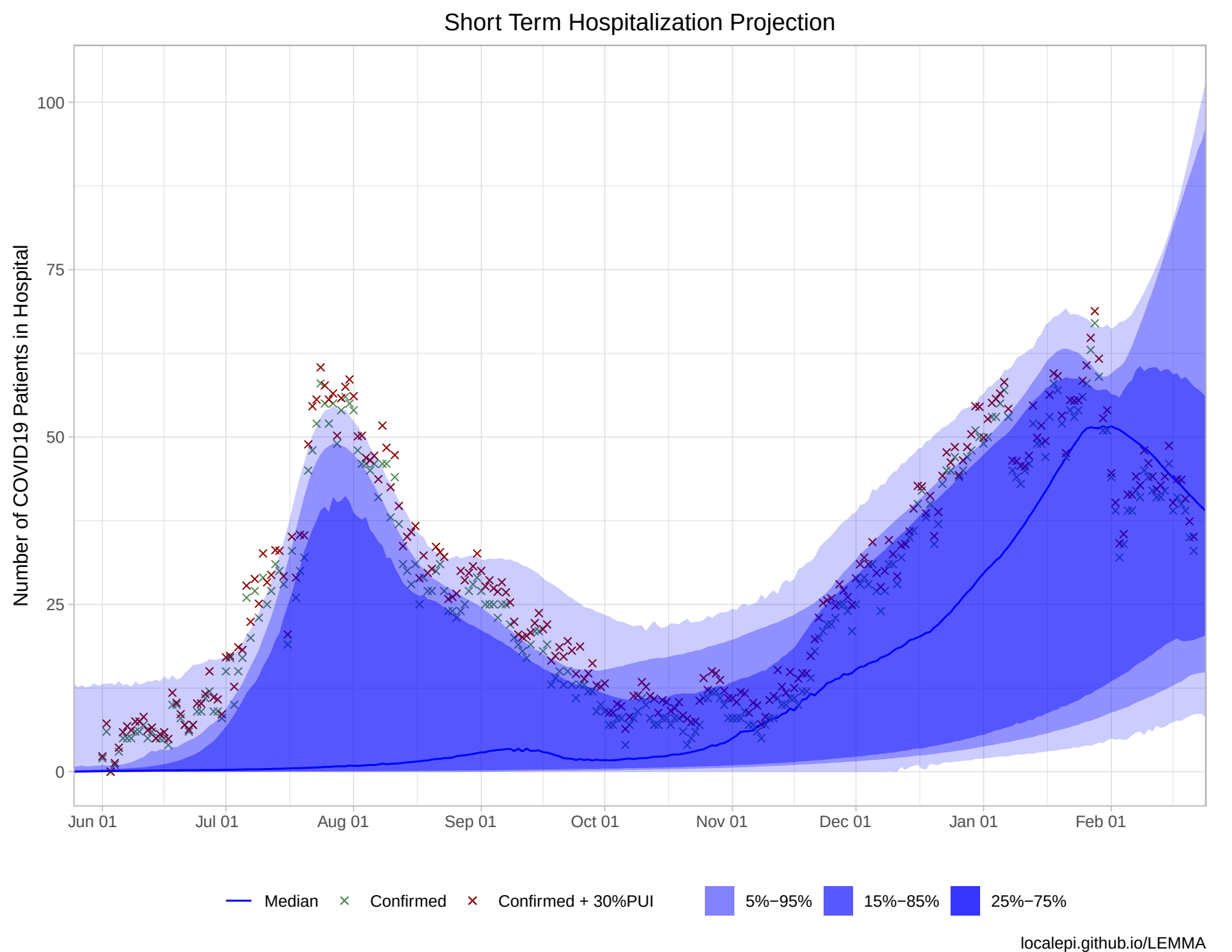
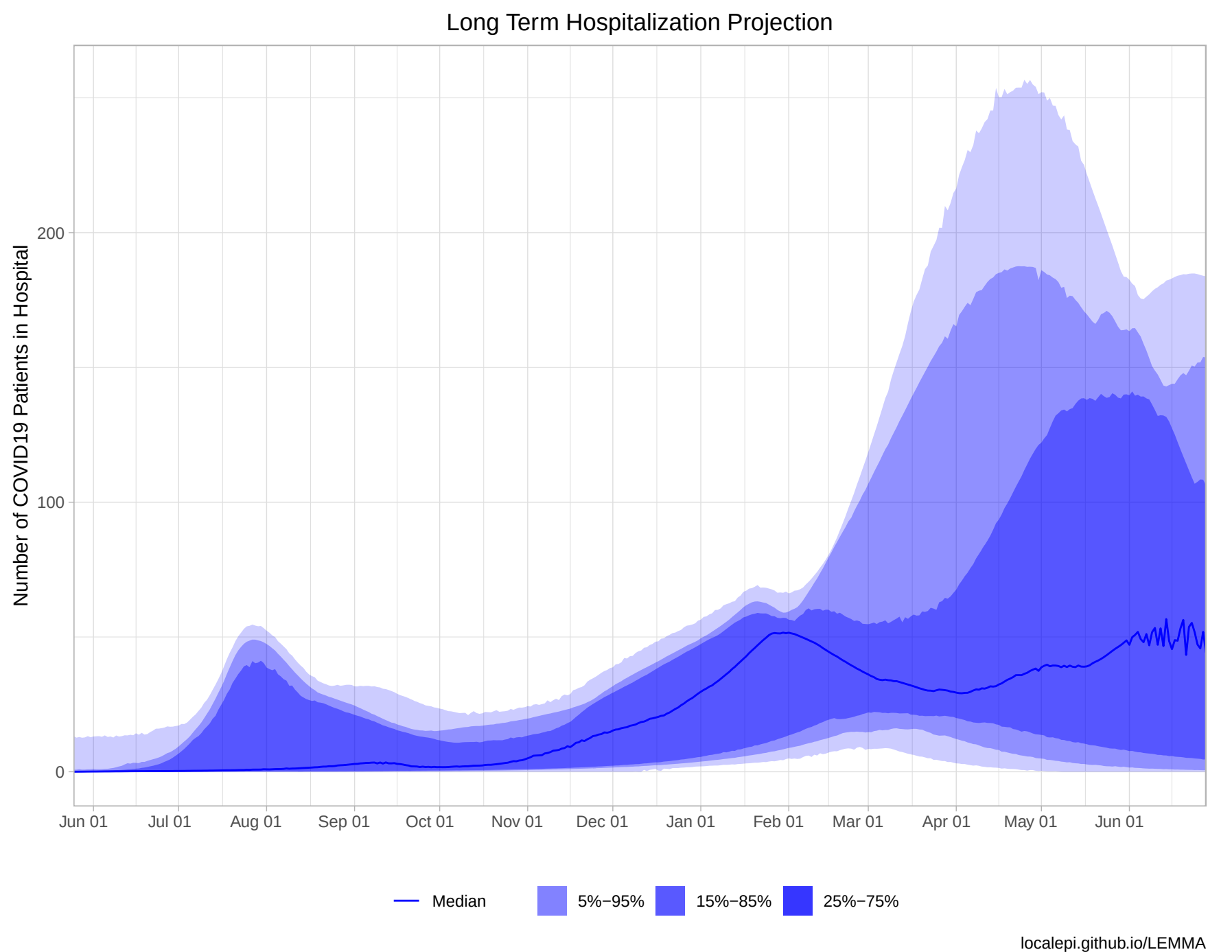
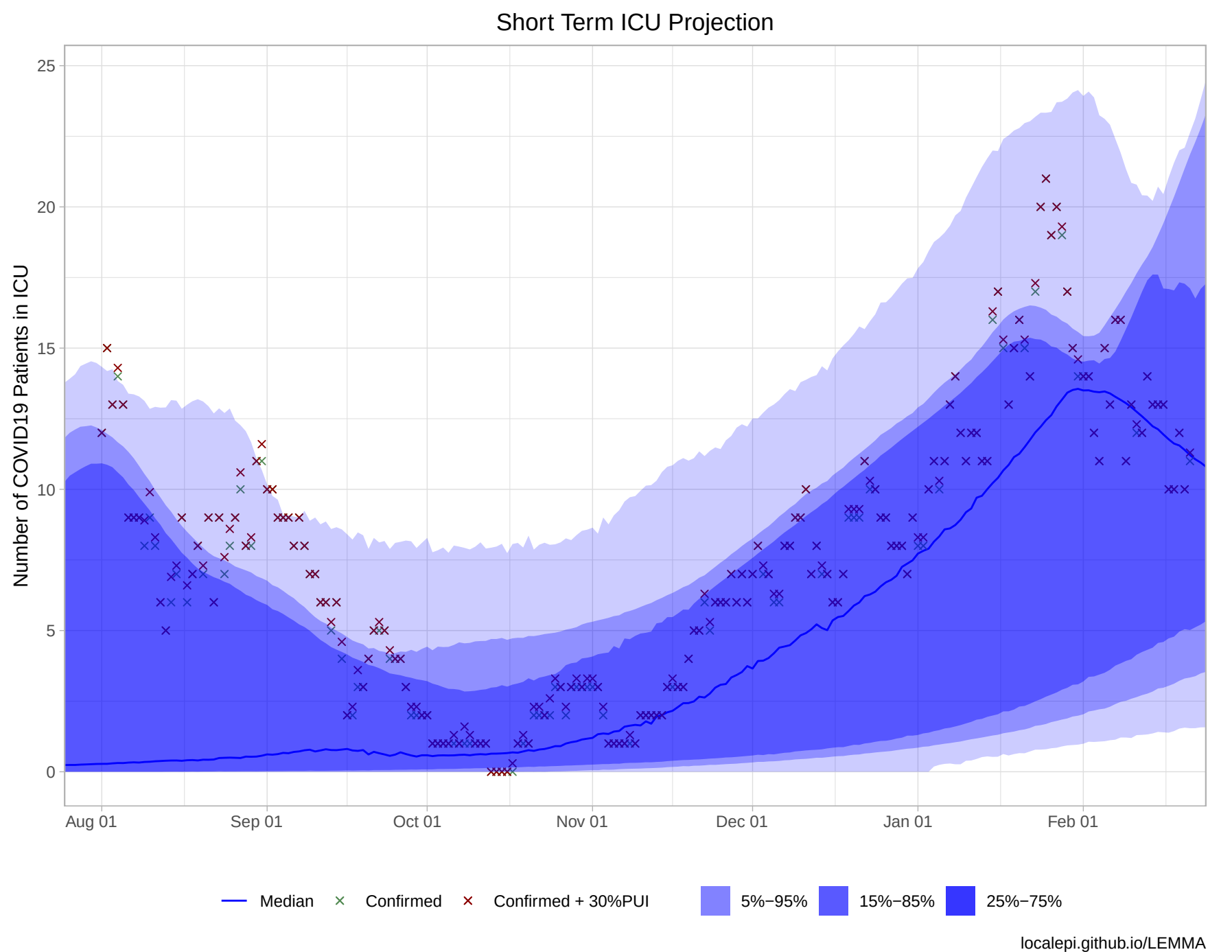
