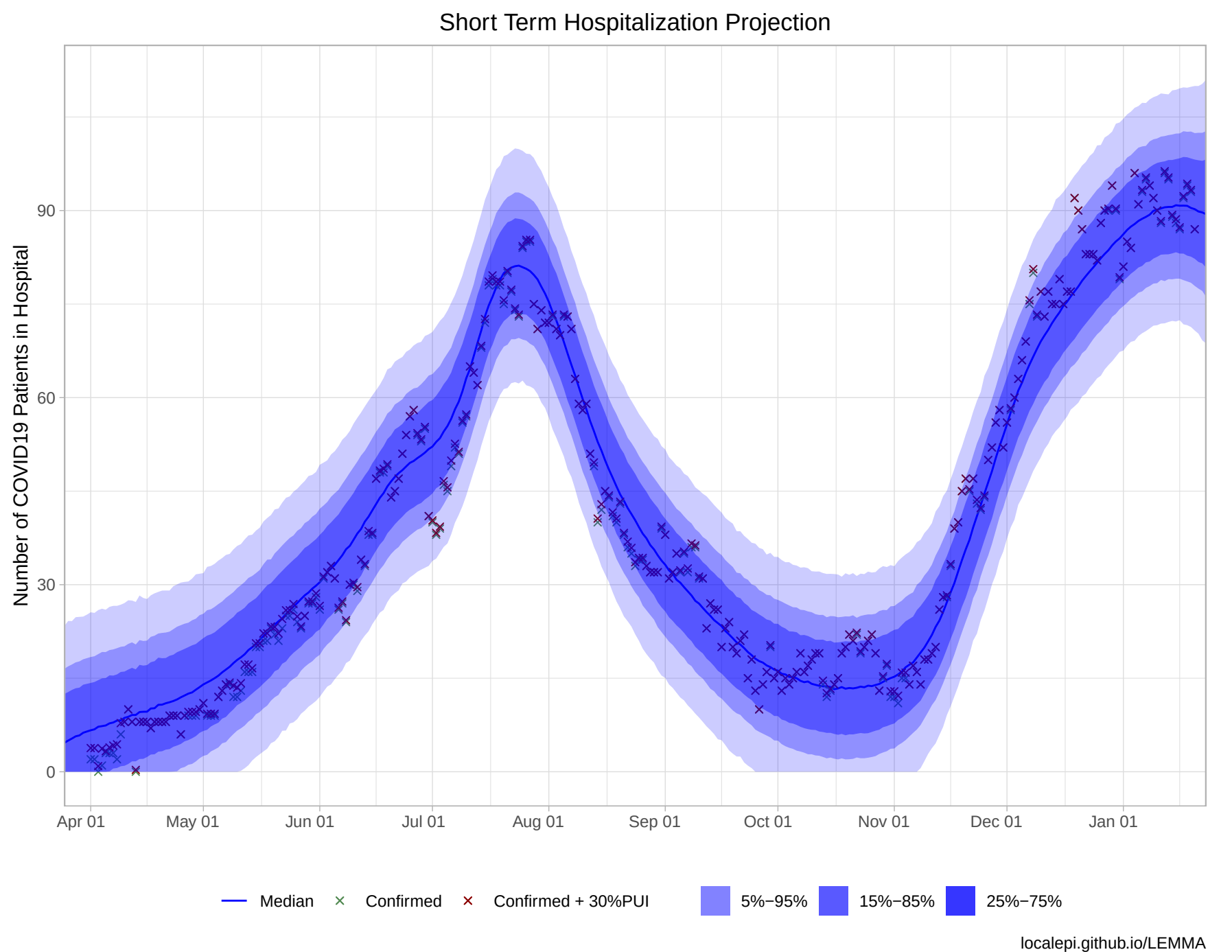
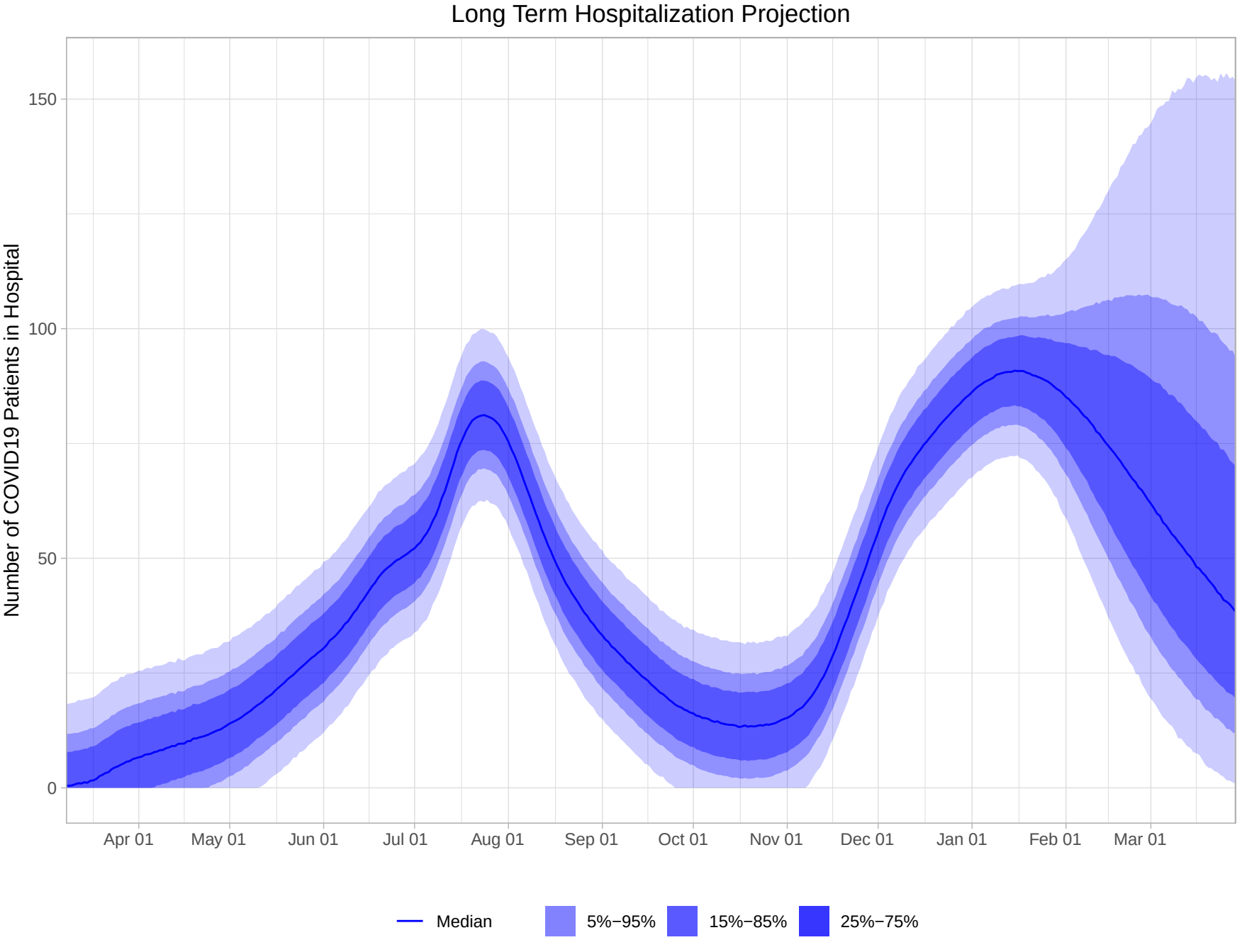
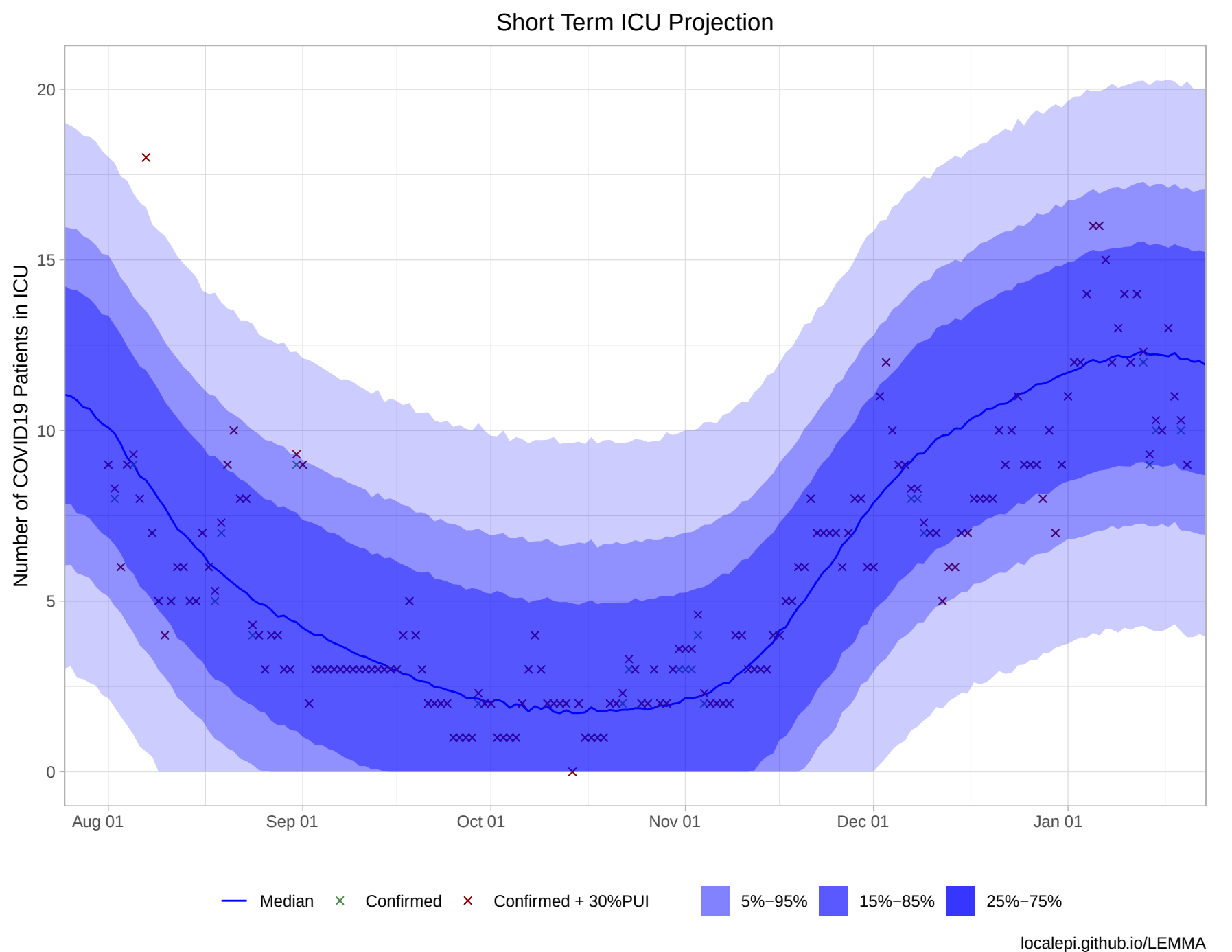
