

Mammograms as Outcome Dags

Direct Effect

Primary predictor

Adjustment variables

Age	County Type, Healthcare Util, Psych Dx, Race, Substance Abuse
Race	Age, County Type, Healthcare Util, Psych Dx, Substance Abuse
Psychiatric Dx	Age, County Type, Healthcare Utilization, Race, Substance Abuse
Substance Abuse	Age, County Type, Healthcare Util, Psychiatric Diagnosis, Race
County Type	Age, Healthcare Util, Psychiatric Diagnosis, Race, Substance Abuse
Healthcare Util	Age, County Type, Psychiatric Diagnosis, Race, Substance Abuse

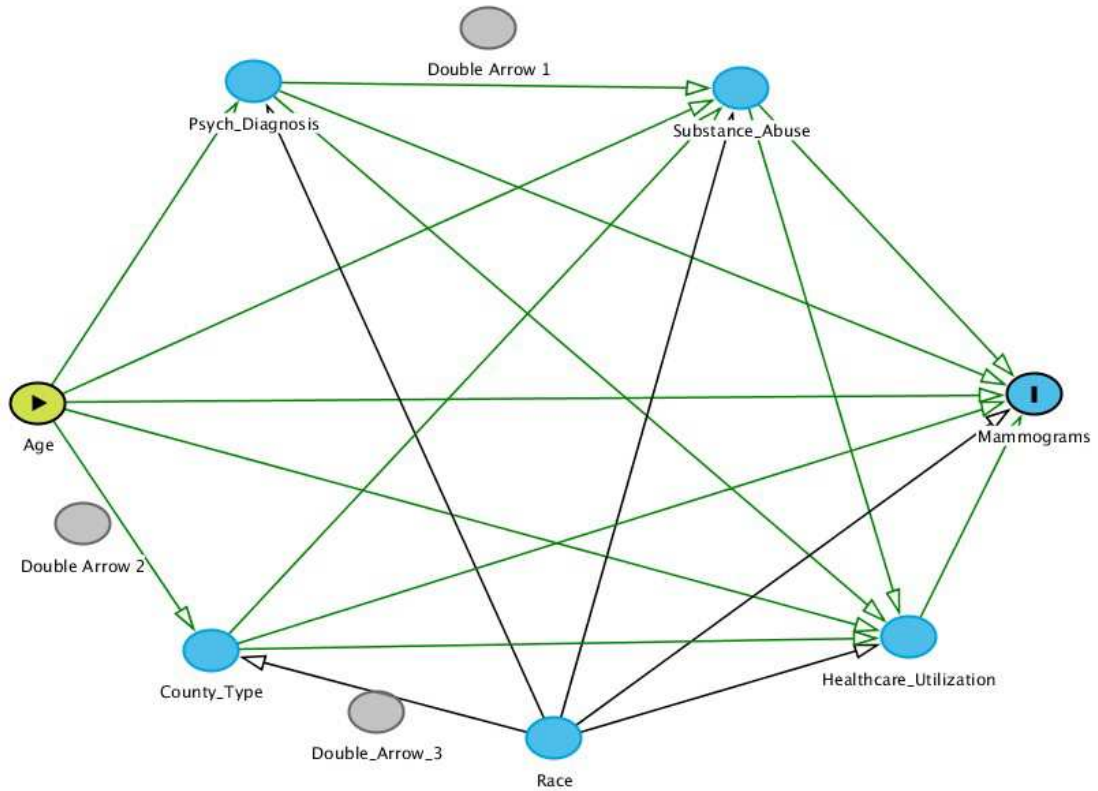
Total Effect

Primary predictor

Adjustment variables

Age	County Type
Race	County Type
Psychiatric Dx	Age, Race, Substance Abuse
Substance Abuse	Age, County Type, Psychiatric Diagnosis, Race
County Type	Age, Race
Healthcare Util	Age, County Type, Psychiatric Diagnosis, Race, Substance Abuse

