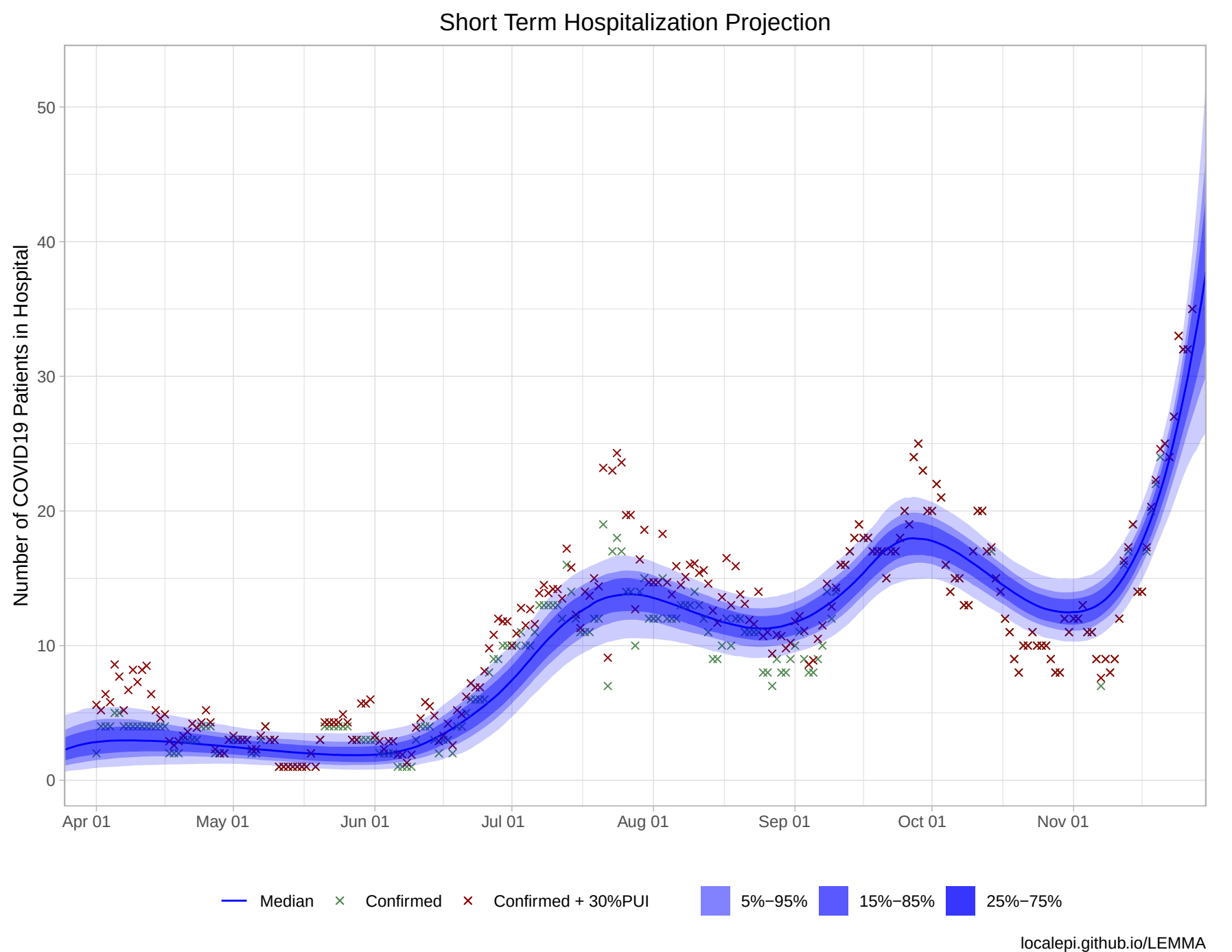
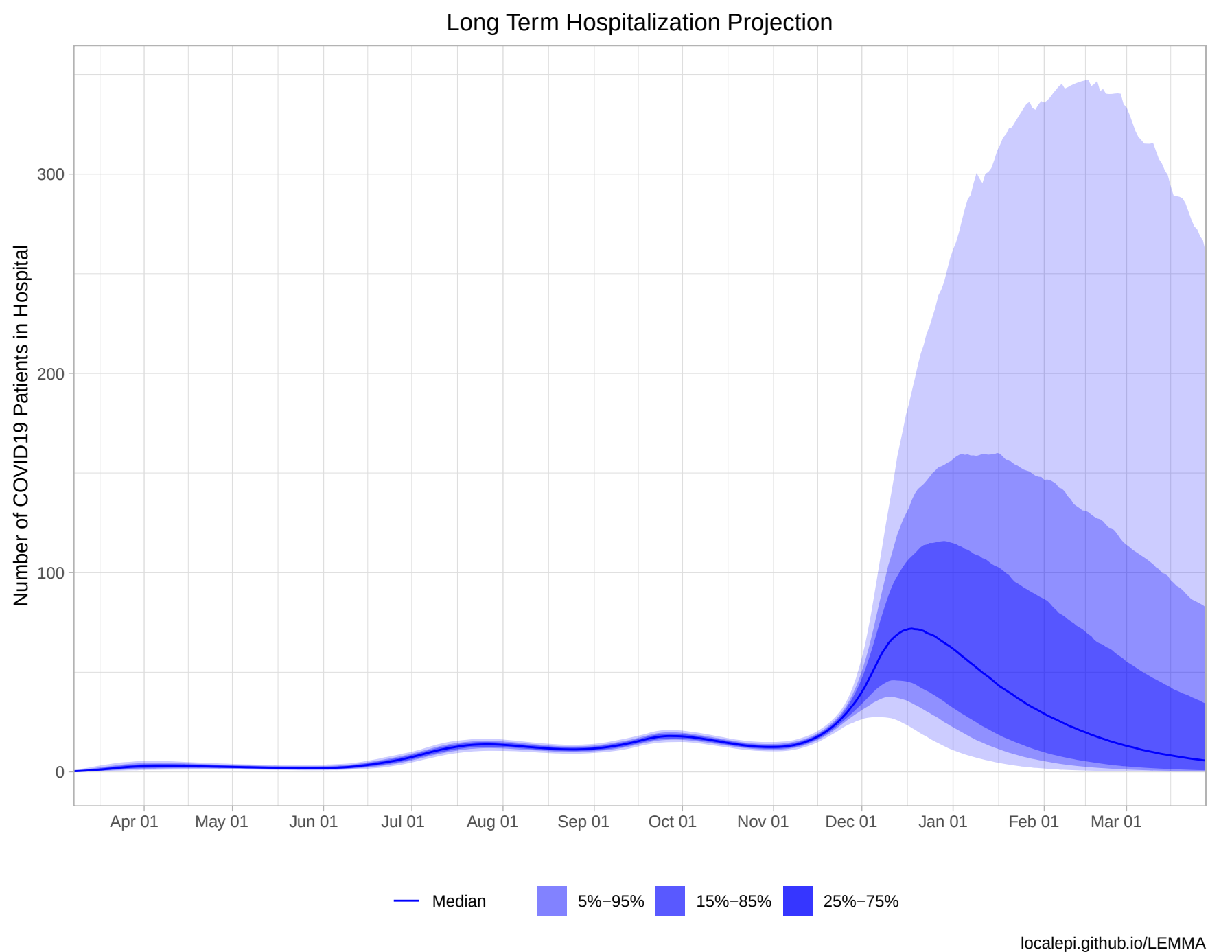
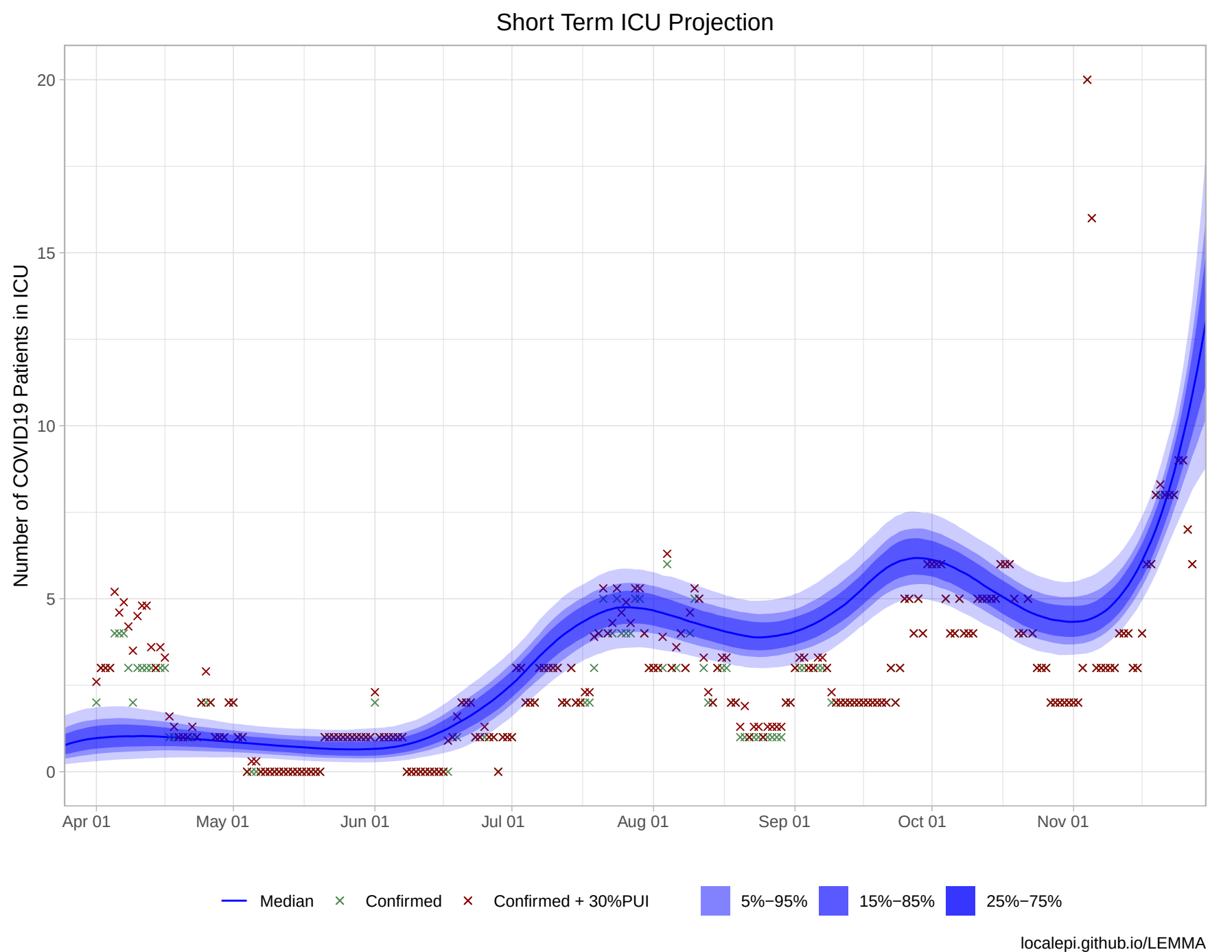
