LaTeX Preamble

```
    \documentclass{article}
\usepackage{graphicx} % Required for inserting images
\usepackage{tikz}
\usepackage[landscape]{geometry}
\usepackage{float}
\usepackage{listings}
\usepackage{caption}
\usepackage{subcaption}

%arrange page numbers
\usepackage{fancyhdr}
\pagestyle{fancy}
\fancyhf{}
\renewcommand{\headrulewidth}{0pt}
\fancyhead[R]{\thepage}

%setup Tikz to draw the graphs
\usetikzlibrary{external}
\tikzexternalize
%load options
\usetikzlibrary{positioning, calc, shapes.geometric, shapes.multipart,
        shapes, arrows.meta, arrows, decorations.markings, external, trees}

%Create custom arrow style:
\tikzstyle{Arrow} = [
thick,
decoration={
markings,
mark=at position 0.9999 with {
\arrow[thick]{latex}}},
shorten >= 3pt, preaction = {decorate}]
```

LaTeXCode for Figure 1:

```
\begin{tikzpicture}
    \node (1) {};
    \node [right =of 1] (2)  {\textbf{Heavy Alcohol Use (Exposure)}};
    \node [right =of 2] (3) {};
    \node [right =of 3] (4) {\textbf{Death (Outcome)}};
    \node [left =of 1] (5) {\textbf{SEP}};
    \node [above =of 3] (6) {\textbf{Smoking}};

    \draw[Arrow] (2.east)--(4.west);
    \draw[Arrow] (2) to (6);
    \draw[Arrow] (6) to (4);
    \draw[Arrow] (5) to [out=-25, in=-160] (4);
    \draw[Arrow] (5) to (6);
    \draw[Arrow] (5.east)--(2.west);
\end{tikzpicture}
```

Daggity Code for Figure 1:

```
    dag {
"Heavy Alcohol Use" [exposure,pos="-0.641,0.725"]
Death [outcome,pos="0.403,0.714"]
SEP [selected,pos="-1.648,0.714"]
Smoking [pos="-0.232,-0.073"]
"Heavy Alcohol Use" -> Death
"Heavy Alcohol Use" -> Smoking
SEP -> "Heavy Alcohol Use"
SEP -> Death [pos="-0.582,1.774"]
SEP -> Smoking
Smoking -> Death
}
```

LaTeX Code for Figure 2:

```
\begin{tikzpicture}
    \node (1) {\textbf{Family Hx of heavy Alcohol Use}};
    \node [above =of 1] (11) {};
    \node [above =of 11] (12) {};
    \node [above =of 12] (13) {};
    \node [right =of 1] (2) {};
    \node [above =of 2] (10) {\textbf{Friends heavy alcohol use}};
    \node [above =of 10] (8) {\textbf{SEP}};
    \node [right =of 2] (3) {\textbf{Heavy Alcohol Use (Exposure)}};
    \node [above =of 3] (9) {};
    \node [right =of 8] (7) {};
    \node [right =of 3] (4) {};
    \node [above =of 4] (6) {\textbf{Smoking}};
    \node [right =of 4] (5) {\textbf{Death (Outcome)}};

    \draw[Arrow] (3.east)--(5.west);
    \draw[Arrow] (3) to (6);
        \draw[Arrow] (6) to (5);
    \draw[Arrow] (1) to (3);
        \draw[Arrow, thick] (1.north)--(8.west);
        \draw[Arrow] (1) to [out=-25, in=-160] (5);
    \draw[Arrow] (8) to (6);
    \draw[Arrow] (8) to [out=25, in=140] (5);
    \draw[Arrow] (10) to (6);
    \draw[Arrow] (10) to (3);
    \draw[Arrow] (8) to (10);

\end{tikzpicture}
```

