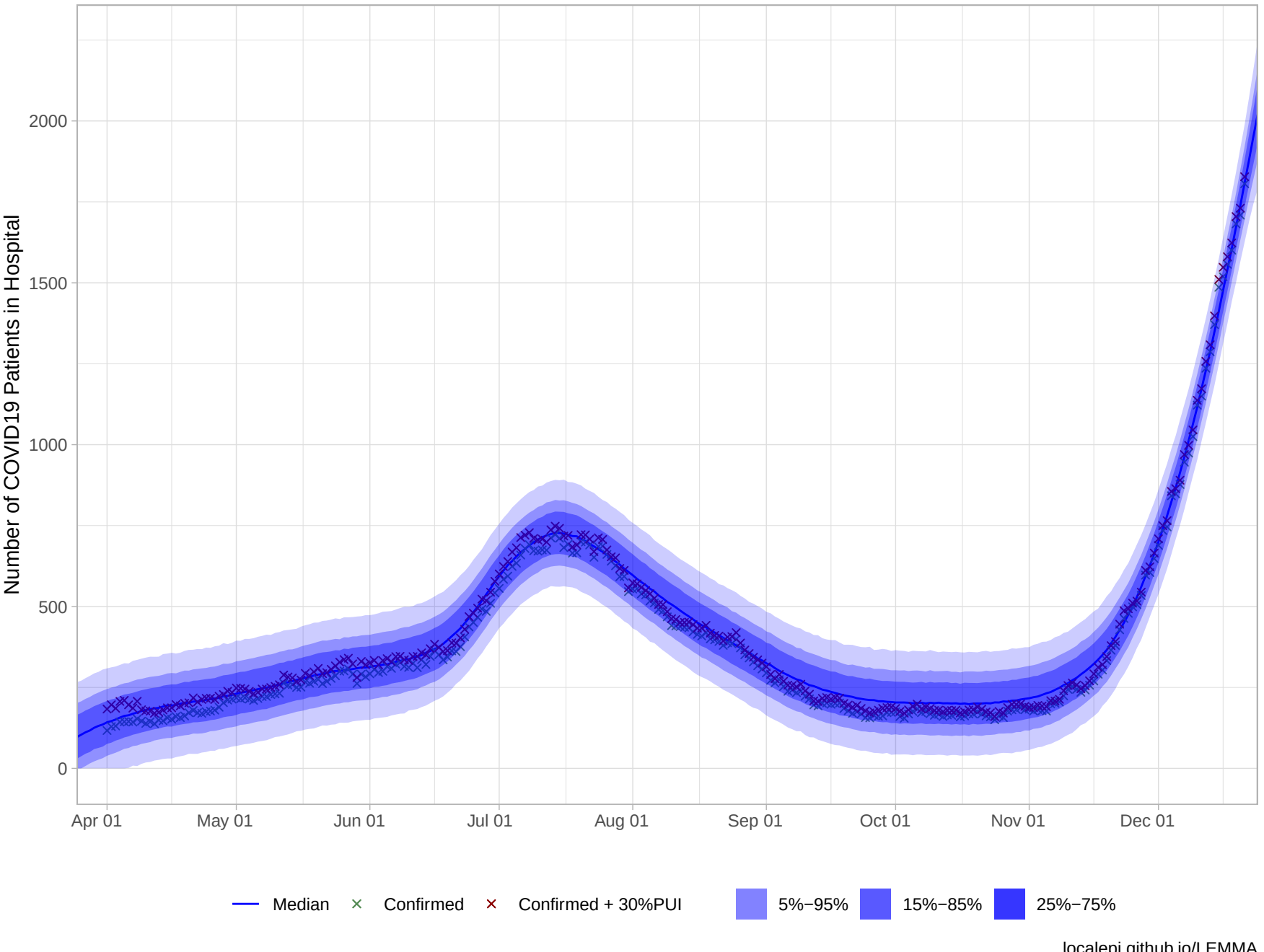
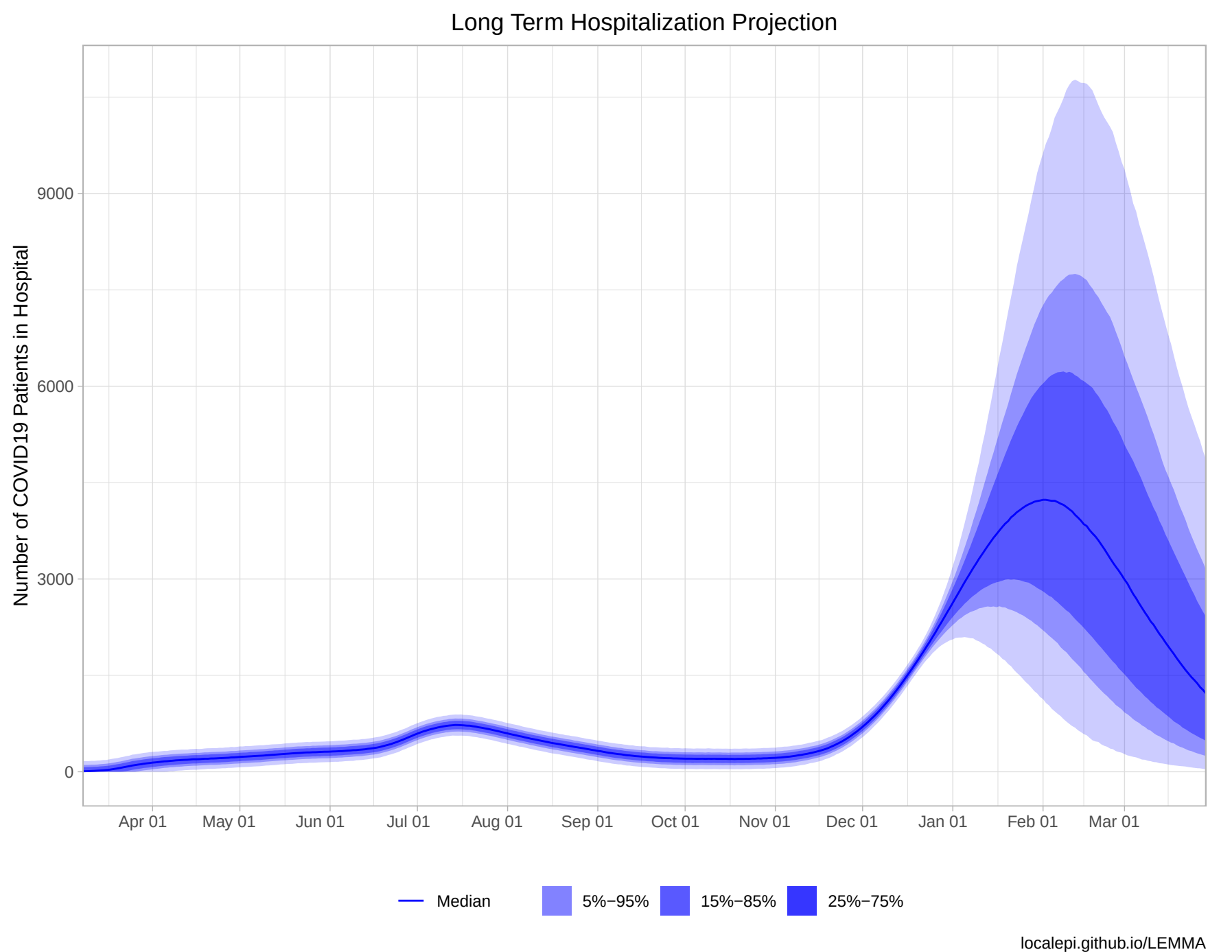
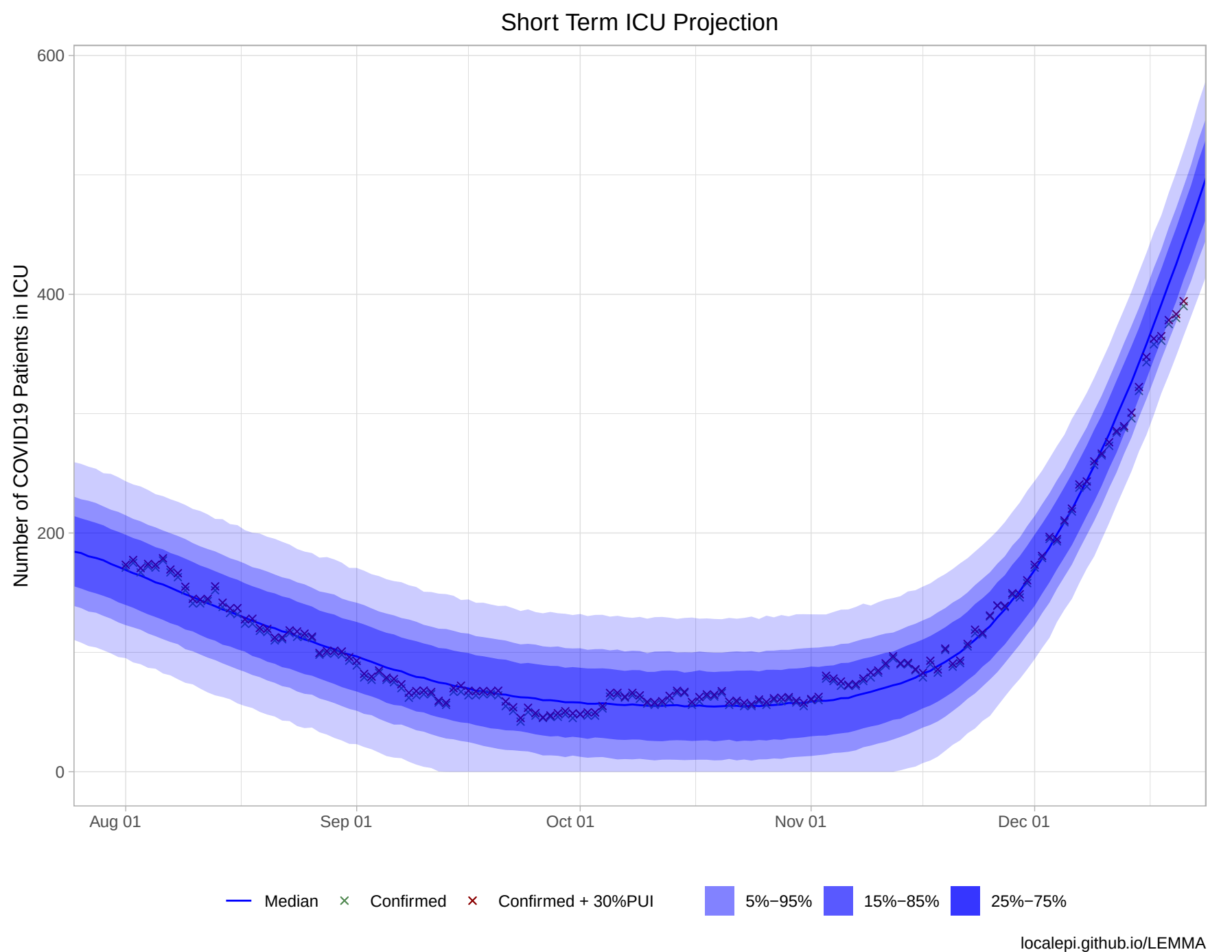
