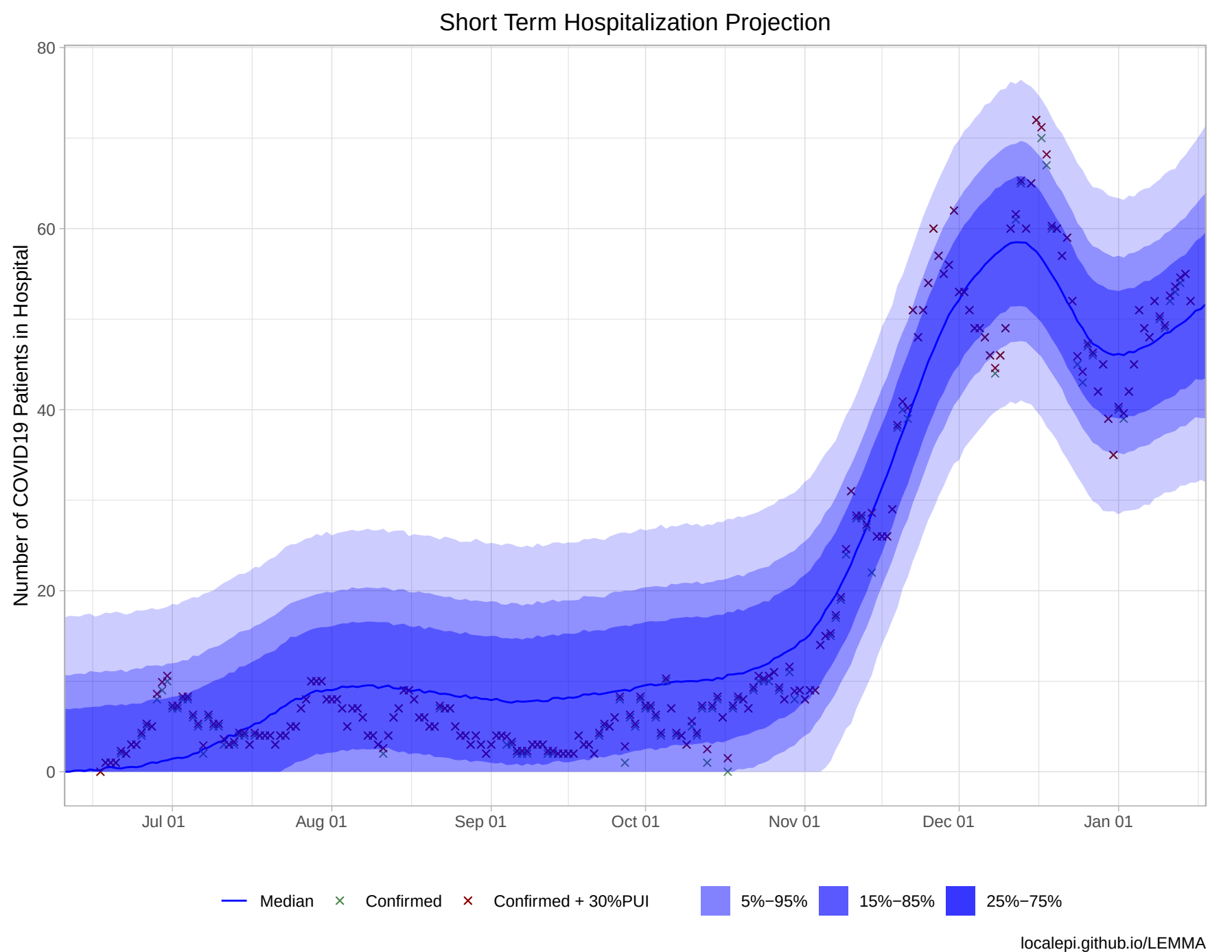
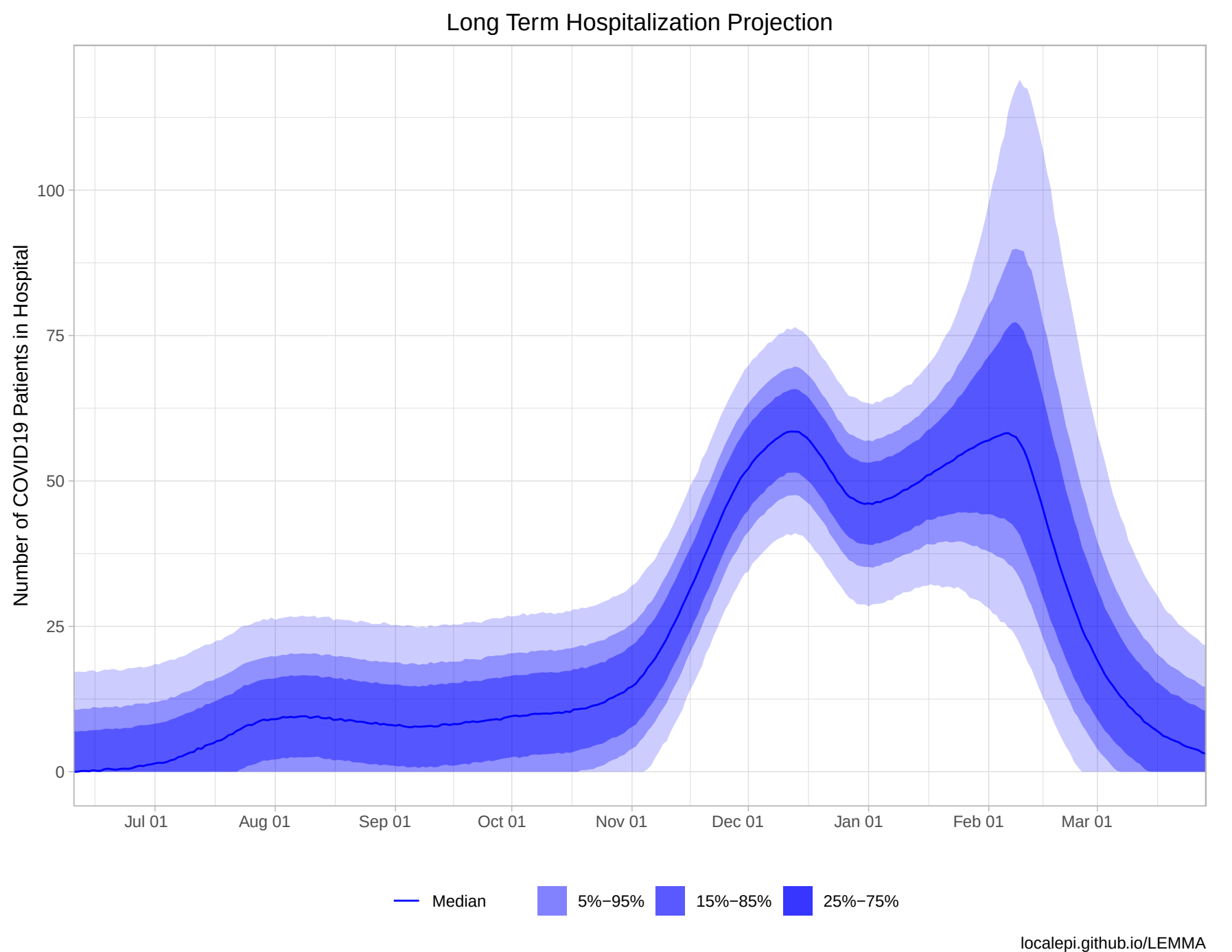
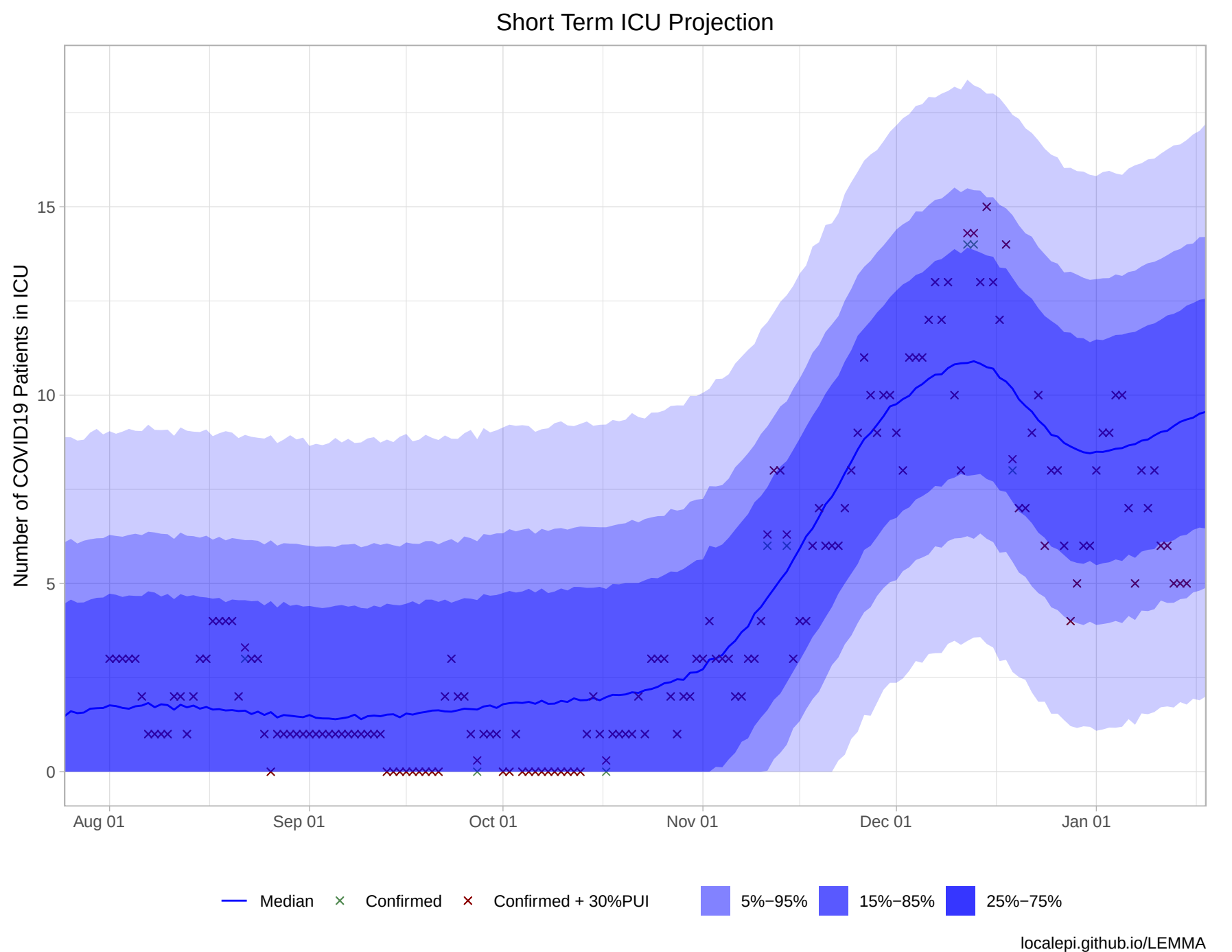
