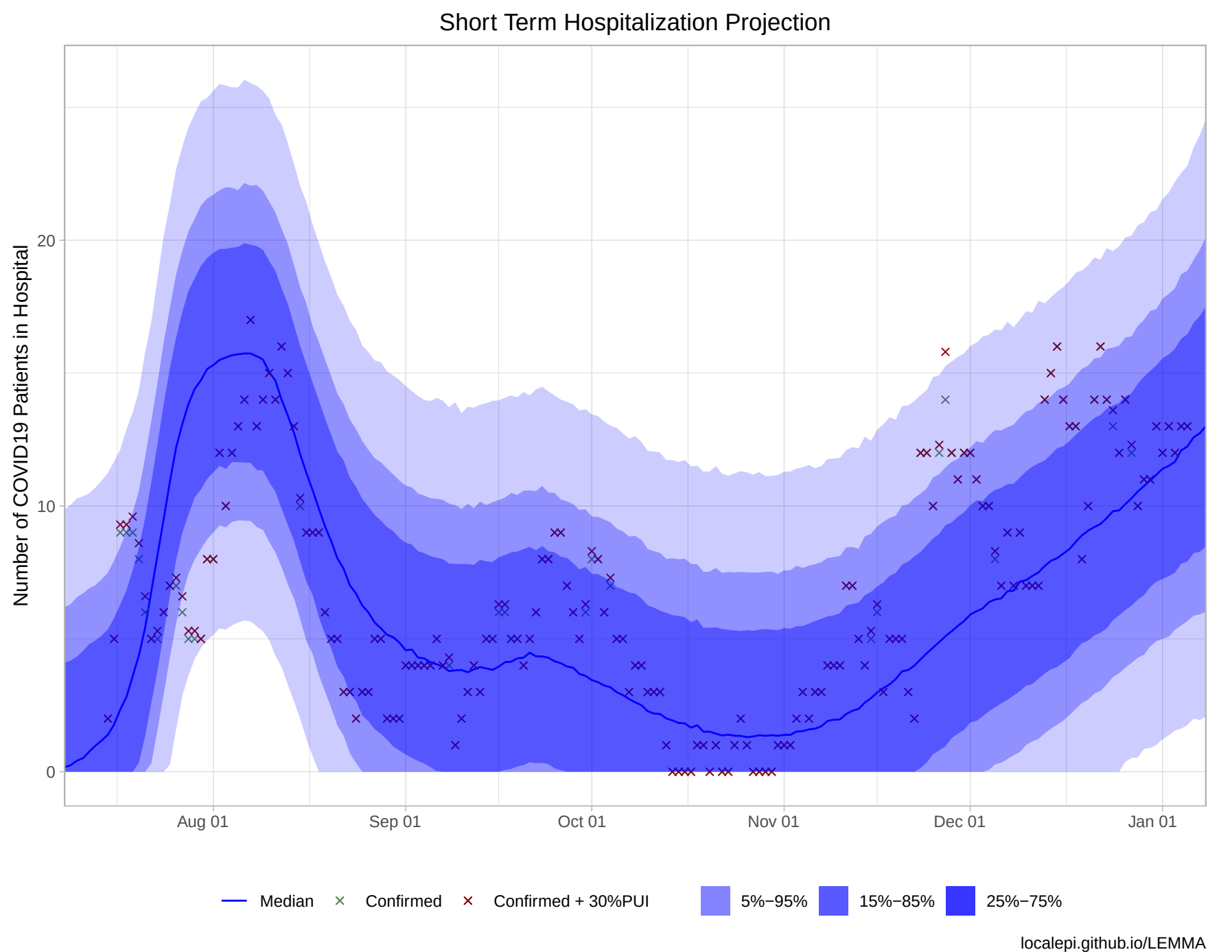
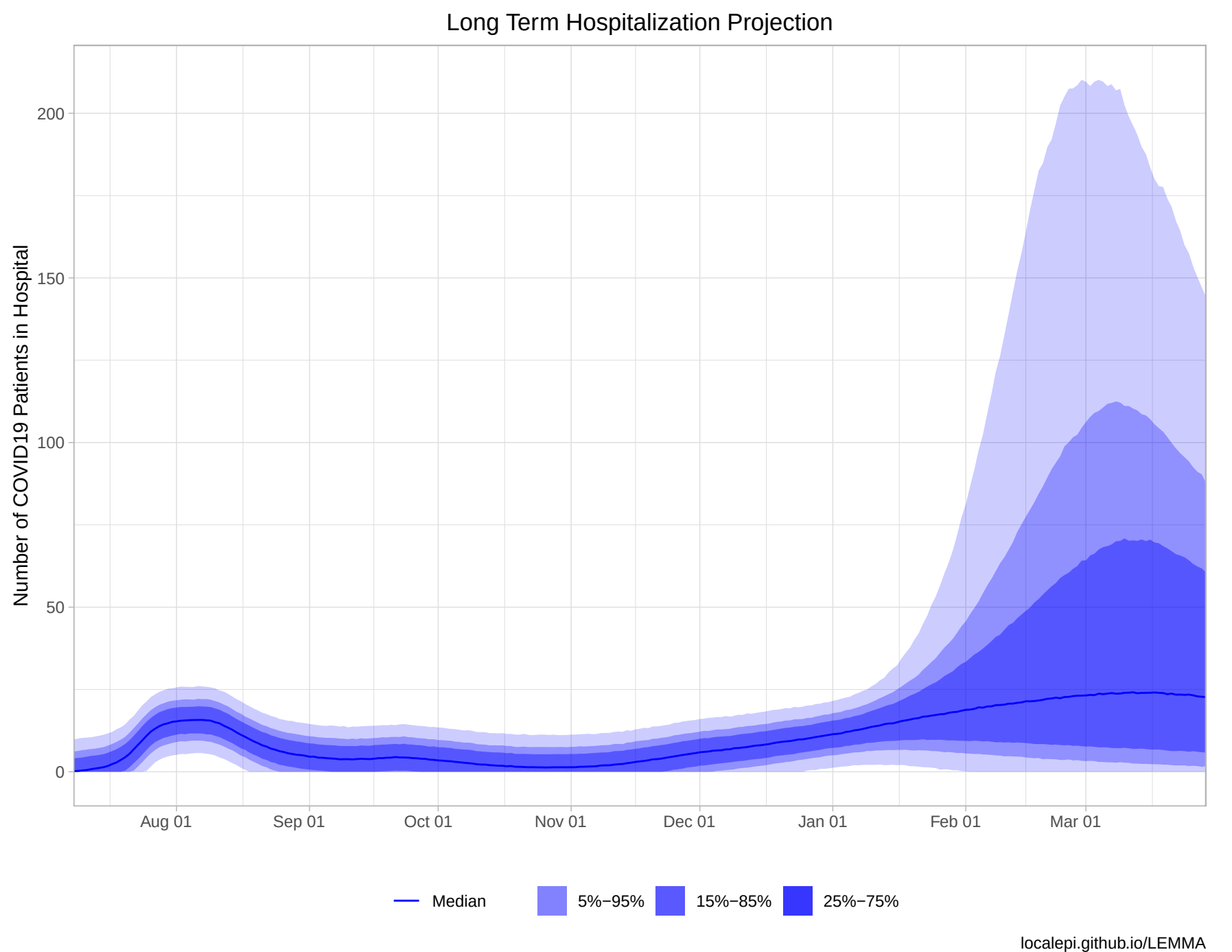
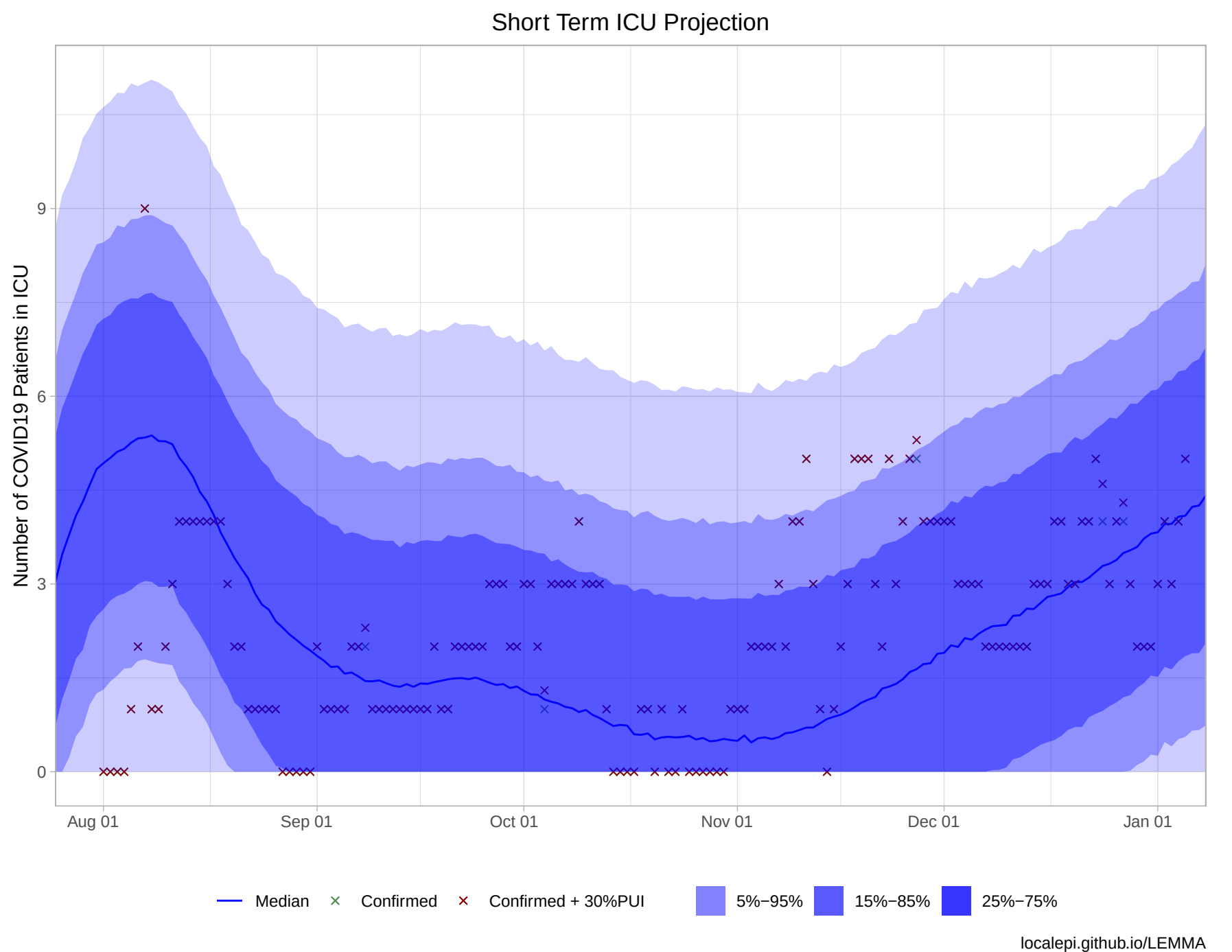
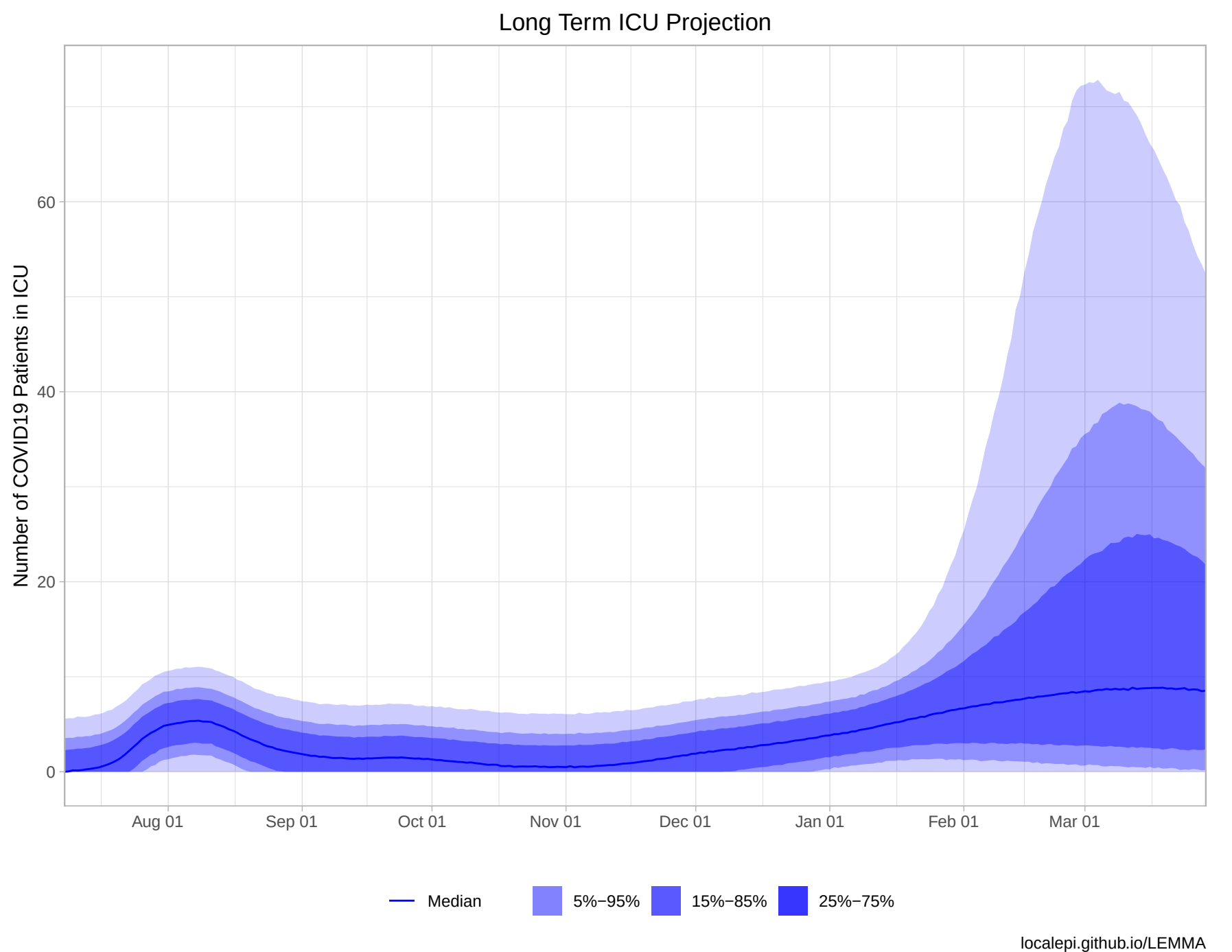
