Birth

A

Age 0 month

Disease-specific death

Outpatient visit

Hospitalization

Death

Markov model

Vaccination

No Vaccination

Not infected before vaccination (susceptible) (97%)

Infected before vaccination (partially immune) (3%)

Not infected before vaccination (susceptible) (97%)

Infected before vaccination (partially immune) (3%)

Decision tree

Vaccination (dose 1&2: age 2&4 months)

No vaccination

Partially immune due to vaccination

Susceptible (no diarrhea)

1st infection

Asymptomatic

Mild

Severe

Outpatient visit

Hospitalization

Death

Disease-specific death

Partially immune (no diarrhea)

2nd infection

Asymptomatic

Mild

Severe

Outpatient visit

Hospitalization

Death

Disease-specific death

Partially immune (no diarrhea)

3rd infection

Asymptomatic

Mild

Partially immune (no diarrhea)

4th infection

Asymptomatic

Mild

Partially immune (no diarrhea)

The solid arrows represent transition probabilities between health states, which are different depending on vaccination history and the number of previous wildtype rotavirus infections (Table 1).

* Deaths due to other causes occur at every stage according to the local background mortality but are not shown.