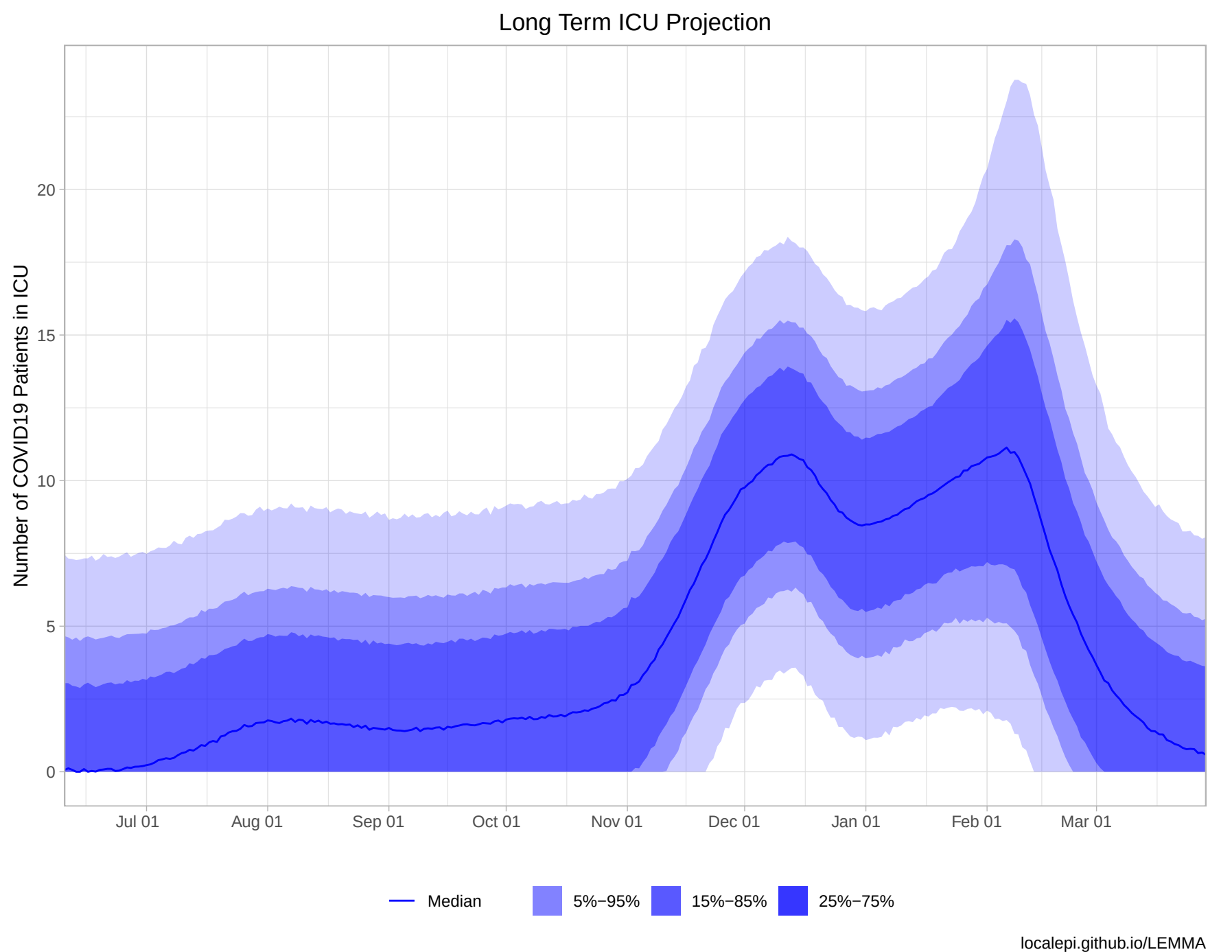
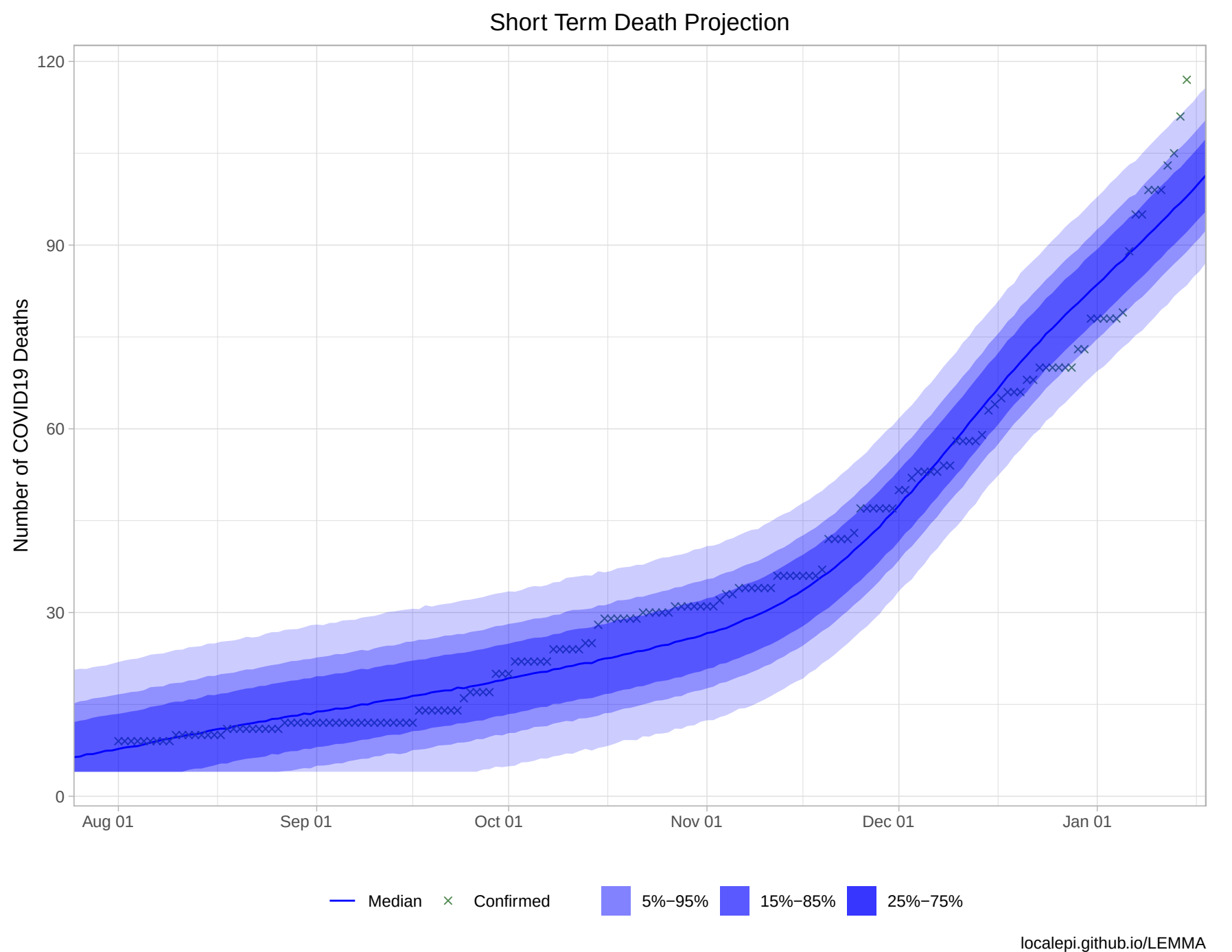
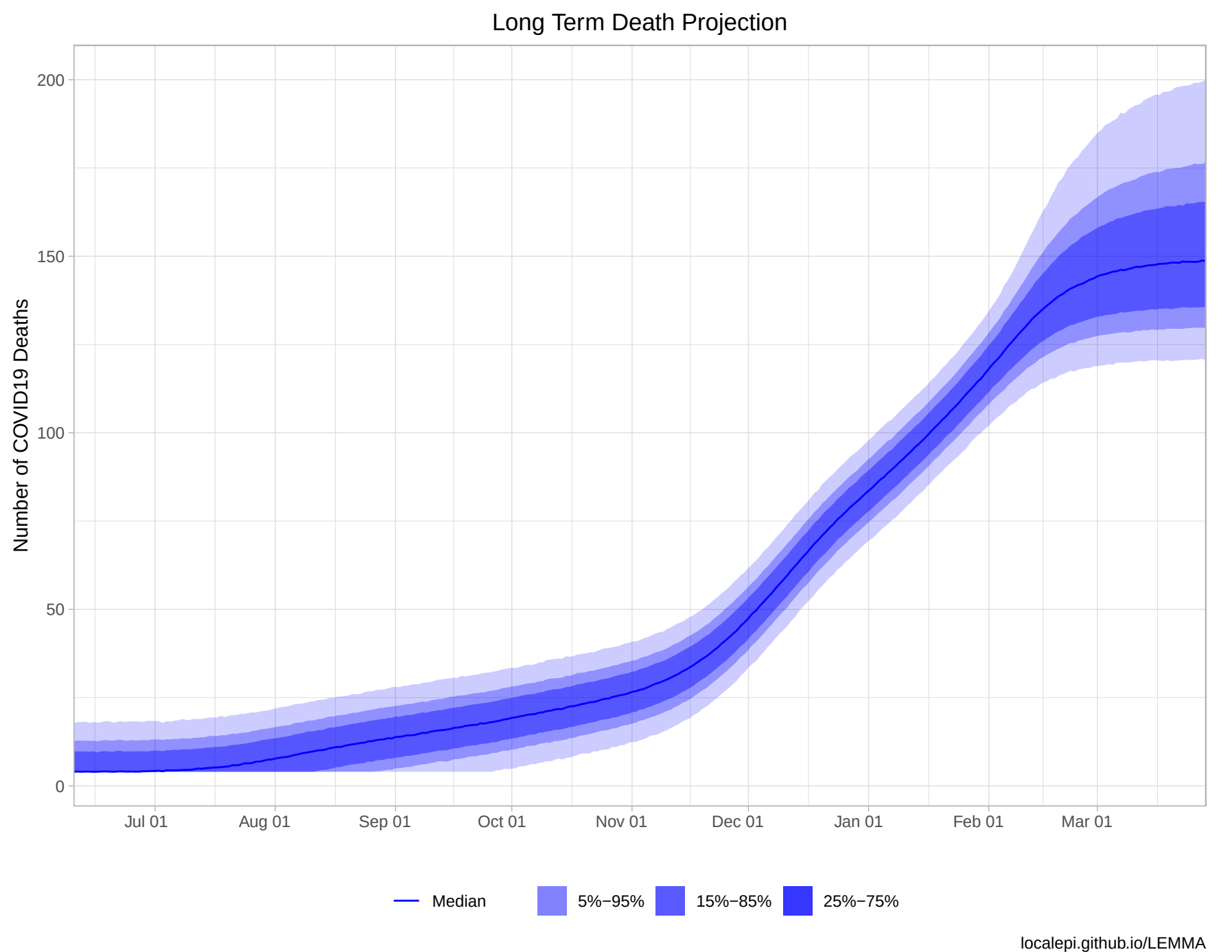

