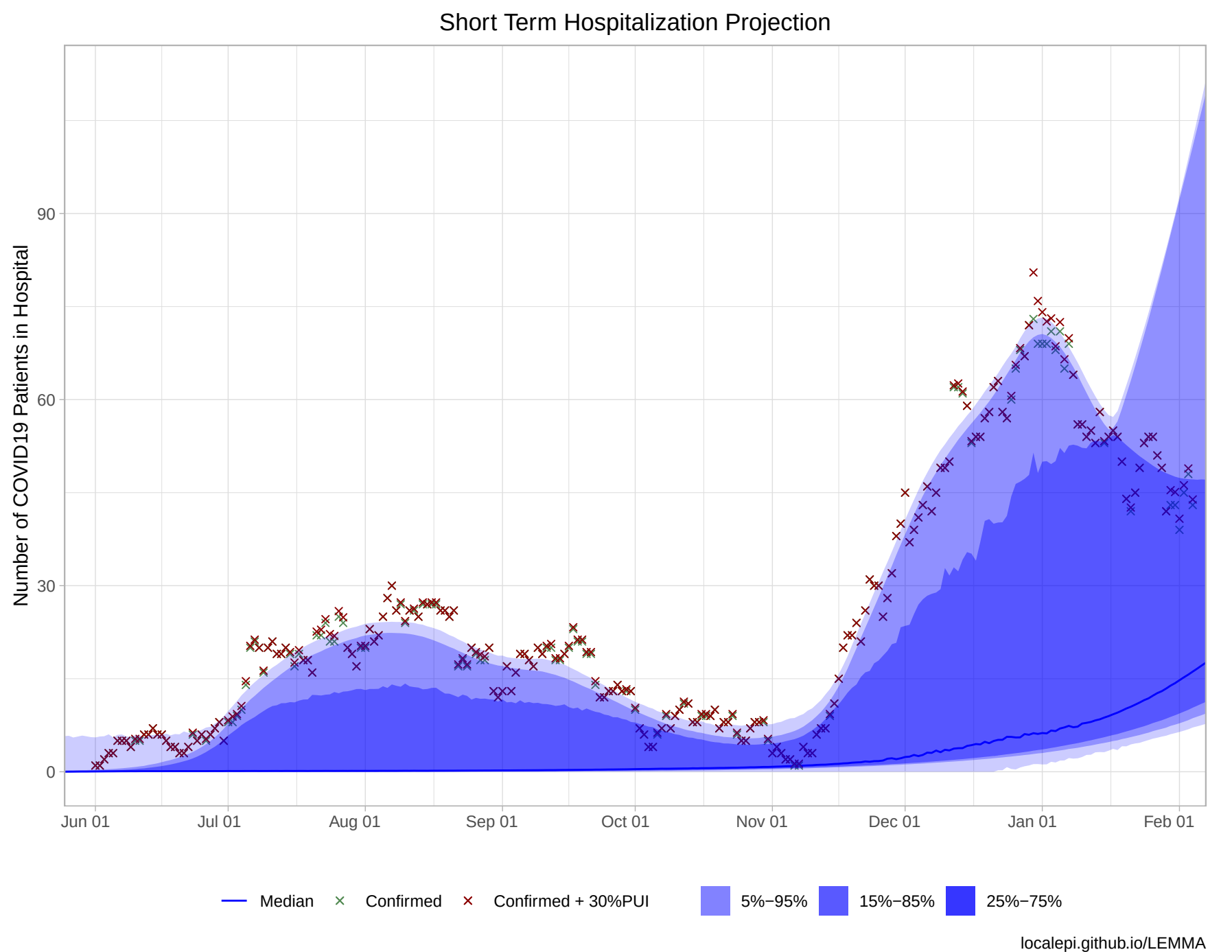
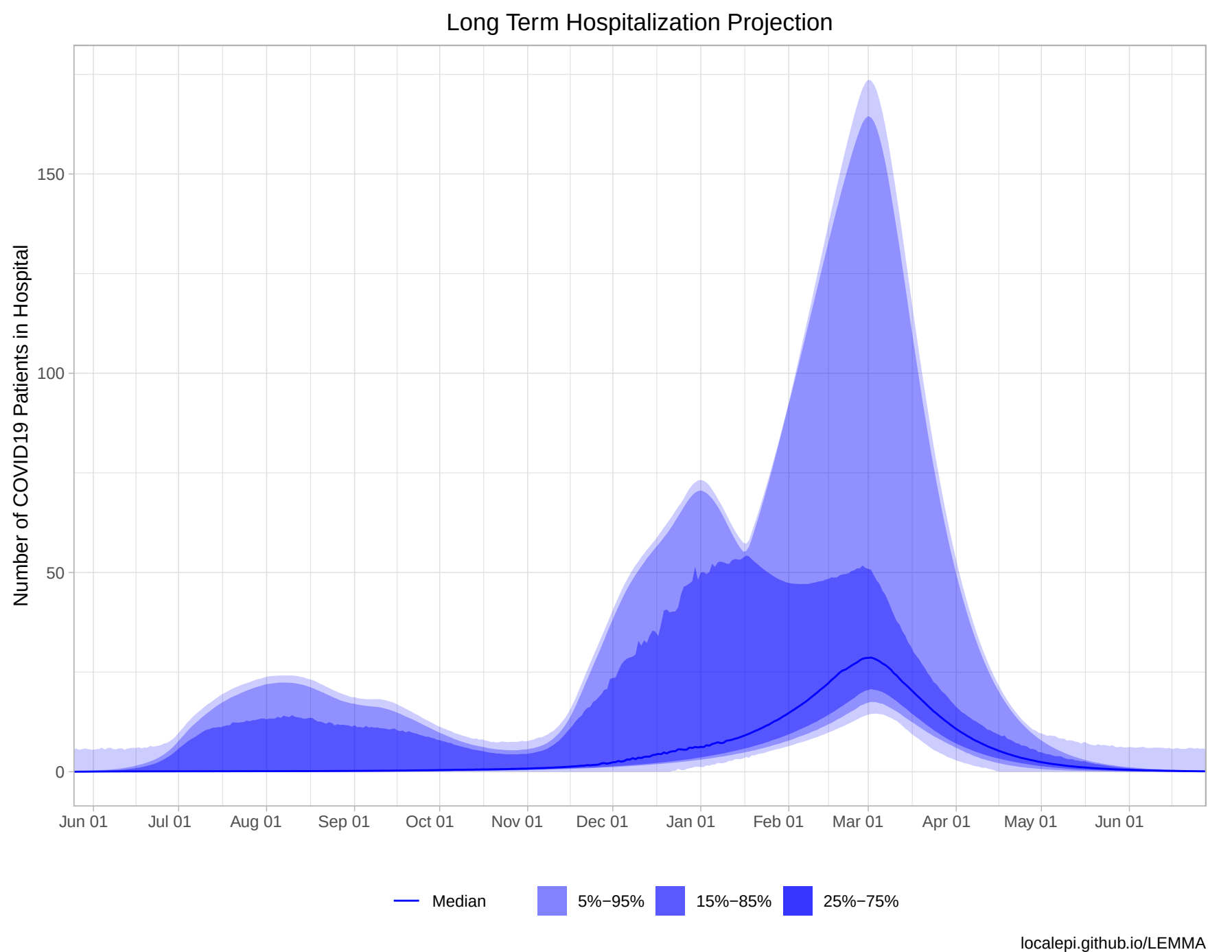
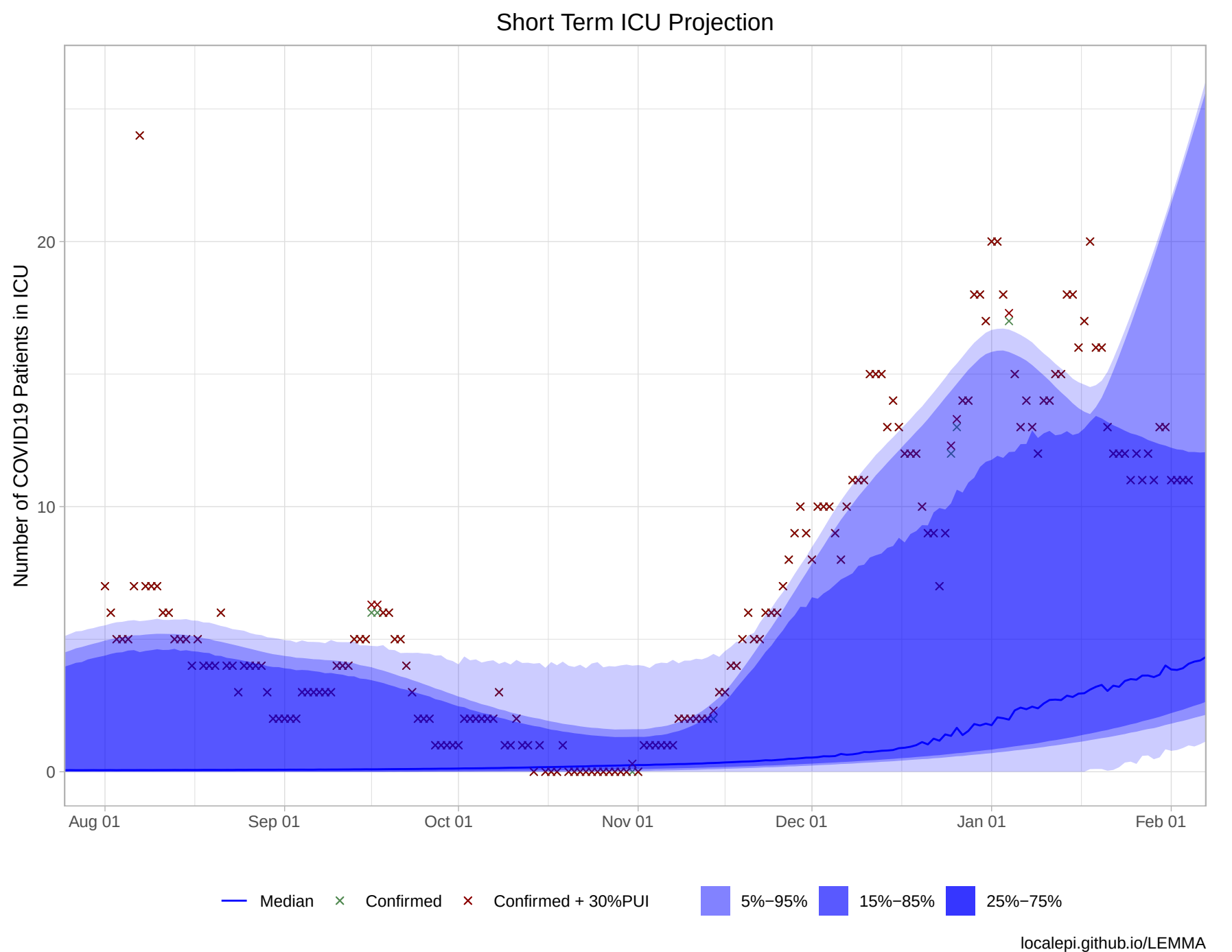