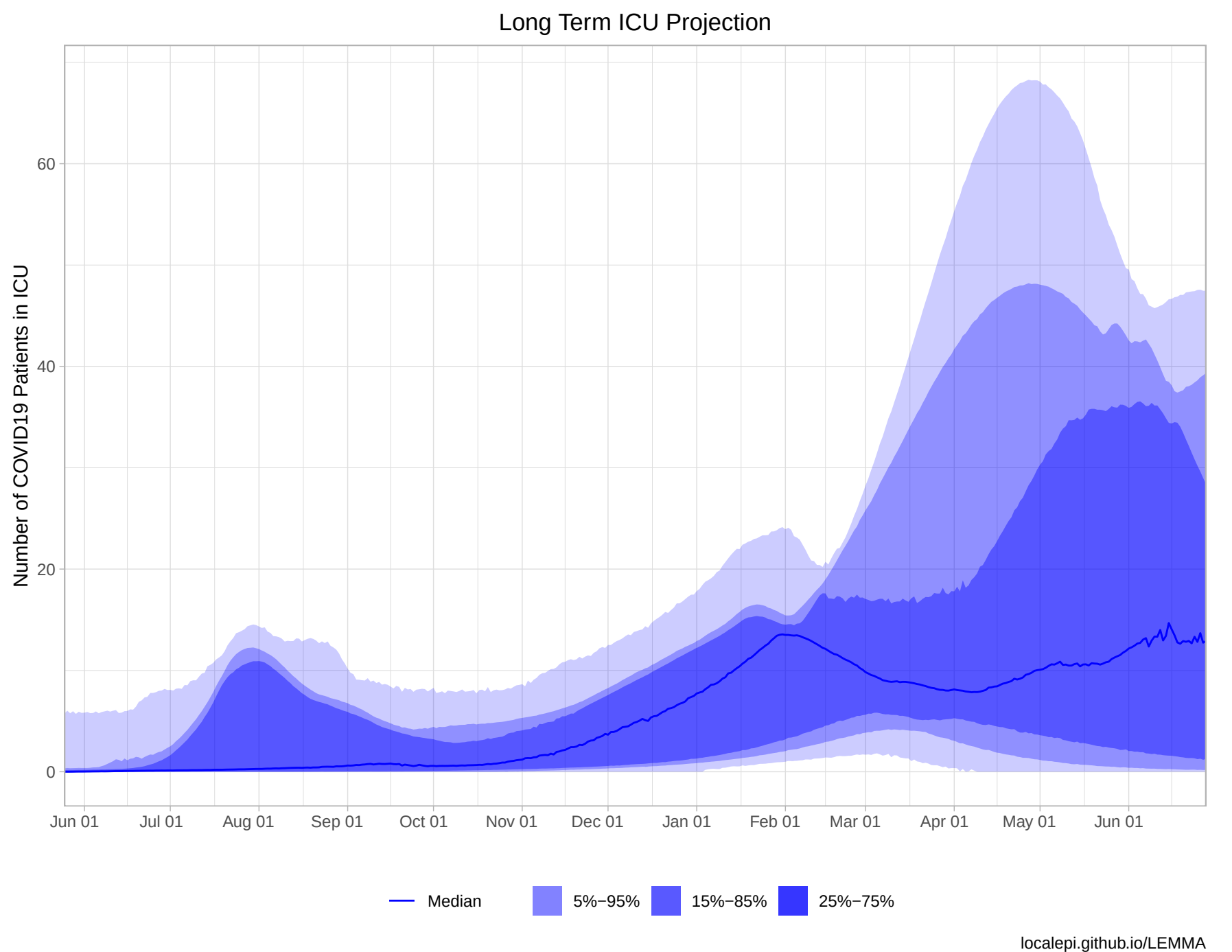
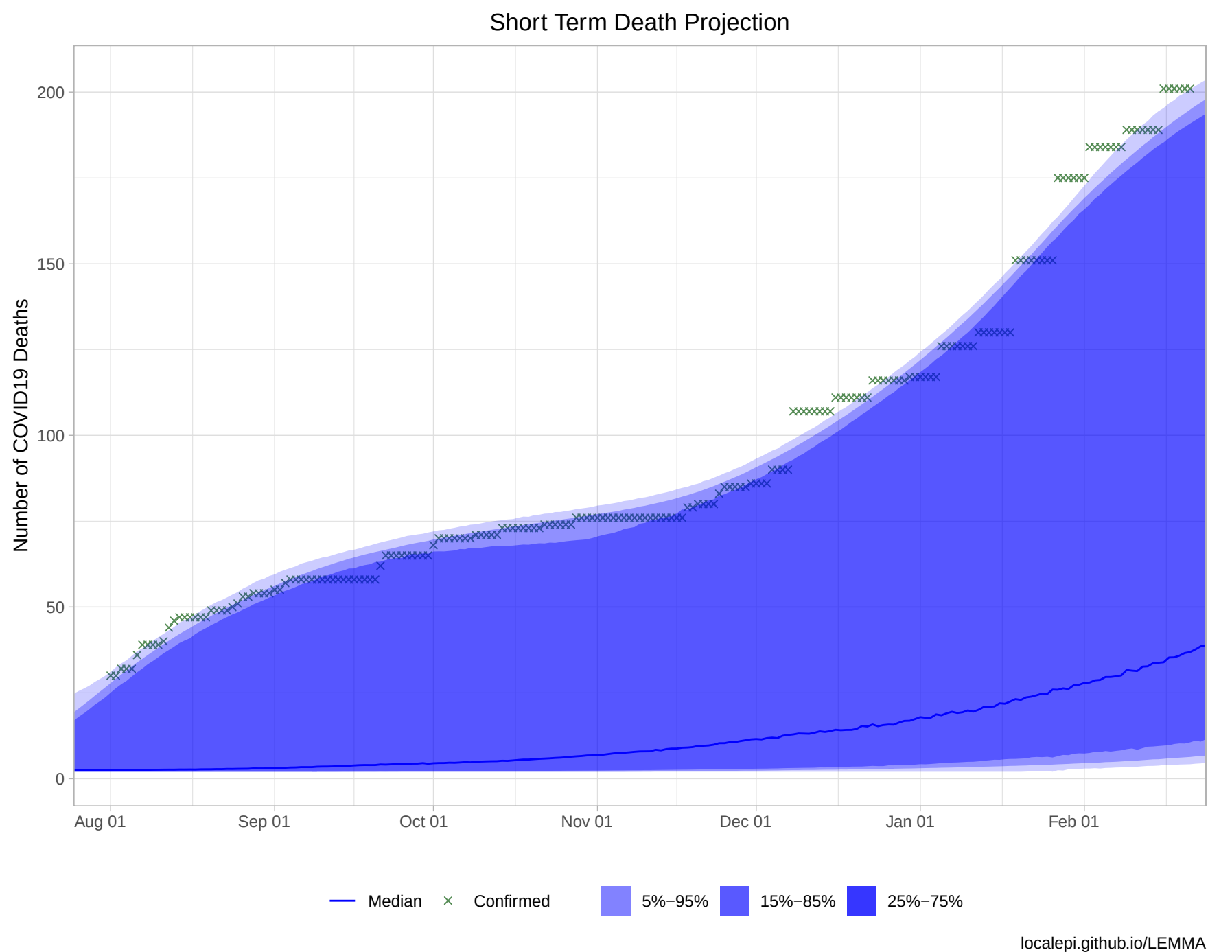
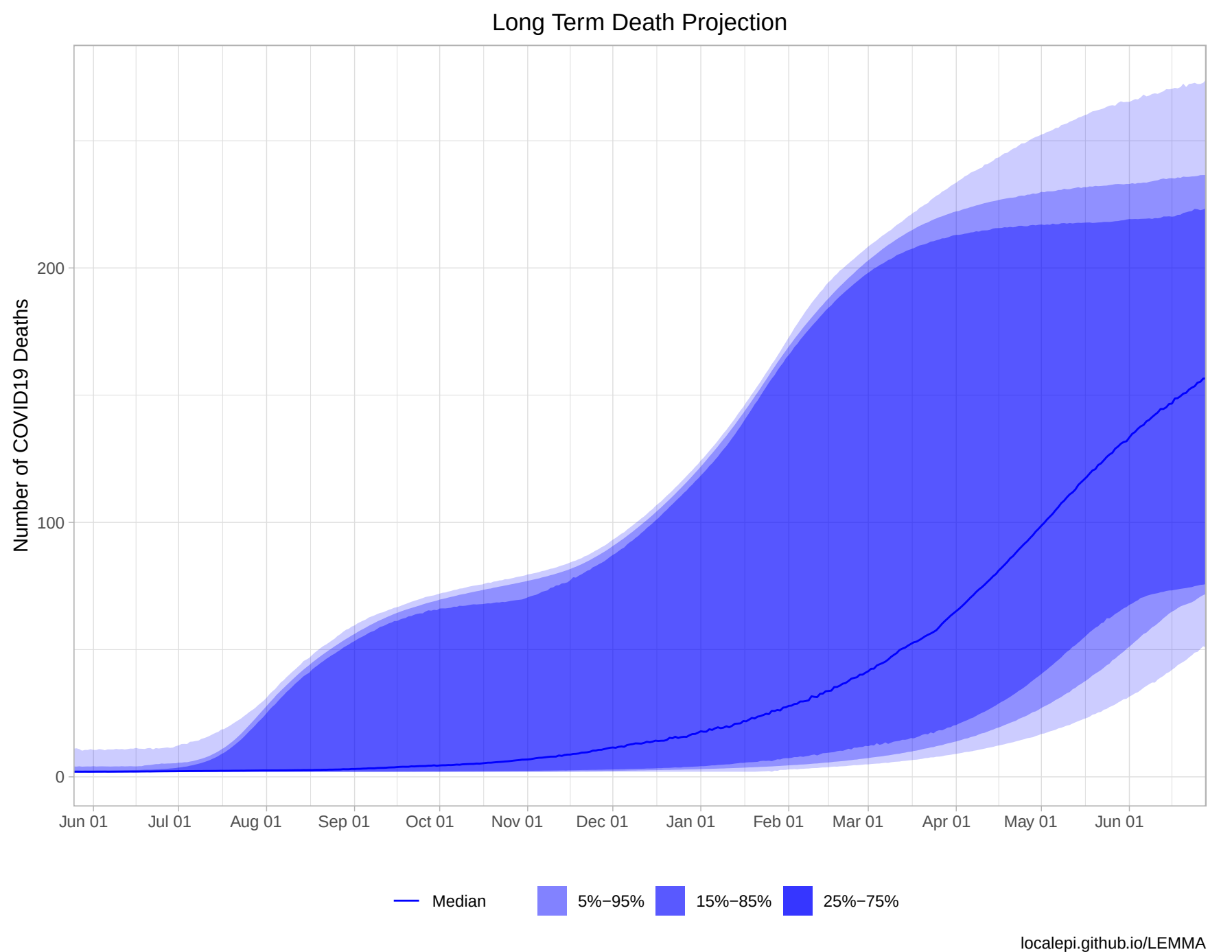