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
80
60
40
20
0
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

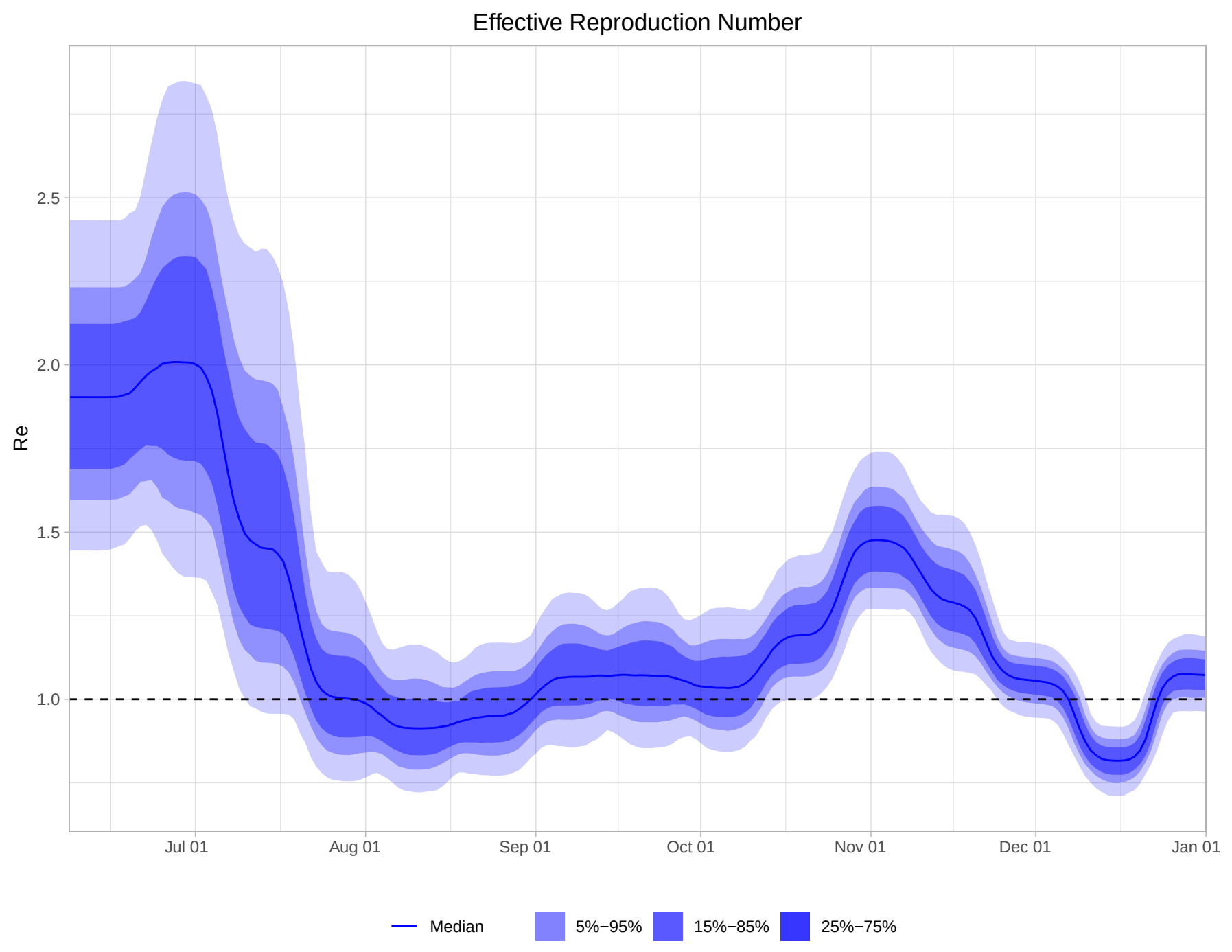

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
25
50
75
100
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


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

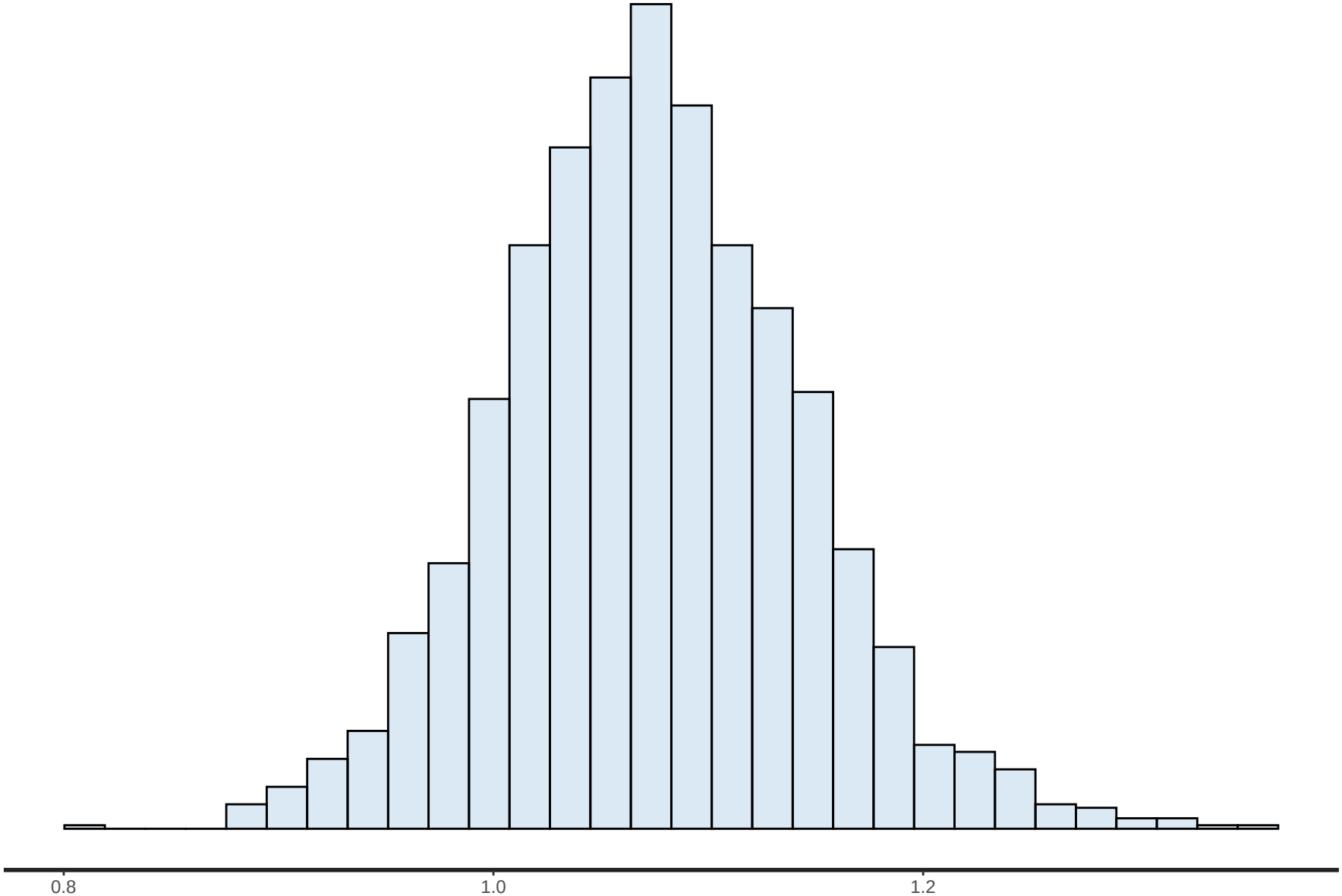

Short Term Death Projection
Number of COVID19 Deaths
120
90
60
30
0
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