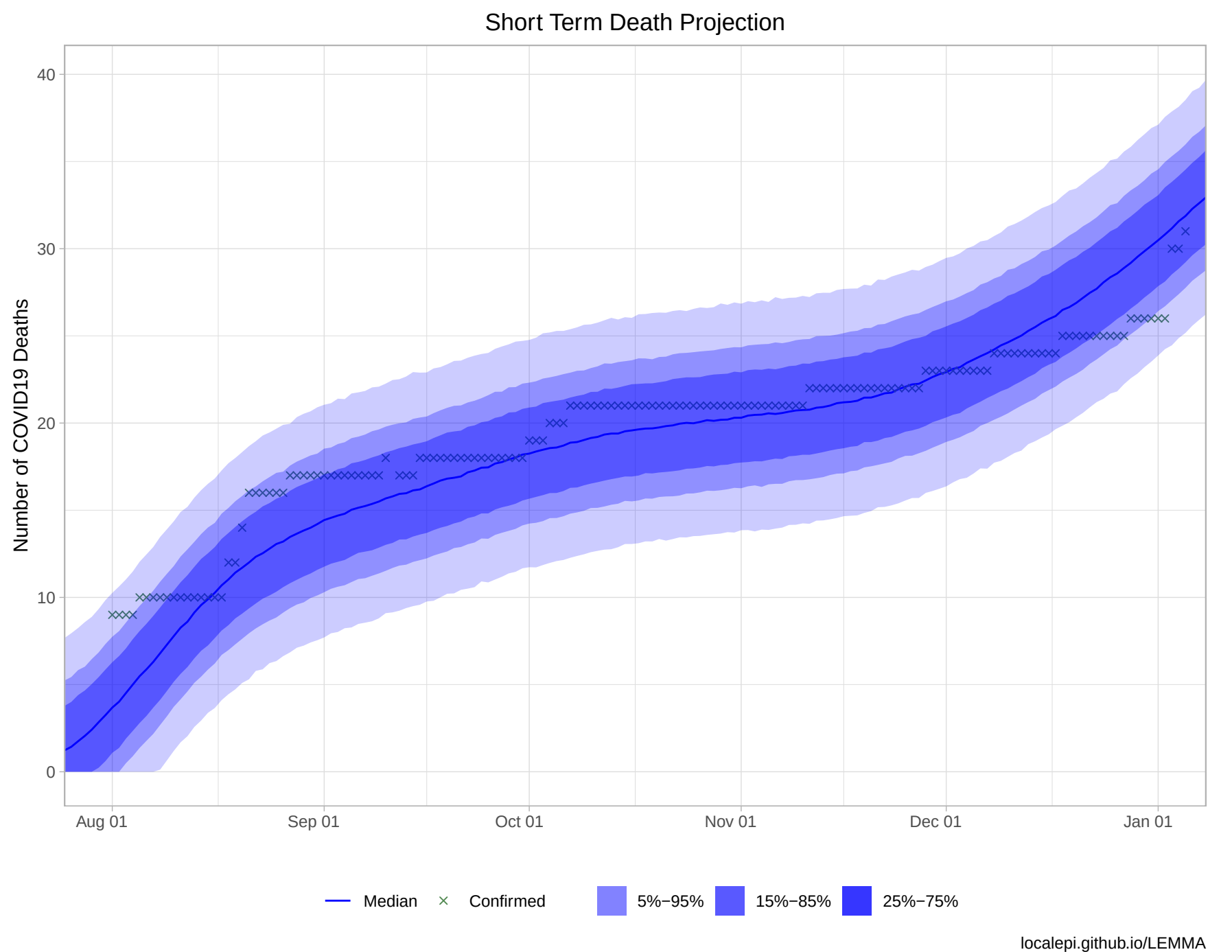
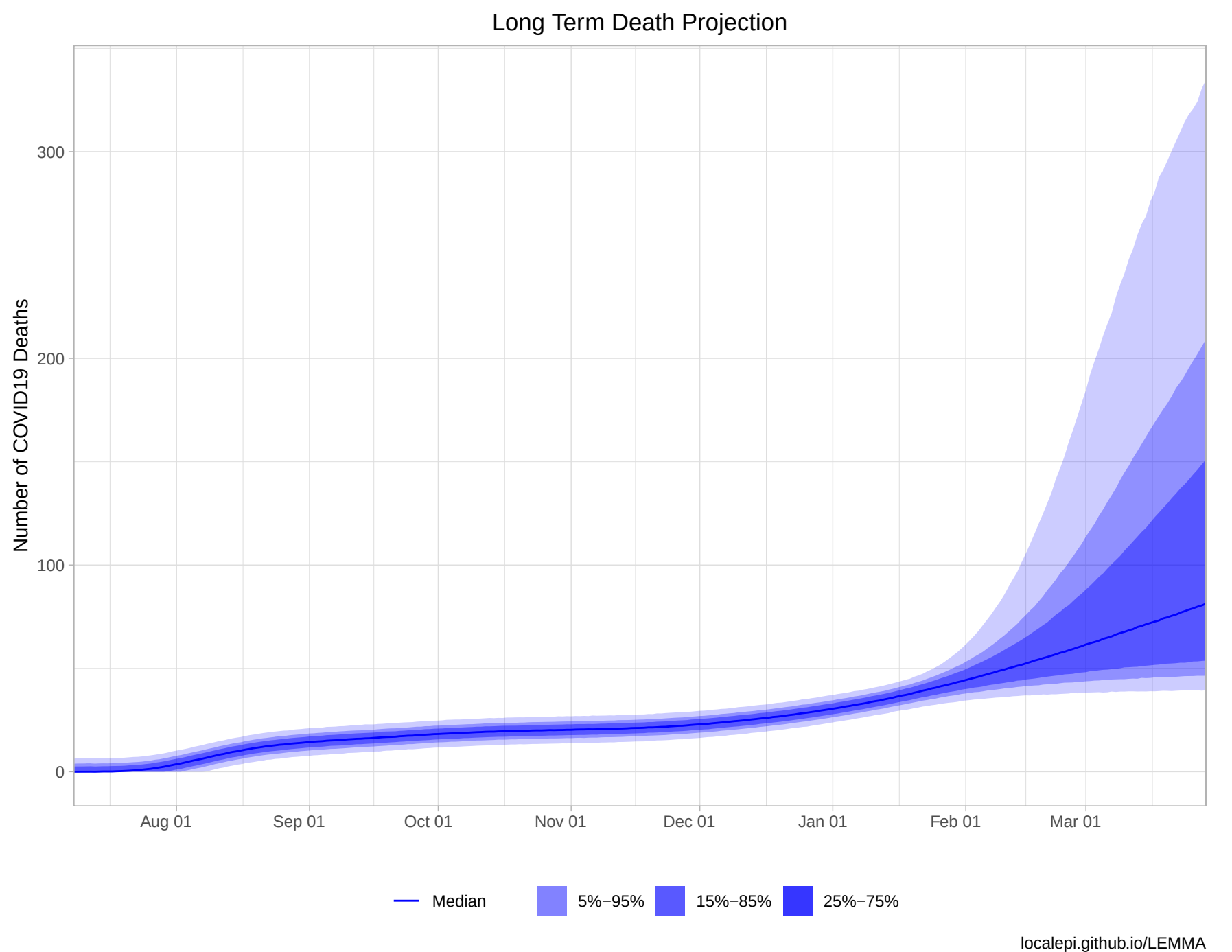

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
