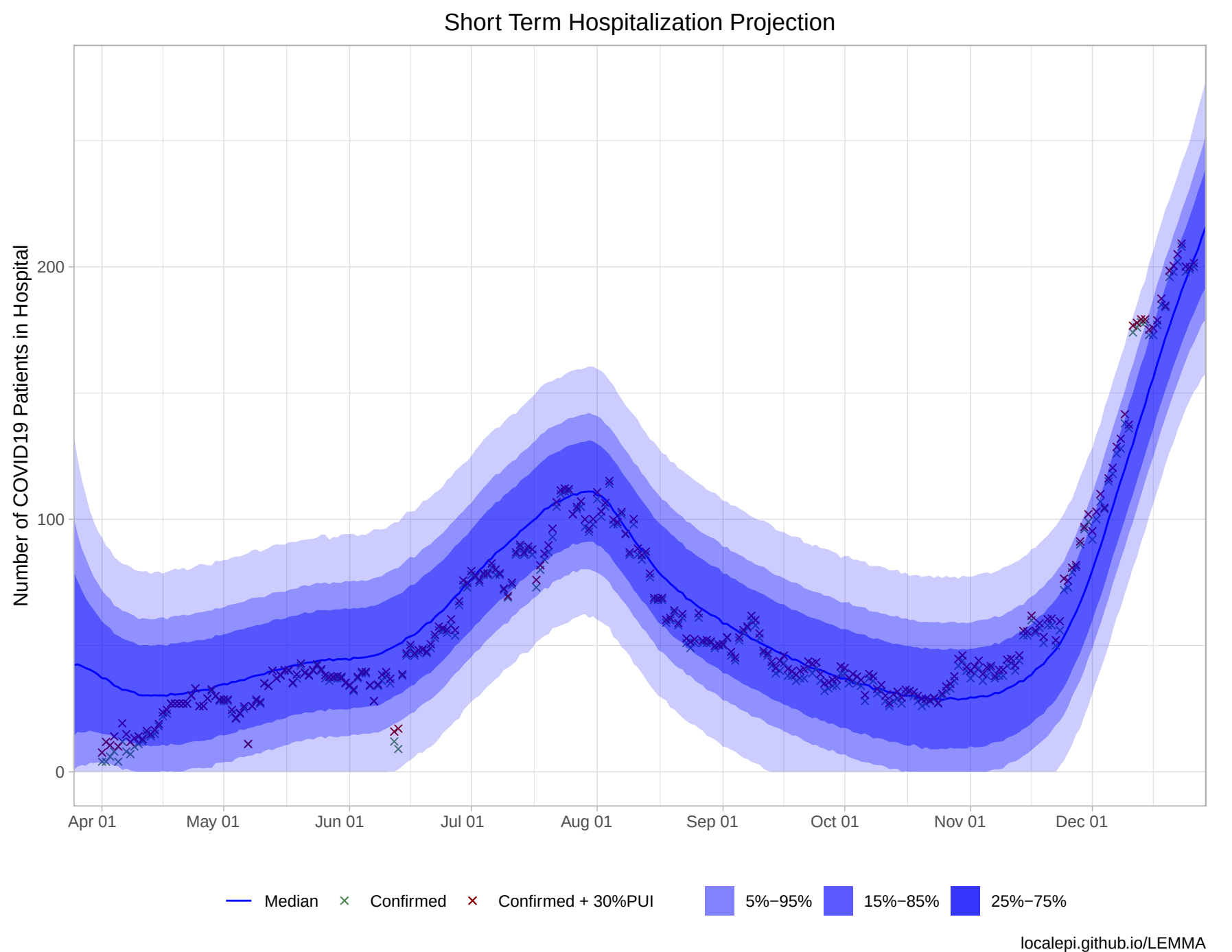
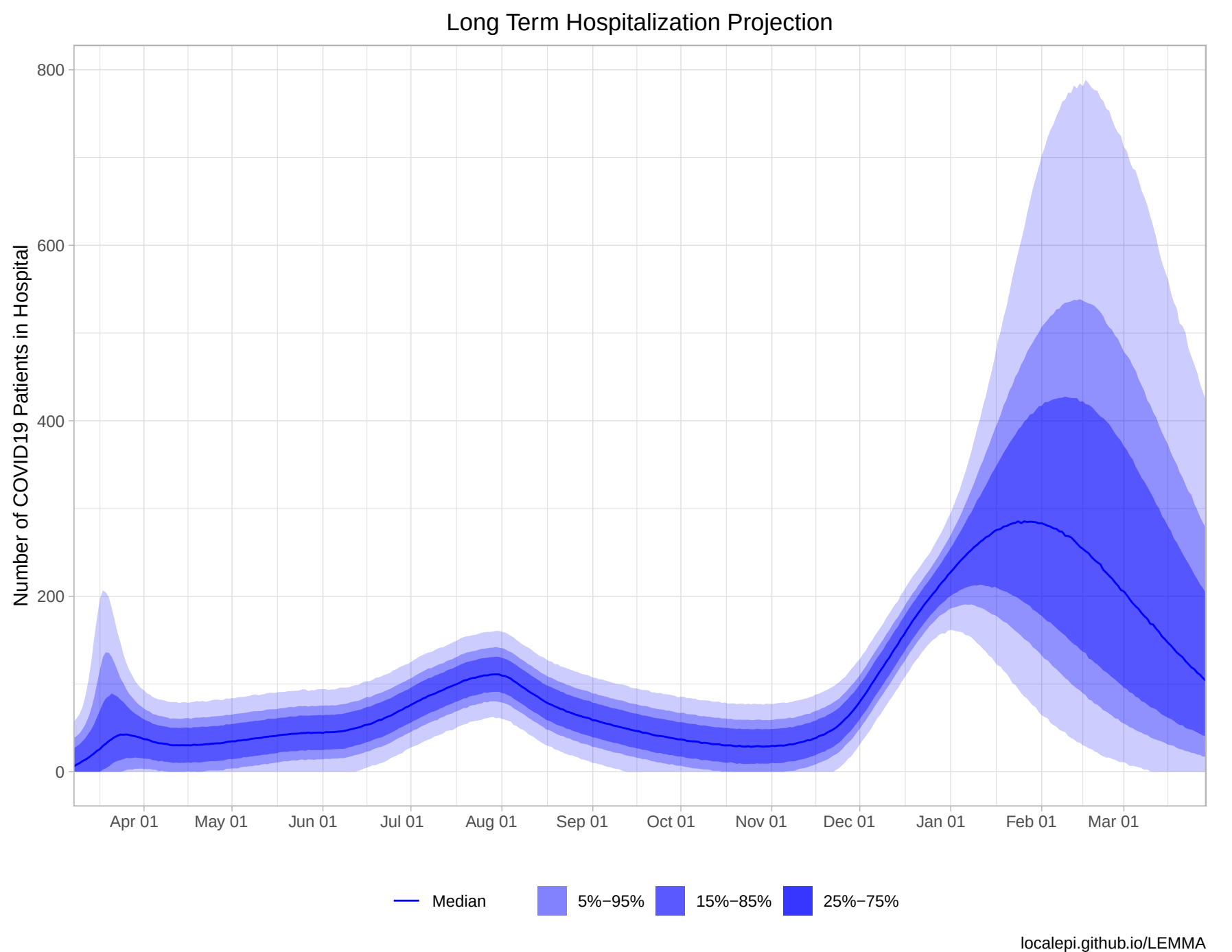
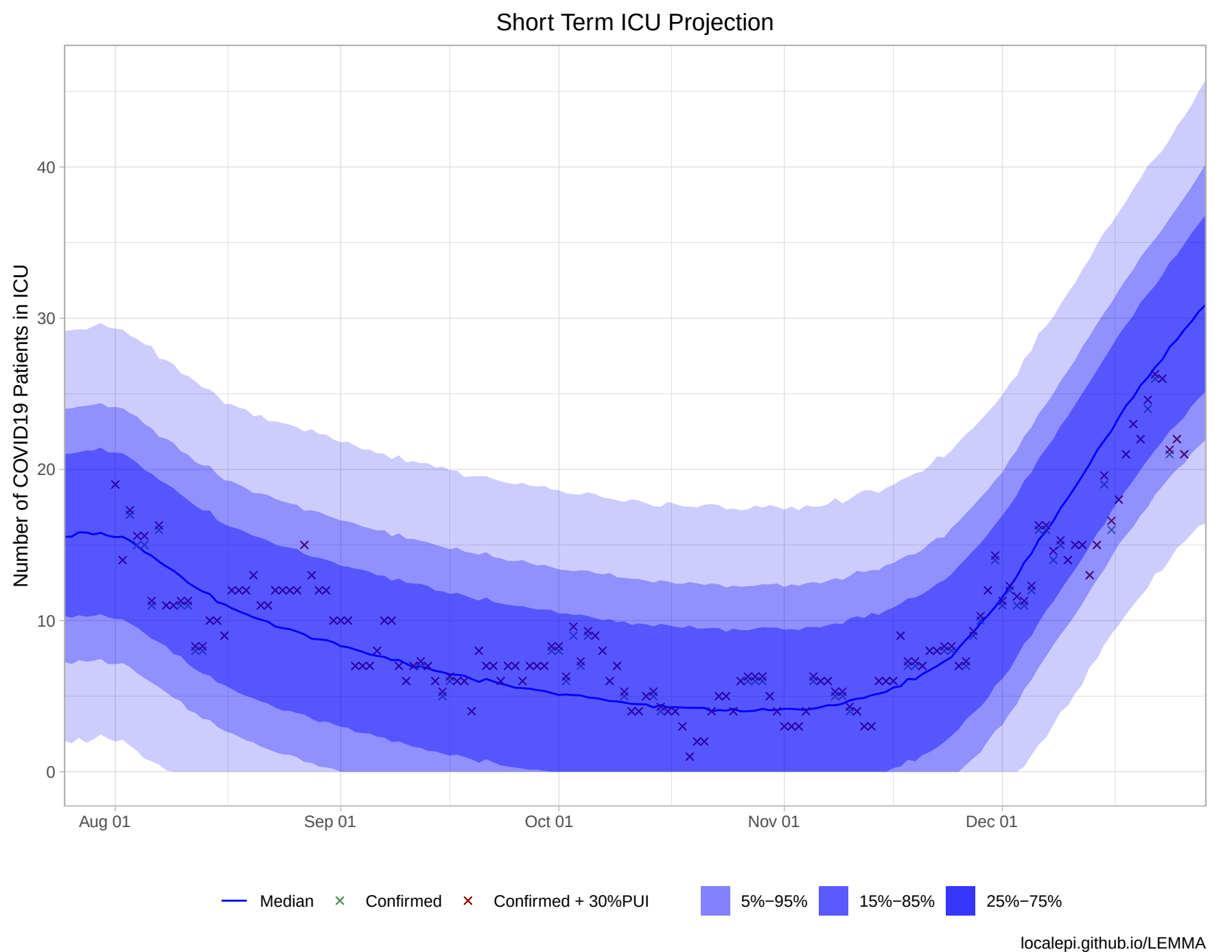