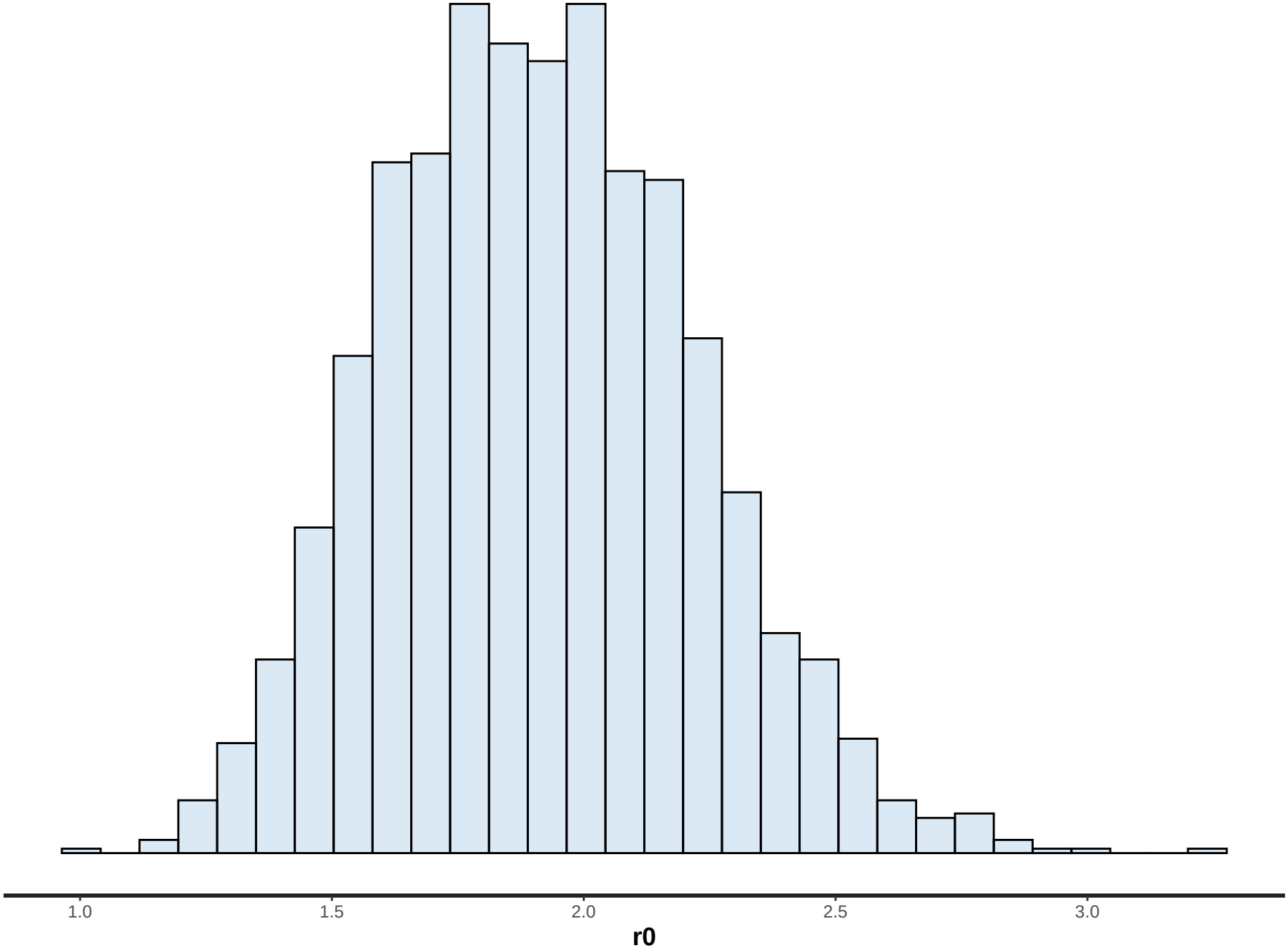

Long Term Death Projection
Number of COVID19 Deaths
200
150
100
50
0
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

