Supplemental Tables

Table S1
Missing data analysis

|  | Not Missing $(\mathrm{n}=18,890)$ | $\begin{gathered} \text { Missing } \\ (\mathrm{n}=3,254) \end{gathered}$ | p-value |
| :---: | :---: | :---: | :---: |
| Age (mean) | 48 | 45 | < 0.001 |
| Gender (male) | 48 | 53 | < 0.001 |
| Race |  |  |  |
| White non-Hispanic | 83 | 72 | <0.001 |
| African American | 10 | 15 | <0.001 |
| Hispanic | 2 | 5 | <0.001 |
| Other | 5 | 6 | 0.30 |
| Married | 55 | 51 | <0.01 |
| Education (Highest level) |  |  |  |
| Non High School Graduate | 12 | 17 | <0.001 |
| High School Graduate | 62 | 62 | 0.90 |
| College Graduate | 26 | 21 | <0.001 |
| Employment |  |  |  |
| Unemployed/Student | 24 | 27 | 0.01 |
| Employed | 58 | 55 | 0.07 |
| Retired | 18 | 17 | 0.47 |
| Comorbidity |  |  |  |
| Depression | 19 | 17 | 0.08 |
| DM | 10 | 11 | 0.31 |
| COPD | 7 | 9 | 0.02 |
| CAD | 5 | 4 | 0.34 |
| Alcohol Misuse | 15 | 15 | 0.93 |
| Perceived Health |  |  |  |
| Fair/Poor | 18 | 20 | $<0.01$ |
| Coverage/Utilization |  |  |  |
| No Primary Physician | 22 | 29 | <0.001 |
| No Insurance Coverage | 9 | 14 | <0.001 |
| Delay Care Due to Cost | 13 | 16 | 0.04 |
| Delay Care for Non-Cost Reason | 13 | 15 | 0.18 |
| Any Reason for Delay in Care | 22 | 28 | $<0.001$ |
| Lack of Perceived Social Support | 18 | 16 | 0.56 |

Table S2
Differences between participants in the 2013-2014 BRFSS sample who were and were not assigned social support and treatment delay modules

|  | Not assigned social support and treatment delay modules ( $\mathrm{n}=934,203$ ) | Assigned social support and treatment delay modules ( $\mathrm{n}=22,234$ ) |
| :---: | :---: | :---: |
| Age (mean) | 47 | 47 |
| Gender (male, \%) | 49 | 49 |
| Race |  |  |
| White non-Hispanic | 81 | 64 |
| African American | 11 | 12 |
| Hispanic | 3 | 16 |
| Other | 6 | 8 |
| Married | 54 | 51 |
| Education (Highest level) |  |  |
| Non High School Graduate | 13 | 15 |
| High School Graduate | 62 | 59 |
| College Graduate | 25 | 26 |
| Employment |  |  |
| Unemployed/Student | 24 | 27 |
| Employed | 58 | 56 |
| Retired | 18 | 17 |
| Comorbidity |  |  |
| Depression | 19 | 18 |
| DM | 10 | 10 |
| COPD | 7 | 7 |
| CAD | 5 | 4 |
| Alcohol Misuse | 15 | 17 |
| Perceived Health |  |  |
| Fair/Poor | 18 | 18 |
| Social Network |  |  |
| Single adult household | 22 | 19 |
| Coverage/Utilization |  |  |
| No Primary Physician | 23 | 23 |
| No Insurance Coverage | 10 | 12 |
| Delay Care Due to Cost | 14 | 15 |
| Delay Care for Non-Cost Reason | 14 | 20 |
| Any Reason for Delay in Care | 23 | 34 |