Age Dag



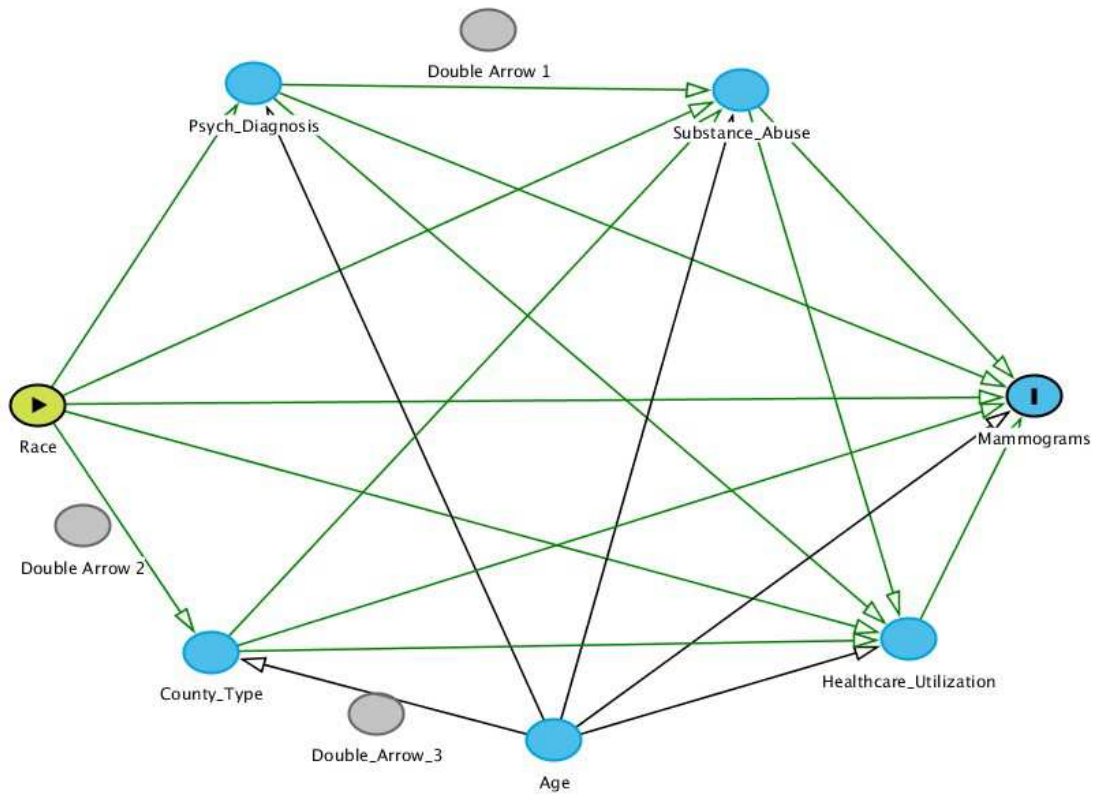
Minimal sufficient adjustment sets for estimating the direct effect of Age on Mammograms:

- {County_Type, Healthcare_Utilization, Psych_Diagnosis, Race, Substance_Abuse}

Minimal sufficient adjustment sets for estimating the total effect of Age on Mammograms:

- {} County Type (given double arrow)