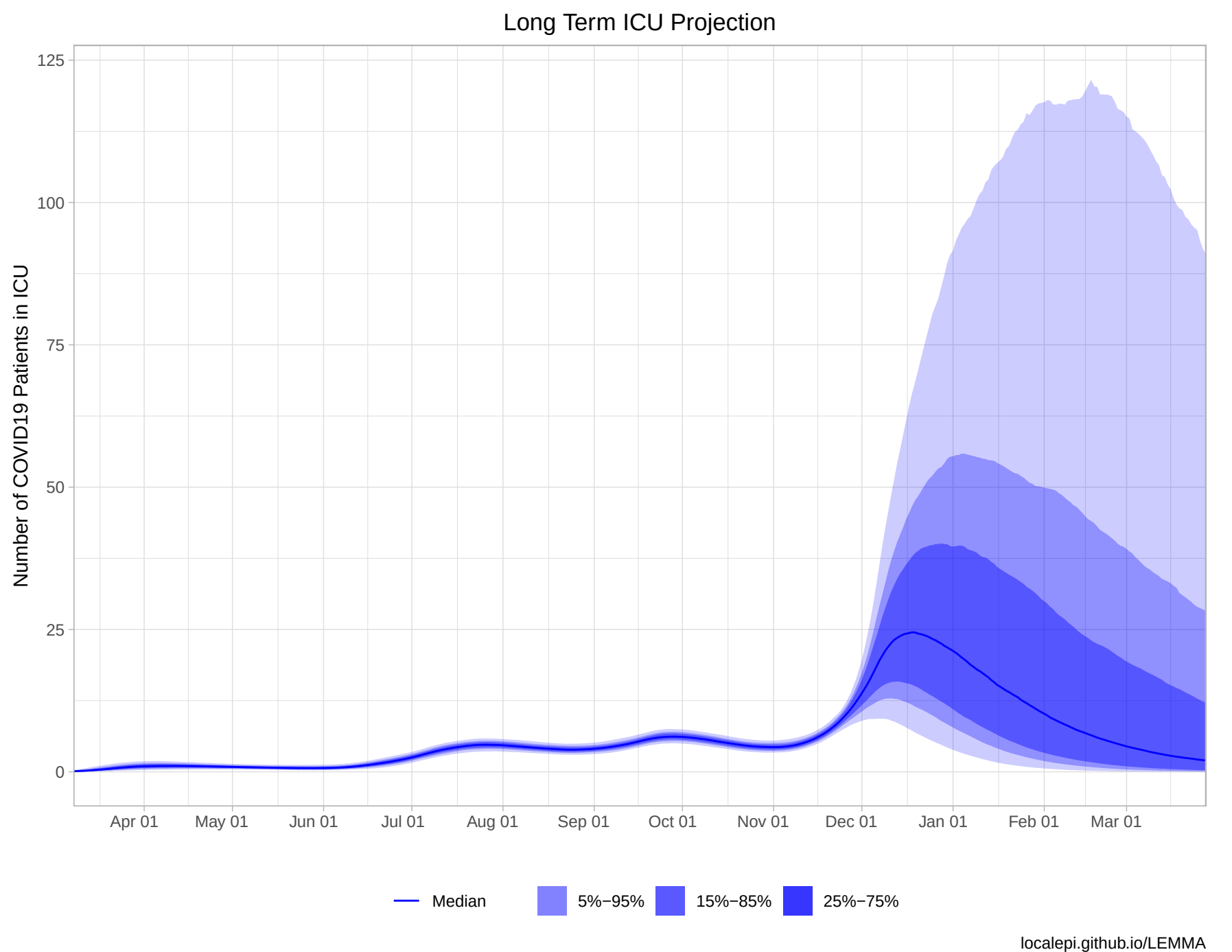
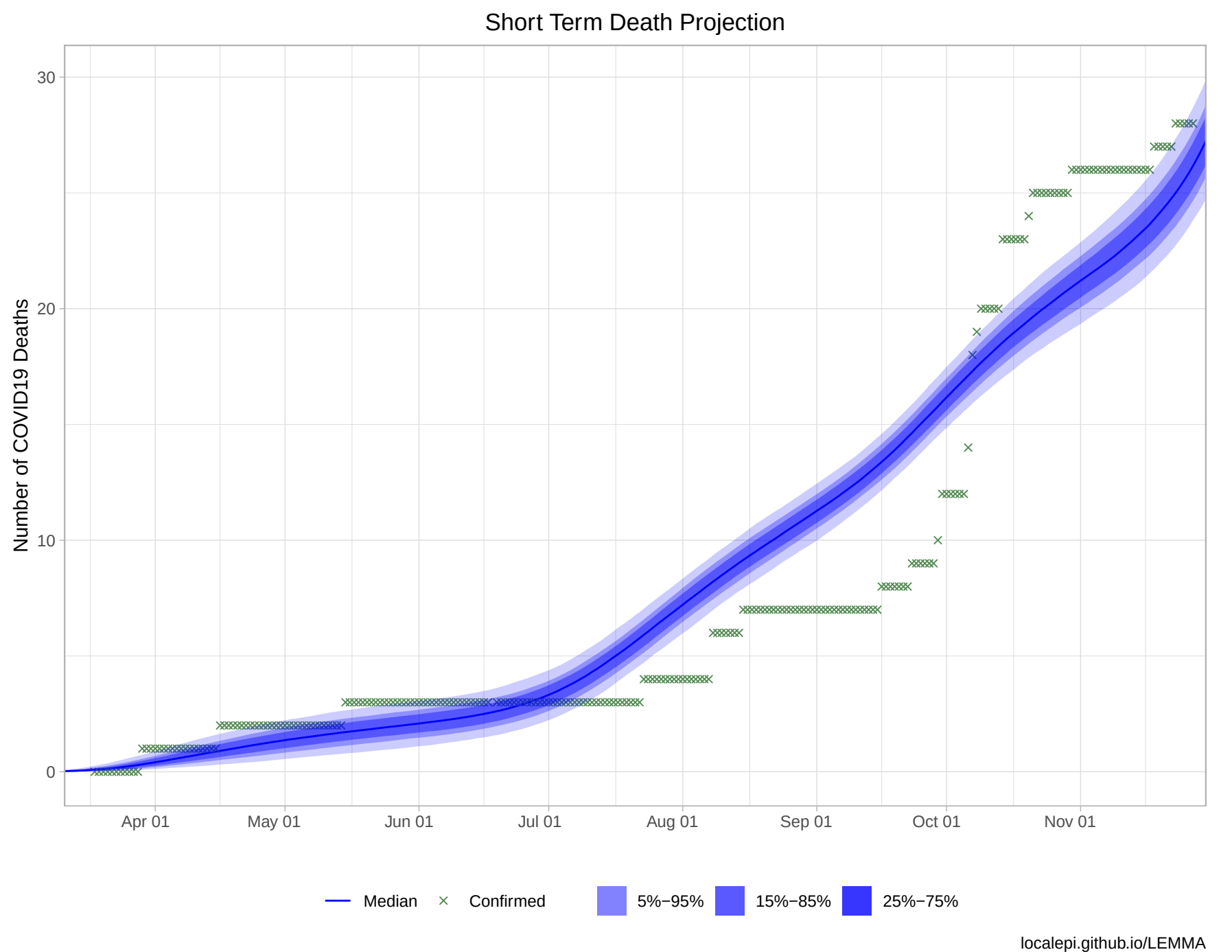
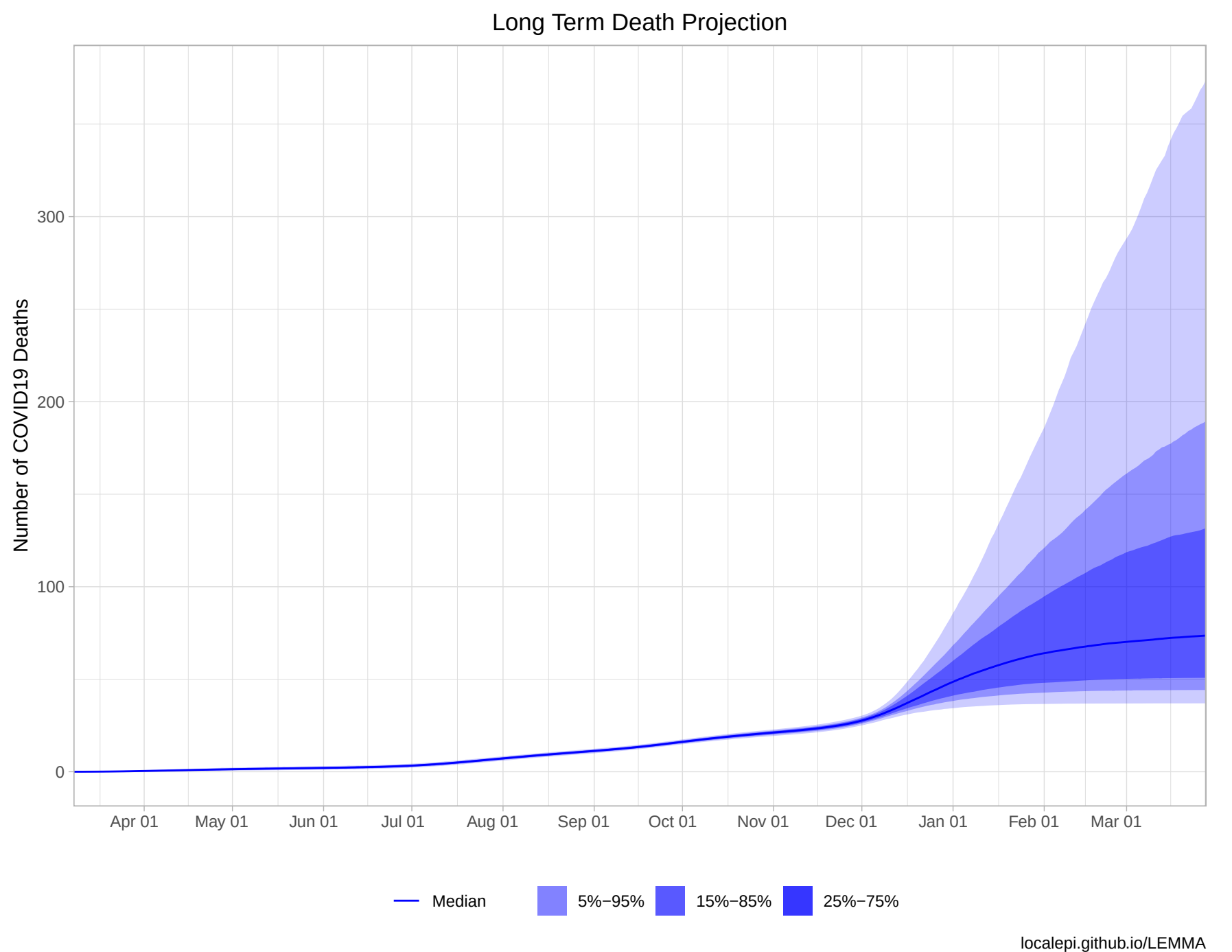