Daggity Code for Figure 2:

```
    dag {
"Friends Heavy Alcohol Use" [pos="-1.002,0.076"]
"Heavy Alcohol Use" [exposure,pos="-0.641,0.725"]
"family hx of heavy alcohol use" [selected,pos="-1.648,0.714"]
Death [outcome,pos="0.403,0.714"]
SEP [pos="-1.071,-0.423"]
Smoking [pos="-0.232,-0.073"]
"Friends Heavy Alcohol Use" -> "Heavy Alcohol Use"
"Friends Heavy Alcohol Use" -> Smoking
"Heavy Alcohol Use" -> Death
"Heavy Alcohol Use" -> Smoking
"family hx of heavy alcohol use" -> "Heavy Alcohol Use"
"family hx of heavy alcohol use" -> Death [pos="-0.582,1.774"]
"family hx of heavy alcohol use" -> SEP
SEP -> "Friends Heavy Alcohol Use"
SEP -> Death [pos="0.085,-0.783"]
SEP -> Smoking
Smoking -> Death
}
```

LaTeX Code for Figure 3:

```
        \begin{tikzpicture}
            \node (1) {\textbf{Family Hx of heavy alcohol use}};
            \node [above =of 1] (11) {};
            \node [above =of 11] (12) {};
            \node [above =of 12] (13) {};
            \node [right =of 1] (2) {};
            \node [above =of 2] (10) {\textbf{Friends heavy alcohol use}};
            \node [above =of 10] (8) {\textbf{SES}};
            \node [right =of 2] (3) {\textbf{Heavy Alcohol Use (Exposure)}};
            \node [above =of 3] (9) {};
            \node [right =of 8] (7) {};
            \node [right =of 3] (4) {};
```

```
        \node [above =of 4] (6) {\textbf{Smoking}};
        \node [right =of 4] (5) {\textbf{Death (Outcome)}};
        \node [above =of 1] (14) {\textbf{Unmeasured (U)}};
        \draw[Arrow] (3.east)--(5.west);
        \draw[Arrow] (3) to (6);
            \draw[Arrow] (6) to (5);
        \draw[Arrow] (1) to (3);
            \draw[Arrow, thick] (1) to [out=40, in=-160] (8);
            \draw[Arrow] (1) to [out=-25, in=-160] (5);
        \draw[Arrow] (8) to (6);
        \draw[Arrow] (8) to [out=25, in=140] (5);
        \draw[Arrow] (10) to (6);
        \draw[Arrow] (10) to (3);
        \draw[Arrow] (8) to (10);
        \draw[Arrow] (14) to (1);
        \draw[Arrow] (14) to (8);
    \end{tikzpicture}
```

Daggity Code for Figure 3:

```
dag {
    "Friends Heavy Alcohol Use" [pos="-1.002,0.076"]
    "Heavy Alcohol Use" [exposure,pos="-0.641,0.725"]
    "family hx of heavy alcohol use" [selected,pos="-1.648,0.714"]
    Death [outcome,pos="0.403,0.714"]
    SEP [pos="-1.071,-0.423"]
    Smoking [pos="-0.232,-0.073"]
    U [pos="-1.710,-0.047"]
    "Friends Heavy Alcohol Use" -> "Heavy Alcohol Use"
    "Friends Heavy Alcohol Use" -> Smoking
    "Heavy Alcohol Use" -> Death
    "Heavy Alcohol Use" -> Smoking
    "family hx of heavy alcohol use" -> "Heavy Alcohol Use"
    "family hx of heavy alcohol use" -> Death [pos="-0.582,1.774"]
```

```
"family hx of heavy alcohol use" -> SEP
SEP -> "Friends Heavy Alcohol Use"
SEP -> Death [pos="0.085,-0.783"]
SEP -> Smoking
Smoking -> Death
U -> "family hx of heavy alcohol use"
U -> SEP
}
```

LaTeX Code for Figure 4a and 4b:

```
\begin{figure}[H]
    %Figure 4a
    \subsection{Figure 4a}
    \begin{tikzpicture}
        \node [text width =3.5cm] (1) {\textbf{Unmeasured/Unknown Risk Factors}};
        \node  [right =of 1] (2) {};
        \node [right =of 2] (3)  {};
        \node [above =of 2] (4) {\textbf{Heart Failure}};
        \node [above =of 1] (6) {};
        \node [above =of 6] (7) {\textbf{Obesity}};
        \node [right =of 4] (8) {\textbf{Mortality}};

        \draw[Arrow] (7) to (4);
        \draw[Arrow] (7) to (4);
        \draw[Arrow] (4) to (8);
        \draw[Arrow] (1) to (8);
        \draw[Arrow] (1) to (4);
    \end{tikzpicture}

    %Figure 4b
    \subsection{Figure 4b}
    \begin{tikzpicture}
        \node [text width =3.5cm] (1) {\textbf{Unmeasured/Unknown Risk Factors}};
```

```
        \node  [right =of 1] (2) {};
        \node [right =of 2] (3)  {};
        \node [rectangle, outer sep=2, draw, above =of 2] (4) {\textbf{Heart Failure}};
        \node [above =of 1] (6) {};
        \node [above =of 6] (7) {\textbf{Obesity}};
        \node [right =of 4] (8) {\textbf{Mortality}};

        \draw[Arrow] (7) to (4);
        \draw[Arrow] (4) to (8);
        \draw[Arrow] (1) to (8);
        \draw[Arrow] (1) to (4);
    \end{tikzpicture}
```