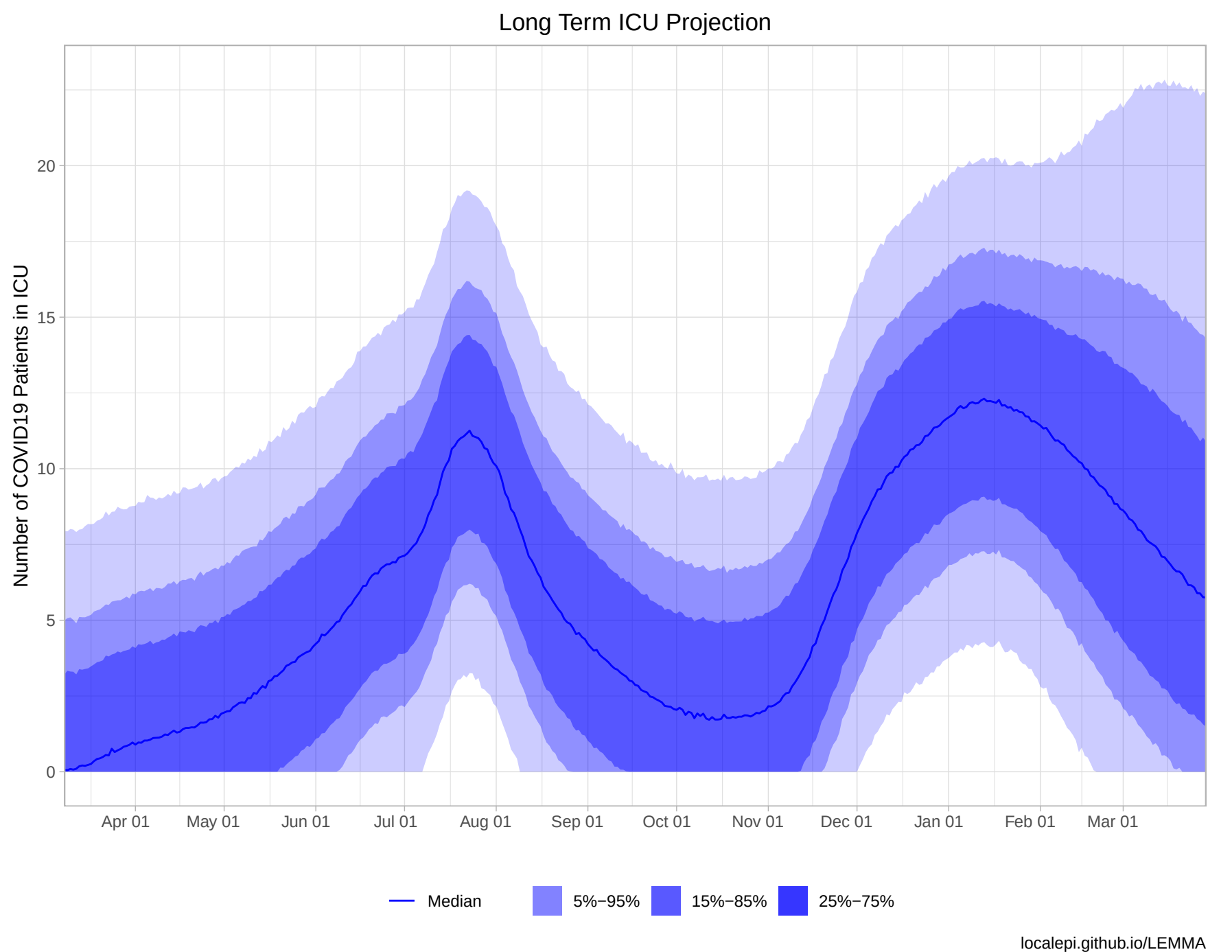
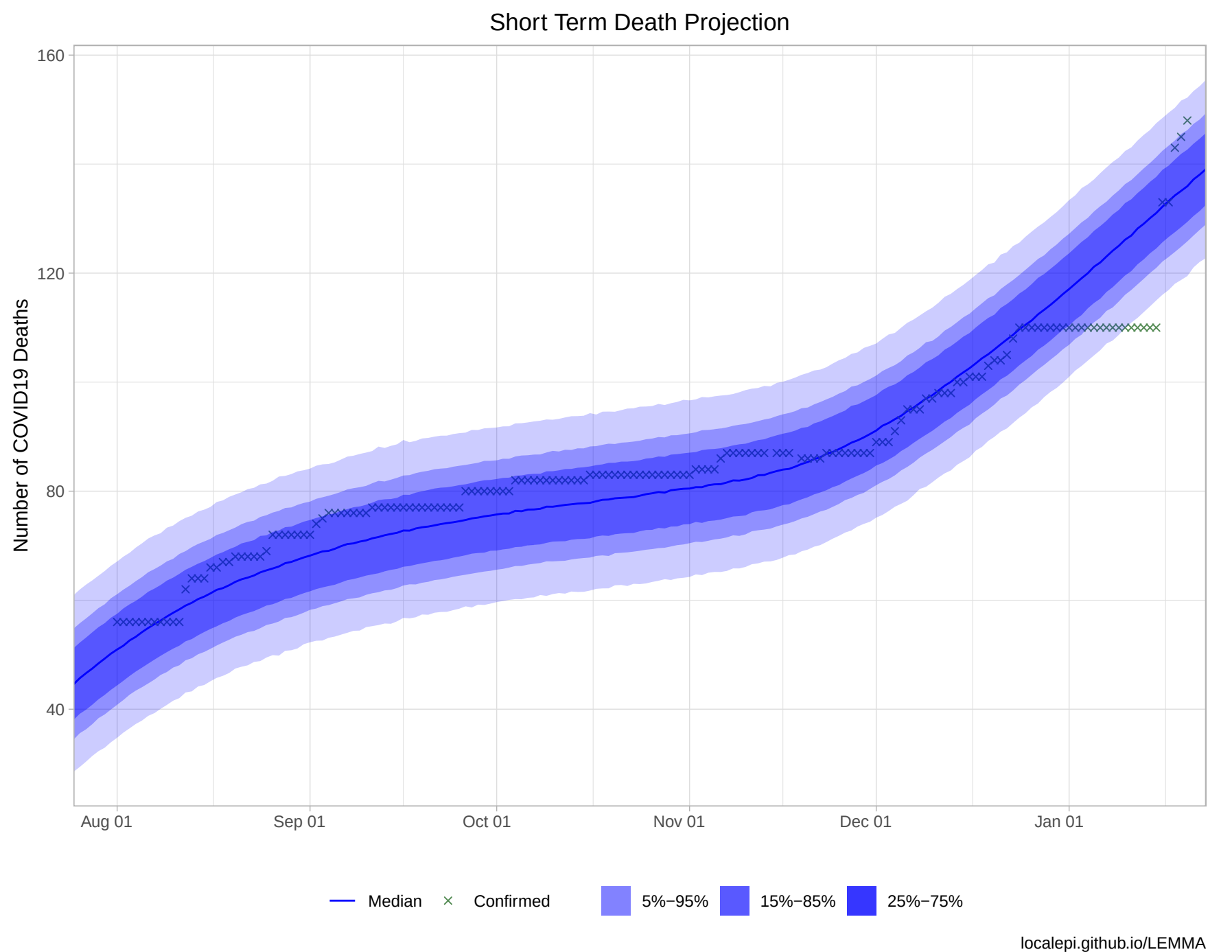
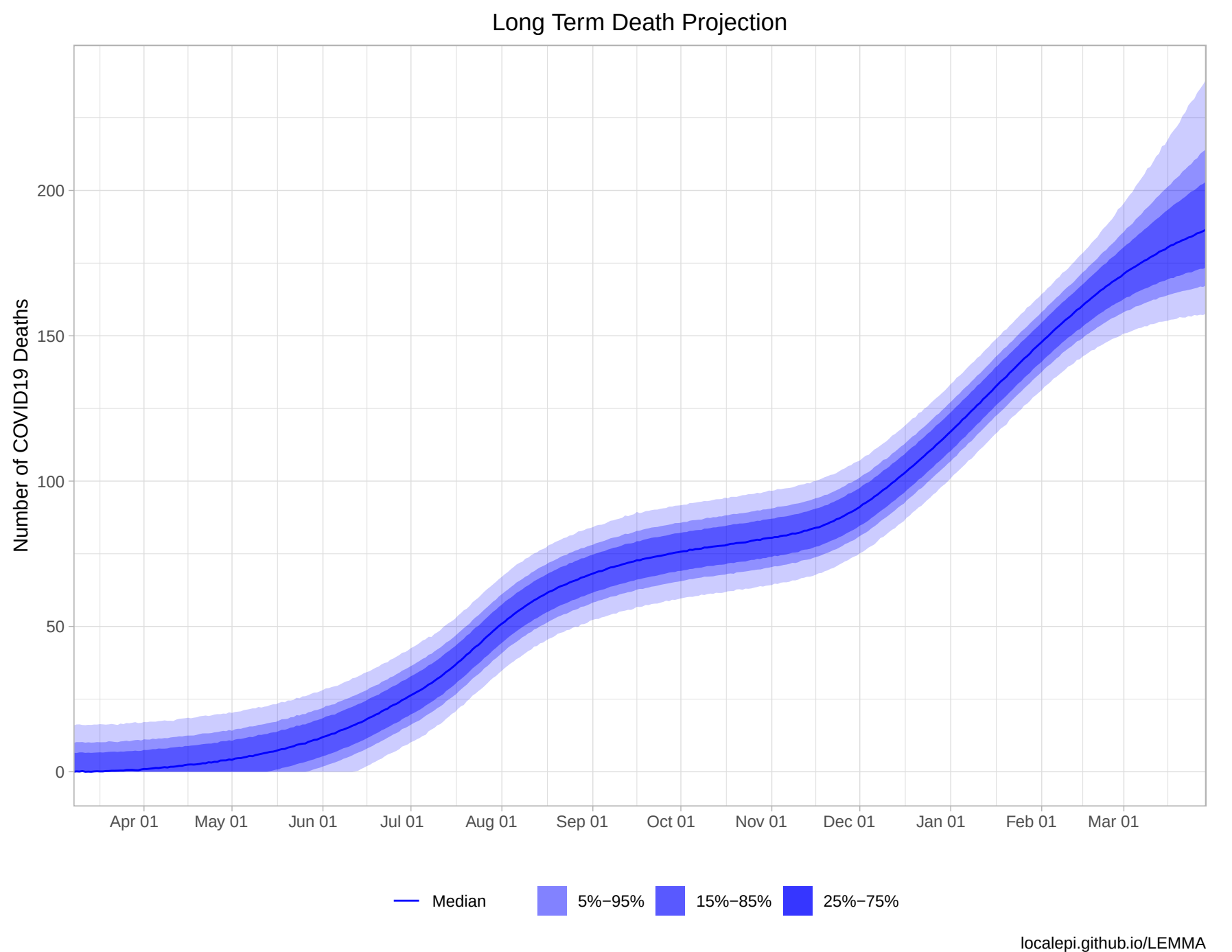