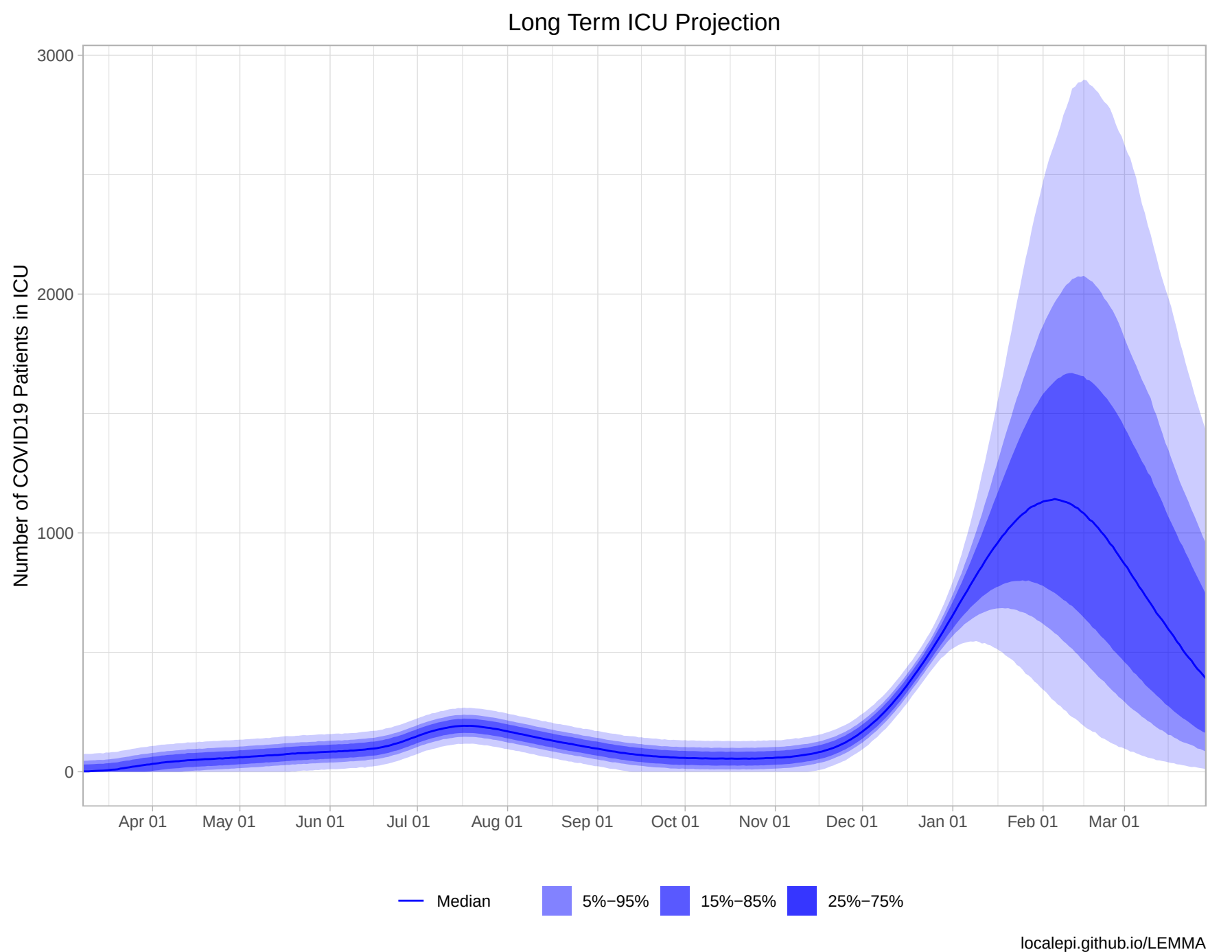
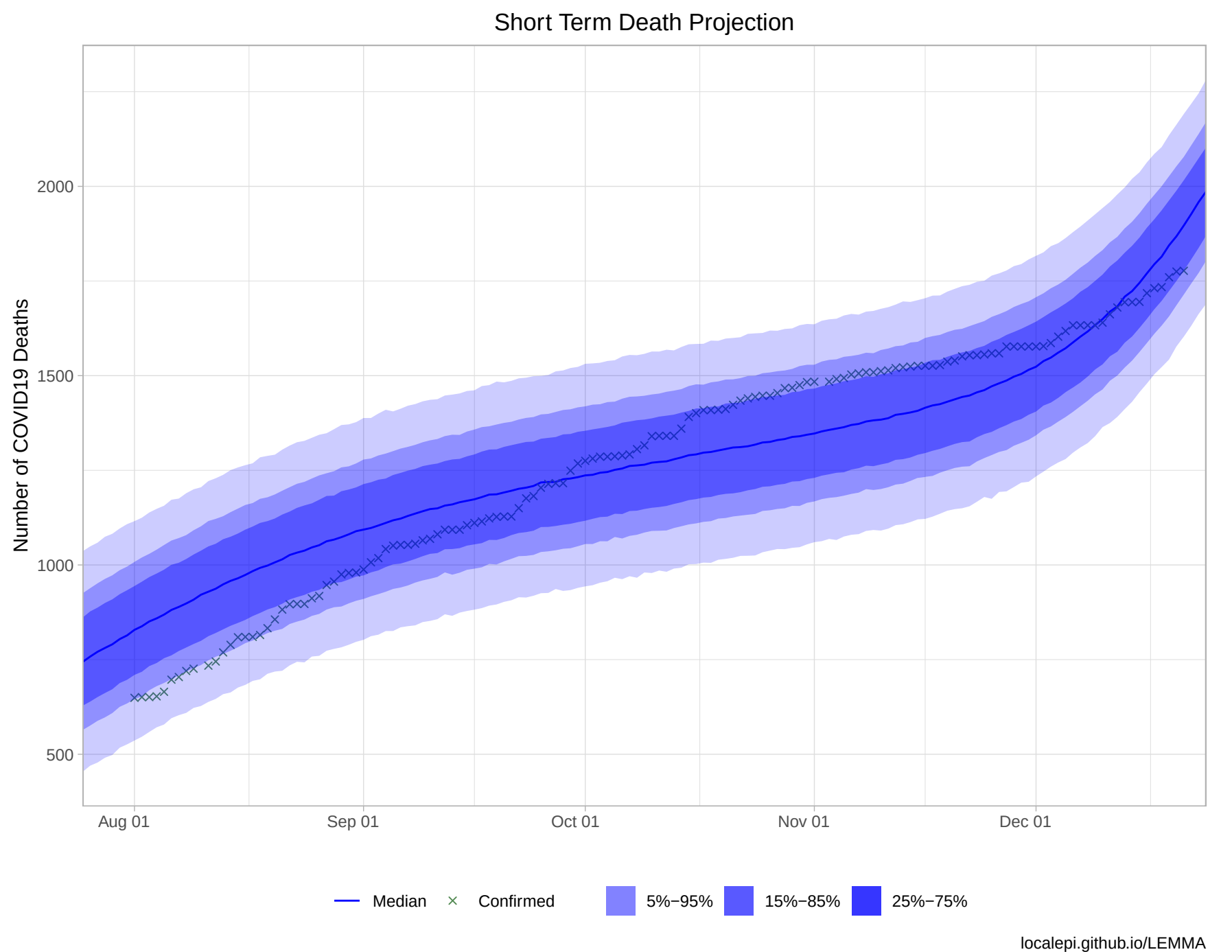
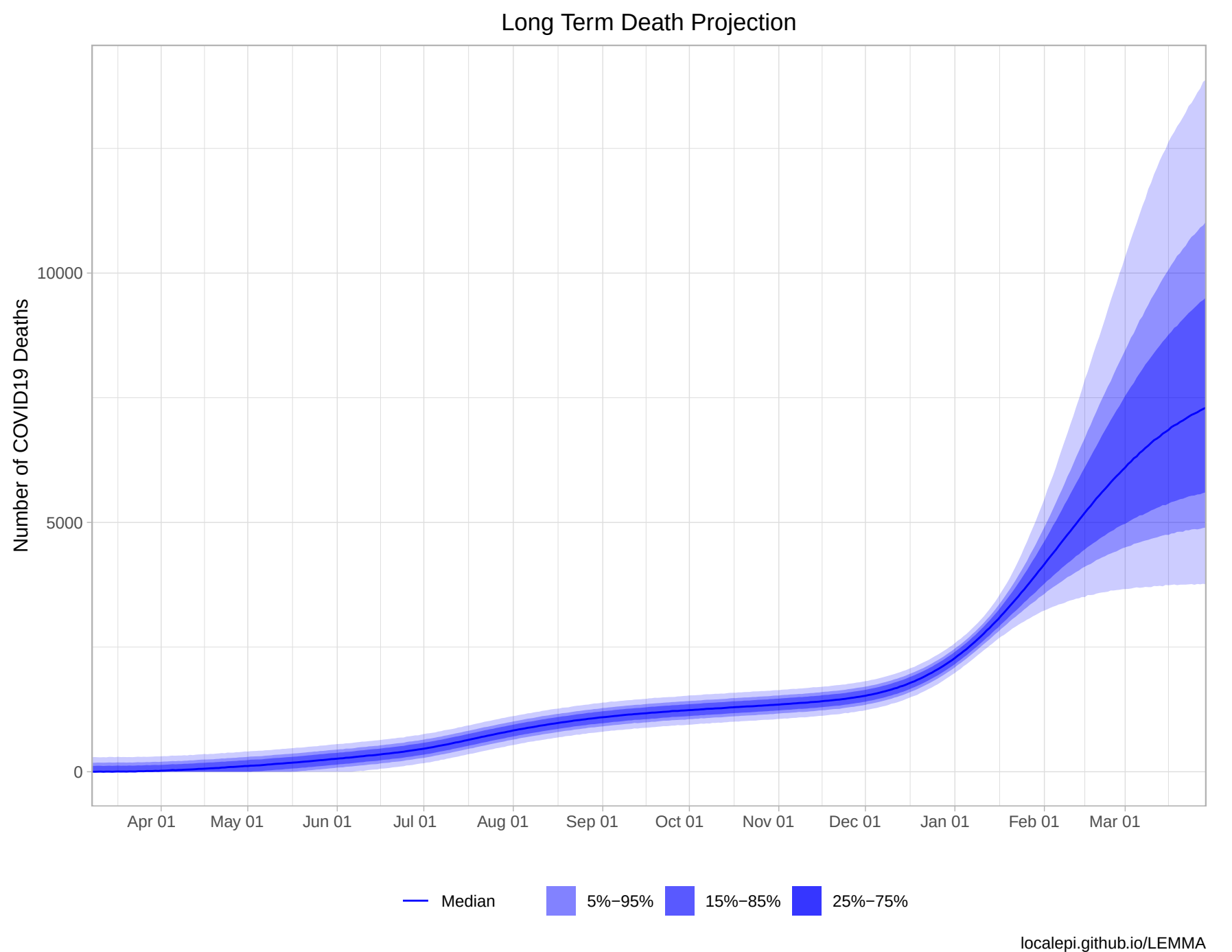

