SUPPLEMENTAL MATERIAL

Table S1. The odds ratio of having high total burdens¹ among non-elderly adults with heart disease by presence of multiple chronic conditions, 2010-2015

Model 1 (95% Cl) Model 2 (95% Cl) Multiple chronic condition vs heart disease only Multiple chronic condition 208 (1.34-3.23) 1.79 (1.09-2.93) Insurance vs private group Private non-group 7.30 (5.04-10.59) 5.51 (3.39-8.96) Public 1.02 (0.79-1.33) 0.16 (0.10-0.26) Uninsured 2.20 (1.53-3.18) 0.59 (0.37-0.94) Age group vs 18-39 Age 40-54 1.19 (0.82-1.72) 1.40 (0.94-2.09) Age 55-64 1.51 (1.03-2.20) 1.98 (1.28-3.05) Female vs male 0.50 (0.76-1.22) 3.88 (0.70-1.11) Age 40-54 0.88 (0.70-1.11) 0.68 (0.53-0.89) Hispanic 0.97 (0.72-1.31) 0.81 (0.57-1.17) Marital status vs married 0.97 (0.72-1.31) 0.81 (0.57-1.17) Model / divorced/separated 0.97 (0.72-1.31) 0.81 (0.57-1.17) Motel status vs full time work 0.95 (0.65-1.40) 0.95 (0.65-1.40) Working 2.35 (1.69-3.29) 2.35 (1.69-3.29) Part time worker 1.36 (0.92-2.01) 3.04 (17.06-56.		Adults with heart disease	
Multiple chronic condition 2.08 (1.34-3.23) 1.79 (1.09-2.93) Insurance vs private group 7.30 (5.04-10.59) 5.51 (3.39-8.96) Public 1.02 (0.79-1.33) 0.16 (0.10-2.6) Uninsured 2.20 (1.53-3.18) 0.59 (0.37-0.94) Age group vs 18-39		Model 1 <mark>(95% CI)</mark>	Model 2 <mark>(95% Cl)</mark>
Insurance vs private group 7.30 (5.04-10.59) 5.51 (3.39-8.96) Public 1.02 (0.79-1.33) 0.16 (0.10-0.26) Uninsured 2.20 (1.53-3.18) 0.59 (0.37-0.94) Age group vs 18-39	Multiple chronic condition vs heart di	isease only	
Private non-group 7.30 (5.04-10.59) 5.51 (3.39-8.96) Public 1.02 (0.79-1.33) 0.16 (0.10-0.26) Uninsured 2.20 (1.53-3.18) 0.59 (0.37-0.94) Age group vs 18-39 Age 40-54 1.19 (0.82-1.72) 1.40 (0.94-2.09) Age 55-64 1.51 (1.03-2.20) 1.98 (1.28-3.05) Female vs male 1.15 (0.93-1.42) 0.96 (0.76-1.22) Race/ethnicity vs white/other Black 0.88 (0.70-1.11) 0.68 (0.53-0.89) Hispanic 0.97 (0.72-1.31) 0.81 (0.57-1.17) Marital status vs married Never married 0.95 (0.65-1.40) Widowed/divorced/separated 0.68 (0.49-0.95) Employment status vs full time work 2.35 (1.69-3.29) Part time worker 1.36 (0.92- 2.01) Poor 31.04 (17.06-56.48) Low income/near poor 31.04 (17.06-56.48) Low income/near poor 31.04 (17.06-56.48) Low income/near poor 0.93 (0.	Multiple chronic condition	2.08 (1.34-3.23)	1.79 (1.09-2.93)
Public 1.02 (0.79-1.33) 0.16 (0.10-0.26) Uninsured 2.20 (1.53-3.18) 0.59 (0.37-0.94) Age group vs 18-39	Insurance vs private group		
Uninsured 2.20 (1.53-3.18) 0.59 (0.37-0.94) Age group vs 18-39	Private non-group	7.30 (5.04-10.59)	5.51 (3.39-8.96)
Age group vs 18-39 Age 40-54 1.19 (0.82-1.72) 1.40 (0.94-2.09) Age 55-64 1.51 (1.03-2.20) 1.98 (1.28-3.05) Female vs male 1.15 (0.93-1.42) 0.96 (0.76-1.22) Race/ethnicity vs white/other 0.96 (0.76-1.22) Race/ethnicity vs white/other Black 0.88 (0.70-1.11) 0.68 (0.53-0.89) Hispanic 0.97 (0.72-1.31) 0.81 (0.57-1.17) Marital status vs married 0.95 (0.65-1.40) Never married 0.95 (0.65-1.40) Widowed/divorced/separated 0.95 (0.65-1.40) Widowed/divorced/separated 0.95 (0.69-3.29) Pmployment status vs full time work 2.35 (1.69-3.29) Not working 2.35 (1.69-3.29) Part time worker 1.31 (0.4 (17.06-56.48) Low income/near poor 31.04 (17.06-56.48) Low income/near poor 31.04 (17.06-56.48) Low income/near poor 2.62 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.93 (0.66-1.33) High school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Public	1.02 (0.79-1.33)	0.16 (0.10-0.26)
