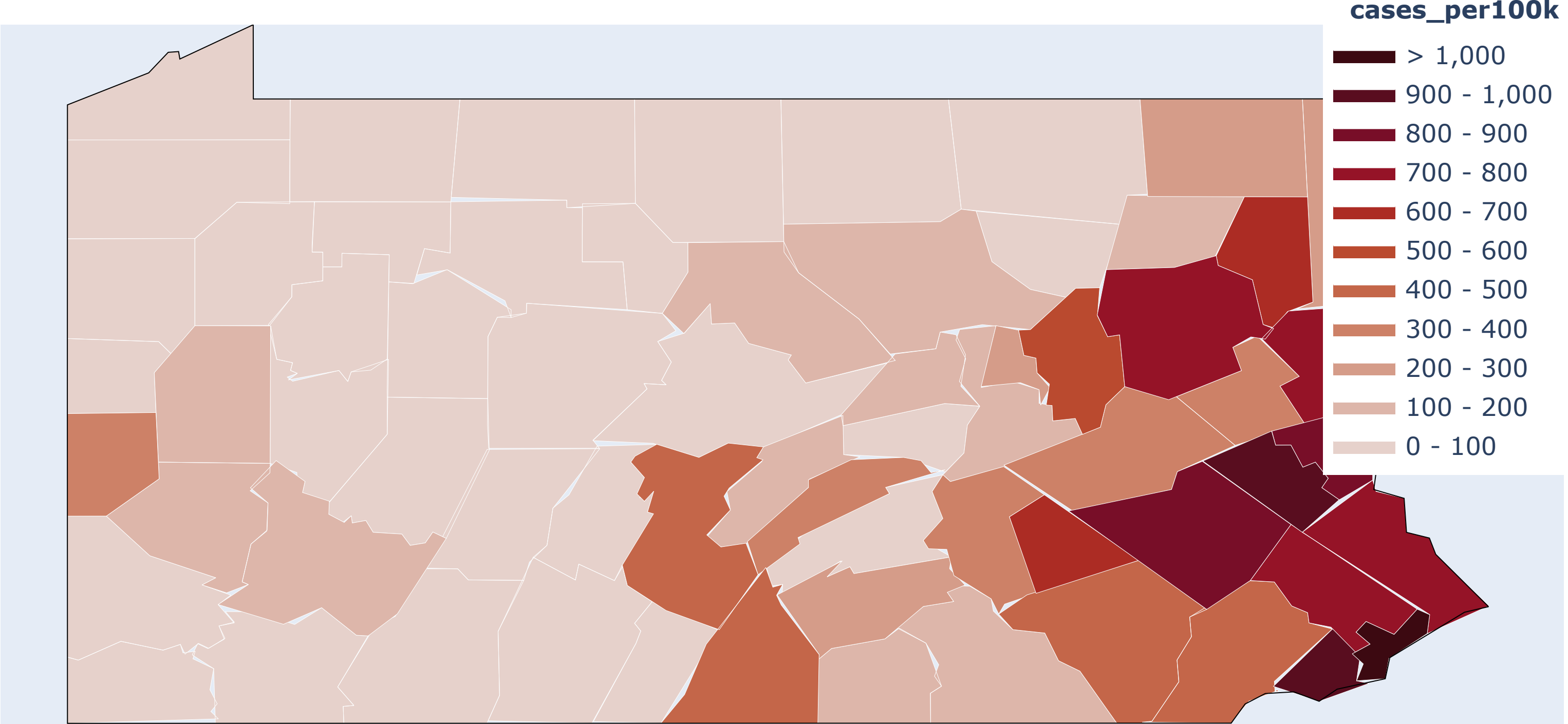