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
2000
1500
1000
500
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

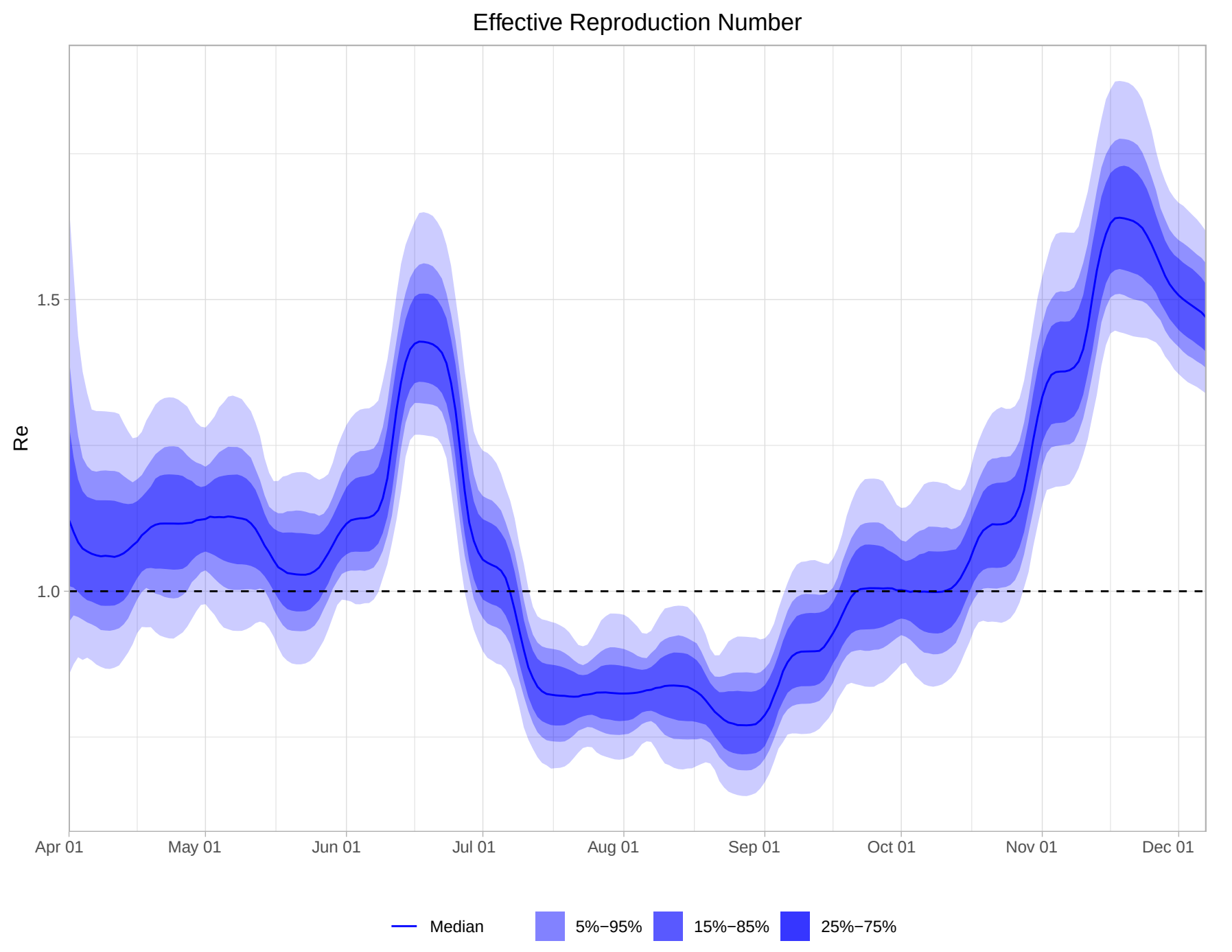

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
3000
6000
9000
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
600
400
200
0
Aug 01
Sep 01
Oct 01
Nov 01
Dec 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
3000
2000
1000
0
Apr 01
May 01
Jun 01
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

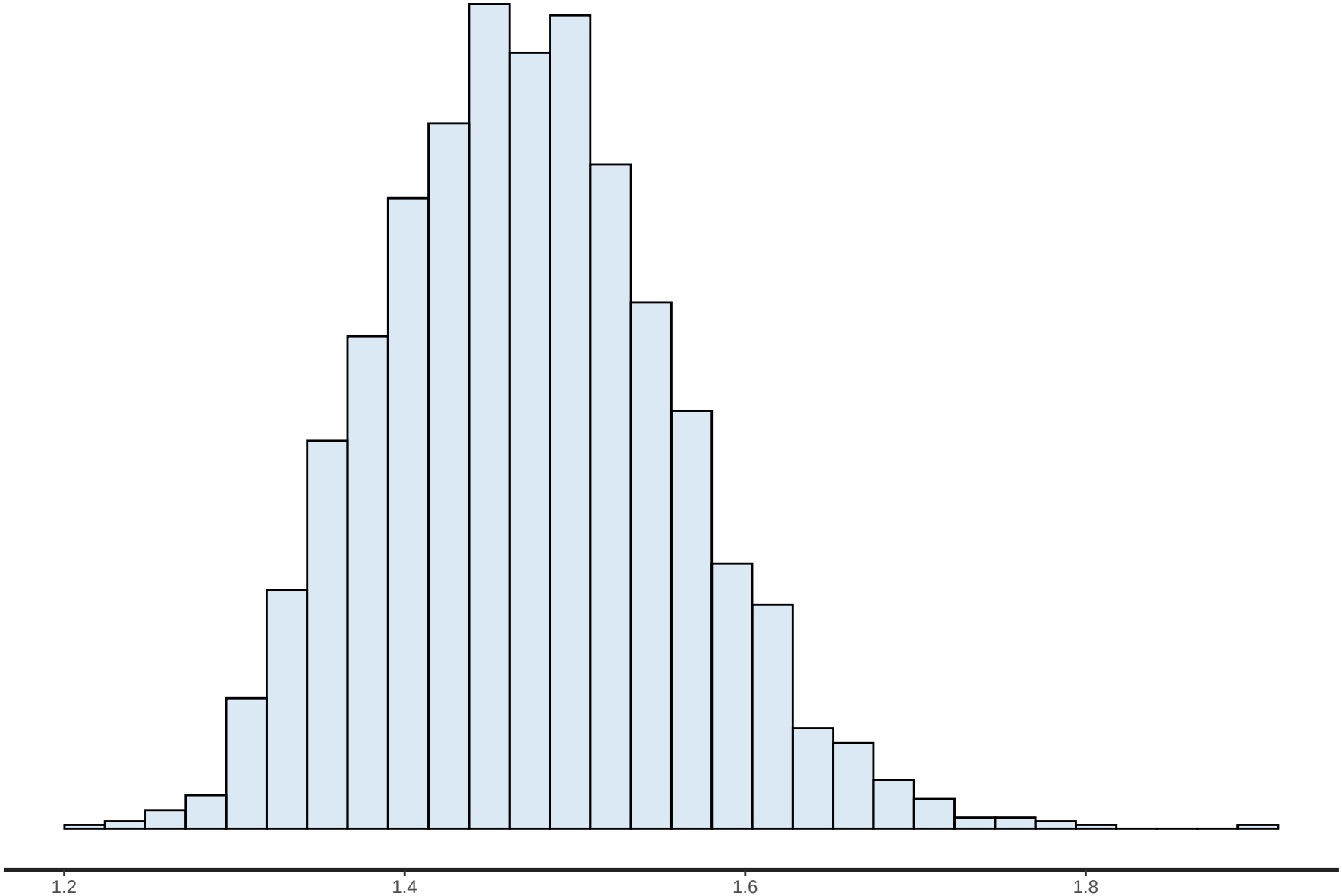

Short Term Death Projection
Number of COVID19 Deaths
2000
1500
1000
500
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