10
20
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

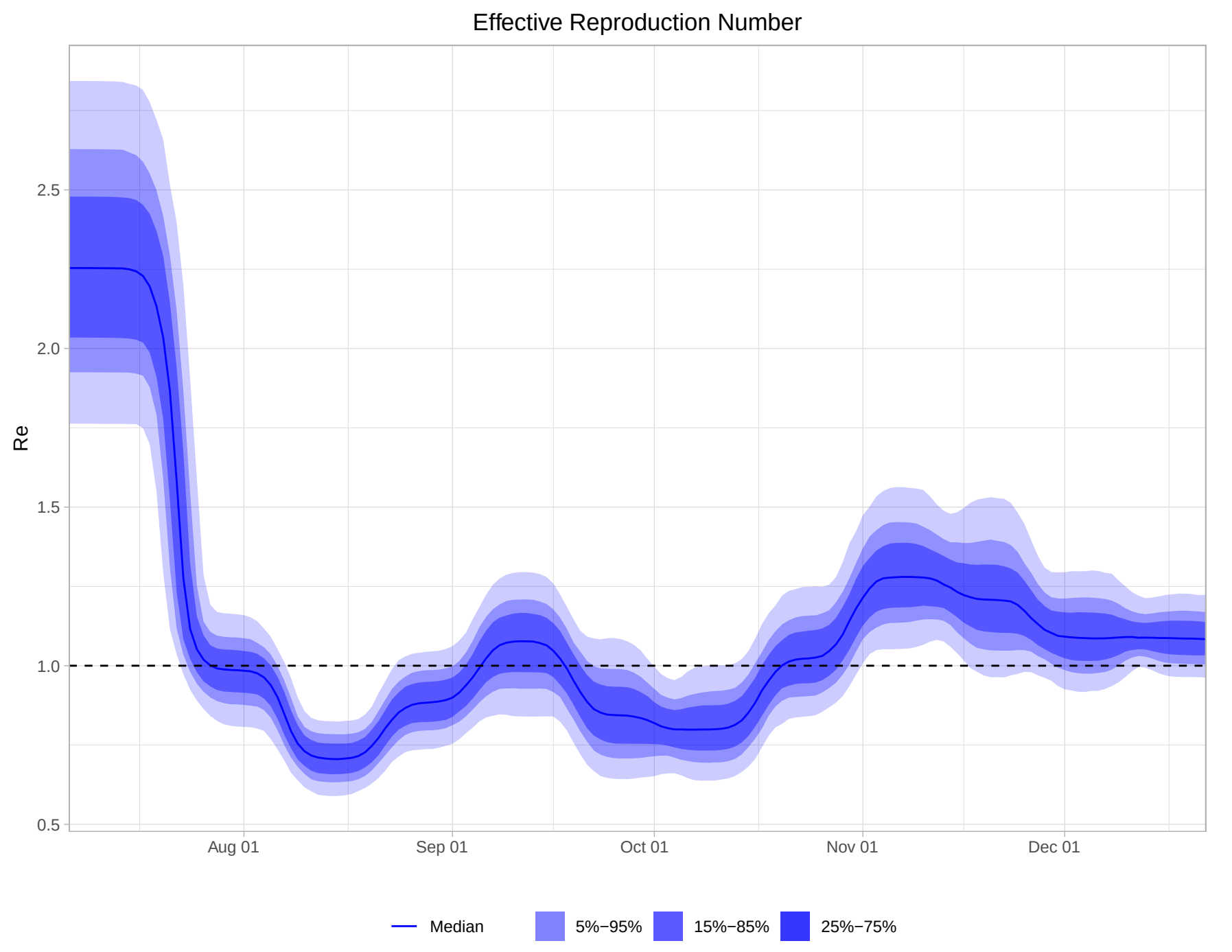

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