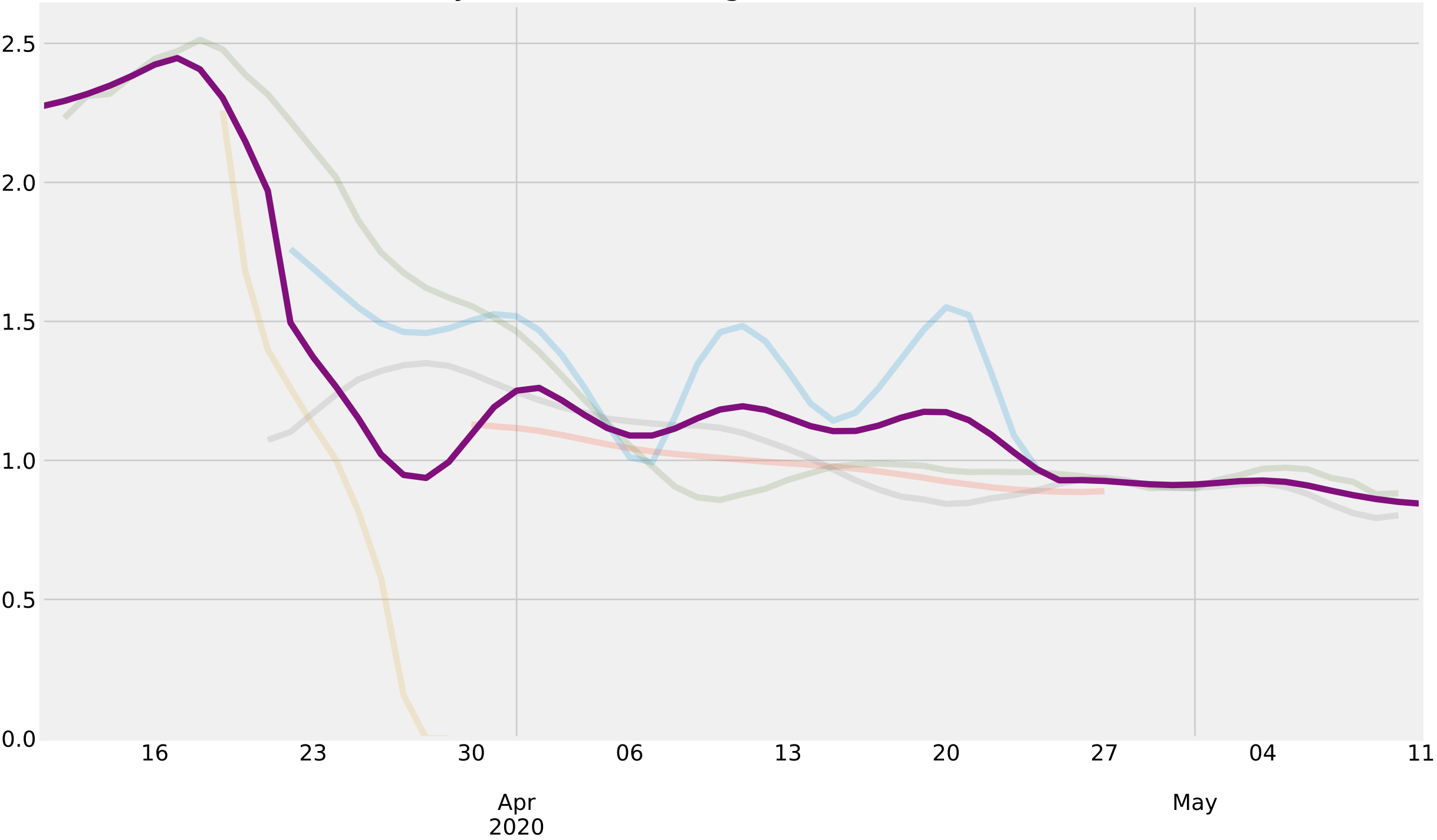