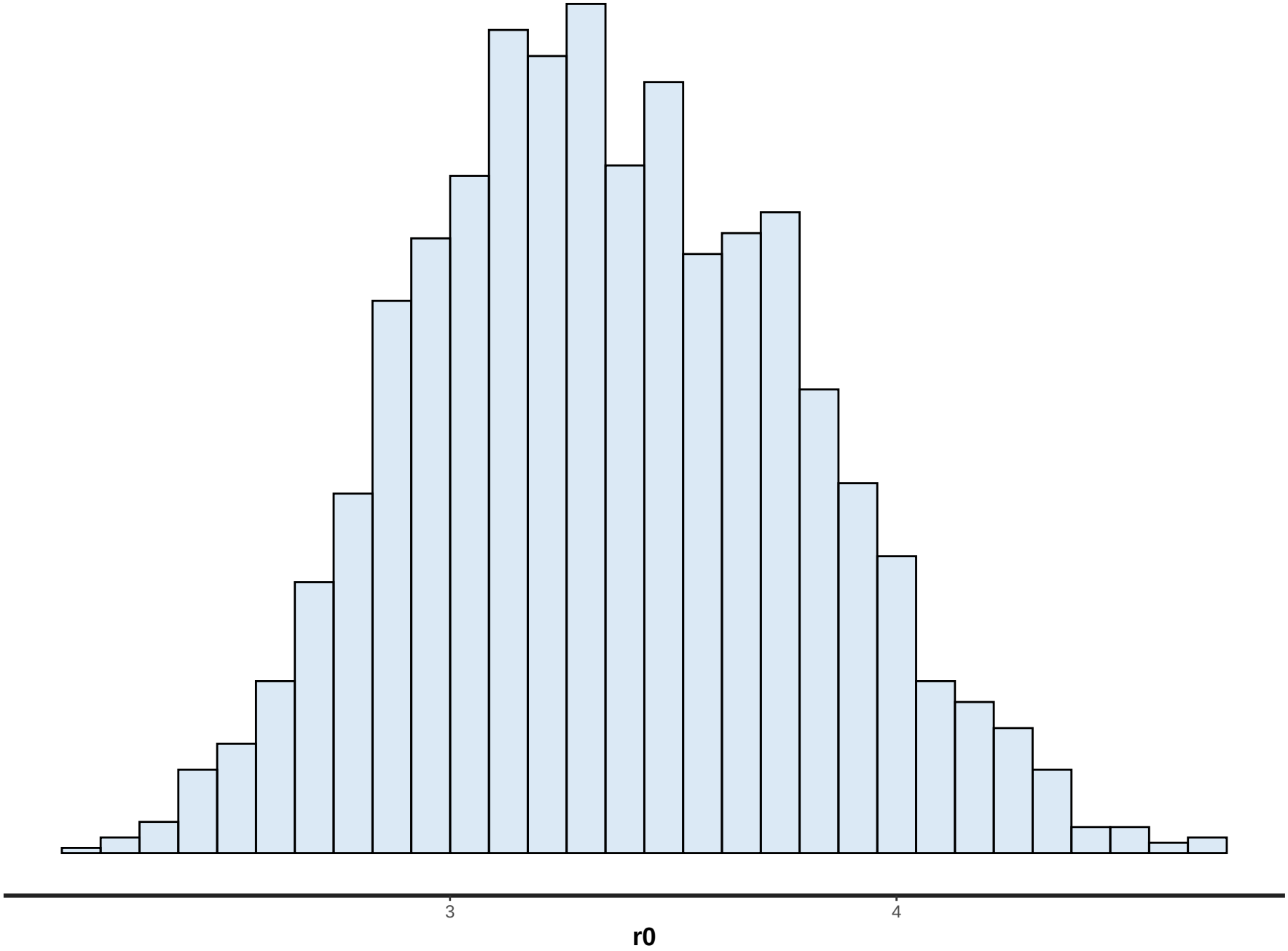

Long Term Death Projection
Number of COVID19 Deaths
10000
5000
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

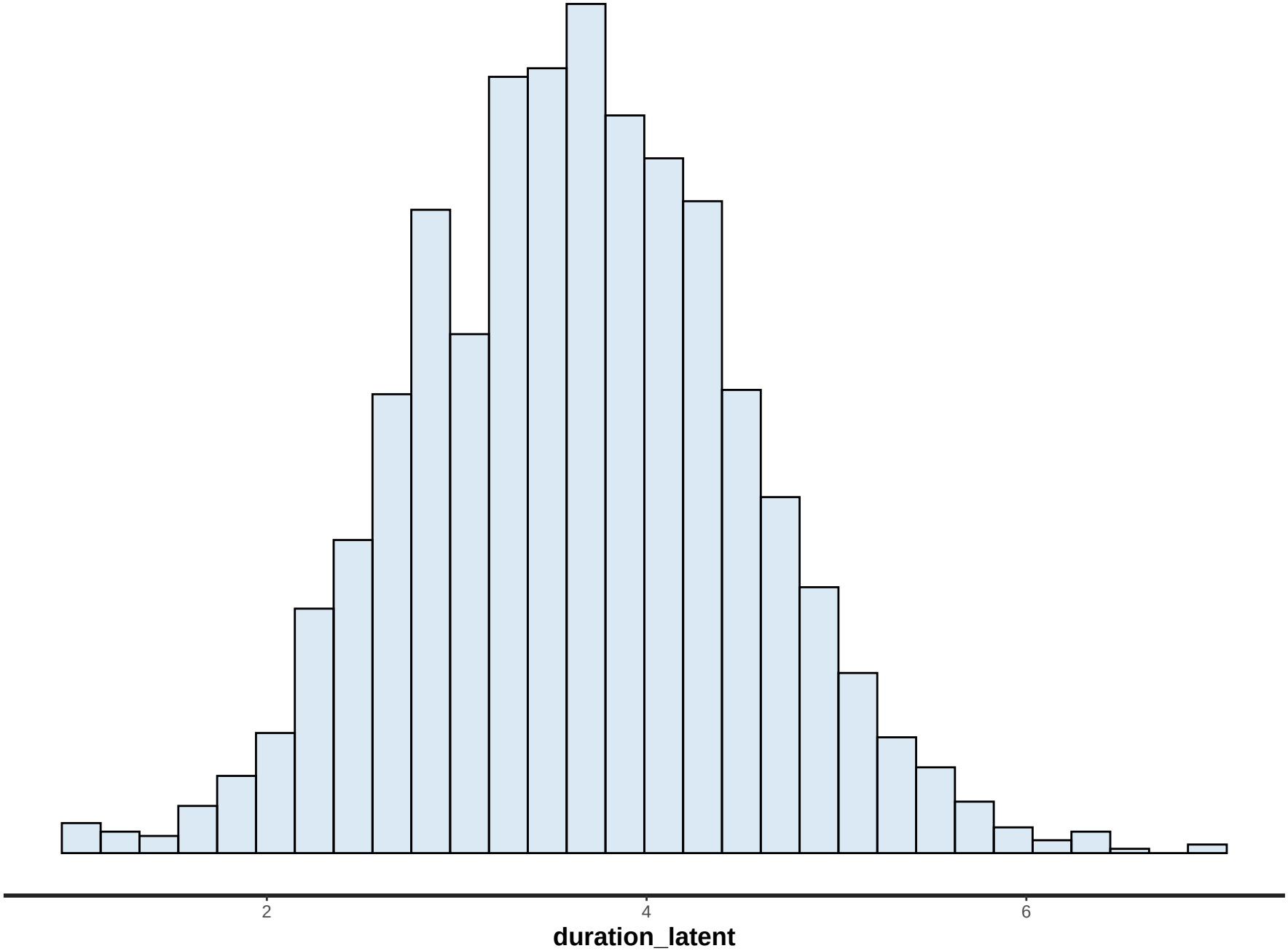

Effective Reproduction Number
Re
1.5
1.0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

