Indicator 14: Could not afford prescribed medicines

Internal variable name: outc14_medscost

Definition: Was there a time in the past 12 months when you did not take your medication as prescribed because of cost?

Predictive models

	Mixed, demos only	Logit, no area effects	Mixed with area covariates
	b/se	b/se	b/se
Outcome 14: Could not afford prescribed medicines			
NH Black vs. NH White	0.2022	0.1511	0.1511
	(0.1503)	(0.1581)	(0.1648)
NH Asian vs. NH White	-0.3676	-0.2312	-0.2312
	(0.4774)	(0.3928)	(0.4761)
NH Other vs. NH White	0.5705*	0.5668*	0.5668*
	(0.2320)	(0.2615)	(0.2374)
Hispanic vs. NH White	0.1629	0.1730	0.1730
	(0.2863)	(0.2380)	(0.2636)
Female	0.3942***	0.3996***	0.3996***
	(0.1034)	(0.1195)	(0.1039)
Age 18-34 vs. 65+	0.6502***	0.6479***	0.6479***
	(0.1861)	(0.1804)	(0.1871)
Age 35-44 vs. 65+	0.7957***	0.8497***	0.8497***
	(0.1539)	(0.1822)	(0.1556)
Age 45-54 vs. 65+	0.7780***	0.8043***	0.8043***
	(0.1463)	(0.1634)	(0.1494)
Age 55-64 vs. 65+	0.6295***	0.6493***	0.6493***
	(0.1529)	(0.1553)	(0.1531)
Kidney Male Rate		-0.0166**	-0.0166***
		(0.0055)	(0.0046)
Health Behaviors z-score, County Rankings		2.2666***	2.2666***
		(0.3382)	(0.2819)
VA BRFSS 2014 SAE outc19_binge_drink		2.8881	2.8881*
		(1.6473)	(1.1633)
% black HH head receiving SNAP		-0.0133***	-0.0133***
		(0.0029)	(0.0023)
Other All Rate		0.0205***	0.0205***
		(0.0054)	(0.0046)
Primary care physicians rate, County Rankings/AMA		1.0537**	1.0537***
		(0.3478)	(0.2515)
Non-Hodgkin Lymphoma All Rate		0.0106	0.0106
		(0.0146)	(0.0110)

c.CHR_physicians_pc#c.NonHodgkinLymphomaAllRate		-0.0387* (0.0161)	-0.0387** (0.0137)
Compound % lacking kitchen or complete plumbing		-0.1903 (0.1271)	-0.1903* (0.0907)
% inst group quarter pop, 2010 Census		0.1162** (0.0440)	0.1162*** (0.0308)
c.ACS_pct_no_facilities#c.PDB_pct_inst_gq_cen10		-0.0712 (0.0377)	-0.0712** (0.0272)
Intercept	-3.1281*** (0.1072)	-3.8277*** (0.3801)	-3.8277*** (0.2541)
Area effect variance	0.1318* (0.0602)		0.0000 (0.0000)

Number of alternative models used to estimate model error = 10.