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
10
20
30
40
50
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

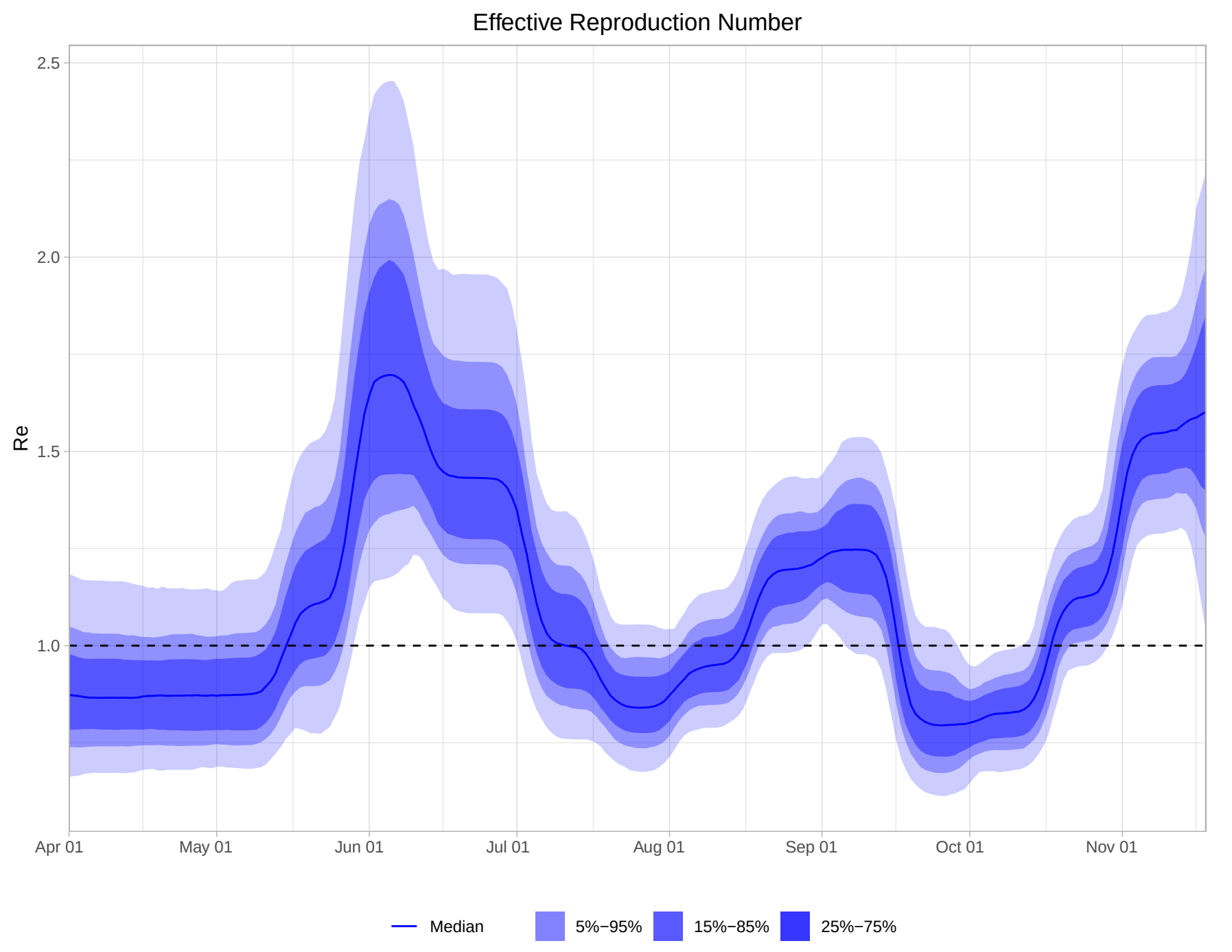

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
20
15
10
5
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 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
125
100
75
50
25
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

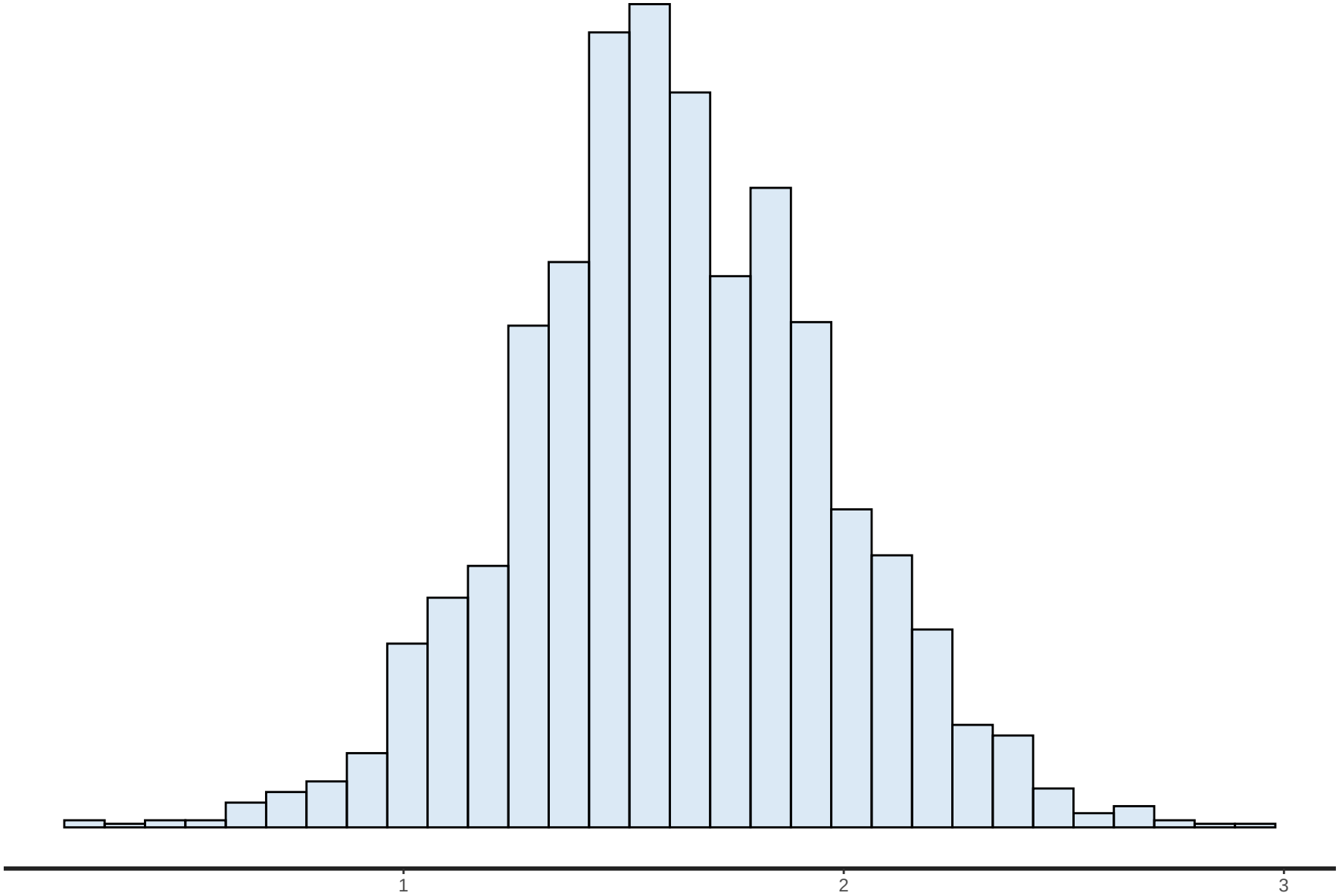

Short Term Death Projection
Number of COVID19 Deaths
30
20
10
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

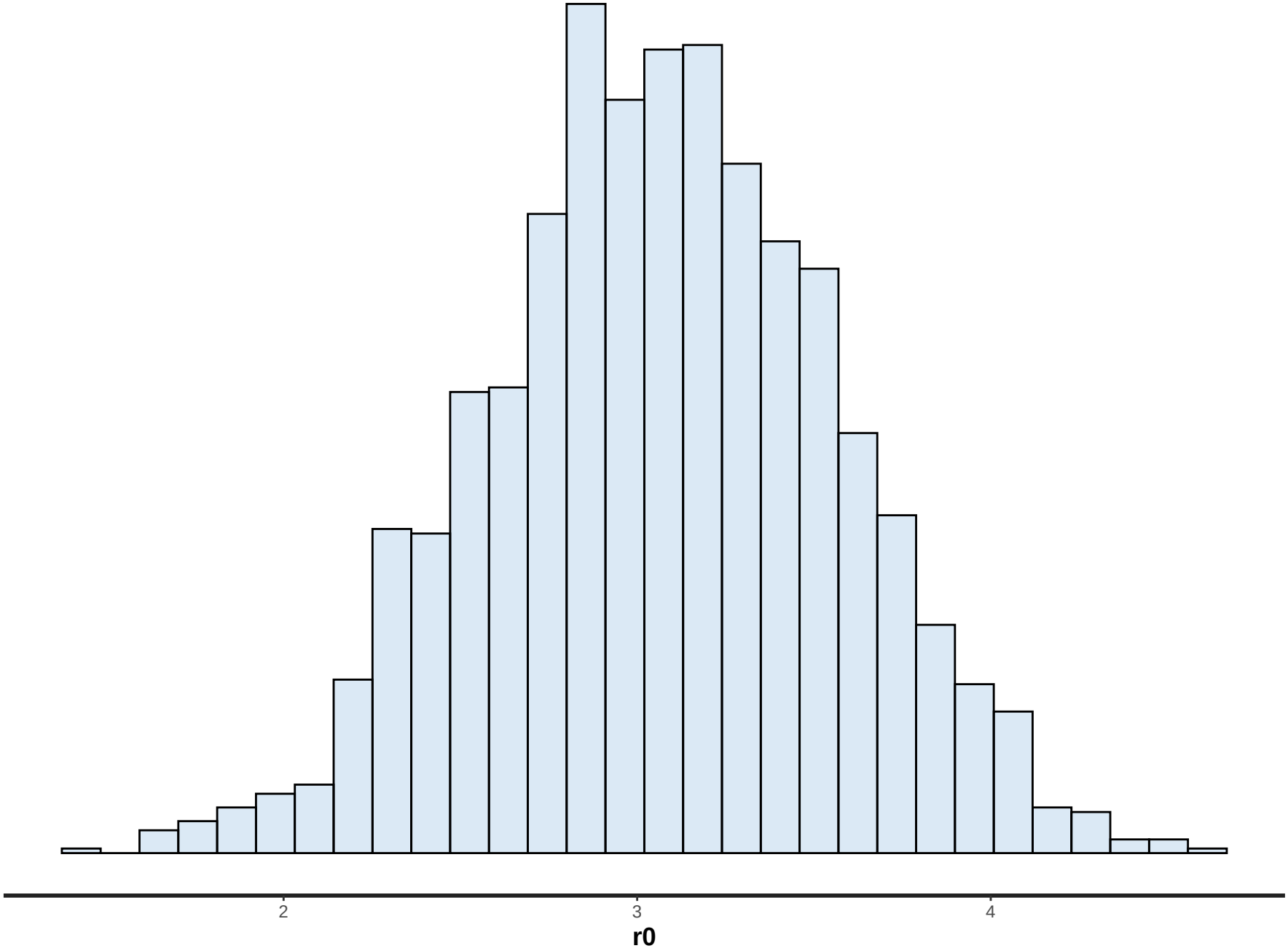

Long Term Death Projection
Number of COVID19 Deaths
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