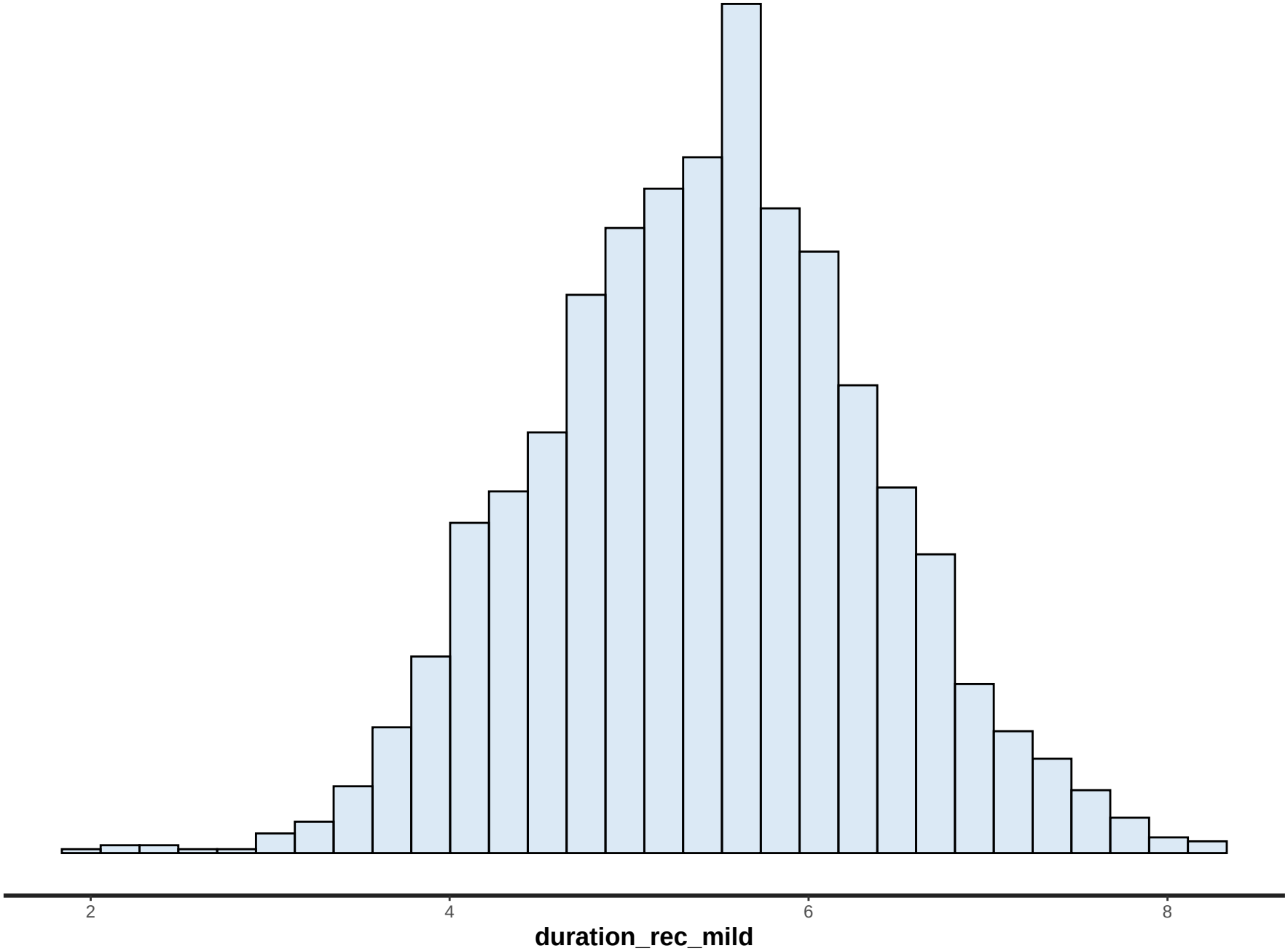
Rt as of 2020−12−07

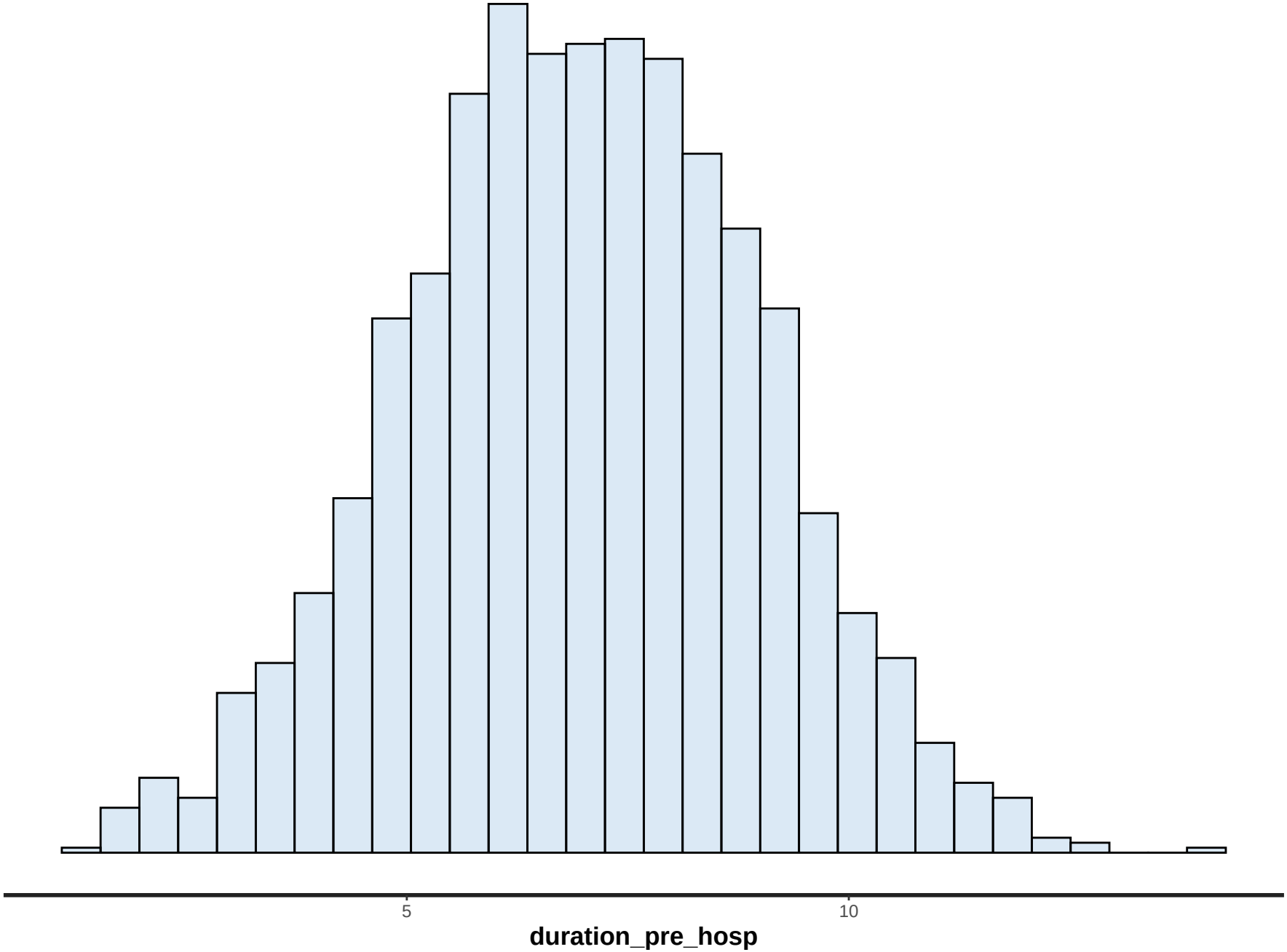
5%	10%	25%	50%	75%	90%	95%
1.34	1.36	1.41	1.47	1.53	1.58	1.62

