

## Supplementary Material

### Appendix A: Variables from NHANES dataset used in analysis.

Variable name	Variable Description	Variable Classification
MCQ520	During the past 12 months {have you/has s/he} had pain in the abdominal area shaded on the diagram?	Categorical- binary (Yes/No)
DSD128Z	For what reason or reasons do you take {PRODUCT NAME}?? (For what reason or reasons did the doctor or other health professional tell you to take {PRODUCT}?)	Categorical- binary (Yes/No)
INDFMPIR	Poverty income ratio (PIR) - a ratio of family income to poverty threshold	Continuous (dichotomized in this paper)
DMDEDUC2	What is the highest grade or level of school {you have/SP has} completed or the highest degree {you have/s/he has} received?	Categorical: <ul style="list-style-type: none"> <li>• Less than 9th grade</li> <li>• 9-11th grade education ( includes 12th grade and no diploma)</li> <li>• High school graduate/ GED, some college or associates (AA) degree , and college graduate or higher.</li> </ul>
MCQ560	Have {you/s/he} ever had gallbladder surgery?	Categorical- Binary (Yes/No)
ridageyr	Age in years at screening	Continuous
bmxbmi	Body Mass index (kg/m <sup>2</sup> )	Continuous
slq050	Ever told the doctor you have trouble sleeping?	Categorical- binary (Yes/No)
diq010	Doctor told you have diabetes	Categorical- binary (Yes/No)
smq890	Ever smoked a cigarette even one time?	Categorical- binary (Yes/No)
smq040	Do you now smoke cigarettes?	Categorical- binary (Yes/No)