Wisconsin: COVID-19 Cases Per 100k Residents
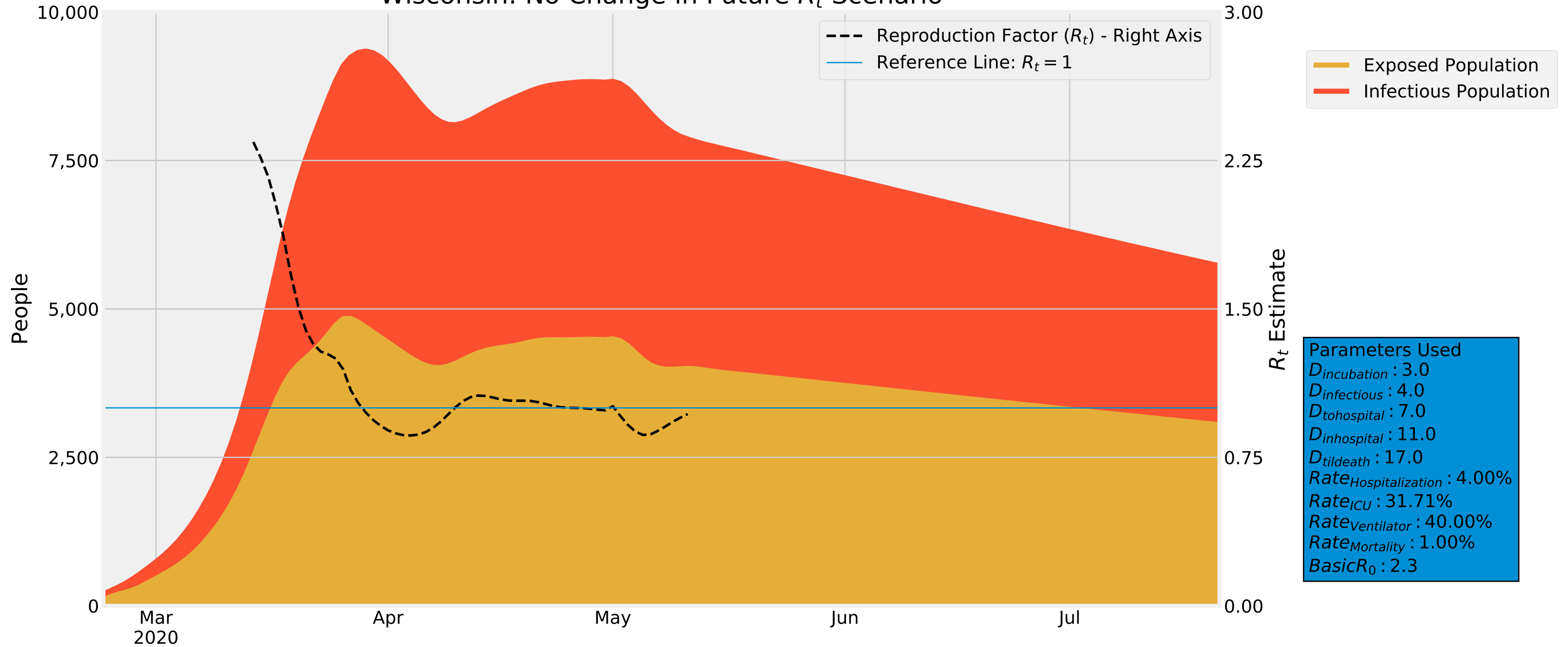