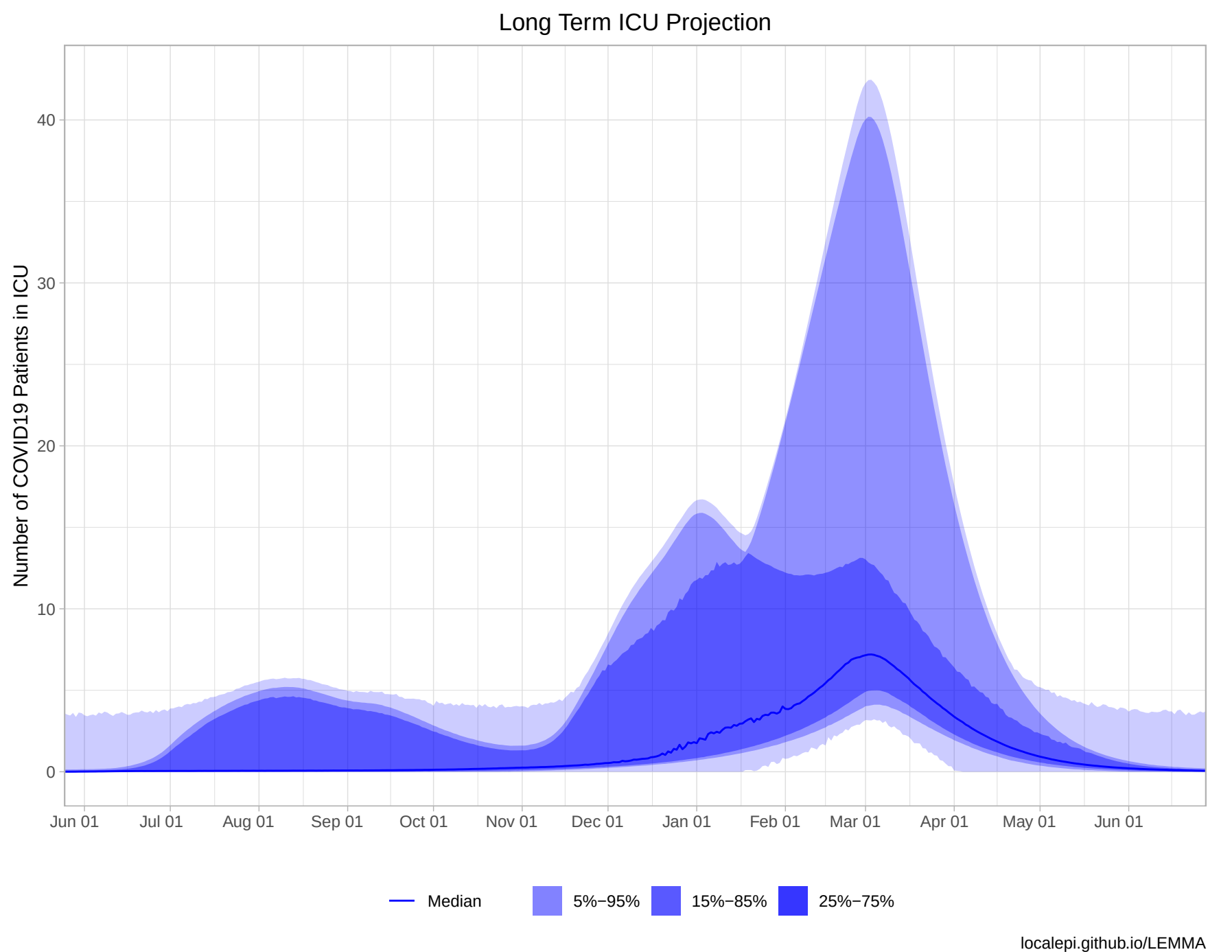
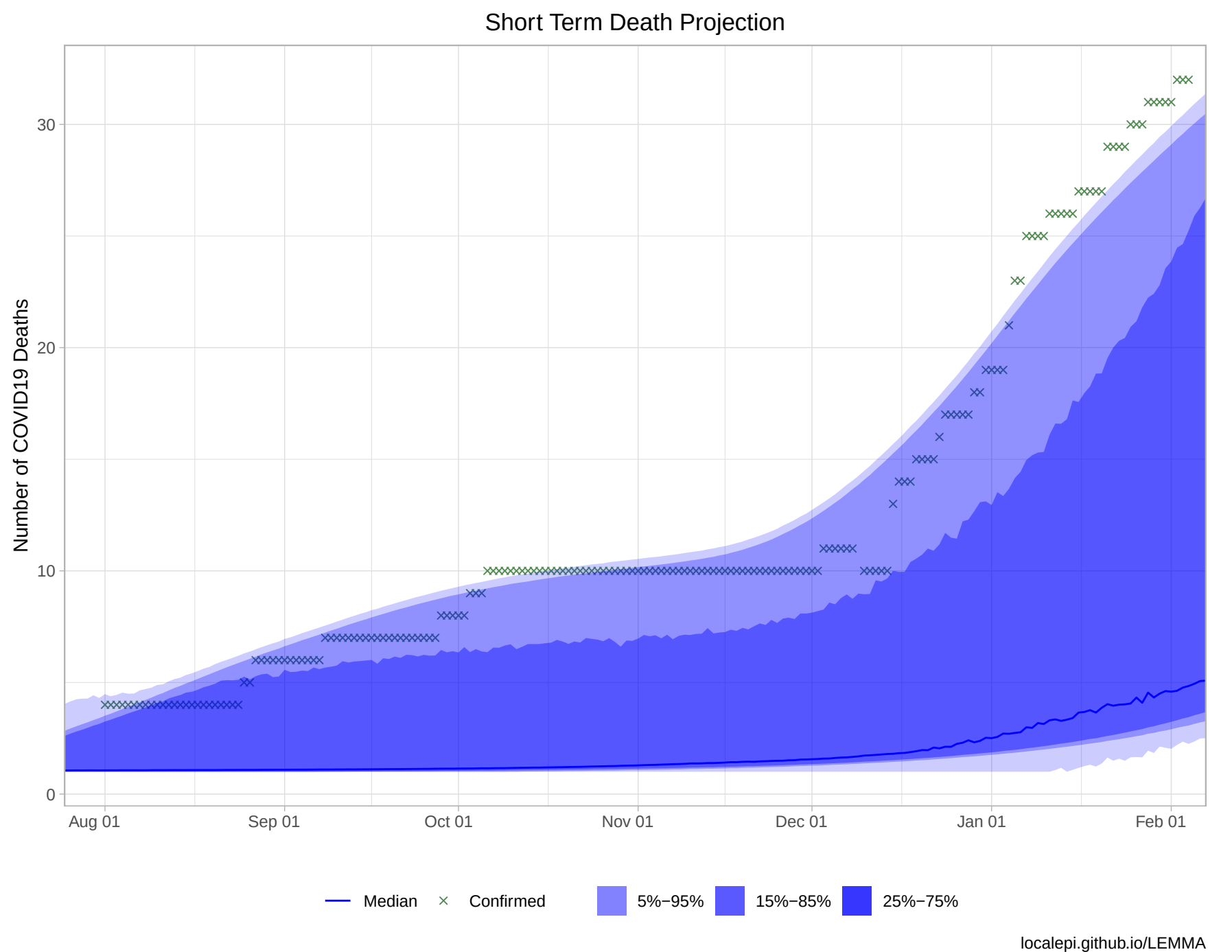
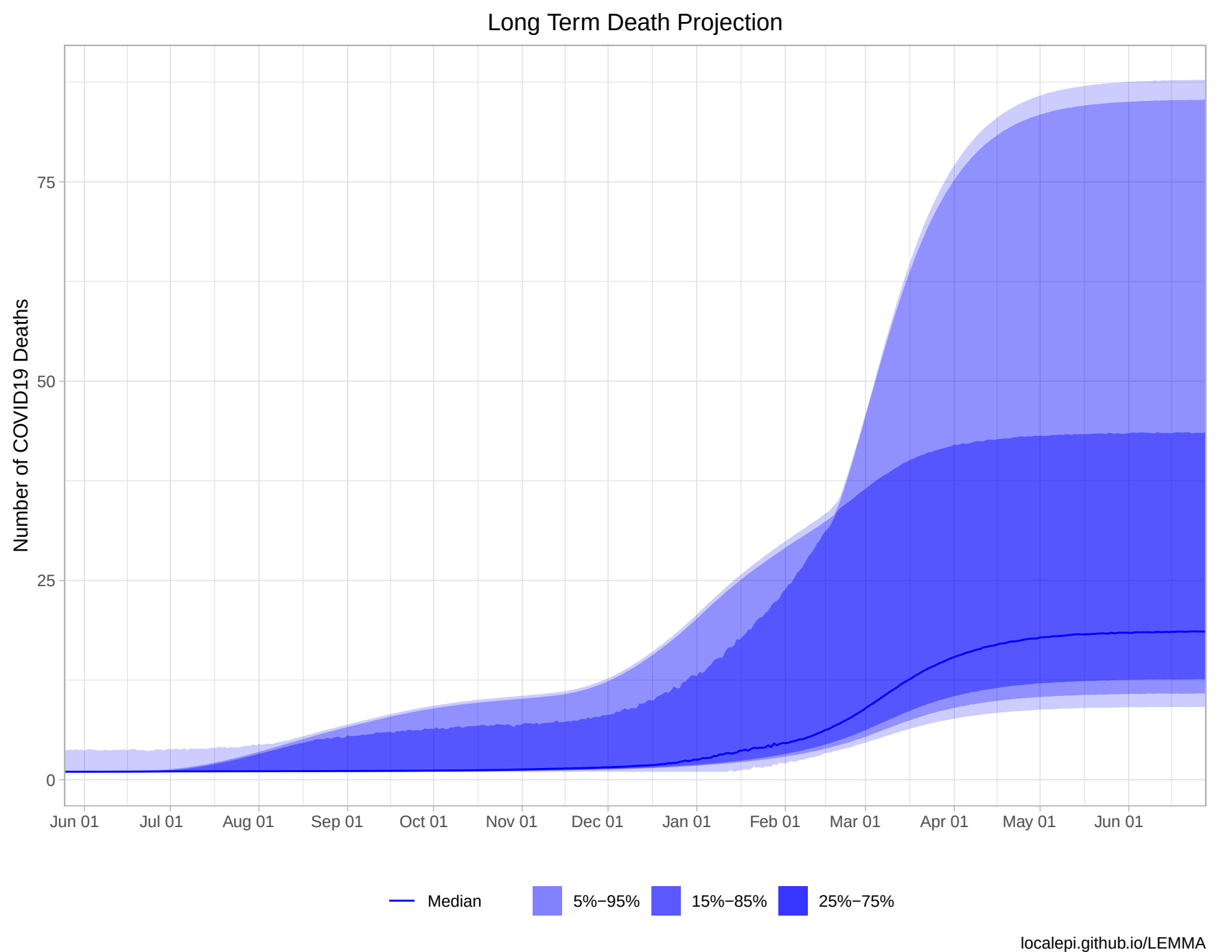