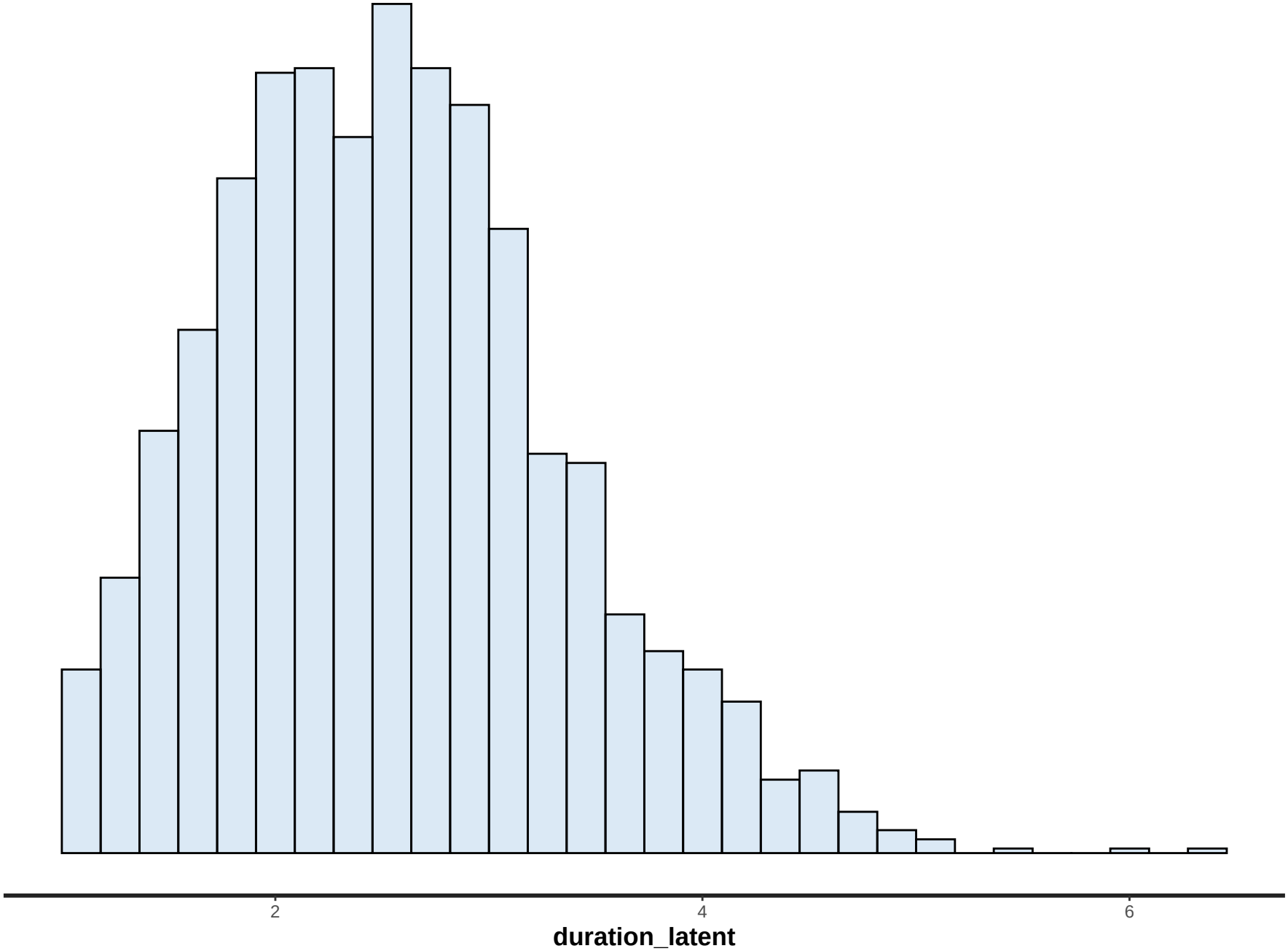

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
5%−95%
15%−85%
25%−75%

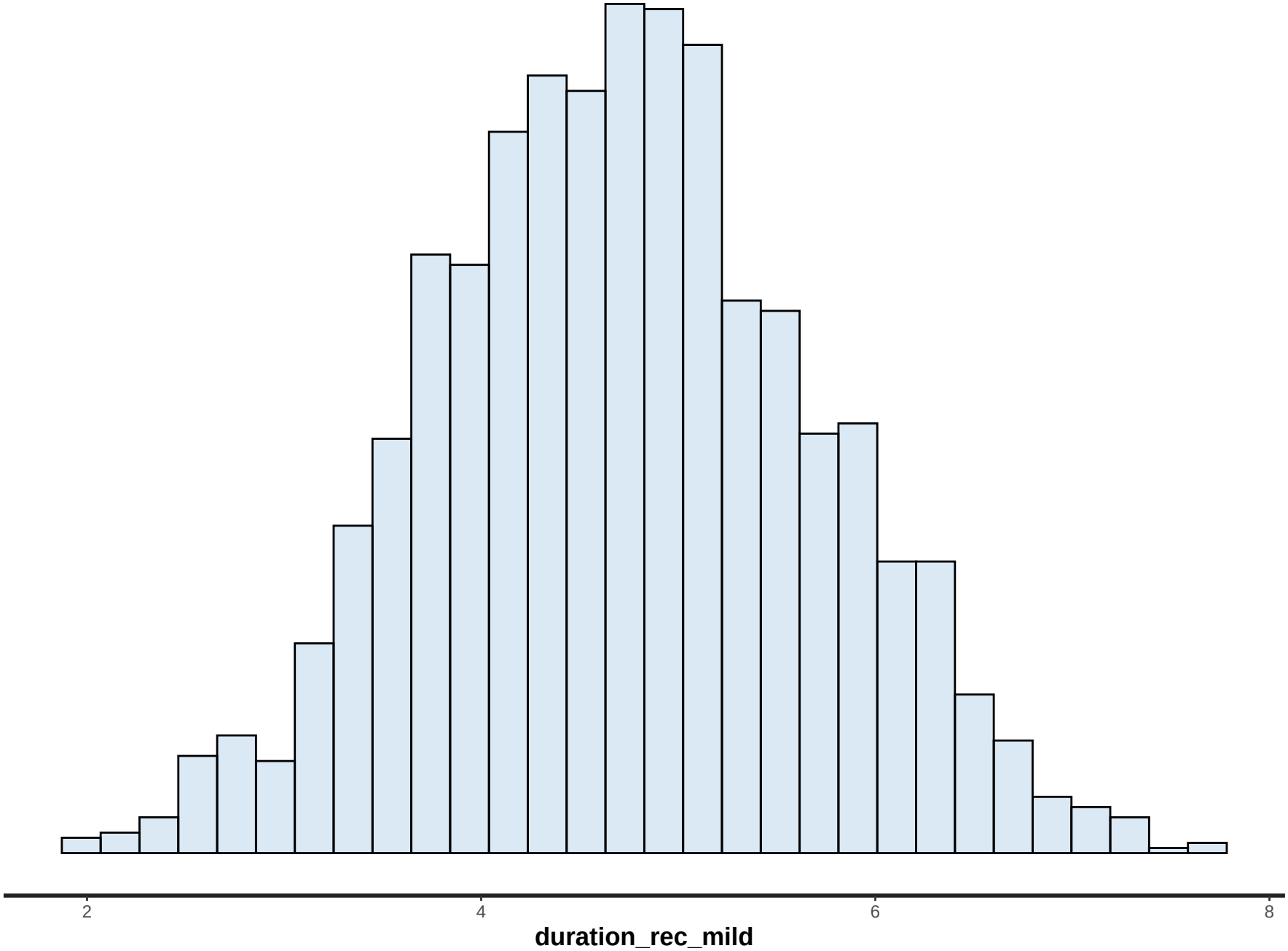
Rt as of 2021−01−01

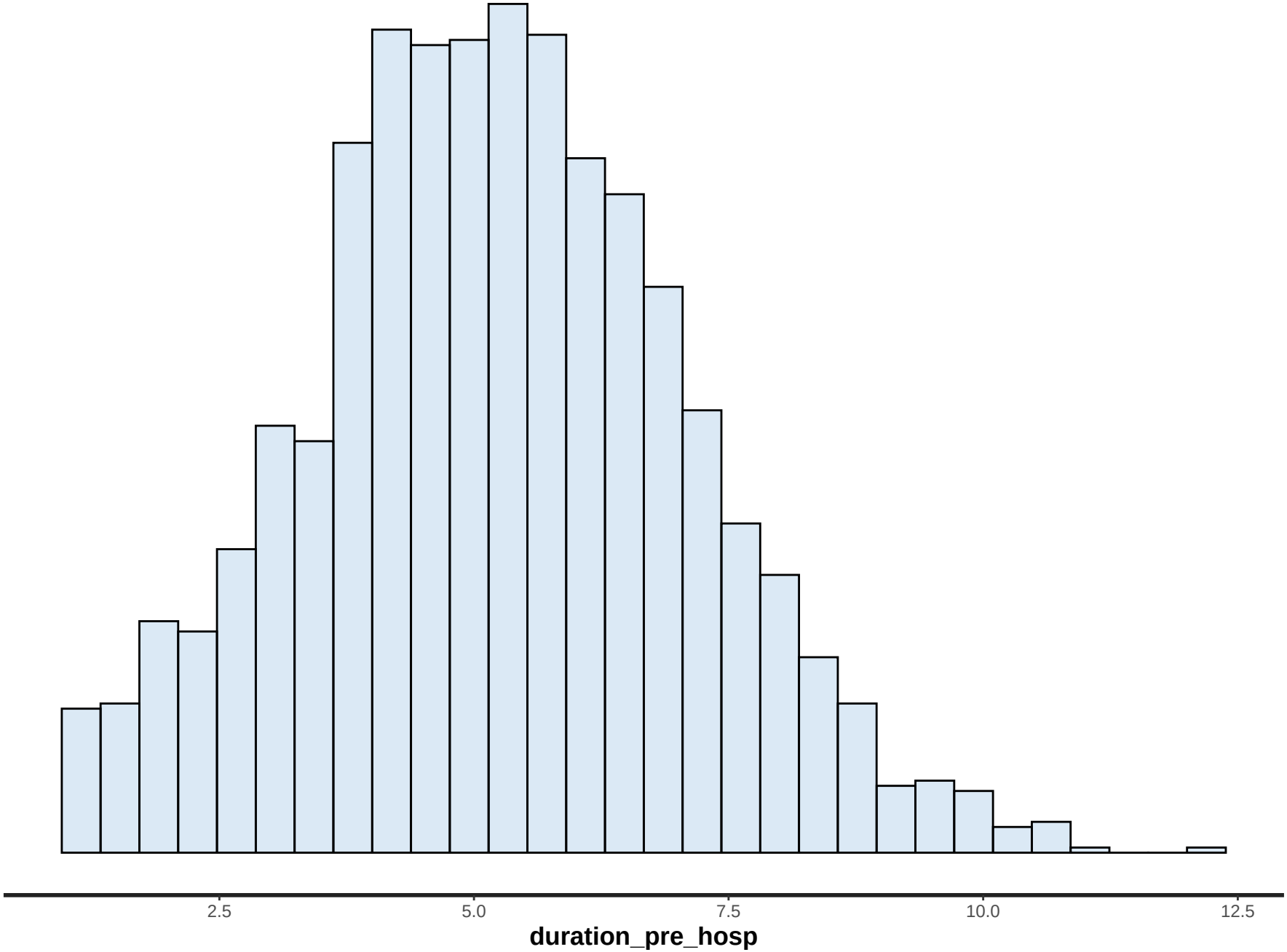
5%	10%	25%	50%	75%	90%	95%
0.96	0.99	1.03	1.07	1.12	1.16	1.19