Pennsylvania: COVID-19 Cases Per 100k Residents



Reproduction Rate (R_t) Estimates
Pennsylvania: No Change in Future R_t Scenario

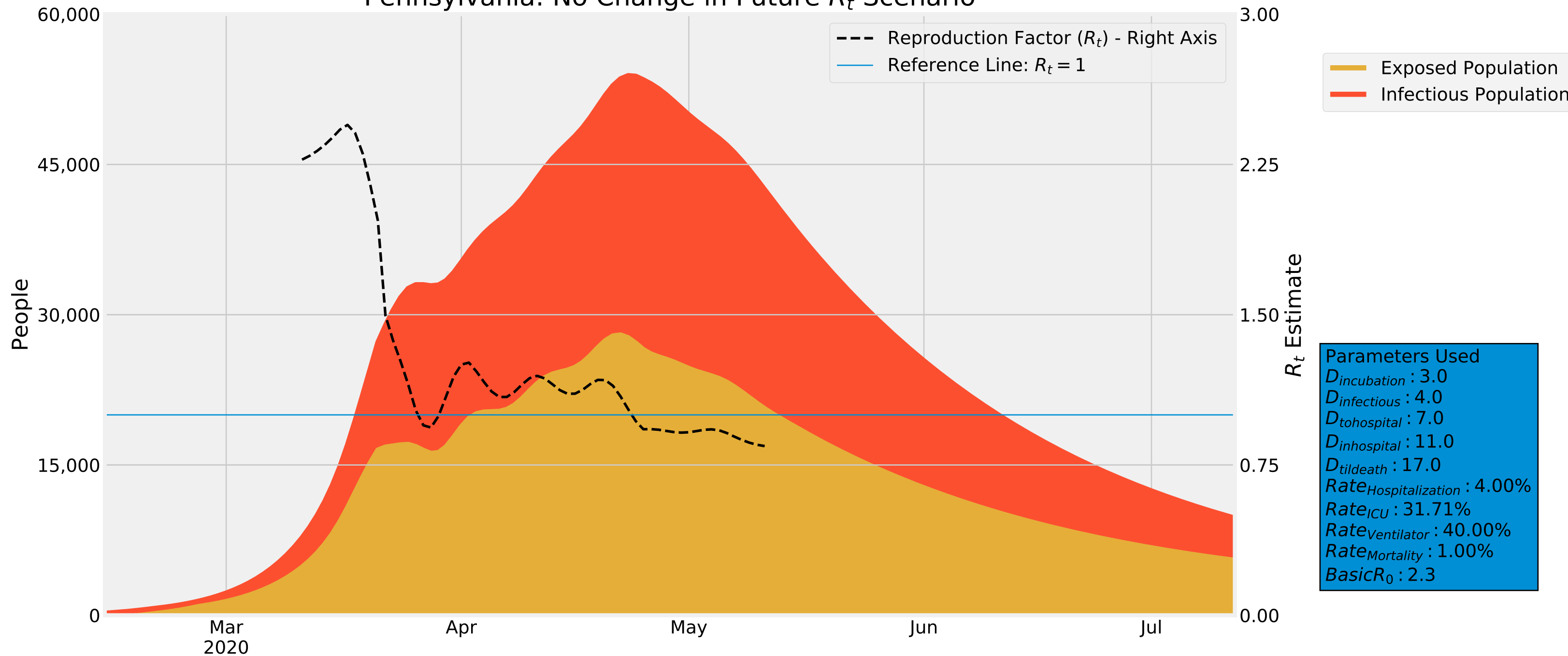


- rt_deaths_daily
- rt_hosp_concur
- rt_hosp_admits
- rt_cases_daily
- rt_pos_test_share_daily
- rt_joint_est