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
30
60
90
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

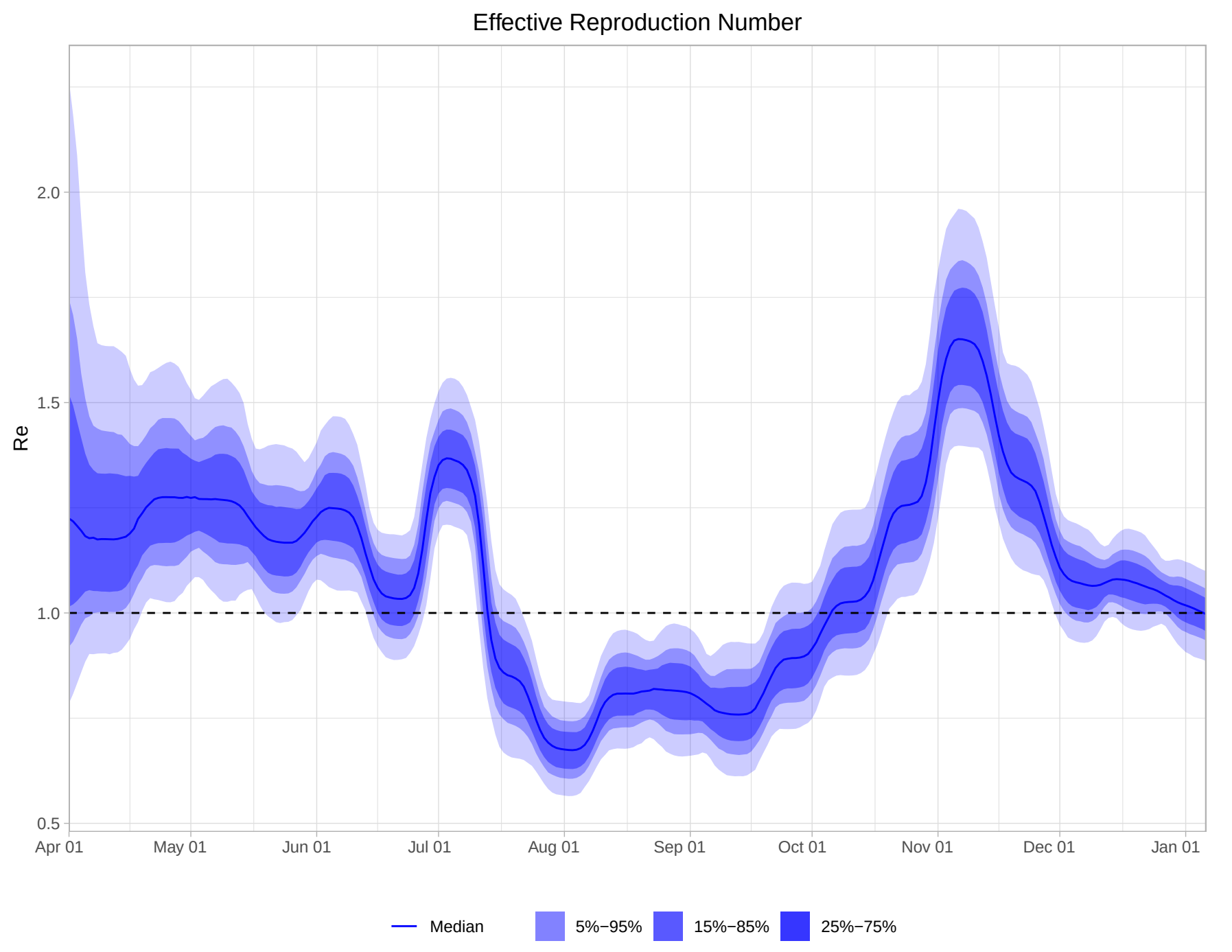

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
150
100
50
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
20
15
10
5
0
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
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

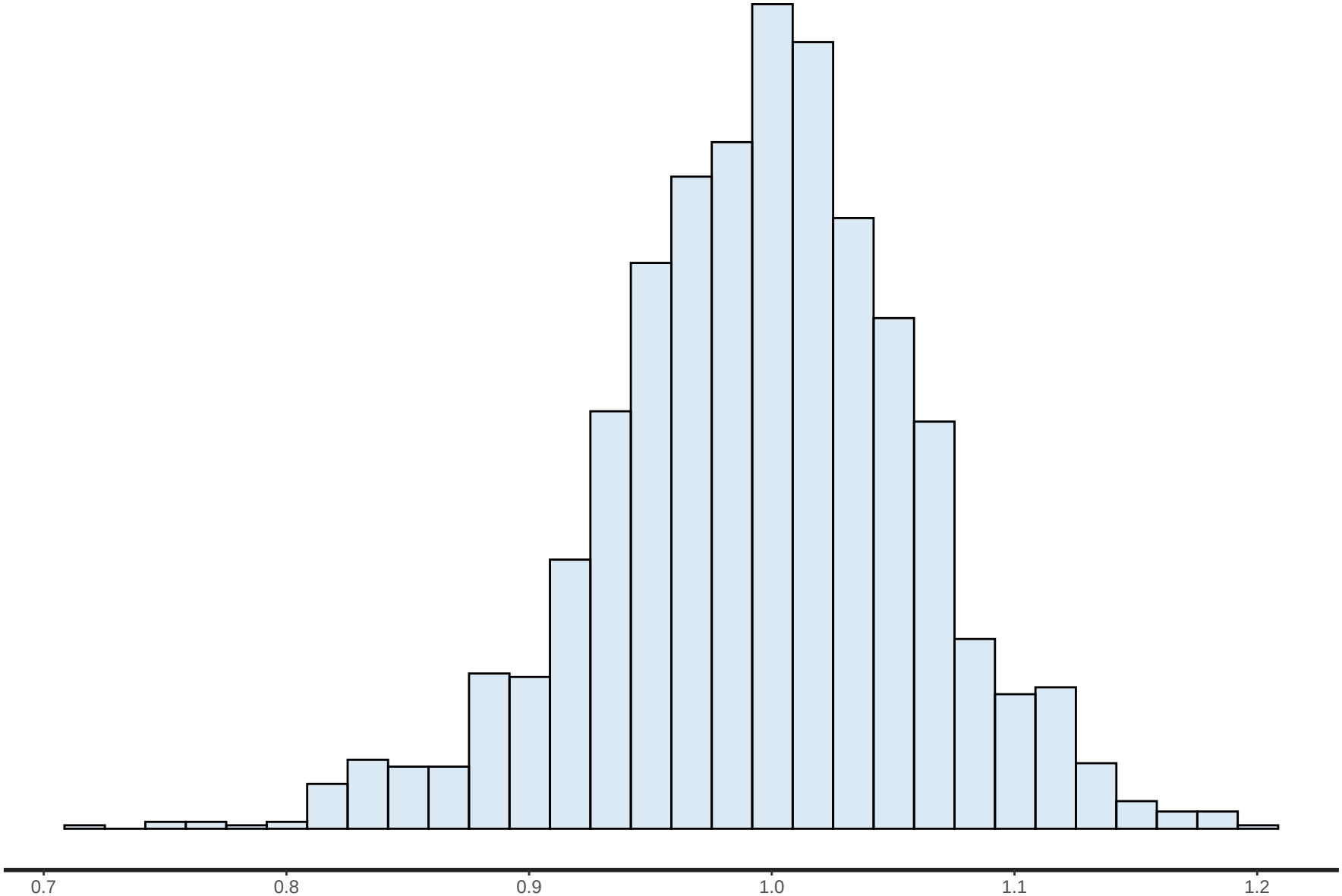

Short Term Death Projection
Number of COVID19 Deaths
160
120
80
40
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

