**Link Strengths using True Average Percentage**

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Regarding IC\* there is a link between two variables P(i,j) = -2 if there is a marked directed i-\*>j edge. | | | | | | | | | | | |
| -2 | Retinopathy |  |  |  | LSTA% | LSBA% |  |  |  | LSTA% | LSBA% |
| 3 | 5 | 2 | 4 |  | 17.20% | 43.90% | 17 | 19 |  | 0.30% | 54.80% |
| 7 | 4 | 6 | 3 |  |  |  | 21 | 18 |  |  |  |
| 4 | 6 | 3 | 5 |  | 12.20% | 49.20% | 18 | 20 |  | 15.30% | 67.40% |
| 5 | 6 | 4 | 5 |  | 9.50% | 49.90% | 19 | 20 |  | 11.20% | 66.90% |
| 6 | 8 | 5 | 7 |  | 8.10% | 58.50% | 20 | 22 |  | 10.20% | 72.80% |
| 3 | 9 | 2 | 8 |  | 4.80% | 66.00% | 17 | 23 |  | 1.50% | 78.50% |
| 6 | 10 | 5 | 9 |  | 11.50% | 83.70% | 20 | 24 |  | 12.70% | 87.40% |
| 4 | 11 | 3 | 10 |  | 13.30% | 90.90% | 18 | 25 |  | 18.80% | 94.90% |
| 5 | 11 | 4 | 10 |  | 8.50% | 91.20% | 19 | 25 |  | 11.60% | 95.00% |
| 8 | 11 | 7 | 10 |  | 40.60% | 93.40% | 22 | 25 |  | 42.40% | 96.50% |
| 9 | 11 | 8 | 10 |  | 56.60% | 93.40% | 23 | 25 |  | 61.20% | 96.40% |
| 10 | 11 | 9 | 10 |  | 46.90% | 93.40% | 24 | 25 |  | 52.40% | 96.50% |
| 3 | 12 | 2 | 11 |  | 11.10% | 96.50% | 17 | 26 |  | 8.10% | 97.70% |
| 4 | 12 | 3 | 11 |  | 23.70% | 97.00% | 18 | 26 |  | 37.50% | 97.60% |
| 8 | 12 | 7 | 11 |  | 61.30% | 98.10% | 22 | 26 |  | 60.10% | 98.40% |
| 10 | 12 | 9 | 11 |  | 40.00% | 98.00% | 24 | 26 |  | 51.30% | 98.40% |
| 5 | 13 | 4 | 12 |  | 40.50% | 99.30% | 19 | 27 |  | 43.60% | 99.20% |
| 8 | 13 | 7 | 12 |  | 47.50% | 99.60% | 22 | 27 |  | 57.80% | 99.50% |
| 12 | 13 | 11 | 12 |  | 74.80% | 99.60% | 26 | 27 |  | 58.70% | 99.50% |
| 5 | 14 | 4 | 13 |  | 65.00% | 99.50% | 19 | 28 |  | 61.50% | 99.80% |
| 10 | 14 | 9 | 13 |  | 69.60% | 99.70% | 24 | 28 |  | 85.70% | 99.90% |
| 11 | 14 | 10 | 13 |  | 22.60% | 99.70% | 25 | 28 |  | 0.00% | 99.90% |
| 5 | 7 | 4 | 6 |  | 9.20% | 73.30% | 19 | 21 |  | 16.10% | 78.50% |
| 4 | 14 | 3 | 13 |  | 73.50% | 99.50% | 18 | 28 |  | 45.90% | 99.80% |
| 6 | 14 | 5 | 13 |  | 63.70% | 99.50% | 20 | 28 |  | 84.40% | 99.80% |
| Regarding IC\* there is a link between two variables P(i,j) = P(j,i) = 2 if there is a latent variable L such that i<-L->j. | | | | | | | | | | | |
|  |  | 2 |  |  |  |  |  |  |  |  |  |
| 12 | 3 | 11 | 2 |  | 11.10% |  | 26 | 17 |  | 8.10% |  |
| 6 | 7 | 5 | 6 |  | 7.20% | 71.00% | 20 | 21 |  | 5.60% | 76.50% |
| Regarding IC\* there is a link between two variables P(i,j) = -1 if there is either a latent variable L such that i <-L-> j. | | | | | | | | | | | |
|  |  | -1 |  |  |  |  |  |  |  |  |  |
| 2 | 3 | 1 | 2 |  | 6.10% | 5.60% | 16 | 17 |  | 10.30% | 20.00% |
| 2 | 4 | 1 | 3 |  | 8.90% | 13.10% | 16 | 18 |  | 3.50% | 34.10% |
| 2 | 7 | 1 | 6 |  | 8.30% | 72.30% | 16 | 21 |  | 7.90% | 79.00% |
| 2 | 8 | 1 | 7 |  | 17.40% | 64.40% | 16 | 22 |  | 10.20% | 76.70% |
| 2 | 10 | 1 | 9 |  | 41.50% | 87.60% | 16 | 24 |  | 23.70% | 90.90% |
| 2 | 11 | 1 | 10 |  | 39.60% | 93.20% | 16 | 25 |  | 28.70% | 96.60% |
| 3 | 4 | 2 | 3 |  | 1.60% | 10.40% | 17 | 18 |  | 0.30% | 28.20% |
| 3 | 8 | 2 | 7 |  | 2.80% | 56.20% | 17 | 22 |  | 1.30% | 74.80% |
| 3 | 10 | 2 | 9 |  | 9.00% | 81.10% | 17 | 24 |  | 3.40% | 87.30% |
| 9 | 10 | 8 | 9 |  | 41.60% | 87.20% | 23 | 24 |  | 39.70% | 90.40% |
| 9 | 12 | 8 | 11 |  | 60.80% | 98.00% | 23 | 26 |  | 64.60% | 98.40% |
|  |  |  |  |  |  |  |  |  |  | 98.40% | 98.40% |



