Antigua and Barbuda

Data

New Cases

New Deaths

Mobility Data
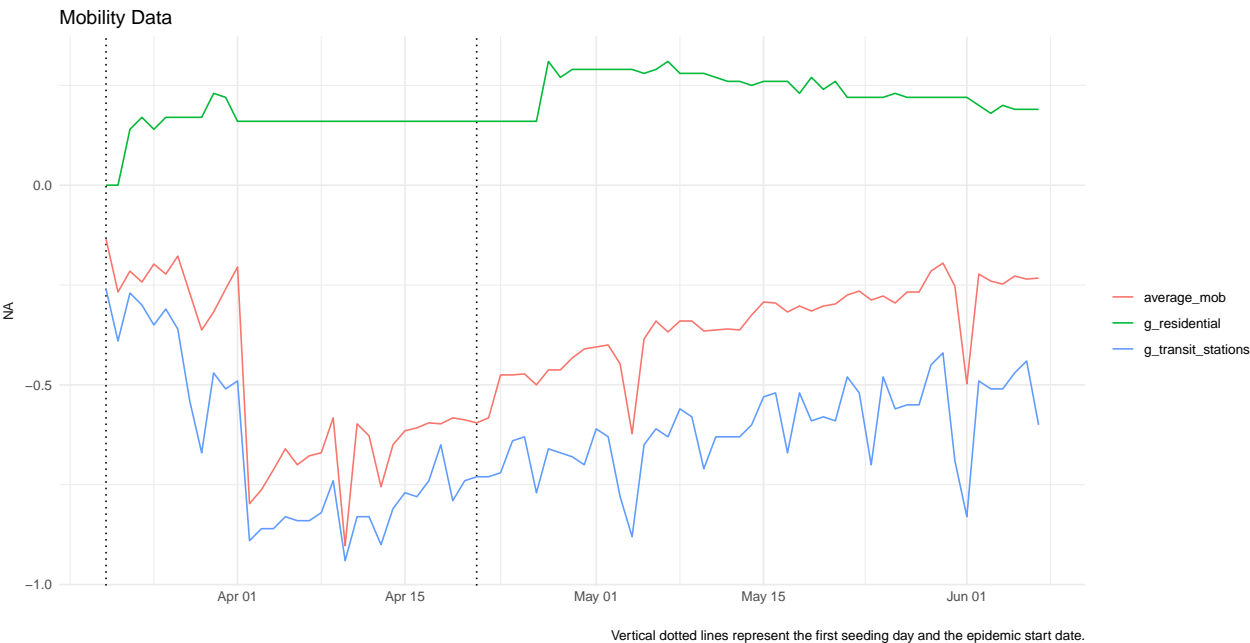