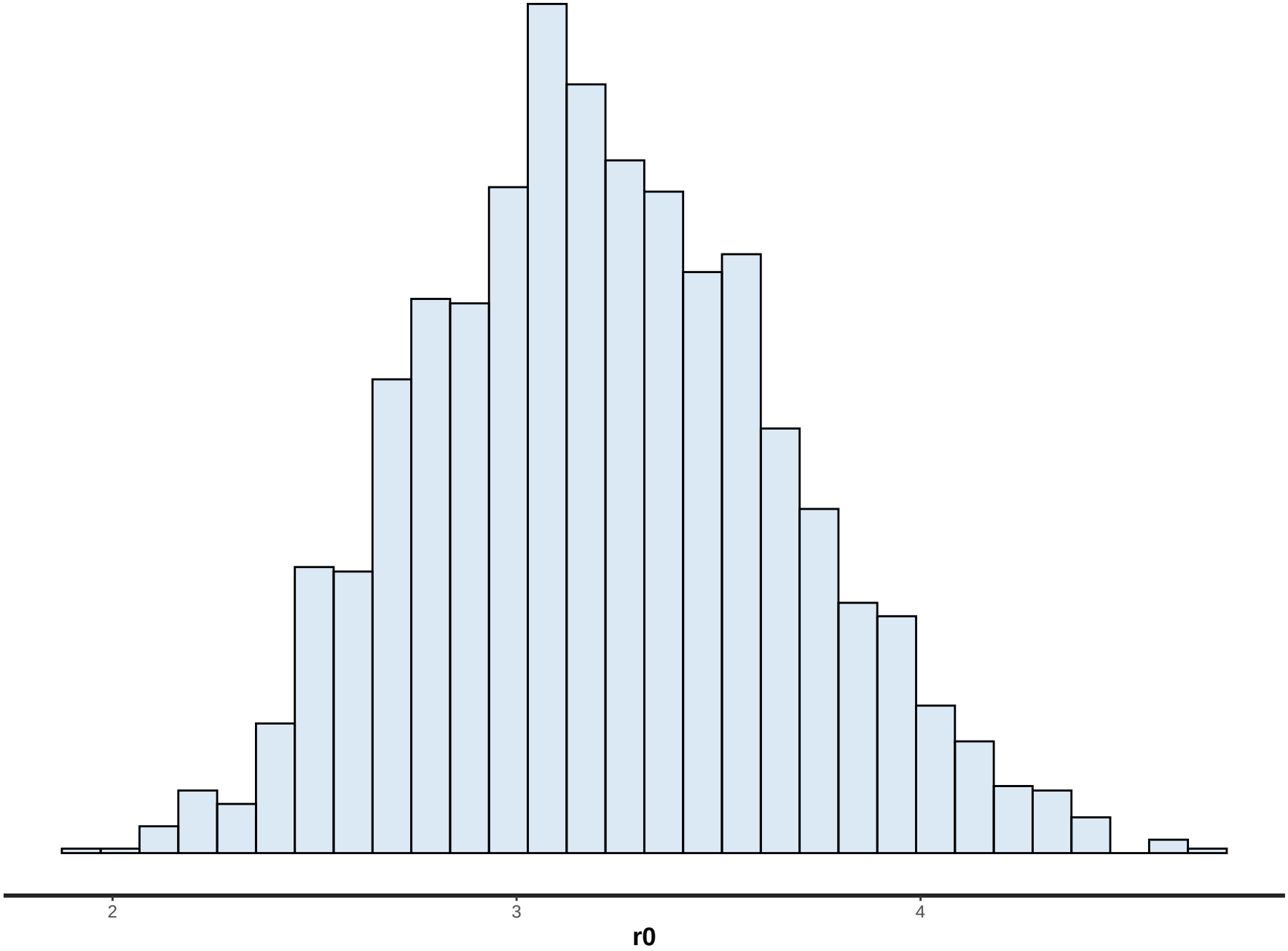

Long Term Death Projection
Number of COVID19 Deaths
200
150
100
50
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

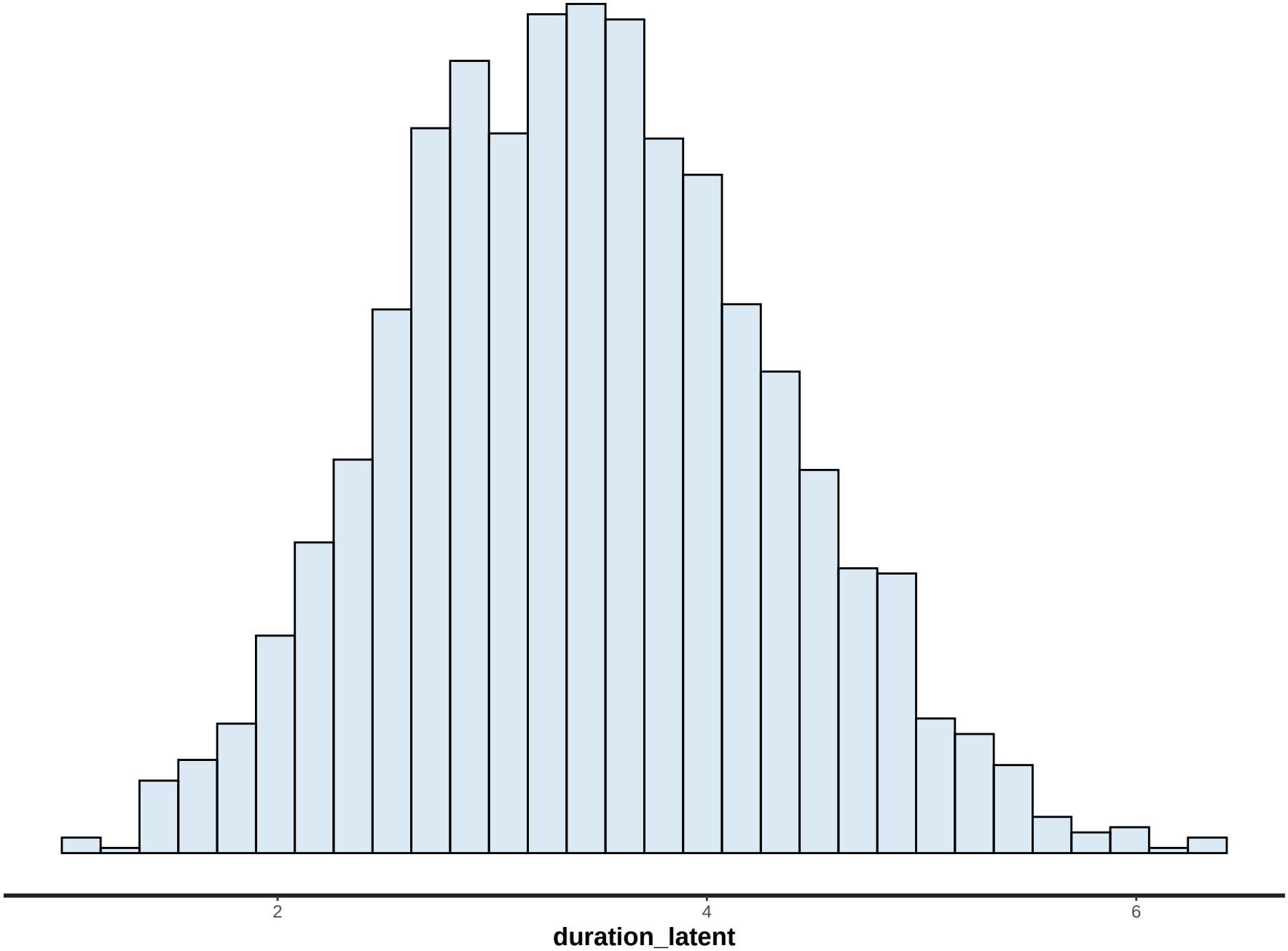

Effective Reproduction Number
Re
2.0
1.5
1.0
0.5
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
5%−95%
15%−85%
25%−75%