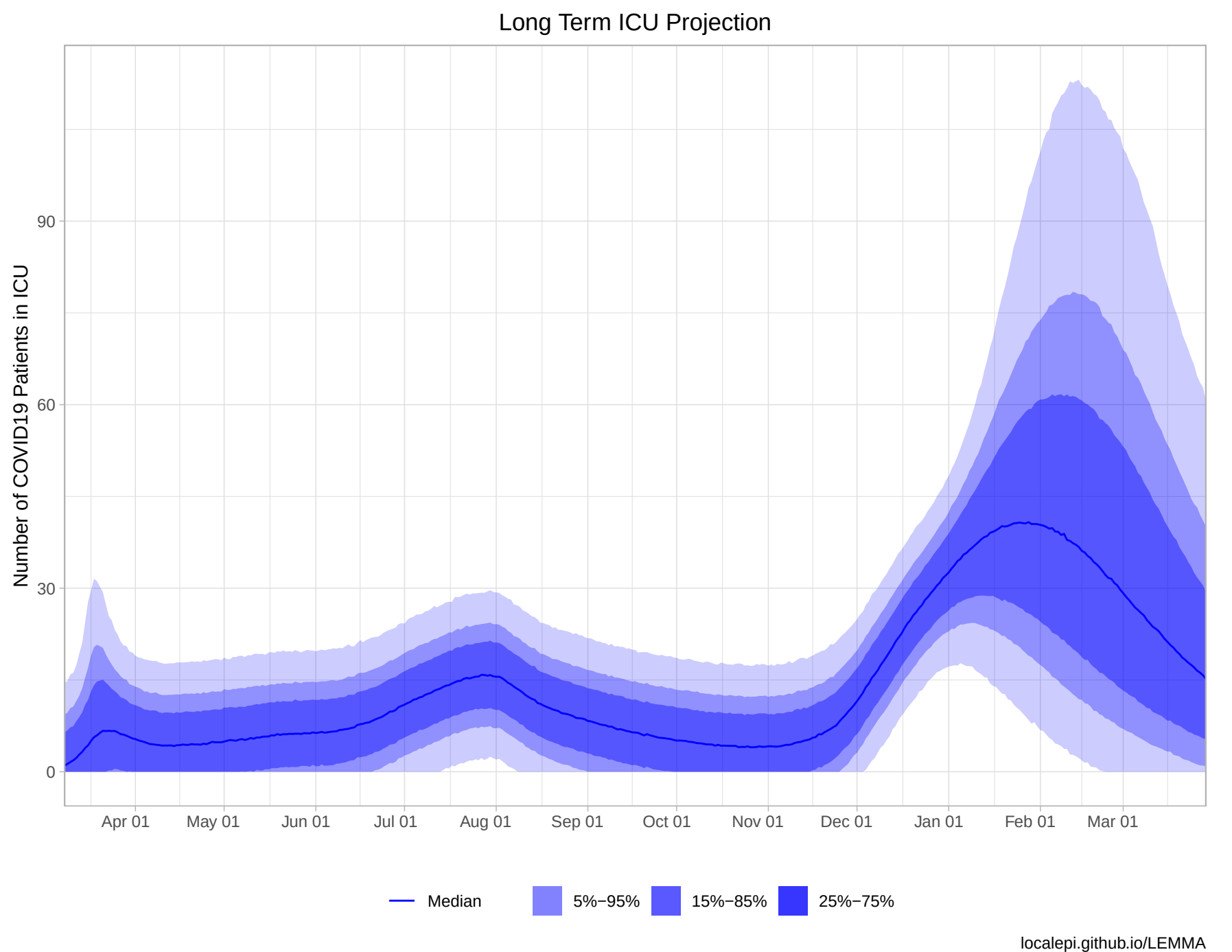
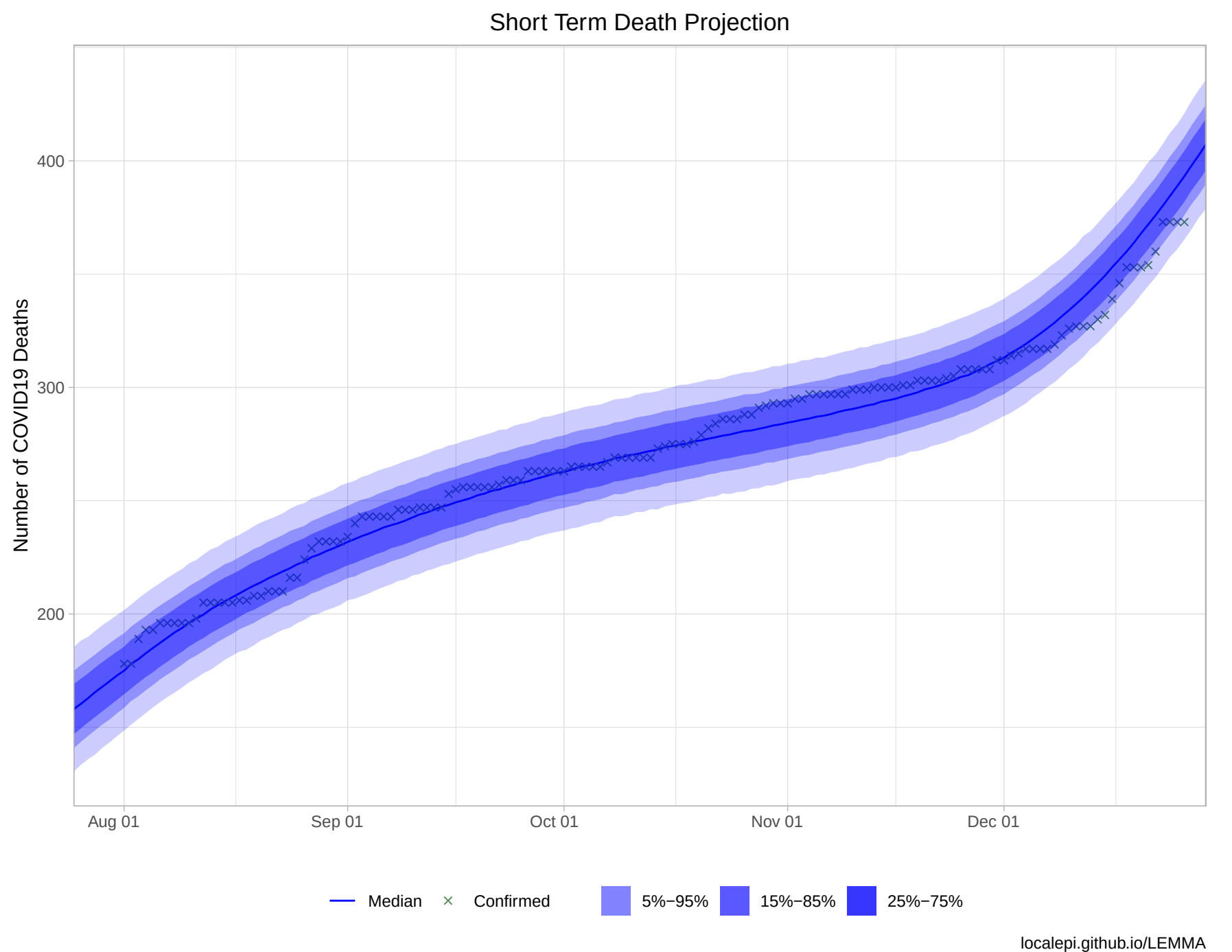
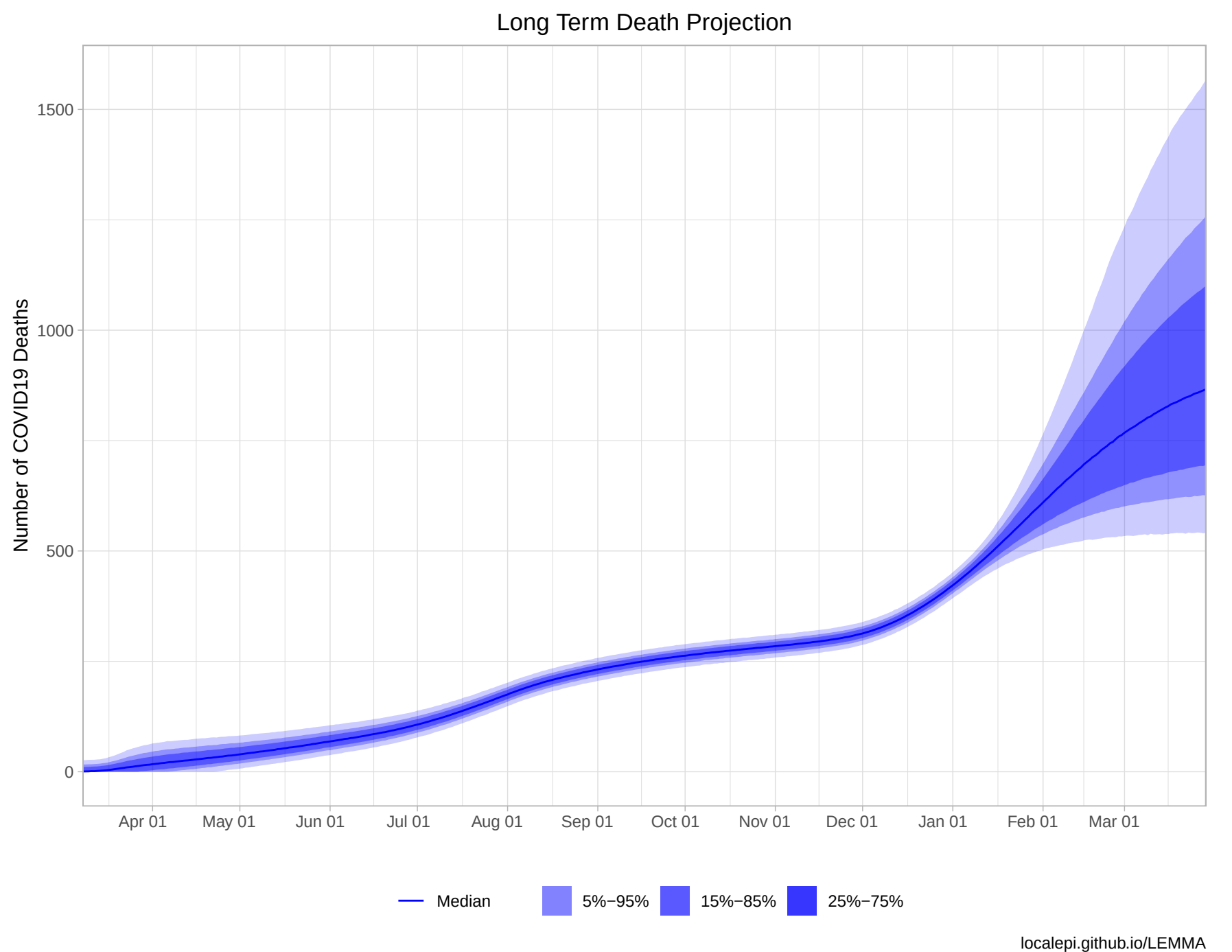