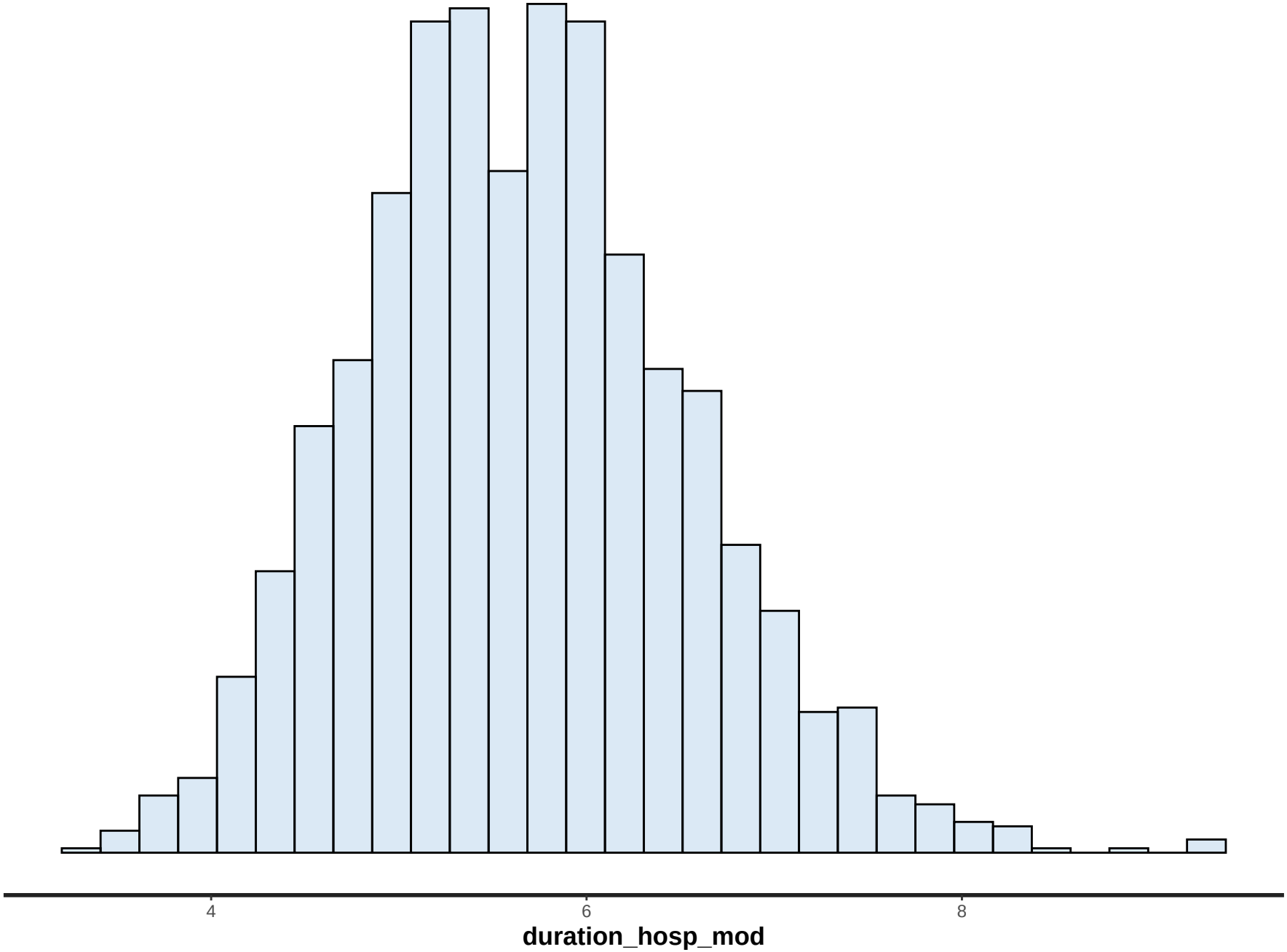


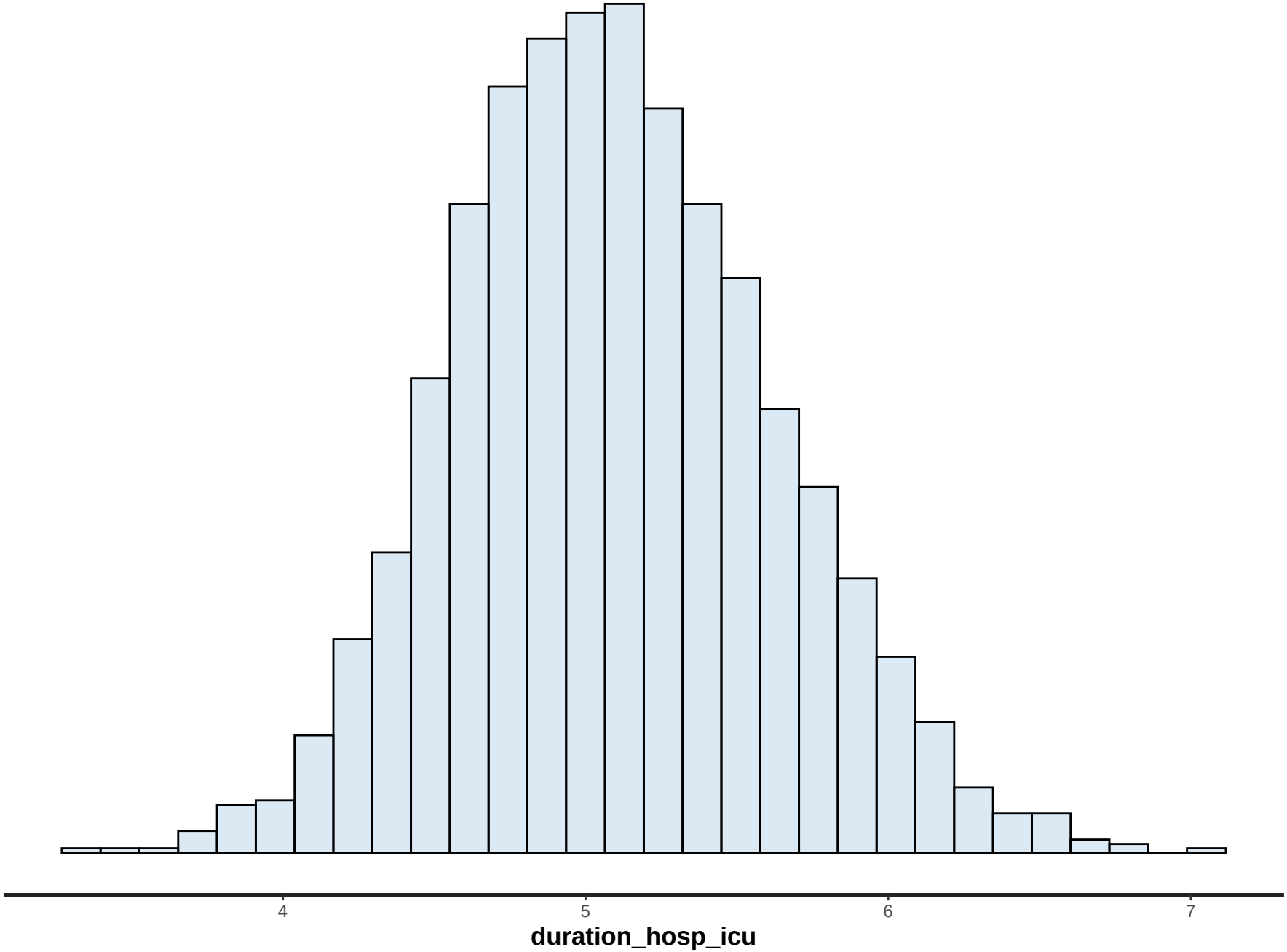

1.0
1.5
2.0
2.5
3.0
r0

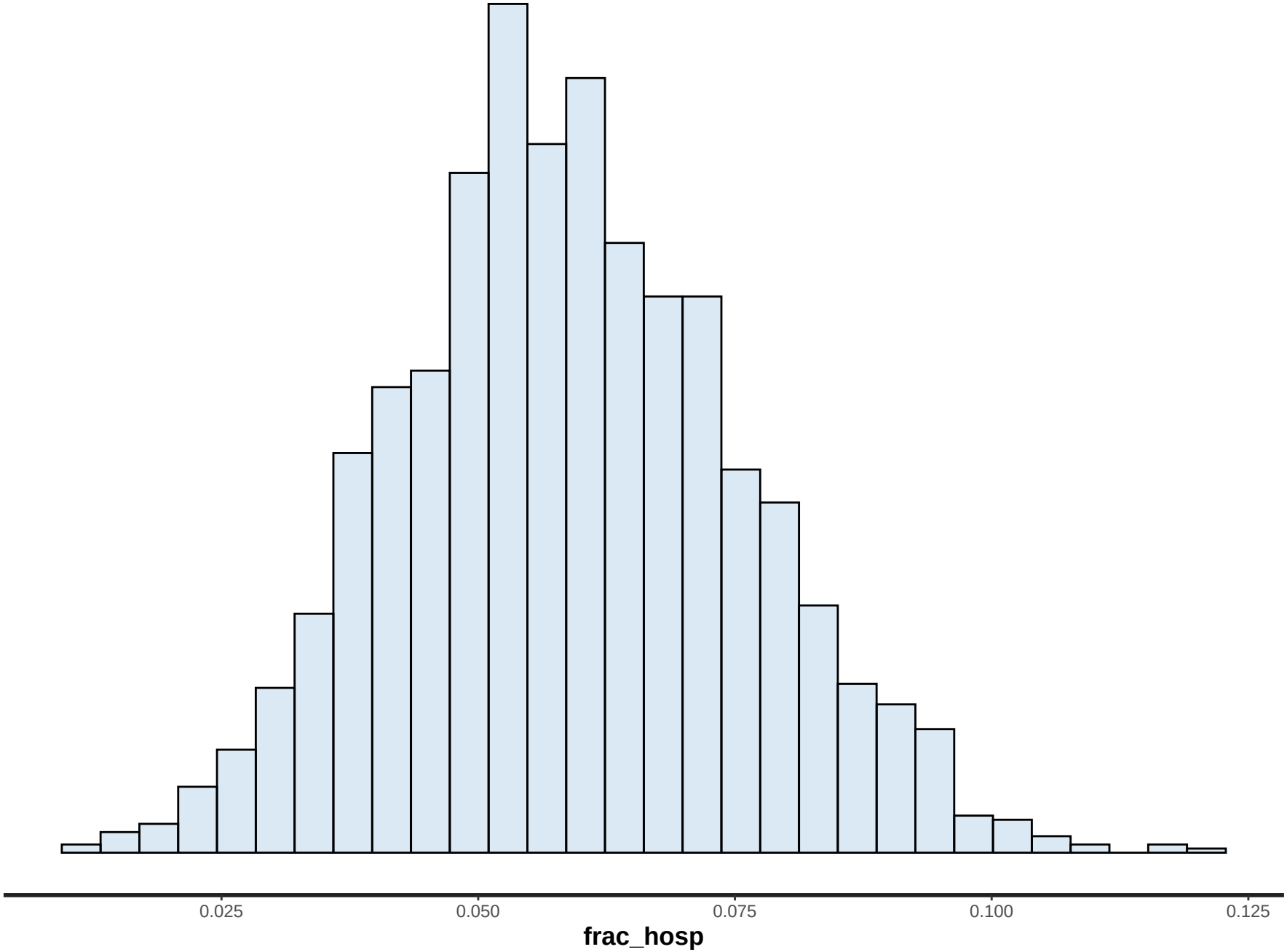

2
4
6
duration_latent

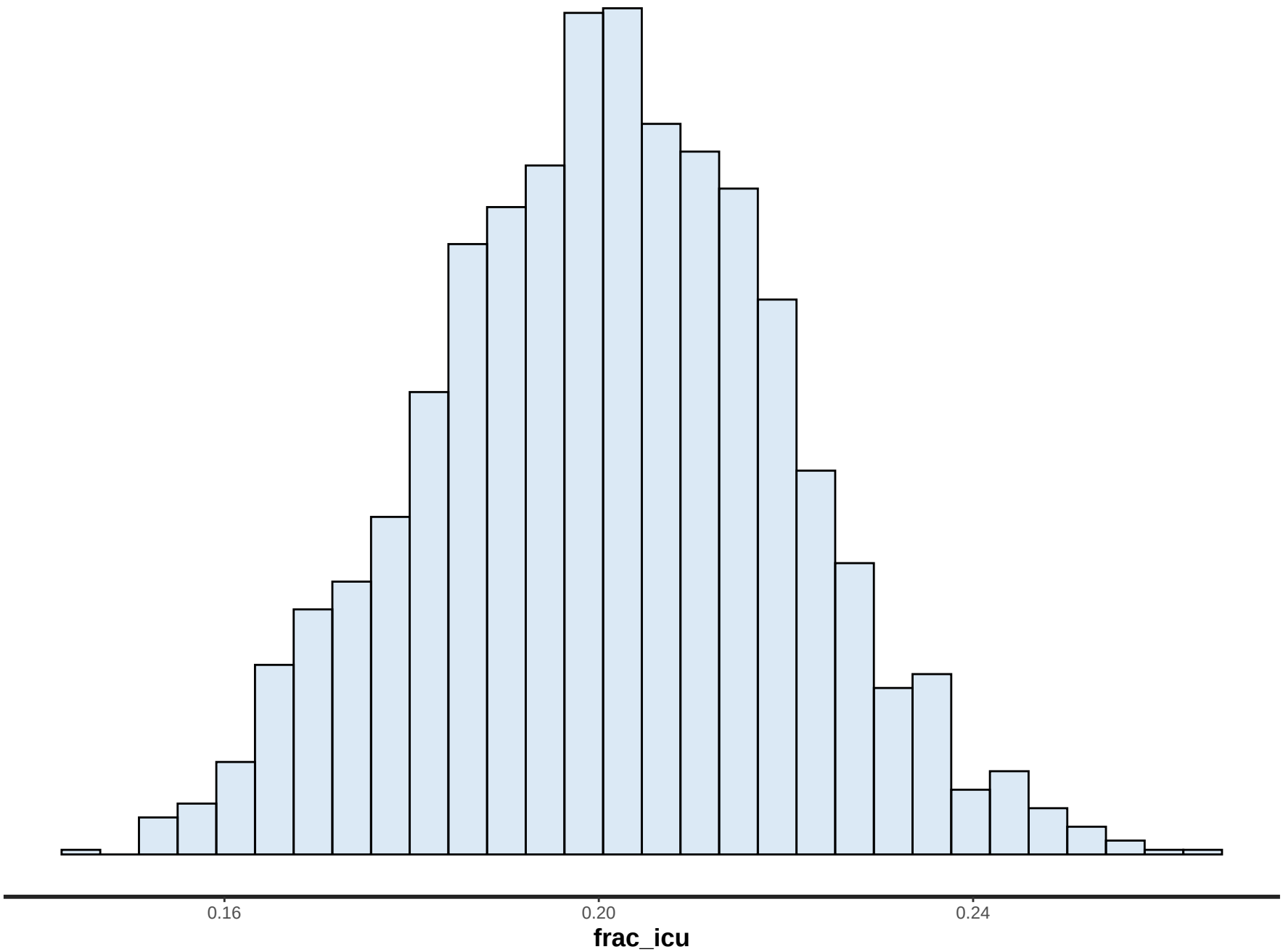

2
4
6
8
duration_rec_mild

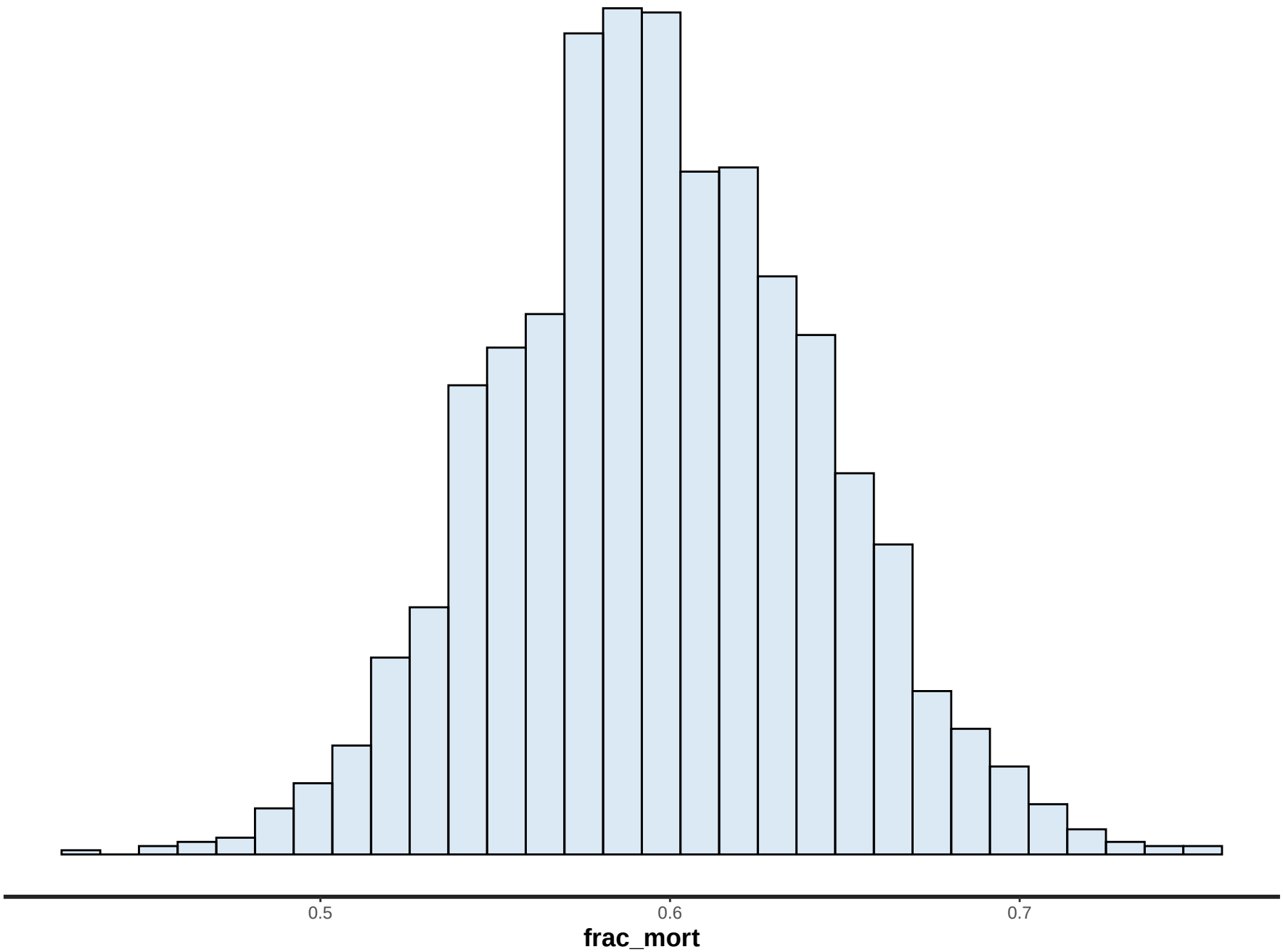

2.5
5.0
7.5
10.0
12.5
duration_pre_hosp

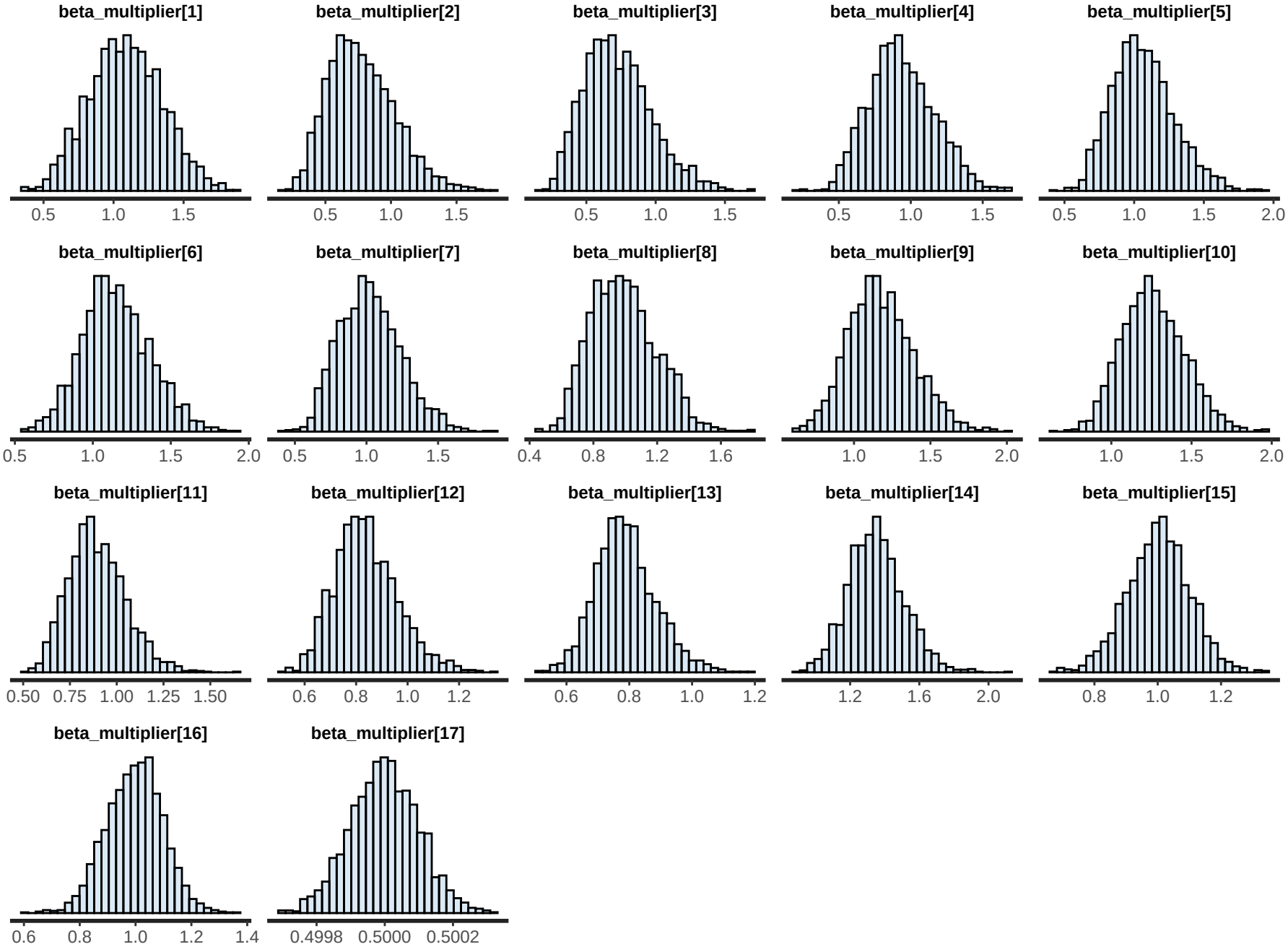

4
6
8
duration_hosp_mod


4
5
6
7
duration_hosp_icu


0.025
0.050
0.075
0.100
0.125
frac_hosp


0.16
0.20
0.24
frac_icu


0.5
0.6
0.7
frac_mort


beta_multiplier[1]
0.5 1.0 1.5
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0.5 1.0 1.5
beta_multiplier[3]
0.5 1.0 1.5
beta_multiplier[4]
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beta_multiplier[5]