"Latent" -> "HbA1c" [label="0.6%",color=gray90,style=dashed];

"Latent" -> "Retinopathy" [label="3.4%",color=gray90,style=dashed];

"Latent" -> "Neuropathy" [label="3.5%",color=gray90,style=dashed];

"Latent" -> "Nepropathy" [label="11.0%",color=gray89];

"Latent" -> "Liver\_disease" [label="21.6%",color=gray78];

"Latent" -> "Hypertention" [label="3.2%",color=gray90,style=dashed];

"Latent" -> "BMI" [label="12.9%",color=gray87];

"Latent" -> "Creatinine" [label="19.7%",color=gray80];

"Latent" -> "Cholestrol" [label="28.9%",color=gray71];

"Latent" -> "HDL" [label="17.1%",color=gray83];

"Latent" -> "DBP" [label="45.8%",color=gray54];

"Latent" -> "SBP" [label="47.9%",color=gray52];

"Latent" -> "Smoking" [label="80.7%",color=gray19];

"Latent" -> "Latent1" [label="100.0%",color=gray00];

"HbA1c" -> "Retinopathy" [label="6.1%",color=gray90,style=dashed];

"HbA1c" -> "Neuropathy" [label="8.9%",color=gray90,style=dashed];

"HbA1c" -> "Nepropathy" [label="16.0%",color=gray84];

"HbA1c" -> "Liver\_disease" [label="15.6%",color=gray84];

"HbA1c" -> "Hypertention" [label="8.3%",color=gray90,style=dashed];

"HbA1c" -> "BMI" [label="17.4%",color=gray83];

"HbA1c" -> "Creatinine" [label="22.4%",color=gray78];

"HbA1c" -> "Cholestrol" [label="41.5%",color=gray59];

"HbA1c" -> "HDL" [label="39.6%",color=gray60];

"HbA1c" -> "DBP" [label="44.1%",color=gray56];

"HbA1c" -> "SBP" [label="75.4%",color=gray25];

"HbA1c" -> "Smoking" [label="97.2%",color=gray03];

"HbA1c" -> "HbA1c1" [label="60.9%",color=gray39];

"HbA1c" -> "Retinopathy1" [label="8.5%",color=gray90,style=dashed];

"HbA1c" -> "Neuropathy1" [label="2.7%",color=gray90,style=dashed];

"HbA1c" -> "Nepropathy1" [label="3.5%",color=gray90,style=dashed];

"HbA1c" -> "Liver\_disease1" [label="6.3%",color=gray90,style=dashed];

"HbA1c" -> "Hypertention1" [label="9.0%",color=gray90,style=dashed];

"HbA1c" -> "BMI1" [label="8.0%",color=gray90,style=dashed];

"HbA1c" -> "Creatinine1" [label="15.0%",color=gray85];

"HbA1c" -> "Cholestrol1" [label="12.8%",color=gray87];

"HbA1c" -> "HDL1" [label="14.3%",color=gray86];