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

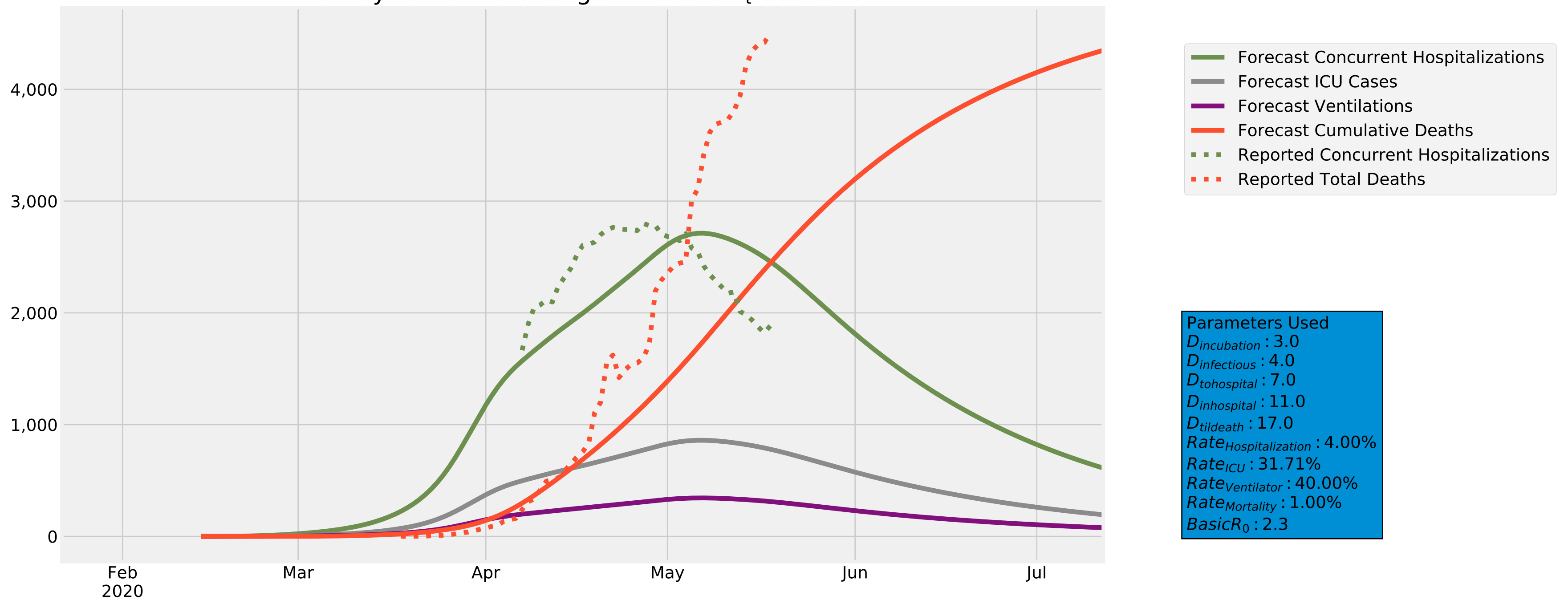
Simultaneous Infections Forecast

Pennsylvania: No Change in Future R_t Scenario



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

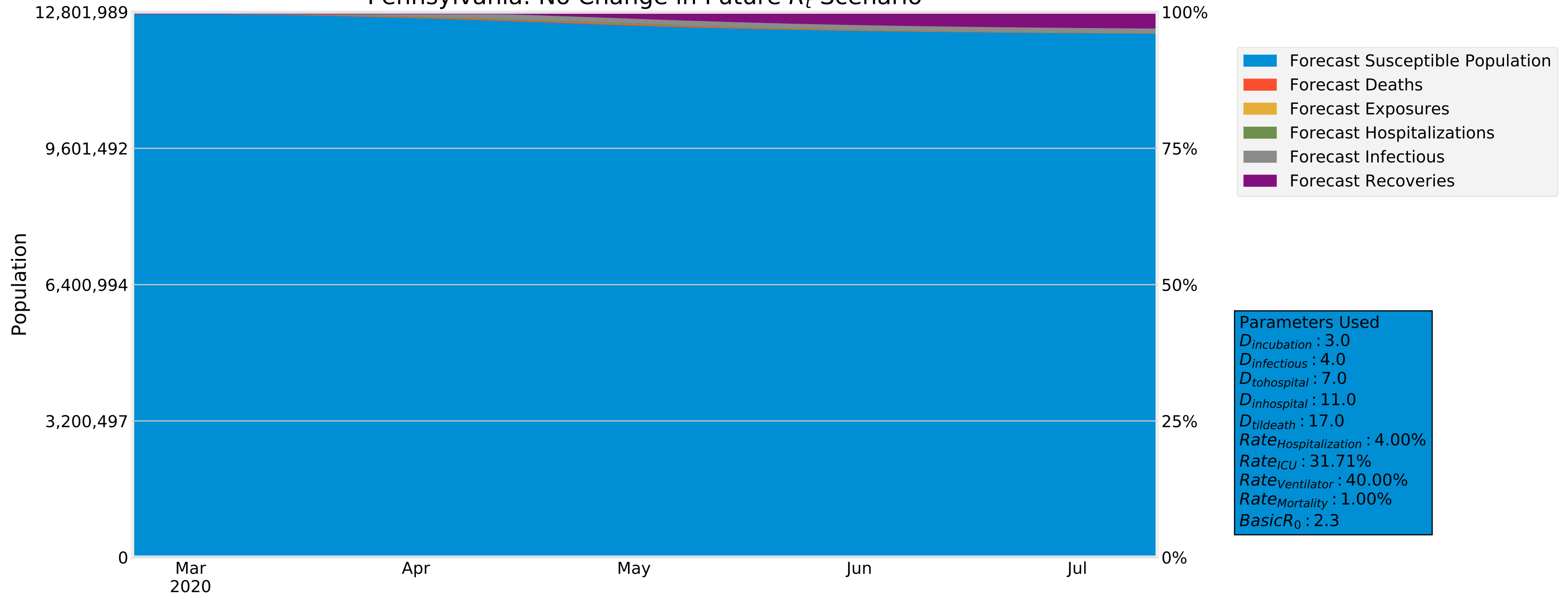
Hospitalization and Deaths Forecast Pennsylvania: No Change in Future R_t Scenario