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
100
75
50
25
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

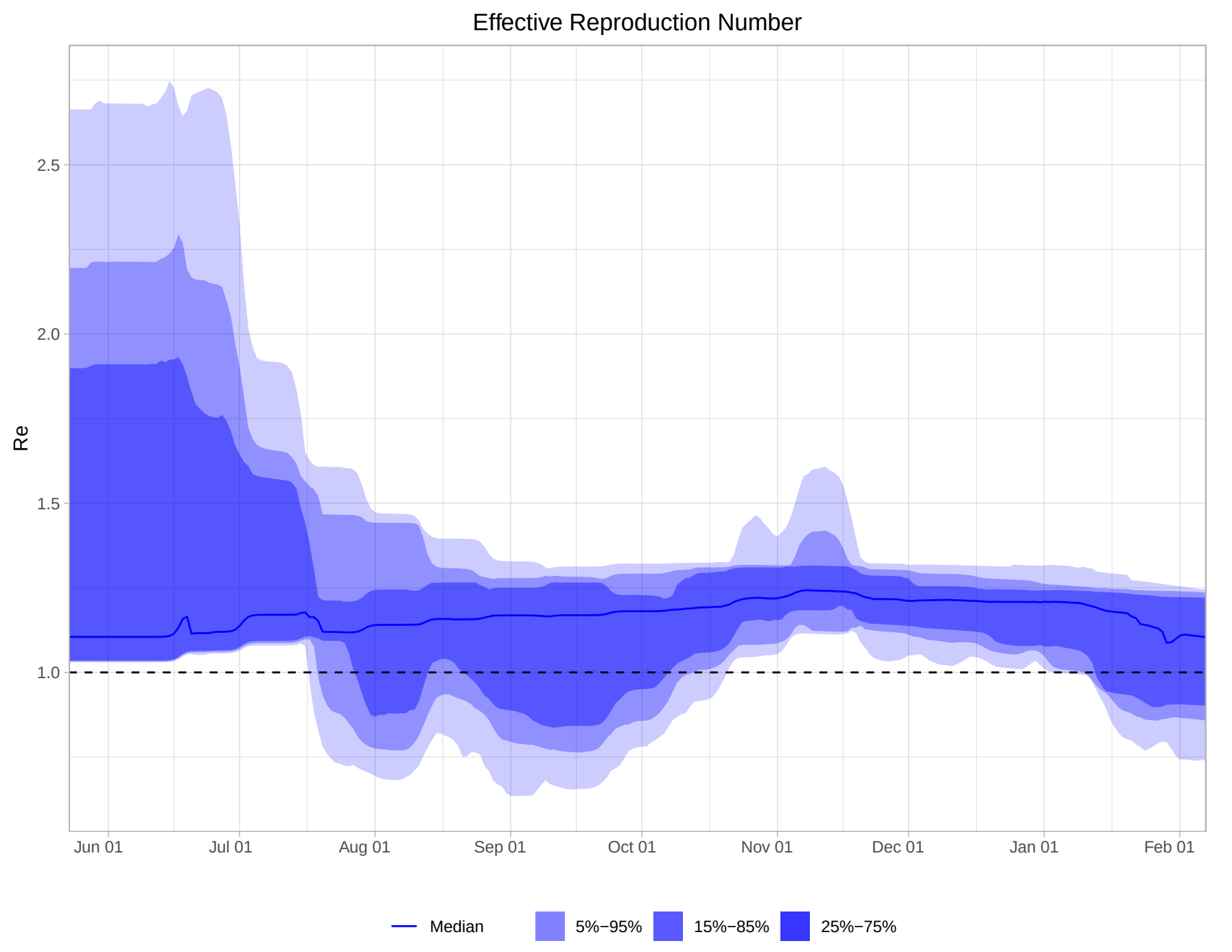

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
200
100
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Apr 01
May 01
Jun 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
25
20
15
10
5
0
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Long Term ICU Projection
Number of COVID19 Patients in ICU
0
20
40
60
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Apr 01
May 01
Jun 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

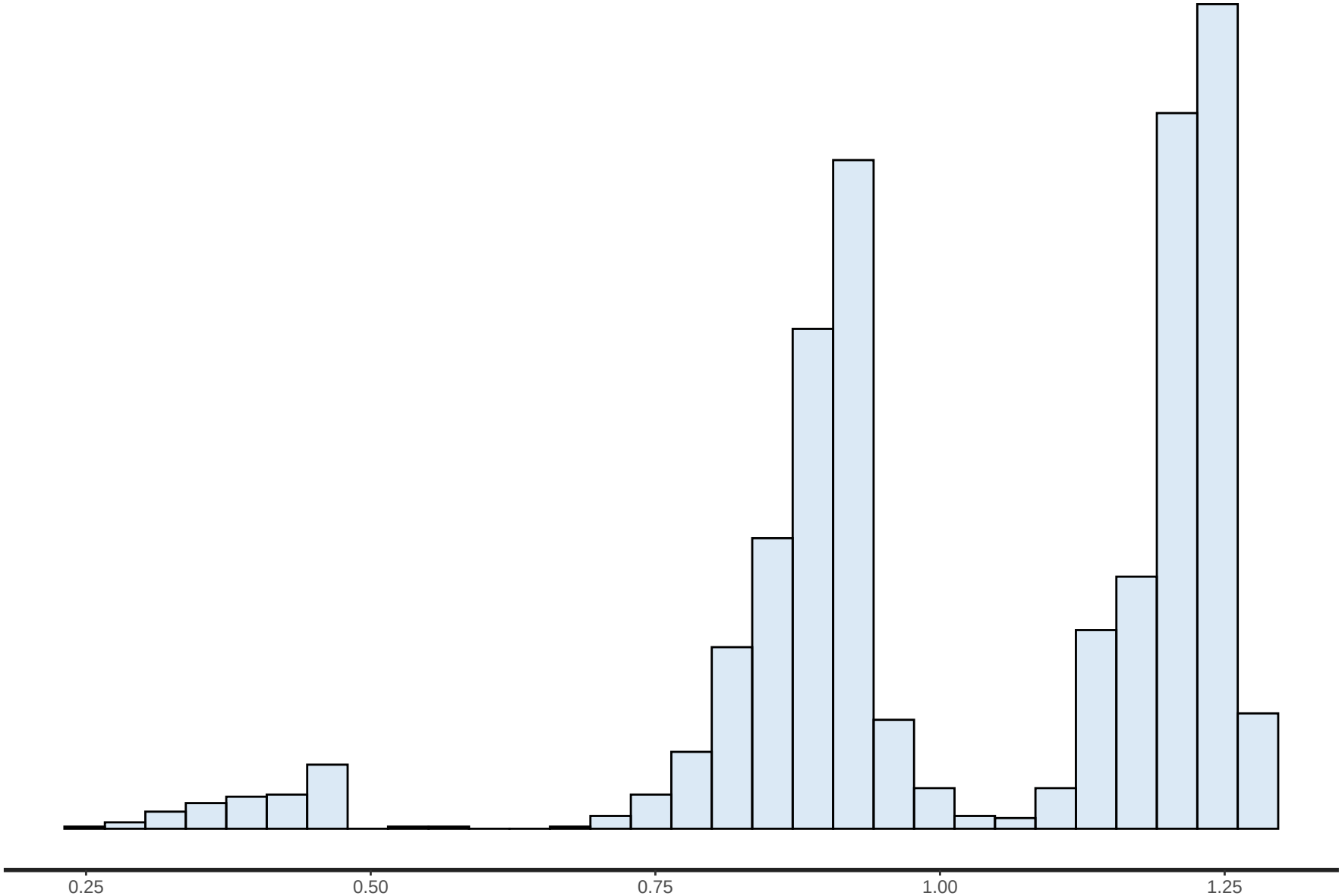

Short Term Death Projection
Number of COVID19 Deaths
200
150
100
50
0
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

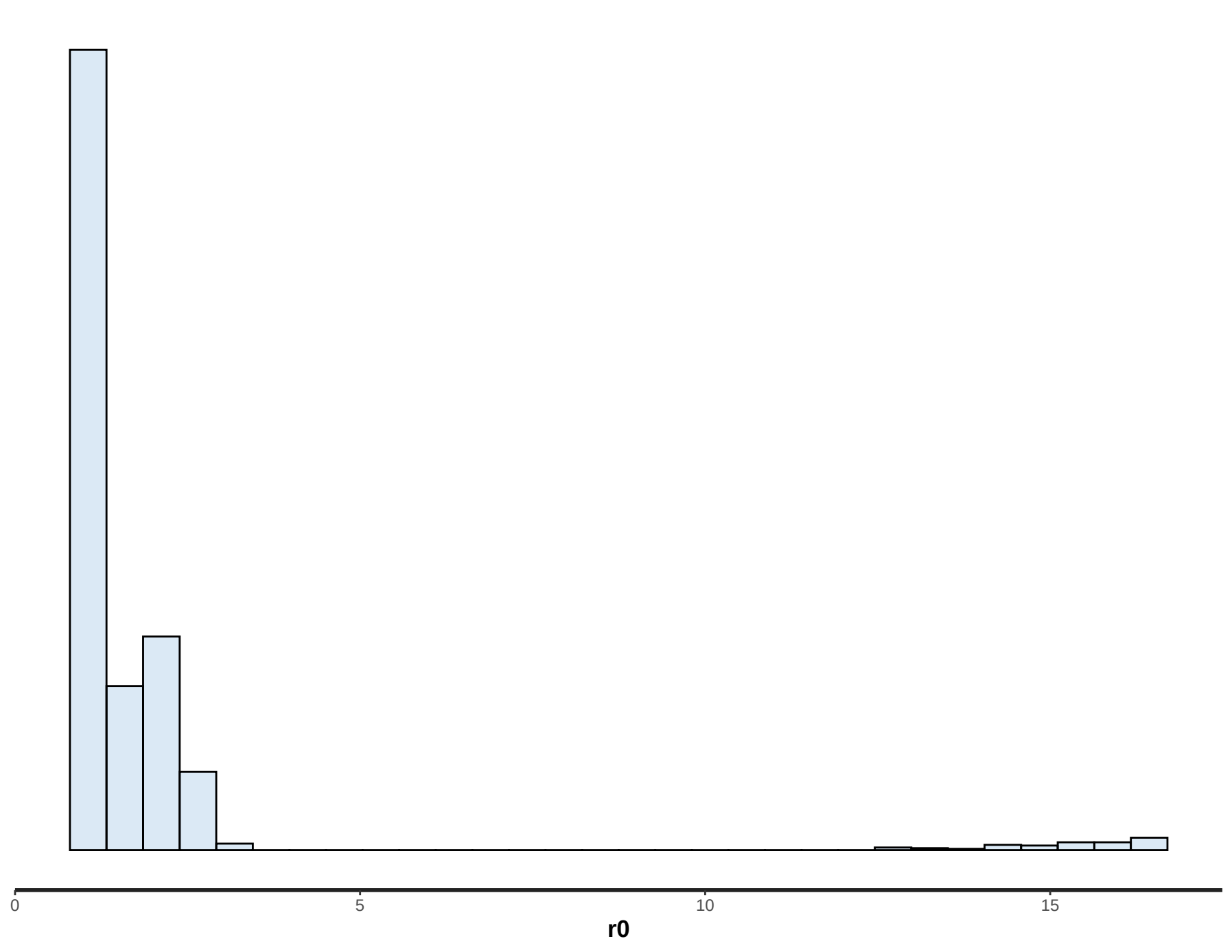

Long Term Death Projection
Number of COVID19 Deaths
200
100
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Apr 01
May 01
Jun 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