"HbA1c" -> "DBP1" [label="20.6%",color=gray79];

"HbA1c" -> "SBP1" [label="7.5%",color=gray90,style=dashed];

"HbA1c" -> "Smoking1" [label="92.4%",color=gray08];

"Retinopathy" -> "Neuropathy" [label="1.6%",color=gray90,style=dashed];

"Retinopathy" -> "Nepropathy" [label="17.2%",color=gray83];

"Retinopathy" -> "Liver\_disease" [label="1.5%",color=gray90,style=dashed];

"Retinopathy" -> "Hypertention" [label="4.4%",color=gray90,style=dashed];

"Retinopathy" -> "BMI" [label="2.8%",color=gray90,style=dashed];

"Retinopathy" -> "Creatinine" [label="4.8%",color=gray90,style=dashed];

"Retinopathy" -> "Cholestrol" [label="9.0%",color=gray90,style=dashed];

"Retinopathy" -> "HDL" [label="6.7%",color=gray90,style=dashed];

"Retinopathy" -> "DBP" [label="11.1%",color=gray89];

"Retinopathy" -> "SBP" [label="0.0%",color=gray90,style=dashed];

"Retinopathy" -> "Smoking" [label="29.5%",color=gray71];

"Neuropathy" -> "Nepropathy" [label="16.6%",color=gray83];

"Neuropathy" -> "Liver\_disease" [label="12.2%",color=gray88];

"Neuropathy" -> "Hypertention" [label="11.9%",color=gray88];

"Neuropathy" -> "BMI" [label="14.2%",color=gray86];

"Neuropathy" -> "Creatinine" [label="11.8%",color=gray88];

"Neuropathy" -> "Cholestrol" [label="20.5%",color=gray79];

"Neuropathy" -> "HDL" [label="13.3%",color=gray87];

"Neuropathy" -> "DBP" [label="23.7%",color=gray76];

"Neuropathy" -> "SBP" [label="41.6%",color=gray58];

"Neuropathy" -> "Smoking" [label="73.5%",color=gray27];

"Nepropathy" -> "Liver\_disease" [label="9.5%",color=gray90,style=dashed];

"Nepropathy" -> "Hypertention" [label="9.2%",color=gray90,style=dashed];

"Nepropathy" -> "BMI" [label="10.9%",color=gray89];

"Nepropathy" -> "Creatinine" [label="8.4%",color=gray90,style=dashed];

"Nepropathy" -> "Cholestrol" [label="8.0%",color=gray90,style=dashed];

"Nepropathy" -> "HDL" [label="8.5%",color=gray90,style=dashed];

"Nepropathy" -> "DBP" [label="15.0%",color=gray85];

"Nepropathy" -> "SBP" [label="40.5%",color=gray60];

"Nepropathy" -> "Smoking" [label="65.0%",color=gray35];

"Liver\_disease" -> "Hypertention" [label="7.2%",color=gray90,style=dashed];

"Liver\_disease" -> "BMI" [label="8.1%",color=gray90,style=dashed];

"Liver\_disease" -> "Creatinine" [label="11.2%",color=gray89];

"Liver\_disease" -> "Cholestrol" [label="11.5%",color=gray89];

"Liver\_disease" -> "HDL" [label="19.9%",color=gray80];

"Liver\_disease" -> "DBP" [label="30.4%",color=gray70];

"Liver\_disease" -> "SBP" [label="0.0%",color=gray90,style=dashed];

"Liver\_disease" -> "Smoking" [label="63.7%",color=gray36];

"Hypertention" -> "BMI" [label="9.2%",color=gray90,style=dashed];

"Hypertention" -> "Creatinine" [label="7.3%",color=gray90,style=dashed];

"Hypertention" -> "Cholestrol" [label="29.4%",color=gray71];

"Hypertention" -> "HDL" [label="14.9%",color=gray85];

"Hypertention" -> "DBP" [label="25.7%",color=gray74];

"Hypertention" -> "SBP" [label="45.0%",color=gray55];

"Hypertention" -> "Smoking" [label="20.9%",color=gray79];

"BMI" -> "Creatinine" [label="20.9%",color=gray79];

"BMI" -> "Cholestrol" [label="43.0%",color=gray57];

"BMI" -> "HDL" [label="40.6%",color=gray59];

"BMI" -> "DBP" [label="61.3%",color=gray39];

"BMI" -> "SBP" [label="47.5%",color=gray52];

"BMI" -> "Smoking" [label="95.1%",color=gray05];