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
100
200
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

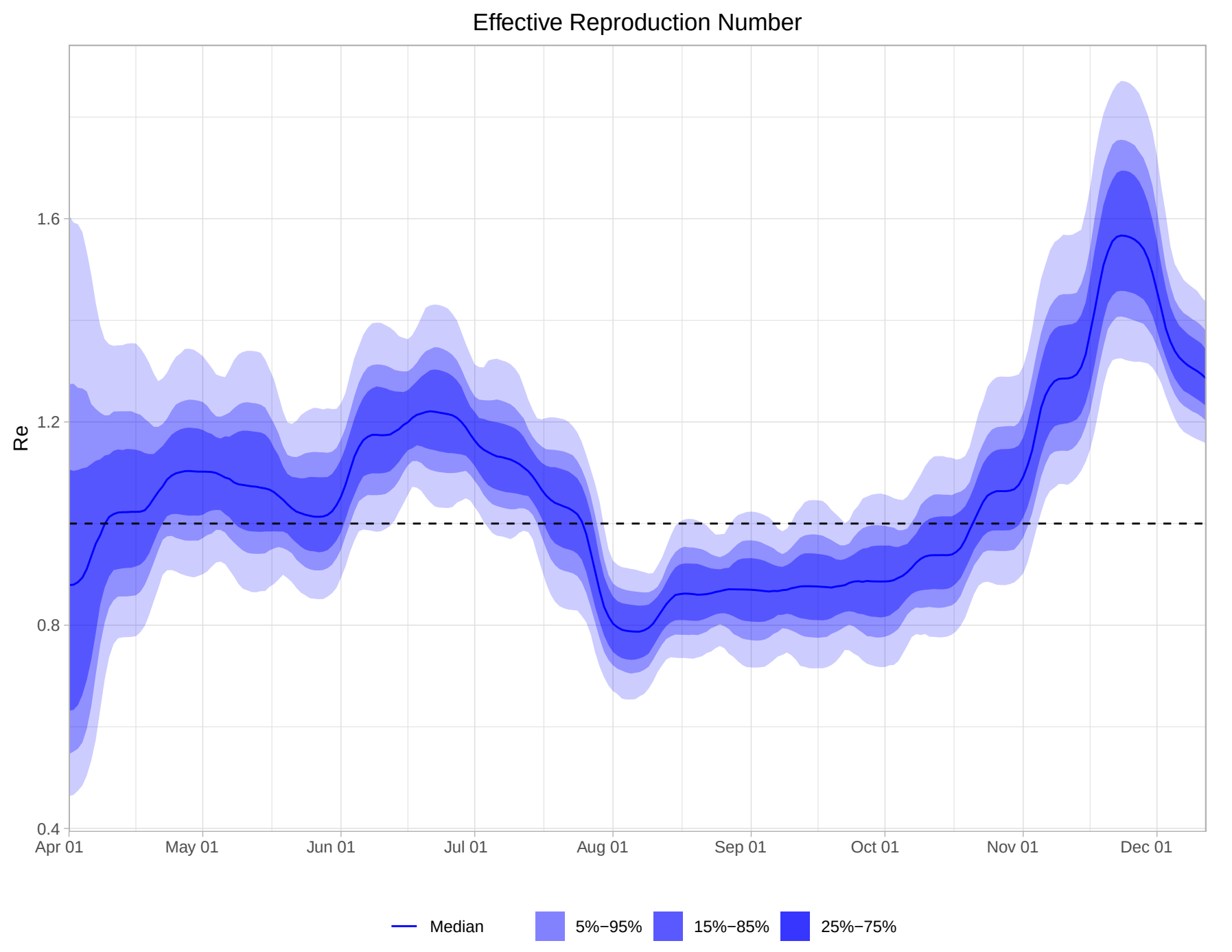

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
800
600
400
200
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
10
20
30
40
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
0
30
60
90
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

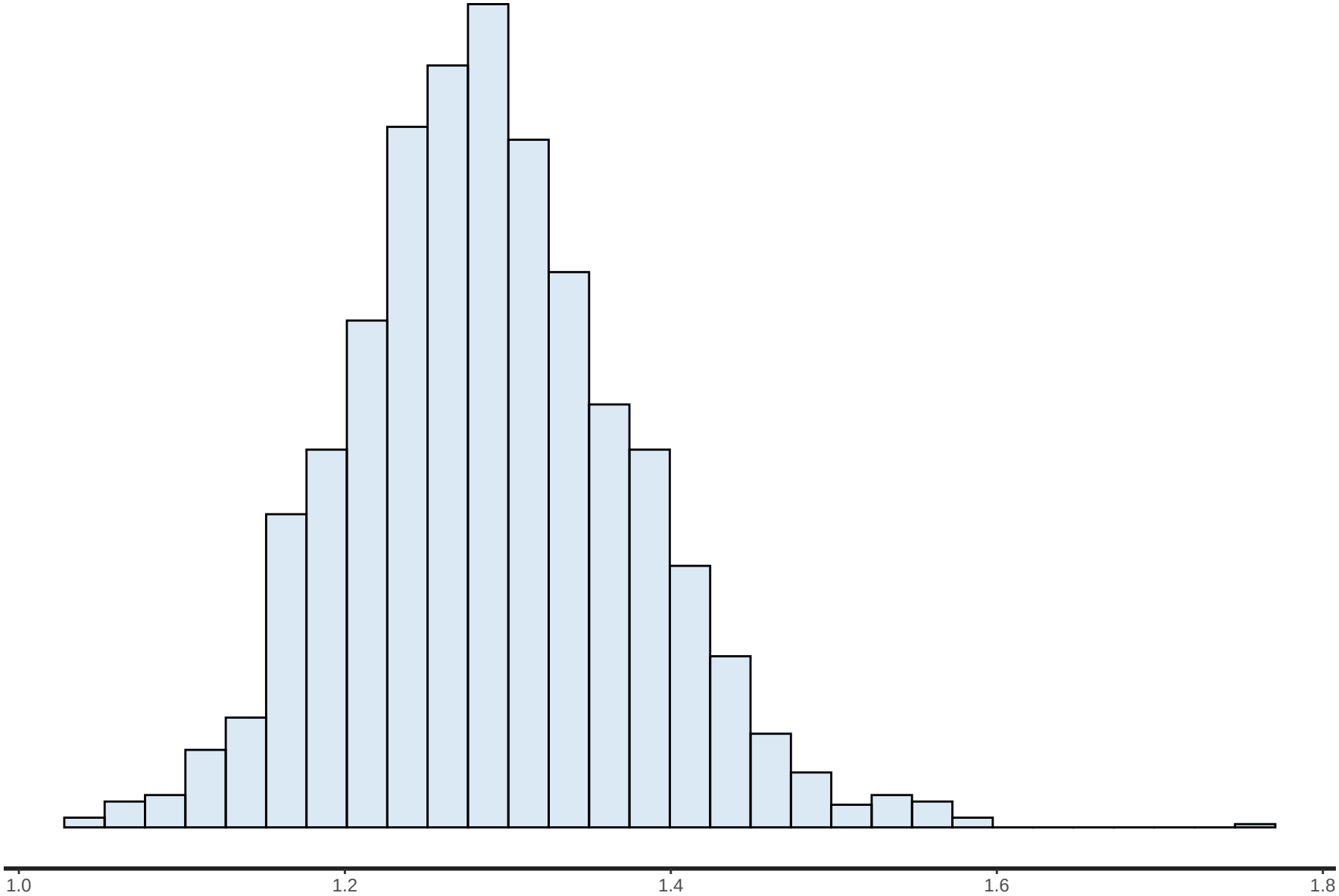

Short Term Death Projection
Number of COVID19 Deaths
400
300
200
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