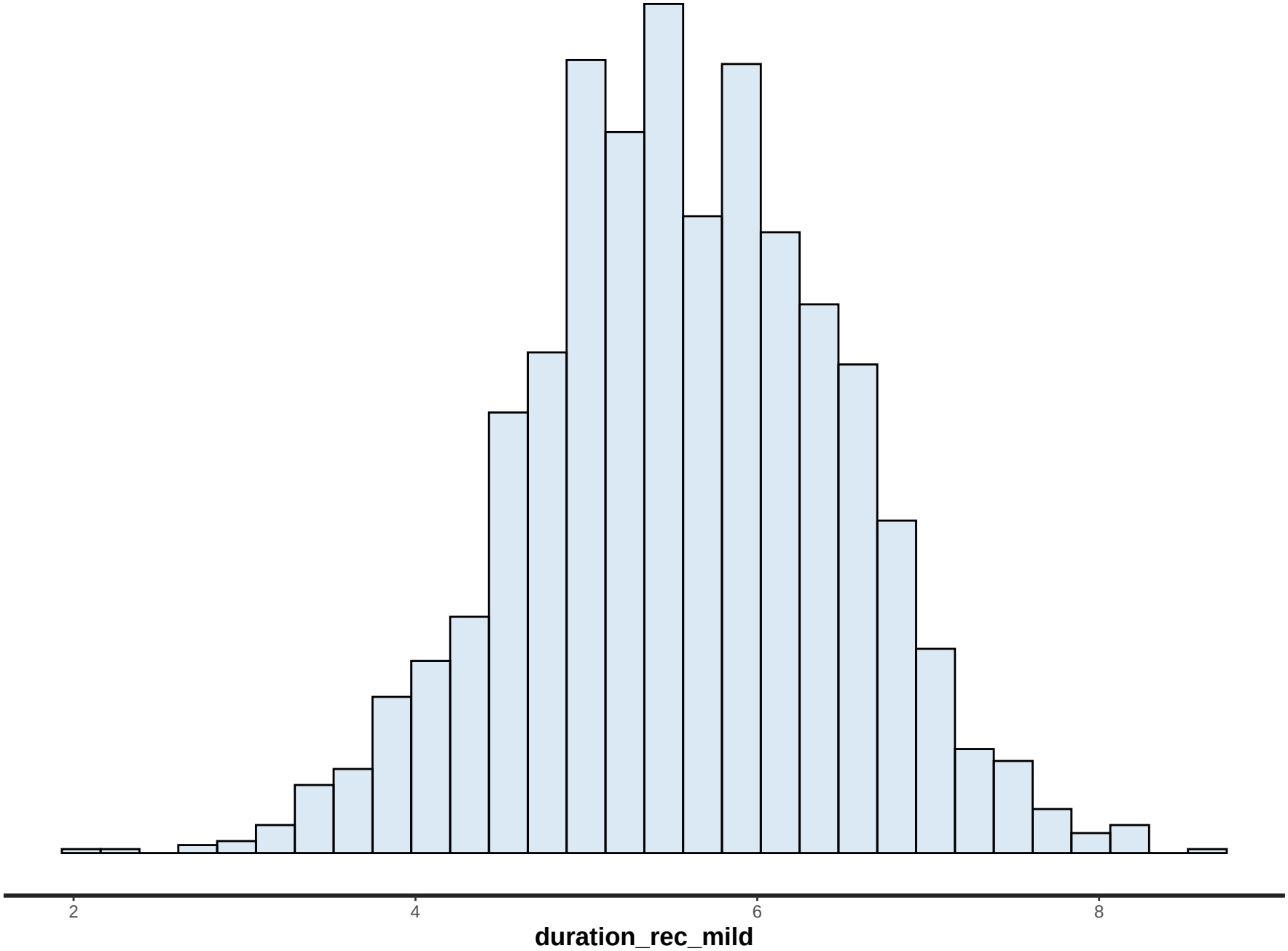
Rt as of 2021−01−06

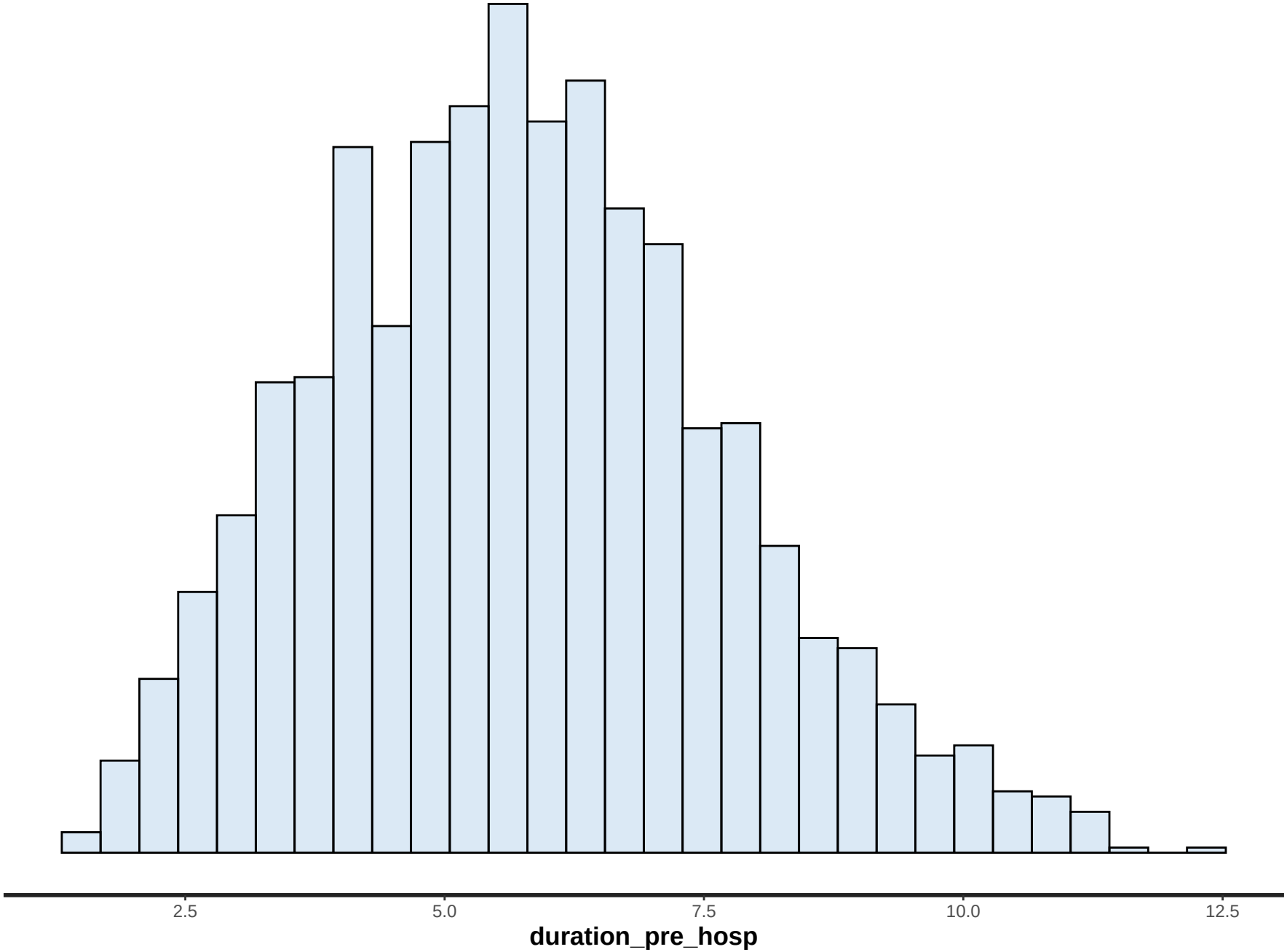
5%	10%	25%	50%	75%	90%	95%
0.89	0.92	0.96	1.00	1.04	1.07	1.10