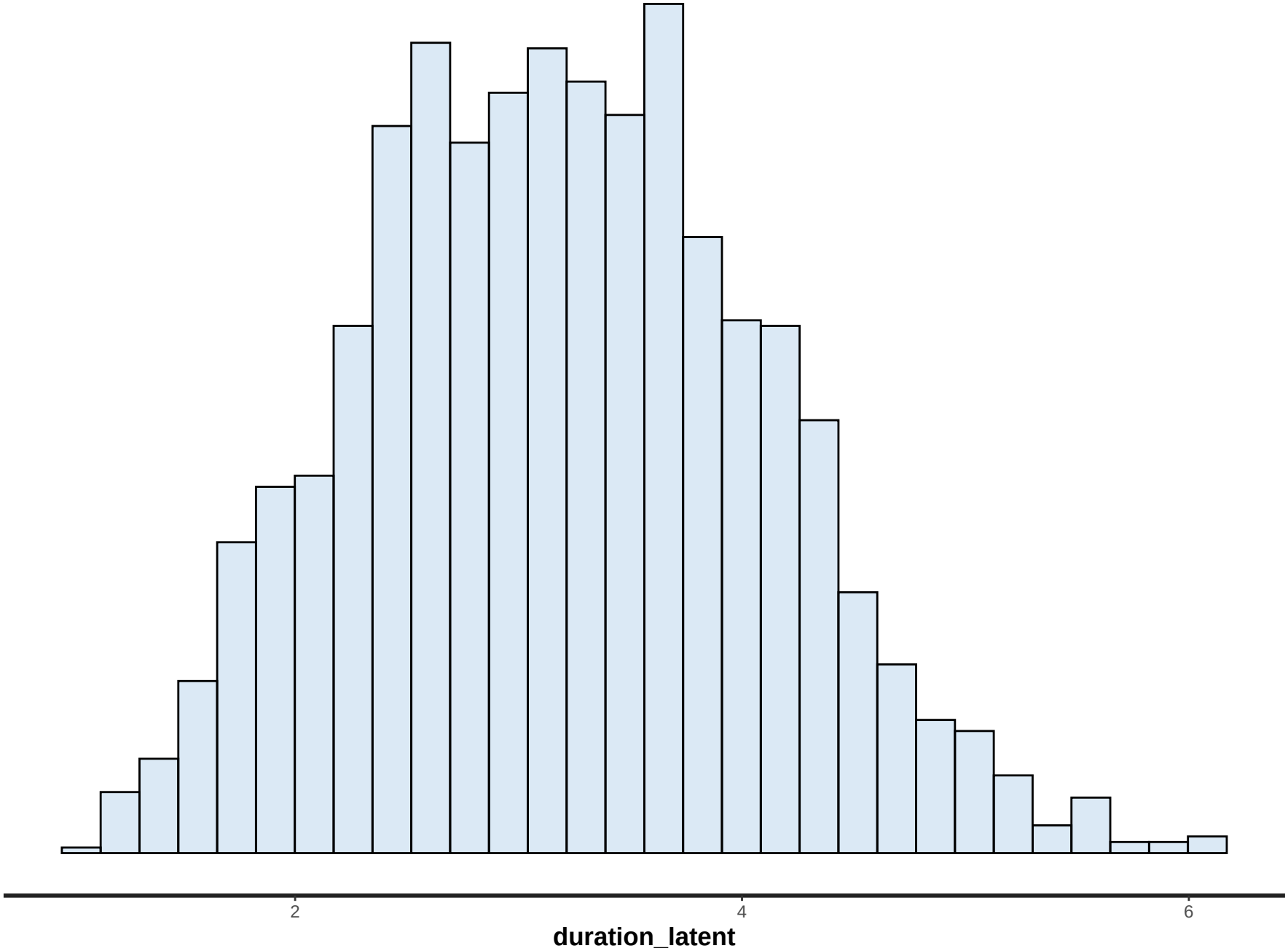

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
5%−95%
15%−85%
25%−75%

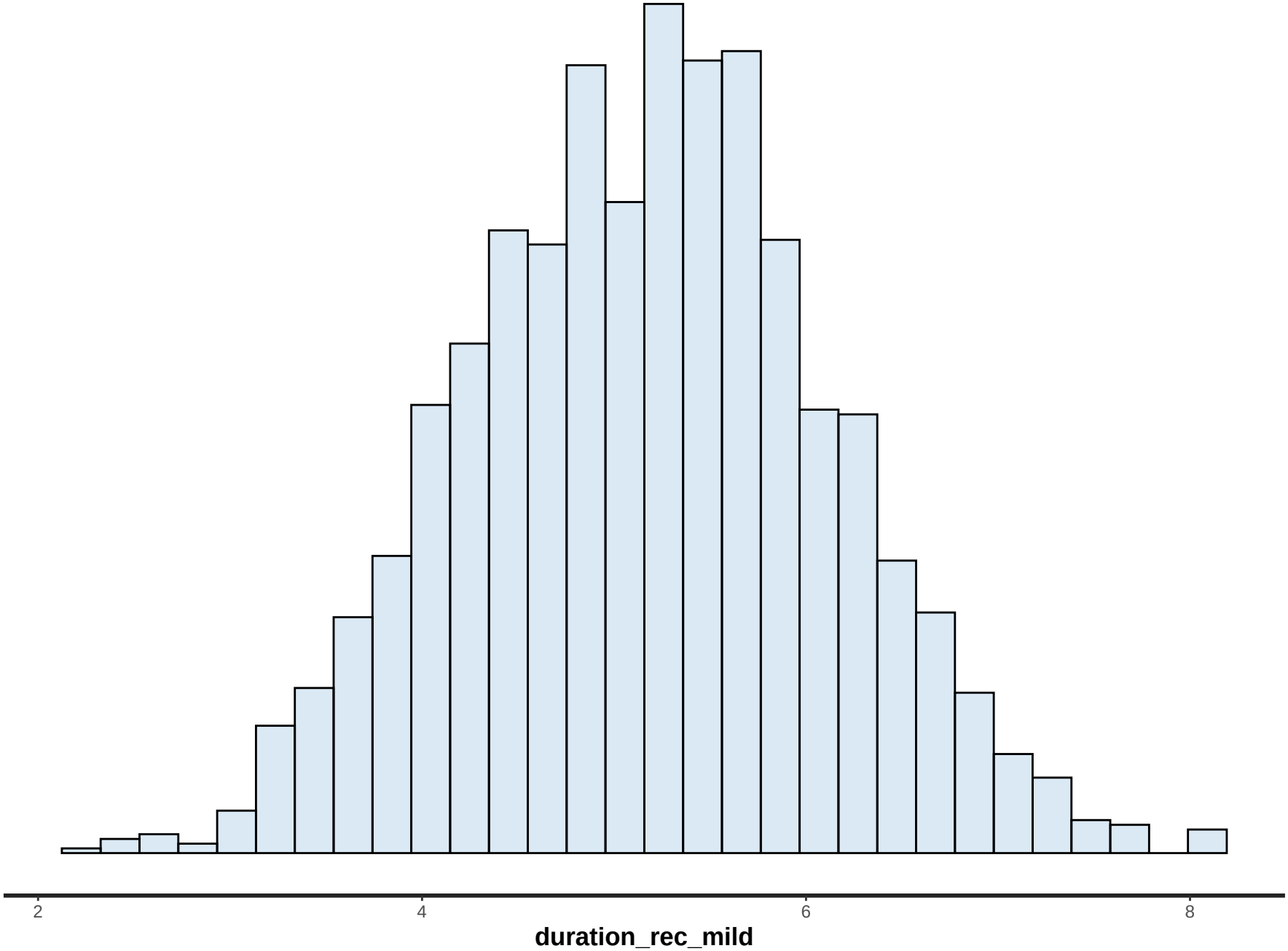
Rt as of 2020−11−18

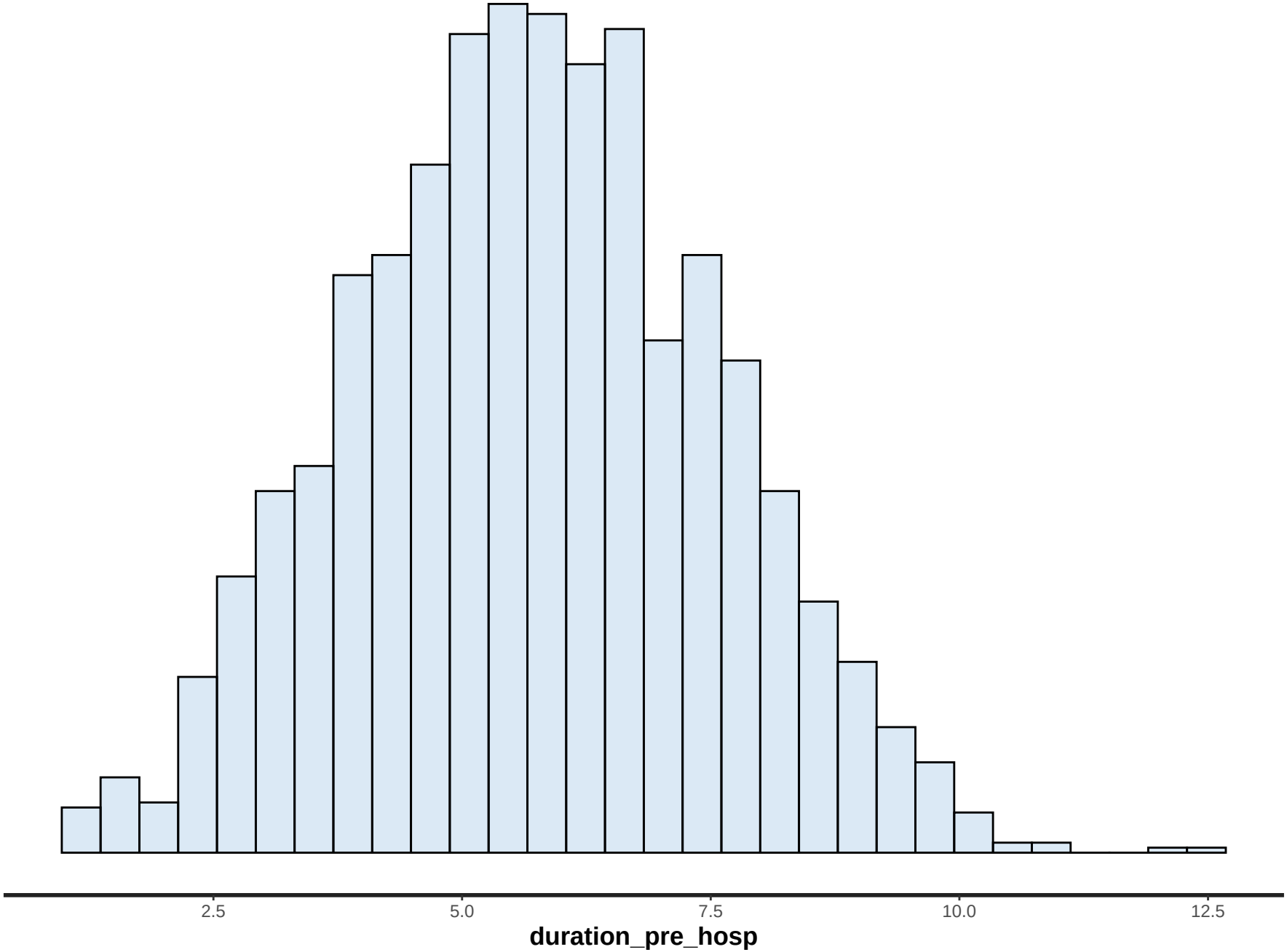
5%	10%	25%	50%	75%	90%	95%
1.04	1.18	1.40	1.60	1.85	2.08	2.22