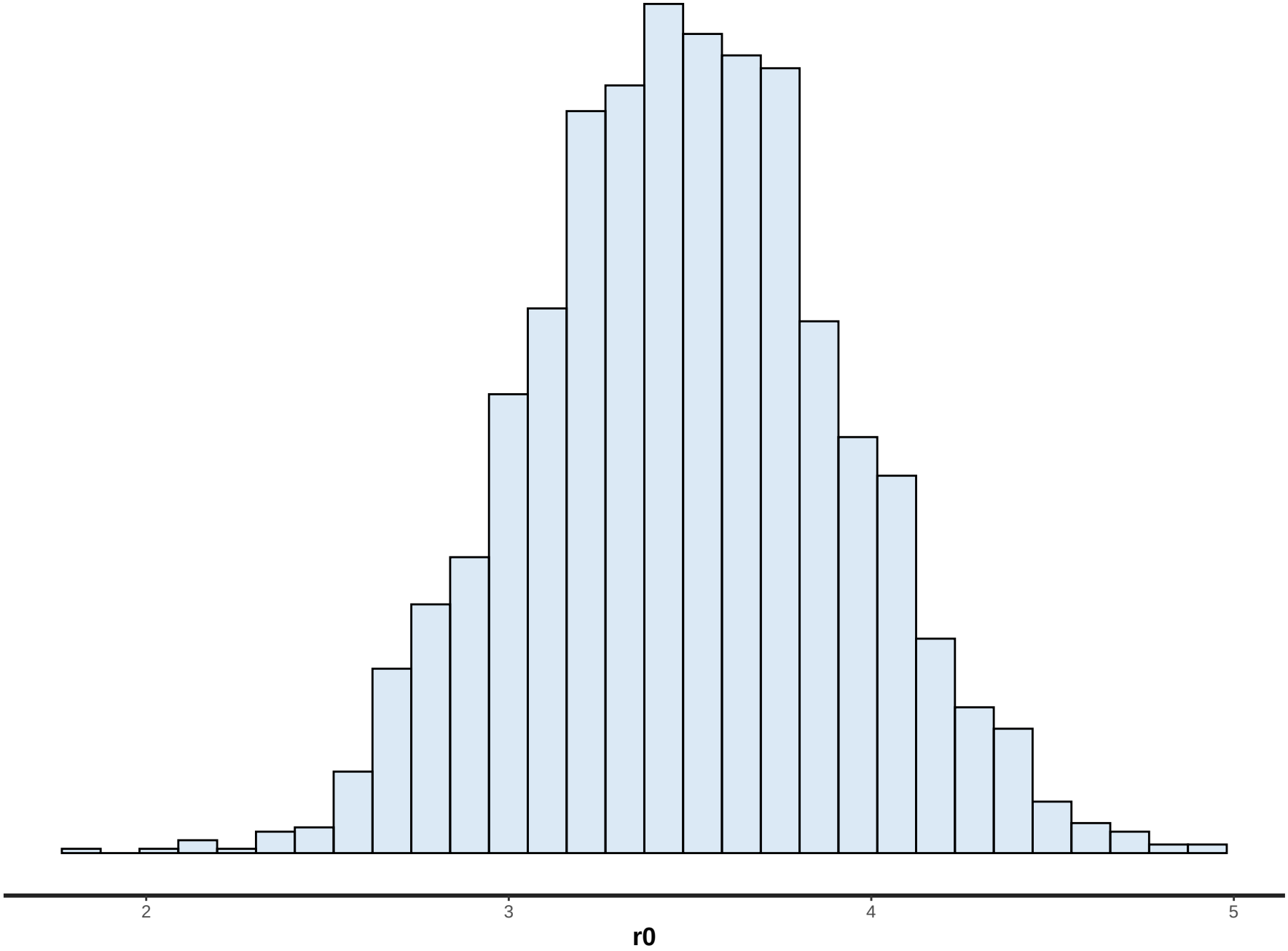

Long Term Death Projection
Number of COVID19 Deaths
1500
1000
500
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

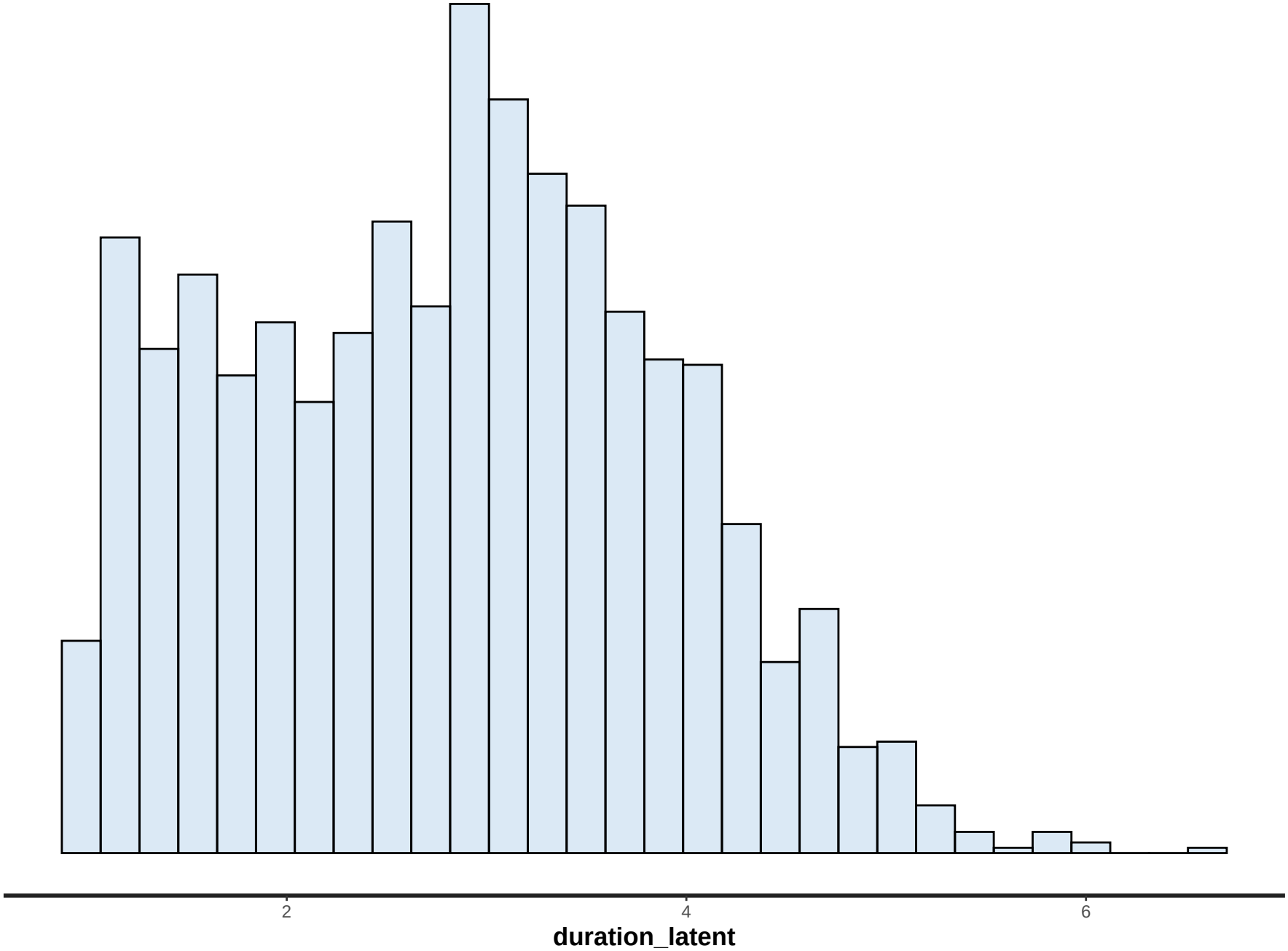

Effective Reproduction Number
Re
1.6
1.2
0.8
0.4
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