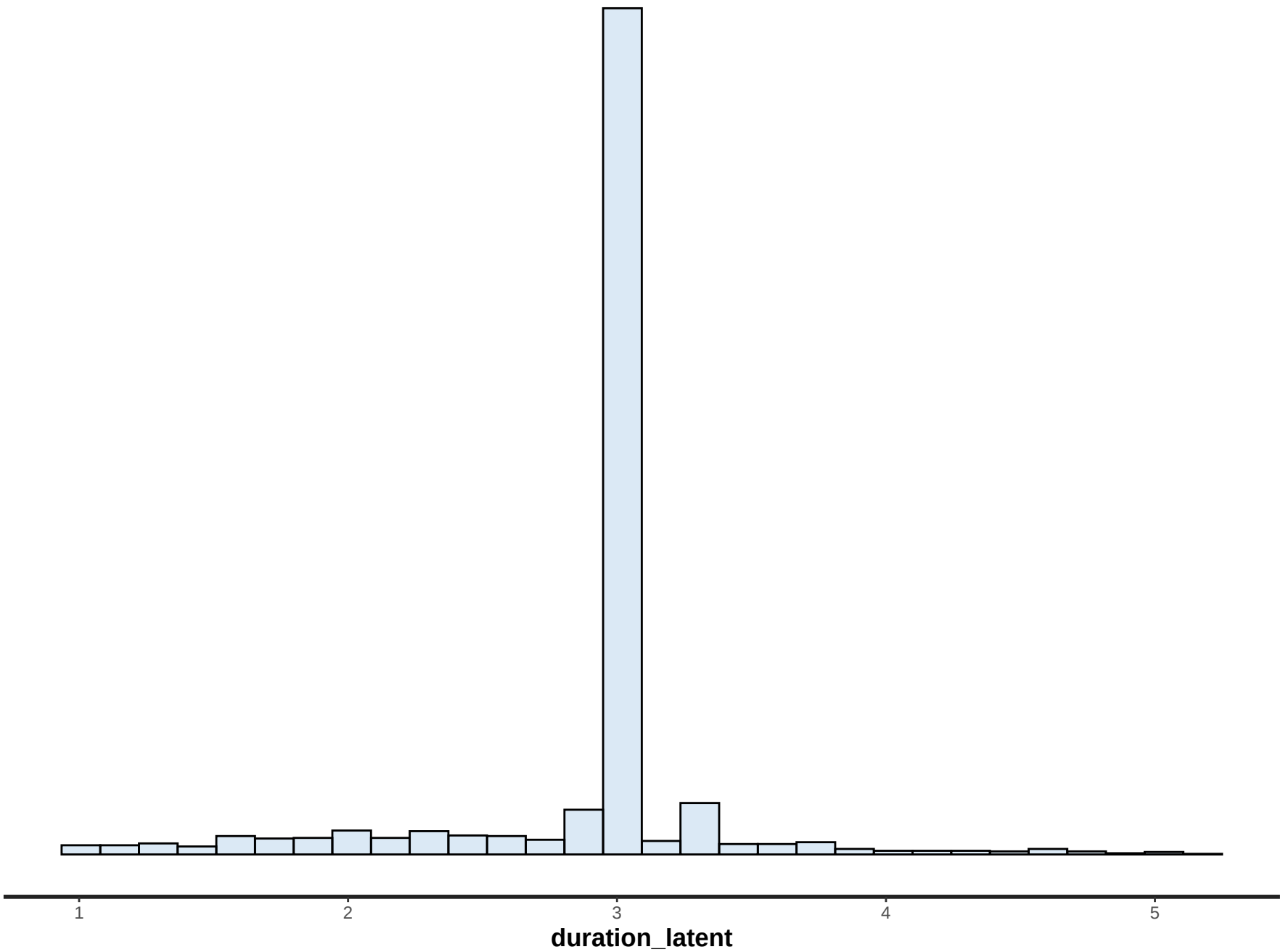

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%

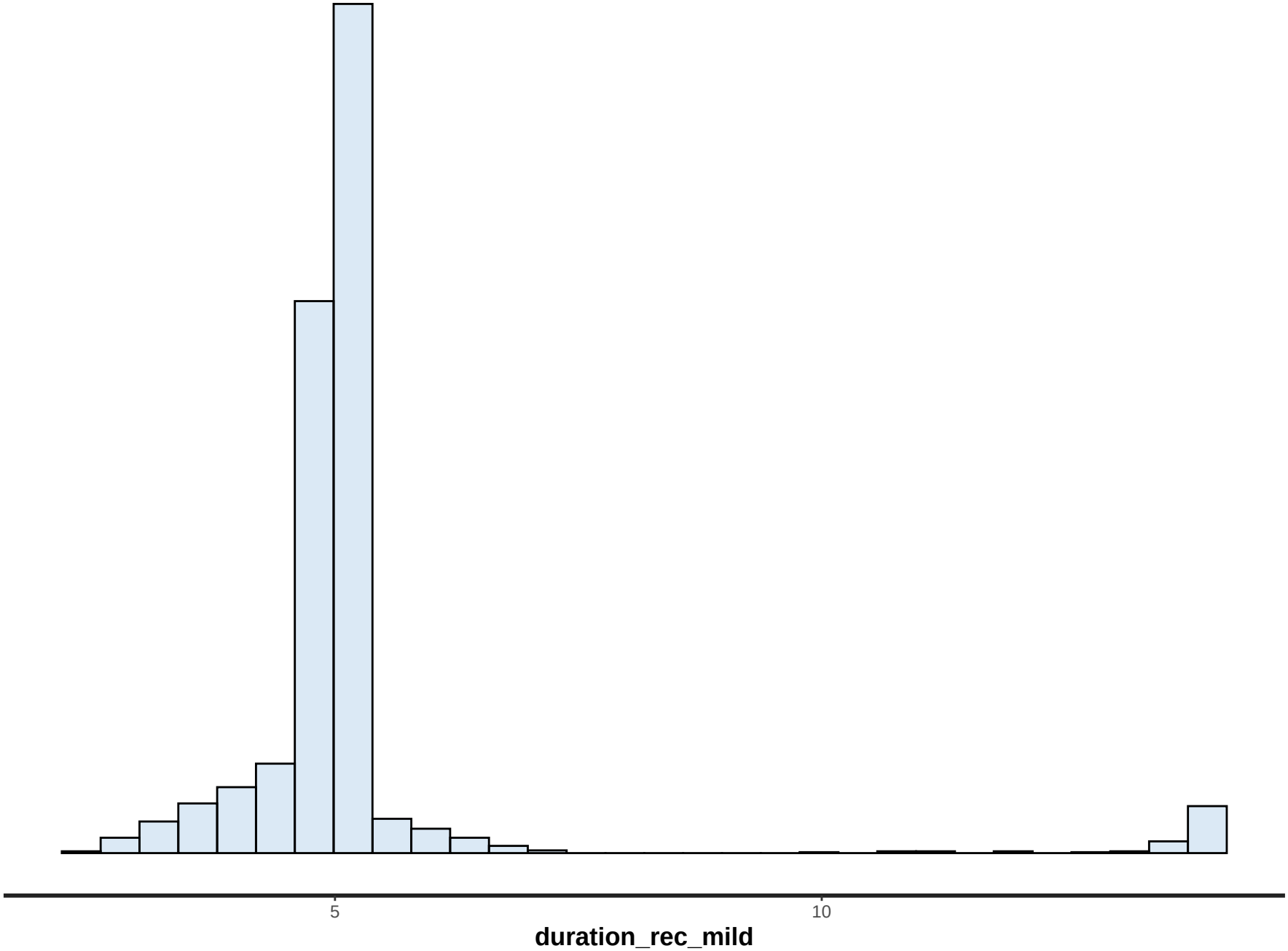
Rt as of 2021−02−07

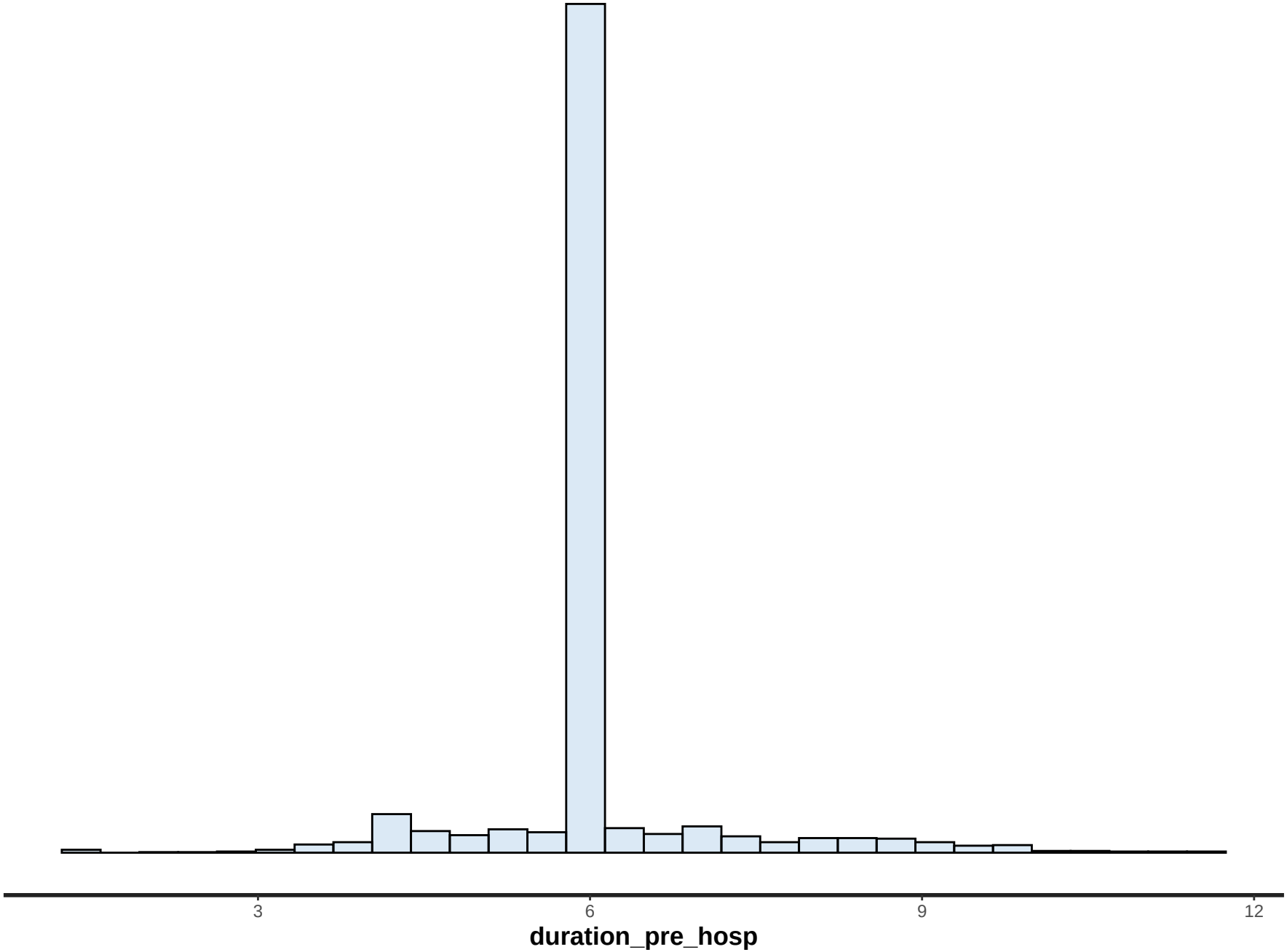
5%	10%	25%	50%	75%	90%	95%
0.74	0.82	0.90	1.10	1.22	1.24	1.24