Race Dag



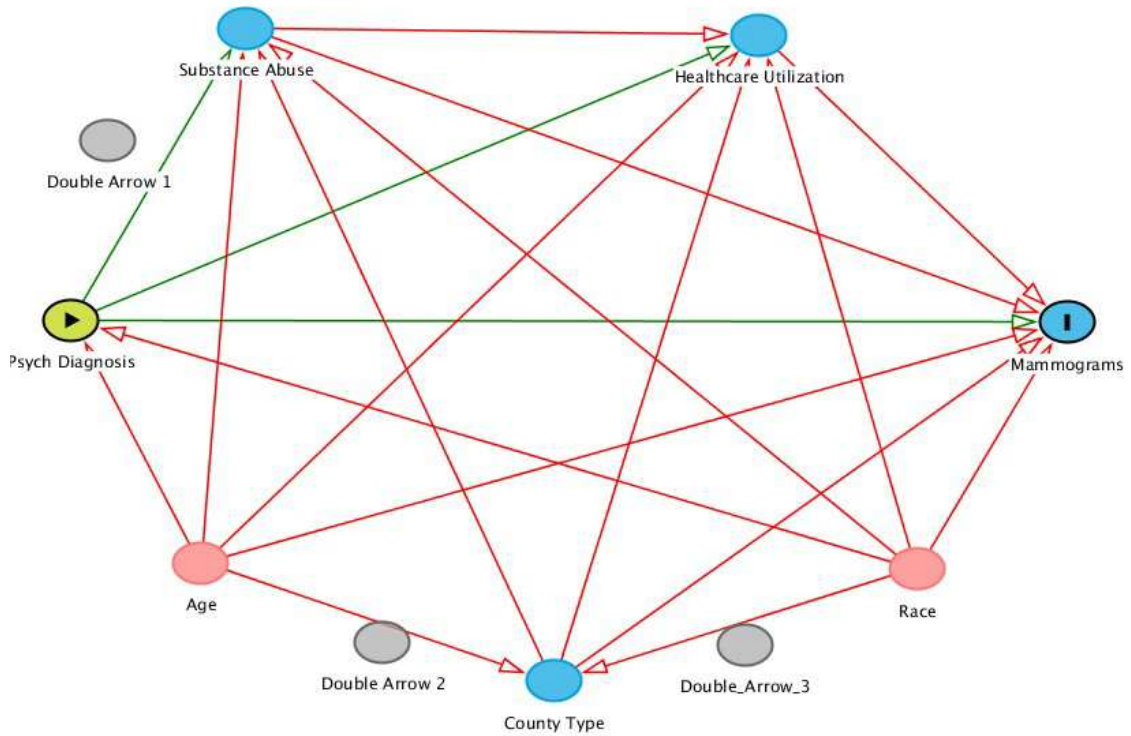
Minimal sufficient adjustment sets for estimating the direct effect of Race on Mammograms:

- {Age, County_Type, Healthcare_Utilization, Psych_Diagnosis, Substance_Abuse}

Minimal sufficient adjustment sets for estimating the total effect of Race on Mammograms:

- {} County Type (given double arrow)

Psych Diagnosis Dag



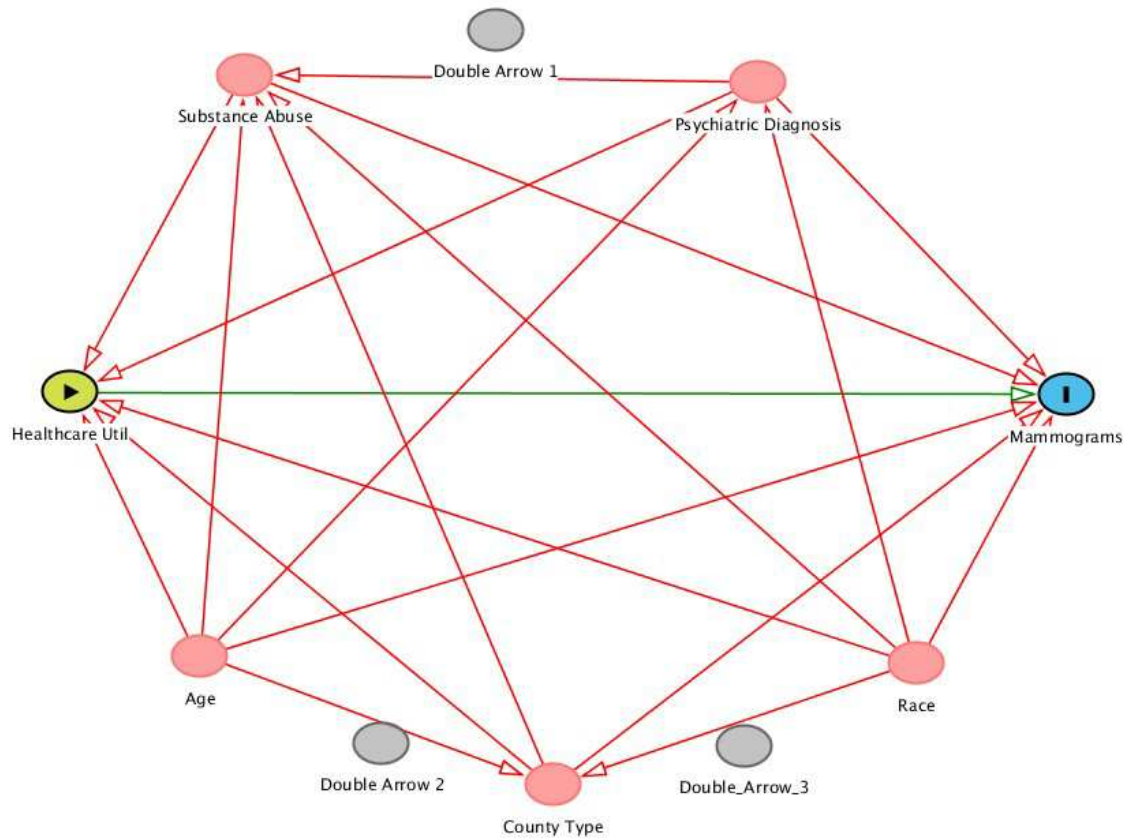
Minimal sufficient adjustment sets for estimating the direct effect of Psych Diagnosis on Mammograms:

- {Age, County Type, Healthcare Utilization, Race, Substance Abuse }

Minimal sufficient adjustment sets for estimating the total effect of Psych Diagnosis on Mammograms:

- {Age, Race} Substance Abuse (given double arrow)

Healthcare Utilization Dag

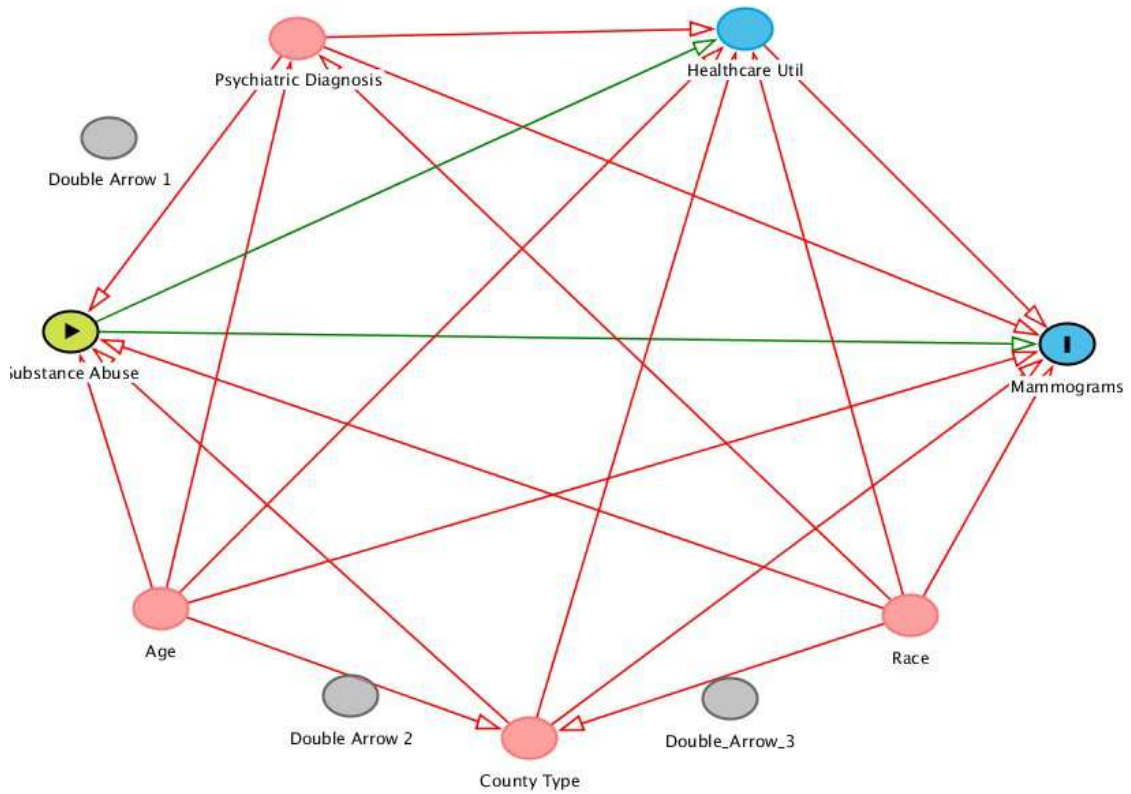


Total and direct effects are equal in this model.