200
150
100
50
0
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
3
6
9
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
20
40
60
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

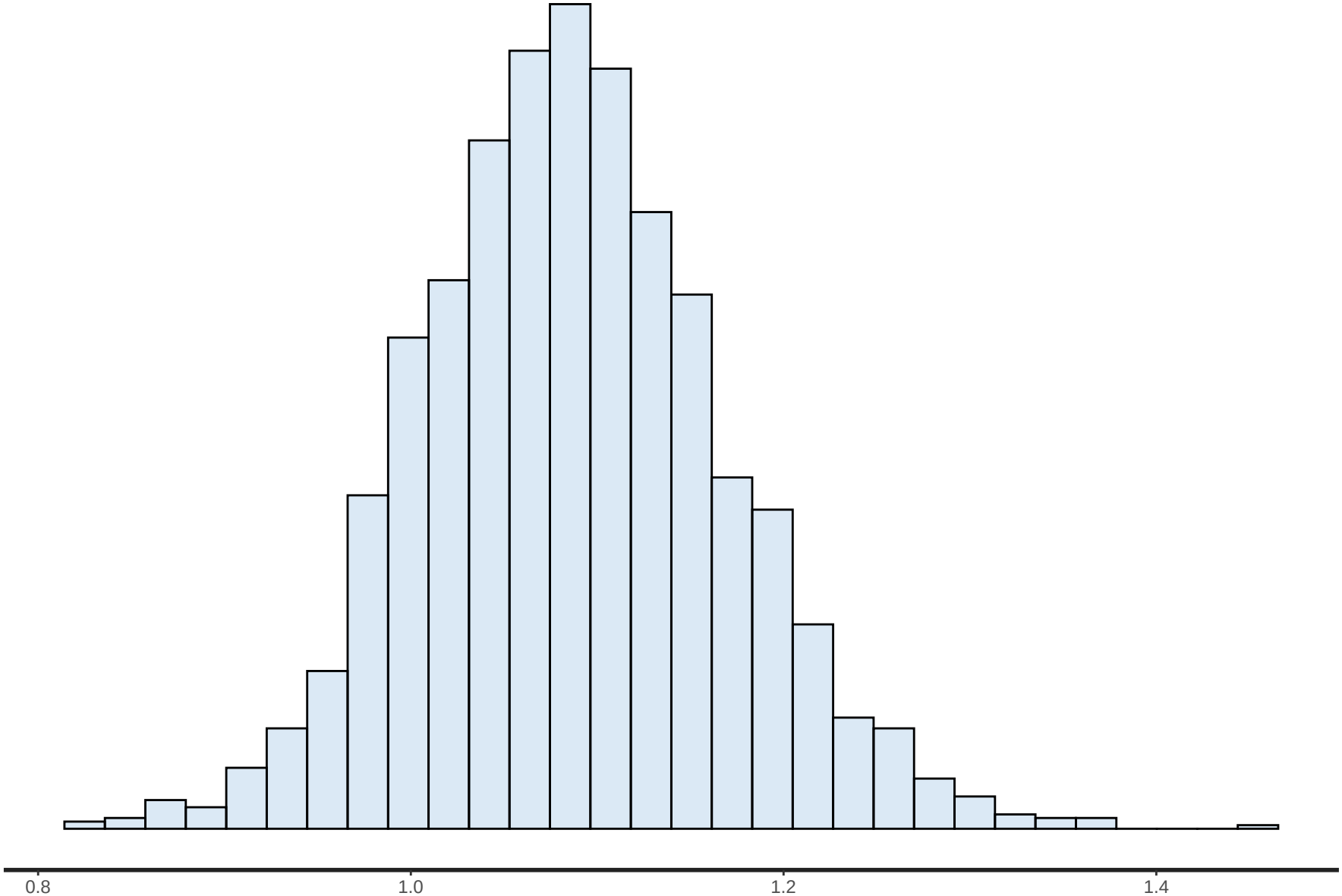

Short Term Death Projection
Number of COVID19 Deaths