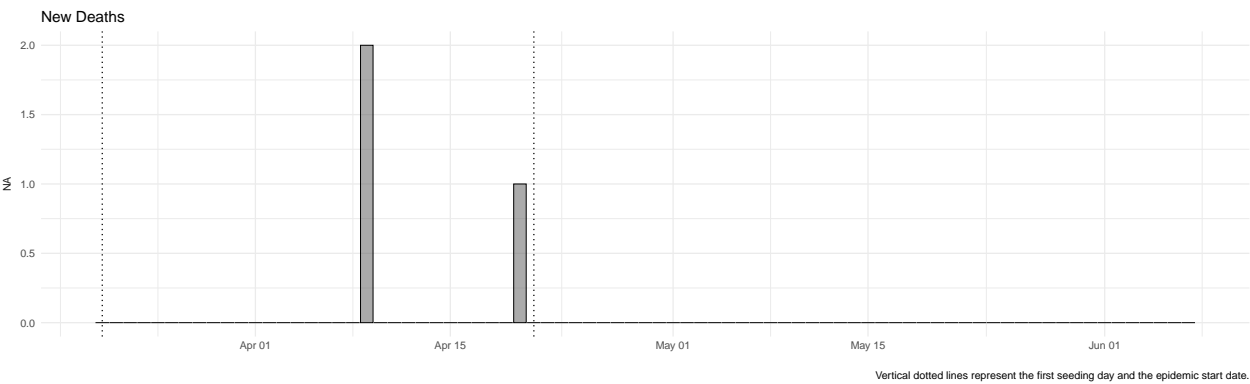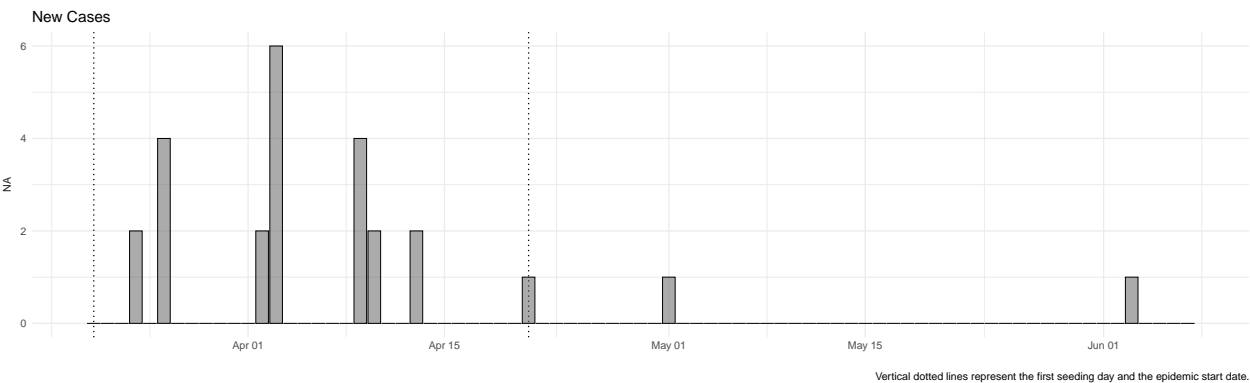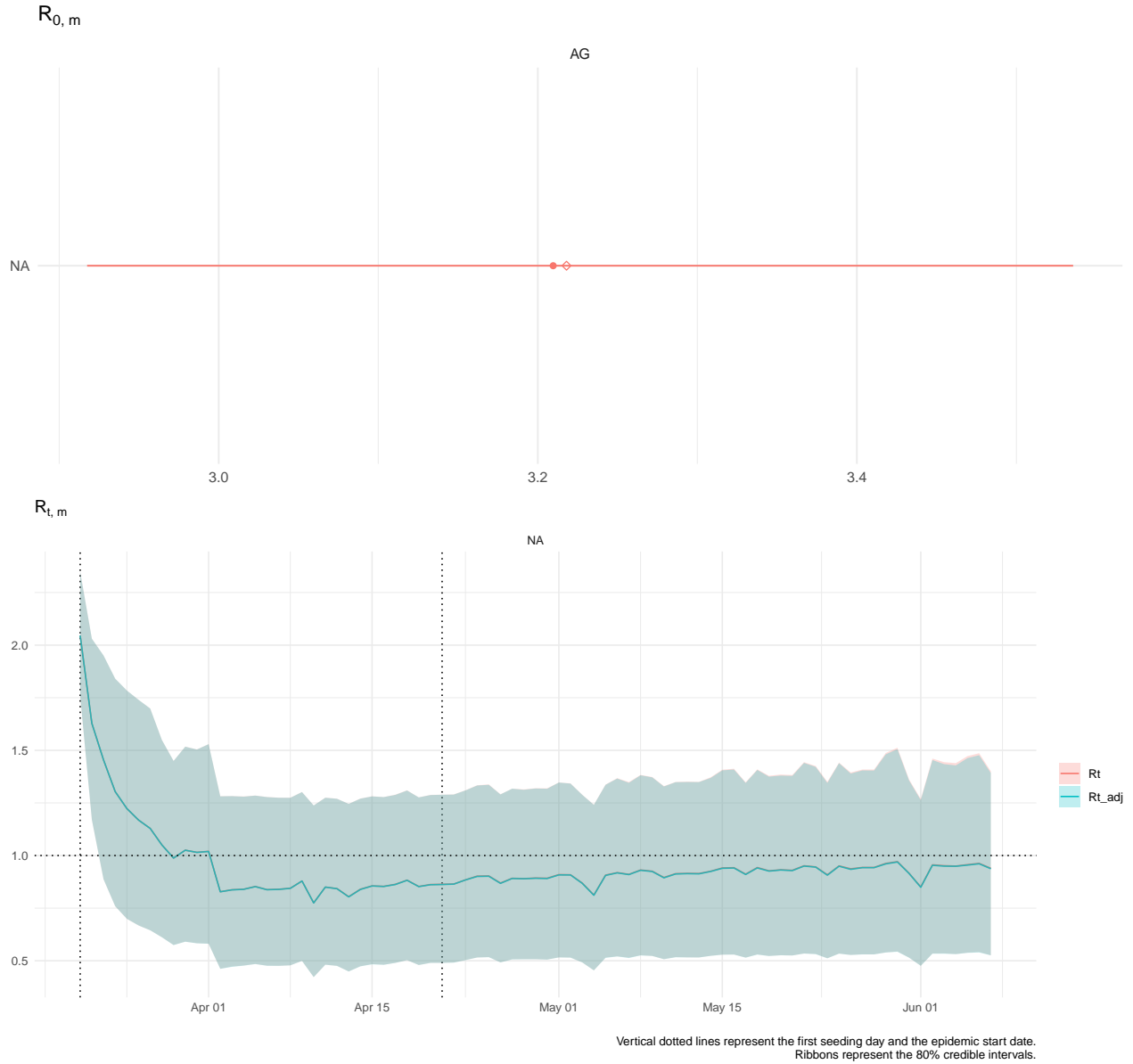
Analysis