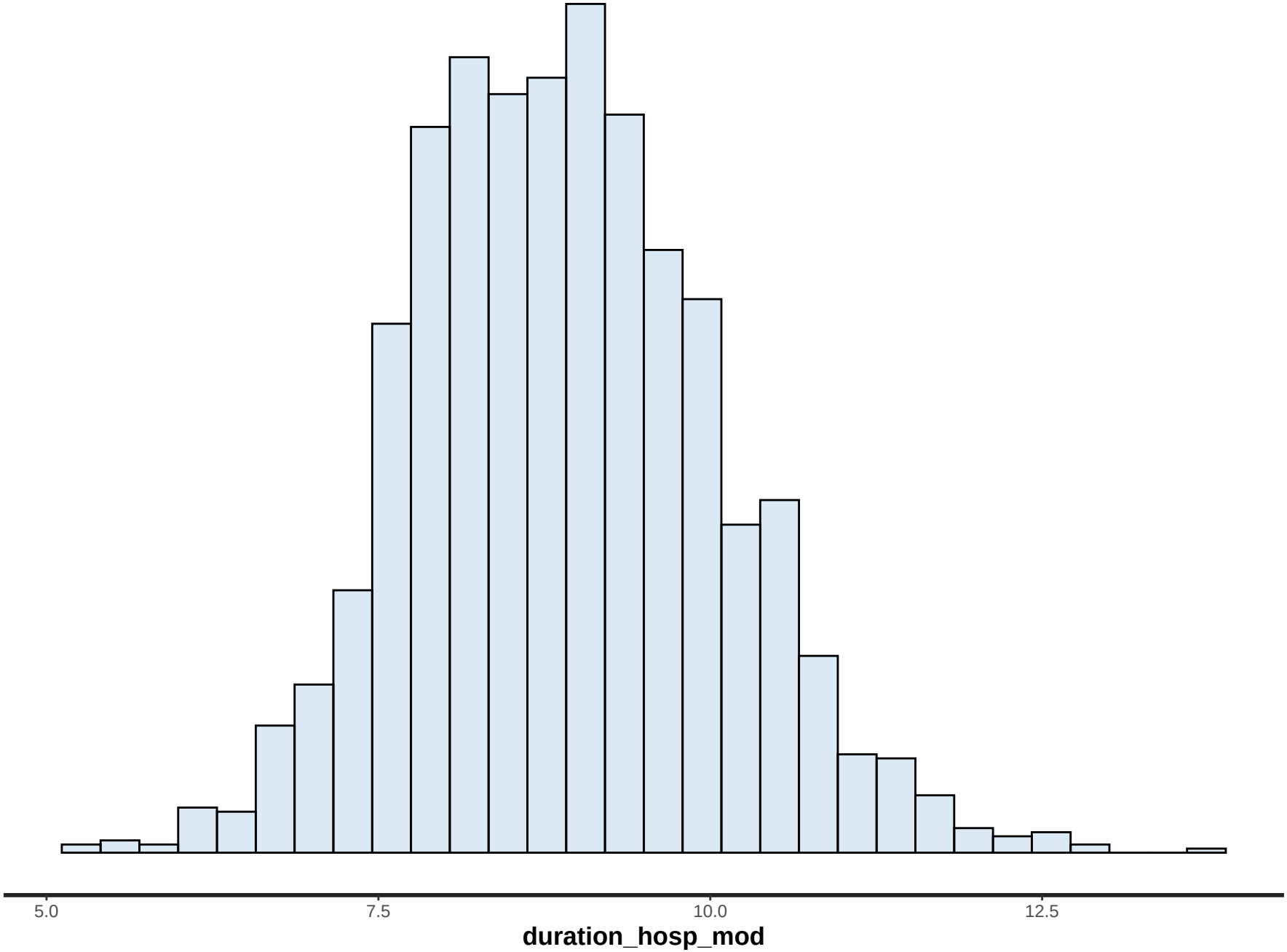


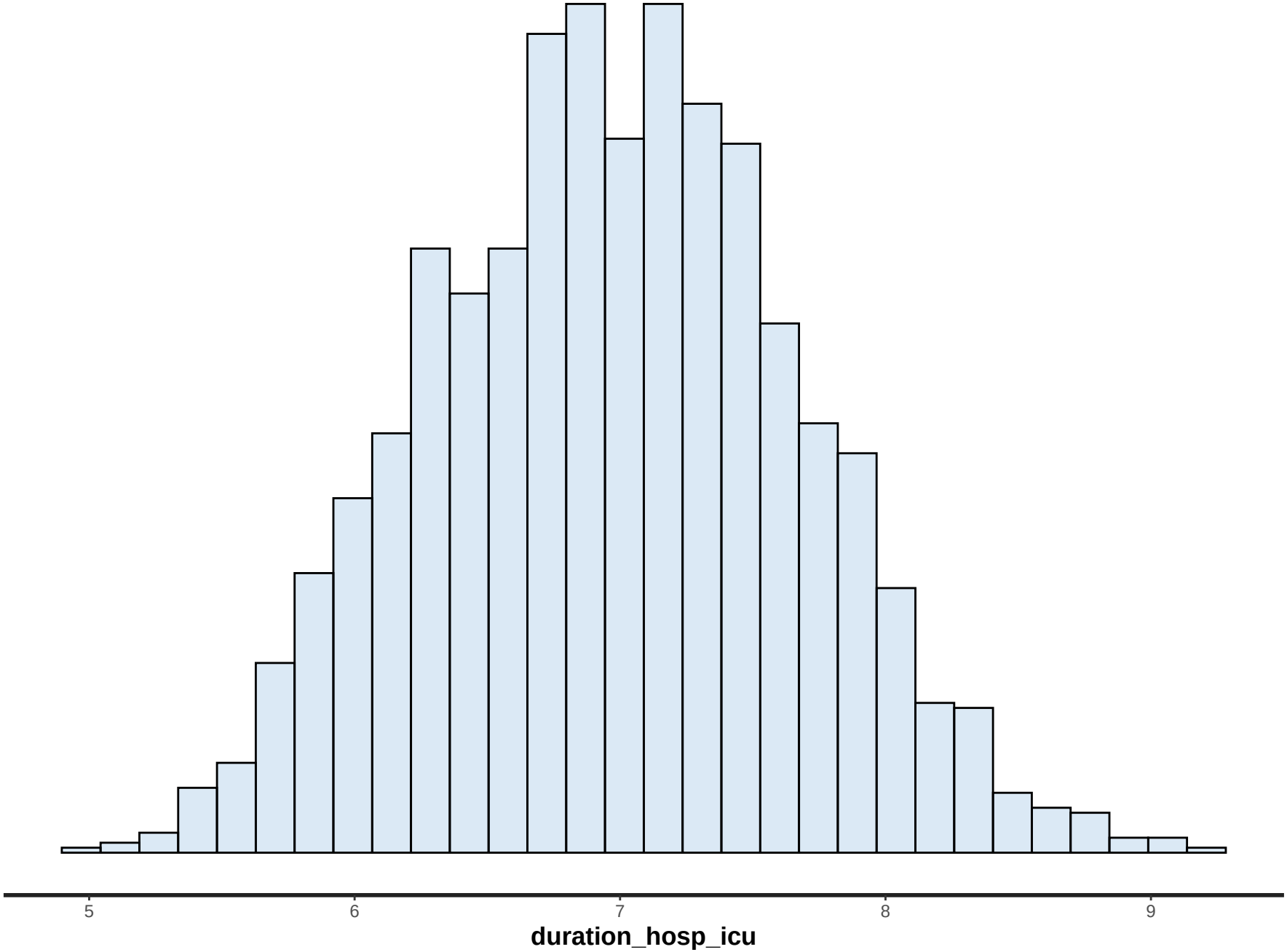

2
3
4
r0

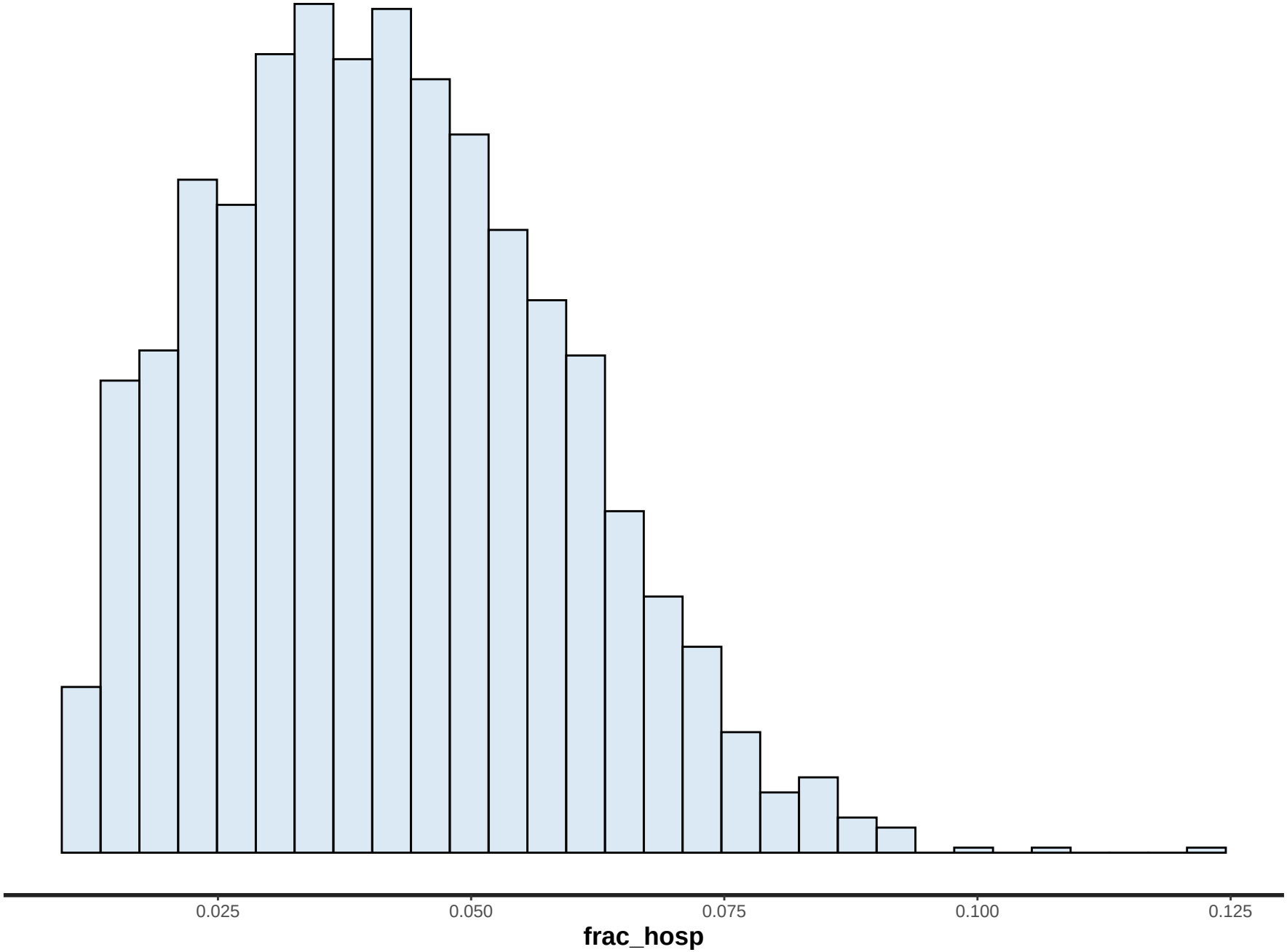

2
4
6
duration_latent

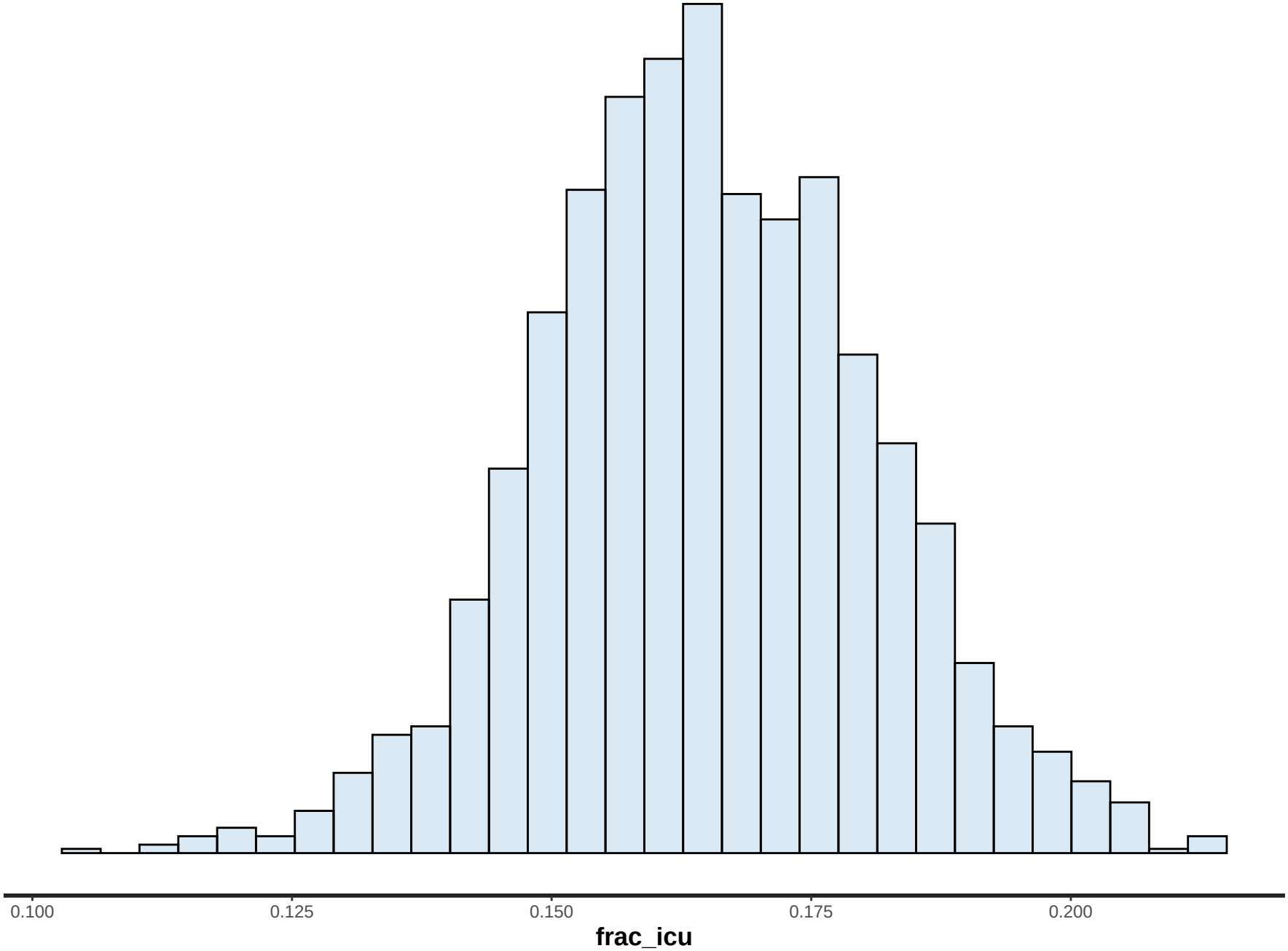

2
4
6
8
duration_rec_mild

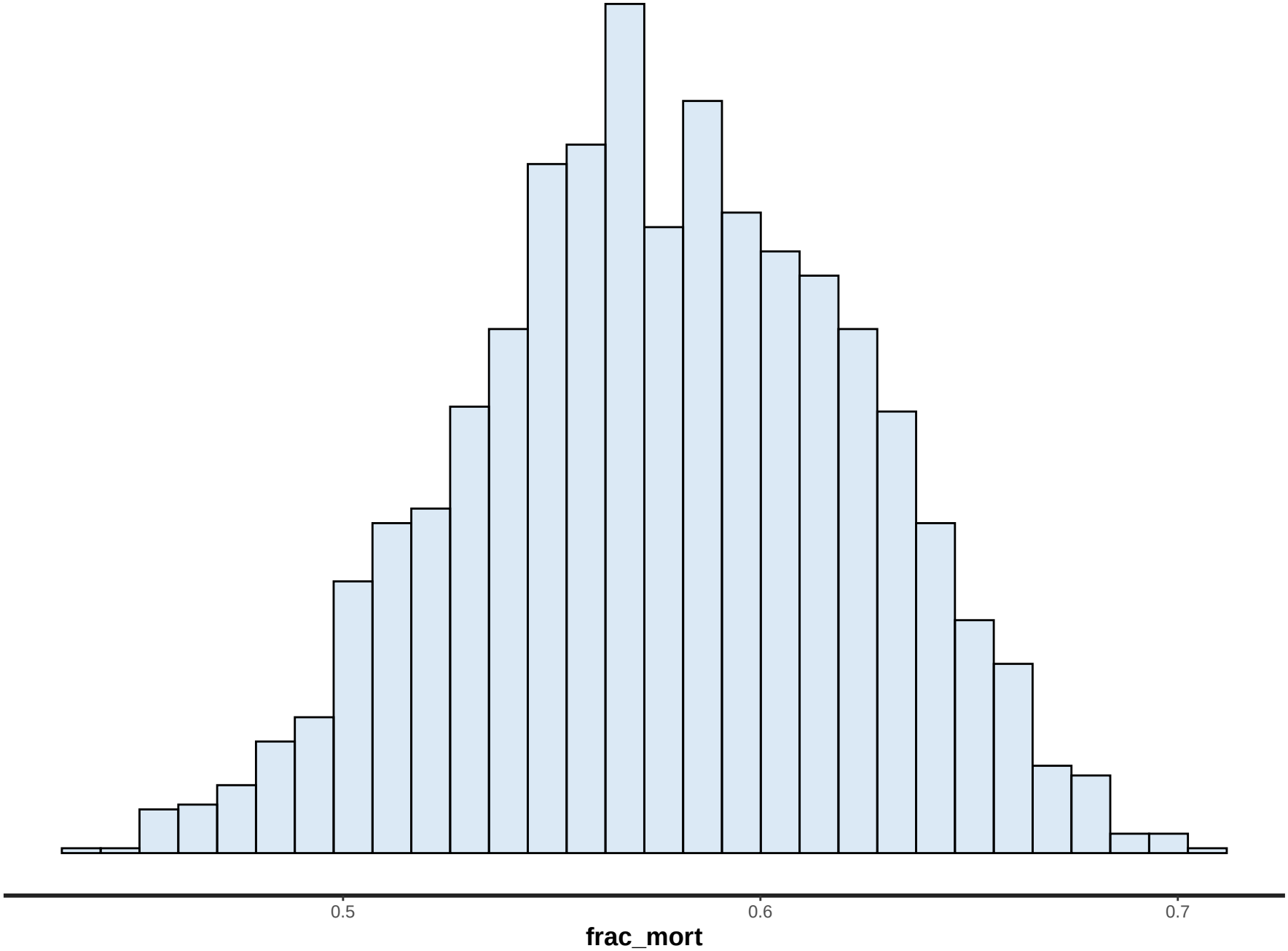

2.5
5.0
7.5
10.0
12.5
duration_pre_hosp

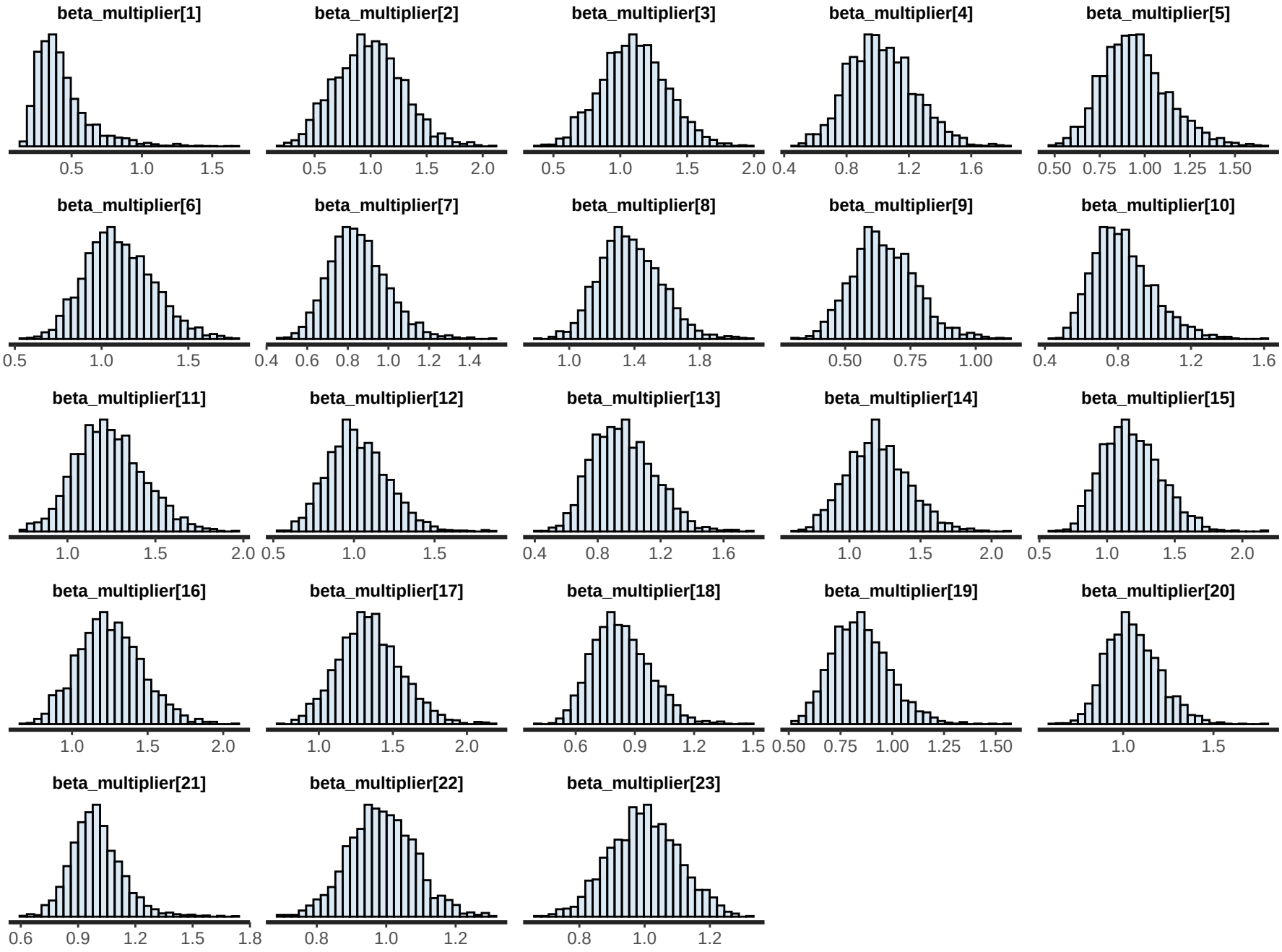

5.0
7.5
10.0
12.5
duration_hosp_mod


5
6
7
8
9
duration_hosp_icu


0.025
0.050
0.075
0.100
0.125
frac_hosp


0.100
0.125
0.150
0.175
0.200
frac_icu


0.5
0.6
0.7
frac_mort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beta_multiplier[2]
0.5 1.0 1.5 2.0
beta_multiplier[3]
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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]
0.5 1.0 1.5
beta_multiplier[7]
0.4 0.6 0.8 1.0 1.2 1.4
beta_multiplier[8]
1.0 1.4 1.8
beta_multiplier[9]
0.50 0.75 1.00
beta_multiplier[10]
0.4 0.8 1.2 1.6
beta_multiplier[11]
1.0 1.5 2.0