TABLE S3
Baseline Characteristics of Tennessee Respondents

|  | $\begin{gathered} \text { Overall } \\ (\mathrm{N}=3,773) \end{gathered}$ | With Support $(\mathrm{N}=2,908)$ | No Support $(\mathrm{N}=865)$ | $P$ value |
| :---: | :---: | :---: | :---: | :---: |
| Age (mean) | 48 | 48 | 48 |  |
| Gender (male) | 1,768 (47) | 1,302 (45) | 466 (54) | <0.001 |
| Race/Ethnicity |  |  |  |  |
| White Non-Hispanic | 2,998 (79) | 2,374 (82) | 624 (72) | <0.001 |
| African American | 554 (15) | 367 (13) | 187 (22) | <0.001 |
| Hispanic | 41 (1) | 39 (1) | 2 (<1) | 0.03 |
| Other | 180 (5) | 127 (4) | 53 (6) | 0.30 |
| Married | 2,032 (54) | 1,654 (57) | 379 (43) | <0.001 |
| Single Adult Household * | 490 (23) | 361 (21) | 129 (29) | <0.001 |
| Education |  |  |  |  |
| Non-High School Grad | 574 (15) | 373 (13) | 202 (23) | <0.001 |
| High School Grad | 2,354 (63) | 1,801 (62) | 552 (64) | 0.40 |
| College Grad | 835 (22) | 729 (25) | 106 (12) | <0.001 |
| Employment |  |  |  |  |
| Unemployed/Student | 1,103 (29) | 774 (21) | 329 (38) | <0.001 |
| Employed | 1,954 (52) | 1,555 (53) | 399 (46) | <0.01 |
| Retired | 708 (19) | 572 (20) | 137 (16) | 0.02 |
| Comorbidity |  |  |  |  |
| Depression | 747 (20) | 438 (15) | 309 (36) | <0.001 |
| Diabetes | 462 (12) | 332 (11) | 130 (15) | 0.02 |
| COPD | 346 (9) | 215 (7) | 131 (15) | <0.001 |
| CAD | 252 (7) | 176 (6) | 76 (9) | 0.02 |
| Alcohol Misuse | 355 (10) | 265 (9) | 90 (11) | 0.42 |
| Perceived Health |  |  |  |  |
| Fair/Poor | 865 (23) | 525 (18) | 341 (40) | <0.001 |
| Access |  |  |  |  |
| No PCP | 783 (21) | 559 (19) | 224 (26) | <0.01 |
| Uninsured | 638 (17) | 414 (14) | 223 (26) | <0.001 |
| Delay |  |  |  |  |
| Delay Cost | 664 (18) | 415 (14) | 249 (29) | <0.001 |
| Delay Non-Cost | 552 (15) | 361 (12) | 192 (22) | <0.001 |
| Delay $\dagger$ | 1,014 (27) | 669 (23) | 345 (40) | <0.001 |

All data weighted according to BRFSS formula. Multiplication by 1,000 gives weighted N . Total weighted $\mathrm{N}=$ 3,773,000

* large proportion of missing data (50\%) for single adult household status
$\dagger$ respondents reported both cost and non-cost reasons for delaying care, therefore total number of delays is less sum of cost and non-cost delays

TABLE S4

Baseline Characteristics of Minnesota Respondents

|  | $\begin{gathered} \text { Overall } \\ (\mathrm{N}=3,686) \end{gathered}$ | With Support $(\mathrm{N}=3,179)$ | No Support $(\mathrm{N}=507)$ | $P$ value |
| :---: | :---: | :---: | :---: | :---: |
| Age (mean) | 47 | 47 | 46 |  |
| Gender (male) | 1,782 (48) | 1,510 (47) | 273 (54) | $<0.001$ |
| Race/Ethnicity |  |  |  |  |
| White Non-Hispanic | 3,160 (86) | 2,793 (88) | 367 (72) | <0.001 |
| African American | 163 (4) | 111 (3) | 52 (10) | <0.001 |
| Hispanic | 142 (4) | 113 (4) | 30 (6) | <0.01 |
| Other | 221 (6) | 162 (5) | 58 (11) | <0.001 |
| Married | 2,070 (56) | 1,872 (59) | 198 (39) | $<0.001$ |
| Single Adult Household * | 314 (20) | 256 (18) | 58 (32) | $<0.001$ |
| Education |  |  |  |  |
| Non-High School Grad | 322 (9) | 237 (7) | 85 (17) | $<0.001$ |
| High School Grad | 2,257 (61) | 1,929 (61) | 329 (65) | <0.01 |
| College Grad | 1,108 (30) | 1,014 (32) | 94 (18) | <0.001 |
| Employment |  |  |  |  |
| Unemployed/Student | 660 (18) | 525 (17) | 136 (27) | $<0.001$ |
| Employed | 2,387 (65) | 2,097 (66) | 290 (58) | <0.001 |
| Retired | 626 (17) | 548 (17) | 78 (15) | 0.07 |
| Comorbidity |  |  |  |  |
| Depression | 684 (19) | 523 (16) | 161 (32) | <0.001 |
| Diabetes | 298 (8) | 249 (8) | 49 (10) | 0.03 |
| COPD | 161 (4) | 124 (4) | 37 (7) | $<0.001$ |
| CAD | 127 (3) | 107 (3) | 20 (4) | 0.20 |
| Alcohol Misuse | 766 (21) | 670 (21) | 95 (19) | 0.07 |
| Perceived Health |  |  |  |  |
| Fair/Poor | 437 (12) | 305 (10) | 132 (26) | $<0.001$ |
| Access |  |  |  |  |
| No PCP | 858 (23) | 699 (22) | 160 (32) | $<0.001$ |
| Uninsured | 5 (<1) | 5 (<1) | 1 (<1) | 0.60 |
| Delay |  |  |  |  |
| Delay Cost | 331 (9) | 228 (7) | 103 (20) | <0.001 |
| Delay Non-Cost | 444 (12) | 325 (10) | 119 (23) | <0.001 |
| Delay $\dagger$ | 659 (18) | 484 (15) | 175 (34) | <0.001 |