Age 40-54 1.19 (0.82-1.72) 1.40 (0.94-2.09) Age 55-64 1.51 (1.03-2.20) 1.98 (1.28-3.05) Female vs male 1.15 (0.93-1.42) 0.96 (0.76-1.22) Race/ethnicity vs white/other Black 0.88 (0.70-1.11) 0.68 (0.53-0.89) Hispanic 0.97 (0.72-1.31) 0.81 (0.57-1.17) Marital status vs married Never married 0.95 (0.65-1.40) Widowed/divorced/separated 0.68 (0.49-0.95) Employment status vs full time work Not working 2.35 (1.69-3.29) Part time worker Poor 31.04 (17.06-56.48) Low income/near poor 31.04 (17.06-56.48) Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) High school 0.78 (0.58-1.05) Boor 0.78 (0.58-1.05)	Uninsured	2.20 (1.53-3.18)	0.59 (0.37-0.94)
Age 55-64 1.51 (1.03-2.20) 1.98 (1.28-3.05) Female vs male 1.15 (0.93-1.42) 0.96 (0.76-1.22) Race/ethnicity vs white/other Black 0.88 (0.70-1.11) 0.68 (0.53-0.89) Hispanic 0.97 (0.72-1.31) 0.81 (0.57-1.17) Marital status vs married 0.95 (0.65-1.40) Never married 0.95 (0.65-1.40) 0.68 (0.49-0.95) Employment status vs full time work 0.68 (0.49-0.95) Poor 2.35 (1.69-3.29) Part time worker 1.36 (0.92- 2.01) Poor 31.04 (17.06-56.48) Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Age group vs 18-39		
Female vs male 1.15 (0.93-1.42) 0.96 (0.76-1.22) Race/ethnicity vs white/other	Age 40-54	1.19 (0.82-1.72)	1.40 (0.94-2.09)
Race/ethnicity vs white/other Black 0.88 (0.70-1.11) 0.68 (0.53-0.89) Hispanic 0.97 (0.72-1.31) 0.81 (0.57-1.17) Marital status vs married 0.95 (0.65-1.40) Never married 0.95 (0.65-1.40) Widowed/divorced/separated 0.95 (0.65-1.40) Widowed/divorced/separated 0.88 (0.70-1.11) Not working 2.35 (1.69-3.29) Part time worker 1.36 (0.92- 2.01) Poverty status vs high income 12.35 (7.35-20.75) Poor 31.04 (17.06-56.48) Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) Region vs Northeast 0.78 (0.58-1.05)	Age 55-64	1.51 (1.03-2.20)	1.98 (1.28-3.05)
Black 0.88 (0.70-1.11) 0.68 (0.53-0.89) Hispanic 0.97 (0.72-1.31) 0.81 (0.57-1.17) Marital status vs married 0.95 (0.65-1.40) Never married 0.95 (0.65-1.40) Widowed/divorced/separated 0.68 (0.49-0.95) Employment status vs full time work 0.53 (1.69-3.29) Part time worker 2.35 (1.69-3.29) Part time worker 0.90 (0.52 - 2.01) Poverty status vs high income 1.36 (0.92 - 2.01) Poor 31.04 (17.06-56.48) Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) High school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Female vs male	1.15 (0.93-1.42)	0.96 (0.76-1.22)
Hispanic 0.97 (0.72-1.31) 0.81 (0.57-1.17) Marital status vs married 0.95 (0.65-1.40) Never married 0.68 (0.49-0.95) Employment status vs full time work 0.81 (0.92-0.92) Part time worker 2.35 (1.69-3.29) Part time worker 1.36 (0.92-2.01) Poverty status vs high income 1.36 (0.92-2.01) Poor 31.04 (17.06-56.48) Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Race/ethnicity vs white/other		