beta_multiplier[12]
0.5 1.0 1.5
beta_multiplier[13]
0.4 0.8 1.2 1.6
beta_multiplier[14]
1.0 1.5 2.0
beta_multiplier[15]
0.5 1.0 1.5 2.0
beta_multiplier[16]
1.0 1.5 2.0
beta_multiplier[17]
1.0 1.5 2.0
beta_multiplier[18]
0.6 0.9 1.2 1.5
beta_multiplier[19]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[20]
1.0 1.5
beta_multiplier[21]
0.6 0.9 1.2 1.5 1.8
beta_multiplier[22]
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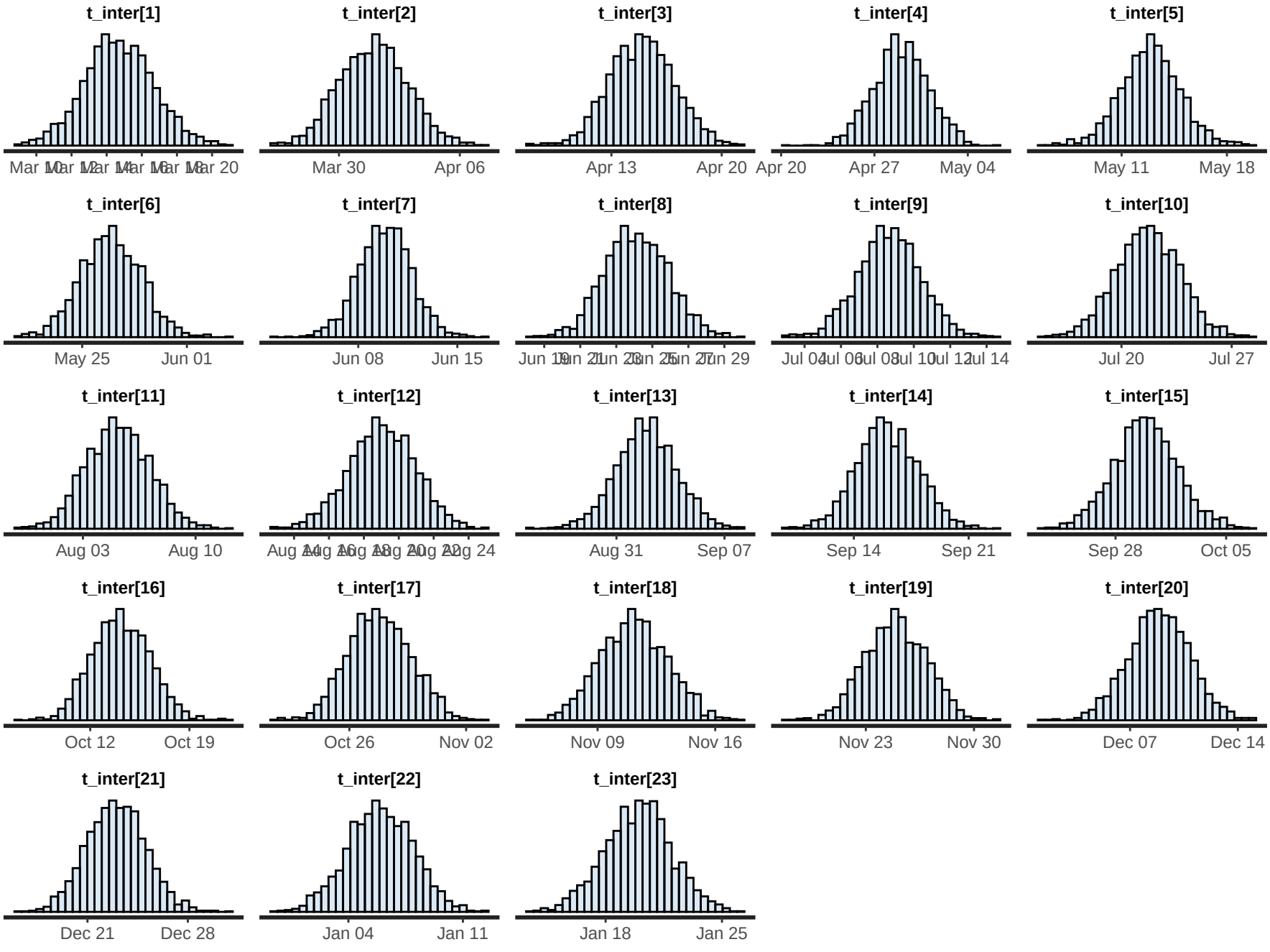
beta_multiplier[23]
0.8 1.0 1.2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Mar 10
Mar 12
Mar 14
Mar 16
Mar 18
Mar 20
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Mar 30
Apr 06
t_inter[3]
Apr 13
Apr 20
t_inter[4]
Apr 20
Apr 27
May 04
t_inter[5]
May 11
May 18
t_inter[6]
May 25
Jun 01
t_inter[7]
Jun 08
Jun 15
t_inter[8]
Jun 19
Jun 21
Jun 23
Jun 25
Jun 27
Jun 29
t_inter[9]
Jul 04
Jul 06
Jul 08
Jul 10
Jul 12
Jul 14
t_inter[10]
Jul 20