Daggity Code for Figure 4a and 4b:

4a

```
dag {
    "Heart Failure" [exposure,pos="-0.575,0.545"]
    "Unmeasured/Unknown" [pos="-1.119,1.008"]
    Mortality [outcome,pos="-0.072,0.545"]
    Obesity [pos="-1.071,-0.006"]
    "Heart Failure" -> Mortality
    "Unmeasured/Unknown" -> "Heart Failure"
    "Unmeasured/Unknown" -> Mortality
    Obesity -> "Heart Failure"
    }
```

4b

```
dag {
    "Heart Failure" [adjusted,pos="-0.685,0.529"]
    "Unmeasured/Unknown" [pos="-1.119,1.008"]
```

```
    Mortality [outcome,pos="-0.072,0.545"]
    Obesity [pos="-1.071,-0.006"]
    "Heart Failure" -> Mortality
    "Unmeasured/Unknown" -> "Heart Failure"
    "Unmeasured/Unknown" -> Mortality
    Obesity -> "Heart Failure"
    }
```

LaTeX Code for Figure 5:

A

```
\begin{tikzpicture}
    \node  [text width=2.5cm, align=center] (4) at (10,7)  {\textbf{Death before Age 4 Years}};
    \node (2) at (6,7) {\textbf{SEP at Birth}};
    \node [text width=3cm] (6) at (14,7) {\textbf{Infections from Birth to Age 4 Years}};
    \node (1) at (6,5) {\textbf{Birthweight}};
    \node [text width=3cm](5) at (14,5) {\textbf{Lung Function at Age 4 Years}};
    \node [rectangle, draw, outer sep=0.1cm] (7) at (10,9) {\textbf{S}};

    \draw[Arrow] (1.east) to (4.south);
    \draw[Arrow] (2.south) to (1.north);
    \draw[Arrow] (2.south) to (5.north west);
    \draw[Arrow] (6.west) to (4.east);
    \draw[Arrow] (6.south) to (5.north);
    \draw[Arrow] (1.east) to (5.west);
    \draw[Arrow] (2.east) to (4.west);
    \draw[Arrow] (4.north) to (7.south);

\end{tikzpicture}
```

B

```
\begin{tikzpicture}
    \node [text width=3cm, rectangle, draw, outer sep=0.1cm] (4) at (10,7)
      {\textbf{Antihypertensive Medication Use}};
    \node (3) at (10,5) {\textbf{Hypertension}};
    \node (2) at (6,7) {\textbf{Obesity}};
    \node (6) at (14,7) {\textbf{Schooling}};
    \node (1) at (6,5) {\textbf{Physical Activity}};
    \node (5) at (14,5) {\textbf{Diet}};

    \draw[Arrow] (2.south) to (1.north);
    \draw[Arrow] (2.east) to (4.west);
    \draw[Arrow] (1.east) to (3.west);
    \draw[Arrow] (5.west) to (3.east);
    \draw[Arrow] (6.south) to (5.north);
    \draw[Arrow] (6.west) to (4.east);
    \draw[Arrow] (4.south) to (3.north);
\end{tikzpicture}
```

Daggity Code for Figure 5:

A

```
dag {
"Death before Age 4" [pos="-0.663,0.344"]
"Lung Function at Age 4" [pos="-0.061,1.296"]
"SEP at birth" [pos="-1.203,0.545"]
"infection from birth to age 4" [outcome,pos="-0.072,0.545"]
Birthweight [exposure,pos="-1.228,1.286"]
S [pos="-0.663,-0.341"]
"Death before Age 4" -> S
"SEP at birth" -> "Death before Age 4"
"SEP at birth" -> "Lung Function at Age 4"
"SEP at birth" -> Birthweight
```

```
"infection from birth to age 4" -> "Death before Age 4"
"infection from birth to age 4" -> "Lung Function at Age 4"
Birthweight -> "Death before Age 4"
Birthweight -> "Lung Function at Age 4"}
```

B

```
dag {
"Physical Activity" [exposure,pos="-1.228,1.286"]
"antihypertensive medication use" [pos="-0.604,0.200"]
Obseity [pos="-1.203,0.545"]
diet [outcome,pos="-0.061,1.296"]
hypertension [pos="-0.615,1.286"]
schooling [pos="-0.072,0.545"]
"Physical Activity" -> hypertension
"antihypertensive medication use" -> hypertension
Obseity -> "Physical Activity"
Obseity -> "antihypertensive medication use"
diet -> hypertension
schooling -> "antihypertensive medication use"
schooling -> diet
}
```

LaTeX Code for Figure 6:

```
    \subsection*{A}
    \begin{tikzpicture}
        \node (1) {};
        \node [right =of 1] (2) {};
        \node [right =of 2] (3) {\textbf{Alcohol Use Disorder(Exposure)}};
        \node [right =of 3] (4) {};
        \node [right =of 4] (5) {\textbf{5-Year Mortality(Outcome)}};
```

```
    \draw[Arrow] (3.east)--(5.west);
\end{tikzpicture}

\subsection*{B}
\begin{tikzpicture}
    \node (1) [text width=2cm] {\textbf{Family Hx of Alcohol Use}};
\node [right =of 1] (2) {};
\node [right =of 2] (3) {};
\node [right =of 3] (4) {\textbf{Alcohol Use Disorder(Exposure)}};
\node [right =of 4] (6) {\textbf{5-Year Mortality (Outcome)}};
\node [above =of 1] (13) {};
\node [above =of 2] (9) {\textbf{Heavy Alcohol Use}};
\node [above =of 13] (7) {\textbf{SEP}};
\node [right =of 7] (8) {\textbf{Care Access}};
\node [right =of 6, rectangle, draw] (14) {\textbf{S}};

\draw[Arrow] (4.east)--(6.west);
\end{tikzpicture}
\end{figure}
%need to split these up to smaller figures
\setcounter{figure}{5} %this resets counter so both smaller figures are Figure 6.

\begin{figure}[H]
\subsection*{C}
\begin{tikzpicture}
    \node (1) [text width=2cm] {\textbf{Family Hx of Alcohol Use}};
\node [right =of 1] (2) {};
\node [right =of 2] (3) {};
\node [right =of 3] (4) {\textbf{Alcohol Use Disorder(Exposure)}};
\node [right =of 4] (6) {\textbf{5-Year Mortality (Outcome)}};
\node [above =of 1] (13) {};
\node [above =of 2] (9) {\textbf{Heavy Alcohol Use}};
\node [above =of 13] (7) {\textbf{SEP}};
\node [right =of 7] (8) {\textbf{Care Access}};
\node [right =of 6, rectangle, draw] (14) {\textbf{S}};
```

```
\draw[Arrow] (4.east)--(6.west);
\draw[Arrow] (1.north) to (7.south);
\draw[Arrow] (7.east) to (8.west);
\draw[Arrow] (7) to  (9);
\draw[Arrow] (9) to  (4);
\draw[Arrow] (8) to [out=0, in=140] (6);
\draw[Arrow] (8.south) to  (4.north);
\draw[Arrow] (9) to  (4);
\draw[Arrow] (9) to [out=0, in=160]  (6);
\draw[Arrow] (1) to (9);
\draw[Arrow] (8) to [out=0,in=140] (14);
\end{tikzpicture}

\subsection*{D}
\begin{tikzpicture}
    \node (1) [text width=3cm] {\textbf{Friends Alcohol Use}};
    \node [right =of 1] (2) {};

    \node [right =of 2] (4) {\textbf{Alcohol Use Disorder (Exposure)}};
    \node [right =of 4] (6) {\textbf{5-Year Mortality(Outcome)}};
    \node [above =of 1] (13) {};
    \node [above =of 2, text width=1.8cm] (9) {\textbf{Heavy Alcohol Use}};
    \node [above =of 13] (7) {\textbf{SEP}};
    \node [right =of 7] (8) {\textbf{Care Access}};
    \node [above =of 6] (15) {};
    \node [above =of 15] (16) {\textbf{Smoking}};
    \node [below =of 2] (17) {\textbf{U}};
    \node [left =of 1, text width=2.5cm,align=center] (18) {\textbf{Family Hx of Alcohol Abuse}};
    \node [right =of 6, rectangle, draw] (20) {\textbf{S}};

    \draw[Arrow] (4.east)--(6.west);
    \draw[Arrow] (18.east) to (1.west);
    \draw[Arrow] (7.east) to (8.west);
    \draw[Arrow] (7) to  (9);
    \draw[Arrow] (9) to  (4);
    \draw[Arrow] (8) to [out=0, in=140] (6);
```

```
        \draw[Arrow] (8.south) to  (4.north);
        \draw[Arrow] (9) to  (4);
        \draw[Arrow] (9) to [out=0, in=160]  (6);
        \draw[Arrow] (1) to (9);
        \draw[Arrow] (7) to [out=-10, in=180] (16);
        \draw[Arrow] (9) to (16);
        \draw[Arrow] (16) to (6);
        \draw[Arrow] (17) to [out=20, in=-140] (4);
        \draw[Arrow] (17) to [out=0, in=-160](6);
        \draw [Arrow] (7) to [out=10, in=120] (6);
        \draw [Arrow] (18) to (7);
        \draw [Arrow] (18) to [out=30, in=180] (9);
        \draw [Arrow] (18) to [out=-30, in=-180] (4);
        \draw[Arrow] (8) to [out=0,in=90] (20);
        \draw[Arrow] (17) to [out=0,in=-160] (20);
    \end{tikzpicture}
```