Results

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Augusta County	51015	8.9%	(4.2%, 17.9%)	11.9%	(10.3%, 13.8%)
Bath County	51017	10.1%	(2.1%, 53.2%)	1.5%	(0.1%, 16.1%)
Caroline County	51033	6.4%	(2.0%, 36.1%)	8.2%	(6.6%, 10.1%)
Clarke County	51043	0.0%	(-0.0%, 40.7%)	4.6%	(3.6%, 5.8%)
Culpeper County	51047	7.3%	(1.6%, 28.1%)	7.4%	(6.5%, 8.4%)
Fauquier County	51061	16.2%	(6.4%, 35.4%)	4.8%	(3.9%, 6.0%)
Frederick County	51069	8.7%	(2.9%, 22.9%)	6.2%	(5.0%, 7.6%)
Highland County	51091	12.2%	(2.3%, 68.2%)	13.6%	(7.8%, 22.8%)
King George County	51099	31.8%	(5.3%, 79.5%)	9.7%	(7.5%, 12.4%)
Madison County	51113	6.2%	(1.0%, 30.5%)	4.7%	(2.6%, 8.3%)
Orange County	51137	19.5%	(6.5%, 45.7%)	10.6%	(9.3%, 12.1%)
Page County	51139	19.6%	(6.9%, 44.5%)	9.1%	(7.9%, 10.5%)
Rappahannock County	51157	9.2%	(1.4%, 42.4%)	10.3%	(8.0%, 13.2%)
Rockbridge County	51163	8.7%	(1.4%, 39.3%)	7.1%	(5.5%, 9.1%)
Rockingham County	51165	5.0%	(1.6%, 14.6%)	6.6%	(5.1%, 8.5%)
Shenandoah County	51171	5.3%	(1.5%, 16.7%)	6.9%	(5.2%, 9.2%)
Spotsylvania County	51177	4.6%	(1.5%, 12.9%)	7.8%	(6.6%, 9.3%)
Stafford County	51179	5.5%	(2.4%, 12.5%)	5.1%	(4.0%, 6.4%)
Warren County	51187	17.1%	(6.4%, 38.0%)	11.0%	(8.5%, 14.0%)
Buena Vista City	51530	8.2%	(2.1%, 62.4%)	36.5%	(18.0%, 60.1%)
Fredericksburg City	51630	13.0%	(4.6%, 31.8%)	14.8%	(11.3%, 19.2%)
Harrisonburg City	51660	0.0%	(0.0%, 55.1%)	3.4%	(1.1%, 10.0%)
Lexington City	51678	0.0%	(0.0%, 96.3%)	4.6%	(2.6%, 8.0%)
Staunton City	51790	0.0%	(0.0%, 43.5%)	10.6%	(7.7%, 14.6%)
Waynesboro City	51820	27.7%	(6.4%, 68.4%)	7.7%	(3.0%, 18.2%)
Winchester City	51840	55.1%	(9.7%, 93.4%)	38.2%	(26.9%, 50.9%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Albemarle County	51003	9.1%	(4.2%, 18.5%)	9.1%	(7.2%, 11.4%)
Alleghany County	51005	9.1%	(2.3%, 29.2%)	8.3%	(6.7%, 10.2%)
Amherst County	51009	6.0%	(1.2%, 24.3%)	8.0%	(6.7%, 9.5%)
Appomattox County	51011	23.1%	(8.9%, 47.9%)	12.1%	(8.3%, 17.4%)
Arlington City	51013	9.0%	(3.8%, 20.0%)	6.7%	(5.0%, 8.8%)
Bedford County	51019	10.2%	(4.9%, 20.1%)	11.8%	(10.1%, 13.8%)
Botetourt County	51023	12.9%	(4.4%, 32.6%)	8.8%	(7.2%, 10.8%)
Campbell County	51031	10.5%	(5.0%, 20.7%)	9.2%	(7.8%, 10.9%)
Craig County	51045	26.2%	(4.1%, 74.4%)	22.9%	(14.7%, 33.8%)
Fairfax County	51059	3.7%	(2.3%, 6.0%)	4.9%	(3.6%, 6.6%)
Fluvanna County	51065	16.6%	(5.0%, 42.9%)	6.0%	(4.6%, 7.8%)
Greene County	51079	0.0%	(0.0%, 51.5%)	8.0%	(6.6%, 9.7%)
Loudoun County	51107	3.7%	(1.7%, 8.1%)	4.1%	(3.1%, 5.4%)
Louisa County	51109	7.5%	(2.2%, 22.3%)	10.2%	(8.2%, 12.6%)
Nelson County	51125	2.3%	(1.2%, 37.5%)	13.0%	(9.4%, 17.7%)
Prince William County	51153	6.0%	(3.6%, 9.7%)	6.3%	(5.2%, 7.7%)
Roanoke County	51161	11.8%	(5.1%, 24.9%)	12.0%	(10.3%, 13.8%)
Alexandria City	51510	11.0%	(4.1%, 26.5%)	8.9%	(6.7%, 11.8%)
Charlottesville City	51540	0.8%	(0.6%, 19.6%)	0.5%	(0.0%, 4.7%)
Covington City	51580	0.0%	(0.0%, 96.4%)	13.1%	(8.9%, 18.7%)
Fairfax City	51600	0.6%	(0.4%, 8.7%)	3.5%	(2.3%, 5.1%)
Falls Church City	51610	0.0%	(0.0%, 28.3%)	6.5%	(3.2%, 13.0%)
Lynchburg City	51680	10.9%	(6.7%, 21.4%)	8.6%	(7.1%, 10.3%)
Manassas City	51683	21.0%	(5.8%, 53.5%)	12.4%	(9.3%, 16.3%)
Manassas Park City	51685	11.4%	(1.7%, 80.2%)	14.7%	(8.7%, 23.7%)
Salem City	51775	0.0%	(0.0%, 43.5%)	4.6%	(2.4%, 8.7%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Bland County	51021	8.8%	(1.3%, 40.6%)	15.7%	(10.4%, 22.9%)
Buchanan County	51027	16.7%	(4.8%, 44.4%)	12.4%	(9.7%, 15.7%)
Carroll County	51035	14.8%	(5.8%, 32.9%)	9.3%	(6.9%, 12.4%)
Dickenson County	51051	25.8%	(8.2%, 57.5%)	18.3%	(13.3%, 24.7%)
Floyd County	51063	11.8%	(3.7%, 32.1%)	15.6%	(11.9%, 20.3%)
Franklin County	51067	6.7%	(3.7%, 24.7%)	9.7%	(8.3%, 11.4%)
Giles County	51071	7.3%	(2.8%, 24.1%)	10.7%	(8.4%, 13.6%)
Grayson County	51077	3.7%	(2.0%, 28.4%)	7.9%	(5.7%, 10.7%)
Henry County	51089	11.9%	(4.6%, 27.5%)	13.0%	(10.7%, 15.7%)
Lee County	51105	4.4%	(2.2%, 34.3%)	10.3%	(6.3%, 16.5%)
Montgomery County	51121	7.7%	(3.3%, 16.9%)	9.8%	(7.6%, 12.7%)
Patrick County	51141	3.7%	(1.6%, 39.4%)	7.5%	(6.0%, 9.3%)
Pittsylvania County	51143	8.7%	(4.7%, 15.6%)	7.9%	(6.4%, 9.7%)
Pulaski County	51155	13.1%	(4.8%, 31.0%)	18.5%	(15.2%, 22.2%)
Russell County	51167	8.1%	(3.9%, 25.2%)	7.3%	(5.3%, 10.1%)
Scott County	51169	1.8%	(0.9%, 19.5%)	6.8%	(4.9%, 9.2%)
Smyth County	51173	25.0%	(8.6%, 54.1%)	15.7%	(12.9%, 19.0%)
Tazewell County	51185	18.0%	(7.6%, 37.0%)	14.5%	(11.9%, 17.7%)
Washington County	51191	14.8%	(7.2%, 27.9%)	11.6%	(9.8%, 13.6%)
Wise County	51195	26.9%	(14.4%, 44.7%)	20.0%	(16.5%, 24.0%)
Wythe County	51197	14.2%	(4.4%, 37.0%)	11.3%	(8.8%, 14.5%)
Bristol City	51520	67.0%	(9.2%, 97.6%)	8.2%	(5.7%, 11.7%)
Danville City	51590	13.4%	(2.3%, 50.8%)	12.0%	(9.3%, 15.4%)
Galax City	51640	30.7%	(2.7%, 87.7%)	13.2%	(6.7%, 24.3%)
Martinsville City	51690	9.2%	(2.2%, 58.0%)	8.6%	(6.7%, 11.0%)
Norton City	51720	49.8%	(11.0%, 88.8%)	54.3%	(37.2%, 70.5%)
Radford City	51750	38.0%	(7.9%, 81.4%)	26.8%	(19.2%, 36.0%)
Roanoke City	51770	10.1%	(4.7%, 20.3%)	13.1%	(9.9%, 17.2%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Amelia County	51007	6.8%	(3.4%, 42.2%)	11.1%	(7.7%, 15.8%)
Brunswick County	51025	18.8%	(4.0%, 56.5%)	7.1%	(4.2%, 11.7%)
Buckingham County	51029	5.6%	(2.6%, 26.7%)	4.2%	(1.3%, 12.3%)
Charles City County	51036	0.0%	(0.0%, 58.8%)	3.7%	(2.8%, 4.9%)
Charlotte County	51037	9.2%	(4.4%, 28.6%)	5.9%	(3.3%, 10.2%)
Chesterfield County	51041	9.6%	(6.0%, 15.0%)	5.6%	(4.6%, 6.8%)
Cumberland County	51049	2.3%	(1.2%, 26.3%)	4.7%	(2.3%, 9.1%)
Dinwiddie County	51053	5.4%	(2.6%, 34.0%)	5.6%	(4.7%, 6.6%)
Goochland County	51075	9.7%	(1.5%, 43.4%)	9.3%	(6.6%, 12.8%)
Greensville County	51081	39.7%	(10.8%, 78.2%)	20.4%	(8.4%, 41.6%)
Halifax County	51083	5.4%	(2.9%, 17.9%)	8.4%	(7.0%, 10.0%)
Hanover County	51085	4.4%	(2.7%, 12.3%)	5.3%	(3.9%, 7.1%)
Henrico County	51087	7.0%	(3.5%, 13.3%)	6.7%	(5.5%, 8.0%)
Lunenburg County	51111	9.9%	(4.2%, 45.9%)	9.4%	(6.3%, 13.6%)
Mecklenburg County	51117	10.4%	(4.7%, 21.4%)	12.7%	(10.6%, 15.2%)
New Kent County	51127	34.6%	(12.0%, 67.1%)	19.8%	(12.7%, 29.5%)
Nottoway County	51135	46.2%	(16.5%, 78.9%)	20.3%	(13.5%, 29.4%)
Powhatan County	51145	12.9%	(4.4%, 32.4%)	13.2%	(9.6%, 17.8%)
Prince Edward County	51147	6.9%	(3.6%, 23.8%)	7.1%	(5.4%, 9.3%)
Prince George County	51149	19.6%	(8.2%, 40.0%)	14.6%	(10.1%, 20.7%)
Surry County	51181	10.0%	(1.5%, 45.2%)	8.1%	(6.3%, 10.4%)
Sussex County	51183	3.0%	(1.6%, 22.6%)	15.7%	(8.5%, 27.2%)
Colonial Heights City	51570	7.8%	(1.3%, 34.7%)	12.9%	(8.4%, 19.4%)
Emporia City	51595	0.0%	(0.0%, 91.8%)	1.5%	(0.6%, 3.6%)
Hopewell City	51670	14.1%	(5.1%, 33.7%)	7.9%	(6.5%, 9.6%)
Petersburg City	51730	18.1%	(7.9%, 36.3%)	15.4%	(11.0%, 21.1%)
Richmond City	51760	12.3%	(5.9%, 23.9%)	15.1%	(12.0%, 18.7%)

County name	County FIPS	Direct estimate	Direct 95% CI	SAE composite	SAE CI
Accomack County	51001	8.7%	(3.7%, 19.3%)	8.2%	(6.3%, 10.6%)
Essex County	51057	3.2%	(1.8%, 30.7%)	3.9%	(2.4%, 6.2%)
Gloucester County	51073	9.7%	(3.8%, 22.6%)	6.0%	(4.4%, 8.0%)
Isle of Wight County	51093	0.6%	(0.4%, 18.7%)	6.8%	(5.6%, 8.1%)
James City County	51095	12.1%	(4.7%, 27.4%)	6.2%	(4.9%, 7.8%)
King and Queen County	51097	0.0%	(0.0%, 36.2%)	9.9%	(4.4%, 20.7%)
King William County	51101	14.4%	(2.1%, 57.0%)	4.0%	(3.1%, 5.0%)
Lancaster County	51103	3.3%	(1.8%, 23.0%)	5.9%	(4.2%, 8.2%)
Mathews County	51115	13.1%	(3.5%, 38.3%)	11.9%	(8.0%, 17.3%)
Middlesex County	51119	9.1%	(1.7%, 36.6%)	10.3%	(7.3%, 14.3%)
Northampton County	51131	16.2%	(5.0%, 41.3%)	11.6%	(8.8%, 15.1%)
Northumberland County	51133	8.5%	(2.4%, 26.6%)	7.0%	(5.3%, 9.2%)
Richmond County	51159	21.2%	(5.1%, 57.5%)	17.9%	(10.8%, 28.3%)
Southampton County	51175	6.4%	(1.0%, 31.9%)	9.4%	(6.7%, 13.1%)
Westmoreland County	51193	21.2%	(5.9%, 53.6%)	8.5%	(5.8%, 12.2%)
York County	51199	7.1%	(3.8%, 19.2%)	4.6%	(3.4%, 6.0%)
Chesapeake City	51550	5.1%	(2.6%, 9.6%)	6.5%	(5.5%, 7.6%)
Franklin City	51620	16.7%	(3.5%, 52.2%)	4.1%	(2.0%, 8.1%)
Hampton City	51650	6.1%	(3.2%, 11.1%)	6.3%	(5.3%, 7.6%)
Newport News City	51700	9.6%	(5.1%, 17.4%)	10.8%	(9.5%, 12.3%)
Norfolk City	51710	15.2%	(9.7%, 23.0%)	15.3%	(13.3%, 17.6%)
Poquoson City	51735	18.2%	(1.9%, 71.9%)	13.2%	(9.8%, 17.4%)
Portsmouth City	51740	13.1%	(7.4%, 21.9%)	10.3%	(8.4%, 12.4%)
Suffolk City	51800	8.5%	(3.8%, 17.9%)	6.3%	(5.1%, 7.6%)
Virginia Beach City	51810	10.5%	(6.4%, 16.8%)	8.0%	(7.1%, 9.0%)
Williamsburg City	51830	0.0%	(0.0%, 78.6%)	2.2%	(0.8%, 6.3%)