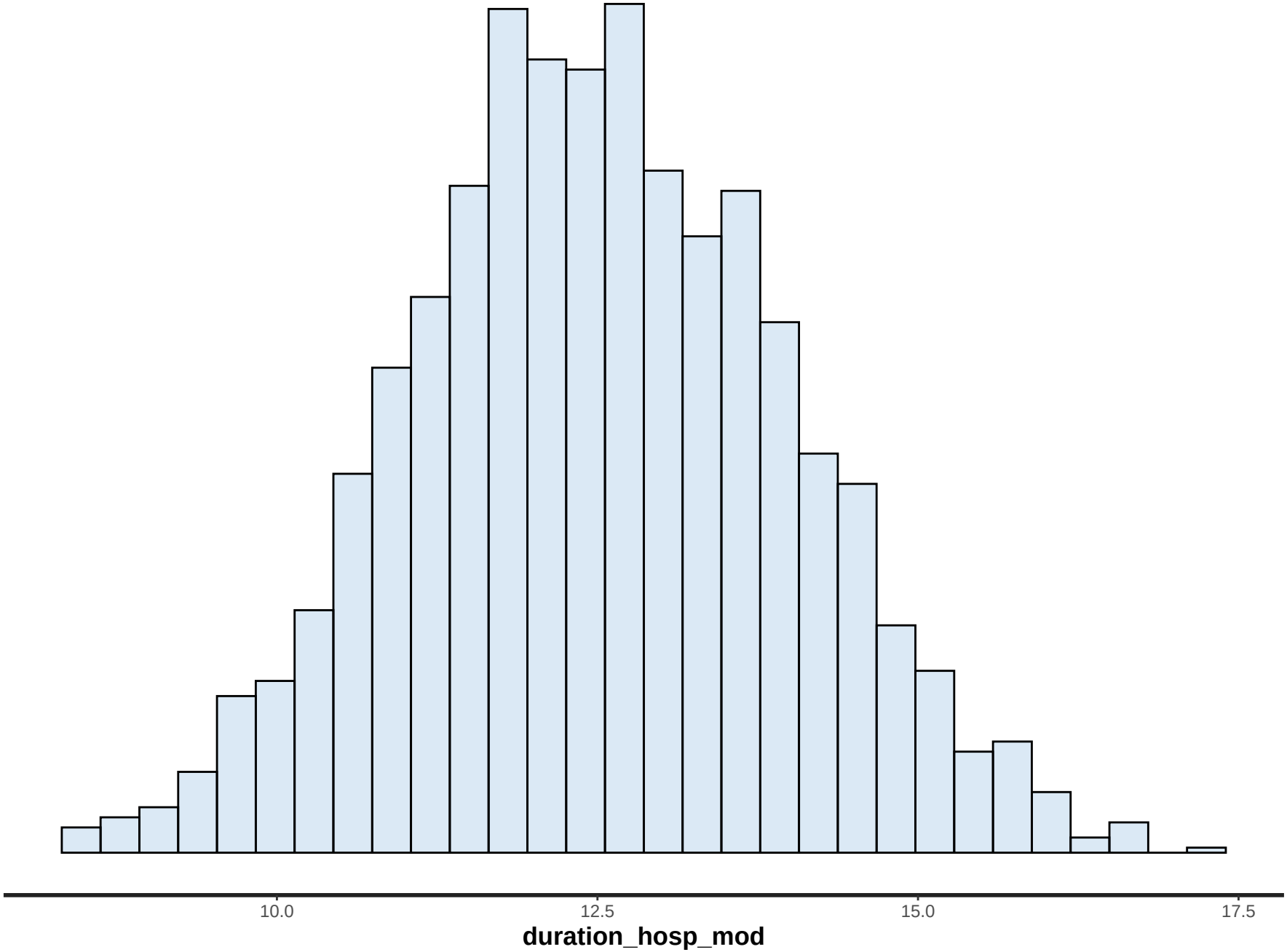


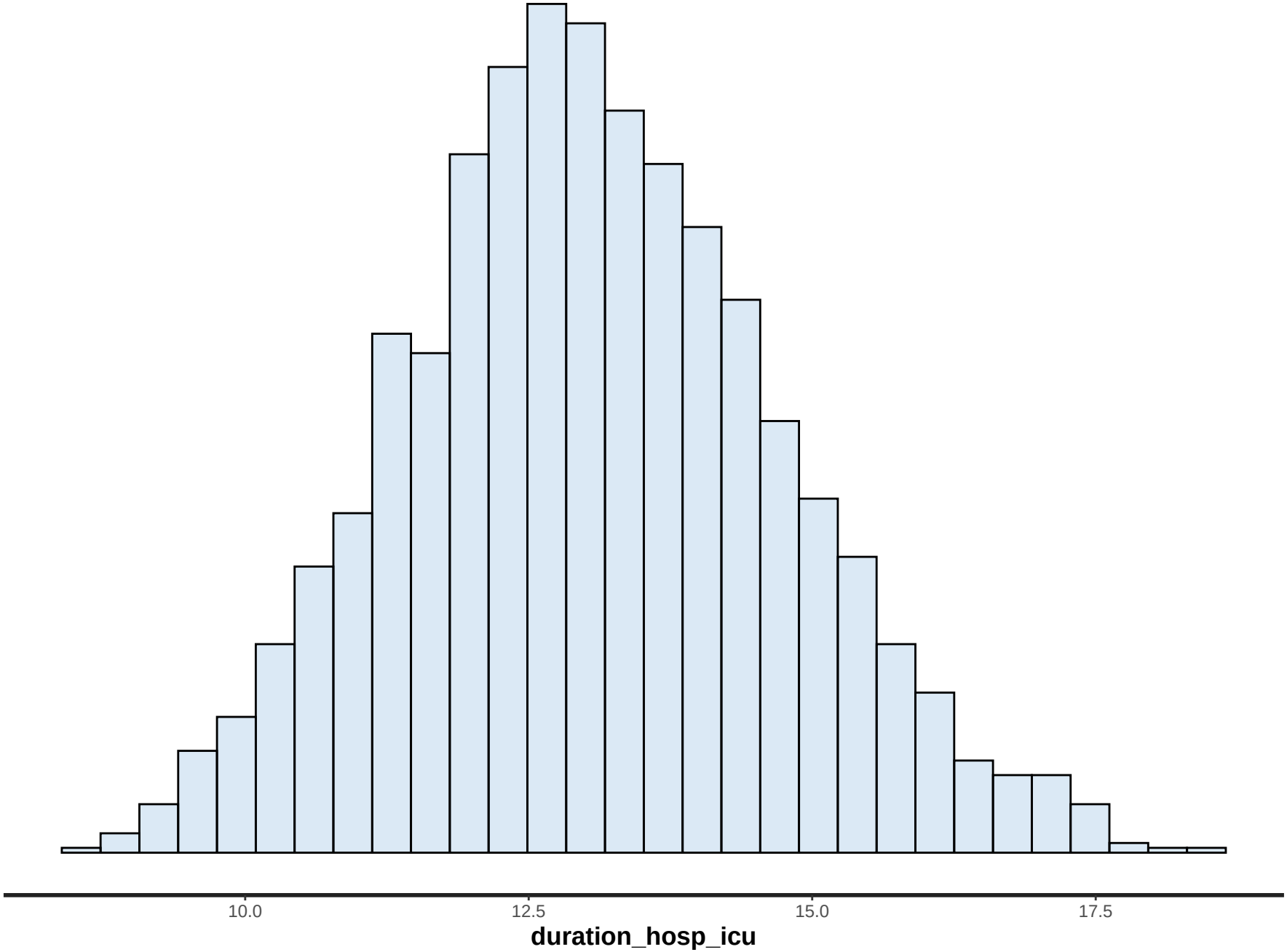

2
3
4
r0

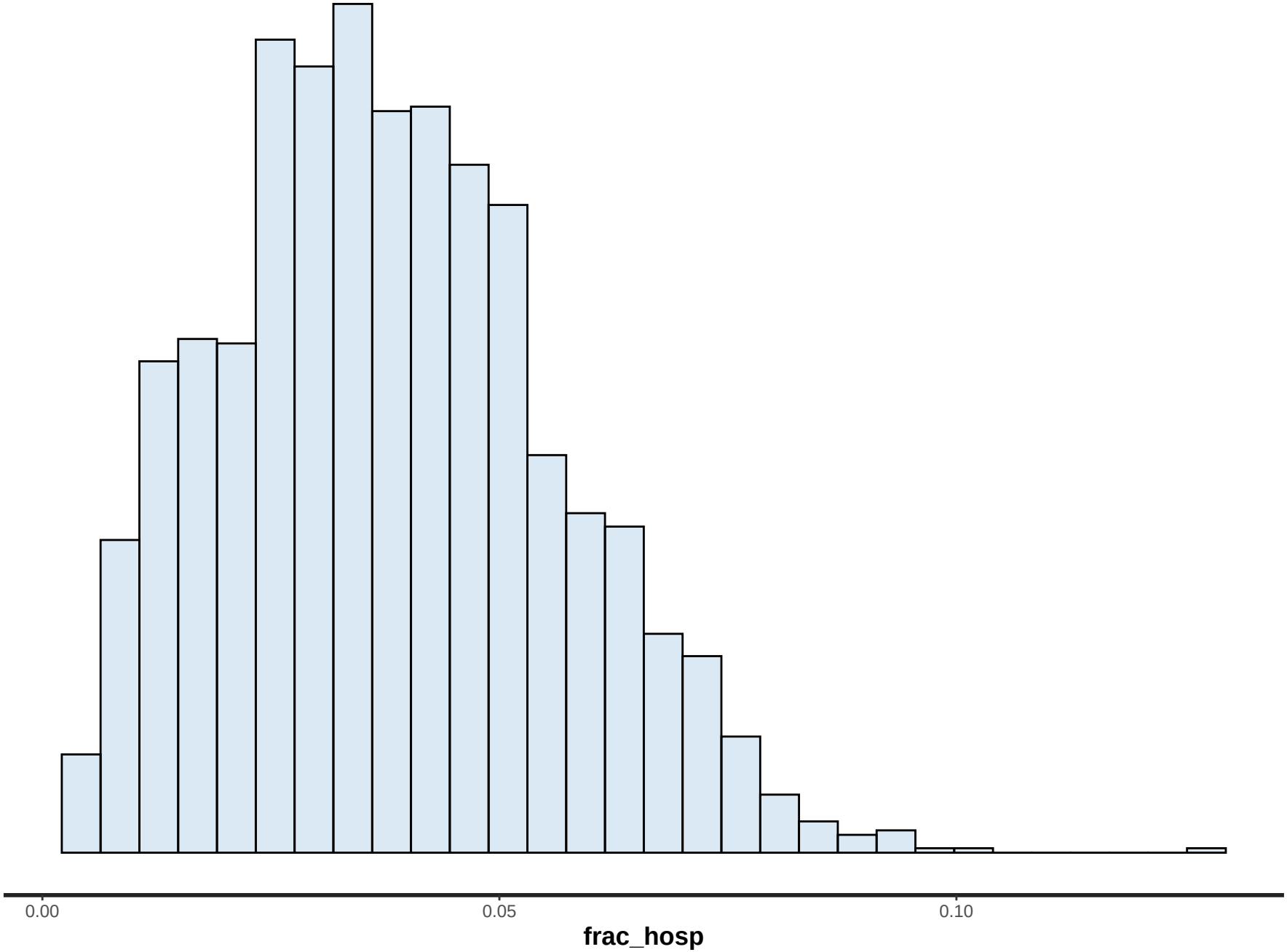

2
4
6
duration_latent

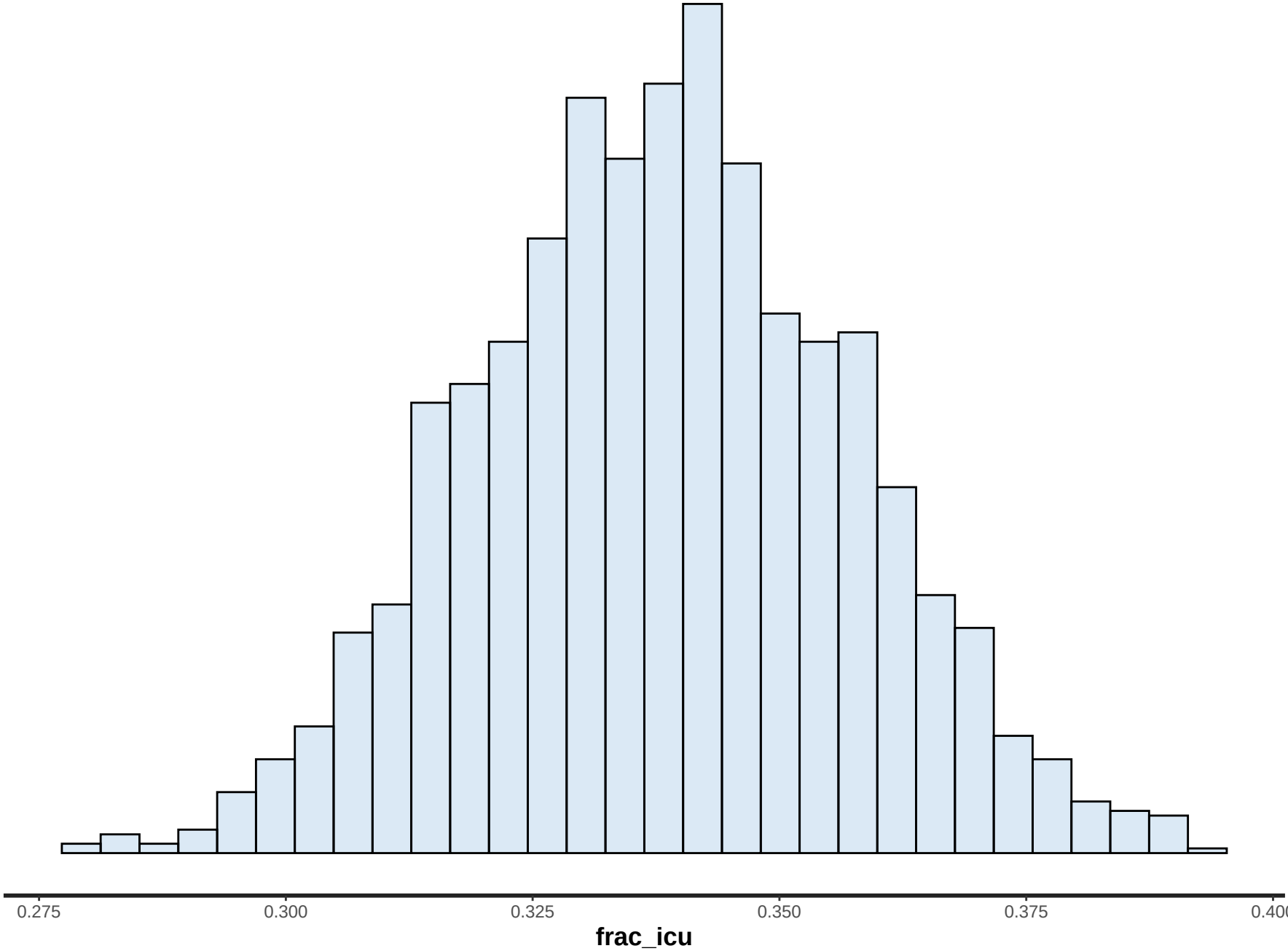

2
4
6
8
duration_rec_mild

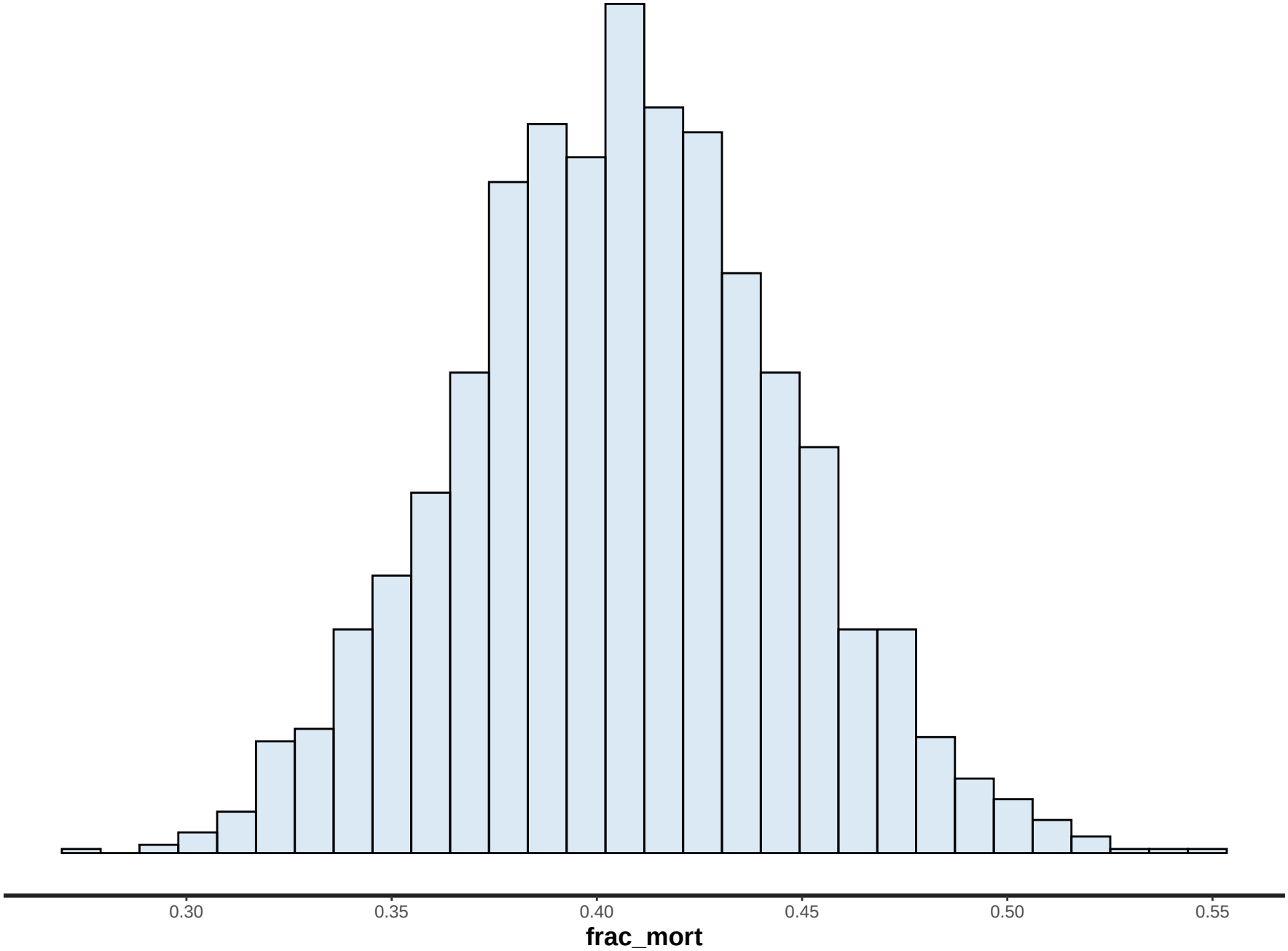

2.5
5.0
7.5
10.0
12.5
duration_pre_hosp

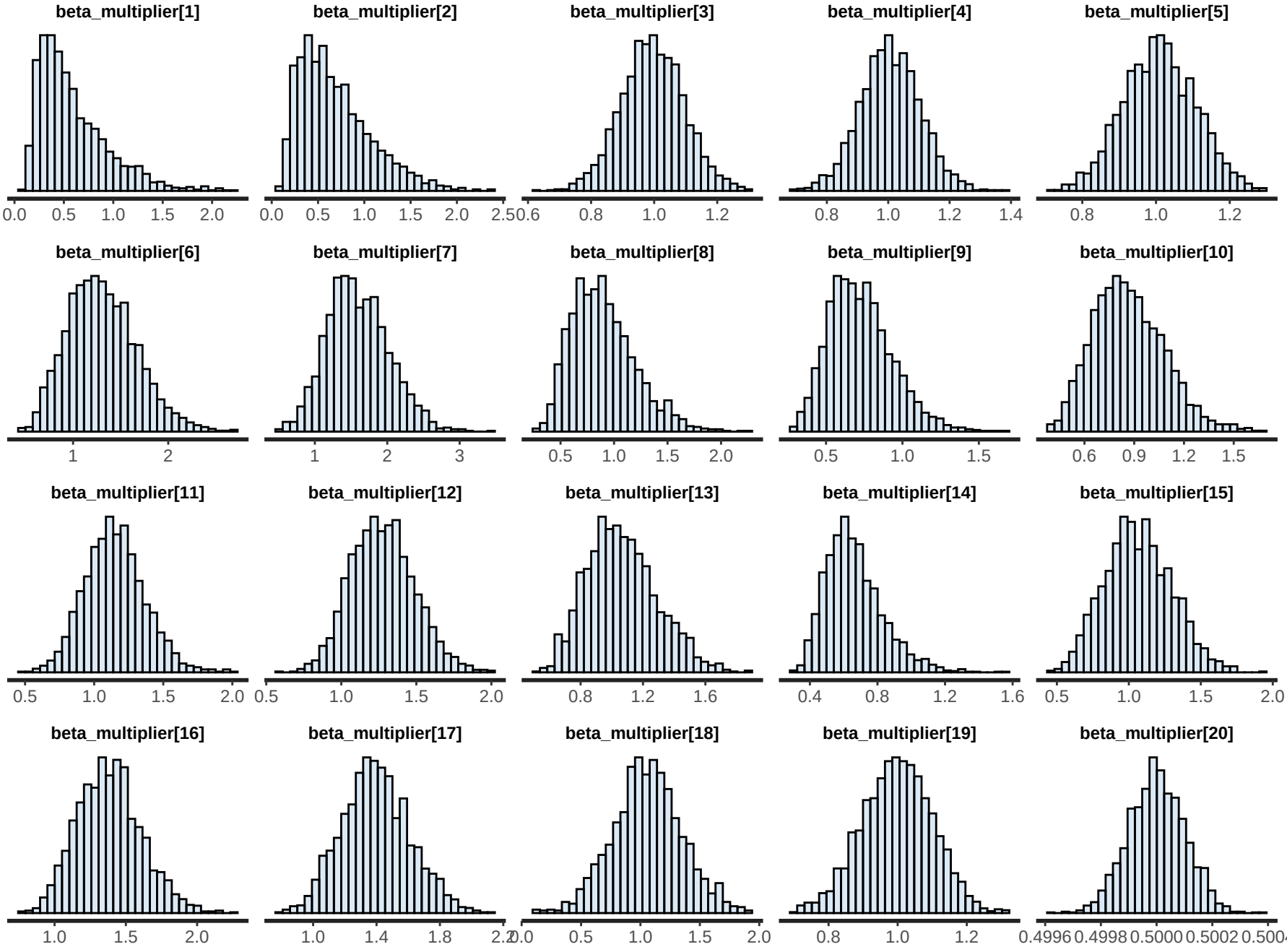

10.0
12.5
15.0
17.5
duration_hosp_mod


10.0
12.5
15.0
17.5
duration_hosp_icu


0.00
0.05
0.10
frac_hosp


0.275
0.300
0.325
0.350
0.375
0.400
frac_icu


0.30
0.35
0.40
0.45
0.50
0.55
frac_mort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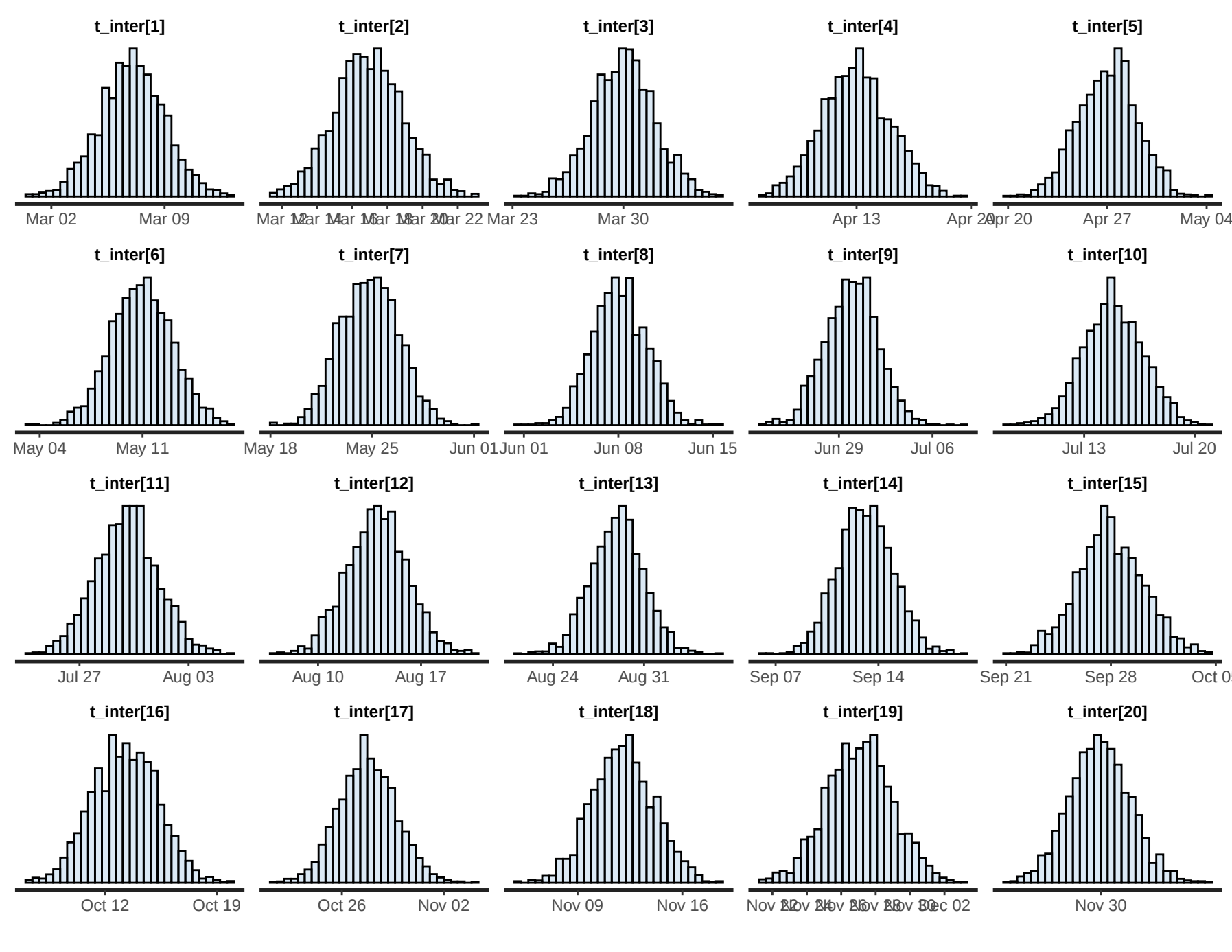
beta_multiplier[2]
beta_multiplier[3]
beta_multiplier[4]