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
30
60
90
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

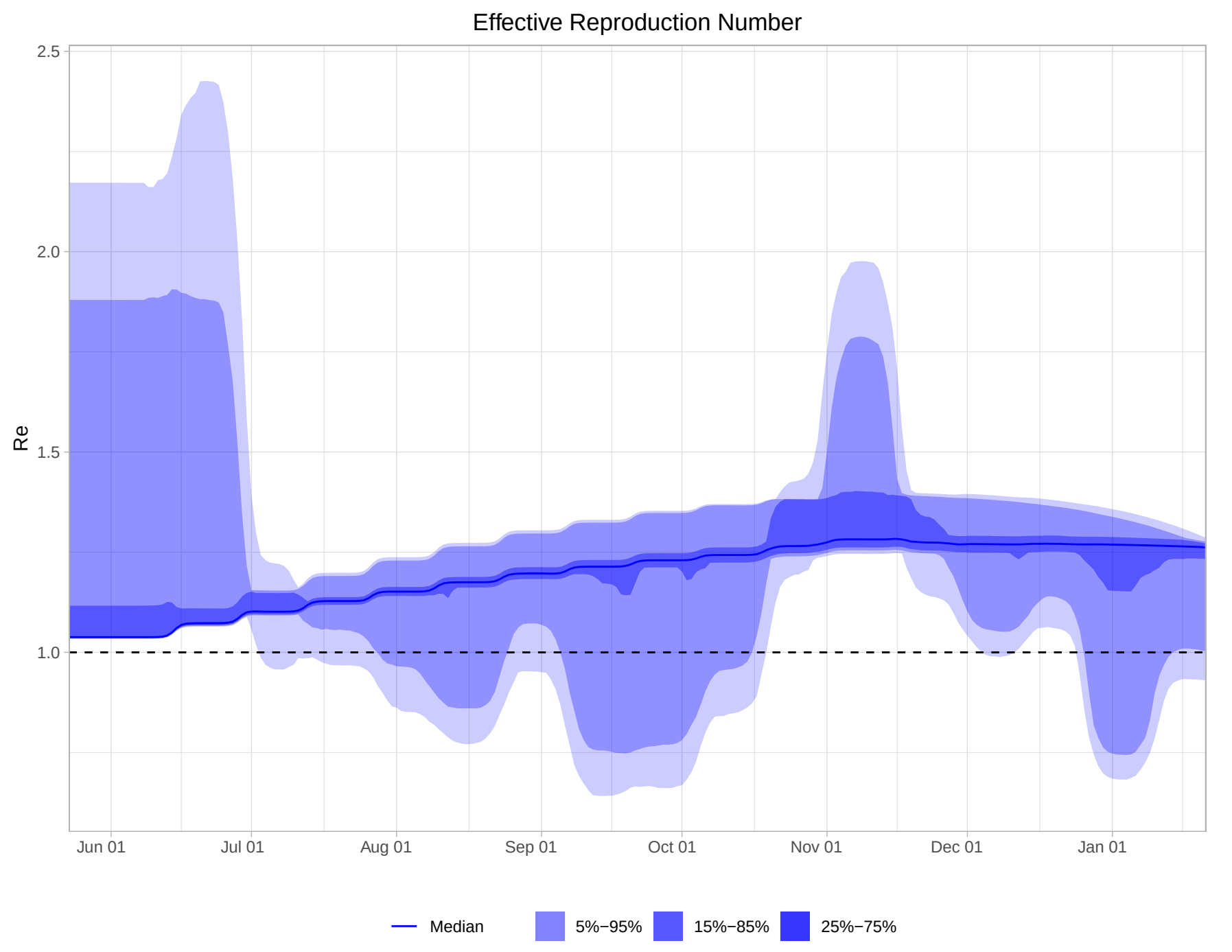

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
150
100
50
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Apr 01
May 01
Jun 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
10
20
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
10
20
30
40
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

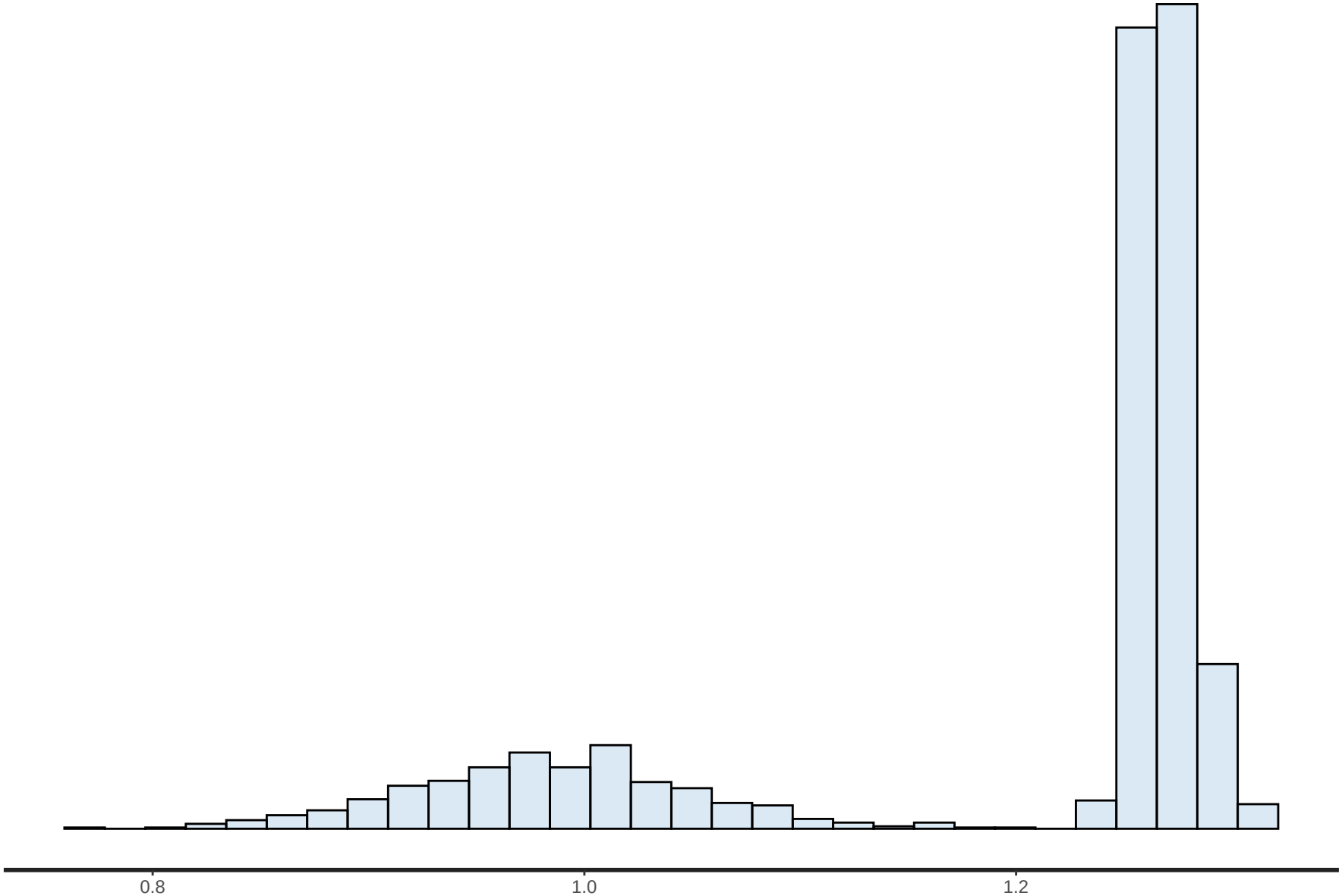

Short Term Death Projection
Number of COVID19 Deaths
0
10
20
30
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