Number of divergent transitions = 0

Maximum $\hat{R}$ = 1.004052

Minimum Bulk ESS = 1355.271

Minimum Tail ESS = 1068.182

$R_{0,m}$

$R_{t,m}$

Vertical dotted lines represent the first seeding day and the epidemic start date.
Ribbons represent the 80% credible intervals.
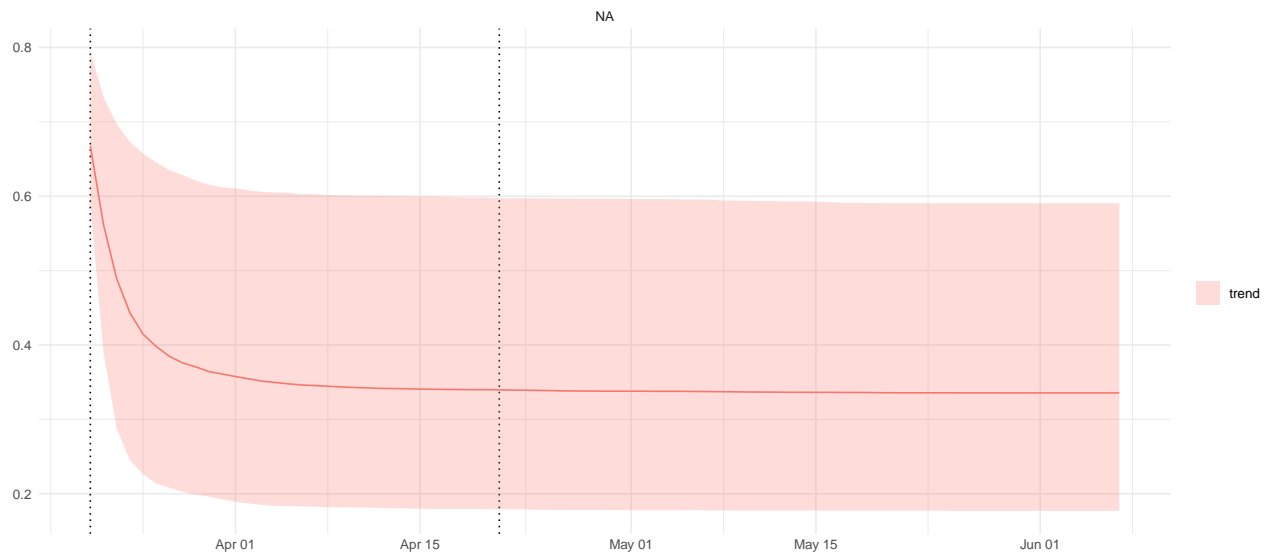
Contact rate function:

$$cr(t; t^*, \lambda_j, \kappa) = \lambda_j + \frac{1 - \lambda_j}{1 + \exp(\kappa(t - t^*))}$$
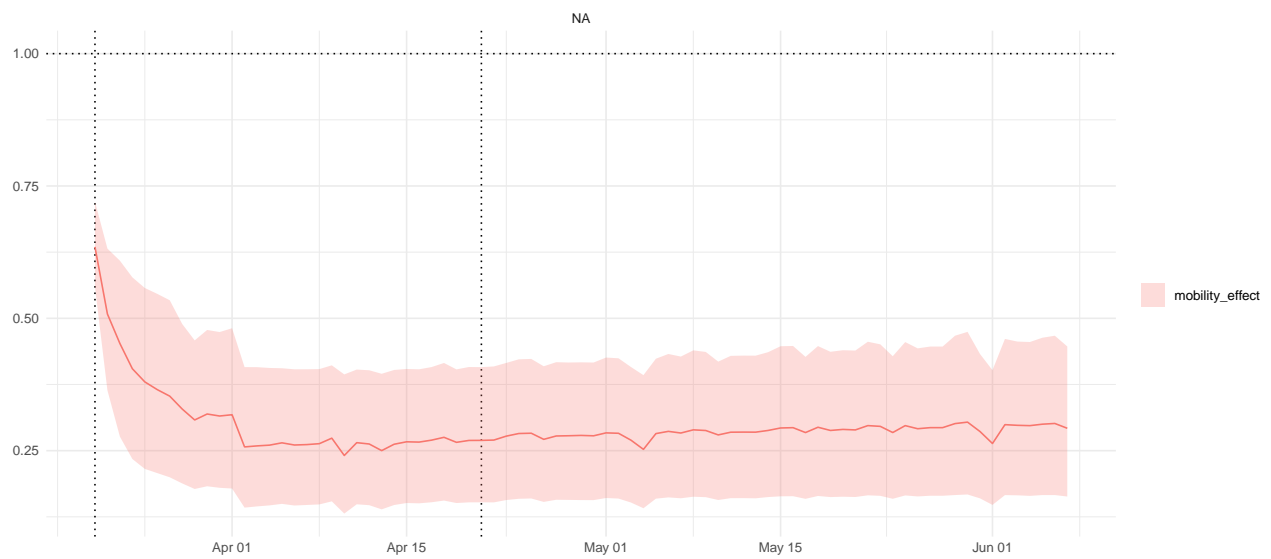
where

$$\lambda_j \sim \texttt{Beta}(3, 1)$$
$$\kappa \sim \texttt{NegHalfNormal}(0, 1).$$

Contact Rate

NA

Vertical dotted lines represent the first seeding day and the epidemic start date.
Ribbons represent the 80% credible intervals.