Graphical representation

Could not afford prescribed medicines
Central Shenandoah and Lord Fairfax HDs
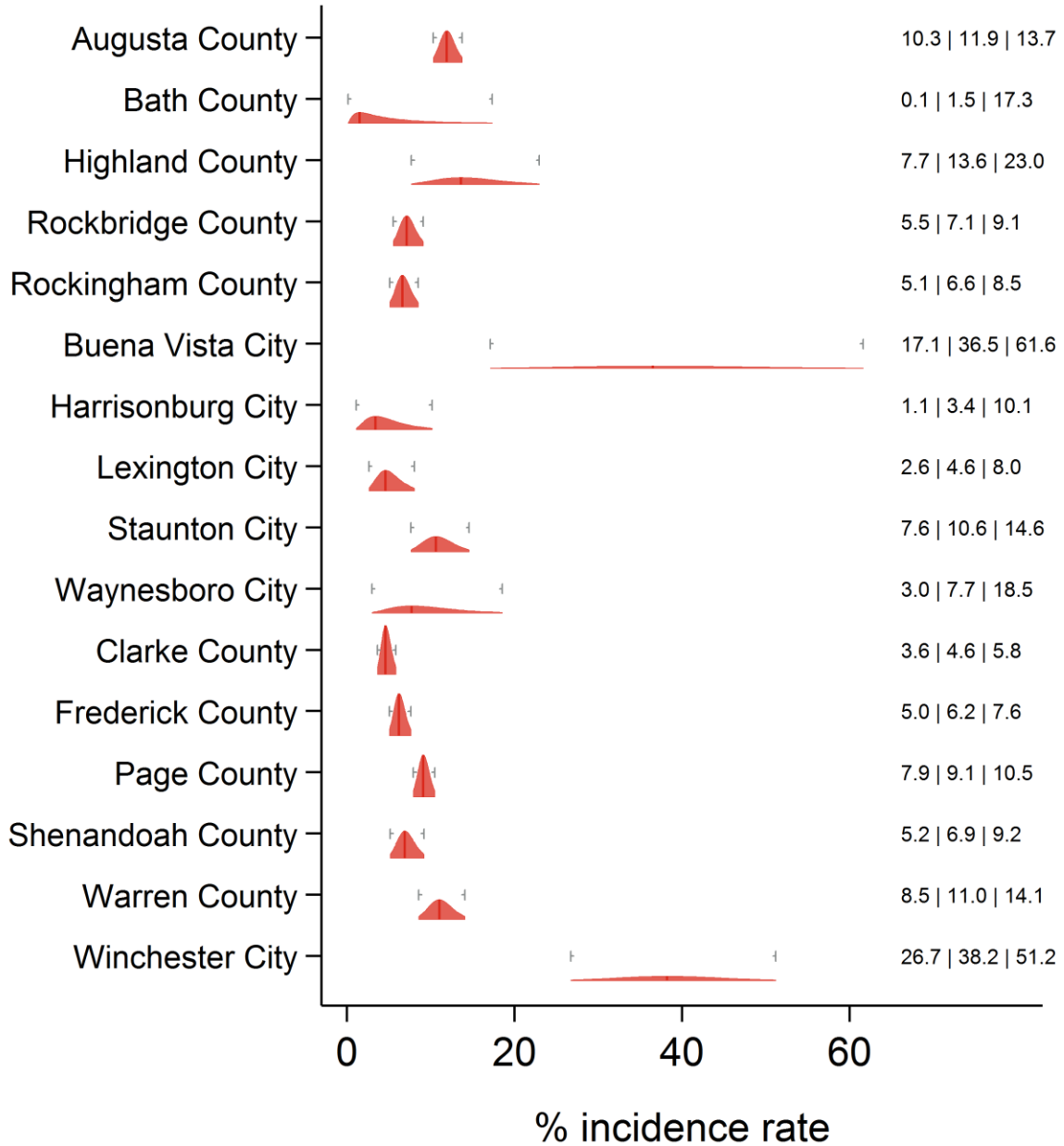
Augusta County	10.3 | 11.9 | 13.7
Bath County	0.1 | 1.5 | 17.3
Highland County	7.7 | 13.6 | 23.0
Rockbridge County	5.5 | 7.1 | 9.1
Rockingham County	5.1 | 6.6 | 8.5
Buena Vista City	17.1 | 36.5 | 61.6
Harrisonburg City	1.1 | 3.4 | 10.1
Lexington City	2.6 | 4.6 | 8.0
Staunton City	7.6 | 10.6 | 14.6
Waynesboro City	3.0 | 7.7 | 18.5
Clarke County	3.6 | 4.6 | 5.8
Frederick County	5.0 | 6.2 | 7.6
Page County	7.9 | 9.1 | 10.5
Shenandoah County	5.2 | 6.9 | 9.2
Warren County	8.5 | 11.0 | 14.1
Winchester City	26.7 | 38.2 | 51.2

% incidence rate

Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Could not afford prescribed medicines
Rappahannock/Rapidan and Rappahannock HDs
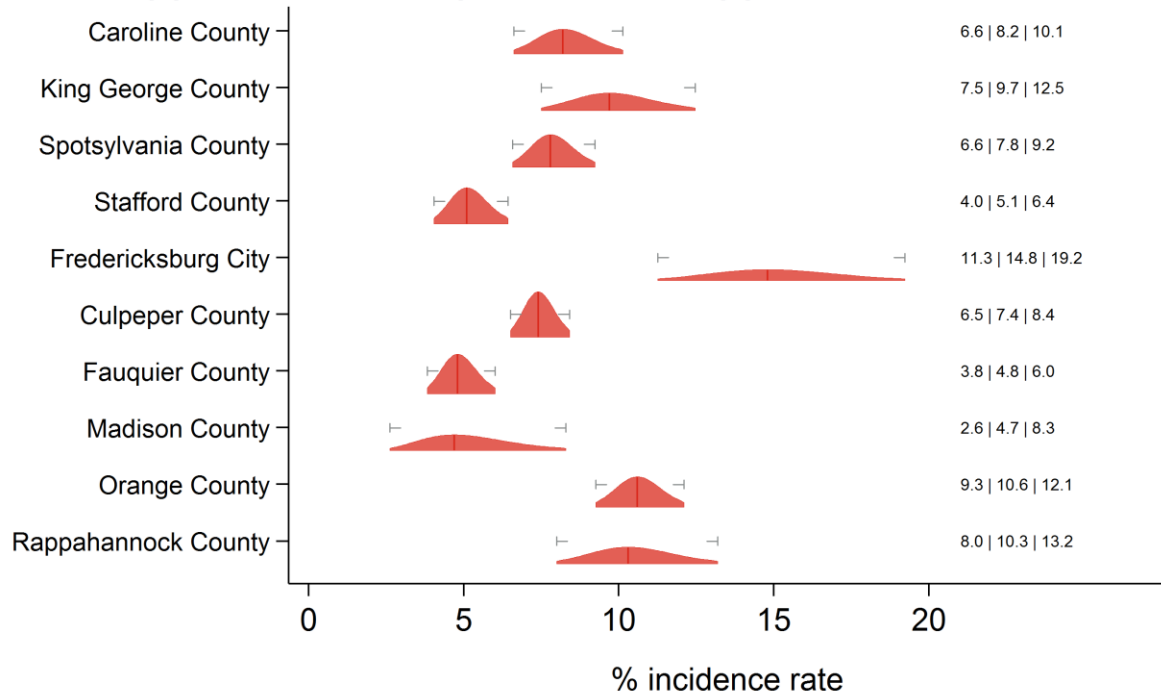
County	2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Caroline County	6.6 | 8.2 | 10.1
King George County	7.5 | 9.7 | 12.5
Spotsylvania County	6.6 | 7.8 | 9.2
Stafford County	4.0 | 5.1 | 6.4
Fredericksburg City	11.3 | 14.8 | 19.2
Culpeper County	6.5 | 7.4 | 8.4
Fauquier County	3.8 | 4.8 | 6.0
Madison County	2.6 | 4.7 | 8.3
Orange County	9.3 | 10.6 | 12.1
Rappahannock County	8.0 | 10.3 | 13.2