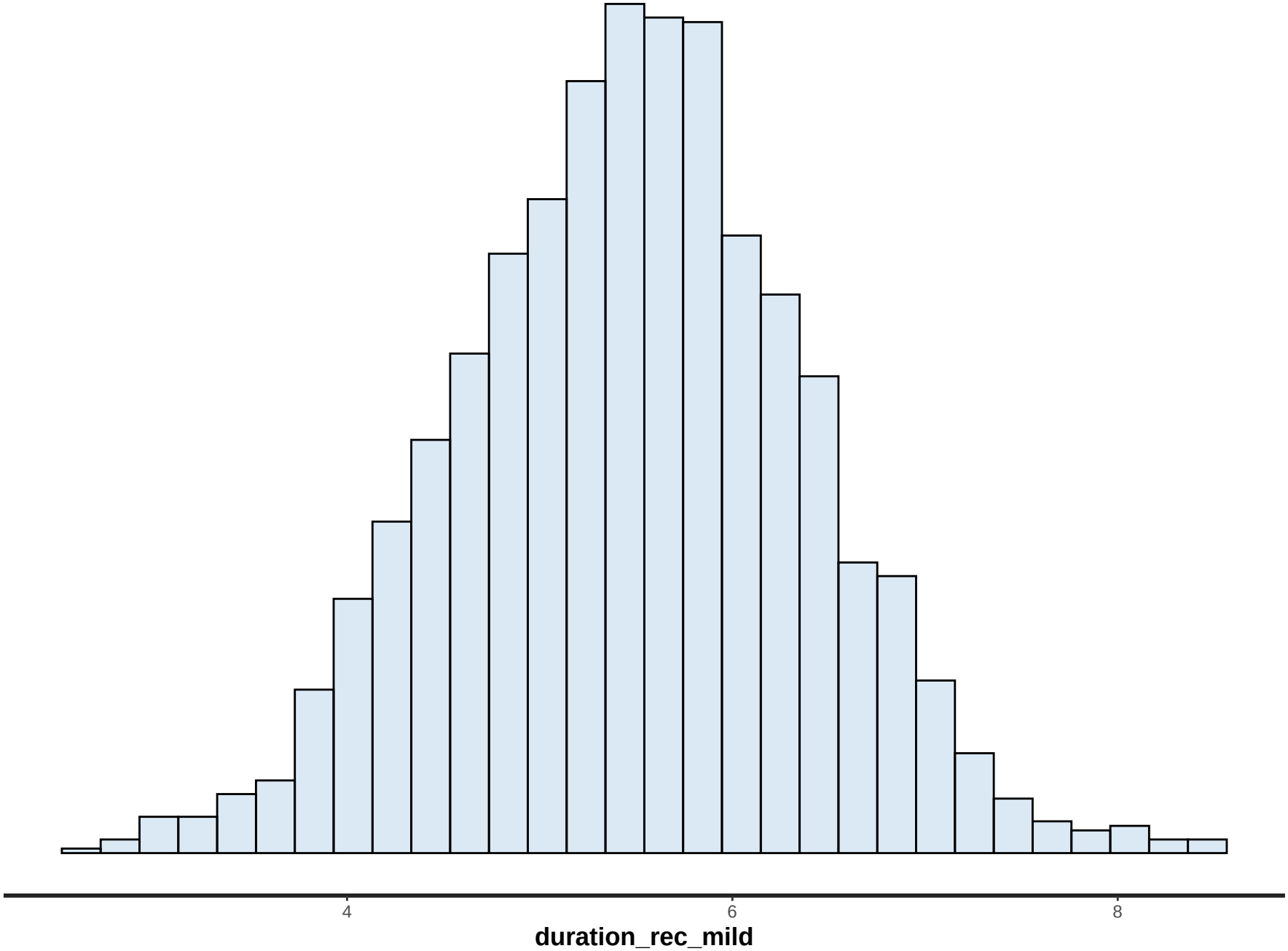
Rt as of 2020−12−12

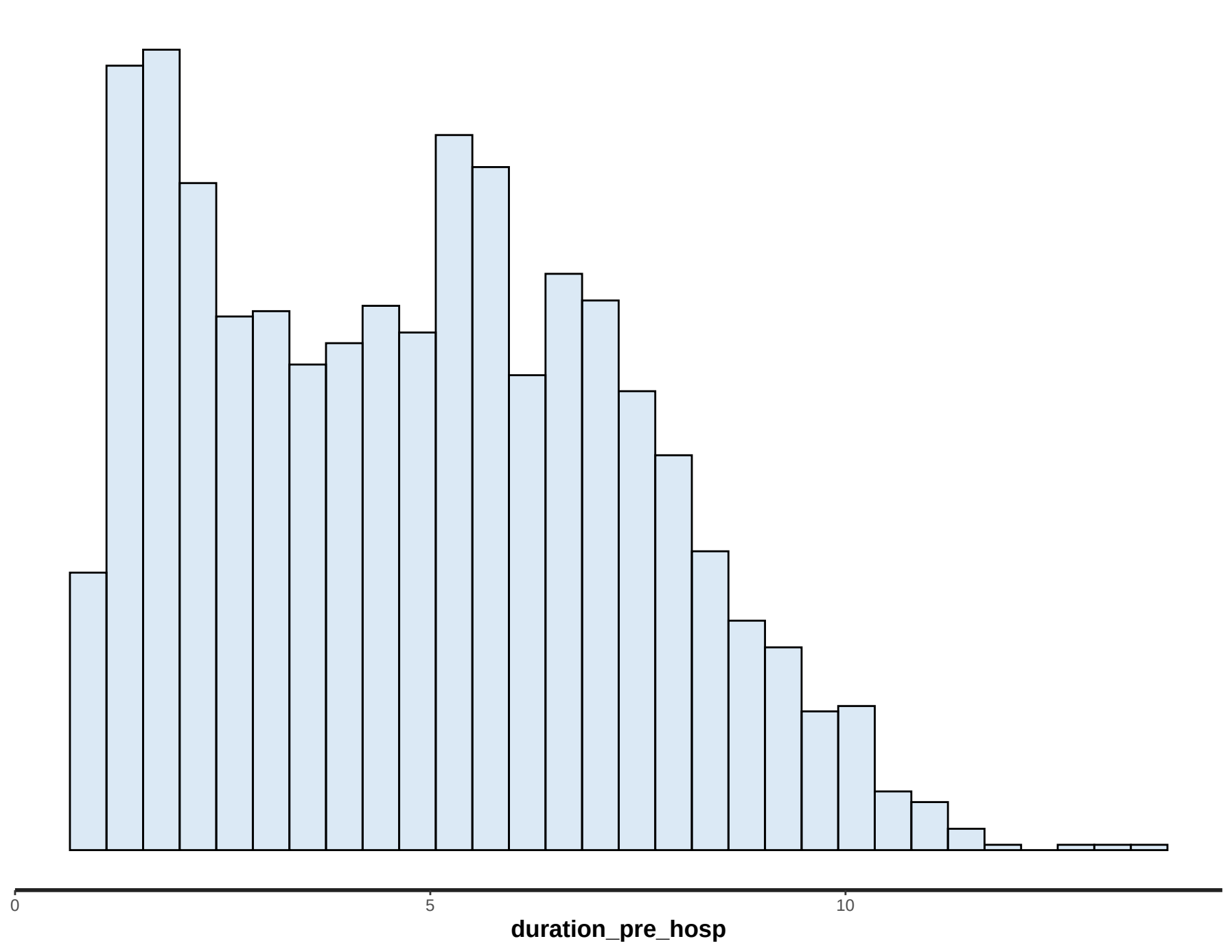
5%	10%	25%	50%	75%	90%	95%
1.16	1.18	1.23	1.29	1.34	1.40	1.44