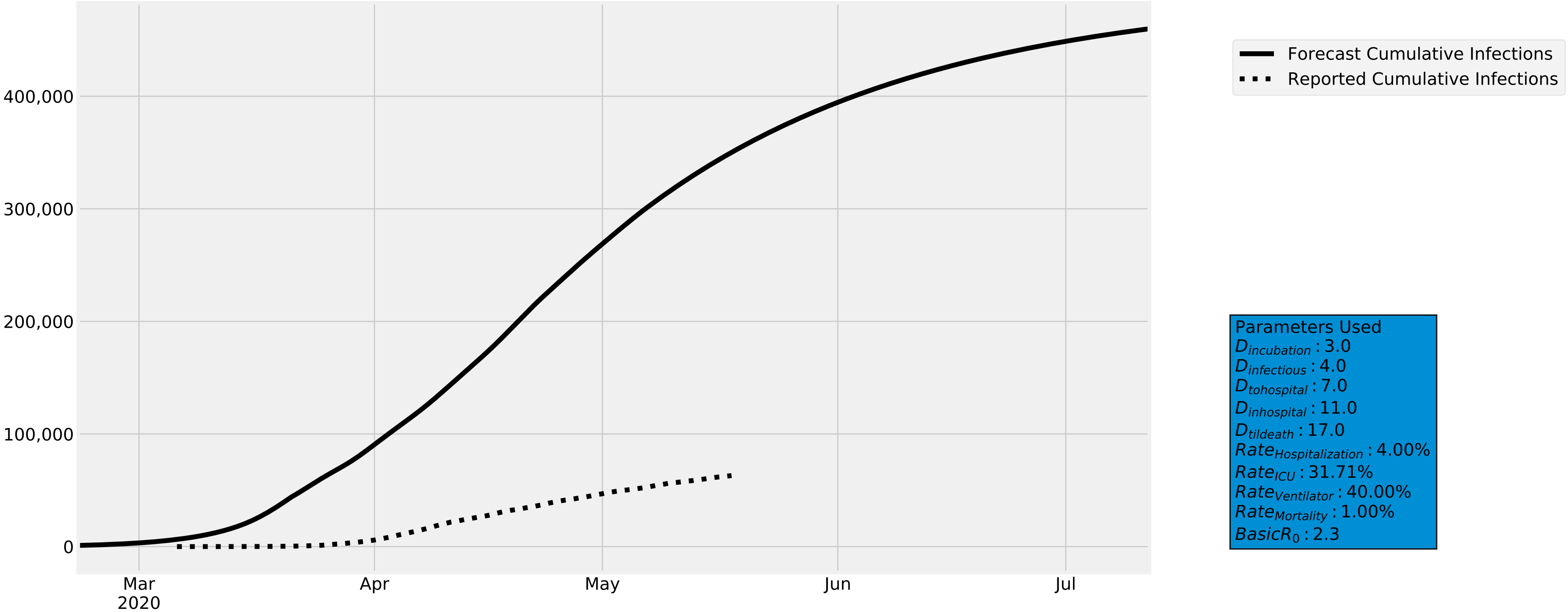
Author: Michael Donnelly (twtr: @donnellymjd)
Chart created on 19 May 2020