cases_per100k

- > 1,000
- 700 - 800
- 500 - 600
- 400 - 500
- 200 - 300
- 100 - 200
- 0 - 100
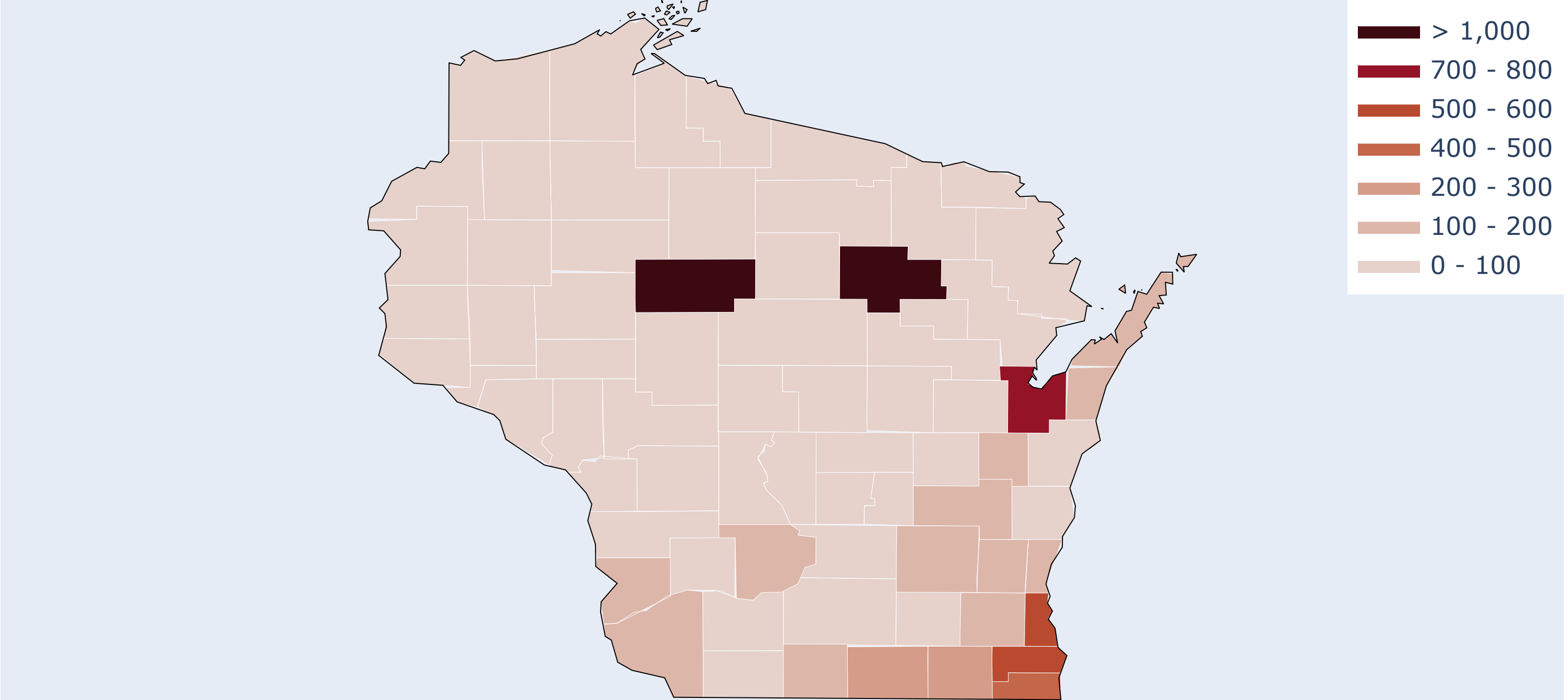
Reproduction Rate (R_t) Estimates
Wisconsin: No Change in Future R_t Scenario

Legend:
- rt_deaths_daily
- rt_hosp_concur
- rt_hosp_admits
- rt_cases_daily
- rt_pos_test_share_daily
- **rt_joint_est**

Parameters Used
$D_{incubation}$: 3.0
$D_{infectious}$: 4.0
$D_{tohospital}$: 7.0
$D_{inhospital}$: 11.0
$D_{tildeath}$: 17.0
$Rate_{Hospitalization}$: 4.00%
$Rate_{ICU}$: 31.71%
$Rate_{Ventilator}$: 40.00%
$Rate_{Mortality}$: 1.00%
$BasicR_0$: 2.3
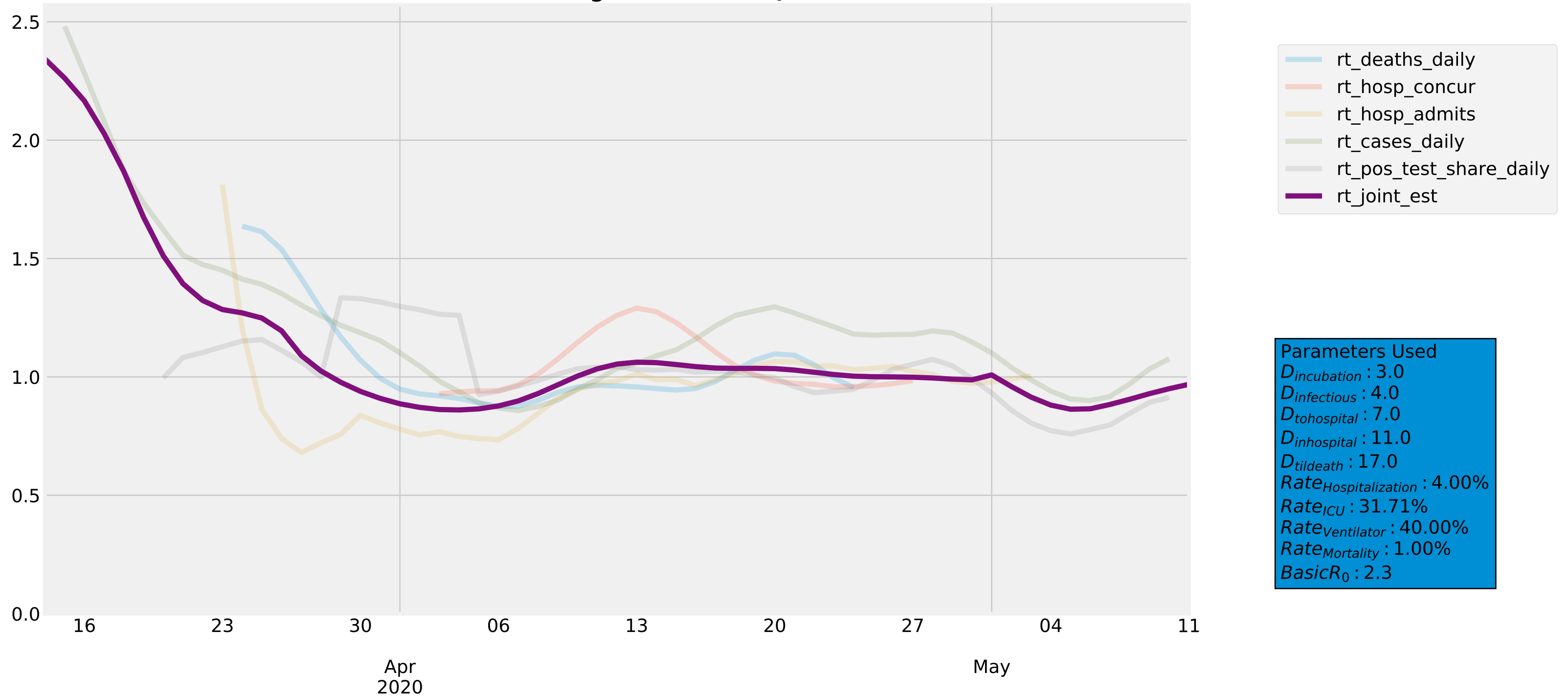
Author: Michael Donnelly (twtr: @donnellymjd)
Chart created on 19 May 2020