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beta_multiplier[6]
0.5 1.0 1.5 2.0
beta_multiplier[7]
0.5 1.0 1.5
beta_multiplier[8]
0.4 0.8 1.2 1.6
beta_multiplier[9]
1.0 1.5 2.0
beta_multiplier[10]
1.0 1.5 2.0
beta_multiplier[11]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[12]
0.6 0.8 1.0 1.2
beta_multiplier[13]
0.6 0.8 1.0 1.2
beta_multiplier[14]
1.2 1.6 2.0
beta_multiplier[15]
0.8 1.0 1.2
beta_multiplier[16]
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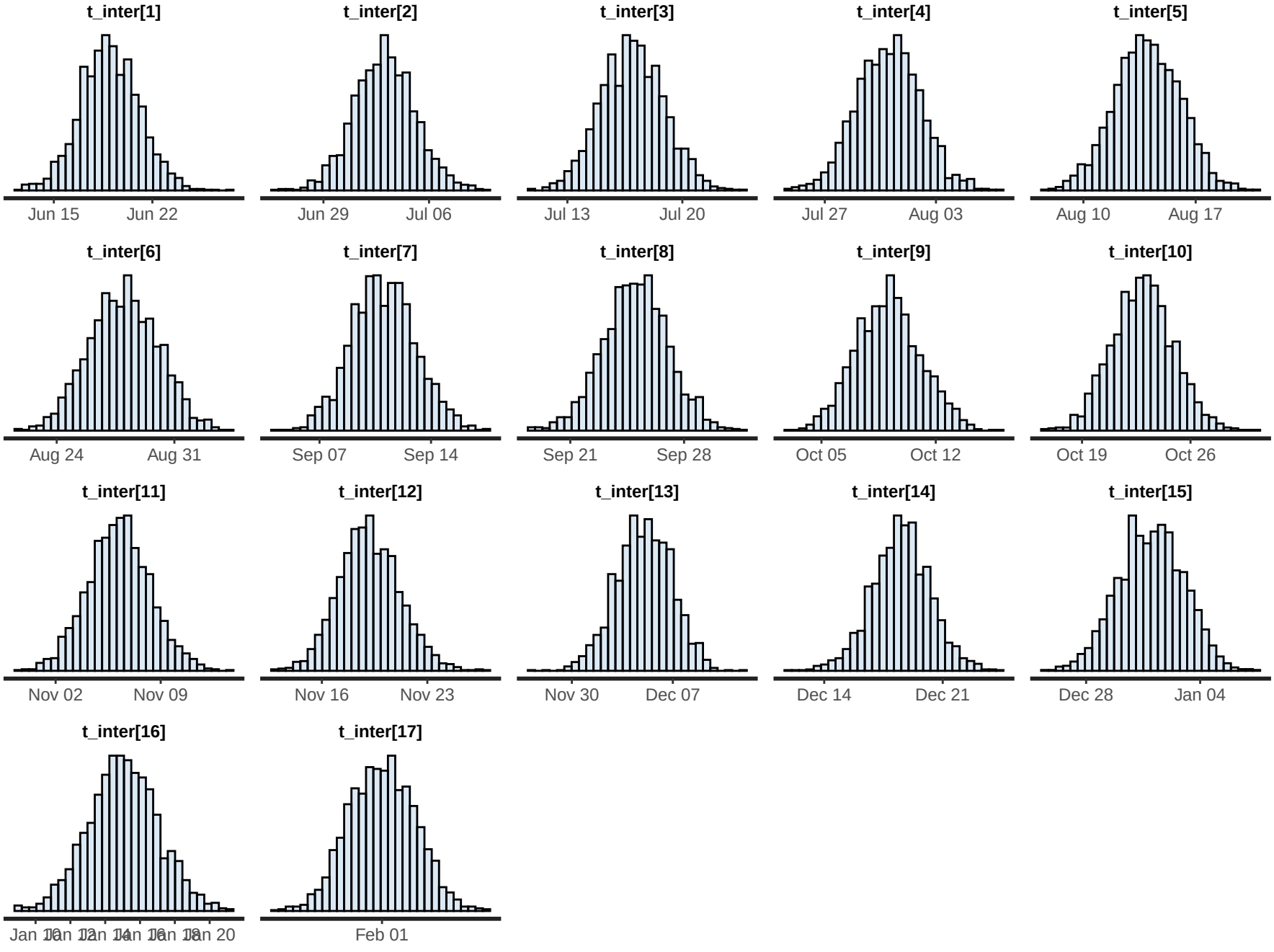
beta_multiplier[17]
0.4998 0.5000 0.5002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Jun 15
Jun 22
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Jun 29
