AKI prediction algorithms and performance

Peter Sutovsky

June 8, 2020

Contents

1	Bay	esian	Networks										1
	1.1	Data	version 1.x .										1
		1.1.1	Evaluation										1
		1.1.2	BN Models -	Descrip	otion								2

1 Bayesian Networks

1.1 Data version 1.x

1.1.1 Evaluation

Table 1: "Accuracies for various models"

model name	missing data present	records count	accuracy
BN00	0	93120	0.73
BN00	1	217148	0.77
BN01	1	217148	0.78
BN01	0	93120	0.74
BN02	0	93120	0.74
BN03	1	217148	0.78

1.1.2 BN Models - Description

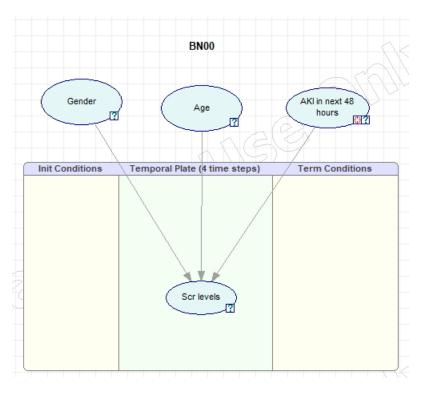


Figure 1: Model BN00 - 4 time steps

Model BN00 - 4 time periods SCr value at time t doesn't depend on previous SCr values

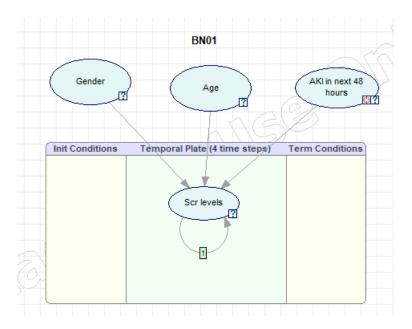


Figure 2: Model BN01 - 4 time steps, SCr value at time t depends on value at the time t-1

Model BN01 - 4 time steps, SCr value at time t depends on value at time t-1

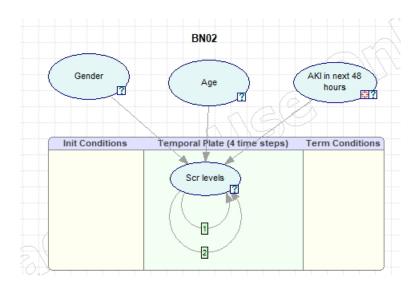


Figure 3: Model BN02 - 4 time steps, SCr value at time t depends on value at the time t-1, and t-2

Model BN02 - 4 time steps, SCr value at time t depends on value at time t-1, and t-2

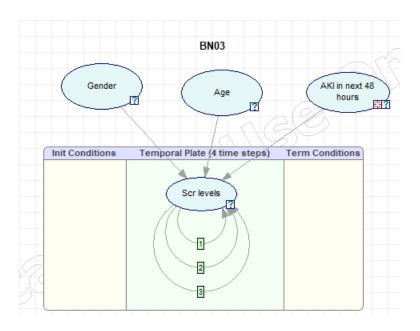


Figure 4: Model BN02 - 4 time steps, SCr value at time t depends on value at time $t-1,\,t-2,$ and t-3

Model BN02 - 4 time steps, SCr value at time t depends on value at time $t-1,\ t-2,\ {\bf and}\ t-3$