beta_multiplier[5]
beta_multiplier[6]
beta_multiplier[7]
beta_multiplier[8]
beta_multiplier[9]
beta_multiplier[10]
beta_multiplier[11]
beta_multiplier[12]
beta_multiplier[13]
beta_multiplier[14]
beta_multiplier[15]
beta_multiplier[16]
beta_multiplier[17]
beta_multiplier[18]
beta_multiplier[19]
beta_multiplier[20]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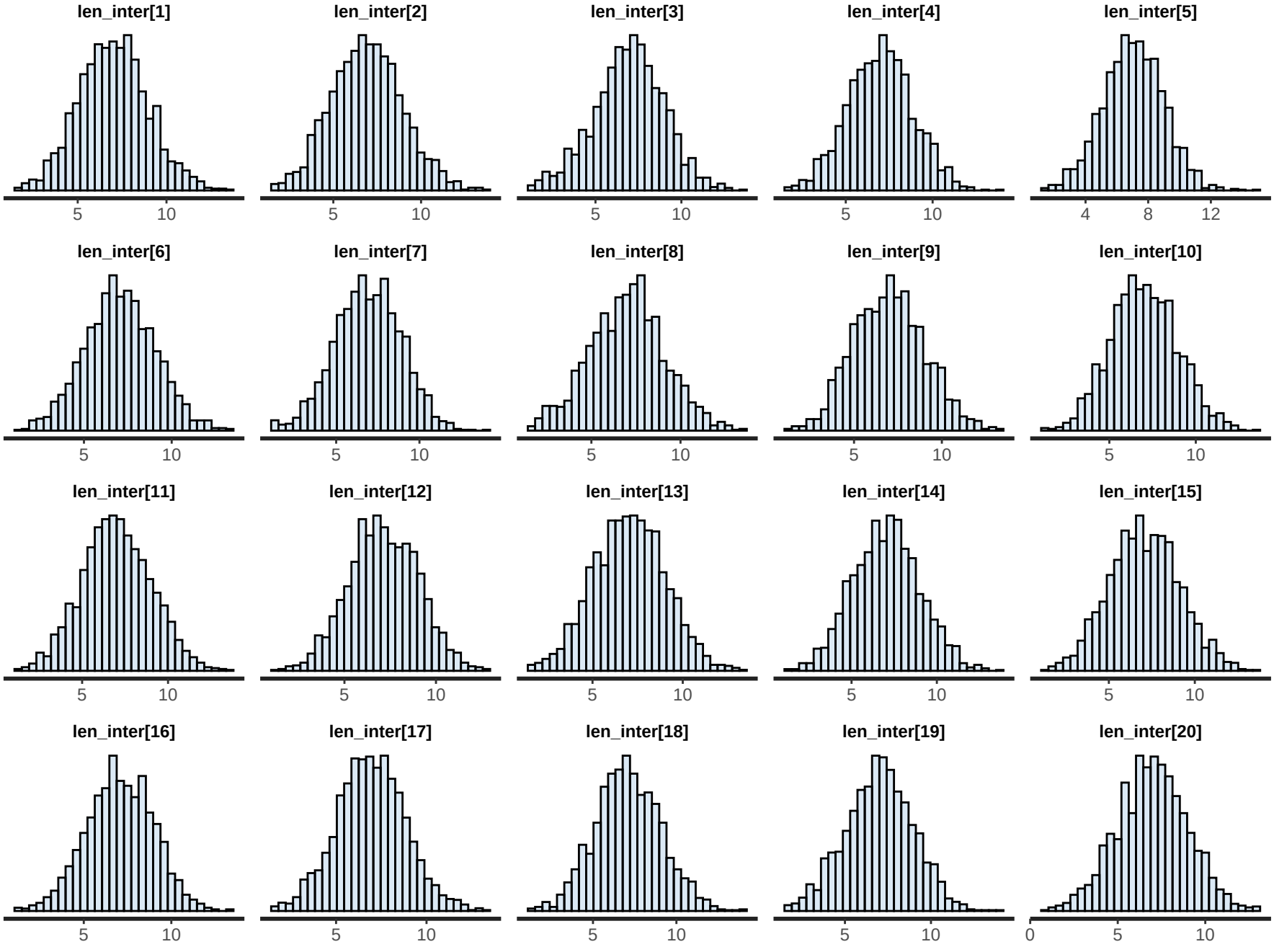
Mar 02
Mar 09
t_inter[2]
Mar 12
Mar 14
Mar 16
Mar 18
Mar 20
Mar 22
t_inter[3]
Mar 23
Mar 30
t_inter[4]
Apr 13
Apr 20
t_inter[5]
Apr 20
Apr 27
May 04
t_inter[6]
May 04
May 11
t_inter[7]
May 18
May 25
Jun 01
t_inter[8]
Jun 01
Jun 08
Jun 15
t_inter[9]
Jun 29
Jul 06
t_inter[10]
Jul 13
Jul 20