Mobility effect

NA

Vertical dotted lines represent the first seeding day and the epidemic start date.
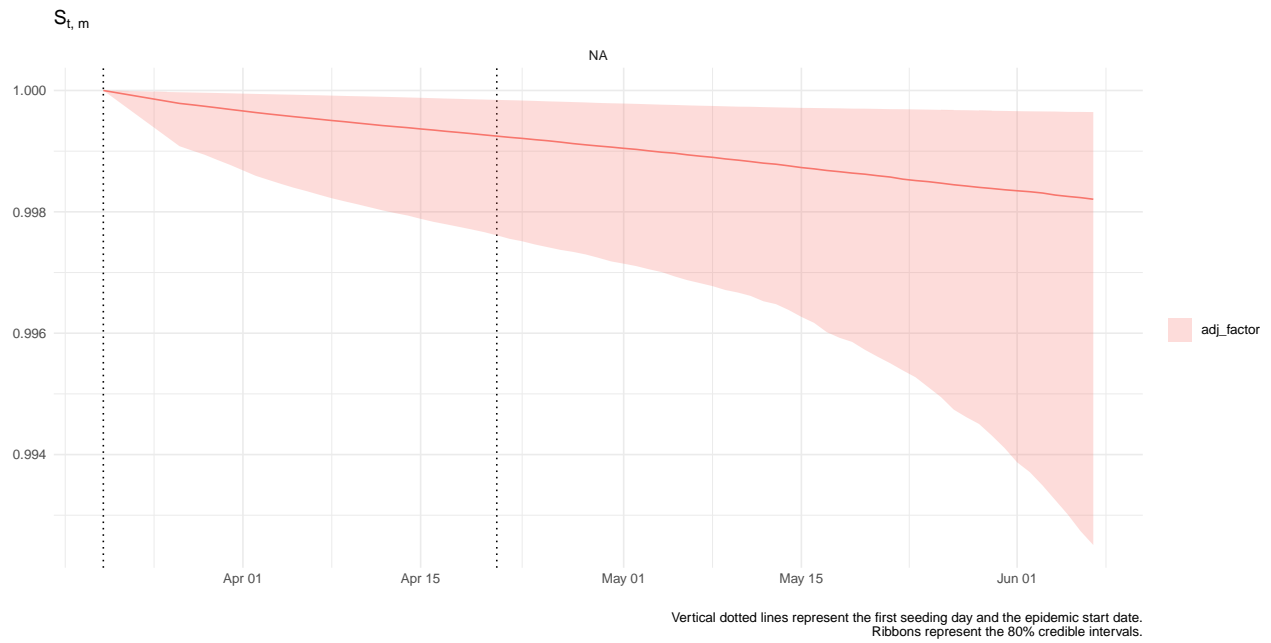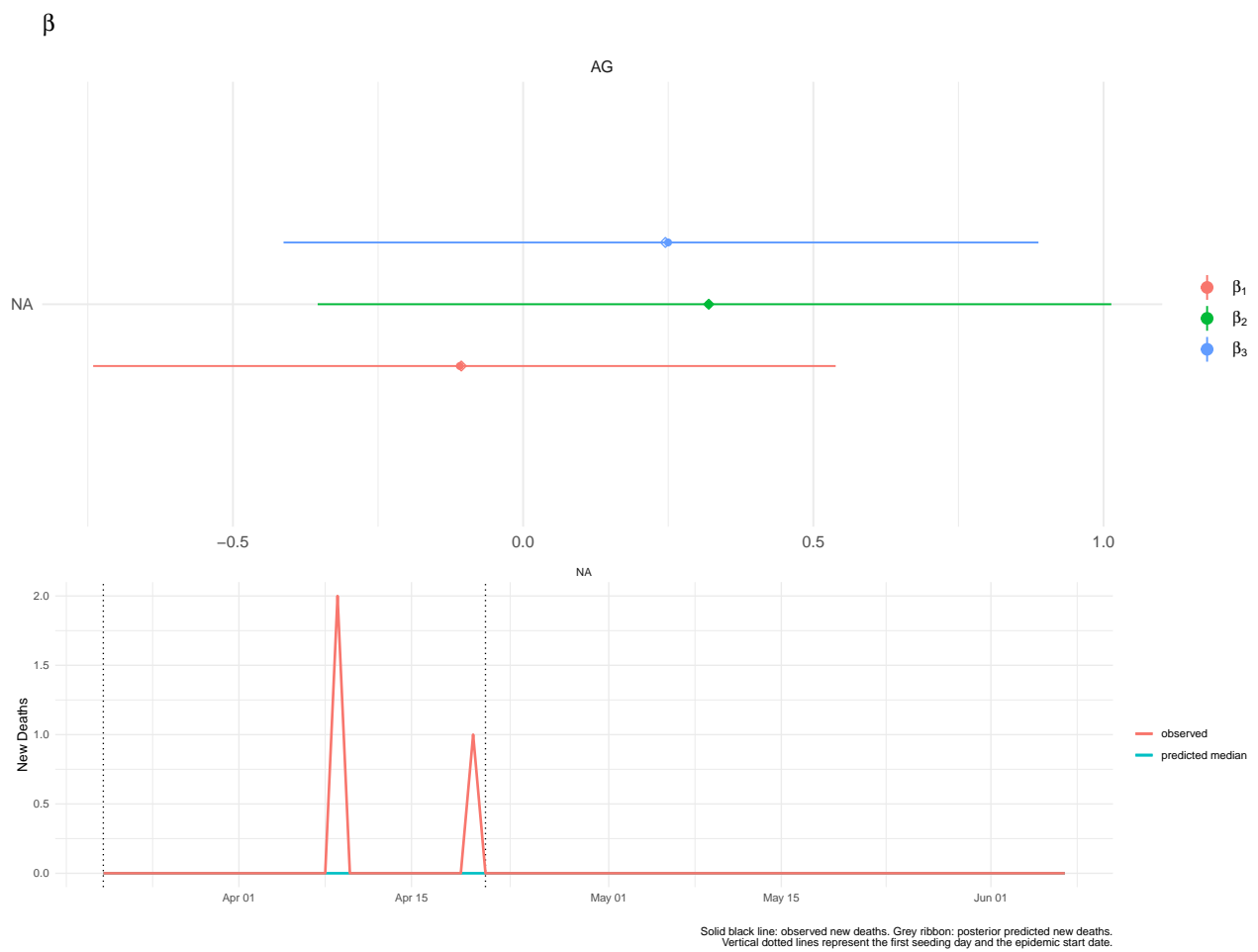Ribbons represent the 80% credible intervals.
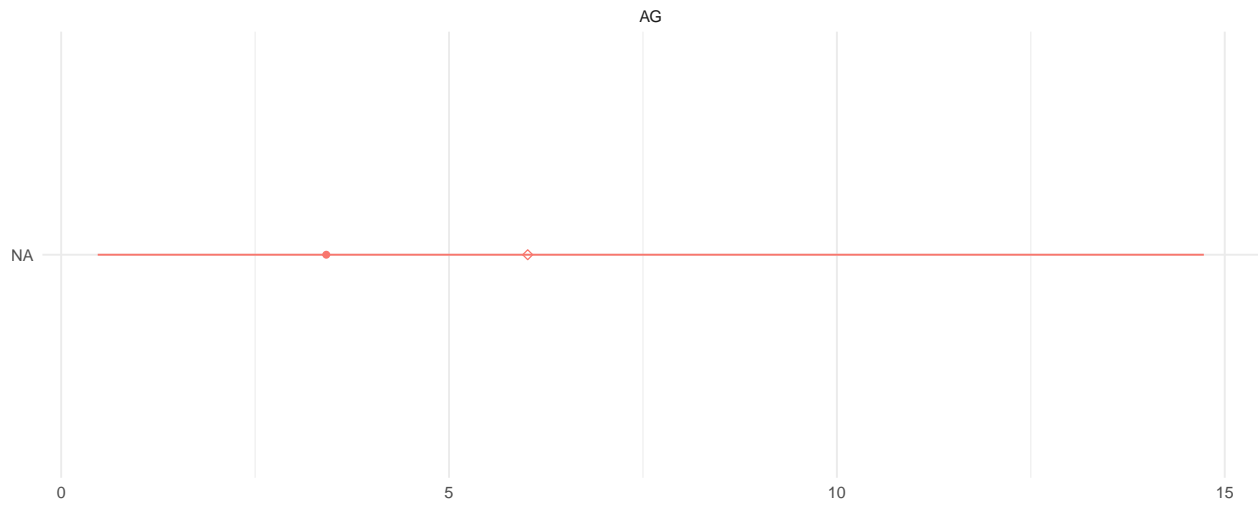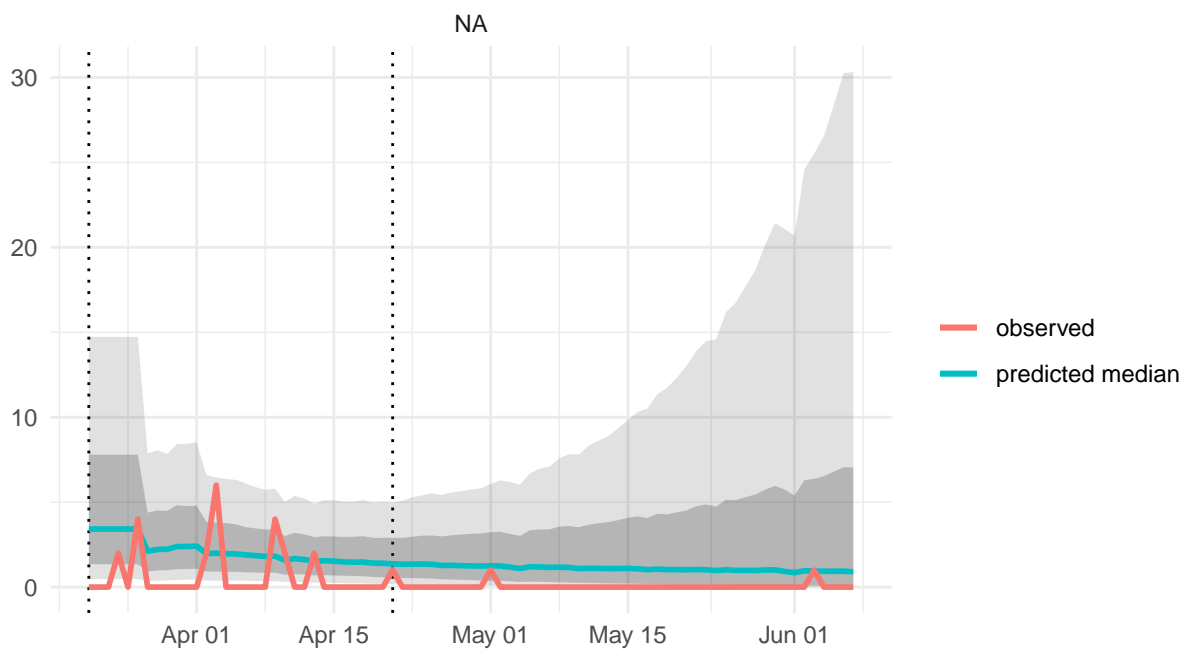
$S_{t, m}$

NA

adj_factor

Vertical dotted lines represent the first seeding day and the epidemic start date.
Ribbons represent the 80% credible intervals.

Mobility linear model: $\beta_1 \cdot X_{\mathrm{residential}} + \beta_2 \cdot X_{\mathrm{transit}} + \beta_3 \cdot X_{\mathrm{average}}$.

β

AG

NA

β_1
β_2
β_3

NA

New Deaths

observed
predicted median

Solid black line: observed new deaths. Grey ribbon: posterior predicted new deaths.
Vertical dotted lines represent the first seeding day and the epidemic start date.

4

Imputed Cases

New Cases
predicted vs observed

Solid black line: observed new deaths. Grey ribbon: posterior predicted new deaths.
Vertical dotted lines represent the first seeding day and the epidemic start date.

IFR

AG

NA

0.0060   0.0065   0.0070   0.0075