[^0]Table S5

Reasons for Delaying Medical Care Among Tennessee Respondents

| Reason for delaying care | Overall $(\mathrm{N}=1,014)$ | With Support $(\mathrm{N}=669)$ | Without Support $(\mathrm{N}=345)$ | P-value |
| :---: | :---: | :---: | :---: | :---: |
| Cost | 664 (65) | 415 (62) | 249 (72) | $<0.001$ |
| Couldn't reach office on phone | 3 (<1) | $2(<1)$ | $1(<1)$ | 0.50 |
| Couldn't get timely appointment | 115 (11) | 72 (11) | 44 (13) | $<0.01$ |
| Too long of wait in waiting room | 56 (6) | 36 (5) | 20 (6) | 0.046 |
| Office Closed | 14 (1) | 12 (2) | 2 (1) | 0.32 |
| No transportation | 85 (8) | 63 (9) | 22 (6) | 0.56 |
| Other Reason | 279 (28) | 176 (26) | 103 (30) | <0.001 |

Weighted Data. Multiplication by 1,000 gives weighted frequency ( N ). Total Weighted N Delays = 1,014,000
Patients who delayed care due to cost could also report one additional reason for delaying medical care, therefore percentages for reasons for delay in care are greater than total percentage of patients who delayed care.

Table S6
Multivariate Modeling Tennessee

| Social Support | Model 1 | 95\% CI | p-value | Model 5 | 95\% CI | p-value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Good Social Support | 1.00 | n/a | n/a | 1.00 | n/a | n/a |
| Poor Social Support | 2.22 | 1.78-2.77 | $<0.001$ | 1.50 | 1.16-1.94 | $<0.01$ |
| Demographics |  |  |  |  |  |  |
| Age |  |  |  | 1.01 | 1.00-1.02 | 0.04 |
| Gender (Male) |  |  |  | 0.60 | 0.47-0.76 | <0.001 |
| Race |  |  |  |  |  |  |
| White non-Hispanic |  |  |  | 1.00 | n/a | n/a |
| AA |  |  |  | 1.22 | 0.88-1.70 | 0.22 |
| Hispanic |  |  |  | 1.06 | 0.26-4.35 | 0.94 |
| Other |  |  |  | 0.93 | 0.48-1.80 | 0.84 |
| Marital Status (married) |  |  |  | 0.95 | 0.76-1.20 | 0.68 |
| Socioeconomic Status |  |  |  |  |  |  |
| Education (Highest Level) |  |  |  |  |  |  |
| Non High School |  |  |  | 1.00 | n/a | n/a |
| Graduate |  |  |  | 1.00 | 1/a |  |
| High School Graduate |  |  |  | 0.71 | 0.49-1.03 | 0.07 |
| College Graduate |  |  |  | 0.81 | 0.52-1.25 | 0.34 |
| Employment |  |  |  |  |  |  |
| Employed |  |  |  | 1.00 | n/a | n/a |
| Unemployed/Student |  |  |  | 1.08 | 0.83-1.41 | 0.57 |
| Retired |  |  |  | 0.45 | 0.31-0.64 | <0.001 |
| Health Factors |  |  |  |  |  |  |
| Comorbidity |  |  |  |  |  |  |
| Depression |  |  |  | 2.00 | 1.56-2.56 | $<0.001$ |
| DM |  |  |  | 1.29 | 0.93-1.78 | 0.12 |
| COPD |  |  |  | 1.44 | 1.01-2.06 | 0.04 |
| CAD |  |  |  | 1.08 | 0.70-1.65 | 0.73 |
| Alcohol Misuse |  |  |  | 1.19 | 0.82-1.72 | 0.36 |
| Perceived Health |  |  |  |  |  |  |
| Fair/Poor |  |  |  | 2.04 | 1.51-2.75 | <0.001 |
| Access to Care |  |  |  |  |  |  |
| No Primary Physician |  |  |  | 1.28 | 0.95-1.74 | 0.11 |
| No Insurance |  |  |  | 3.90 | 2.88-5.28 | <0.001 |