Daggity Code for Figure 6:

6a

```
    dag {
        "5-year mortality" [outcome,pos="0.133,0.056"]
        "Alcohol use disorder" [exposure,pos="-0.860,0.066"]
        "Alcohol use disorder" -> "5-year mortality"
        }
```

6b

```
    dag {
"5-year mortality" [outcome,pos="0.133,0.056"]
"Alcohol use disorder" [exposure,pos="-0.860,0.066"]
"Care access" [pos="-0.973,-1.004"]
```

```
"Family history of alcohol use" [pos="-1.743,0.179"]
"Heavy Alcohol Use" [pos="-1.188,-0.397"]
S [adjusted,pos="0.713,0.097"]
SEP [pos="-1.502,-0.958"]
"Alcohol use disorder" -> "5-year mortality"
}
```

6c

```
    dag {
        "5-year mortality" [outcome,pos="0.133,0.056"]
        "Alcohol use disorder" [exposure,pos="-0.860,0.066"]
        "Care access" [pos="-0.973,-1.004"]
        "Family history of alcohol use" [pos="-1.743,0.179"]
        "Heavy Alcohol Use" [pos="-1.188,-0.397"]
        S [adjusted,pos="0.713,0.097"]
        SEP [pos="-1.502,-0.958"]
        "Alcohol use disorder" -> "5-year mortality"
        "Care access" -> "5-year mortality"
        "Care access" -> S
        "Family history of alcohol use" -> "Heavy Alcohol Use"
        "Family history of alcohol use" -> SEP
        "Heavy Alcohol Use" -> "5-year mortality"
        "Heavy Alcohol Use" -> "Alcohol use disorder"
        SEP -> "Care access"
        SEP -> "Heavy Alcohol Use"
        }
```