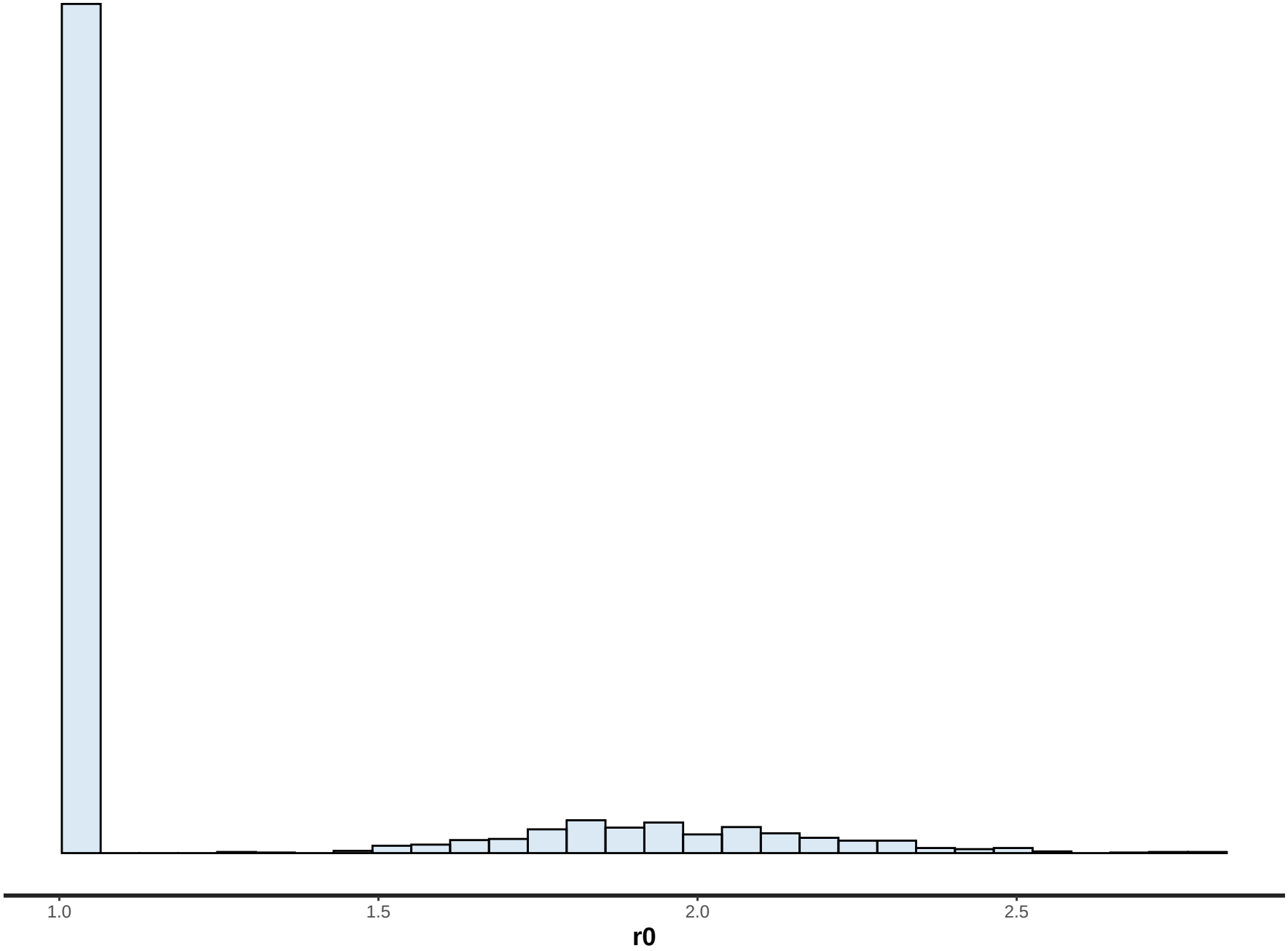

Long Term Death Projection
Number of COVID19 Deaths
0
25
50
75
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Apr 01
May 01
Jun 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