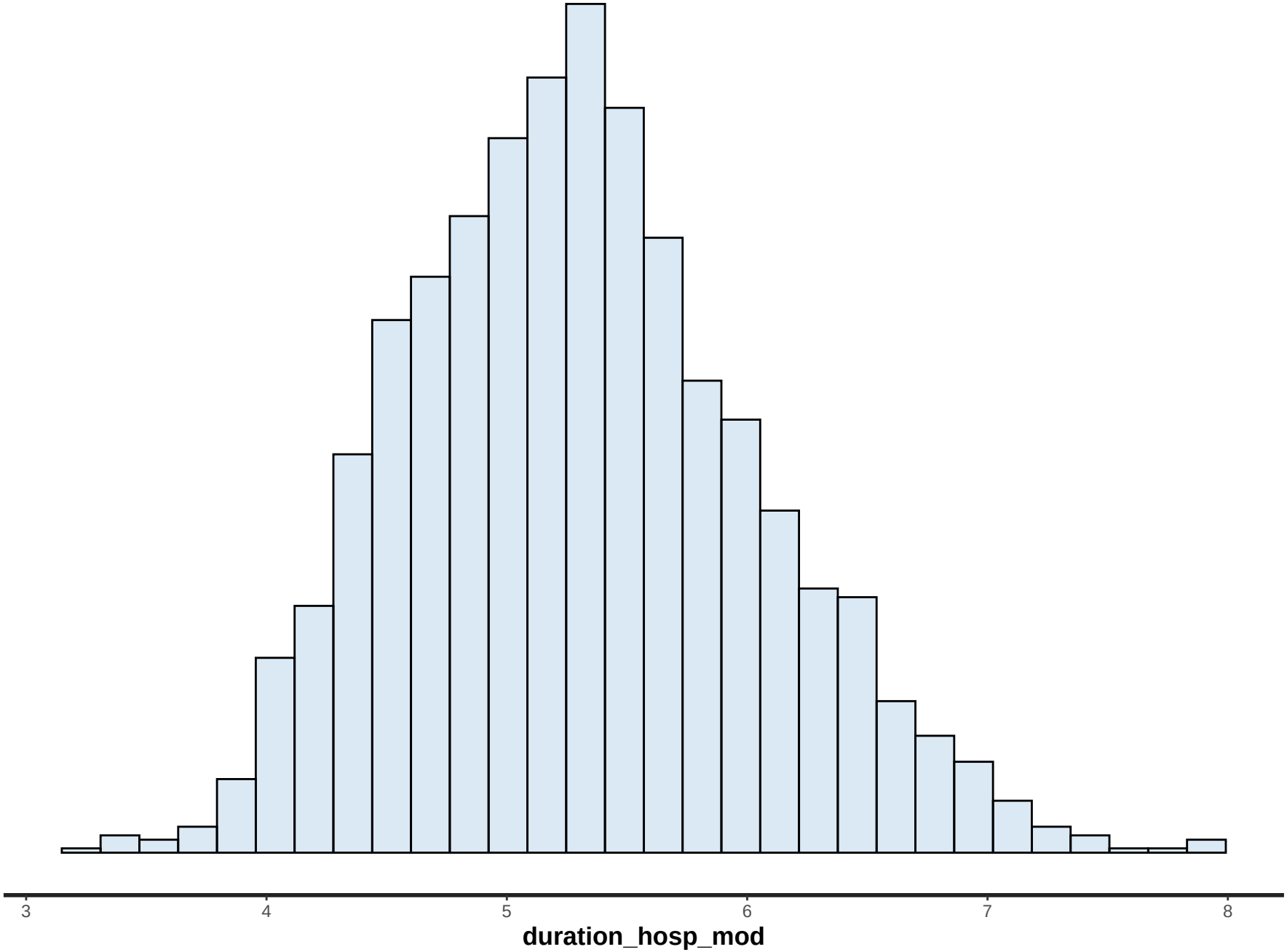


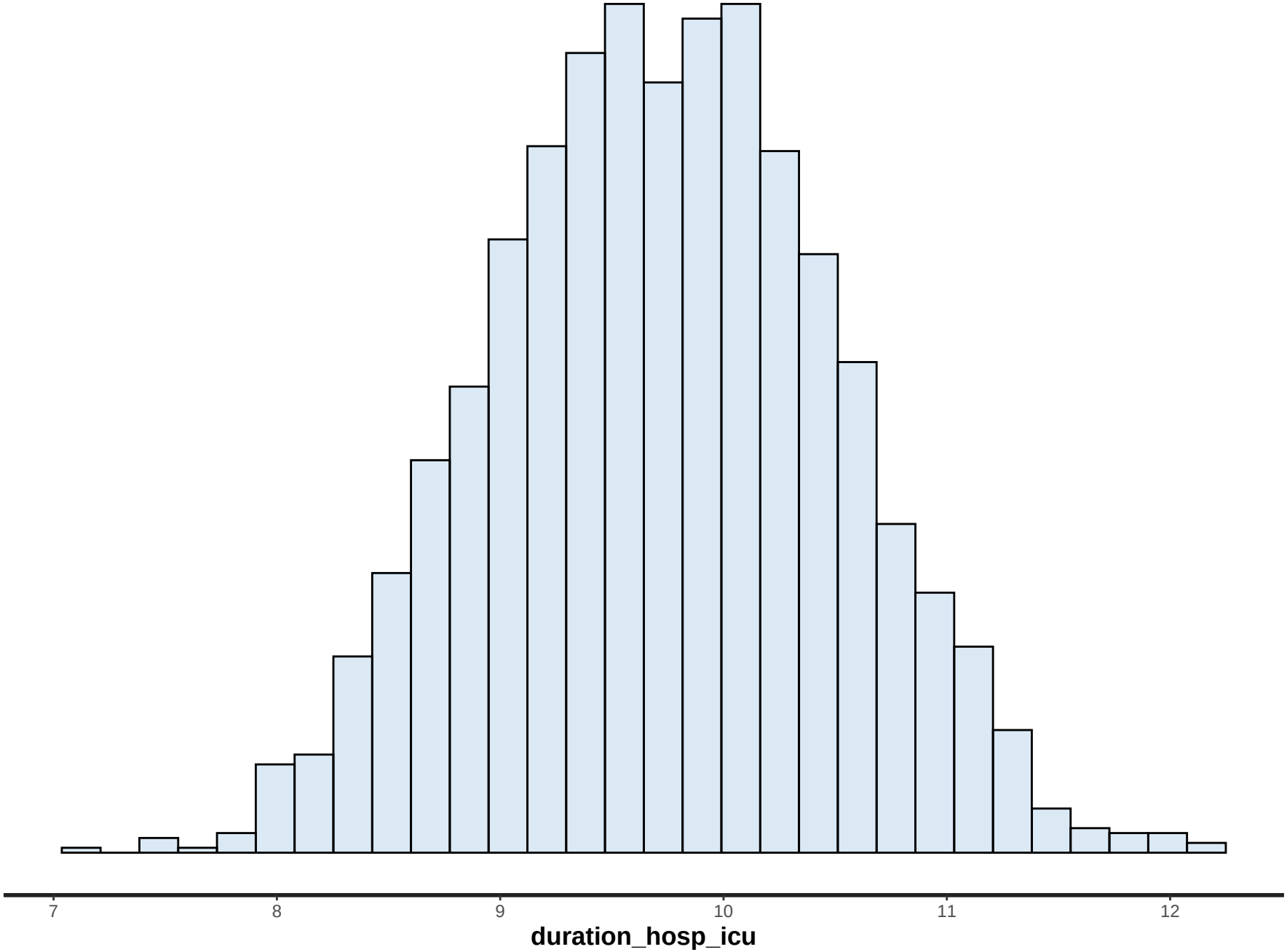

3
4
r0

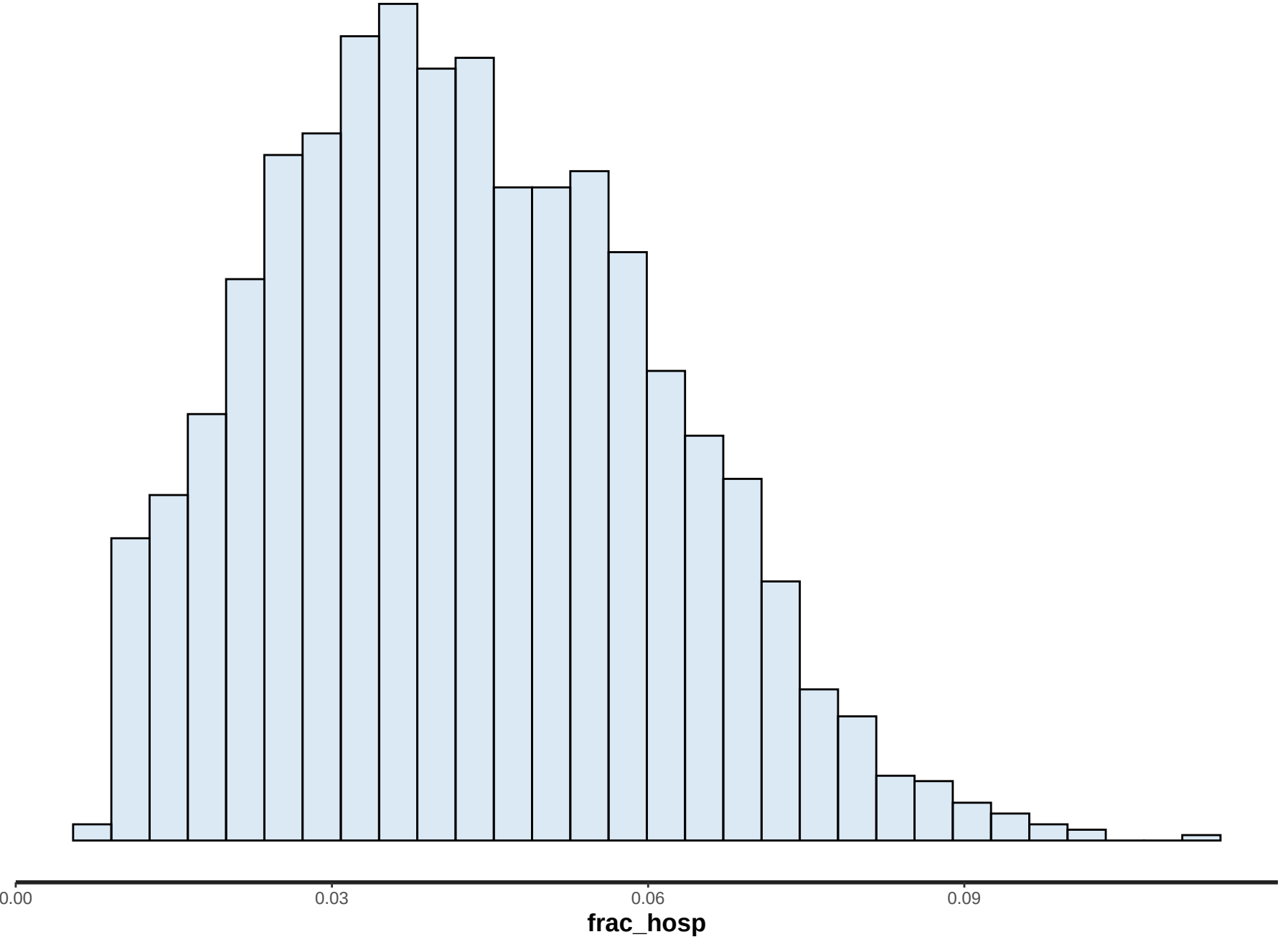

2
4
6
duration_latent

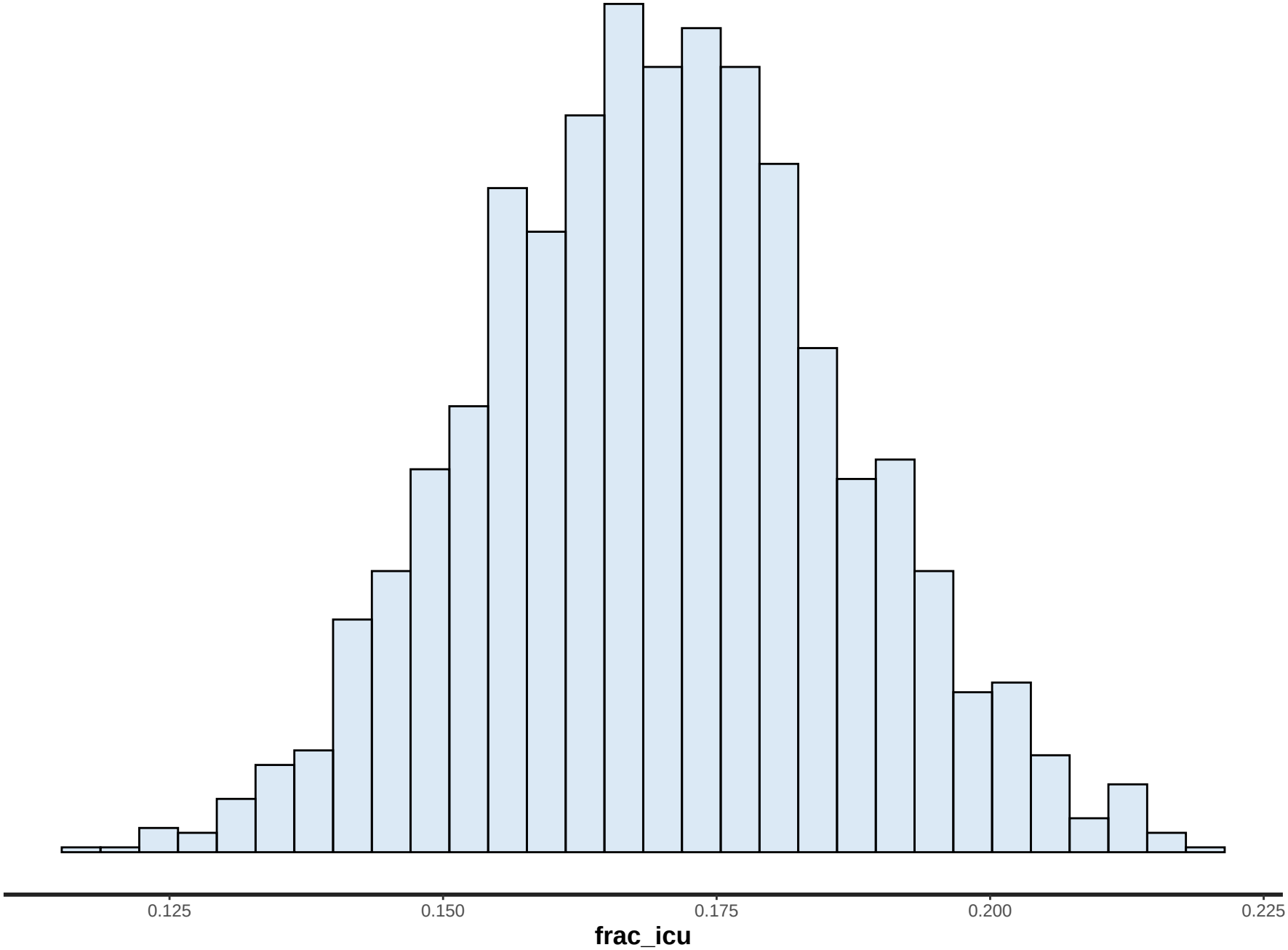

2
4
6
8
duration_rec_mild

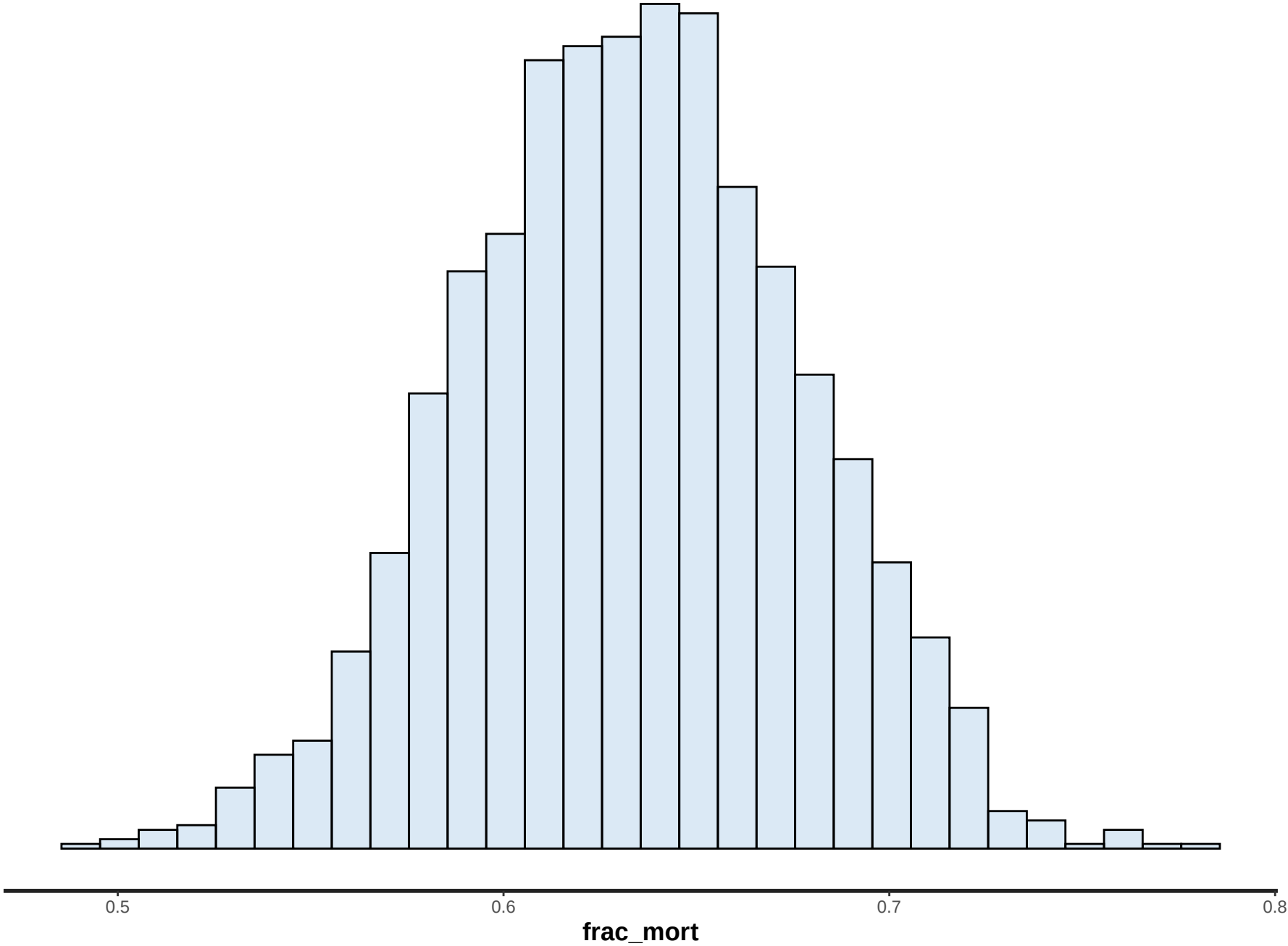

5
10
duration_pre_hosp

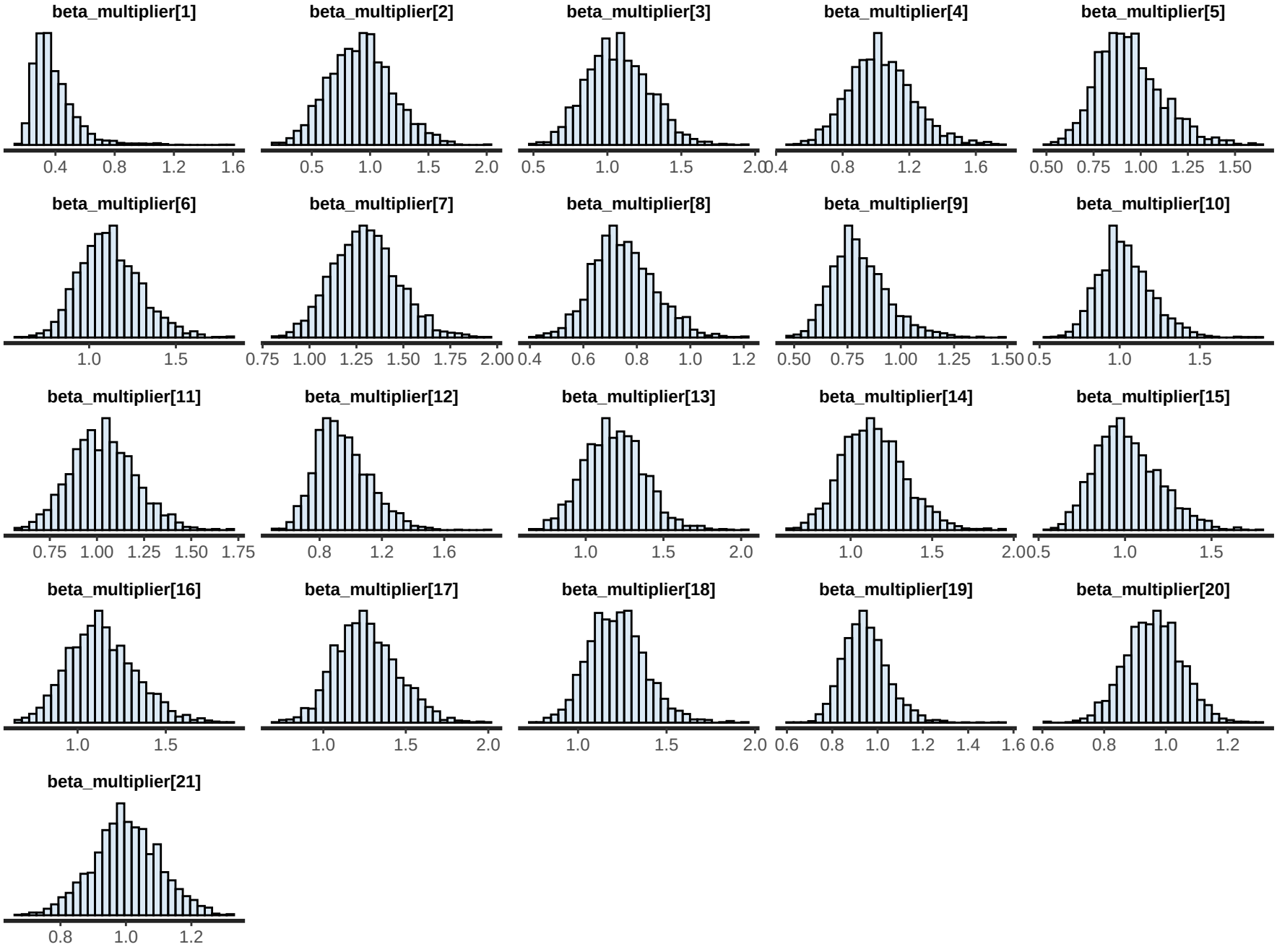

3
4
5
6
7
8
duration_hosp_mod

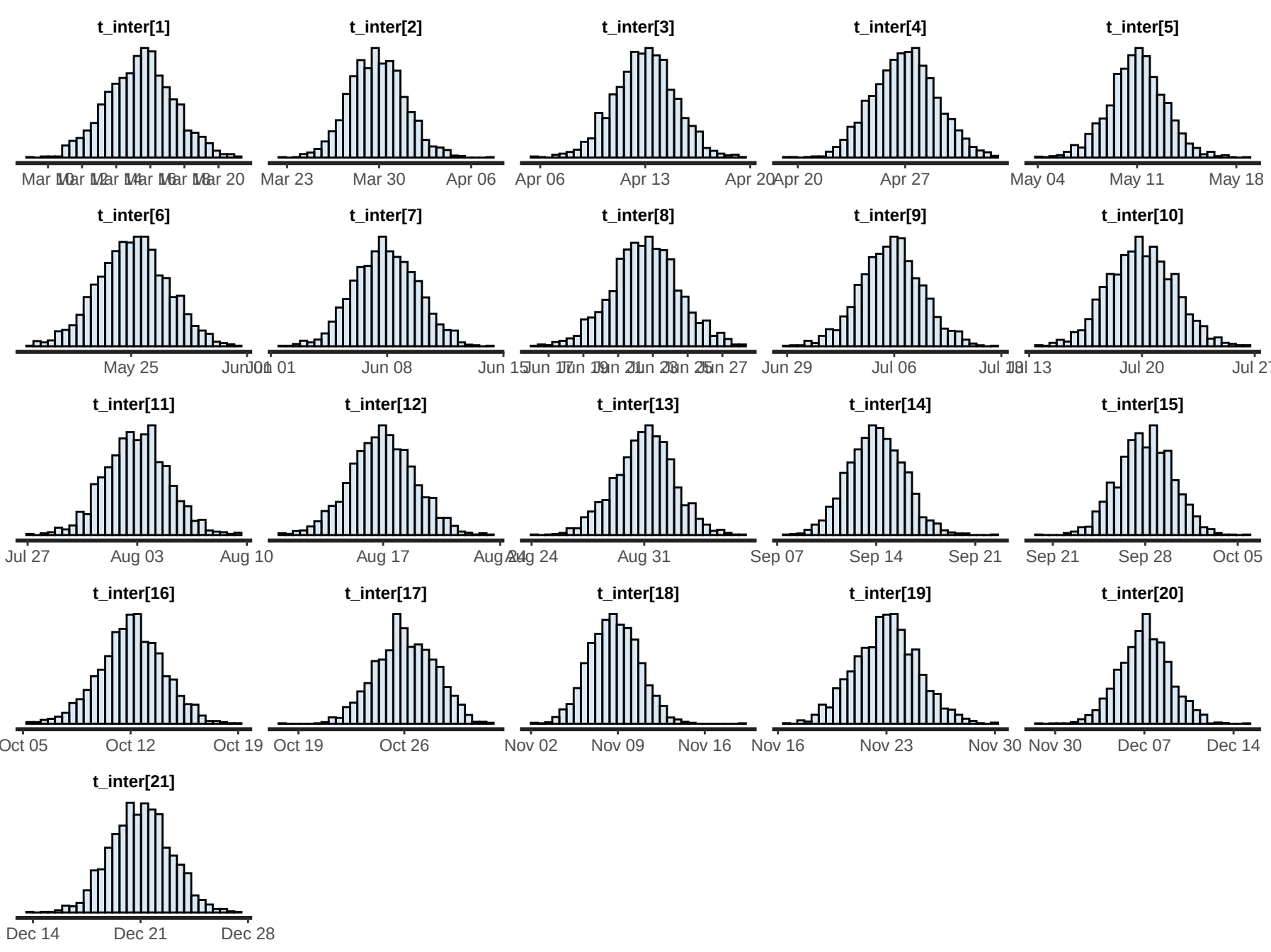

7
8
9
10
11
12
duration_hosp_icu


0.00
0.03
0.06
0.09
frac_hosp


0.125
0.150
0.175
0.200
0.225
frac_icu


0.5
0.6
0.7
0.8
frac_mort


beta_multiplier[1]
0.4 0.8 1.2 1.6
beta_multiplier[2]
0.5 1.0 1.5 2.0
beta_multiplier[3]
0.5 1.0 1.5 2.0
beta_multiplier[4]
0.4 0.8 1.2 1.6
beta_multiplier[5]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[6]
1.0 1.5
beta_multiplier[7]
0.75 1.00 1.25 1.50 1.75 2.00