Marital status vs married 0.95 (0.65-1.40) Never married 0.95 (0.65-1.40) Widowed/divorced/separated 0.68 (0.49-0.95) Employment status vs full time work 2.35 (1.69-3.29) Not working 2.35 (1.69-3.29) Part time worker 1.36 (0.92- 2.01) Poverty status vs high income 2 Poor 31.04 (17.06-56.48) Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school 6.26 (4.08-9.61) Less than high school 0.93 (0.66-1.33) High school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Black	0.88 (0.70-1.11)	0.68 (0.53-0.89)
Never married 0.95 (0.65-1.40) Widowed/divorced/separated 0.68 (0.49-0.95) Employment status vs full time work Not working 2.35 (1.69-3.29) Part time worker 1.36 (0.92- 2.01) Poverty status vs high income Poor 31.04 (17.06-56.48) Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school Less than high school 0.93 (0.66-1.33) High school 0.78 (0.58-1.05) Region vs Northeast Midwest 1.24 (0.84-1.83)	Hispanic	0.97 (0.72-1.31)	0.81 (0.57-1.17)
Widowed/divorced/separated 0.68 (0.49-0.95) Employment status vs full time work	Marital status vs married		
Employment status vs full time work 2.35 (1.69-3.29) Not working 2.35 (1.69-3.29) Part time worker 1.36 (0.92- 2.01) Poverty status vs high income 31.04 (17.06-56.48) Poor 31.04 (17.06-56.48) Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) High school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Never married		0.95 (0.65-1.40)
Not working 2.35 (1.69-3.29) Part time worker 1.36 (0.92- 2.01) Poverty status vs high income 31.04 (17.06-56.48) Poor 31.04 (17.06-56.48) Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Widowed/divorced/separated		0.68 (0.49-0.95)
Part time worker 1.36 (0.92- 2.01) Poverty status vs high income 1.36 (0.92- 2.01) Poor 31.04 (17.06-56.48) Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) High school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Employment status vs full time work		
Poverty status vs high income 31.04 (17.06-56.48) Poor 31.04 (17.06-56.48) Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Not working		2.35 (1.69-3.29)
Poor 31.04 (17.06-56.48) Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) High school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Part time worker		1.36 (0.92- 2.01)
Low income/near poor 12.35 (7.35-20.75) Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) High school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Poverty status vs high income		
Middle income 6.26 (4.08-9.61) Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) High school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Poor		31.04 (17.06-56.48)
Education vs > High school 0.93 (0.66-1.33) Less than high school 0.78 (0.58-1.05) High school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Low income/near poor		12.35 (7.35-20.75)
Less than high school 0.93 (0.66-1.33) High school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Middle income		6.26 (4.08-9.61)
High school 0.78 (0.58-1.05) Region vs Northeast 1.24 (0.84-1.83)	Education vs > High school		
Region vs NortheastMidwest1.24 (0.84-1.83)	Less than high school		0.93 (0.66-1.33)
Midwest 1.24 (0.84-1.83)	High school		0.78 (0.58-1.05)
	Region vs Northeast		
South 1.19 (0.85-1.66)	Midwest		1.24 (0.84-1.83)
	South		1.19 (0.85-1.66)