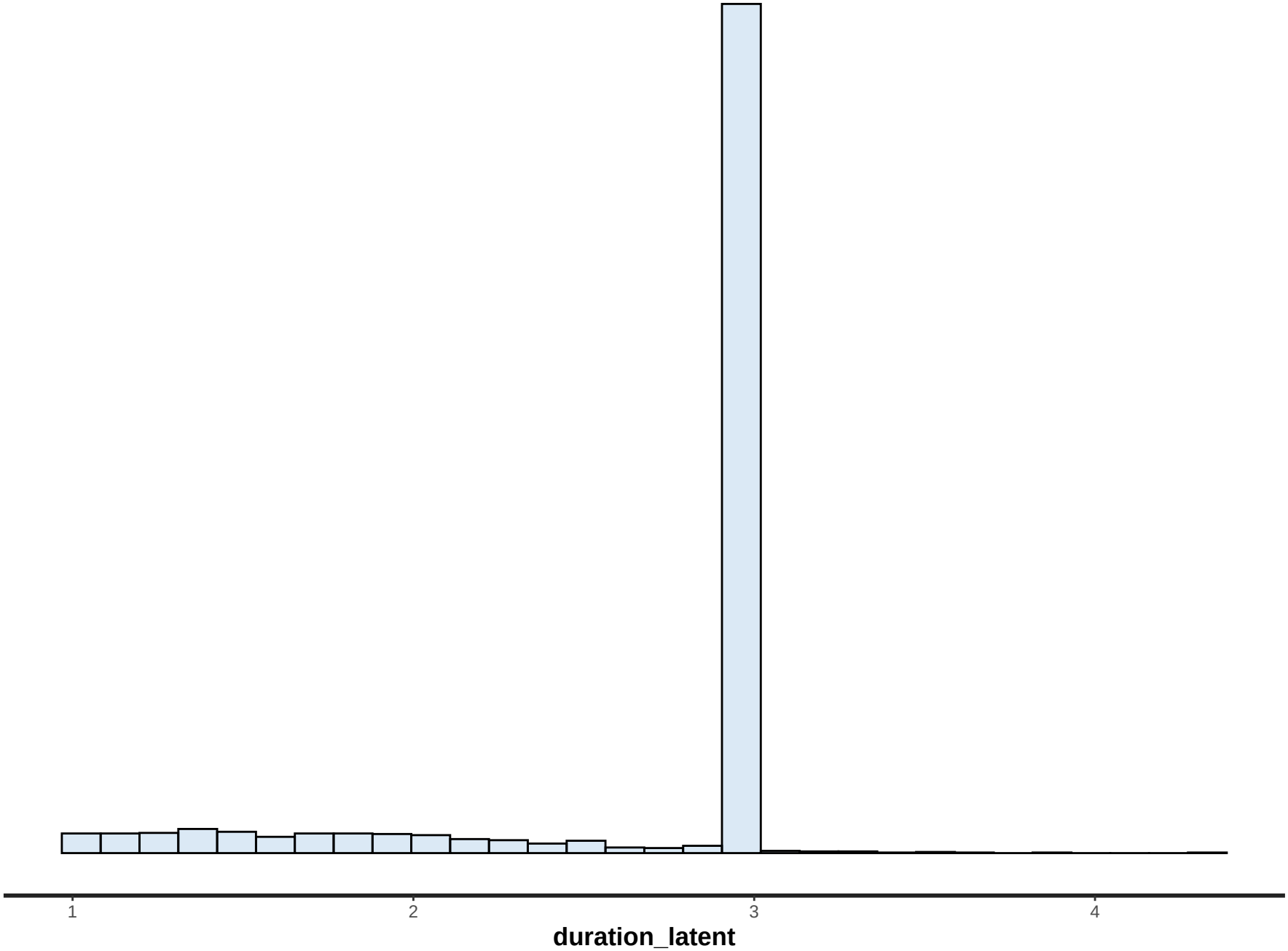

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
5%−95%
15%−85%
25%−75%

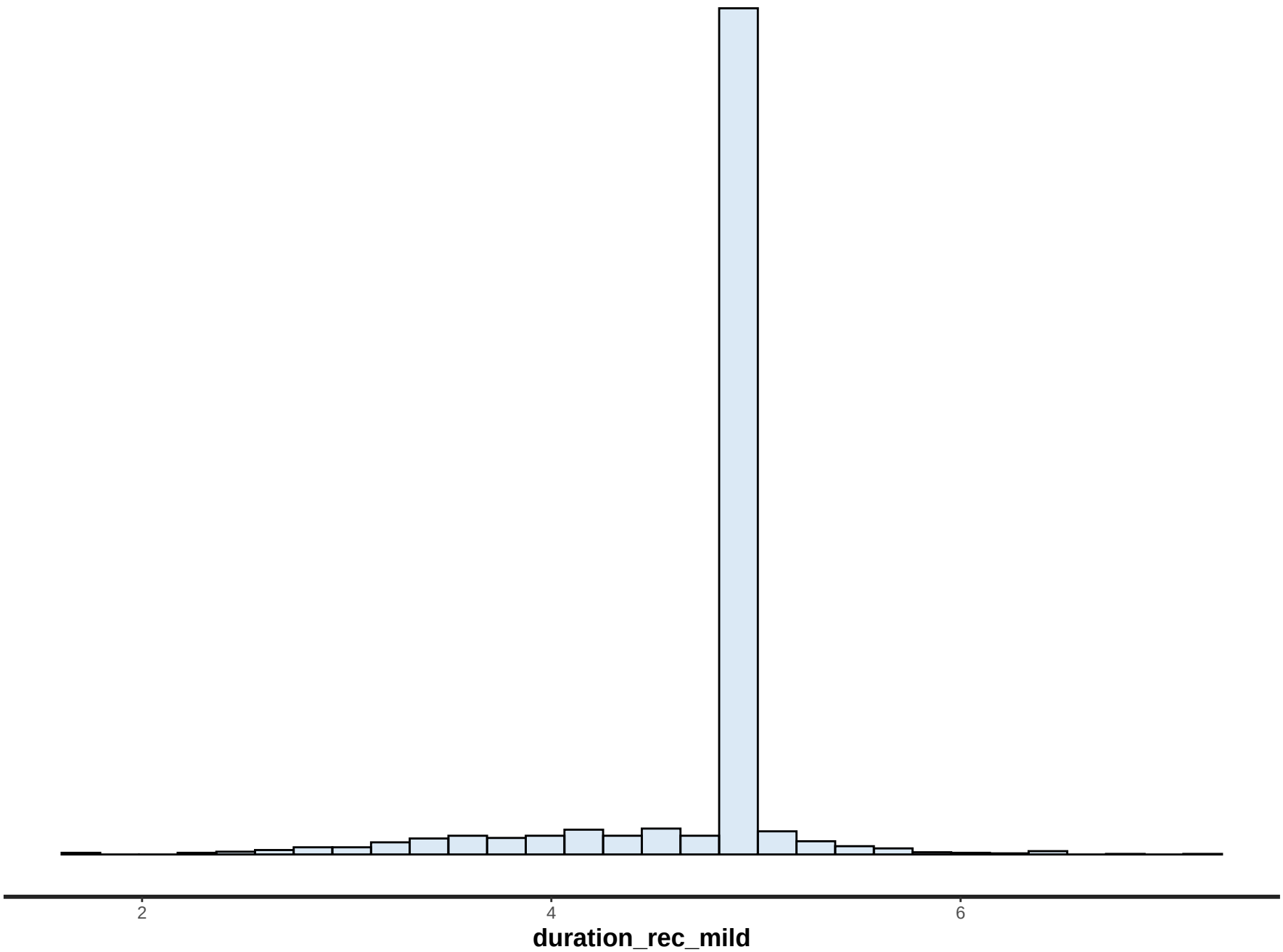
Rt as of 2021−01−21

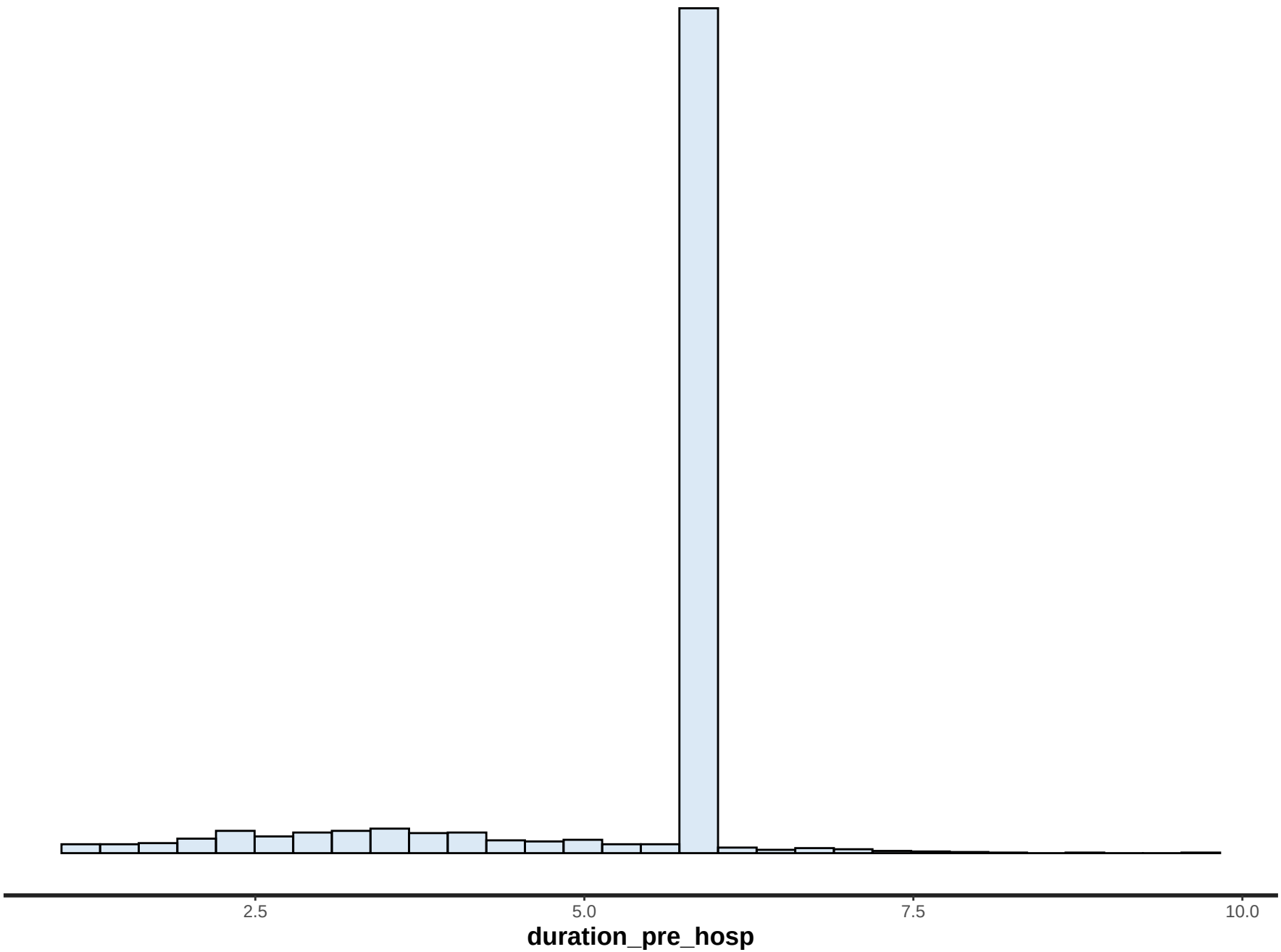
5%	10%	25%	50%	75%	90%	95%
0.93	0.97	1.23	1.26	1.27	1.28	1.29