"Creatinine" -> "Cholestrol" [label="41.6%",color=gray58];

"Creatinine" -> "HDL" [label="56.6%",color=gray43];

"Creatinine" -> "DBP" [label="60.8%",color=gray39];

"Creatinine" -> "SBP" [label="57.1%",color=gray43];

"Creatinine" -> "Smoking" [label="88.6%",color=gray11];

"Cholestrol" -> "HDL" [label="46.9%",color=gray53];

"Cholestrol" -> "DBP" [label="40.0%",color=gray60];

"Cholestrol" -> "SBP" [label="73.6%",color=gray26];

"Cholestrol" -> "Smoking" [label="69.6%",color=gray30];

"HDL" -> "DBP" [label="41.6%",color=gray58];

"HDL" -> "SBP" [label="77.4%",color=gray23];

"HDL" -> "Smoking" [label="22.6%",color=gray77];

"DBP" -> "SBP" [label="74.8%",color=gray25];

"DBP" -> "Smoking" [label="0.0%",color=gray90,style=dashed];

"SBP" -> "Smoking" [label="75.8%",color=gray24];

"Latent1" -> "HbA1c1" [label="1.6%",color=gray90,style=dashed];

"Latent1" -> "Retinopathy1" [label="6.8%",color=gray90,style=dashed];

"Latent1" -> "Neuropathy1" [label="3.9%",color=gray90,style=dashed];

"Latent1" -> "Nepropathy1" [label="3.4%",color=gray90,style=dashed];

"Latent1" -> "Liver\_disease1" [label="25.7%",color=gray74];

"Latent1" -> "Hypertention1" [label="7.7%",color=gray90,style=dashed];

"Latent1" -> "BMI1" [label="15.6%",color=gray84];

"Latent1" -> "Creatinine1" [label="21.2%",color=gray79];

"Latent1" -> "Cholestrol1" [label="27.0%",color=gray73];

"Latent1" -> "HDL1" [label="20.7%",color=gray79];

"Latent1" -> "DBP1" [label="49.6%",color=gray50];

"Latent1" -> "SBP1" [label="44.8%",color=gray55];

"Latent1" -> "Smoking1" [label="92.4%",color=gray08];

"HbA1c1" -> "Retinopathy1" [label="10.3%",color=gray90];

"HbA1c1" -> "Neuropathy1" [label="3.5%",color=gray90,style=dashed];

"HbA1c1" -> "Nepropathy1" [label="3.8%",color=gray90,style=dashed];

"HbA1c1" -> "Liver\_disease1" [label="4.9%",color=gray90,style=dashed];

"HbA1c1" -> "Hypertention1" [label="7.9%",color=gray90,style=dashed];

"HbA1c1" -> "BMI1" [label="10.2%",color=gray90];

"HbA1c1" -> "Creatinine1" [label="10.5%",color=gray89];

"HbA1c1" -> "Cholestrol1" [label="23.7%",color=gray76];

"HbA1c1" -> "HDL1" [label="28.7%",color=gray71];

"HbA1c1" -> "DBP1" [label="20.1%",color=gray80];

"HbA1c1" -> "SBP1" [label="27.1%",color=gray73];

"HbA1c1" -> "Smoking1" [label="83.5%",color=gray16];

"Retinopathy1" -> "Neuropathy1" [label="0.3%",color=gray90,style=dashed];

"Retinopathy1" -> "Nepropathy1" [label="0.3%",color=gray90,style=dashed];

"Retinopathy1" -> "Liver\_disease1" [label="1.2%",color=gray90,style=dashed];

"Retinopathy1" -> "Hypertention1" [label="1.1%",color=gray90,style=dashed];

"Retinopathy1" -> "BMI1" [label="1.3%",color=gray90,style=dashed];

"Retinopathy1" -> "Creatinine1" [label="1.5%",color=gray90,style=dashed];

"Retinopathy1" -> "Cholestrol1" [label="3.4%",color=gray90,style=dashed];

"Retinopathy1" -> "HDL1" [label="4.5%",color=gray90,style=dashed];

"Retinopathy1" -> "DBP1" [label="8.1%",color=gray90,style=dashed];

"Retinopathy1" -> "SBP1" [label="0.0%",color=gray90,style=dashed];

"Retinopathy1" -> "Smoking1" [label="0.0%",color=gray90,style=dashed];

"Neuropathy1" -> "Nepropathy1" [label="9.1%",color=gray90,style=dashed];