West		1.19 (0.78-1.83)
Non-MSA vs MSA		1.17 (0.84-1.64)
Number of observations	5,332	5,332

Source: Authors' calculations using the Medical Expenditure Panel Survey-Household Component, 2010-2015.

¹ High total burden is defined as spending 20% or more of disposable family income on health care services and health insurance premiums.

CI= confidence interval

 Table S2. The odds ratio of being unable to get care and delaying care due to financial reasons among non-elderly adults with heart disease by presence of multiple chronic conditions, 2010-2015

	Was unable to g	et care (95% CI)	Delayed ca	Delayed care (95% CI)	
	Model 1	Model 2	Model 1	Model 2	
Multiple chronic condition vs heart o	disease only				
Multiple chronic condition	1.78 (1.05-3.00)	1.70 (1.03-2.81)	2.17 (1.37-3.45)	2.11 (1.31-3.38)	
Insurance vs private group					
Private non-group	1.49 (0.76-2.94)	1.18 (0.59-2.36)	2.89 (1.68-4.95)	2.24 (1.28-3.89)	
Public	3.69 (2.87-4.76)	2.13 (1.41-3.21)	3.13 (2.41-4.06)	2.06 (1.36-3.11)	
Uninsured	5.98 (4.27-8.37)	4.04 (2.67-6.10)	3.84 (2.61- 5.65)	2.75 (1.77-4.28)	
Age group vs 18-39					
Age 40-54	1.34 (0.95-1.91)	1.33 (0.92-1.93)	1.24 (0.89-1.73)	1.26 (0.89-1.79)	
Age 55-64	1.34 (0.94-1.89)	1.32 (0.90-1.93)	1.29 (0.89-1.87)	1.27 (0.87-1.88)	
Female vs male	1.28 (1.03-1.58)	1.15 (0.91-1.45)	1.19 (0.97-1.47)	1.04 (0.82-1.31)	
Race/ethnicity vs white/other					
Black	0.91 (0.74-1.12)	0.84 (0.67-1.04)	0.87 (0.68-1.12)	0.82 (0.64-1.05)	
Hispanic	0.73 (0.55-0.97)	0.68 (0.51-0.91)	0.74 (0.52-1.04)	0.74 (0.51-1.06)	
Marital status vs married					
Never married		1.13 (0.80-1.61)		1.12 (0.79-1.60)	
Widowed/divorced/separated		1.57 (1.13-2.17)		1.49 (1.09-2.03)	
Employment status vs full time work	(
Not working		1.09 (0.79-1.49)		1.20 (0.87-1.68)	
Part time worker		1.05 (0.72-1.53)		1.34 (0.84-2.13)	
Poverty status vs high income					
Poor		2.40 (1.53-3.76)		1.96 (1.19-3.23)	
Low income/near poor		2.61 (1.76-3.90)		2.13 (1.36-3.32)	
Middle income		2.52 (1.77-3.61)		2.25 (1.54-3.27)	
Education vs > High school					
Less than high school		1.05 (0.77-1.43)		0.76 (0.56-1.04)	
High school		0.98 (0.75-1.26)		0.87 (0.67-1.13)	
Region vs Northeast					

Midwest		1.18 (0.82-1.71)		0.87 (0.60-1.26)
South		1.08 (0.78-1.50)		0.96 (0.69-1.32)
West		1.33 (0.90-1.97)		0.93 (0.65-1.35)
Non-MSA vs MSA		0.99 (0.77-1.28)		1.10 (0.78-1.55)
Number of observations	5,332	5,332	5,332	5,332

Source: Authors' calculations using the Medical Expenditure Panel Survey-Household Component, 2010-2015.

¹ High total burden is defined as spending 20% or more of disposable family income on health care services and health insurance premiums.

CI= confidence interval