t_inter[11]
Jul 27
Aug 03
t_inter[12]
Aug 10
Aug 17
t_inter[13]
Aug 24
Aug 31
t_inter[14]
Sep 07
Sep 14
t_inter[15]
Sep 21
Sep 28
t_inter[16]
Oct 12
Oct 19
t_inter[17]
Oct 26
Nov 02
t_inter[18]
Nov 09
Nov 16
t_inter[19]
Nov 22
Nov 24
Nov 26
Nov 28
Nov 30
Dec 02
t_inter[20]
Nov 30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len_inter[2]
len_inter[3]
len_inter[4]
len_inter[5]
len_inter[6]
len_inter[7]
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len_inter[9]
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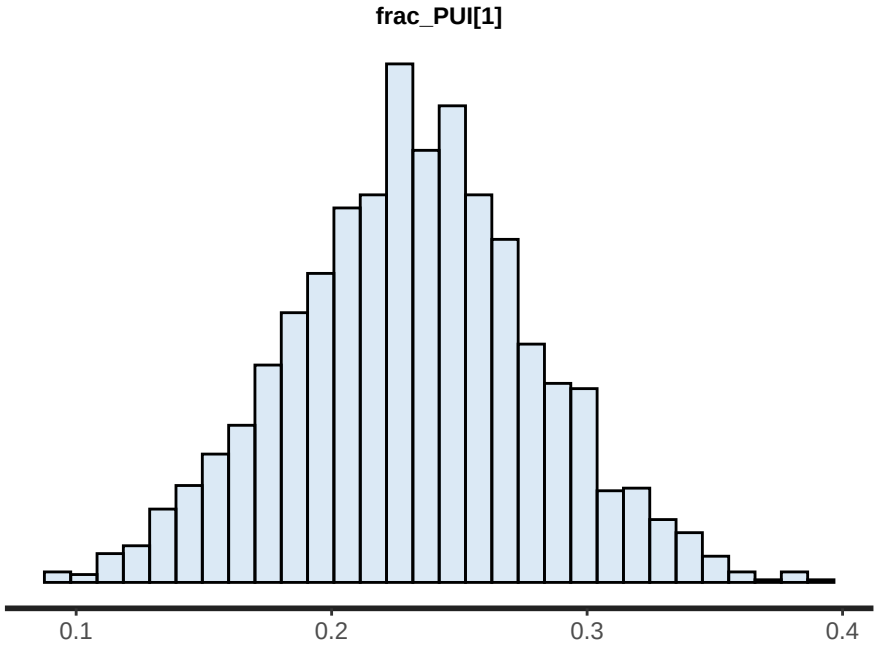
len_inter[12]
len_inter[13]
len_inter[14]
len_inter[15]
len_inter[16]
len_inter[17]
len_inter[18]
len_inter[19]
len_inter[20]