Simultaneous Infections Forecast
Wisconsin: No Change in Future R_t Scenario

Legend:
- - - Reproduction Factor (R_t) - Right Axis
— Reference Line: $R_t = 1$
- Exposed Population
- Infectious Population

Left axis (People): 0, 2,500, 5,000, 7,500, 10,000

Right axis (R_t Estimate): 0.00, 0.75, 1.50, 2.25, 3.00

X-axis: Mar 2020, Apr, May, Jun, Jul

Parameters Used
$D_{incubation}$: 3.0
$D_{infectious}$: 4.0
$D_{tohospital}$: 7.0
$D_{inhospital}$: 11.0
$D_{tildeath}$: 17.0
$Rate_{Hospitalization}$: 4.00%
$Rate_{ICU}$: 31.71%
$Rate_{Ventilator}$: 40.00%
$Rate_{Mortality}$: 1.00%
$BasicR_0$: 2.3

Author: Michael Donnelly (twtr: @donnellymjd)
Chart created on 19 May 2020

Hospitalization and Deaths Forecast
Wisconsin: No Change in Future R_t Scenario

Legend:
- Forecast Concurrent Hospitalizations
- Forecast ICU Cases
- Forecast Ventilations
- Forecast Cumulative Deaths
- Reported Concurrent Hospitalizations
- Reported Total Deaths

Parameters Used
$D_{incubation}$: 3.0
$D_{infectious}$: 4.0
$D_{tohospital}$: 7.0
$D_{inhospital}$: 11.0
$D_{tildeath}$: 17.0
$Rate_{Hospitalization}$: 4.00%
$Rate_{ICU}$: 31.71%
$Rate_{Ventilator}$: 40.00%
$Rate_{Mortality}$: 1.00%
$BasicR_0$: 2.3
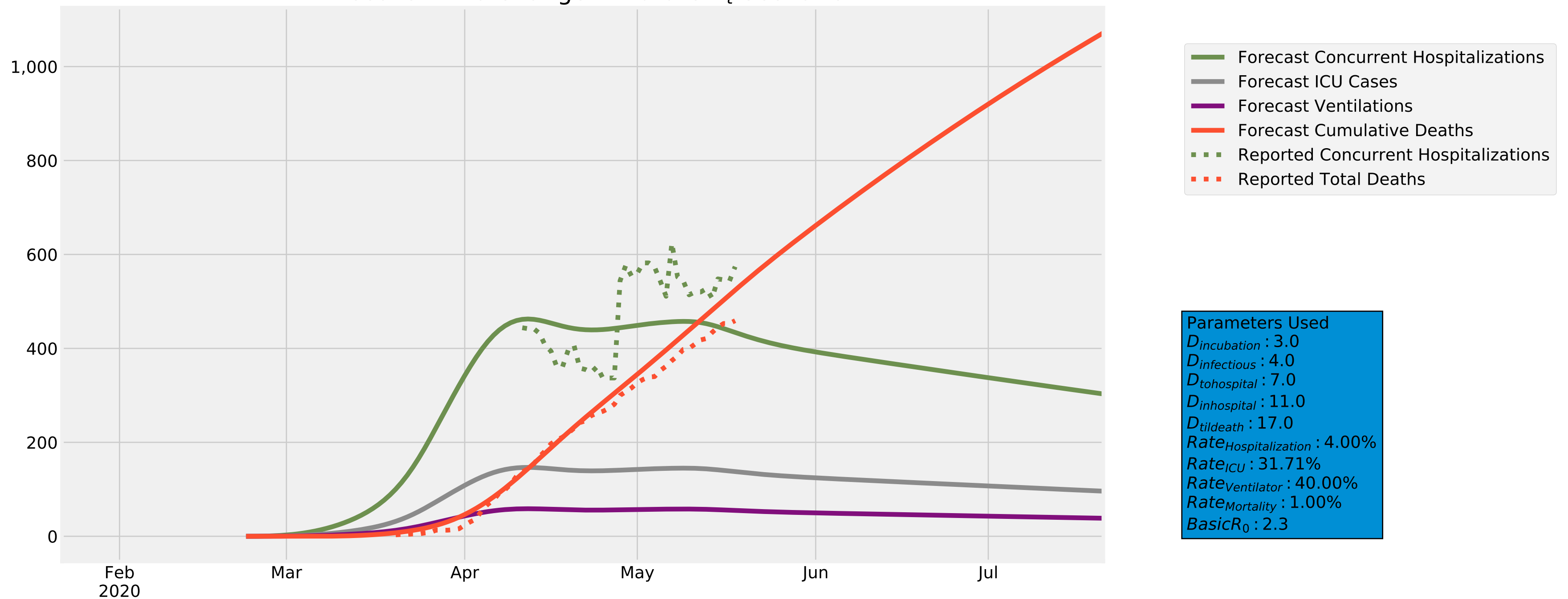
Author: Michael Donnelly (twtr: @donnellymjd)
Chart created on 19 May 2020