% incidence rate

Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Could not afford prescribed medicines Thomas Jefferson and Piedmont HDs
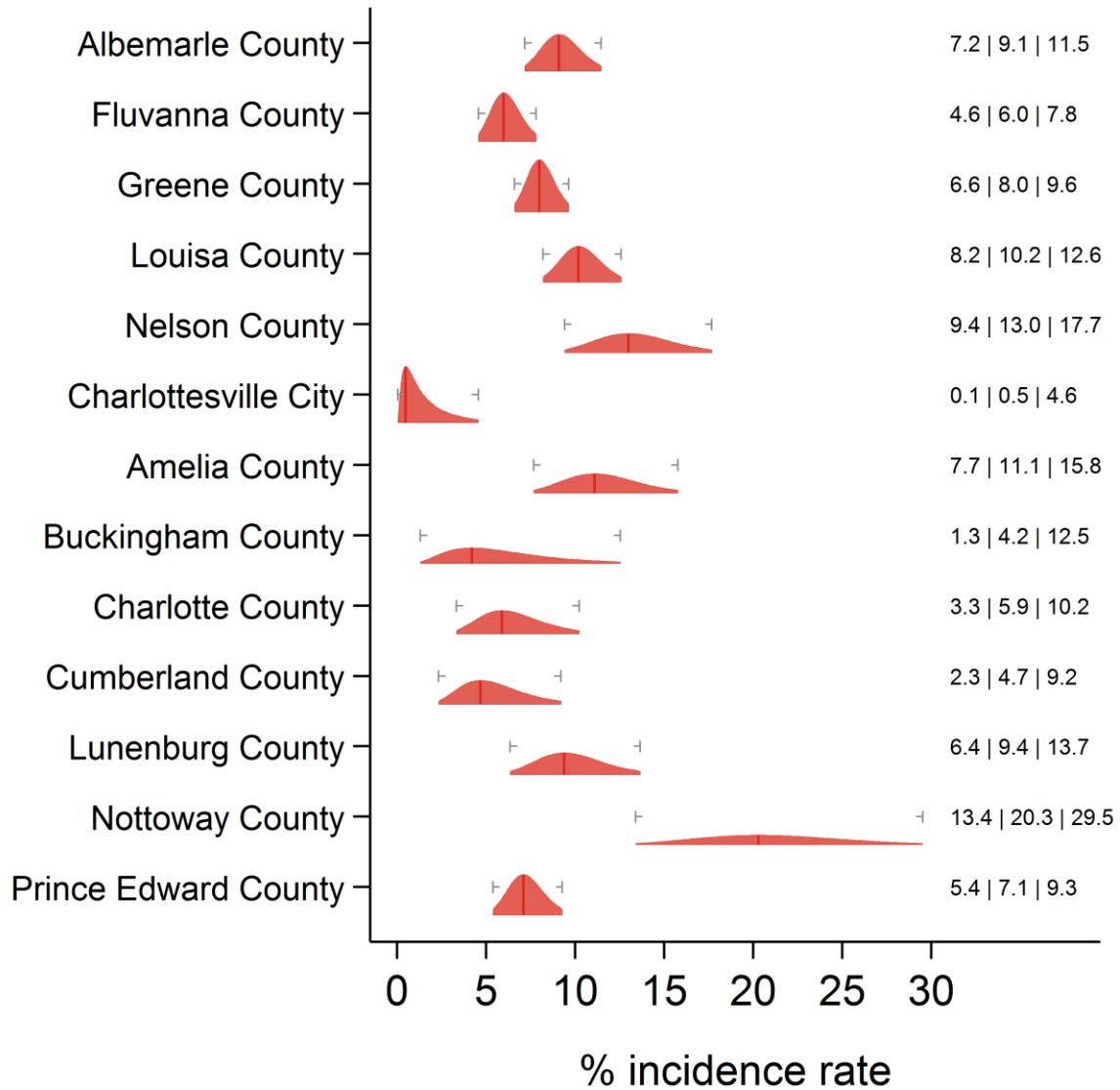
County	2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Albemarle County	7.2 | 9.1 | 11.5
Fluvanna County	4.6 | 6.0 | 7.8
Greene County	6.6 | 8.0 | 9.6
Louisa County	8.2 | 10.2 | 12.6
Nelson County	9.4 | 13.0 | 17.7
Charlottesville City	0.1 | 0.5 | 4.6
Amelia County	7.7 | 11.1 | 15.8
Buckingham County	1.3 | 4.2 | 12.5
Charlotte County	3.3 | 5.9 | 10.2
Cumberland County	2.3 | 4.7 | 9.2
Lunenburg County	6.4 | 9.4 | 13.7
Nottoway County	13.4 | 20.3 | 29.5
Prince Edward County	5.4 | 7.1 | 9.3

% incidence rate

Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Could not afford prescribed medicines
Alexandria, Fairfax, Arlington, Loudon, Prince William HDs

Alexandria City	6.7 | 8.9 | 11.8
Arlington City	5.0 | 6.7 | 8.8
Fairfax County	3.6 | 4.9 | 6.6
Fairfax City	2.4 | 3.5 | 5.1
Falls Church City	3.1 | 6.5 | 13.1
Loudoun County	3.1 | 4.1 | 5.4
Prince William County	5.2 | 6.3 | 7.7
Manassas City	9.3 | 12.4 | 16.3
Manassas Park City	8.7 | 14.7 | 23.9

% incidence rate

Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

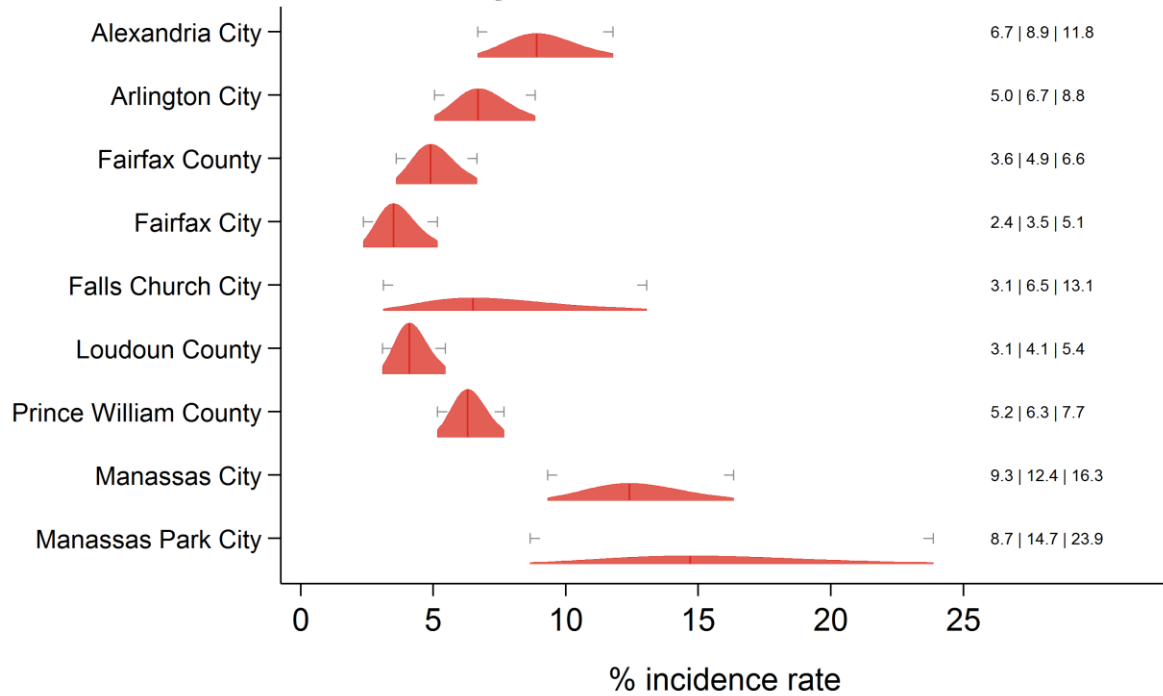# Could not afford prescribed medicines Alleghany, Roanoke and Central Virginia HDs