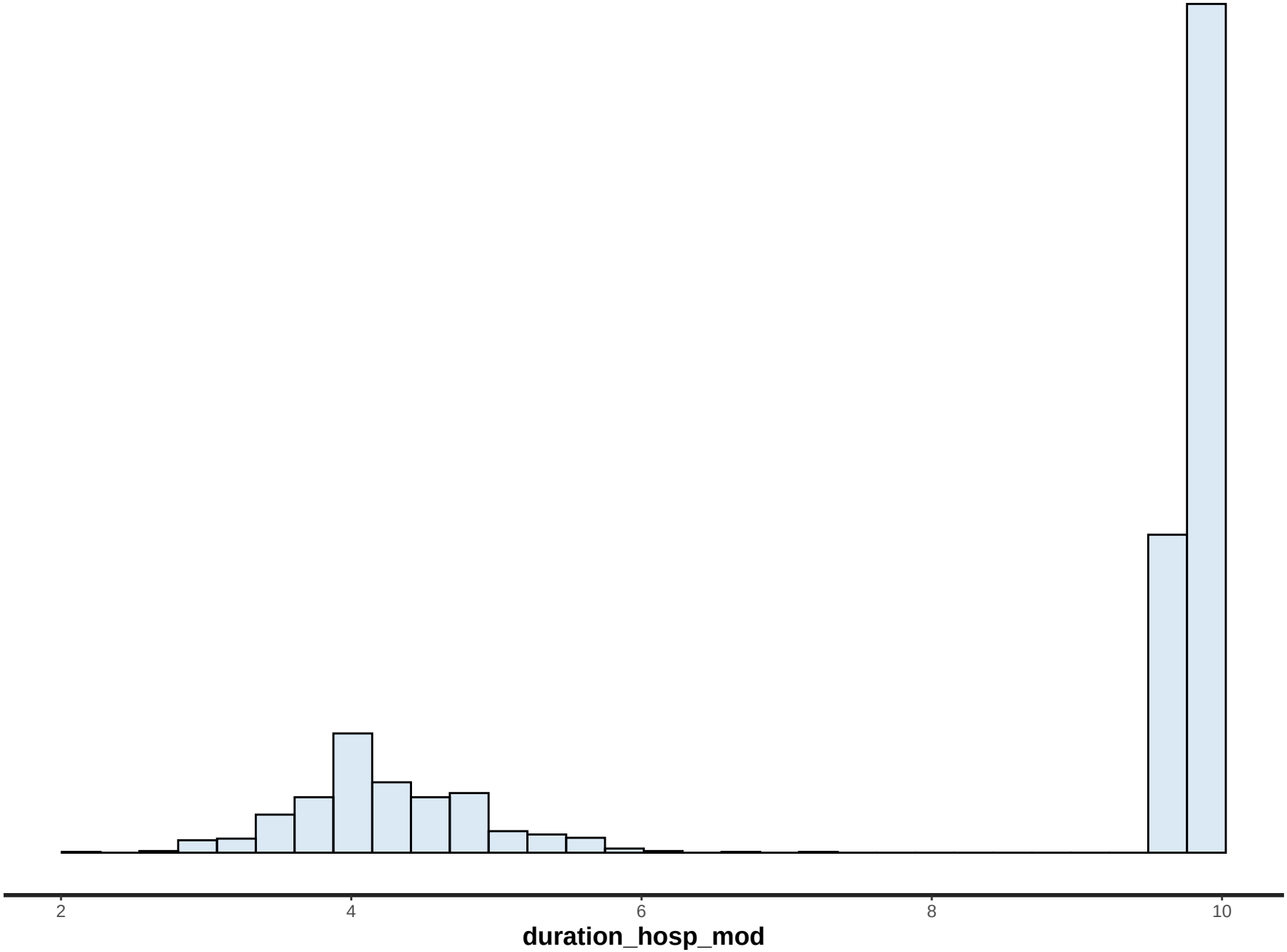


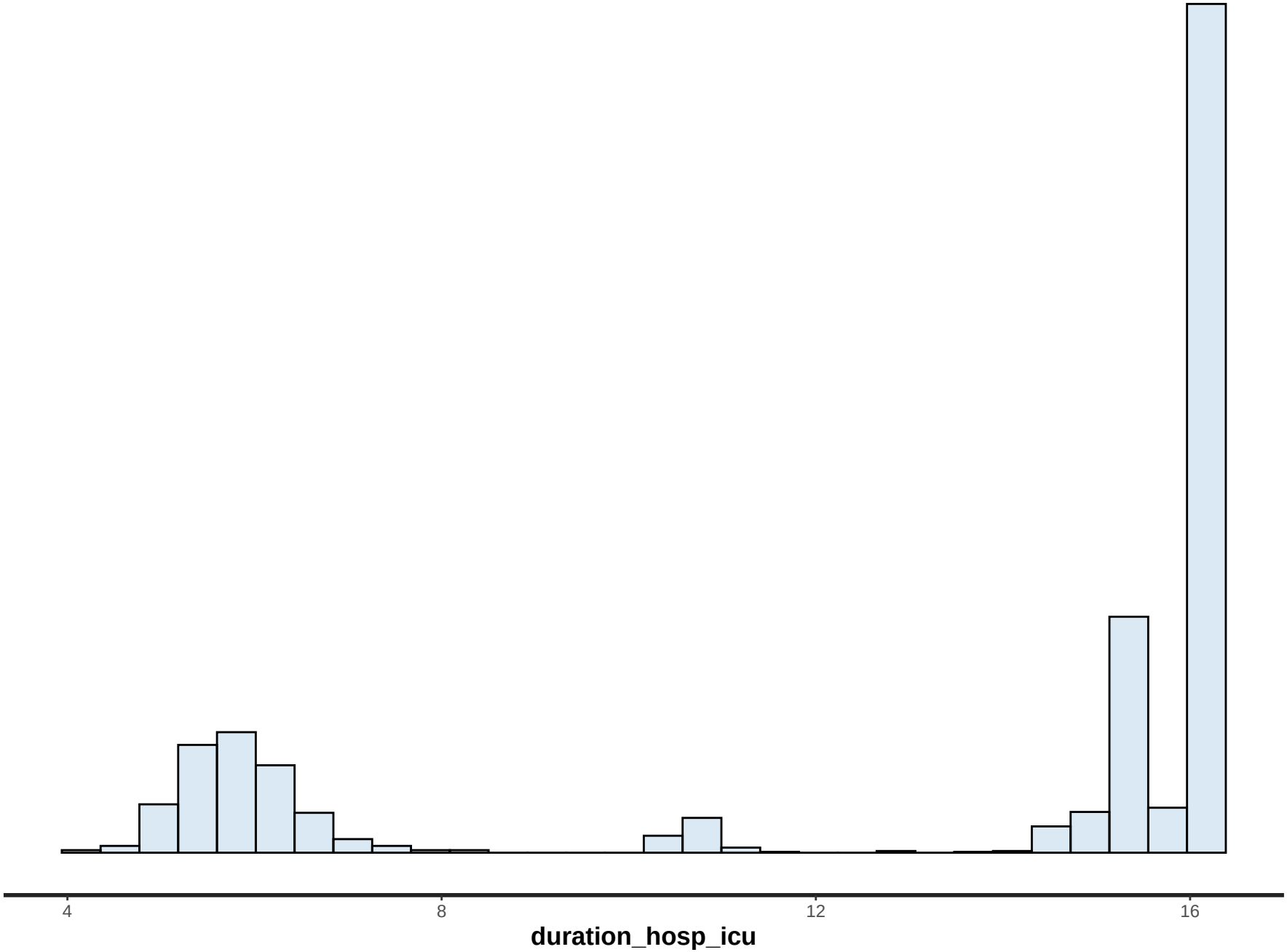

0
5
10
15
r0

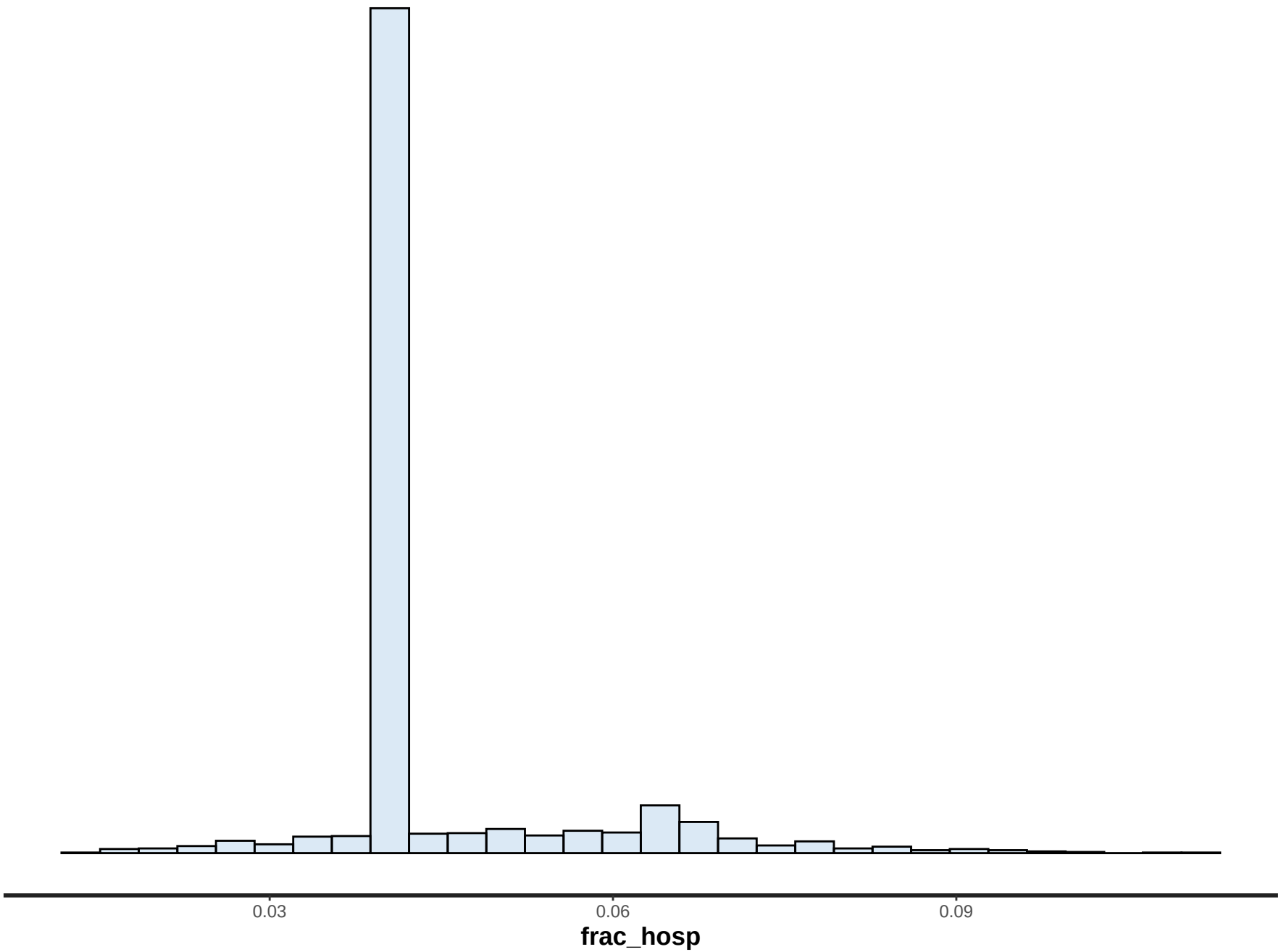

1
2
3
4
5
duration_latent

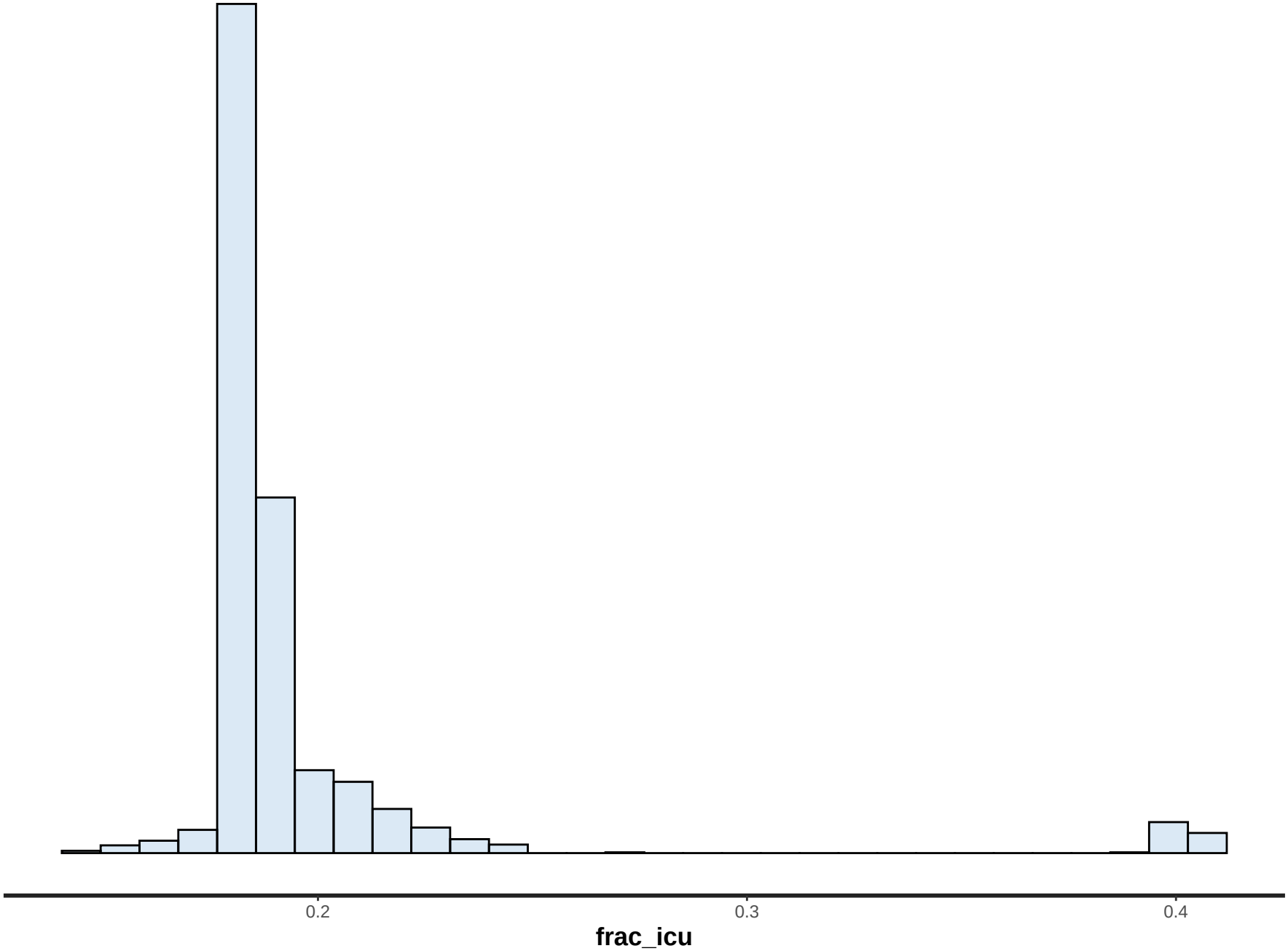

5
10
duration_rec_mild

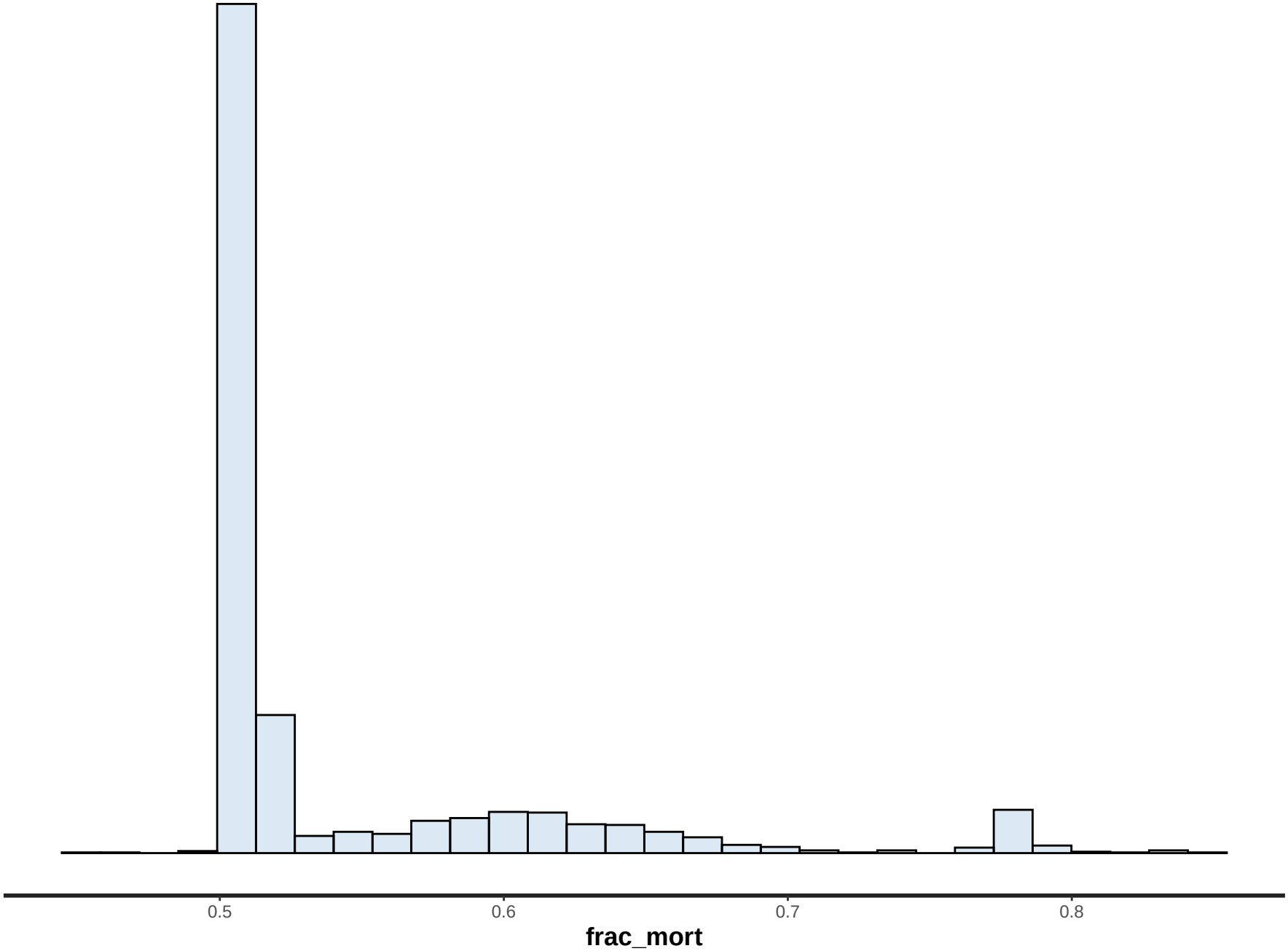

3
6
9
12
duration_pre_hosp

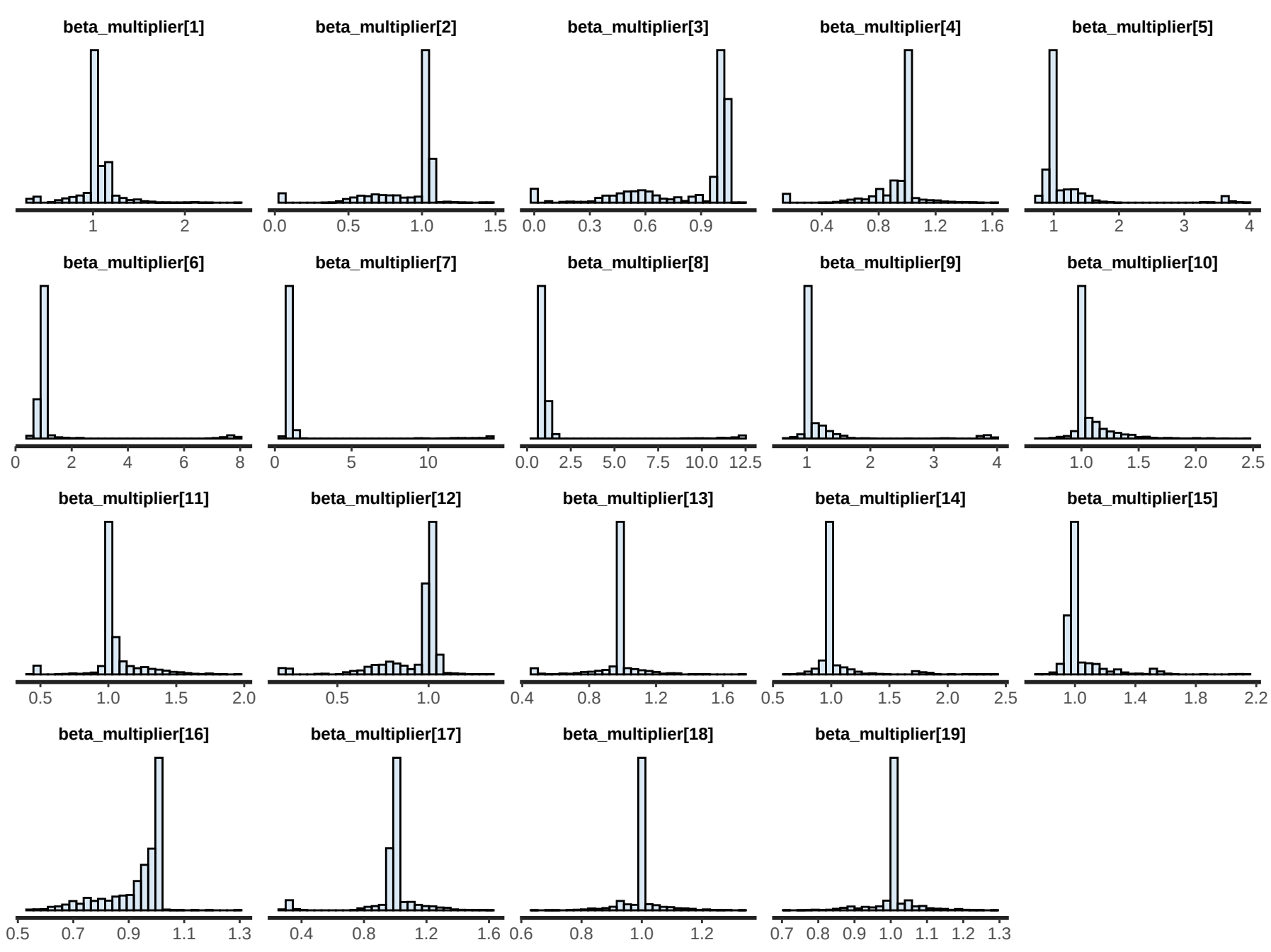

2
4
6
8
10
duration_hosp_mod

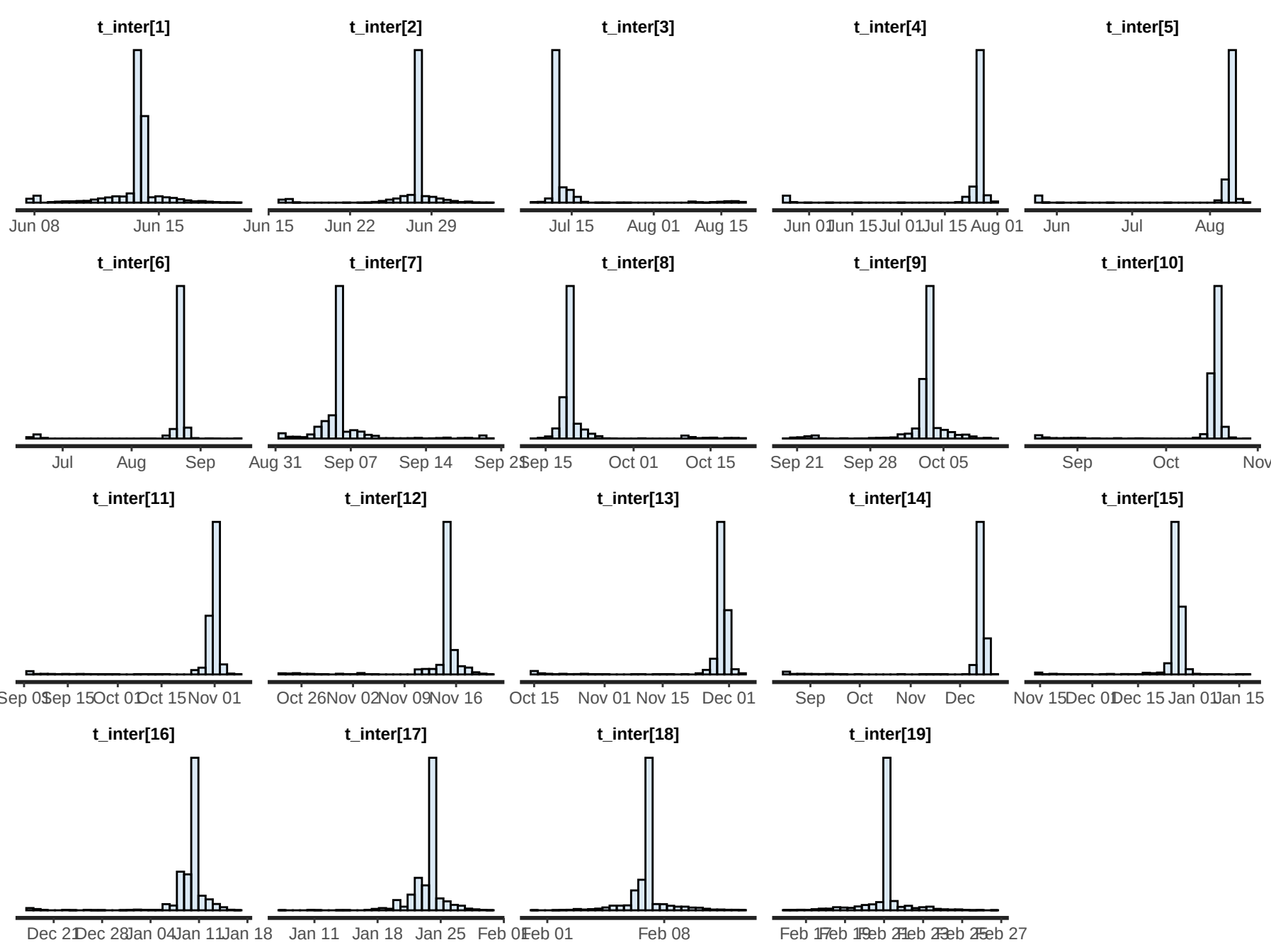

4
8
12
16
duration_hosp_icu

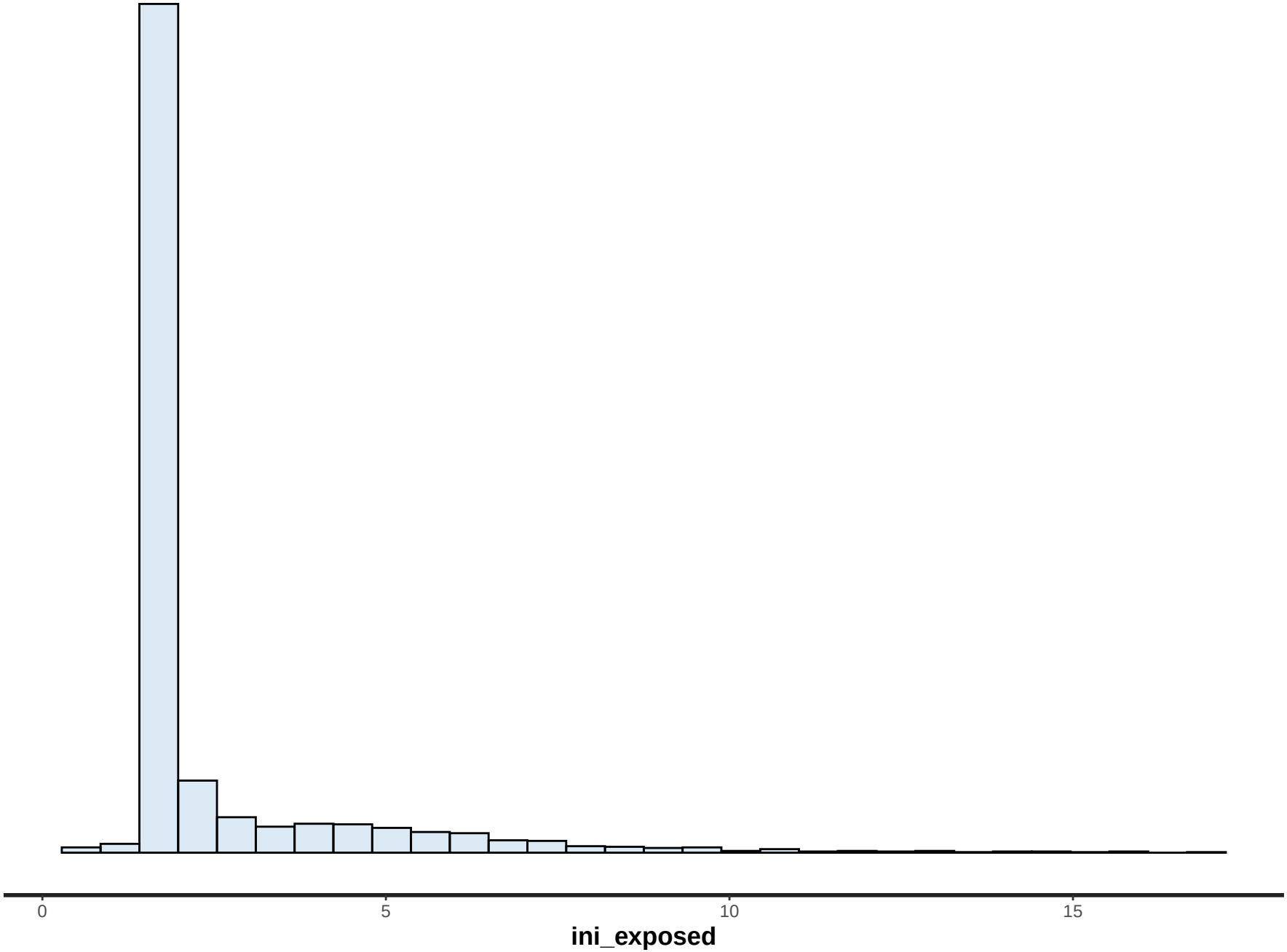

0.03
0.06
0.09
frac_hosp

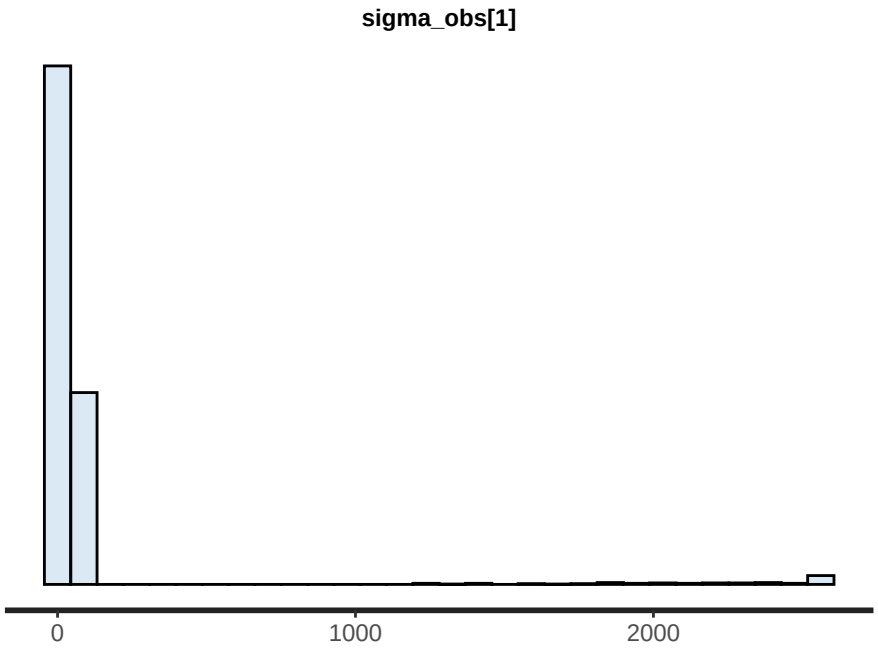