Population Overview Forecast
Wisconsin: No Change in Future R_t Scenario

Legend:
- Forecast Susceptible Population
- Forecast Deaths
- Forecast Exposures
- Forecast Hospitalizations
- Forecast Infectious
- Forecast Recoveries

Parameters Used
$D_{incubation}$: 3.0
$D_{infectious}$: 4.0
$D_{tohospital}$: 7.0
$D_{inhospital}$: 11.0
$D_{tildeath}$: 17.0
$Rate_{Hospitalization}$: 4.00%
$Rate_{ICU}$: 31.71%
$Rate_{Ventilator}$: 40.00%
$Rate_{Mortality}$: 1.00%
$BasicR_0$: 2.3
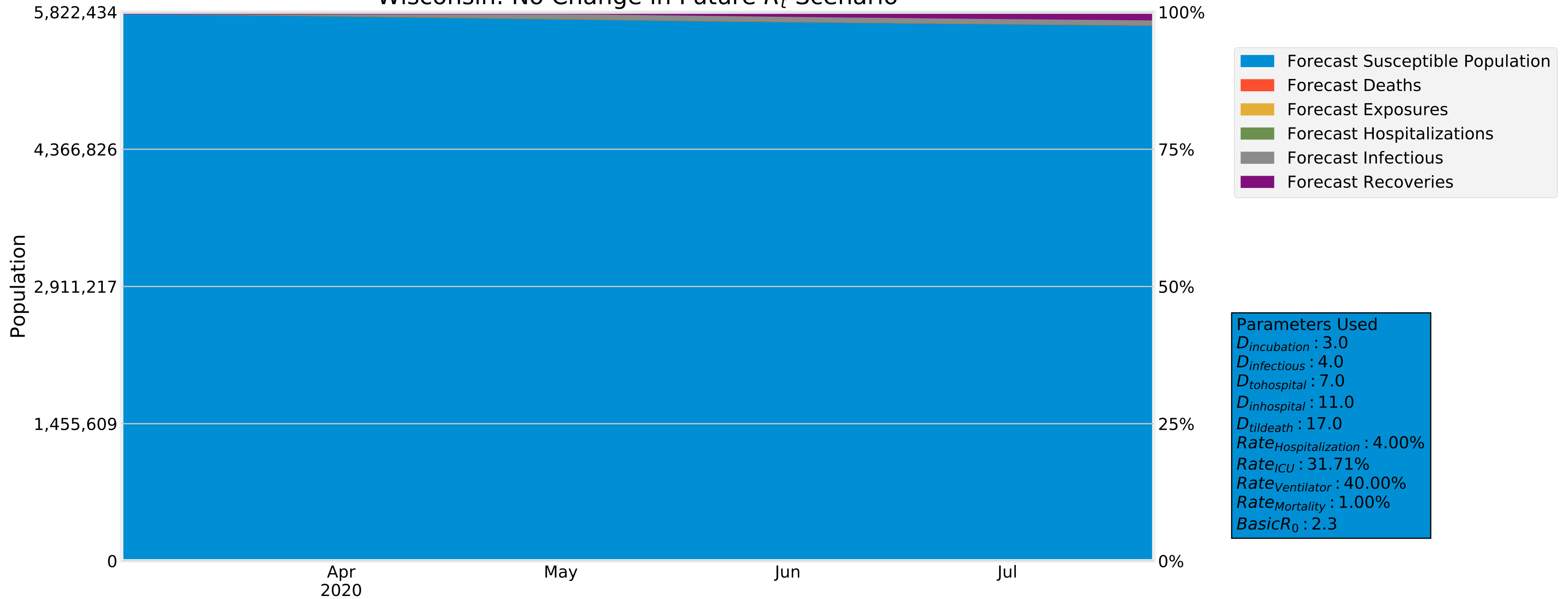
Cumulative Infections Forecast
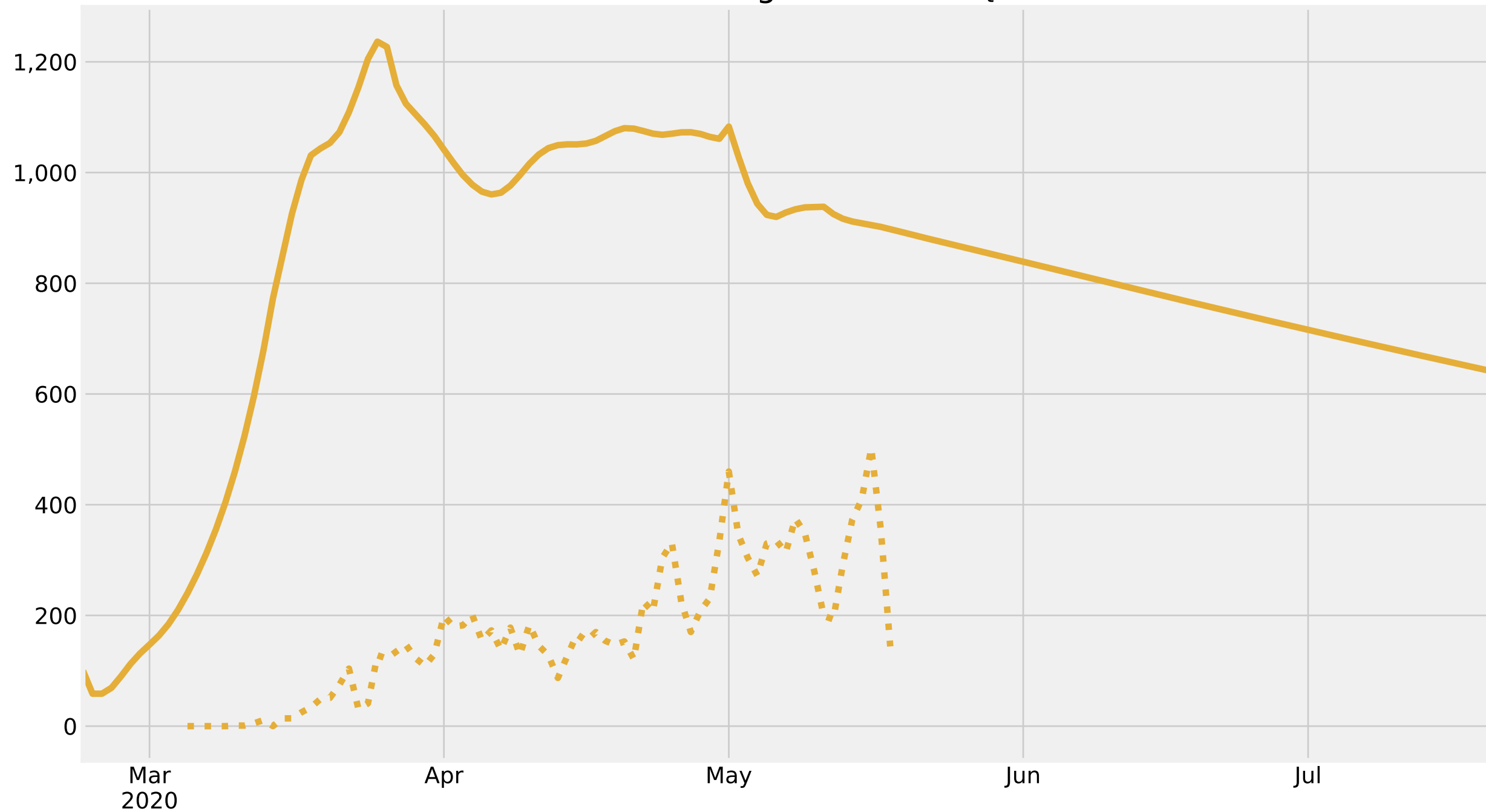## Wisconsin: No Change in Future R_t Scenario
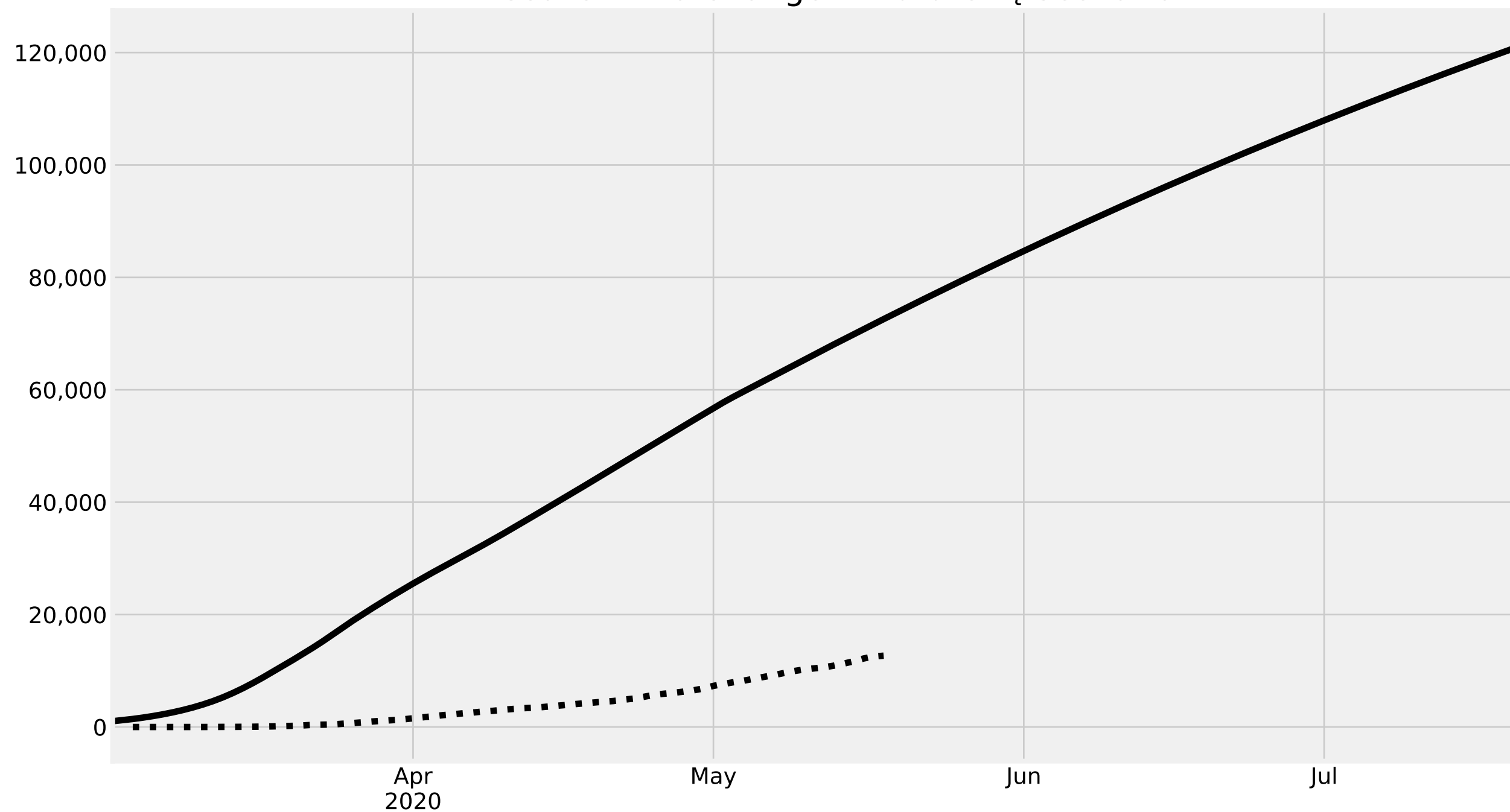
— Forecast Cumulative Infections