County/City	LCB	Point	UCB
Alleghany County	6.7	8.3	10.2
Botetourt County	7.2	8.8	10.8
Craig County	14.6	22.9	34.0
Roanoke County	10.4	12.0	13.8
Covington City	8.9	13.1	18.8
Salem City	2.4	4.6	8.7
Amherst County	6.7	8.0	9.5
Appomattox County	8.2	12.1	17.4
Bedford County	10.1	11.8	13.8
Campbell County	7.8	9.2	10.9
Lynchburg City	7.1	8.6	10.3
Roanoke City	9.9	13.1	17.2

% incidence rate

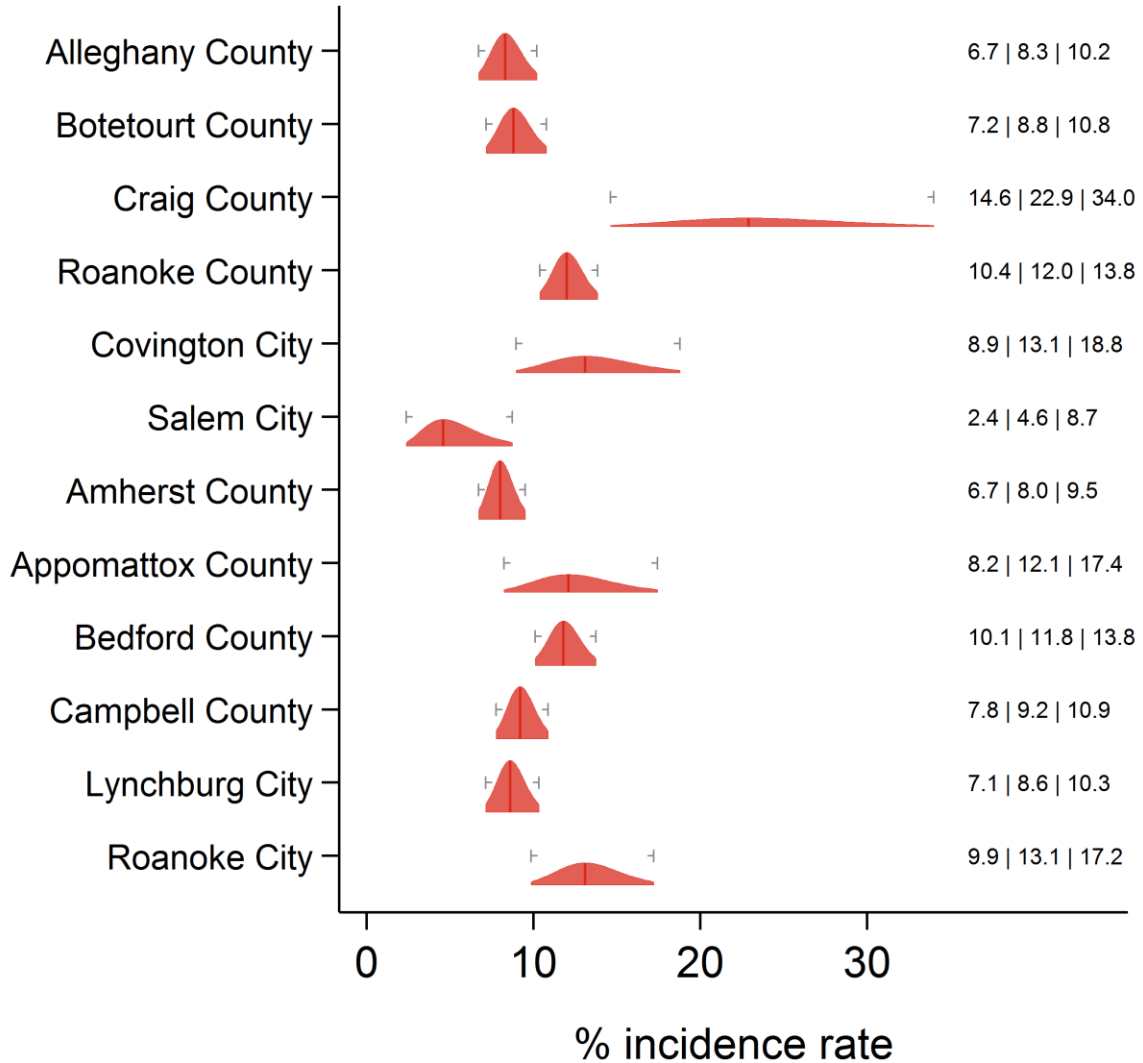Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Could not afford prescribed medicines
Cumberland Plateau and Lenowisco HDs

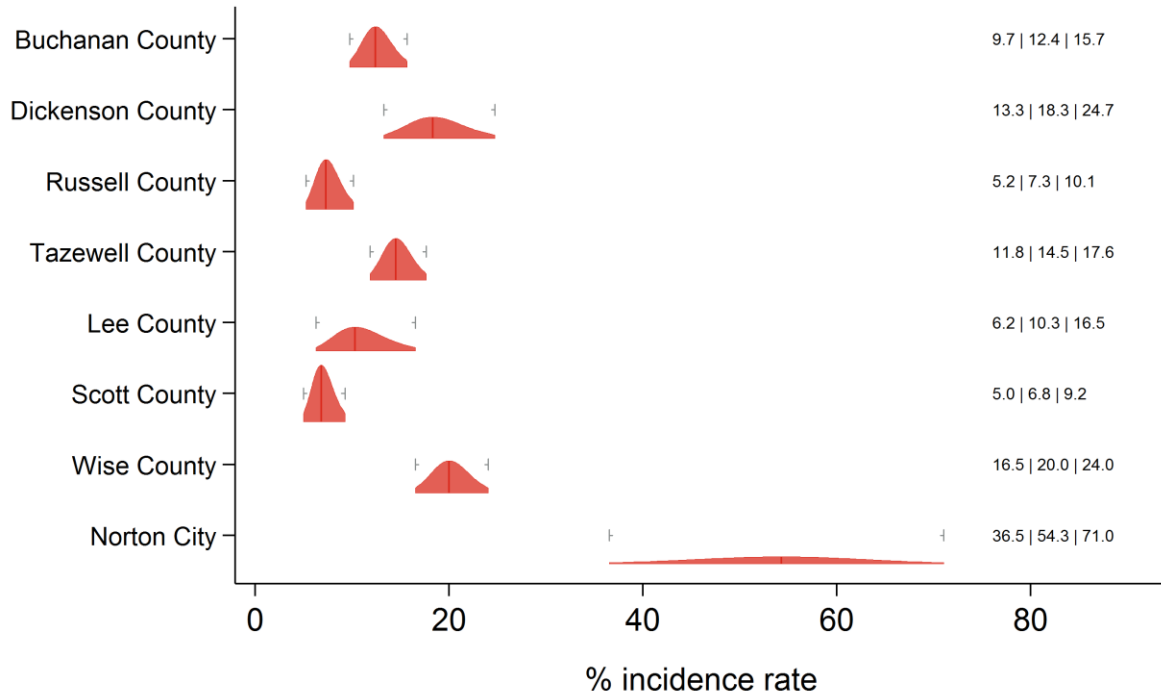| County		LCB | Point | UCB
Buchanan County		9.7 | 12.4 | 15.7
Dickenson County		13.3 | 18.3 | 24.7
Russell County		5.2 | 7.3 | 10.1
Tazewell County		11.8 | 14.5 | 17.6
Lee County		6.2 | 10.3 | 16.5
Scott County		5.0 | 6.8 | 9.2
Wise County		16.5 | 20.0 | 24.0
Norton City		36.5 | 54.3 | 71.0

% incidence rate

Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Could not afford prescribed medicines
Pittsylvania/Danville, Southside and West Piedmont HDs

