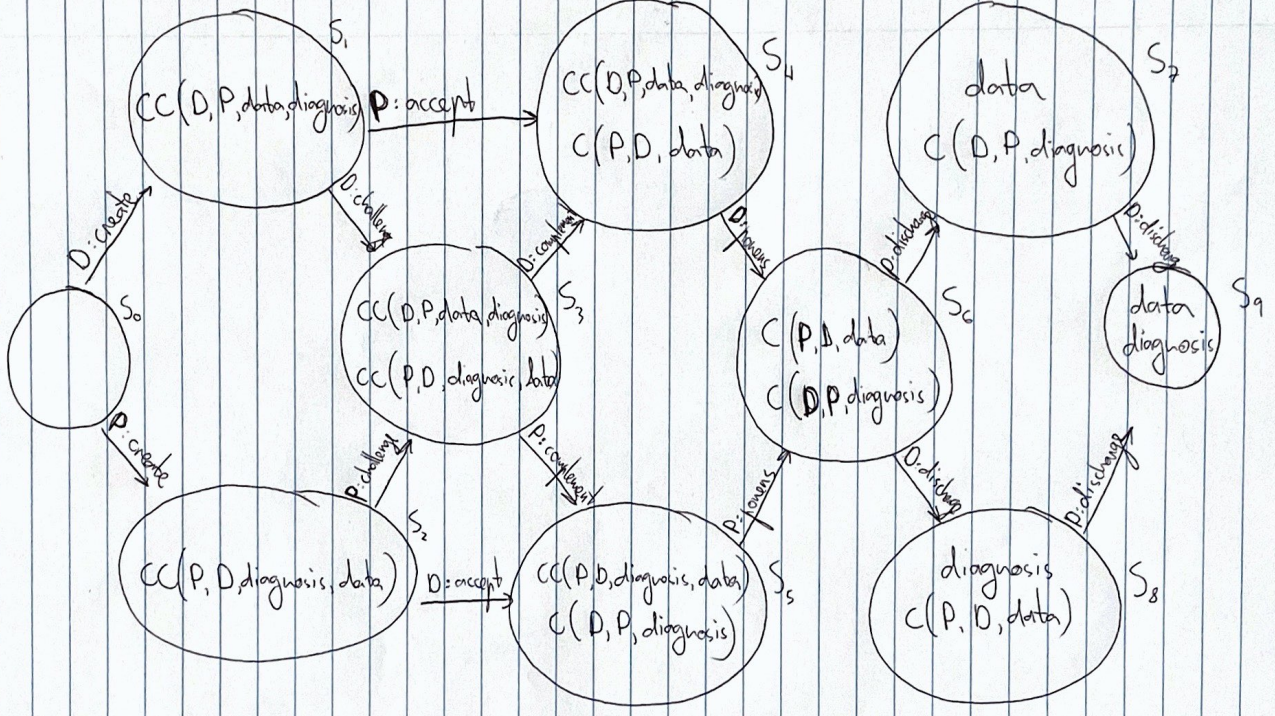
(a)


S0
S1
CC(D,P,data,diagnosis)
P: accept
S4
CC(D,P,data,diagnosis)
C(P,D,data)
S7
data
C(D,P,diagnosis)
D: create
D: challenge
D: confirm
P: reveals
P: discharge
D: discharge
S3
CC(D,P,data,diagnosis)
CC(P,D,diagnosis,data)
S6
C(P,D,data)
C(D,P,diagnosis)
S9
data
diagnosis
P: create
P: challenge
P: confirm
D: reveals
D: discharge
P: discharge
S2
CC(P,D,diagnosis,data)
D: accept
S5
CC(P,D,diagnosis,data)
C(D,P,diagnosis)
S8
diagnosis
C(P,D,data)

(b)

$S_0 \Rightarrow -$

$S_1 \Rightarrow V_D = -0{,}25 \quad V_P = 1 \quad S = 0{,}75$ Worst state for the D: S_1

$S_2 \Rightarrow V_D = 1 \quad V_P = -0{,}25 \quad S = 0{,}75$ Worst state for the P: S_2

$S_3 \Rightarrow V_D = 0{,}75 \quad V_P = 0{,}75 \quad S = 1{,}5$

$S_4 \Rightarrow V_D = 1{,}75 \quad V_P = 0{,}5 \quad S = 2{,}25$

$S_5 \Rightarrow V_D = 0{,}5 \quad V_P = 2{,}75 \quad S = 3{,}25$

$S_6 \Rightarrow V_D = 1{,}5 \quad V_P = 2{,}5 \quad S = 4$

$S_7 \Rightarrow V_D = 4{,}5 \quad V_P = 0 \quad S = 4{,}5$

$S_8 \Rightarrow V_D = 1 \quad V_P = 3{,}5 \quad S = 4{,}5$

$S_9 \Rightarrow V_D = 4 \quad V_P = 1 \quad S = 5$

(c) Yes. For example S_7, where using a 'cancel' operator would deprive P from diagnosis. C(D,P,diagnosis) remains open when the D cancels (or diagnosis becomes a false proposition) and P has already provided data. For the D', an analogue argument exists for S_8 for example (D gave diagnosis, P cancels).

(d) Yes. For example, we could use the trust link to adjust our valuations (for conditions) in terms of cooperation versus deflection. When other trustworthy agents make commitments, we can increase risk and cooperate more. This can be achieved by adjusting condition valuations so that for example all valuations are increased for that agent.

Condition	D's valuation	→ D's valuation for trusted partner
diagnosis	-1	-0,25
C(D,P,diagnosis)	-0,5	0
CC(D,P,data,diagnosis)	-0,25	0,25.