···· Reported Cumulative Infections

Parameters Used
$D_{incubation}$: 3.0
$D_{infectious}$: 4.0
$D_{tohospital}$: 7.0
$D_{inhospital}$: 11.0
$D_{tildeath}$: 17.0
$Rate_{Hospitalization}$: 4.00%
$Rate_{ICU}$: 31.71%
$Rate_{Ventilator}$: 40.00%
$Rate_{Mortality}$: 1.00%
$BasicR_0$: 2.3

Author: Michael Donnelly (twtr: @donnellymjd)
Chart created on 19 May 2020

Daily Exposures Forecast
Wisconsin: No Change in Future R_t Scenario

Legend:
— Forecast Daily New Infections (Exposed)
⋯ Reported Daily New Infections (Exposed)

Parameters Used
$D_{incubation}$: 3.0
$D_{infectious}$: 4.0
$D_{tohospital}$: 7.0
$D_{inhospital}$: 11.0
$D_{tildeath}$: 17.0
$Rate_{Hospitalization}$: 4.00%
$Rate_{ICU}$: 31.71%
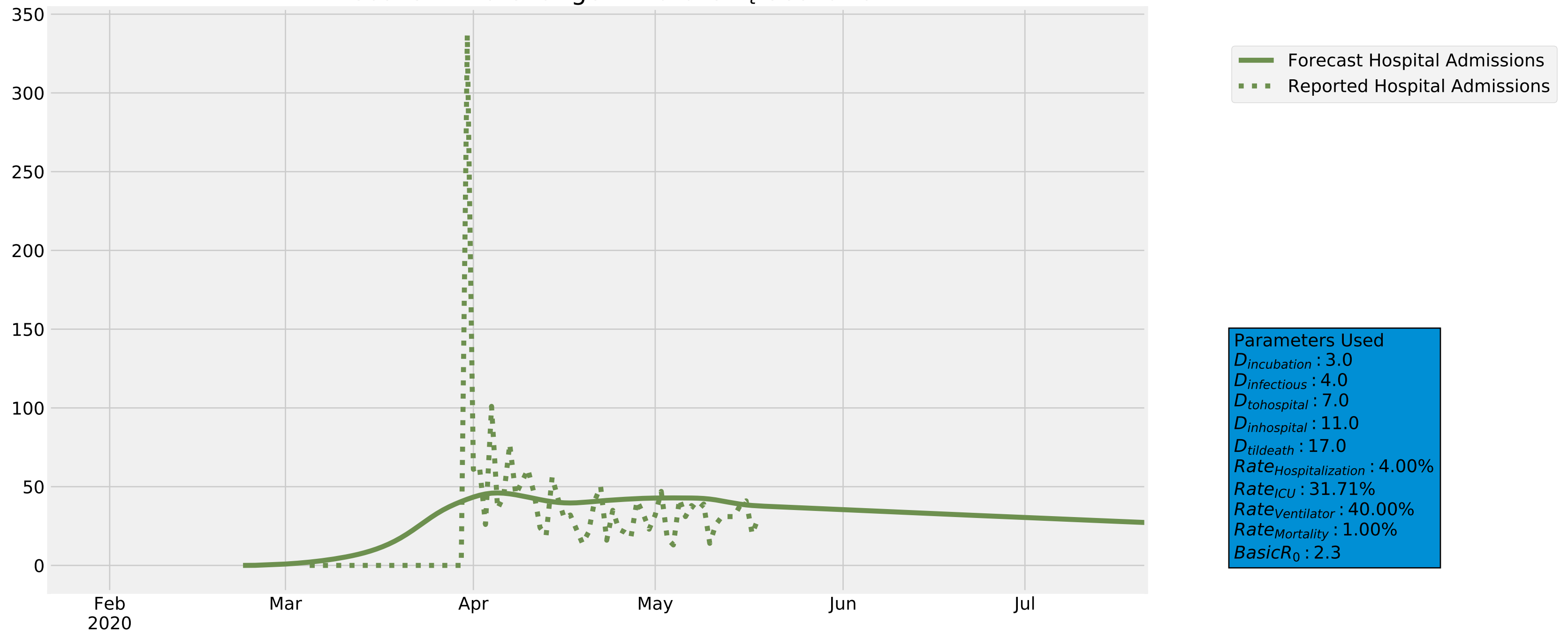$Rate_{Ventilator}$: 40.00%
$Rate_{Mortality}$: 1.00%
$BasicR_0$: 2.3