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Jul 13
Jul 20
t_inter[4]
Jul 27
Aug 03
t_inter[5]
Aug 10
Aug 17
t_inter[6]
Aug 24
Aug 31
t_inter[7]
Sep 07
Sep 14
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Sep 21
Sep 28
t_inter[9]
Oct 05
Oct 12
t_inter[10]
Oct 19
Oct 26
t_inter[11]
Nov 02
Nov 09
t_inter[12]
Nov 16
Nov 23
t_inter[13]
Nov 30
Dec 07
t_inter[14]
Dec 14
Dec 21
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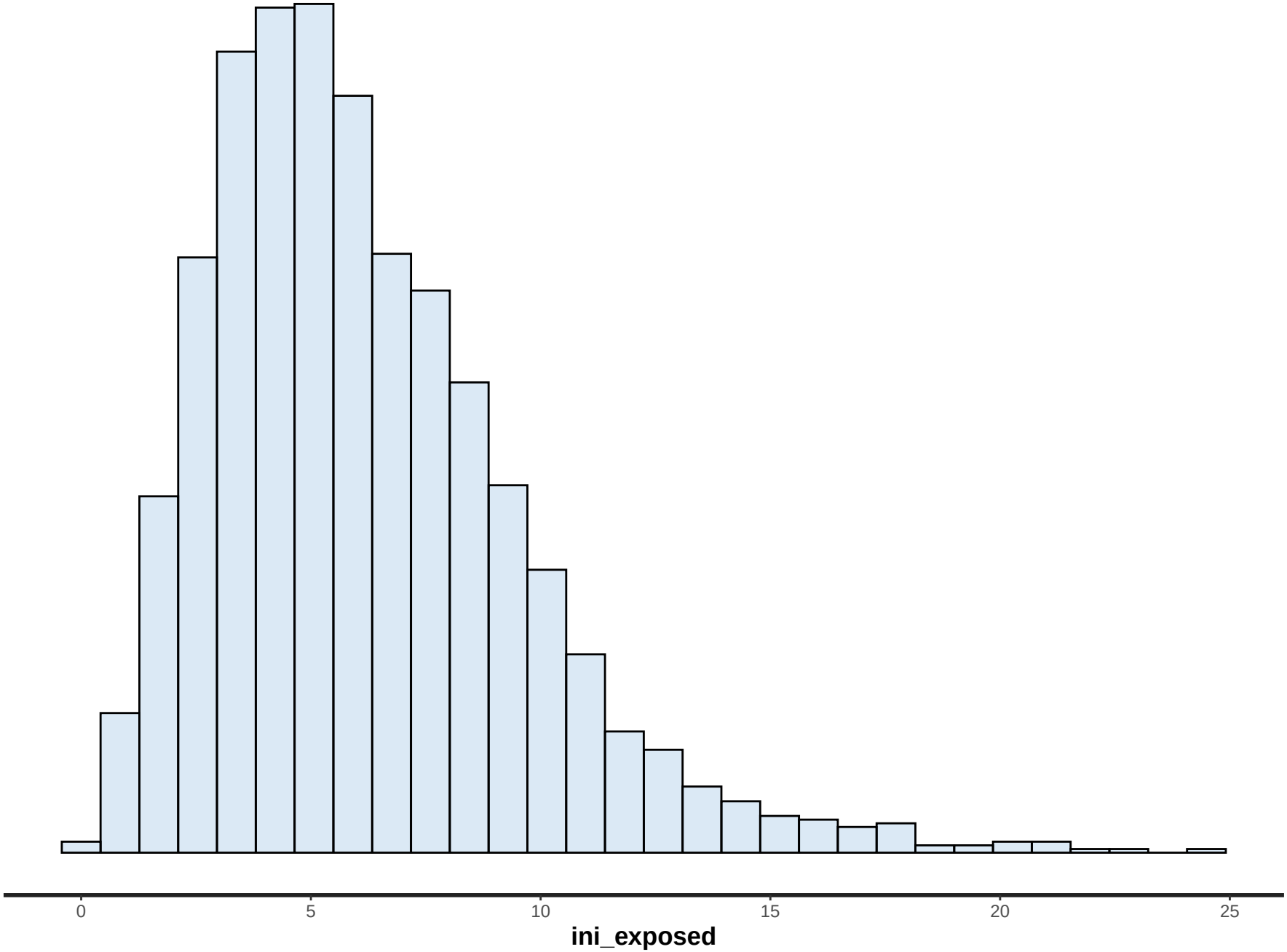
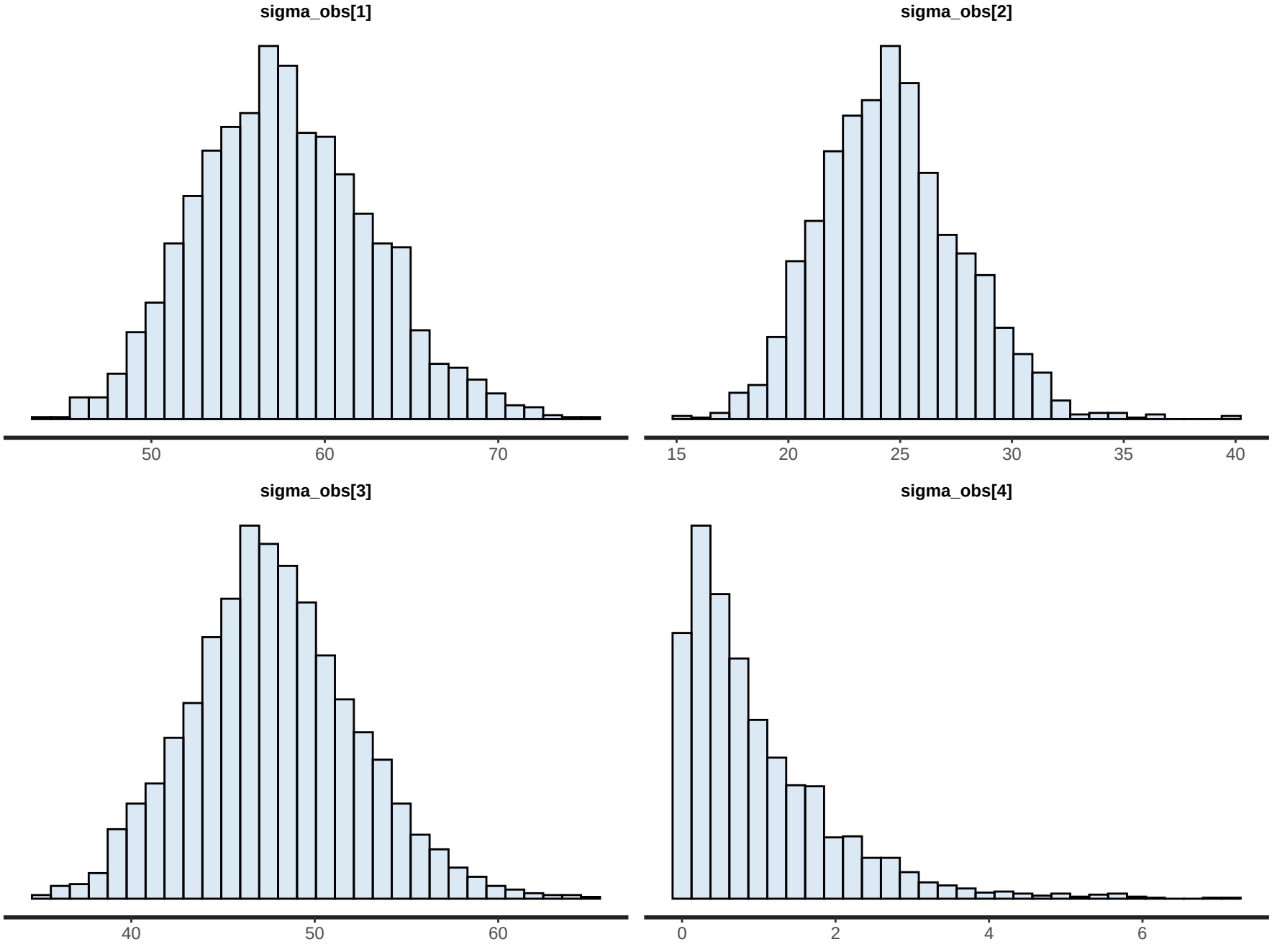
Dec 28
Jan 04
t_inter[16]
Jan 20
t_inter[17]
Feb 01


0
5
10
15
20
25
ini_exposed


sigma_obs[1]
50
60
70
sigma_obs[2]
15
20
25
30
35
40
sigma_obs[3]
40
50
60
sigma_obs[4]
0
2
4
6