frac_PUI[1]
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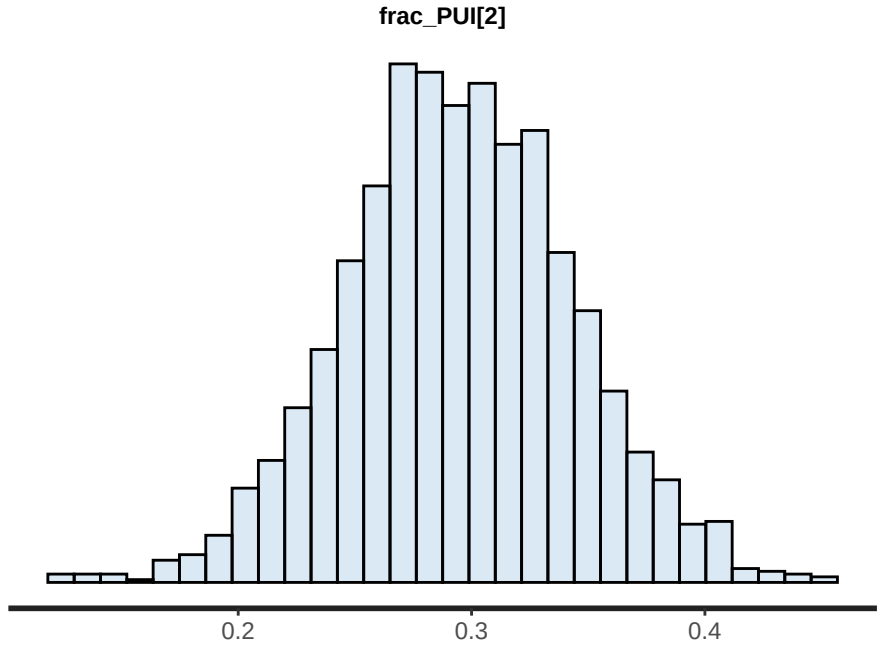
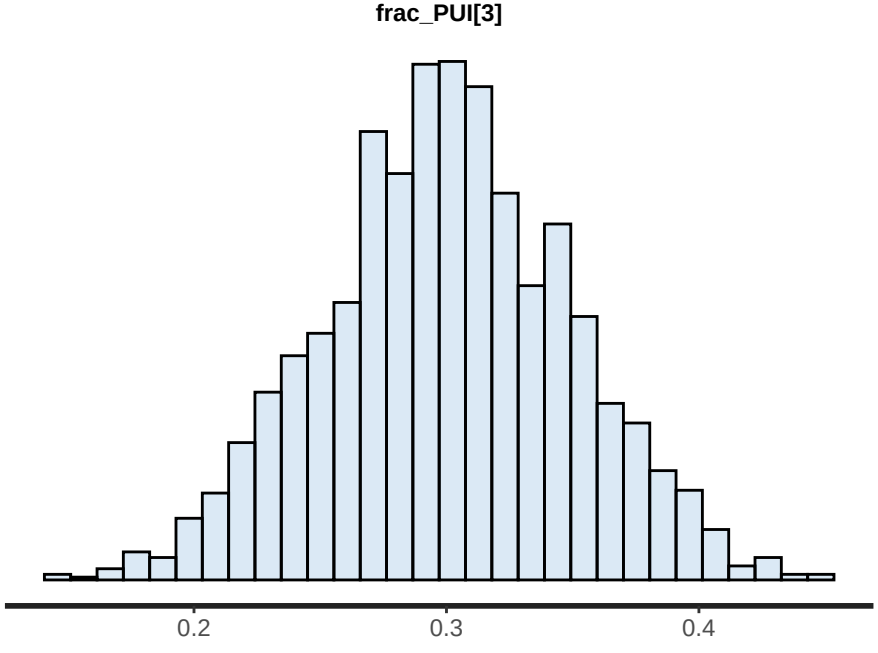
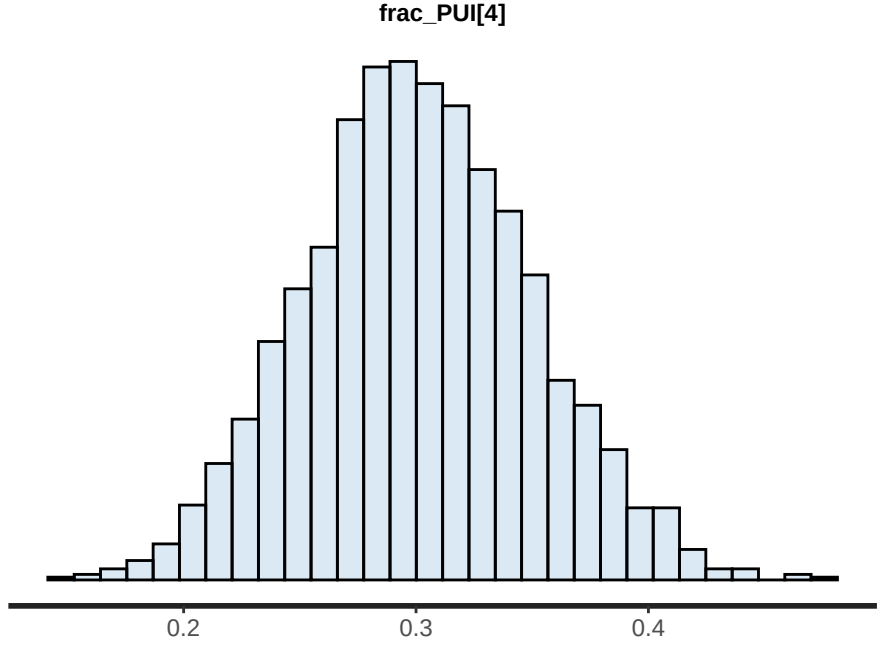
0.2
0.3
0.4


frac_PUI[2]
0.2
0.3
0.4


frac_PUI[3]
0.2
0.3
0.4


frac_PUI[4]
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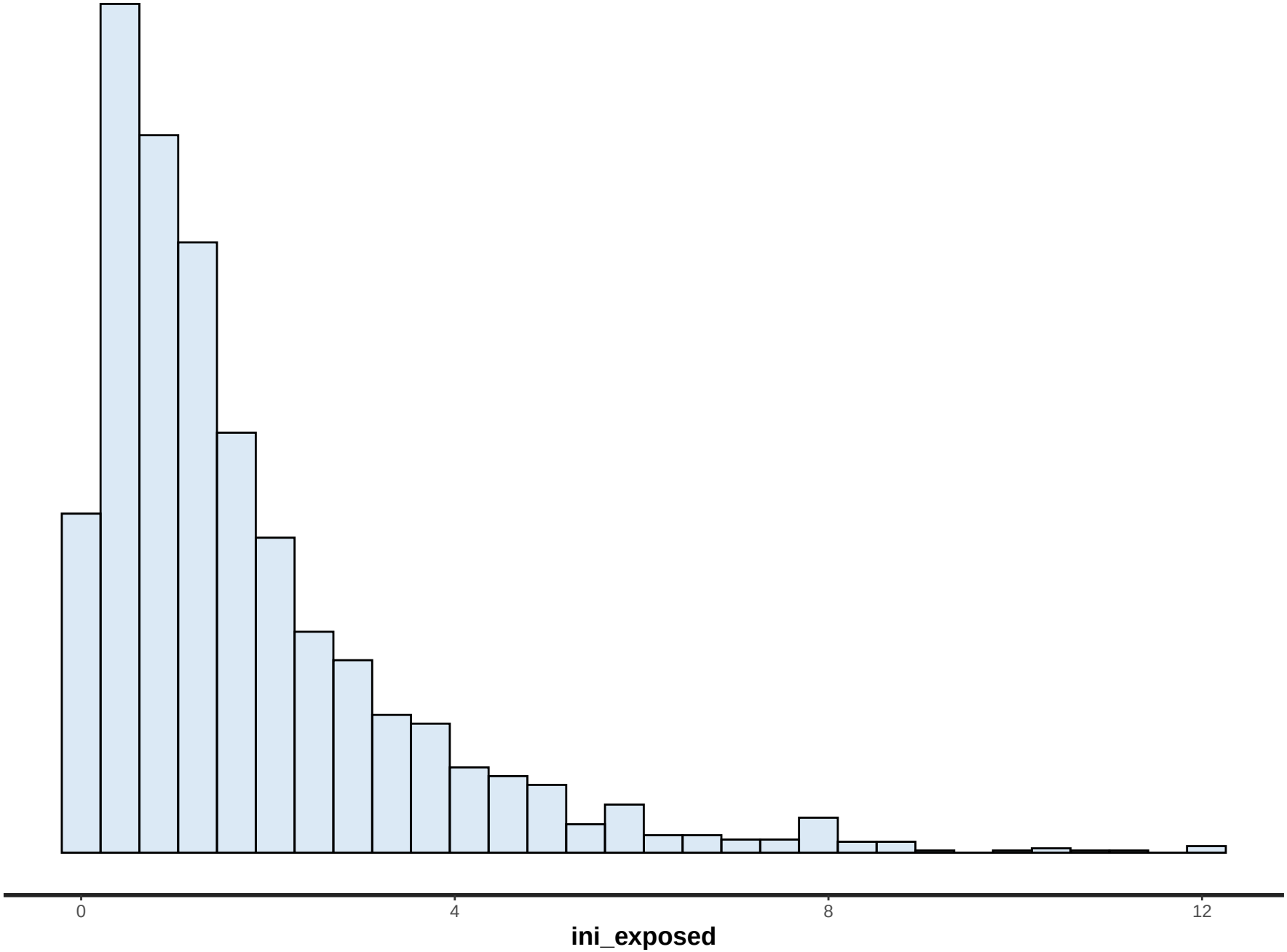
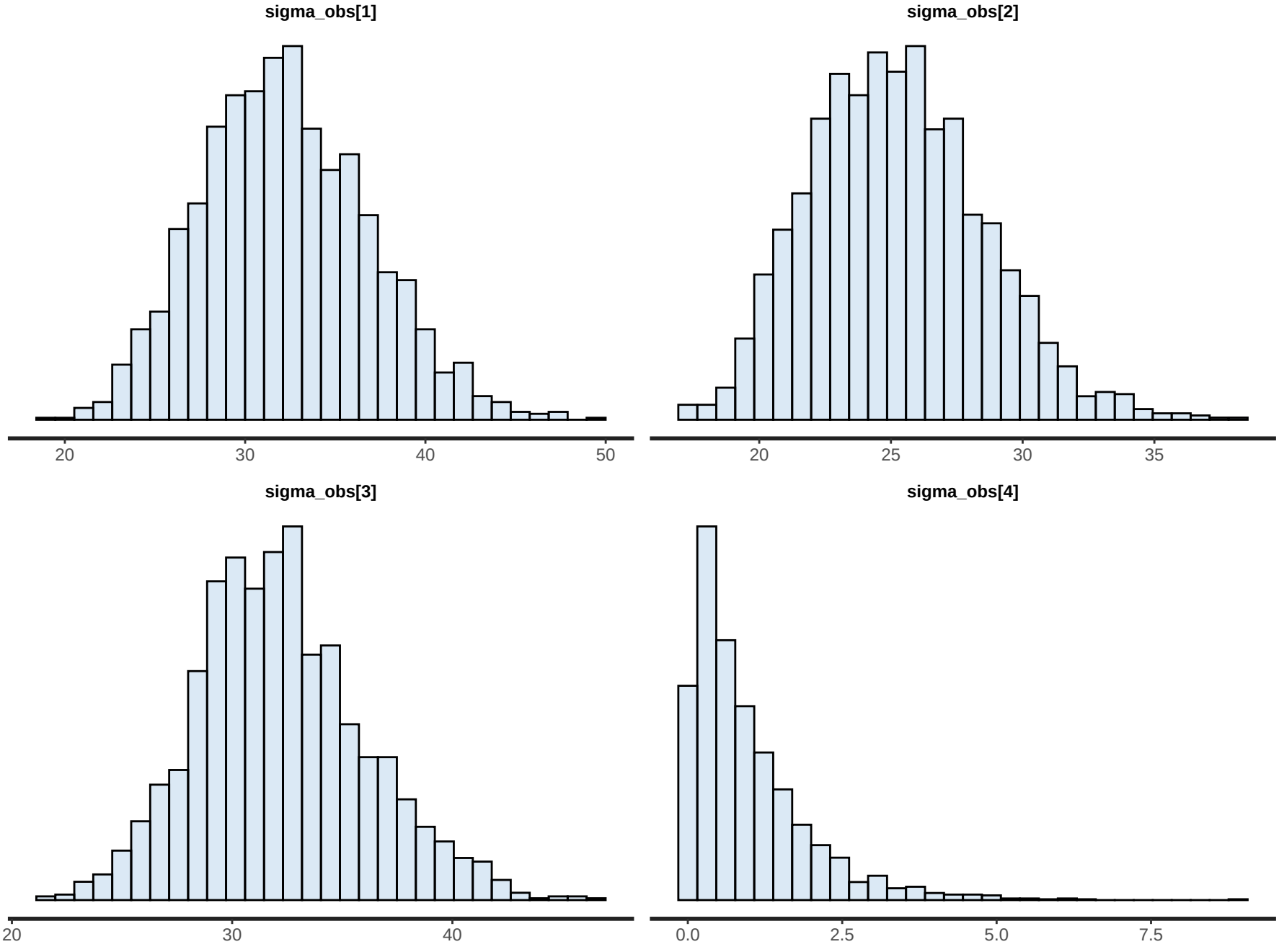
0.3
0.4


0
4
8
12
ini_exposed


sigma_obs[1]
20
30
40
50
sigma_obs[2]
20
25
30
35
sigma_obs[3]
20
30
40
sigma_obs[4]
0.0
2.5
5.0
7.5