Reasult of model for network with 410 nodes unawere probability 0.4 and recover probability 0.0 Probability of being aware Derivation of being aware 0.89 0.91 0.91 0.92 0.92 0.92 0.92 0.92 0.92 2.5 0.2 0.2 0 0.1 0 0 0 0 0 -0 0.90 0.9 0.91 0.92 0.92 0.92 0.92 0.92 0.1 0 0.1 0 0 0 0.91 2.4 0.4 Ö 0.89 0.9 0.91 0.92 0.92 0.92 0.92 0.92 0.92 0.2 0.1 0.1 0.1 0 0 0 2.4 0.85 0.89 0.9 0.91 0.91 0.92 0.92 0.92 0.92 0.92 0.3 0.1 0.1 0 0.1 0 0 0 2.2 0.89 0.9 0.91 0.91 0.91 0.92 0.92 0.92 0.92 - 0.80 2.2 0.4 0.1 0.1 0 0 0.1 0 0 0 lambda 0.89 0.91 0.91 0.92 0.92 0.92 0.92 0.92 2.1 0.2 0 0 0.1 0 0 0.91 0.4 O 0.75 0.89 0.9 0.92 0.92 0.92 0.92 2.4 0.3 0.1 0.1 0 0 0 0.91 0.91 0.92 0.1 0 0.89 0.91 0.92 0.92 0.92 0.92 2.2 0.1 0.1 0 0.9 0.91 0.92 0 0.1 0 0 0 0.70 0.89 0.9 0.91 0.91 0.92 0.92 0.92 0.92 0.92 0.1 0.1 0 0 2.3 0.4 0 0.1 0 0 0.89 0.9 0.91 0.92 0.92 0.91 0.92 0.92 0.92 2.1 0.1 0.1 0.1 0 0.1 0 -0.1- 0.65 0.91 0.91 0.92 0.92 0.92 0.92 2.3 0.1 0.1 0 0 0.1 0 0 0 0.89 0.9 0.91 0.3 0.2 0.3 0.4 0.5 0.6 0.7 0.8 1.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 8.0 0.9 1.0 0.9 0.0 beta beta Average of derivation of being aware by lambda Average of aware prob by lambda 0.12 0.073 0.036 0.045 0.0091 0.0091 2.3 0.89 0.91 0.91 0.92 0.92 0.92 0.92 0.92 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 8.0 0.9 1.0 beta beta Derivation of being infected Probability of being infected 0.77 0.8 0.82 0.83 0.81 0.83 0.84 0.83 4.9 0.8 0.3 0.2 0.1 -0.2 0.3 -0.1 0.1 -0.1 0.84 0.0 8.0 0.76 0.81 0.84 0.84 0.3 0.2 0.1 -0.1 0.2 0 0.1 0 0.79 0.82 0.81 0.83 0.83 4.7 0.9 o. 0.77 0.78 0.79 0.83 0.81 0.82 0.84 0.83 0.85 4.9 8.0 0.1 0.1 0.4 -0.2 0.1 0.2 -0.1 0.2 - 0.7 0.74 0.78 0.8 0.82 0.83 0.83 0.4 0.2 0.1 0.1 0 0 0.81 0.83 0.83 4.7 0.7 0.1 0 - 0.6 0.75 0.78 0.81 0.81 0.81 0.82 0.82 0.83 0.83 4.5 0.3 0.3 0 0 0.1 0.1 0 1 0 0.75 0.79 0.81 0.84 0.83 0.1 0.3 -0.1 0.8 0.8 0.81 0.81 4.4 1.1 0.4 0 0.1 0 0 0.74 0.81 0.82 0.83 0.83 0.82 0.2 0 0.1 0.1 0 -0.1 0.78 0.8 0.8 4.7 0.7 0.1 0.4 0.75 0.8 0.8 0.81 0.82 0.81 0.83 0.82 0.81 0.9 0.5 0 0.1 0.1 -0.1 0.2 -0.1 -0.1 4.6 - 0.4 0.2 0.75 0.78 0.79 0.8 0.81 0.81 0.83 0.81 0.82 0.3 0.1 0.1 0.1 0 -0.2 0.1 4.7 0.8 - 0.3 0.74 0.3 0.2 0.3 -0.1 0.2 -0.1 0 0.1 0.77 0.79 0.82 0.81 0.83 0.82 0.82 0.83 0.7 4.7 0.2 0.82 0.83 0.2 0.1 0.2 0.2 0 0.1 -0.1 0.75 0.77 0.78 0.8 0.82 0.82 0.84 0.8 4.7 0 - 0.2 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 beta beta Average of derivation of being infected by lambda Average of being infected prob by lambda

0.87

0.86

0.87

0.86

0.85

0.85

0.86

0.85

0.85

0.85

0.86

0.1

0.1

0.69

0.67

0.69

0.67

0.65

0.64

0.67

0.66

0.67

0.67

0.67

0.1

0.1

0.2

0.3

0.4

0.5

beta

0.6

0.7

0.8

0.9

1.0

0.62

0.62

0.63

0.64

0.63

0.64

0.62

0.63

0.62

0.64

0.63

0.0

6.63 avg

0.0

0.2

0.2

0.2

0.2

0.2

0.2

0.2

0.2

0.2

0.2

0.2

0.0

0.2

0.0

O

o.

0

lambda .6 0.5 0.4

O

- 2.5

- 2.0

- 1.5

- 1.0

0.5

0.75 0.78 0.8 0.81 0.81 0.82 0.83 0.83 0.83 0.83 0.83 0.84 0.32 0.15 0.13 0.0091 0.091 0.055 0.0091 0.018

0.0

0.1

0.2

0.3

0.4

0.5

beta

0.6

0.7

8.0

0.9

1.0