Population Overview Forecast

Pennsylvania: No Change in Future R_t Scenario

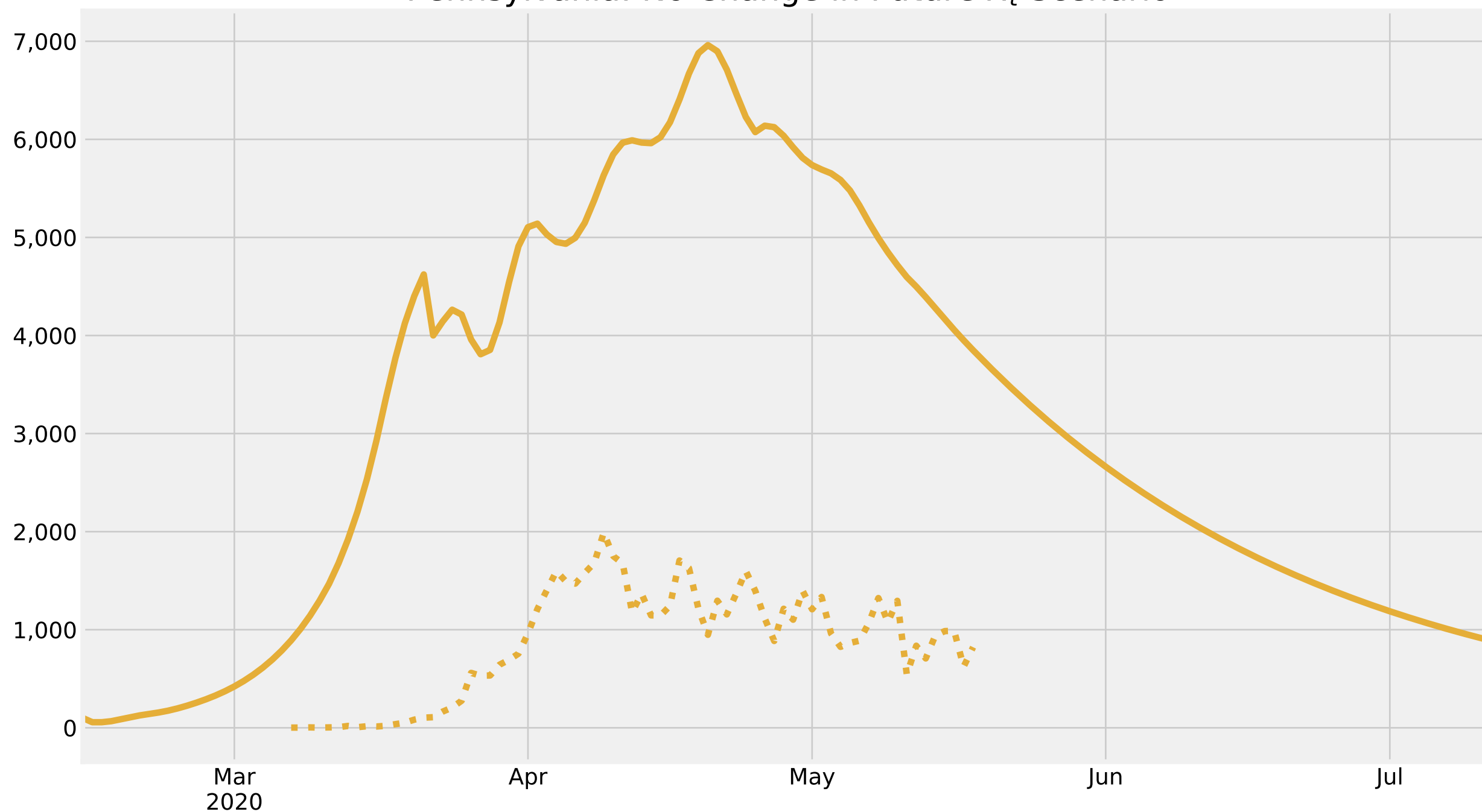


Cumulative Infections Forecast
Pennsylvania: No Change in Future R_t Scenario



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

Daily Exposures Forecast Pennsylvania: No Change in Future R_t Scenario

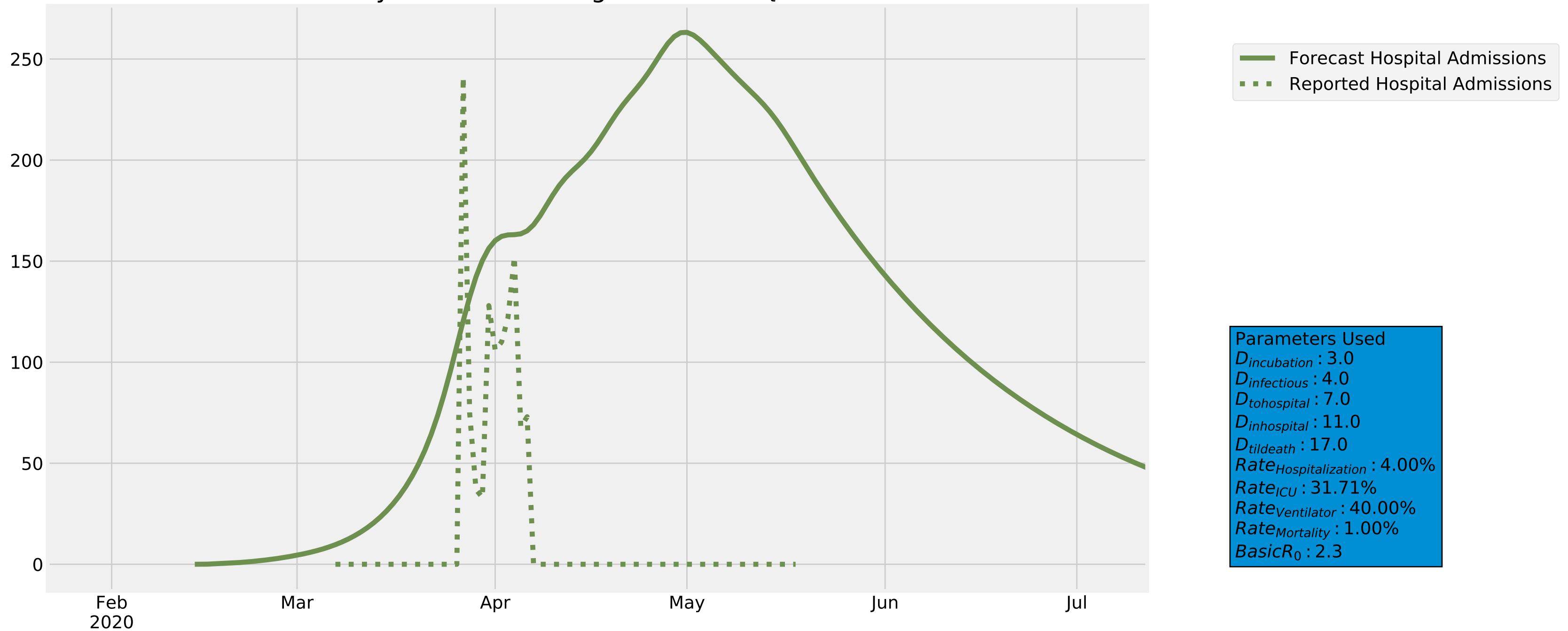