"Neuropathy1" -> "Liver\_disease1" [label="15.3%",color=gray85];

"Neuropathy1" -> "Hypertention1" [label="11.8%",color=gray88];

"Neuropathy1" -> "BMI1" [label="15.1%",color=gray85];

"Neuropathy1" -> "Creatinine1" [label="15.0%",color=gray85];

"Neuropathy1" -> "Cholestrol1" [label="18.8%",color=gray81];

"Neuropathy1" -> "HDL1" [label="18.8%",color=gray81];

"Neuropathy1" -> "DBP1" [label="37.5%",color=gray63];

"Neuropathy1" -> "SBP1" [label="47.4%",color=gray53];

"Neuropathy1" -> "Smoking1" [label="45.9%",color=gray54];

"Nepropathy1" -> "Liver\_disease1" [label="11.2%",color=gray89];

"Nepropathy1" -> "Hypertention1" [label="16.1%",color=gray84];

"Nepropathy1" -> "BMI1" [label="17.2%",color=gray83];

"Nepropathy1" -> "Creatinine1" [label="7.6%",color=gray90,style=dashed];

"Nepropathy1" -> "Cholestrol1" [label="5.8%",color=gray90,style=dashed];

"Nepropathy1" -> "HDL1" [label="11.6%",color=gray88];

"Nepropathy1" -> "DBP1" [label="12.7%",color=gray87];

"Nepropathy1" -> "SBP1" [label="43.6%",color=gray56];

"Nepropathy1" -> "Smoking1" [label="61.5%",color=gray38];

"Liver\_disease1" -> "Hypertention1" [label="5.6%",color=gray90,style=dashed];

"Liver\_disease1" -> "BMI1" [label="10.2%",color=gray90];

"Liver\_disease1" -> "Creatinine1" [label="11.2%",color=gray89];

"Liver\_disease1" -> "Cholestrol1" [label="12.7%",color=gray87];

"Liver\_disease1" -> "HDL1" [label="25.8%",color=gray74];

"Liver\_disease1" -> "DBP1" [label="36.5%",color=gray64];

"Liver\_disease1" -> "SBP1" [label="0.0%",color=gray90,style=dashed];

"Liver\_disease1" -> "Smoking1" [label="84.4%",color=gray16];

"Hypertention1" -> "BMI1" [label="14.4%",color=gray86];

"Hypertention1" -> "Creatinine1" [label="10.8%",color=gray89];

"Hypertention1" -> "Cholestrol1" [label="22.8%",color=gray77];

"Hypertention1" -> "HDL1" [label="15.4%",color=gray85];

"Hypertention1" -> "DBP1" [label="12.5%",color=gray88];

"Hypertention1" -> "SBP1" [label="21.3%",color=gray79];

"Hypertention1" -> "Smoking1" [label="0.0%",color=gray90,style=dashed];

"BMI1" -> "Creatinine1" [label="20.2%",color=gray80];

"BMI1" -> "Cholestrol1" [label="40.8%",color=gray59];

"BMI1" -> "HDL1" [label="42.4%",color=gray58];

"BMI1" -> "DBP1" [label="60.1%",color=gray40];

"BMI1" -> "SBP1" [label="57.8%",color=gray42];

"BMI1" -> "Smoking1" [label="98.0%",color=gray02];

"Creatinine1" -> "Cholestrol1" [label="39.7%",color=gray60];

"Creatinine1" -> "HDL1" [label="61.2%",color=gray39];

"Creatinine1" -> "DBP1" [label="64.6%",color=gray35];

"Creatinine1" -> "SBP1" [label="53.4%",color=gray47];

"Creatinine1" -> "Smoking1" [label="94.5%",color=gray06];

"Cholestrol1" -> "HDL1" [label="52.4%",color=gray48];

"Cholestrol1" -> "DBP1" [label="51.3%",color=gray49];

"Cholestrol1" -> "SBP1" [label="67.0%",color=gray33];

"Cholestrol1" -> "Smoking1" [label="85.7%",color=gray14];

"HDL1" -> "DBP1" [label="33.8%",color=gray66];

"HDL1" -> "SBP1" [label="67.4%",color=gray33];

"HDL1" -> "Smoking1" [label="0.0%",color=gray90,style=dashed];

"DBP1" -> "SBP1" [label="58.7%",color=gray41];

"DBP1" -> "Smoking1" [label="0.0%",color=gray90,style=dashed];

"SBP1" -> "Smoking1" [label="93.5%",color=gray07];

}