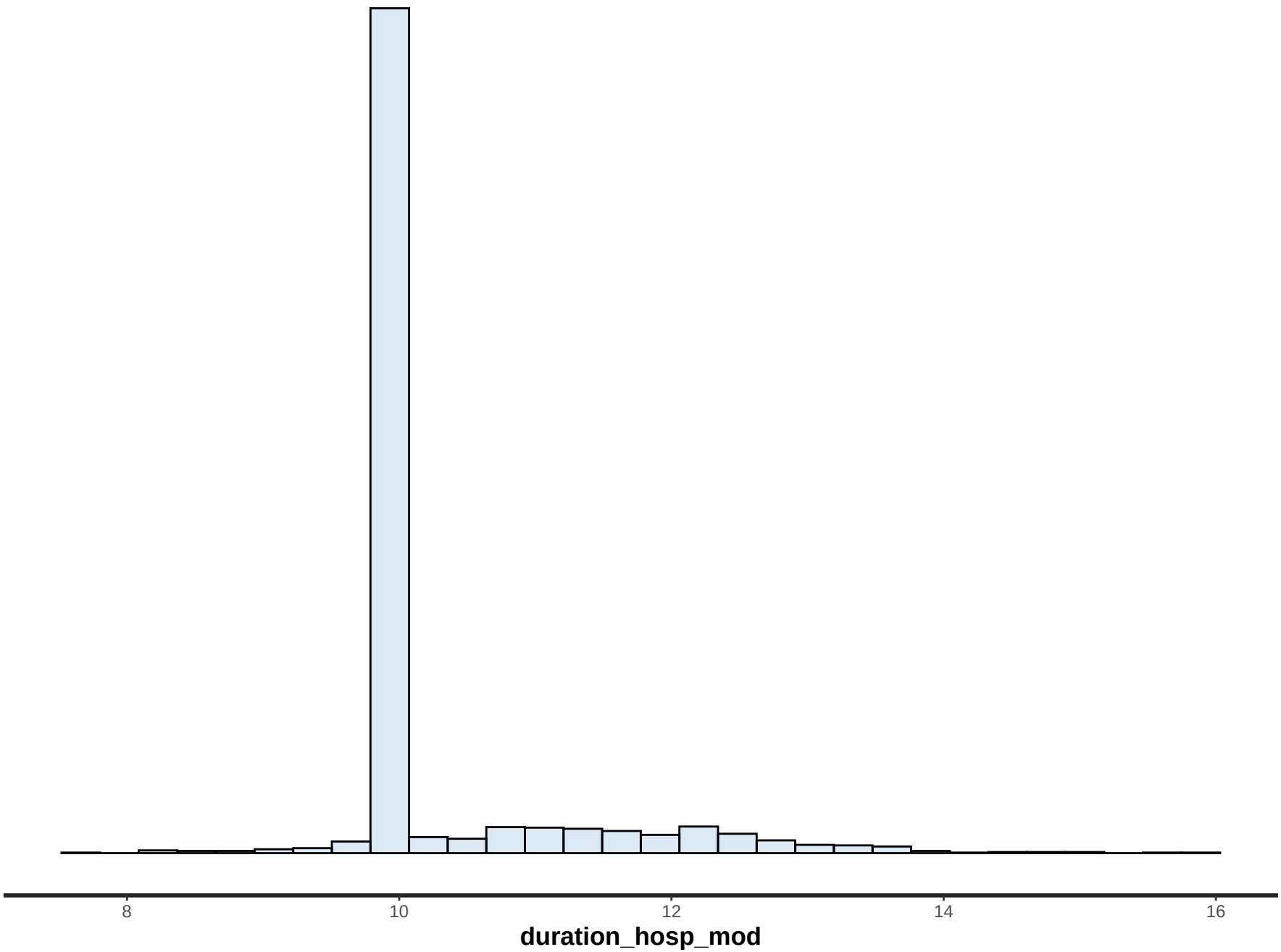


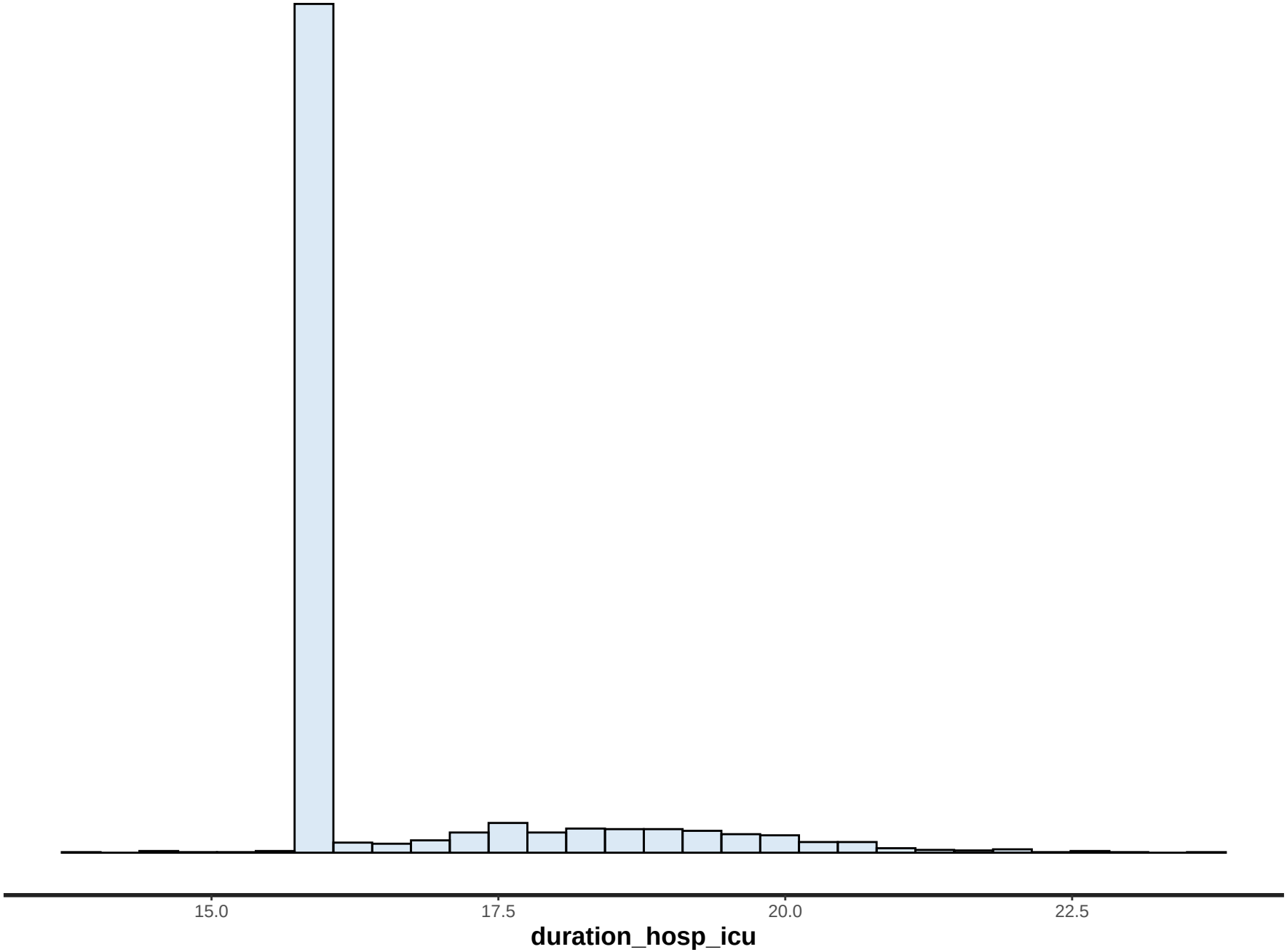

1.0
1.5
2.0
2.5
r0

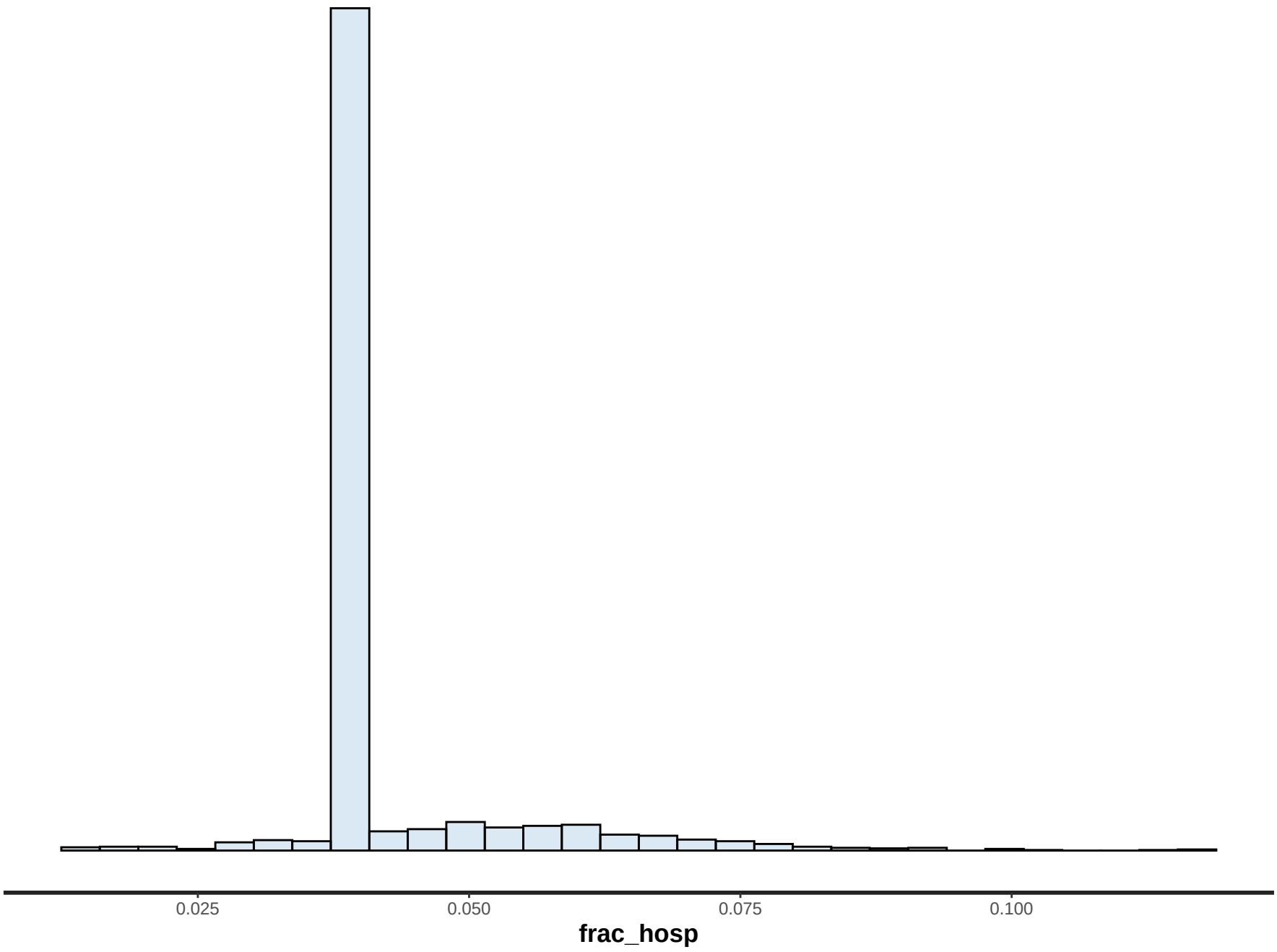

1
2
3
4
duration_latent

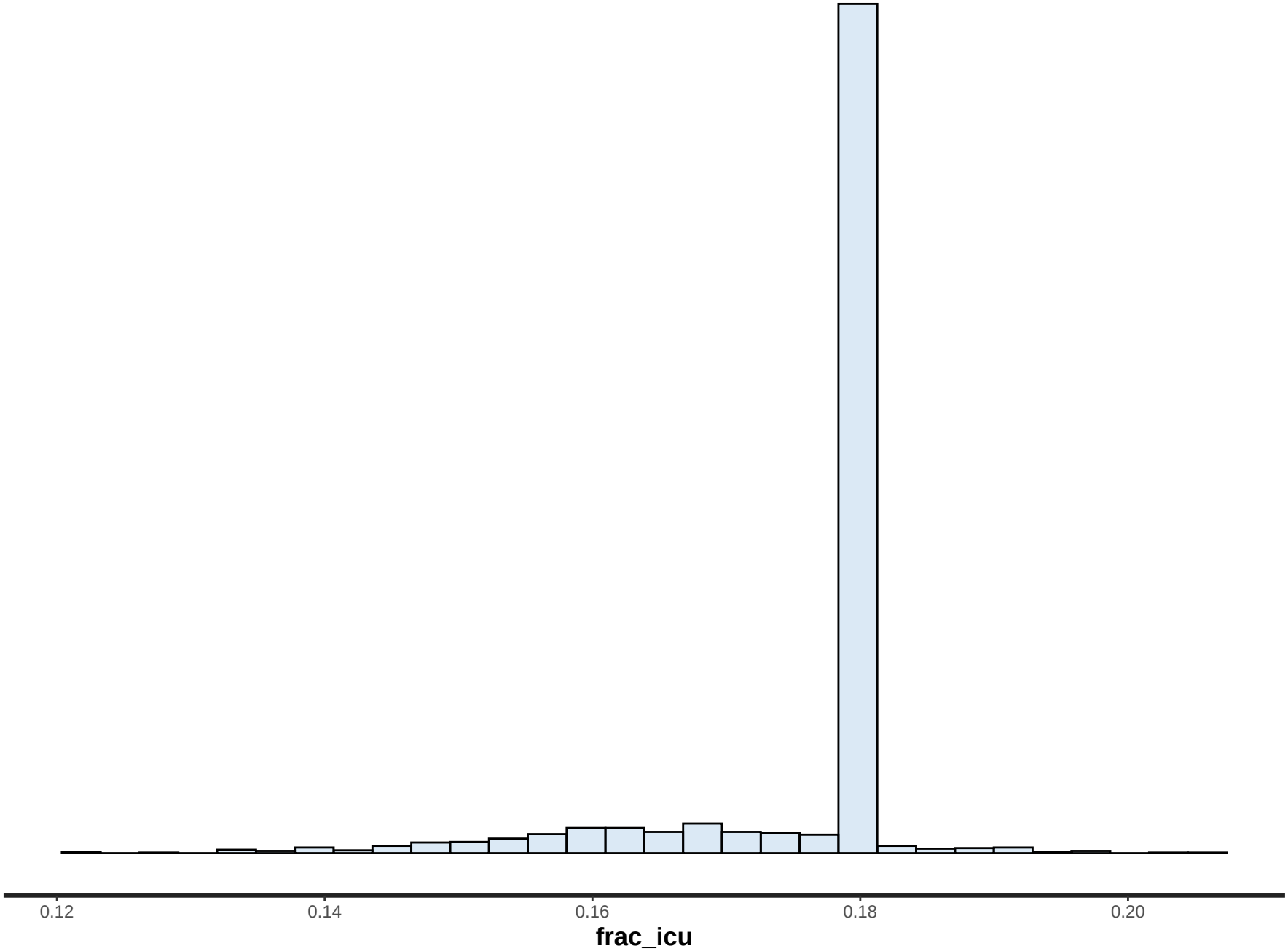

2
4
6
duration_rec_mild

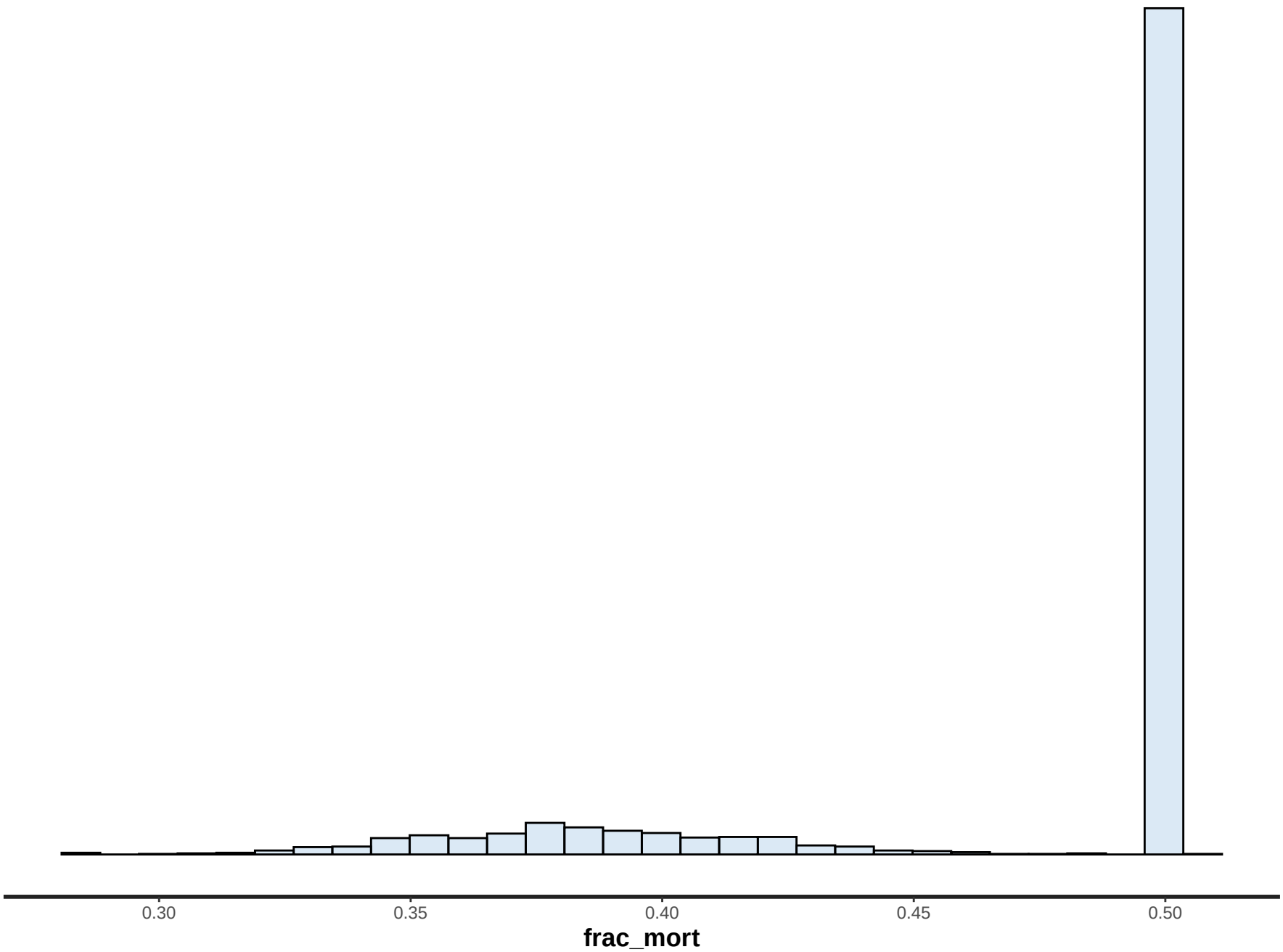

2.5
5.0
7.5
10.0
duration_pre_hosp

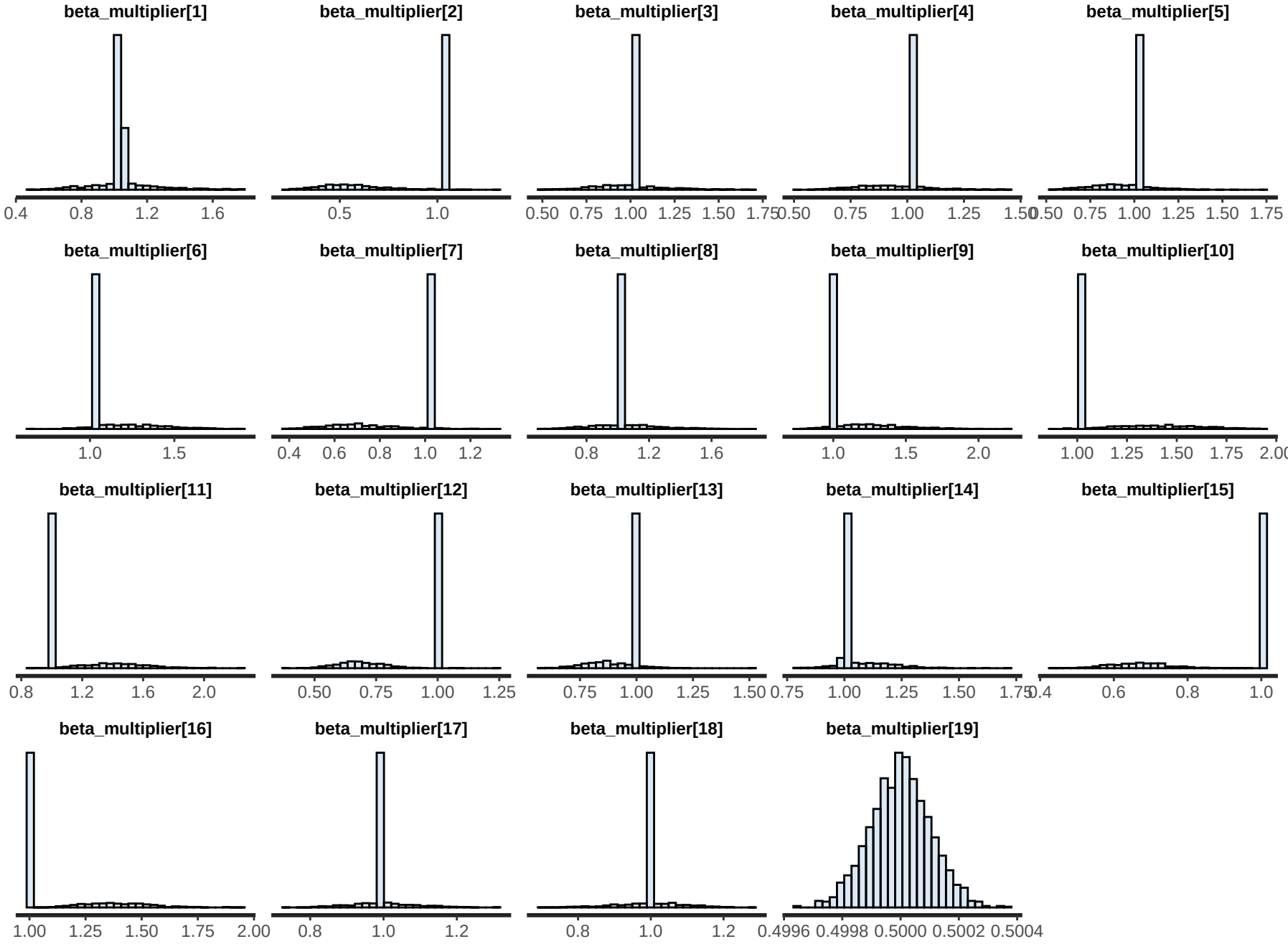

8
10
12
14
16
duration_hosp_mod


15.0
17.5
20.0
22.5
duration_hosp_icu


0.025
0.050
0.075
0.100
frac_hosp


0.12
0.14
0.16
0.18
0.20
frac_icu


0.30
0.35
0.40
0.45
0.50
frac_mort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0.4 0.8 1.2 1.6
beta_multiplier[2]
0.5 1.0
beta_multiplier[3]
0.50 0.75 1.00 1.25 1.50 1.75
beta_multiplier[4]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[5]
0.50 0.75 1.00 1.25 1.50 1.75
beta_multiplier[6]
1.0 1.5
beta_multiplier[7]