beta_multiplier[8]
0.4 0.6 0.8 1.0 1.2
beta_multiplier[9]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[10]
0.5 1.0 1.5
beta_multiplier[11]
0.75 1.00 1.25 1.50 1.75
beta_multiplier[12]
0.8 1.2 1.6
beta_multiplier[13]
1.0 1.5 2.0
beta_multiplier[14]
1.0 1.5 2.0
beta_multiplier[15]
0.5 1.0 1.5
beta_multiplier[16]
1.0 1.5
beta_multiplier[17]
1.0 1.5 2.0
beta_multiplier[18]
1.0 1.5 2.0
beta_multiplier[19]
0.6 0.8 1.0 1.2 1.4 1.6
beta_multiplier[20]
0.6 0.8 1.0 1.2
beta_multiplier[21]
0.8 1.0 1.2


t_inter[1]
Mar 10
Mar 12
Mar 14
Mar 16
Mar 18
Mar 20
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Mar 23
Mar 30
Apr 06
t_inter[3]
Apr 06
Apr 13
Apr 20
t_inter[4]
Apr 20
Apr 27
t_inter[5]
May 04
May 11
May 18
t_inter[6]
May 25
Jun 01
t_inter[7]
Jun 01
Jun 08
Jun 15
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Jun 17
Jun 19
Jun 21
Jun 23
Jun 25
Jun 27
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Jun 29
Jul 06
Jul 13
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Jul 27
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Aug 24
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Nov 09
Nov 16
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Nov 30
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Nov 30
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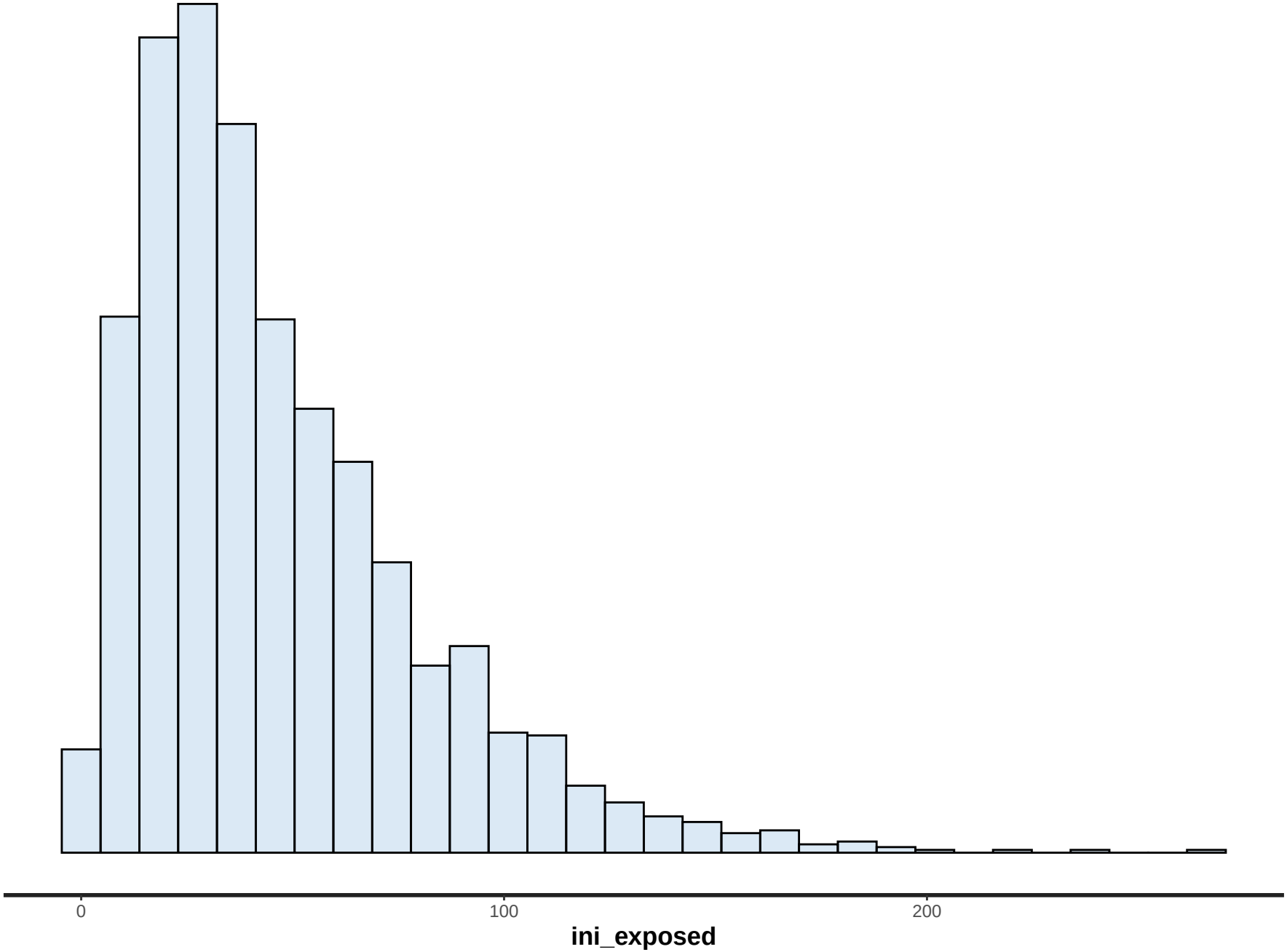
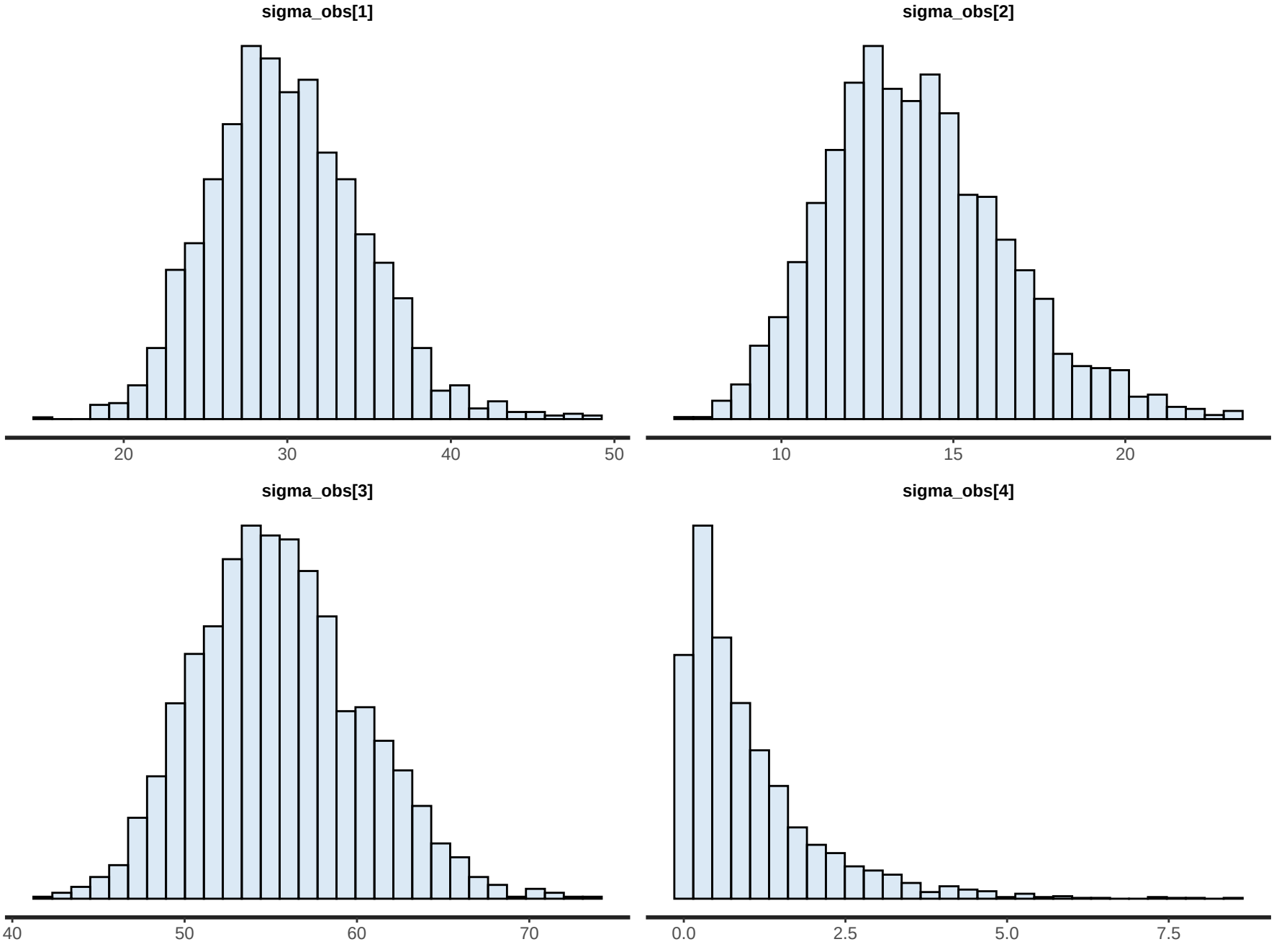
Dec 14
Dec 21
Dec 28


0
100
200
ini_exposed


sigma_obs[1]
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sigma_obs[2]
10
15
20
sigma_obs[3]
40
50
60
70
sigma_obs[4]
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2.5
5.0
7.5