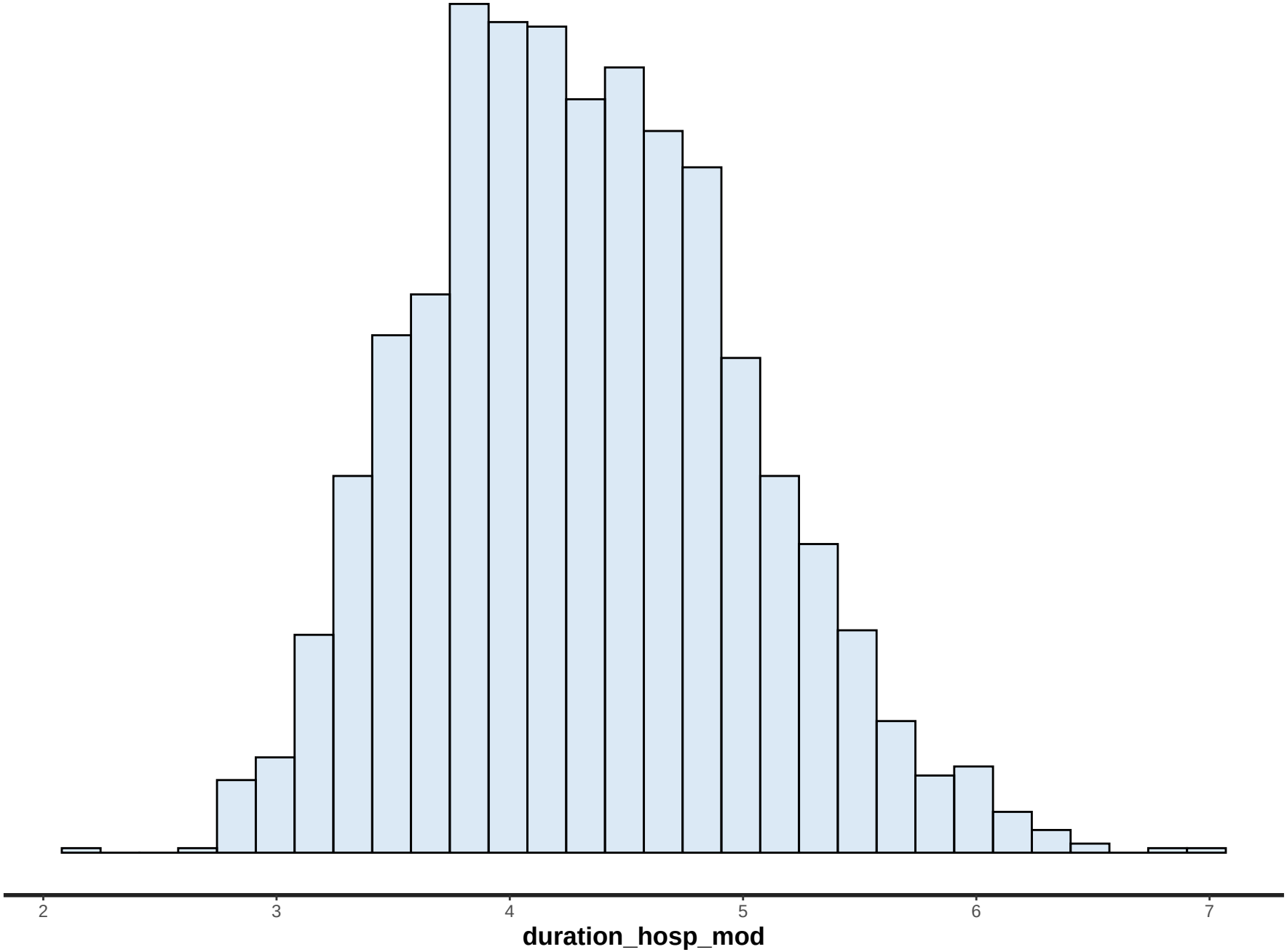


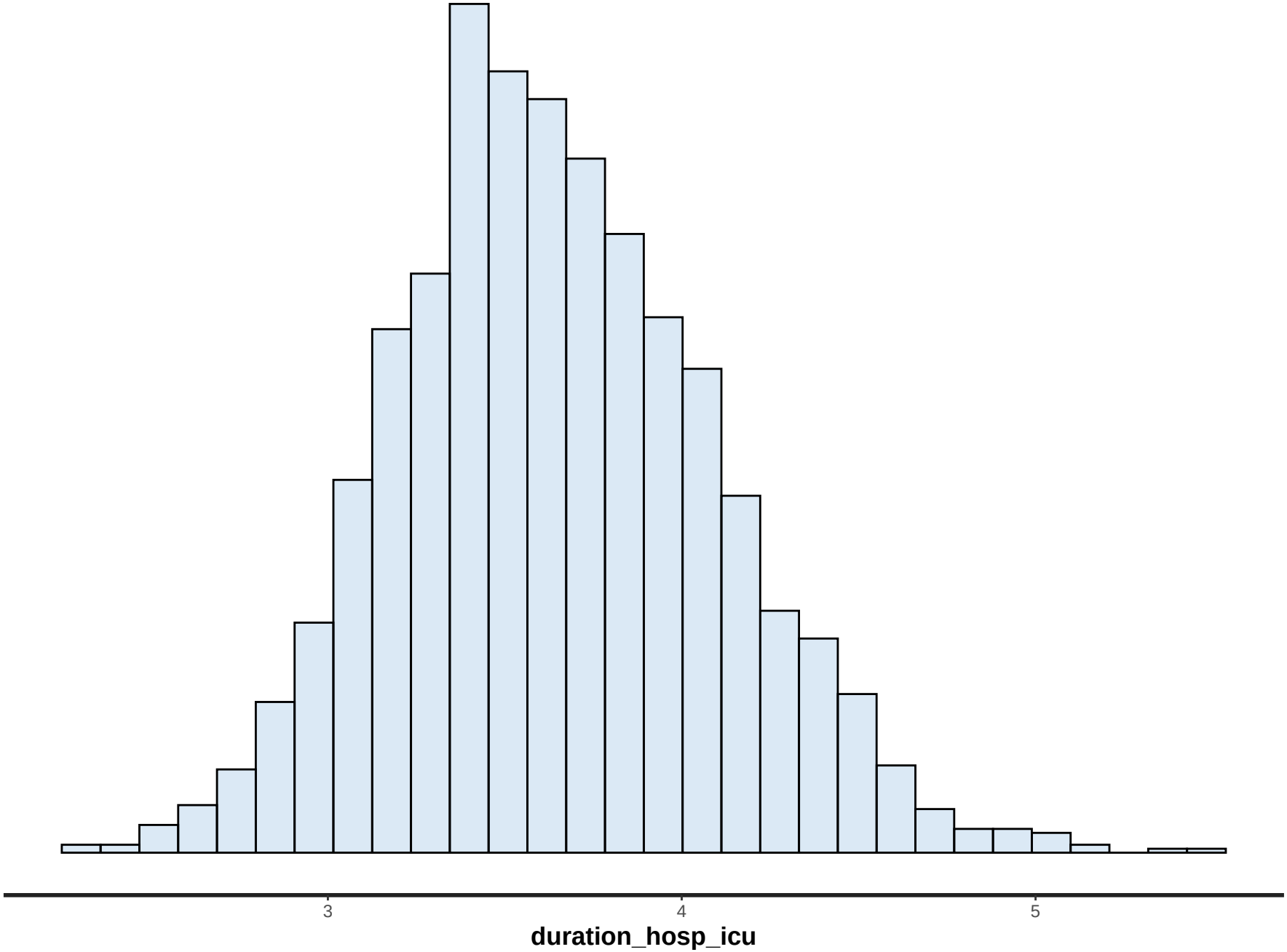

2
3
4
5
r0

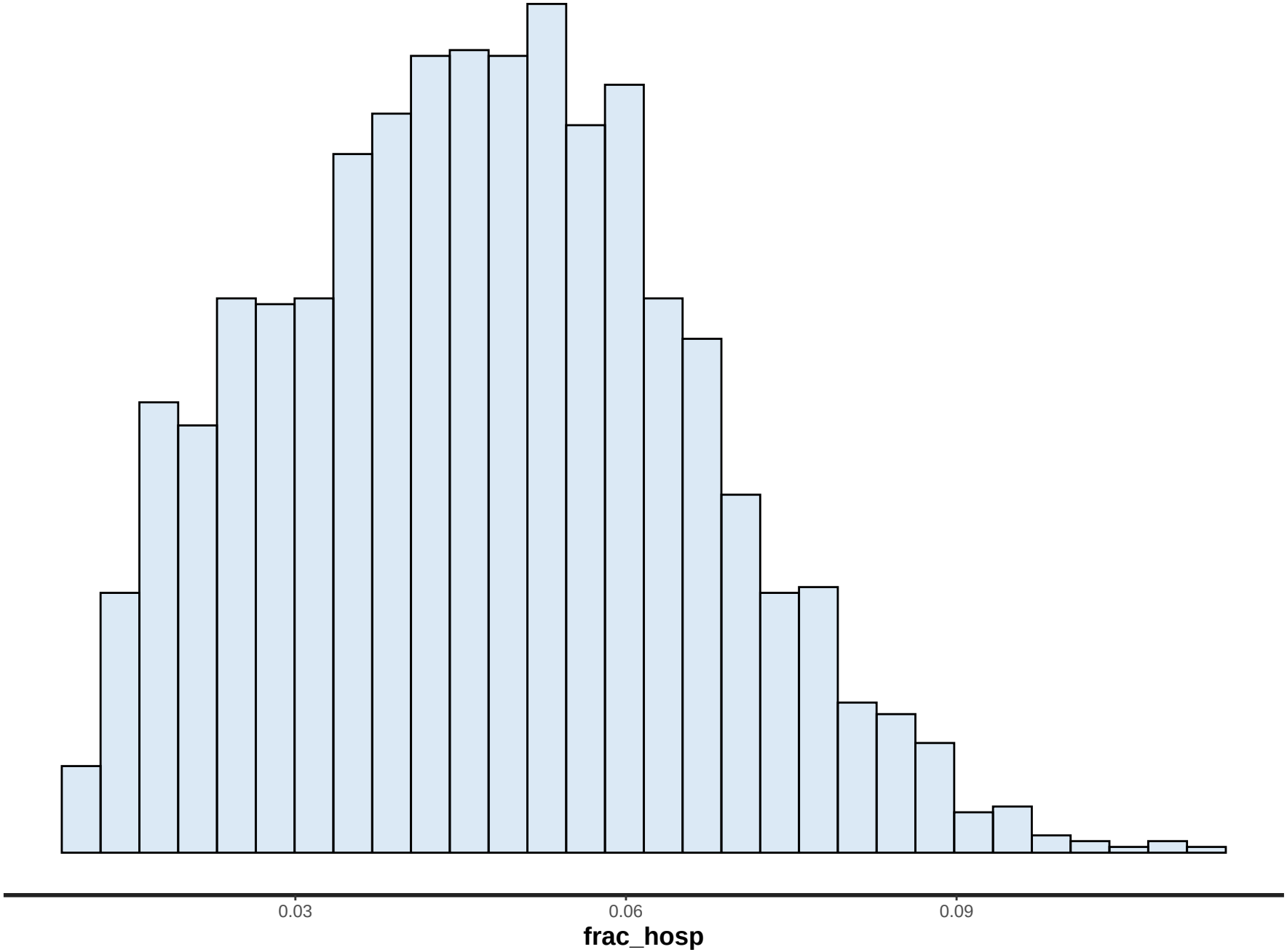

2
4
6
duration_latent

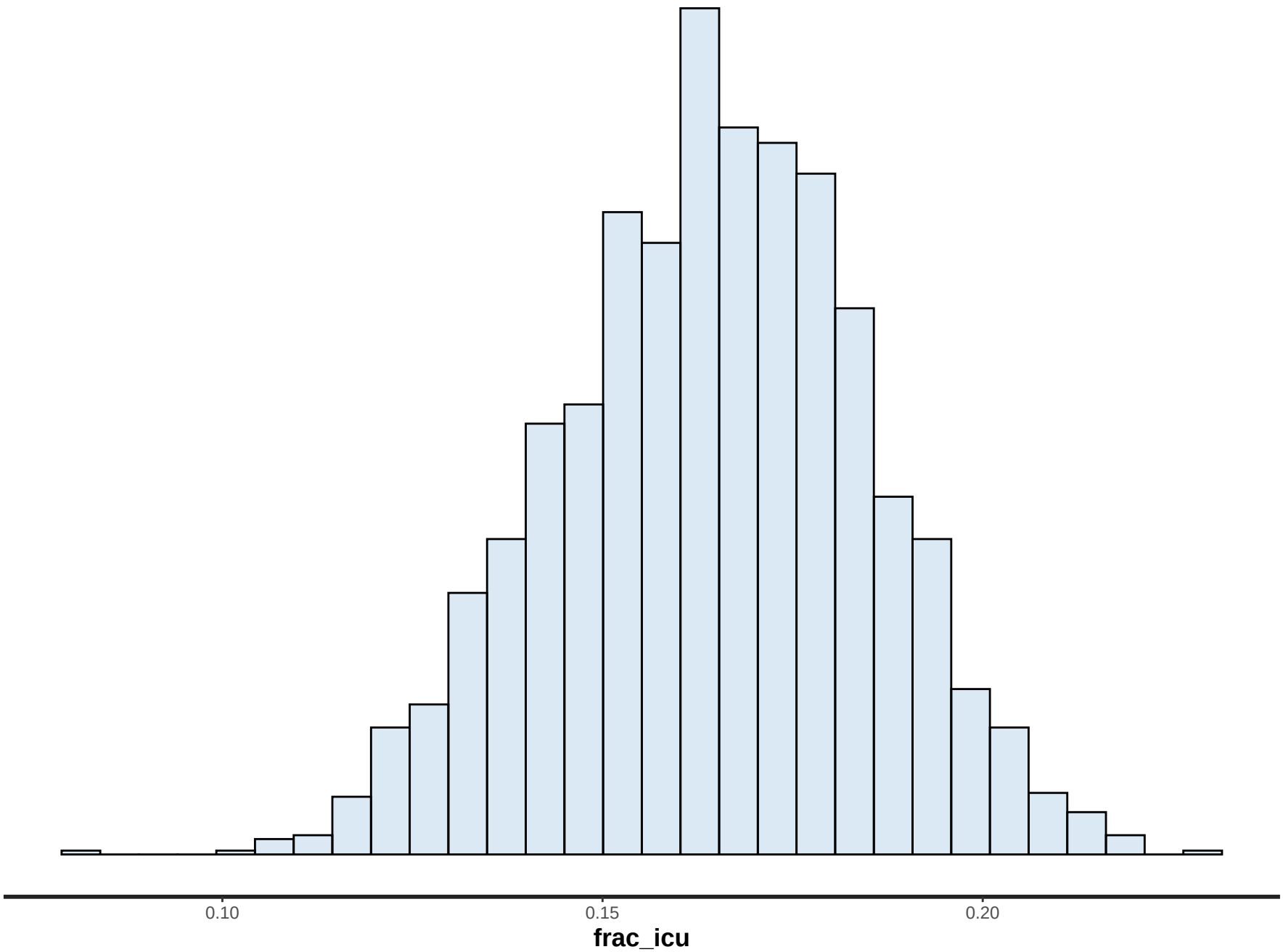

4
6
8
duration_rec_mild

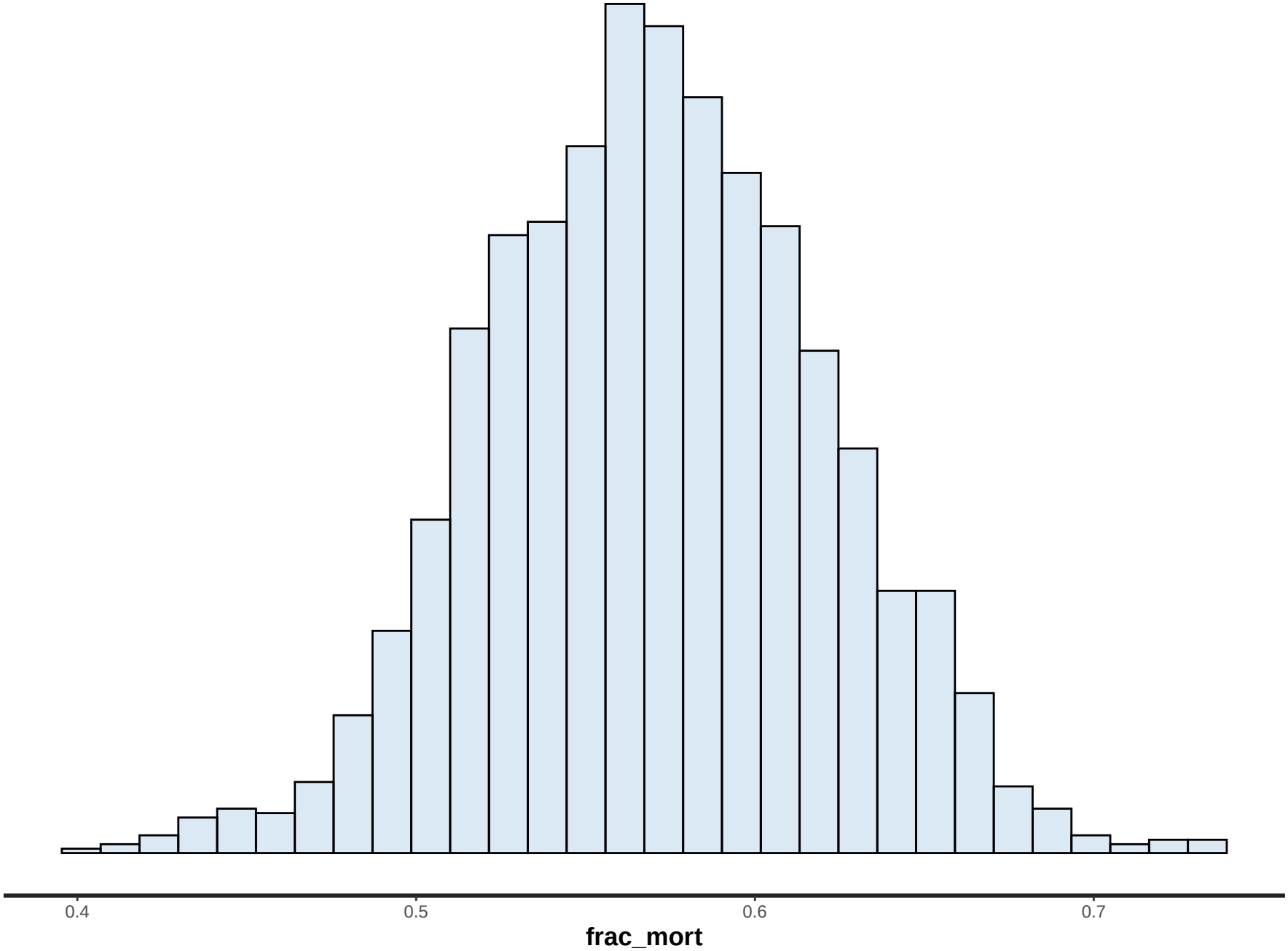

0
5
10
duration_pre_hosp


2
3
4
5
6
7
duration_hosp_mod


3
4
5
duration_hosp_icu


0.03
0.06
0.09
frac_hosp


0.10
0.15
0.20
frac_icu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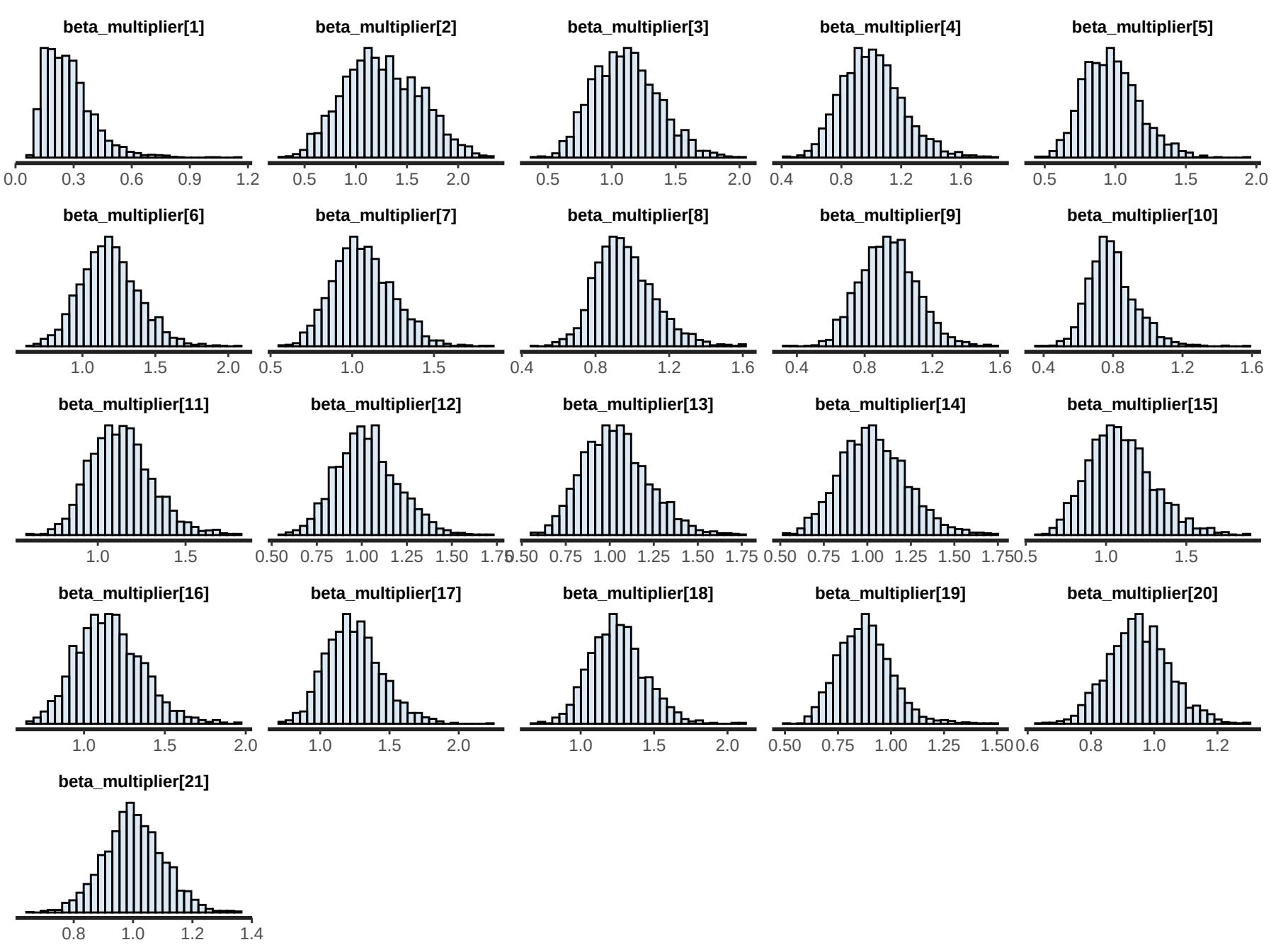
0.5
0.6
0.7
frac_mort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beta_multiplier[2]
0.5 1.0 1.5 2.0
beta_multiplier[3]
0.5 1.0 1.5 2.0
beta_multiplier[4]
0.4 0.8 1.2 1.6
beta_multiplier[5]
0.5 1.0 1.5 2.0
beta_multiplier[6]
1.0 1.5 2.0
beta_multiplier[7]
0.5 1.0 1.5
beta_multiplier[8]
0.4 0.8 1.2 1.6
beta_multiplier[9]
0.4 0.8 1.2 1.6
beta_multiplier[10]
0.4 0.8 1.2 1.6
beta_multiplier[11]