Jul 27
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Aug 10
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Aug 24
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Oct 19
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Nov 09
Nov 16
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Nov 23
Nov 30
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Dec 07
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Dec 21
Dec 28
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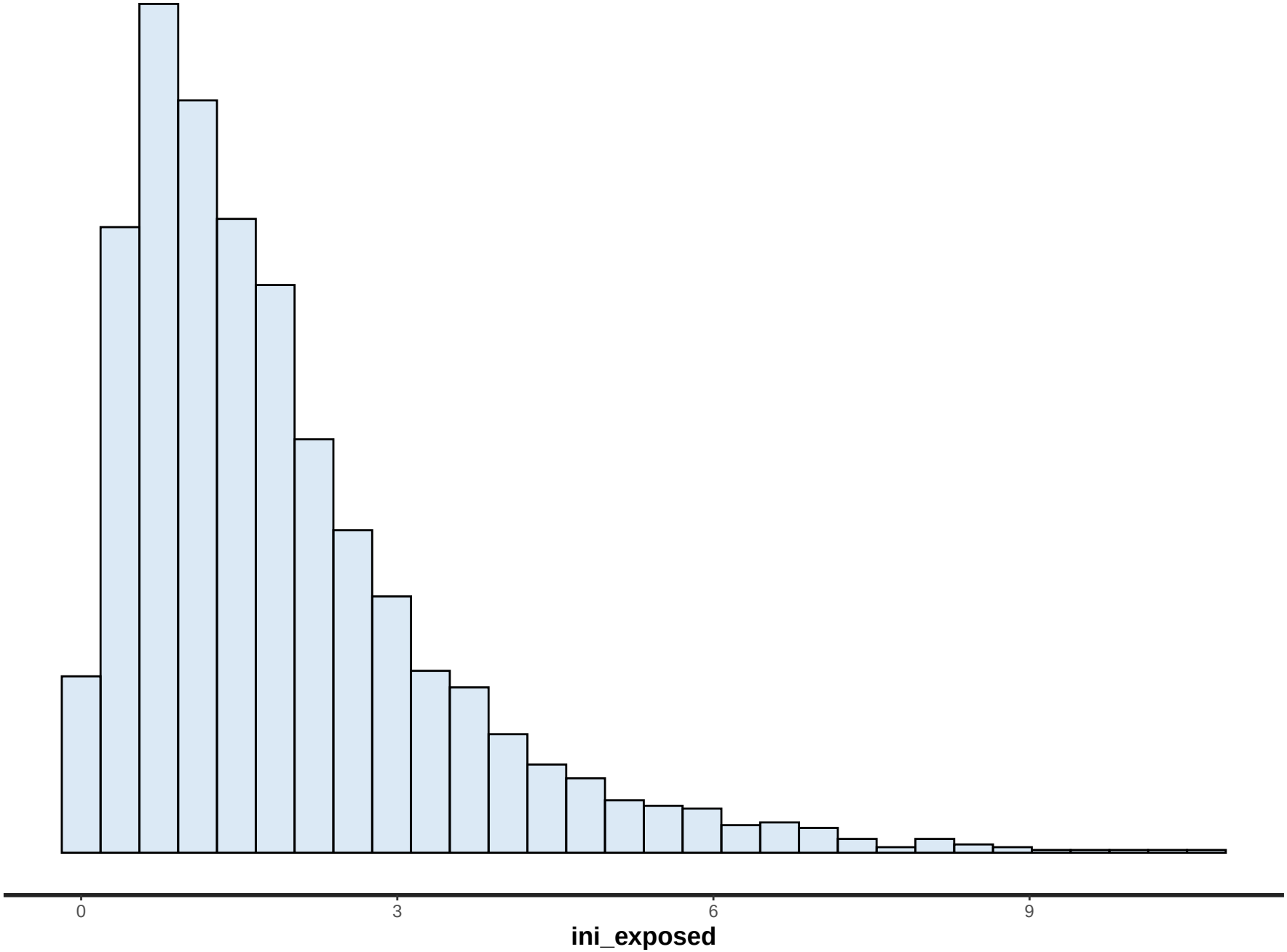
Jan 04
Jan 11
t_inter[23]
Jan 18
Jan 25


0
3
6
9
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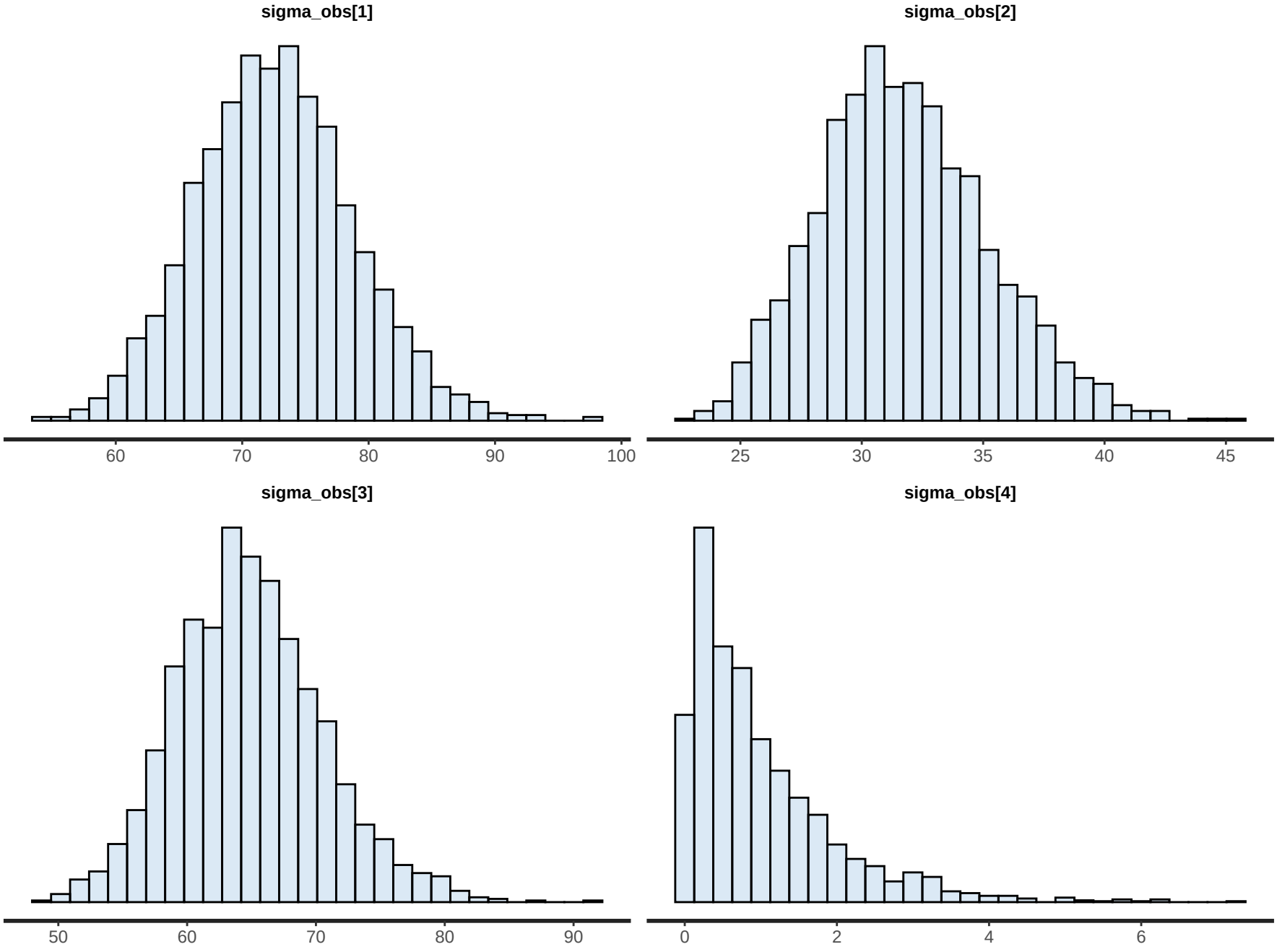
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80
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100
sigma_obs[2]
25
30
35
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sigma_obs[3]
50
60
70
80
90
sigma_obs[4]
0
2
4
6