0.4 0.6 0.8 1.0 1.2
beta_multiplier[8]
0.8 1.2 1.6
beta_multiplier[9]
1.0 1.5 2.0
beta_multiplier[10]
1.00 1.25 1.50 1.75 2.00
beta_multiplier[11]
0.8 1.2 1.6 2.0
beta_multiplier[12]
0.50 0.75 1.00 1.25
beta_multiplier[13]
0.75 1.00 1.25 1.50
beta_multiplier[14]
0.75 1.00 1.25 1.50 1.75
beta_multiplier[15]
0.4 0.6 0.8 1.0
beta_multiplier[16]
1.00 1.25 1.50 1.75 2.00
beta_multiplier[17]
0.8 1.0 1.2
beta_multiplier[18]
0.8 1.0 1.2
beta_multiplier[19]
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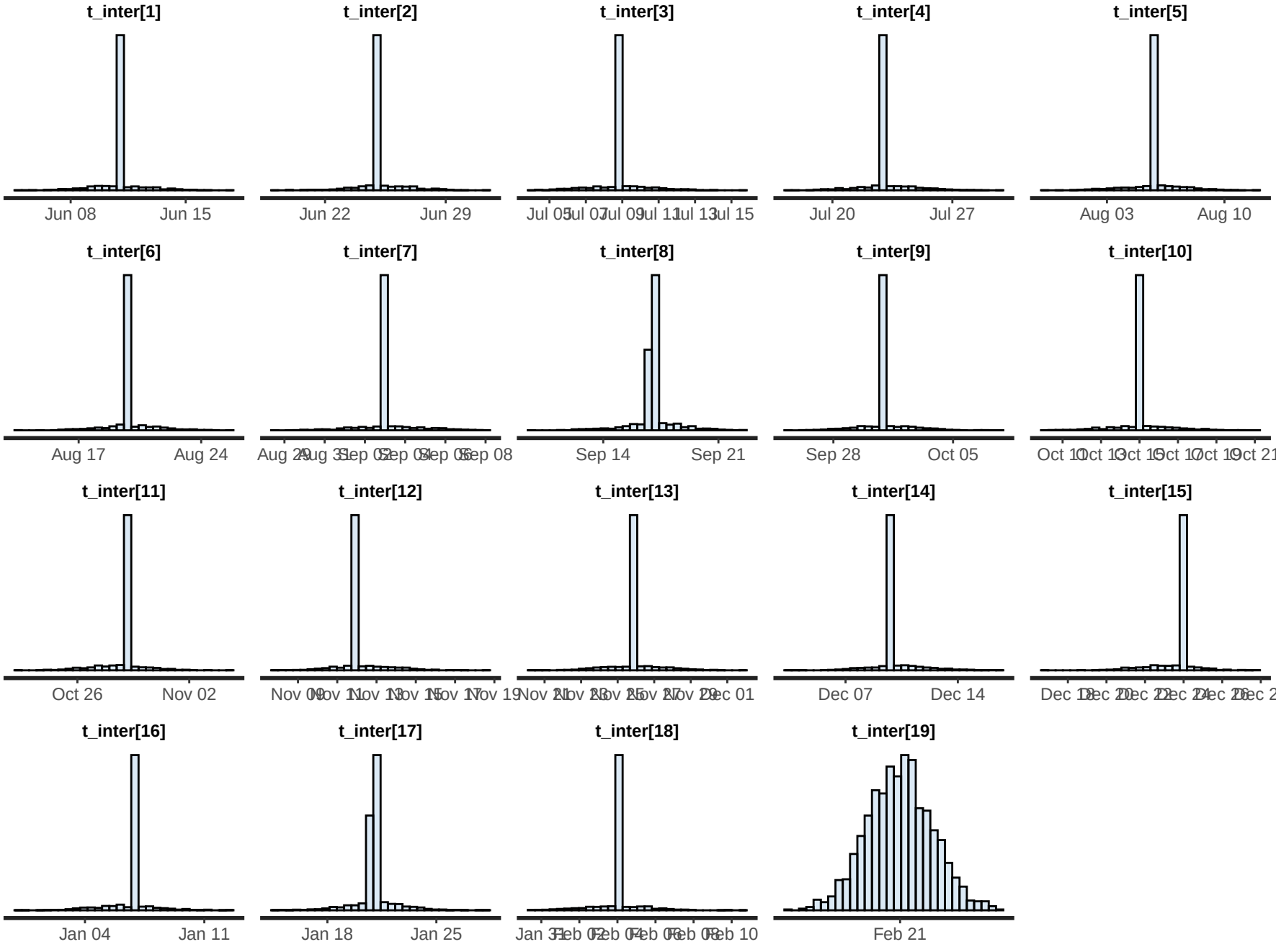
t_inter[1]
Jun 08
Jun 15
t_inter[2]
Jun 22
Jun 29
t_inter[3]
Jul 05
Jul 07
Jul 09
Jul 11
Jul 13
Jul 15
t_inter[4]
Jul 20
Jul 27
t_inter[5]
Aug 03
Aug 10
t_inter[6]
Aug 17
Aug 24
t_inter[7]
Aug 29
Aug 31
Sep 02
Sep 04
Sep 06
Sep 08
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Sep 14