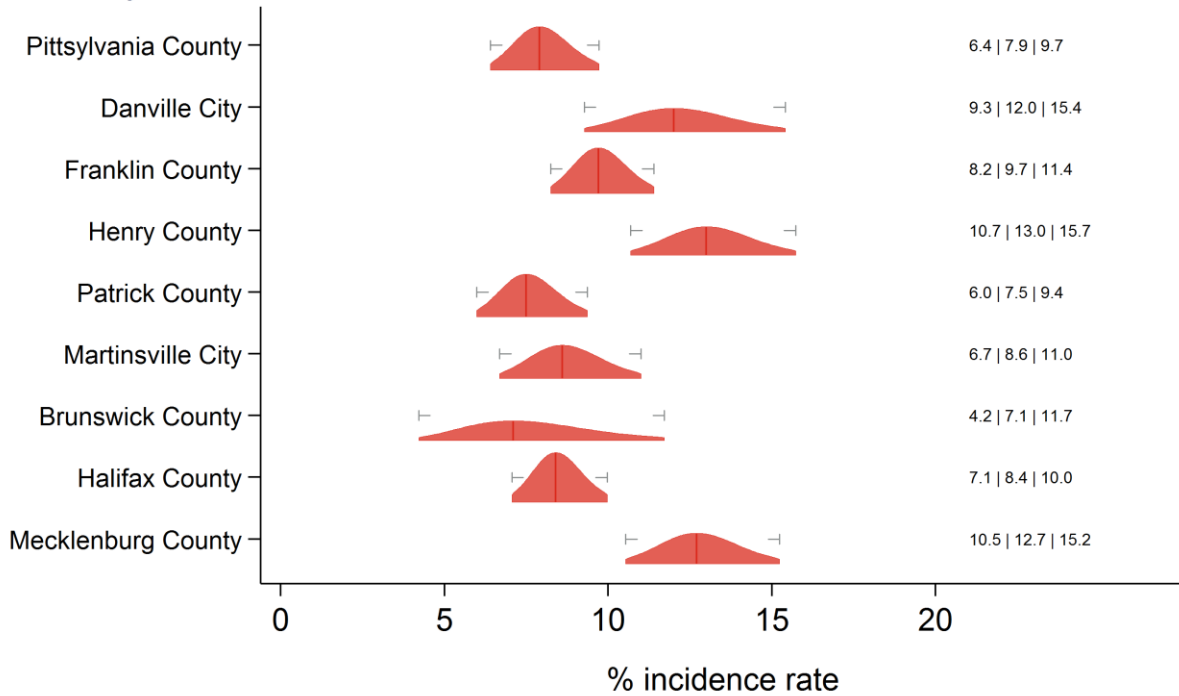| County	Values
Pittsylvania County	6.4 | 7.9 | 9.7
Danville City	9.3 | 12.0 | 15.4
Franklin County	8.2 | 9.7 | 11.4
Henry County	10.7 | 13.0 | 15.7
Patrick County	6.0 | 7.5 | 9.4
Martinsville City	6.7 | 8.6 | 11.0
Brunswick County	4.2 | 7.1 | 11.7
Halifax County	7.1 | 8.4 | 10.0
Mecklenburg County	10.5 | 12.7 | 15.2

% incidence rate
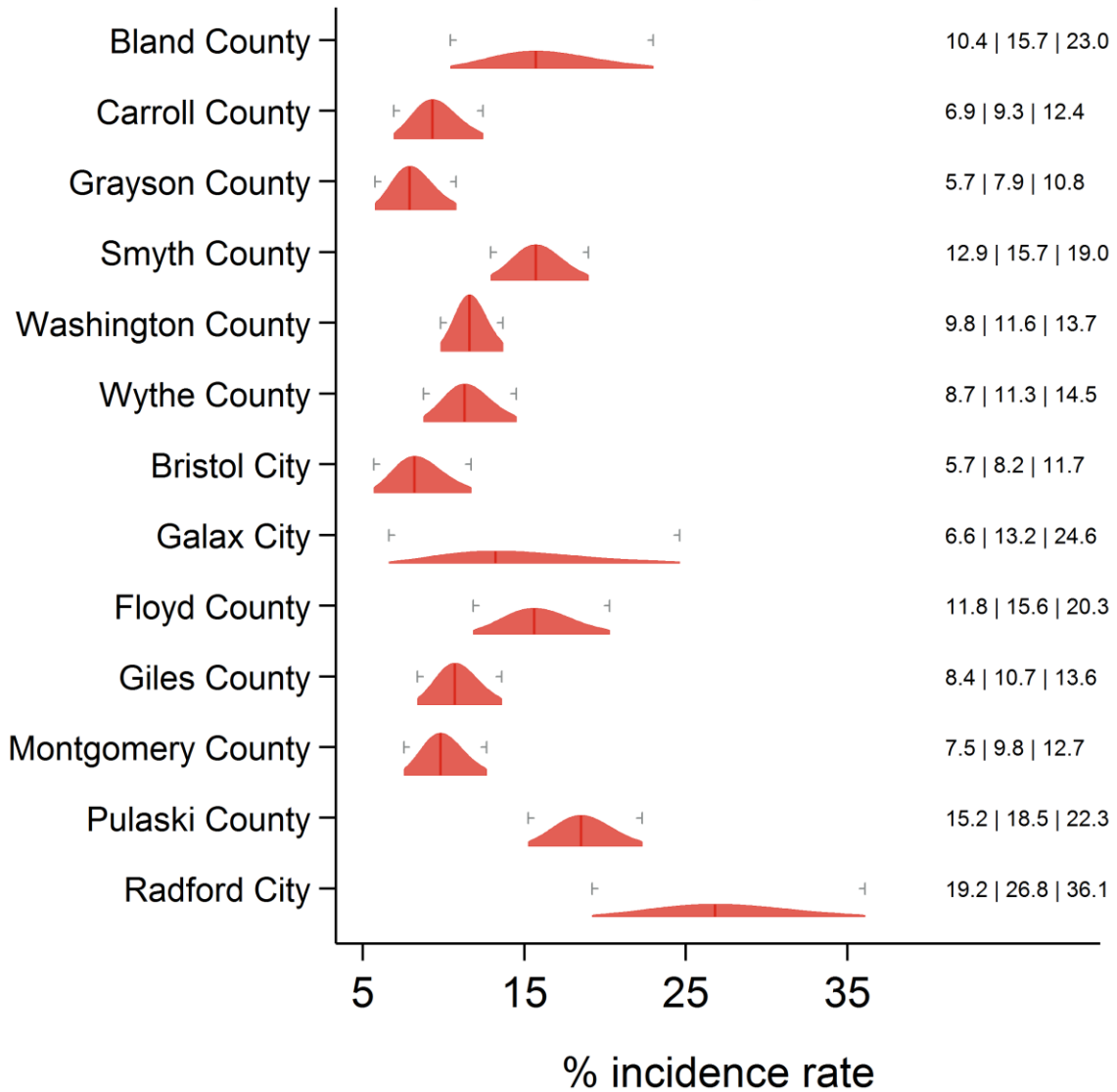
Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Could not afford prescribed medicines
New River and Mount Rogers HDs