Minimal sufficient adjustment sets for estimating the total effect of Healthcare Util on Mammograms:

- {Age, County Type, Psychiatric Diagnosis, Race, Substance Abuse }

Substance Abuse Dag



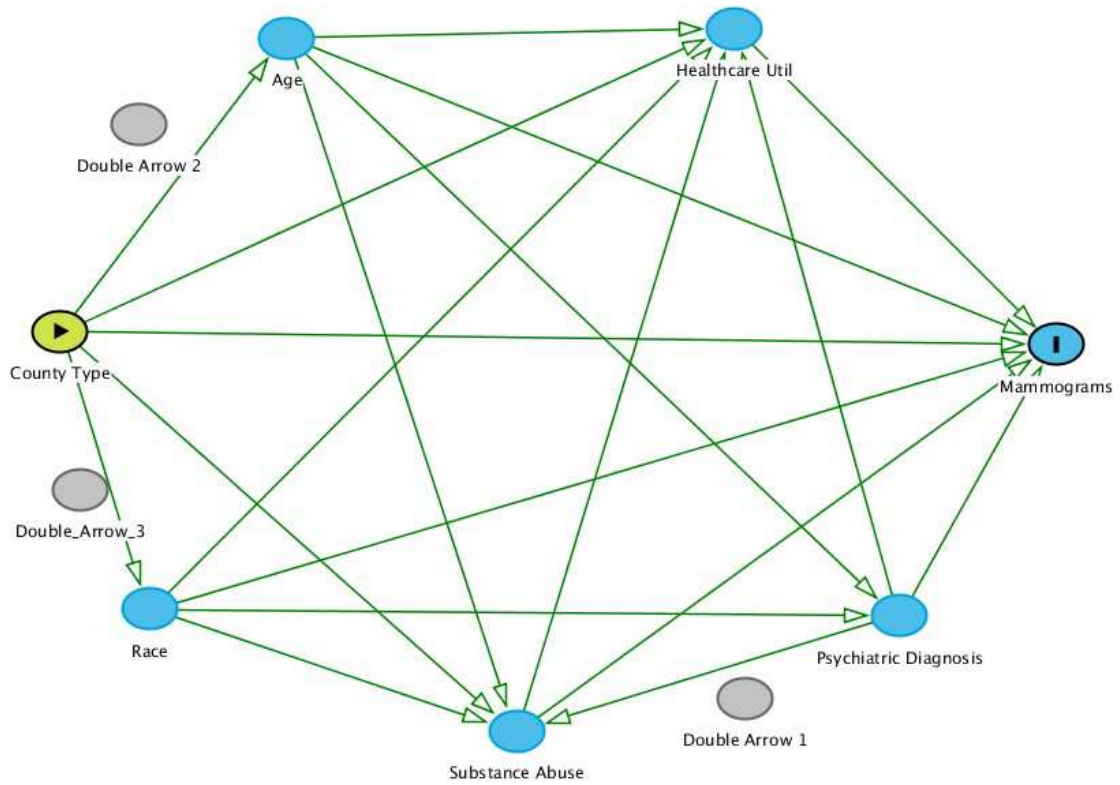
Minimal sufficient adjustment sets for estimating the direct effect of Substance Abuse on Mammograms:

- {Age, County Type, Healthcare Util, Psychiatric Diagnosis, Race}

Minimal sufficient adjustment sets for estimating the total effect of Substance Abuse on Mammograms:

- {Age, County Type, Psychiatric Diagnosis, Race}

County Type Dag



Minimal sufficient adjustment sets for estimating the direct effect of County Type on Mammograms:

- {Age, Healthcare Util, Psychiatric Diagnosis, Race, Substance Abuse}

Minimal sufficient adjustment sets for estimating the total effect of County Type on Mammograms:

- {} Age, Race (given double arrow)