0.2
0.3
0.4
frac_icu

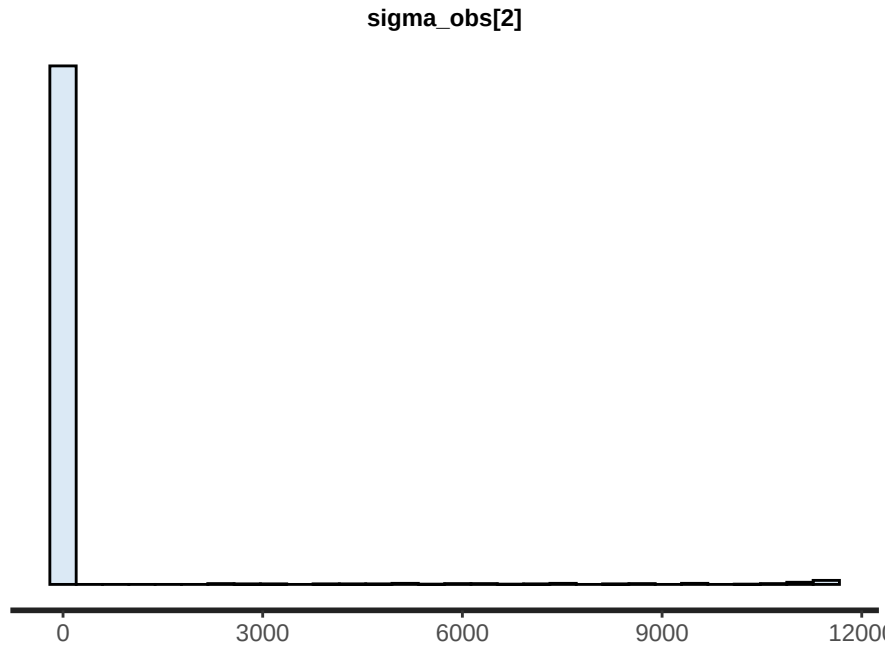

0.5
0.6
0.7
0.8
frac_mort

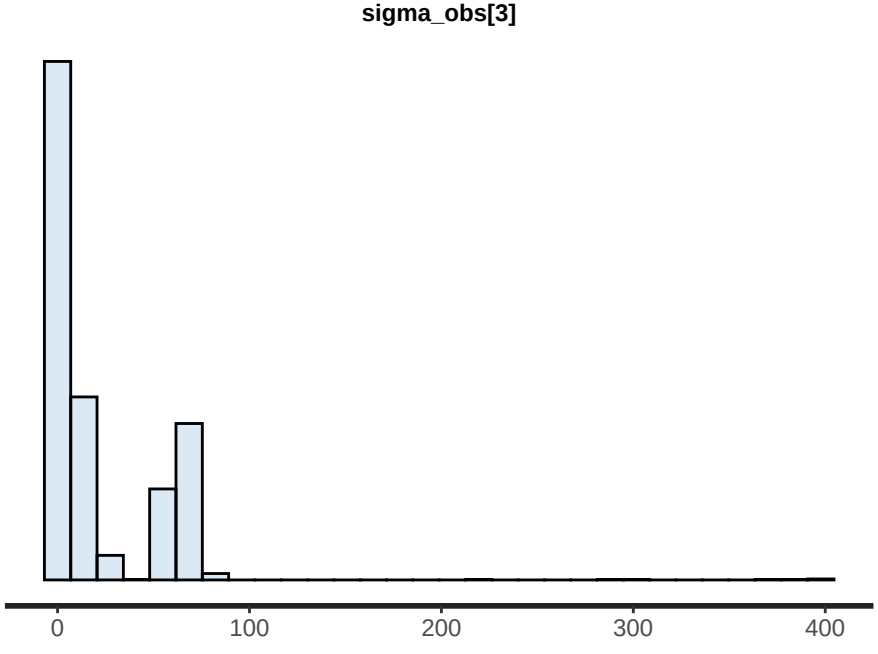

beta_multiplier[1]
1
2
beta_multiplier[2]
0.0
0.5
1.0
1.5
beta_multiplier[3]
0.0
0.3
0.6
0.9
beta_multiplier[4]
0.4
0.8
1.2
1.6
beta_multiplier[5]
1
2
3
4
beta_multiplier[6]
0
2
4
6
8
beta_multiplier[7]
0
5
10
beta_multiplier[8]
0.0
2.5
5.0
7.5
10.0
12.5
beta_multiplier[9]
1
2
3
4
beta_multiplier[10]
1.0
1.5
2.0
2.5
beta_multiplier[11]
0.5
1.0
1.5
2.0
beta_multiplier[12]
0.5
1.0
beta_multiplier[13]
0.4
0.8
1.2