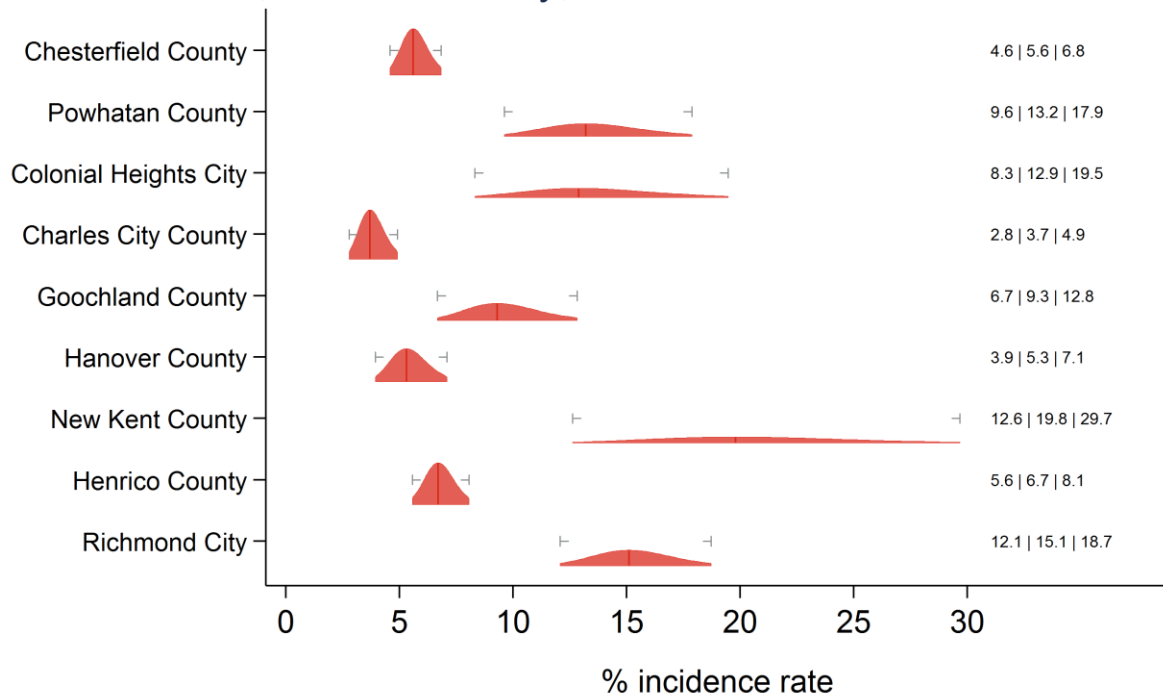| County	LCB | Point | UCB
Bland County	10.4 | 15.7 | 23.0
Carroll County	6.9 | 9.3 | 12.4
Grayson County	5.7 | 7.9 | 10.8
Smyth County	12.9 | 15.7 | 19.0
Washington County	9.8 | 11.6 | 13.7
Wythe County	8.7 | 11.3 | 14.5
Bristol City	5.7 | 8.2 | 11.7
Galax City	6.6 | 13.2 | 24.6
Floyd County	11.8 | 15.6 | 20.3
Giles County	8.4 | 10.7 | 13.6
Montgomery County	7.5 | 9.8 | 12.7
Pulaski County	15.2 | 18.5 | 22.3
Radford City	19.2 | 26.8 | 36.1

% incidence rate

Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
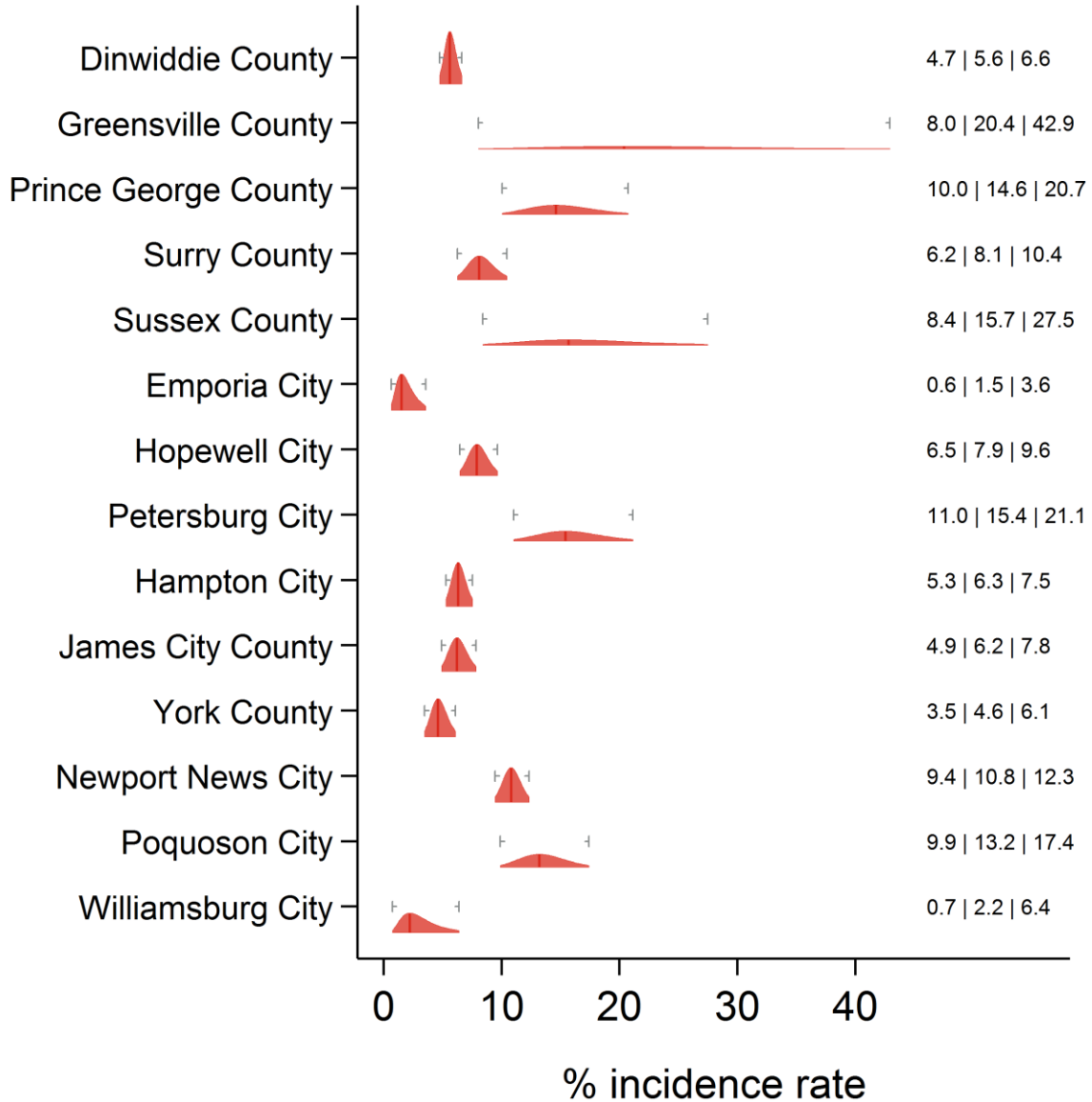Gray markers: 95% confidence interval

Could not afford prescribed medicines
Chesterfield, Chickahominy, Henrico and Richmond HDs

County	2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Chesterfield County	4.6 | 5.6 | 6.8
Powhatan County	9.6 | 13.2 | 17.9
Colonial Heights City	8.3 | 12.9 | 19.5
Charles City County	2.8 | 3.7 | 4.9
Goochland County	6.7 | 9.3 | 12.8
Hanover County	3.9 | 5.3 | 7.1
New Kent County	12.6 | 19.8 | 29.7
Henrico County	5.6 | 6.7 | 8.1
Richmond City	12.1 | 15.1 | 18.7

% incidence rate

Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Could not afford prescribed medicines
Crater, Peninsula and Hampton HDs

County/City	LCB | Point | UCB
Dinwiddie County	4.7 | 5.6 | 6.6
Greensville County	8.0 | 20.4 | 42.9
Prince George County	10.0 | 14.6 | 20.7
Surry County	6.2 | 8.1 | 10.4
Sussex County	8.4 | 15.7 | 27.5
Emporia City	0.6 | 1.5 | 3.6
Hopewell City	6.5 | 7.9 | 9.6
Petersburg City	11.0 | 15.4 | 21.1
Hampton City	5.3 | 6.3 | 7.5
James City County	4.9 | 6.2 | 7.8
York County	3.5 | 4.6 | 6.1
Newport News City	9.4 | 10.8 | 12.3
Poquoson City	9.9 | 13.2 | 17.4
Williamsburg City	0.7 | 2.2 | 6.4