Author: Michael Donnelly (twtr: @donnellymjd)
Chart created on 19 May 2020

Daily Hospital Admissions Forecast
Wisconsin: No Change in Future R_t Scenario

Legend:
— Forecast Hospital Admissions
···· Reported Hospital Admissions

Parameters Used
$D_{incubation}$: 3.0
$D_{infectious}$: 4.0
$D_{tohospital}$: 7.0
$D_{inhospital}$: 11.0
$D_{tildeath}$: 17.0
$Rate_{Hospitalization}$: 4.00%
$Rate_{ICU}$: 31.71%
$Rate_{Ventilator}$: 40.00%
$Rate_{Mortality}$: 1.00%
$BasicR_0$: 2.3
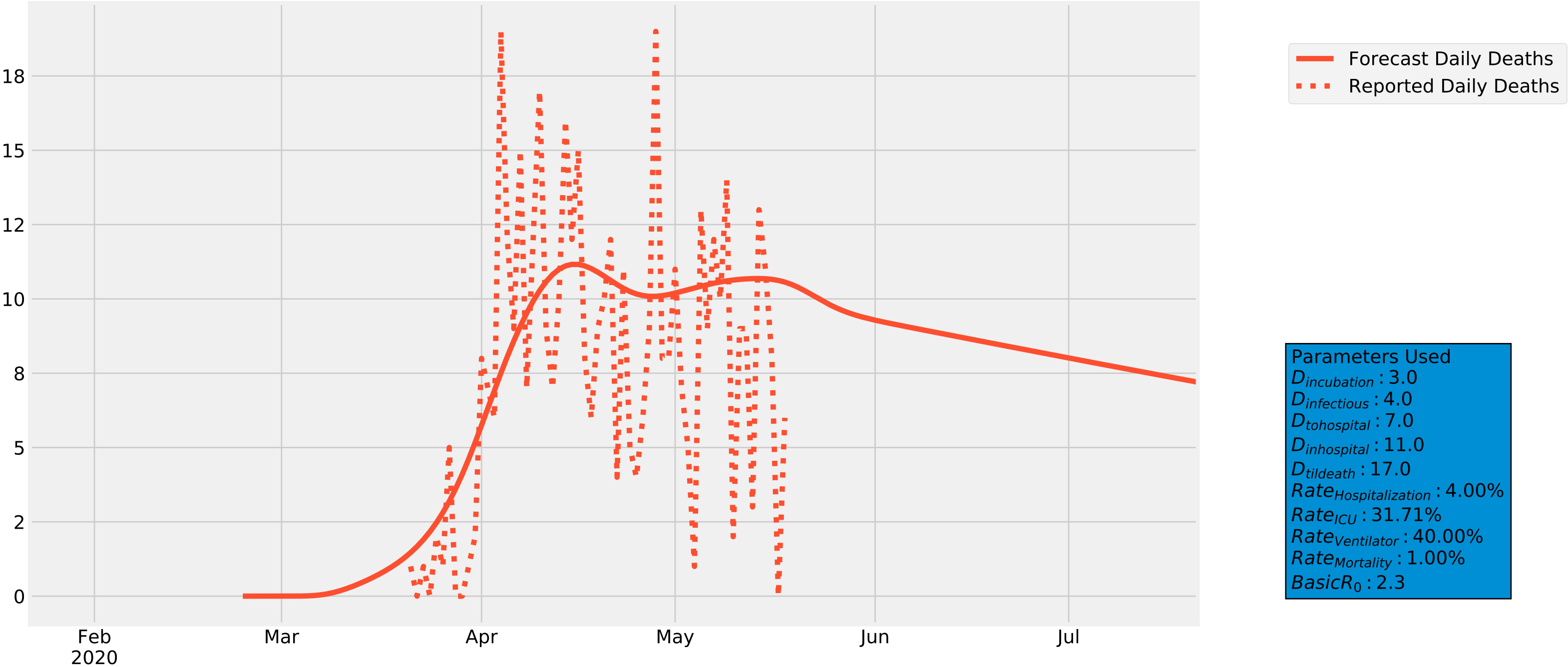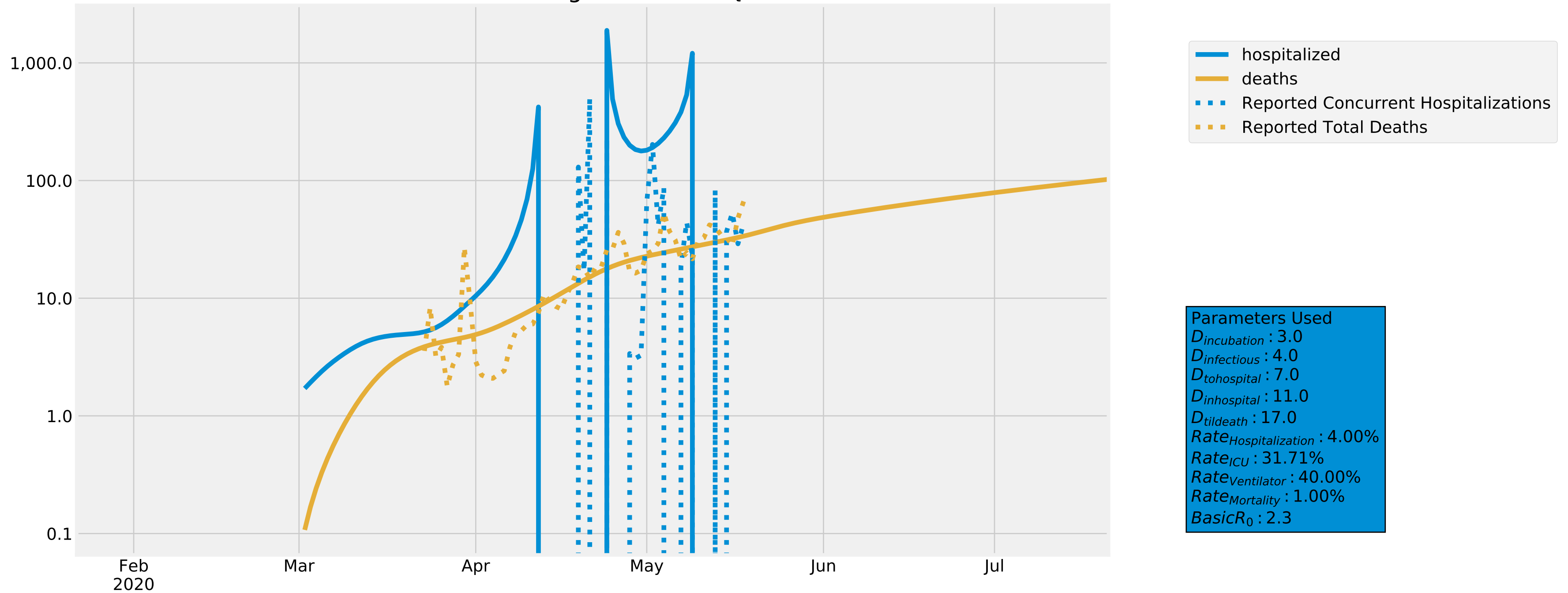
Author: Michael Donnelly (twtr: @donnellymjd)
Chart created on 19 May 2020

Daily Deaths Forecast
Wisconsin: No Change in Future R_t Scenario

Legend:
- Forecast Daily Deaths
- Reported Daily Deaths

Parameters Used
$D_{incubation}$: 3.0
$D_{infectious}$: 4.0
$D_{tohospital}$: 7.0
$D_{inhospital}$: 11.0
$D_{tildeath}$: 17.0
$Rate_{Hospitalization}$: 4.00%
$Rate_{ICU}$: 31.71%
$Rate_{Ventilator}$: 40.00%
$Rate_{Mortality}$: 1.00%
$BasicR_0$: 2.3

Author: Michael Donnelly (twtr: @donnellymjd)
Chart created on 19 May 2020

Doubling Rate Forecast
Wisconsin: No Change in Future R_t Scenario

Legend:
- hospitalized
- deaths
- Reported Concurrent Hospitalizations
- Reported Total Deaths

Parameters Used
$D_{incubation}$: 3.0
$D_{infectious}$: 4.0
$D_{tohospital}$: 7.0
$D_{inhospital}$: 11.0
$D_{tildeath}$: 17.0
$Rate_{Hospitalization}$: 4.00%
$Rate_{ICU}$: 31.71%
$Rate_{Ventilator}$: 40.00%
$Rate_{Mortality}$: 1.00%
$BasicR_0$: 2.3

Author: Michael Donnelly (twtr: @donnellymjd)
Chart created on 19 May 2020