

$t = 0$

$$P(N) = 0.9$$

$$P(D) = 0.1$$

$$P(N|N) = 0.956$$

$$P(D|N) = 0.044$$

$$P(N|D) = 0.4$$

$$P(D|D) = 0.6$$

$t = 1$

$$B_{NN} = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

$$B_{ND} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$B_{DN} = \begin{pmatrix} 0 \\ 1 \end{pmatrix}$$

$$B_{DD} = \begin{pmatrix} 0 \\ 0 \end{pmatrix}$$

$$P_{NN} = \begin{pmatrix} 1 \\ 1 \end{pmatrix}$$

$$P_{ND} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$P_{DN} = \begin{pmatrix} 1 \\ 0 \end{pmatrix}$$

$$P_{DD} = \begin{pmatrix} 0 \\ 0 \end{pmatrix}$$