40
30
20
10
0
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

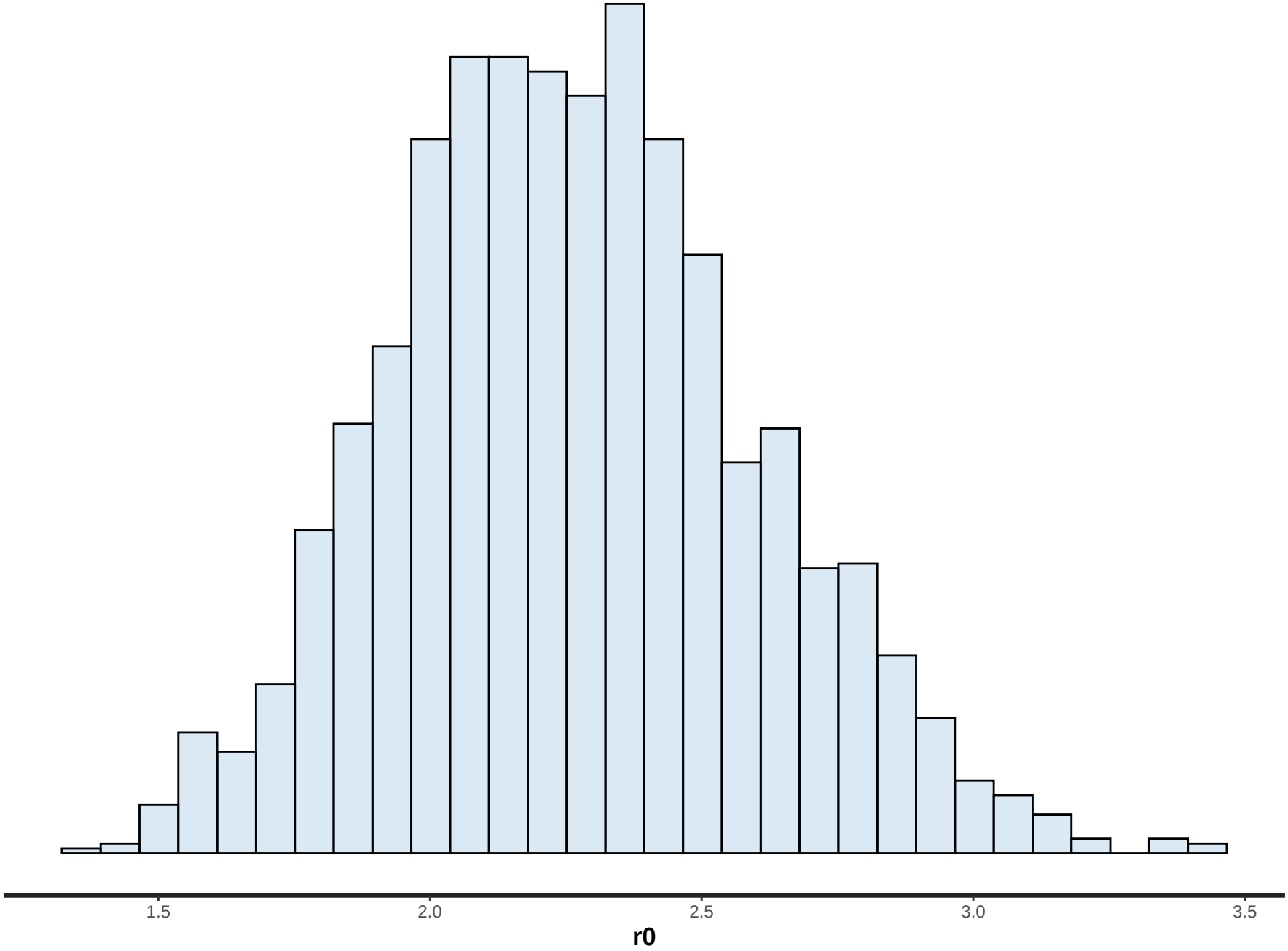

Long Term Death Projection