% incidence rate

Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

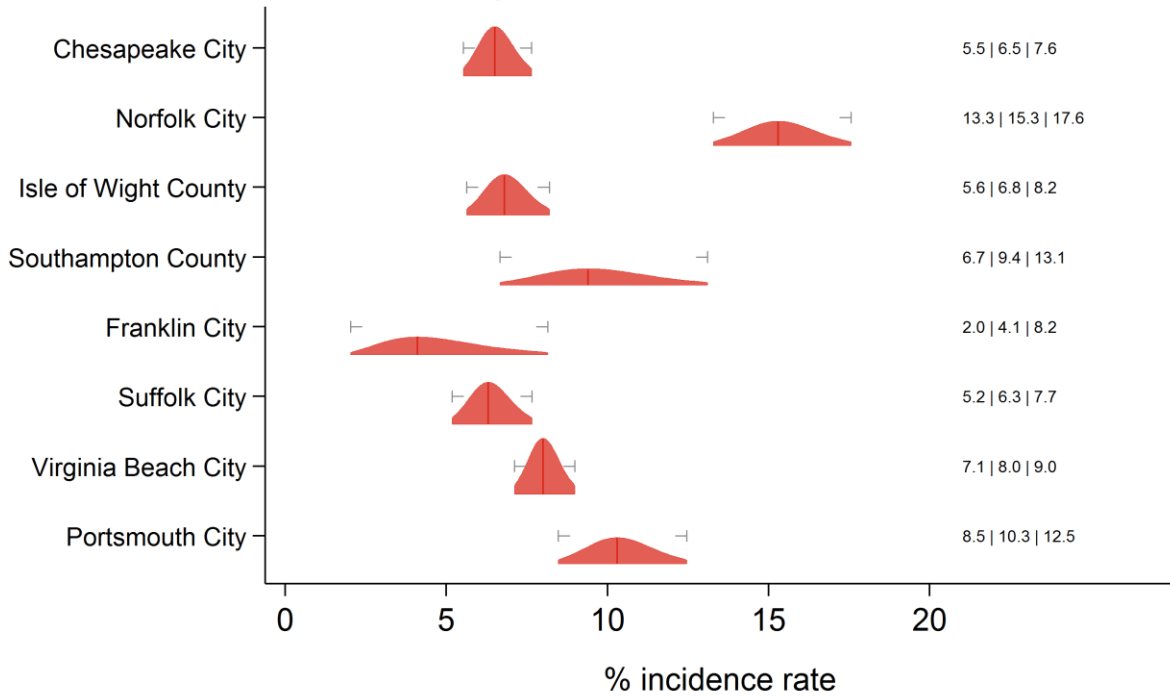## Could not afford prescribed medicines Eastern Shore and Three Rivers HDs
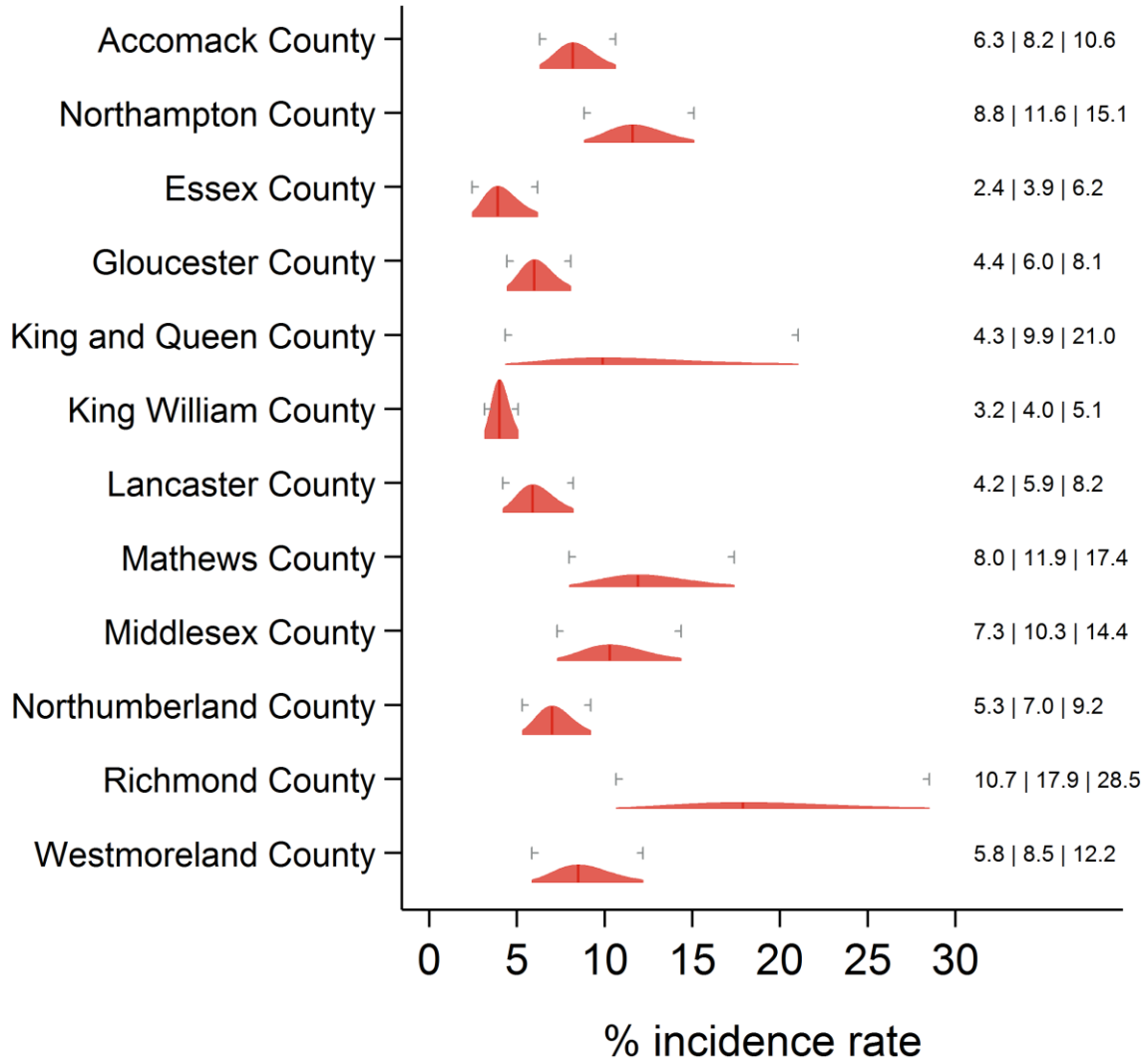
County	LCB | Point | UCB
Accomack County	6.3 | 8.2 | 10.6
Northampton County	8.8 | 11.6 | 15.1
Essex County	2.4 | 3.9 | 6.2
Gloucester County	4.4 | 6.0 | 8.1
King and Queen County	4.3 | 9.9 | 21.0
King William County	3.2 | 4.0 | 5.1
Lancaster County	4.2 | 5.9 | 8.2
Mathews County	8.0 | 11.9 | 17.4
Middlesex County	7.3 | 10.3 | 14.4
Northumberland County	5.3 | 7.0 | 9.2
Richmond County	10.7 | 17.9 | 28.5
Westmoreland County	5.8 | 8.5 | 12.2

% incidence rate

Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Could not afford prescribed medicines
Norfolk,Portsmouth,Chesapeake,VA Beach,W. Tidewater HDs

Location	LCB | Point | UCB
Chesapeake City	5.5 | 6.5 | 7.6
Norfolk City	13.3 | 15.3 | 17.6
Isle of Wight County	5.6 | 6.8 | 8.2
Southampton County	6.7 | 9.4 | 13.1
Franklin City	2.0 | 4.1 | 8.2
Suffolk City	5.2 | 6.3 | 7.7
Virginia Beach City	7.1 | 8.0 | 9.0
Portsmouth City	8.5 | 10.3 | 12.5

% incidence rate

Text at right: 2-sided 95% LCB | Point Estimate | 2-sided 95% UCB
Gray markers: 95% confidence interval

Additional diagnostics

Direct estimate is inside the 95% SAE Wilson CI: 53 areas.

Direct estimate is outside the 95% SAE Wilson CI: 80 areas.

SAE estimate is inside the 95% direct Wilson CI: 128 areas.

SAE estimate is outside the 95% direct Wilson CI: 5 areas.

SAE Wilson 95% CI is fully inside the 95% direct Wilson CI: 116 areas.

SAE Wilson 95% CI partially overlaps with the 95% direct Wilson CI: 17 areas.

SAE Wilson 95% CI and the 95% direct Wilson CI do not overlap: 0 areas.

SAE standard error is less that the direct standard error: 117 areas.

SAE standard error is greater that the (nonzero) direct standard error: 4 areas.

Direct standard error is zero: 12 areas.

Proportion of SAE variance due to ACS sampling error: min = 0.01%; med = 1.75%; max = 10.12%.

Proportion of SAE variance due to sampling error in regression coefficient estimates: min = 19.41%; med = 90.82%; max = 99.34%.

Proportion of SAE variance due to model selection: min = 0.19%; med = 6.83%; max = 80.58%.

Proportion of SAE variance due to area random effects: <identically zero>