6d

```
    dag {
        "5-year mortality" [outcome,pos="0.133,0.056"]
        "Alcohol use disorder" [exposure,pos="-0.860,0.066"]
```

```
"Care access" [pos="-0.973,-1.004"]
"Family history of alcohol use" [pos="-2.075,0.349"]
"Friends alcohol use" [pos="-1.425,0.081"]
"Heavy Alcohol Use" [pos="-1.188,-0.397"]
S [adjusted,pos="0.713,0.097"]
SEP [pos="-1.502,-0.958"]
U [pos="-0.794,0.843"]
smoking [pos="0.020,-0.943"]
"Alcohol use disorder" -> "5-year mortality"
"Care access" -> "5-year mortality"
"Care access" -> S
"Family history of alcohol use" -> "Friends alcohol use"
"Family history of alcohol use" -> "Heavy Alcohol Use"
"Family history of alcohol use" -> SEP
"Friends alcohol use" -> "Heavy Alcohol Use"
"Heavy Alcohol Use" -> "5-year mortality"
"Heavy Alcohol Use" -> "Alcohol use disorder"
"Heavy Alcohol Use" -> smoking
SEP -> "Care access"
SEP -> "Heavy Alcohol Use"
SEP -> smoking [pos="-0.688,-1.437"]
U -> "5-year mortality"
U -> "Alcohol use disorder"
U -> S
smoking -> "5-year mortality"
}
```

LaTeX Code for Figure 7:

```
\subsection*{A}
\begin{tikzpicture}
    \node [rectangle, draw](1) {\textbf{Alcohol Use Disorder (Exposure)}};
    \node [right =of 1] (2) {};
    \node [right =of 2] (3) {};
```

```
        \node [right =of 3] (4) {};
        \node [right =of 4, rectangle, draw] (5) {\textbf{5-Year Mortality (Outcome)}};
        \node [above =of 1, rectangle, draw] (6) {\textbf{SEP}};
        \node [right =of 6, rectangle, draw] (7) {\textbf{Care Access}};
        \node [right =of 7, rectangle, draw] (8) {\textbf{Heavy alcohol use}};
        \node [right =of 8, rectangle, draw] (9) {\textbf{Smoking}};
        \draw [Arrow] (6) to (1); \draw [Arrow] (6) to (5);
        \draw [Arrow] (7) to (1); \draw [Arrow] (7) to (5);
        \draw [Arrow] (8) to (1); \draw [Arrow] (8) to (5);
        \draw [Arrow] (9) to (1); \draw [Arrow] (9) to (5);
    \end{tikzpicture}
\subsection*{B}
\begin{tikzpicture}
    \node (1) {};
    \node [right =of 1] (2)  {\textbf{Alcohol use disorder (Exposure)}};
    \node [right =of 2] (3) {};
    \node [right =of 3] (4) {\textbf{Death (Outcome)}};
    \node [left =of 1] (5) {\textbf{SEP}};
    \node [above =of 3] (6) {\textbf{Smoking}};
    \draw[Arrow] (2.east)--(4.west);
    \draw[>=latex, thick, <->] (2)--(6);
    \draw[Arrow] (6) to (3);
    \draw[Arrow] (5) to [out=-25, in=-160] (4);
    \draw[Arrow] (5) to [out=30, in=180] (6);
    \draw[>=latex, thick, <->] (5.east)--(2.west);
\end{tikzpicture}
```

Daggity Code for Figure 7:

A

```
    "5-year mortality" [outcome,pos="0.133,0.056"]
    "Alcohol use disorder" [exposure,pos="-0.860,0.066"]
    "Care access" [pos="-0.973,-1.004"]
```

```
        "Family history of alcohol use" [pos="-2.075,0.349"]
        "Friends alcohol use" [pos="-1.425,0.081"]
        "Heavy Alcohol Use" [pos="-1.188,-0.397"]
        S [adjusted,pos="0.713,0.097"]
        SEP [pos="-1.502,-0.958"]
        U [pos="-0.794,0.843"]
        smoking [pos="0.020,-0.943"]
        "Alcohol use disorder" -> "5-year mortality"
        "Care access" -> "5-year mortality"
        "Care access" -> S
        "Family history of alcohol use" -> "Friends alcohol use"
        "Family history of alcohol use" -> "Heavy Alcohol Use"
        "Family history of alcohol use" -> SEP
        "Friends alcohol use" -> "Heavy Alcohol Use"
        "Heavy Alcohol Use" -> "5-year mortality"
        "Heavy Alcohol Use" -> "Alcohol use disorder"
        "Heavy Alcohol Use" -> smoking
        SEP -> "Care access"
        SEP -> "Heavy Alcohol Use"
        SEP -> smoking [pos="-0.688,-1.437"]
        U -> "5-year mortality"
        U -> "Alcohol use disorder"
        U -> S
        smoking -> "5-year mortality"
        }
```