Sep 21
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Oct 11
Oct 13
Oct 15
Oct 17
Oct 19
Oct 21
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Nov 02
t_inter[12]
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Nov 13
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t_inter[15]
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Dec 20
Dec 22
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Dec 28
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Jan 04
Jan 11
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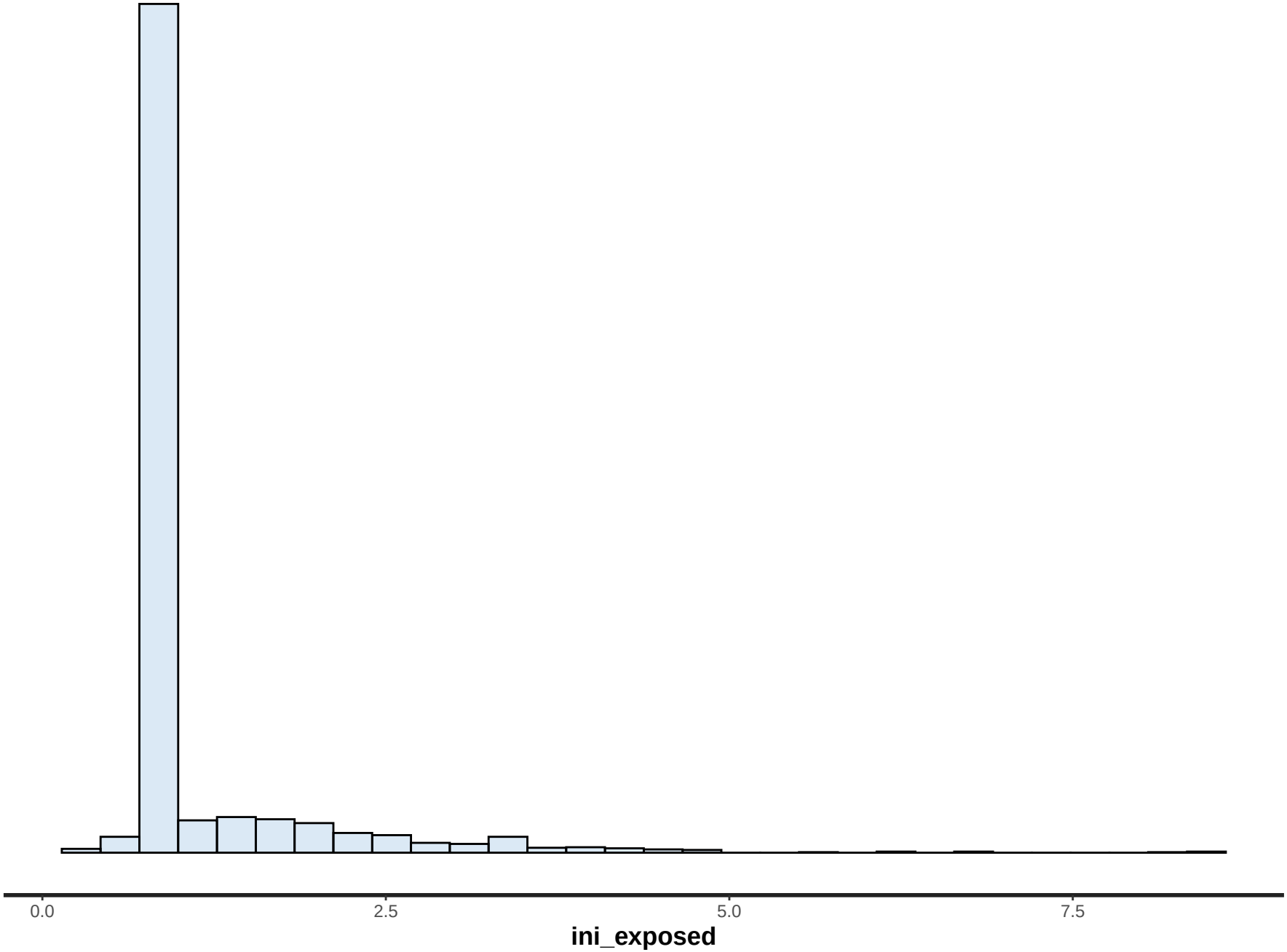
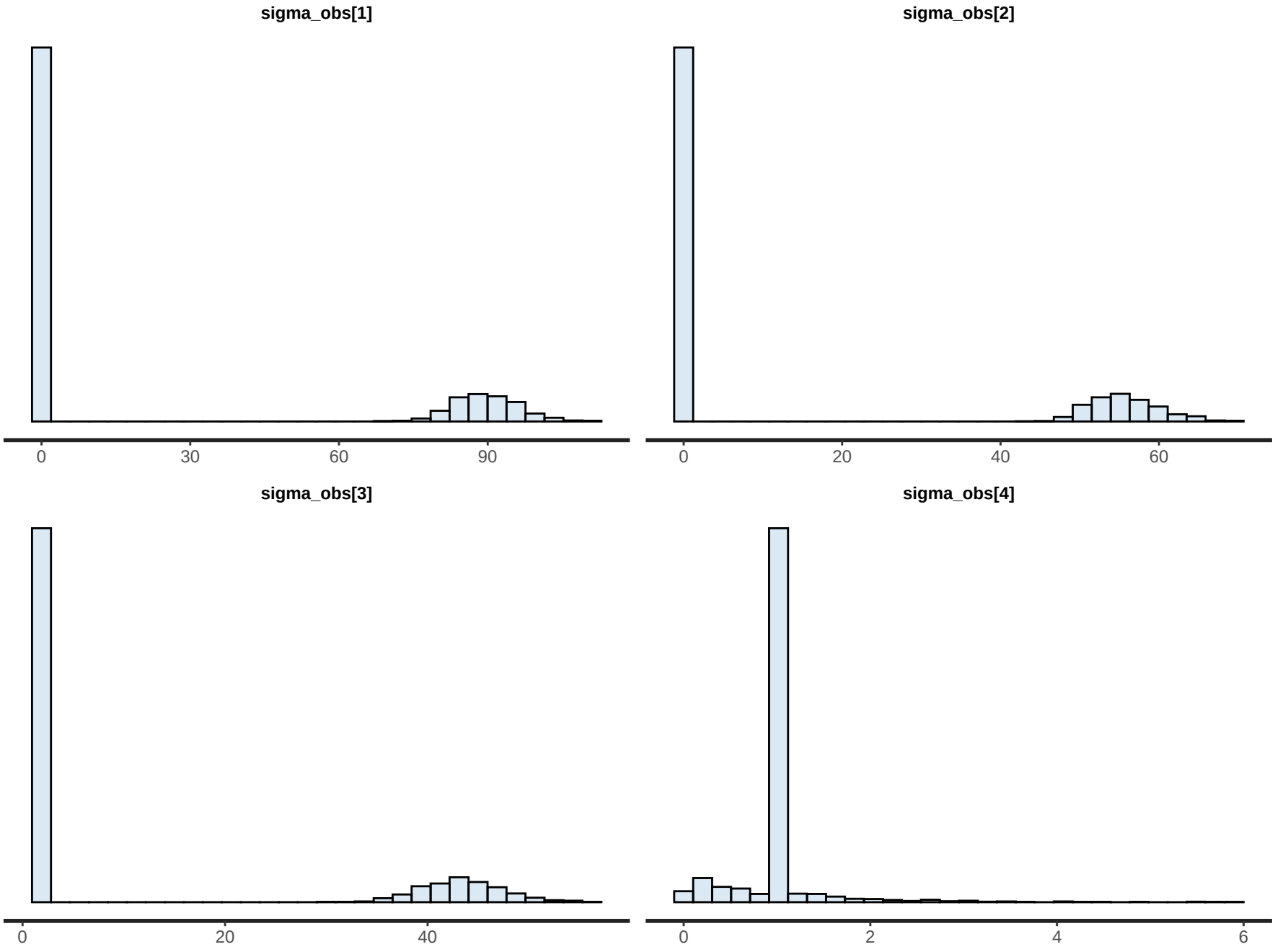
Jan 18
Jan 25
t_inter[18]
Jan 31
Feb 02
Feb 04
Feb 06
Feb 08
Feb 10
t_inter[19]
Feb 21


0.0
2.5
5.0
7.5
ini_exposed


sigma_obs[1]
0
30
60
90
sigma_obs[2]
0
20
40
60
sigma_obs[3]
0
20
40
sigma_obs[4]
0
2
4
6