1.6
beta_multiplier[14]
0.5
1.0
1.5
2.0
2.5
beta_multiplier[15]
1.0
1.4
1.8
2.2
beta_multiplier[16]
0.5
0.7
0.9
1.1
1.3
beta_multiplier[17]
0.4
0.8
1.2
1.6
beta_multiplier[18]
0.6
0.8
1.0
1.2
beta_multiplier[19]
0.7
0.8
0.9
1.0
1.1
1.2
1.3

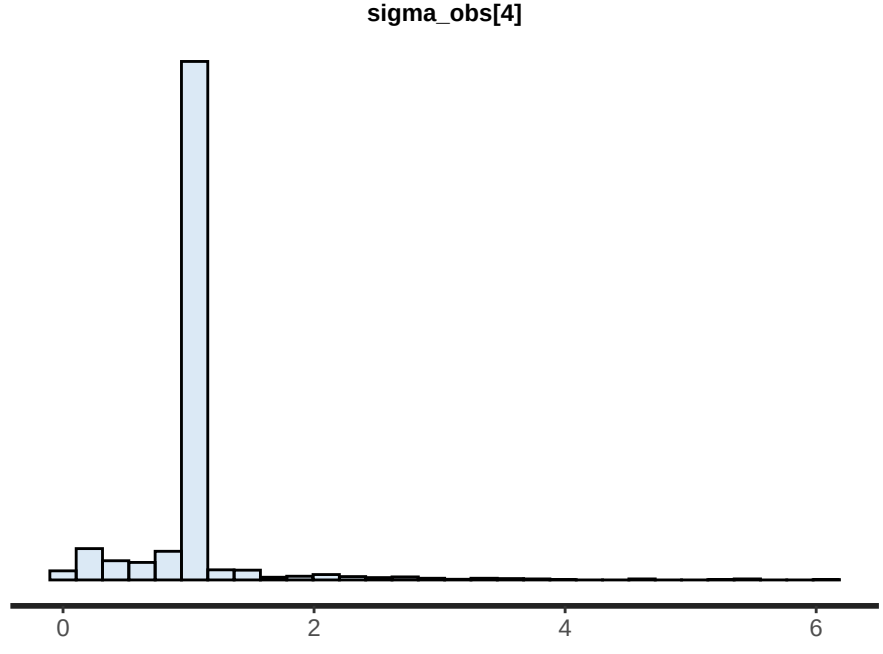

t_inter[1]
Jun 08
Jun 15
t_inter[2]
Jun 15
Jun 22
Jun 29
t_inter[3]
Jul 15
Aug 01
Aug 15
t_inter[4]
Jun 01
Jun 15
Jul 01
Jul 15
Aug 01
t_inter[5]
Jun
Jul
Aug
t_inter[6]
Jul
Aug
Sep
t_inter[7]
Aug 31
Sep 07
Sep 14
Sep 21
t_inter[8]
Sep 15
Oct 01
Oct 15
t_inter[9]
Sep 21
Sep 28
Oct 05
t_inter[10]
Sep
Oct
Nov
t_inter[11]
Sep 01
Sep 15
Oct 01
Oct 15
Nov 01
t_inter[12]
Oct 26
Nov 02
Nov 09
Nov 16
t_inter[13]
Oct 15
Nov 01
Nov 15
Dec 01
t_inter[14]
Sep
Oct
Nov
Dec
t_inter[15]
Nov 15
Dec 01
Dec 15
Jan 01
Jan 15
t_inter[16]
Dec 21
Dec 28
Jan 04
Jan 11
Jan 18
t_inter[17]
Jan 11
Jan 18
Jan 25
Feb 01
t_inter[18]
Feb 01
Feb 08
t_inter[19]
Feb 17
Feb 19
Feb 21
Feb 23
Feb 25
Feb 27


0
5
10
15
ini_exposed


sigma_obs[1]
0
1000
2000


sigma_obs[2]
0
3000
6000
9000
12000


sigma_obs[3]
0
100
200
300
400


sigma_obs[4]
0
2
4
6