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beta_multiplier[12]
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beta_multiplier[13]
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beta_multiplier[16]
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beta_multiplier[17]
1.0 1.5 2.0
beta_multiplier[18]
1.0 1.5 2.0
beta_multiplier[19]
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beta_multiplier[20]
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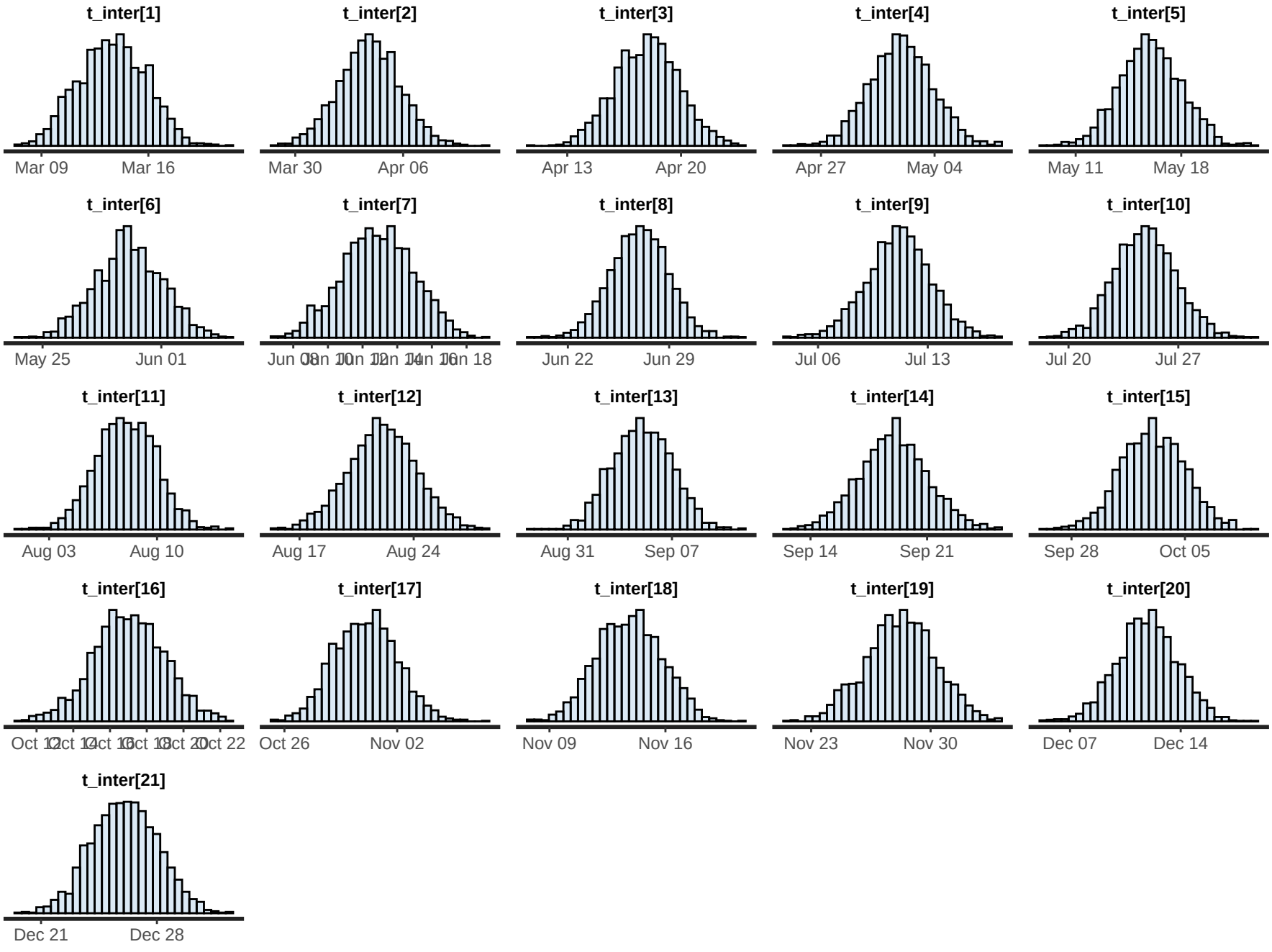
beta_multiplier[21]
0.8 1.0 1.2 1.4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Mar 09
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Mar 30
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Apr 13
Apr 20
t_inter[4]
Apr 27
May 04
t_inter[5]
May 11
May 18
t_inter[6]
May 25
Jun 01
t_inter[7]
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Jun 22
Jun 29
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Jul 06