Forecast Daily New Infections (Exposed)
Reported Daily New Infections (Exposed)

Parameters Used
 $D_{incubation}$: 3.0
 $D_{infectious}$: 4.0
 $D_{tohospital}$: 7.0
 $D_{inhospital}$: 11.0
 $D_{tildeth}$: 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

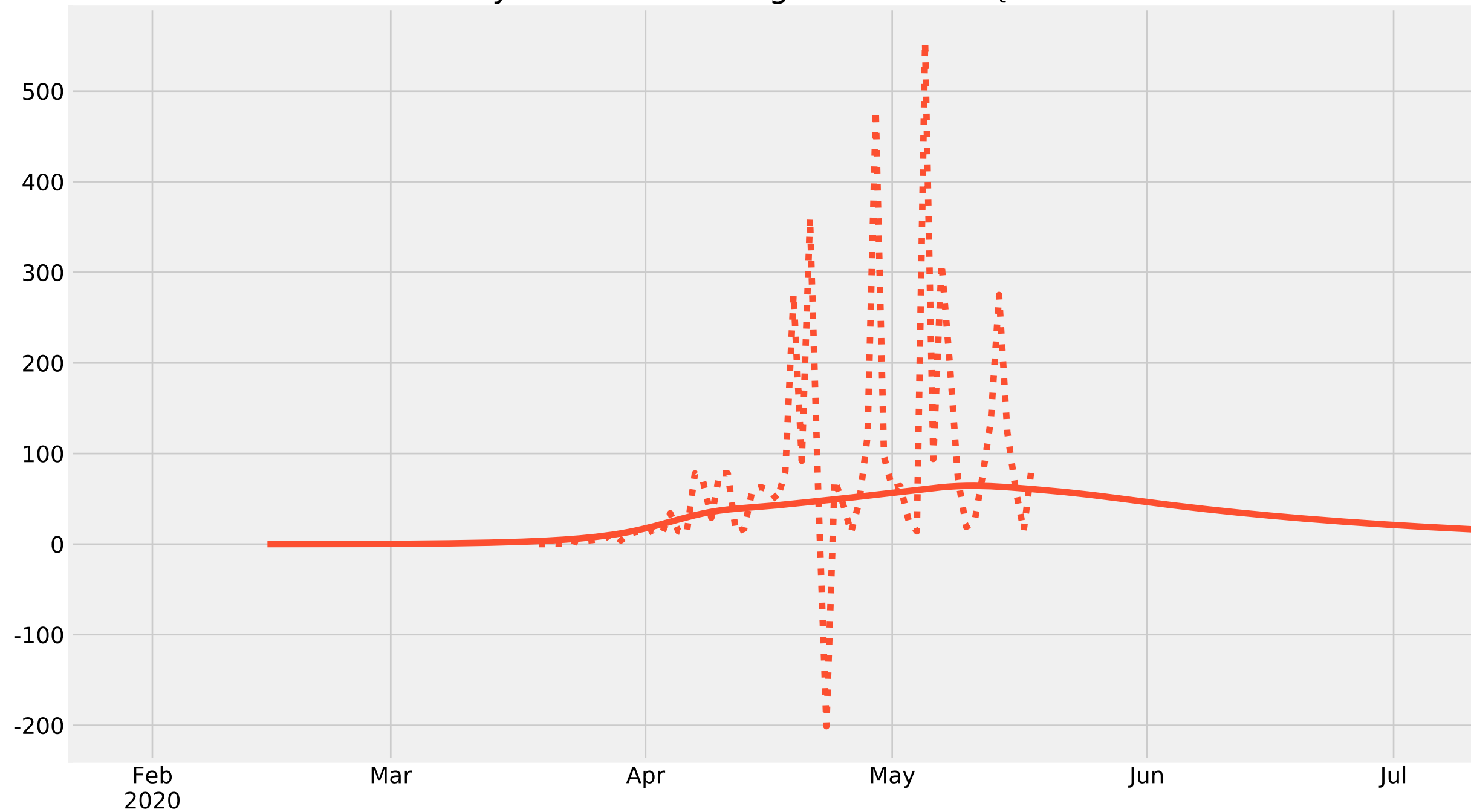
Daily Hospital Admissions Forecast Pennsylvania: No Change in Future R_t Scenario