Number of COVID19 Deaths
300
200
100
0
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

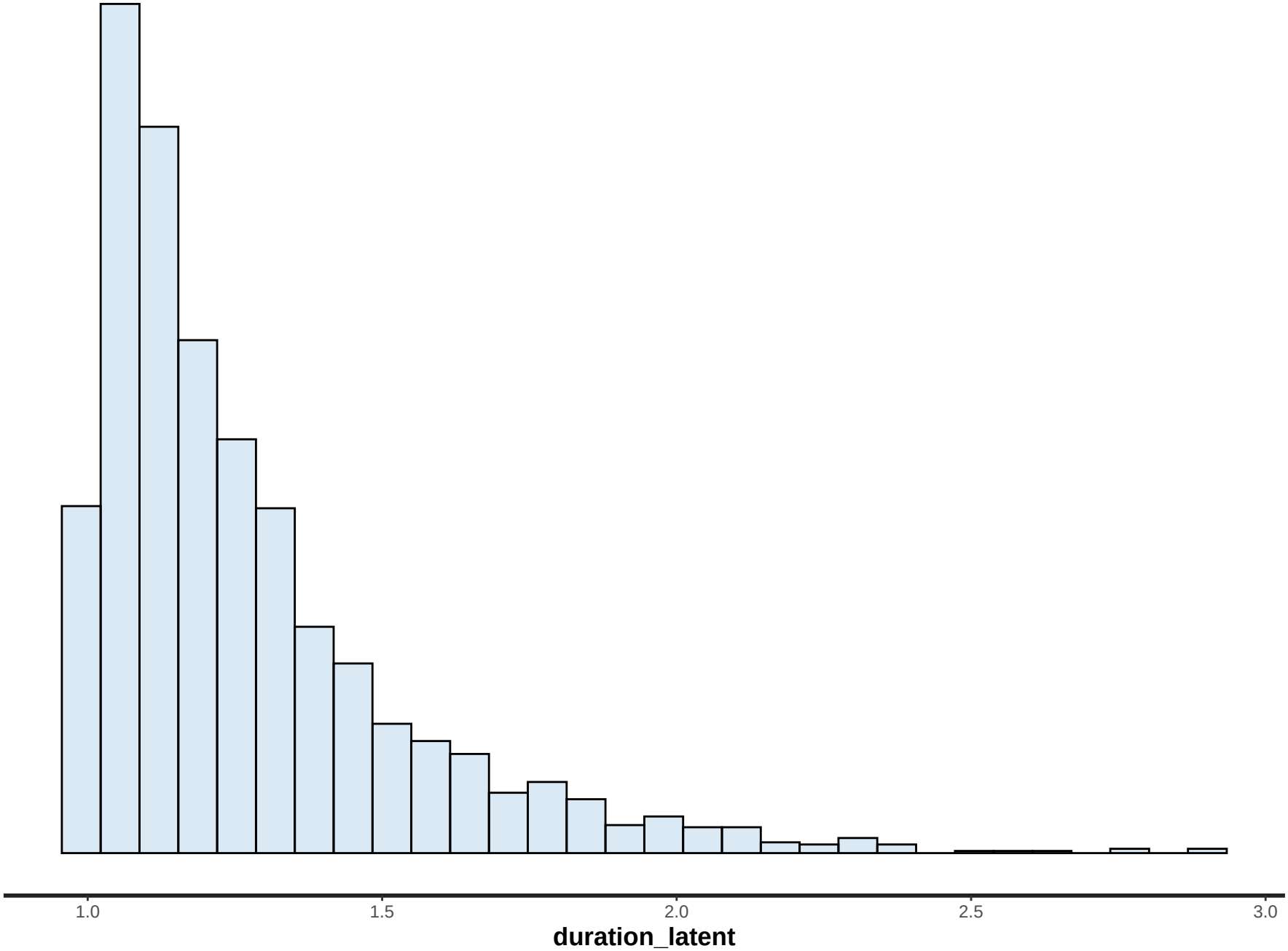