B

```
    dag {
        "5-year mortality" [outcome,pos="0.133,0.056"]
        "Alcohol use disorder" [exposure,pos="-1.020,0.040"]
        SEP [adjusted,pos="-1.623,1.121"]
        smoking [adjusted,pos="-0.042,-0.881"]
        "Alcohol use disorder" -> "5-year mortality"
        "Alcohol use disorder" <-> SEP
```

```
        "Alcohol use disorder" <-> smoking
        SEP -> "5-year mortality"
        SEP -> smoking [pos="-1.261,-0.757"]
        smoking -> "5-year mortality"
        }
*Note that node with edge ending on an edge cannot be made in daggity
```

LaTeX Code for Supplemental Figure 1

```
        \begin{tikzpicture}
            \node [text width=2.8cm](1) {\textbf{Friend's heavy alcohol use$_{time 0}$}};
            \node [right =of 1] (2) {\textbf{Heavy Alcohol Use$_{time 0}$}};
            \node [right =of 2,text width=2.8cm] (3) {\textbf{Friend's heavy alcohol use$_{time 1}$}};
            \node [right =of 3] (4) {\textbf{Heavy Alcohol Use$_{time 1}$}};
            \node [right =of 4] (5) {};
            \node [right =of 5] (8) {\textbf{Death}};
            \node [below =of 3] (6) {\textbf{Smoking$_{time 1}$}};
            \node [right =of 6] (9) {};
            \node [right =of 9] (7) {\textbf{Smoking$_{time 2}$}};
            \draw[Arrow, thick] (1.east) -- (2.west);
            \draw[Arrow, thick] (1) to [out=25, in=160] (3);
            \draw[Arrow, thick] (1) to [out=25, in=160] (4);
            \draw[Arrow, thick] (1) to [out=25, in=160] (8);
            \draw[Arrow, thick] (2.east) -- (3.west);
            \draw[Arrow, thick] (2) to [out=25, in=160] (4);
            \draw[Arrow, thick] (3.east) -- (4.west);
            \draw[Arrow, thick] (3) to [out=25, in=160] (8);
            \draw[Arrow, thick] (2) to (6);
            \draw[Arrow, thick] (6.east) -- (4.south);
            \draw[Arrow, thick] (6.east) -- (7);
            \draw[Arrow, thick] (4) to (7);
            \draw[Arrow, thick] (7) to (8);
        \end{tikzpicture}
```

Daggity Code for Supplemental Figure 1

```
dag {
    "5-year mortality" [outcome,pos="1.246,0.112"]
    "Friends heavy alcohol use_time 0" [adjusted,pos="-1.783,0.184"]
    "Friends heavy alcohol use_time 1" [pos="-0.316,0.107"]
    "Heavy alcohol use_time 0" [pos="-0.878,-0.109"]
    "heavy alcohol use_time 1" [exposure,pos="0.334,-0.186"]
    smoking_time1 [adjusted,pos="-0.250,0.925"]
    smoking_time2 [pos="0.709,0.920"]
    "Friends heavy alcohol use_time 0" -> "5-year mortality" [pos="-0.466,-1.529"]
    "Friends heavy alcohol use_time 0" -> "Friends heavy alcohol use_time 1" [pos="-0.685,-0.618"]
    "Friends heavy alcohol use_time 0" -> "Heavy alcohol use_time 0"
    "Friends heavy alcohol use_time 0" -> "heavy alcohol use_time 1" [pos="-0.663,-0.927"]
    "Friends heavy alcohol use_time 1" -> "heavy alcohol use_time 1"
    "Heavy alcohol use_time 0" -> "Friends heavy alcohol use_time 1"
    "Heavy alcohol use_time 0" -> smoking_time1
    "heavy alcohol use_time 1" -> "5-year mortality"
    "heavy alcohol use_time 1" -> smoking_time2
    smoking_time1 -> "heavy alcohol use_time 1"
    smoking_time1 -> smoking_time2
    smoking_time2 -> "5-year mortality"
    }
```