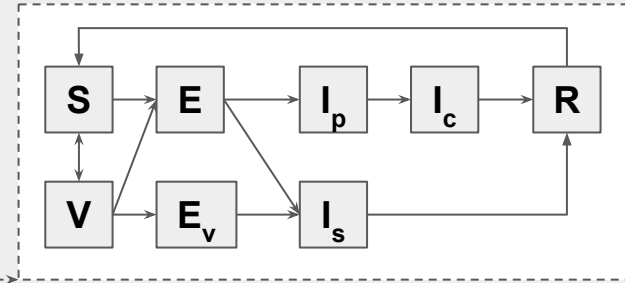


Known parameters based on existing knowledge:

1. Age-specific susceptibility
2. Age-specific clinically progression rates
3. Age-specific infection fatality rates
4. Population contact patterns
5. Population age structures
6. The impact of mobility on population contact pattern
7. Epidemic processes (embedded in CovidM)



Fitting Stage

Input

1. Daily COVID-19 mortality
2. Community mobility
3. Government response stringency index

Output

1. Infection introduction date
2. Basic reproduction number (R_0)

Projection Stage

Input

1. Expected proportion of population immune
2. Assumptions about vaccines (e.g., efficacy, protection duration) and vaccination roll-out strategies
3. Impact and health economic metric parameters
4. Projected mobility/ social contact changes

Output

1. Public health and health economic outcomes associated with different vaccine prioritisation strategies