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

Daily Deaths Forecast

Pennsylvania: No Change in Future R_t Scenario

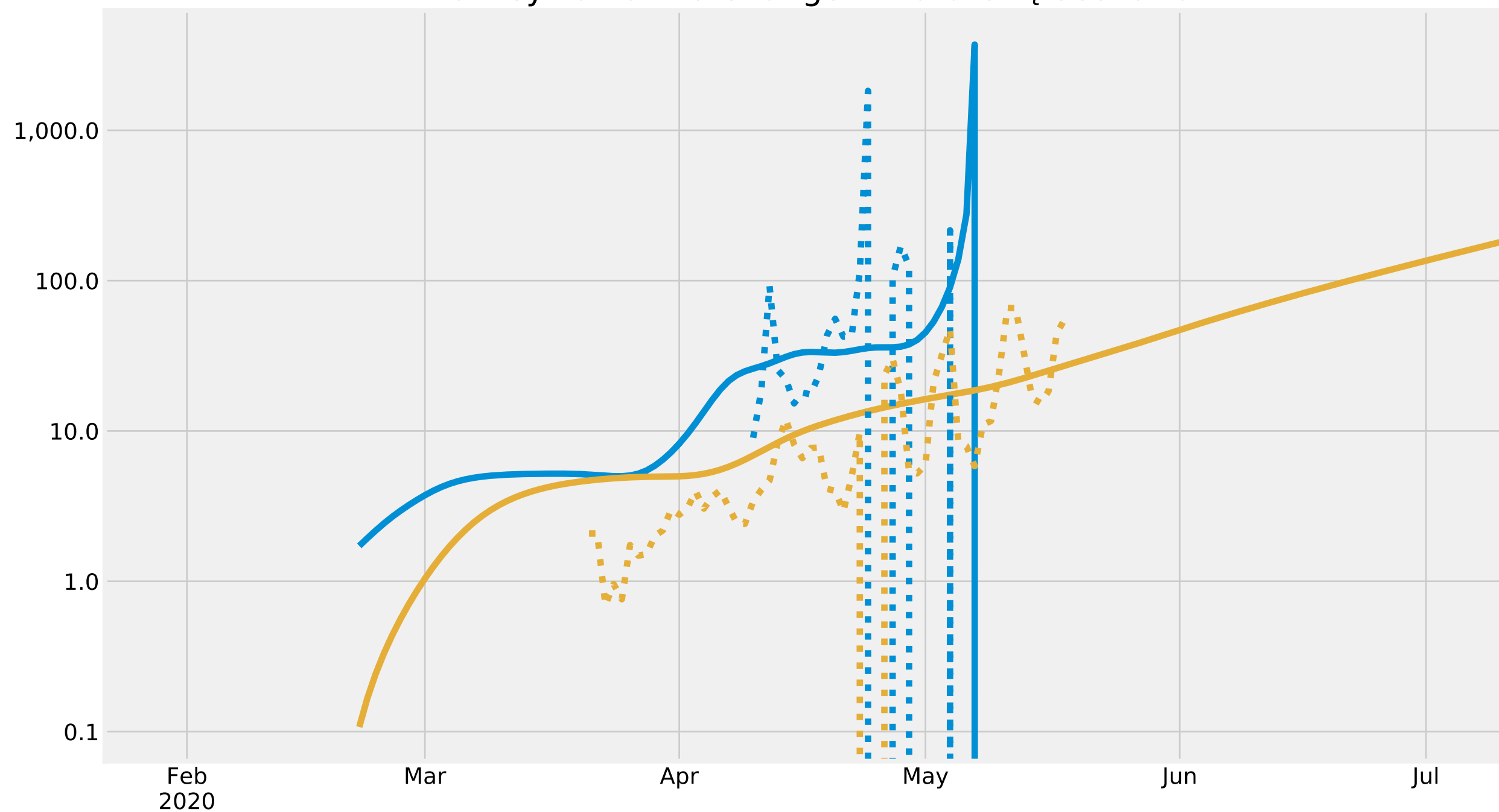


Forecast Daily Deaths
Reported Daily Deaths

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 Pennsylvania: No Change in Future R_t Scenario



- 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