Jul 13
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Jul 27
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Aug 17
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Aug 31
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Sep 14
Sep 21
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Sep 28
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Oct 26
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Nov 09
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Nov 23
Nov 30
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Dec 07
Dec 14
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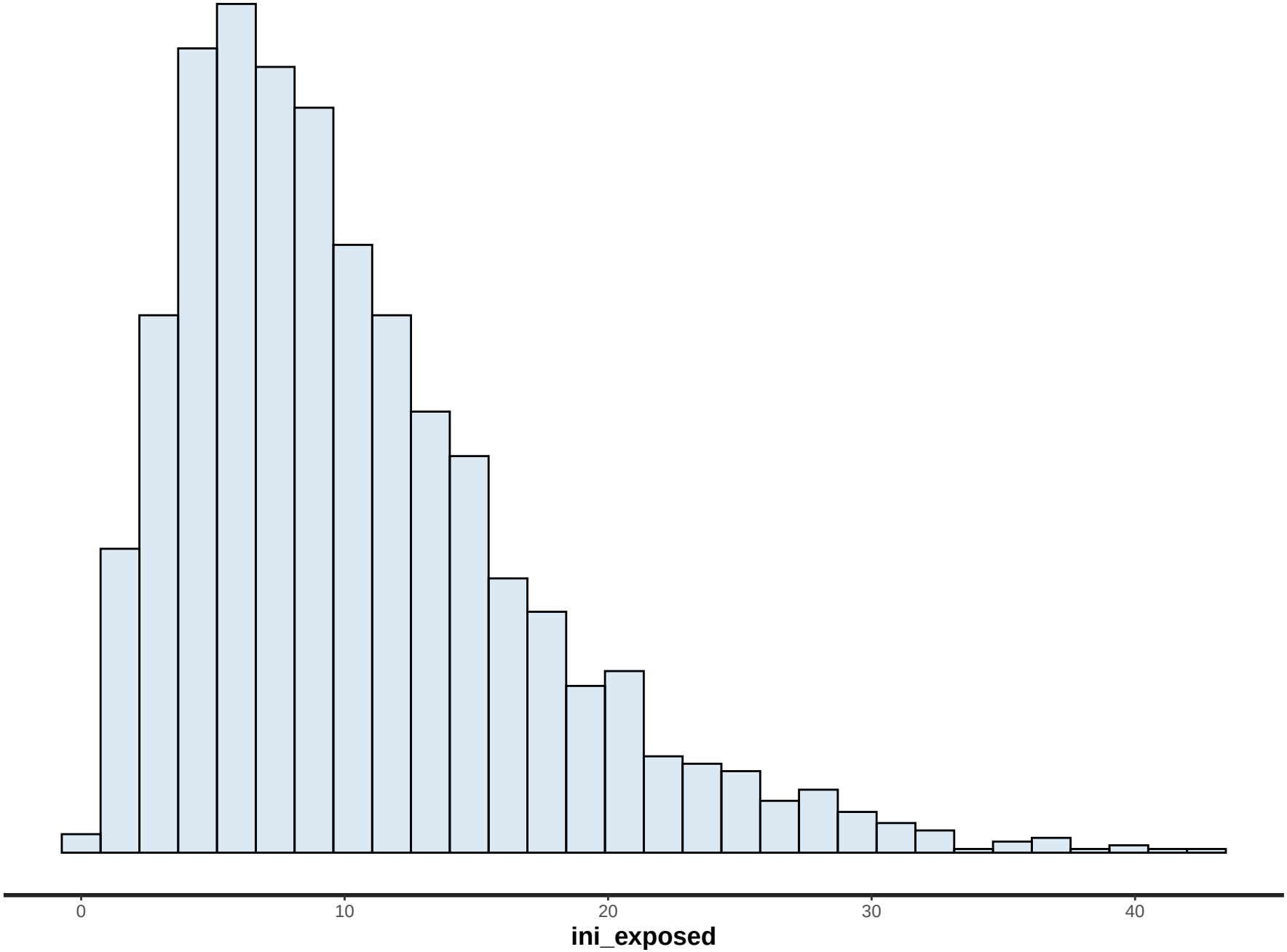
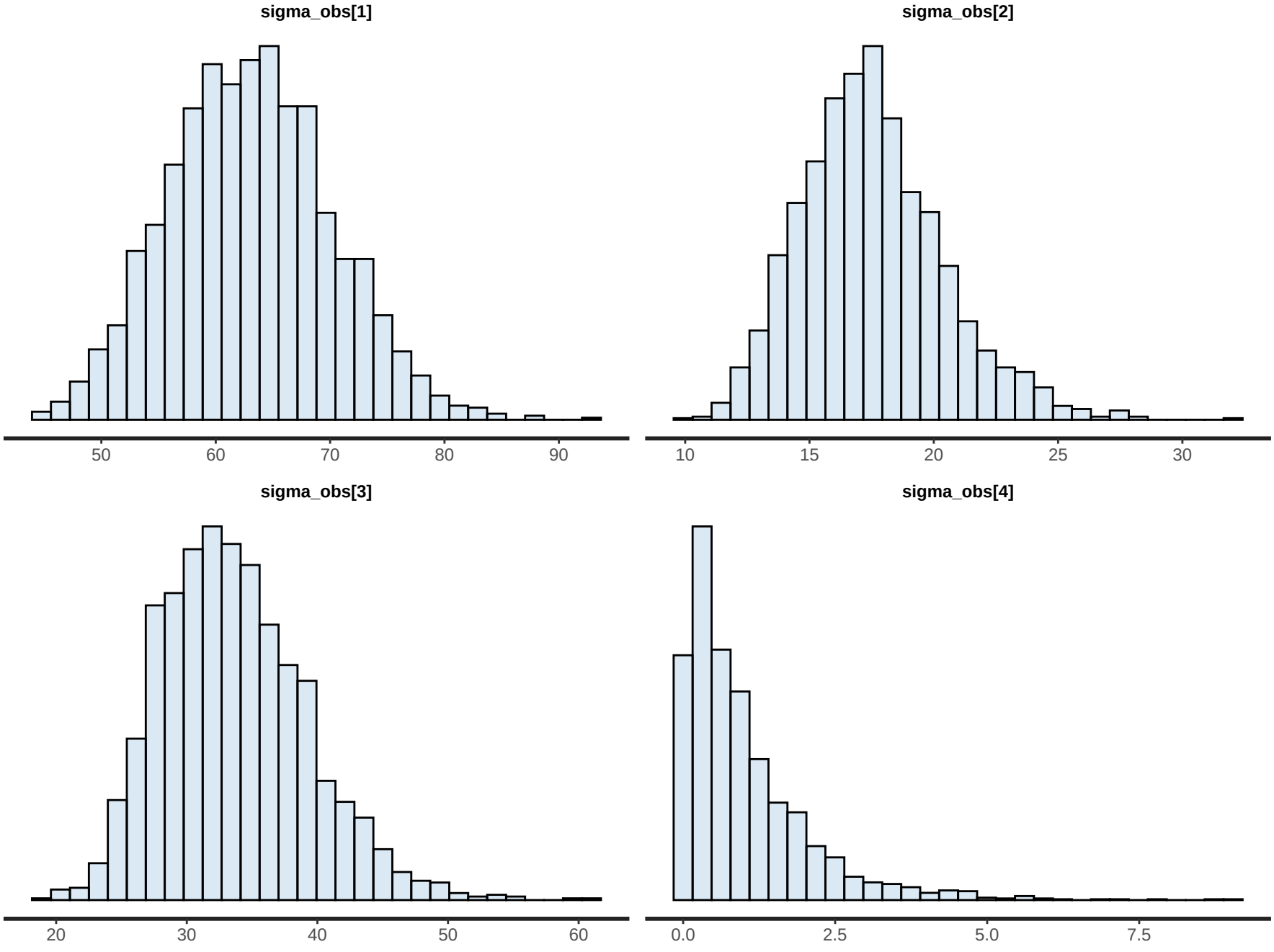
Dec 21
Dec 28


0
10
20
30
40
ini_exposed


sigma_obs[1]
50
60
70
80
90
sigma_obs[2]
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15
20
25
30
sigma_obs[3]
20
30
40
50
60
sigma_obs[4]
0.0
2.5
5.0
7.5