Table S7
Reasons for Delaying Medical Care Among Minnesota Respondents

| Reason for delaying care | Overall <br> $(\mathrm{N}=659)$ | With Support <br> $(\mathrm{N}=484)$ | Without Support <br> $(\mathrm{N}=175)$ | P-value |
| :--- | :---: | :---: | :---: | :---: |
| Cost | $331(50)$ | $228(47)$ | $103(59)$ | $<0.001$ |
| Couldn't reach office on <br> phone | $19(3)$ | $14(3)$ | $5(3)$ | $<0.01$ |
| Couldn't get timely <br> appointment | $160(24)$ | $125(4)$ | $35(20)$ | $<0.001$ |
| Too long of wait in waiting <br> room | $60(9)$ | $41(26)$ | $19(11)$ | $<0.001$ |
| Office Closed | $23(3)$ | $17(4)$ | $6(3)$ | 0.01 |
| No transportation | $88(13)$ | $54(11)$ | $34(19)$ | $<0.001$ |
| Other Reason | $95(14)$ | $74(15)$ | $21(12)$ | $<0.001$ |
| Weight) |  |  |  |  |

Weighted Data. Multiplication by 1,000 gives weighted frequency (N). Total Weighted N Delays $=659,000$
Patients who delayed care due to cost could also report one additional reason for delaying medical care, therefore percentages for reasons for delay in care are greater than total percentage of patients who delayed care.

Table S8
Multivariate Modeling Minnesota

| Social Support | Model 1 | 95\% CI | p-value | Model 5 | 95\% CI | p-value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Good Social Support | 1.00 | n/a | n/a | 1.00 | n/a | n/a |
| Poor Social Support | 2.93 | 2.55-3.36 | $<0.001$ | 2.16 | 1.83-2.56 | $<0.001$ |
| Demographics |  |  |  |  |  |  |
| Age |  |  |  | 1.01 | 1.01-1.02 | $<0.001$ |
| Gender (Male) |  |  |  | 0.66 | 0.58-0.75 | <0.001 |
| Race |  |  |  |  |  |  |
| White non-Hispanic |  |  |  | 1.00 | n/a | n/a |
| AA |  |  |  | 0.58 | 0.42-0.80 | $<0.001$ |
| Hispanic |  |  |  | 1.44 | 1.00-2.06 | 0.05 |
| Other |  |  |  | 1.08 | 0.56-1.68 | 0.73 |
| Marital Status (married) |  |  |  | 0.88 | 0.77-0.99 | 0.04 |
| Socioeconomic Status |  |  |  |  |  |  |
| Education (Highest Level) |  |  |  |  |  |  |
| Non High School |  |  |  | 1.00 | n/a | n/a |
| Graduate |  |  |  | 1.00 | n/a | n/a |
| High School Graduate |  |  |  | 0.98 | 0.71-1.35 | 0.90 |
| College Graduate |  |  |  | 0.97 | 0.71-1.35 | 0.83 |
| Employment |  |  |  |  |  |  |
| Employed |  |  |  | 1.00 | n/a | n/a |
| Unemployed/Student |  |  |  | 1.09 | 0.92-1.29 | 0.33 |
| Retired |  |  |  | 0.58 | 0.48-0.71 | <0.001 |
| Health Factors |  |  |  |  |  |  |
| Comorbidity |  |  |  |  |  |  |
| Depression |  |  |  | 2.02 | 1.75-2.32 | <0.001 |
| DM |  |  |  | 1.07 | 0.86-1.33 | 0.56 |
| COPD |  |  |  | 1.70 | 1.35-2.15 | <0.001 |
| CAD |  |  |  | 0.88 | 0.65-1.20 | 0.42 |
| Alcohol Misuse |  |  |  | 1.14 | 0.98-1.33 | 0.10 |
| Perceived Health |  |  |  |  |  |  |
| Fair/Poor |  |  |  | 2.21 | 1.85-2.64 | <0.001 |
| Access to Care |  |  |  |  |  |  |
| No Primary Physician |  |  |  | 1.10 | 0.93-1.29 | 0.27 |
| No Insurance |  |  |  | 1.75 | 0.41-7.53 | 0.45 |

95\% confidence intervals and p-values given refer to model 5


[^0]:    All data weighted according to BRFSS formula. Multiplication by 1,000 gives weighted N . Total weighted $\mathrm{N}=$ 3,686,000

    * large proportion of missing data (50\%) for single adult household status
    $\dagger$ respondents reported both cost and non-cost reasons for delaying care, therefore total number of delays is less sum of cost and non-cost delays