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
0.5
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

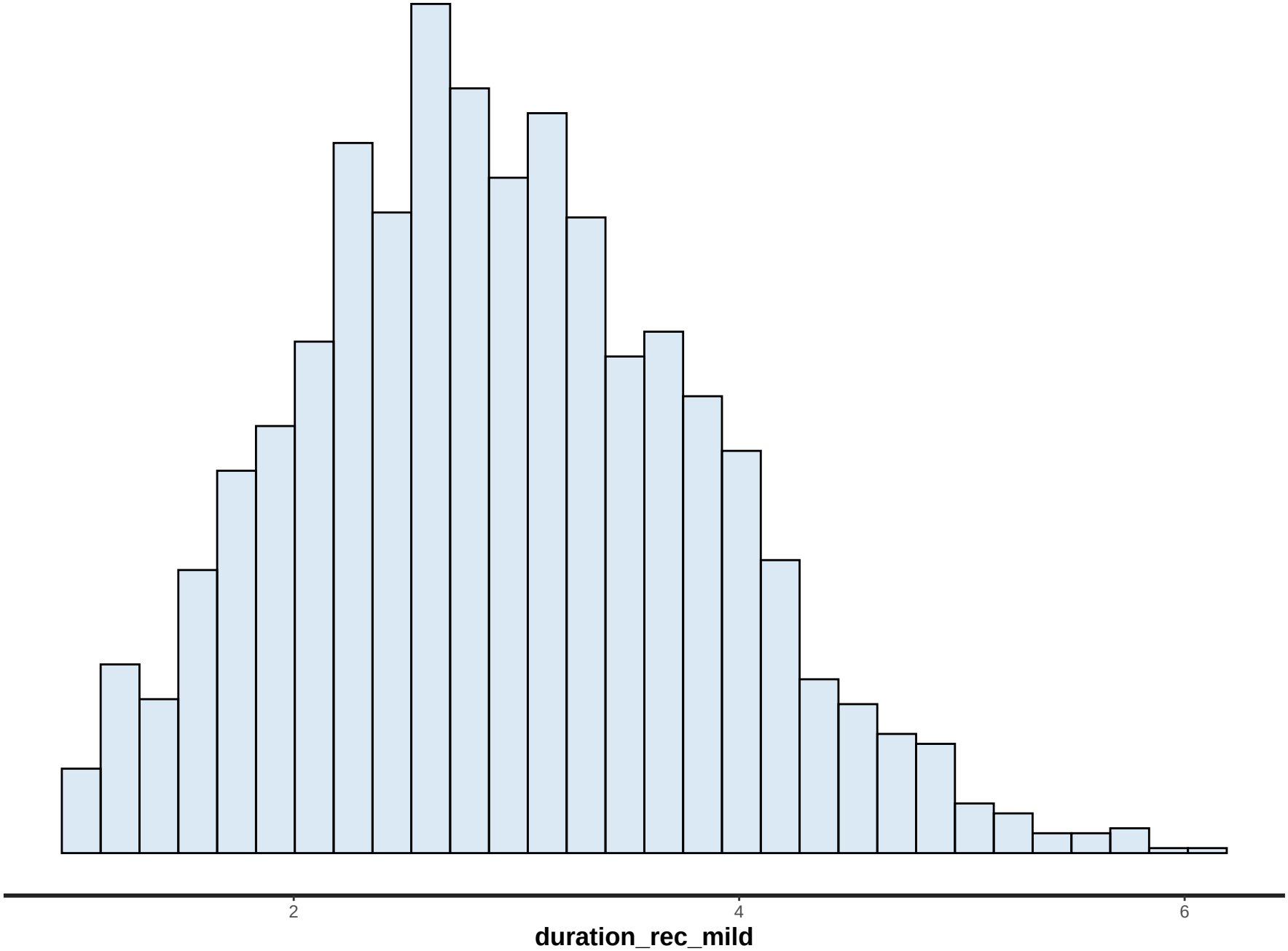
Rt as of 2020−12−22

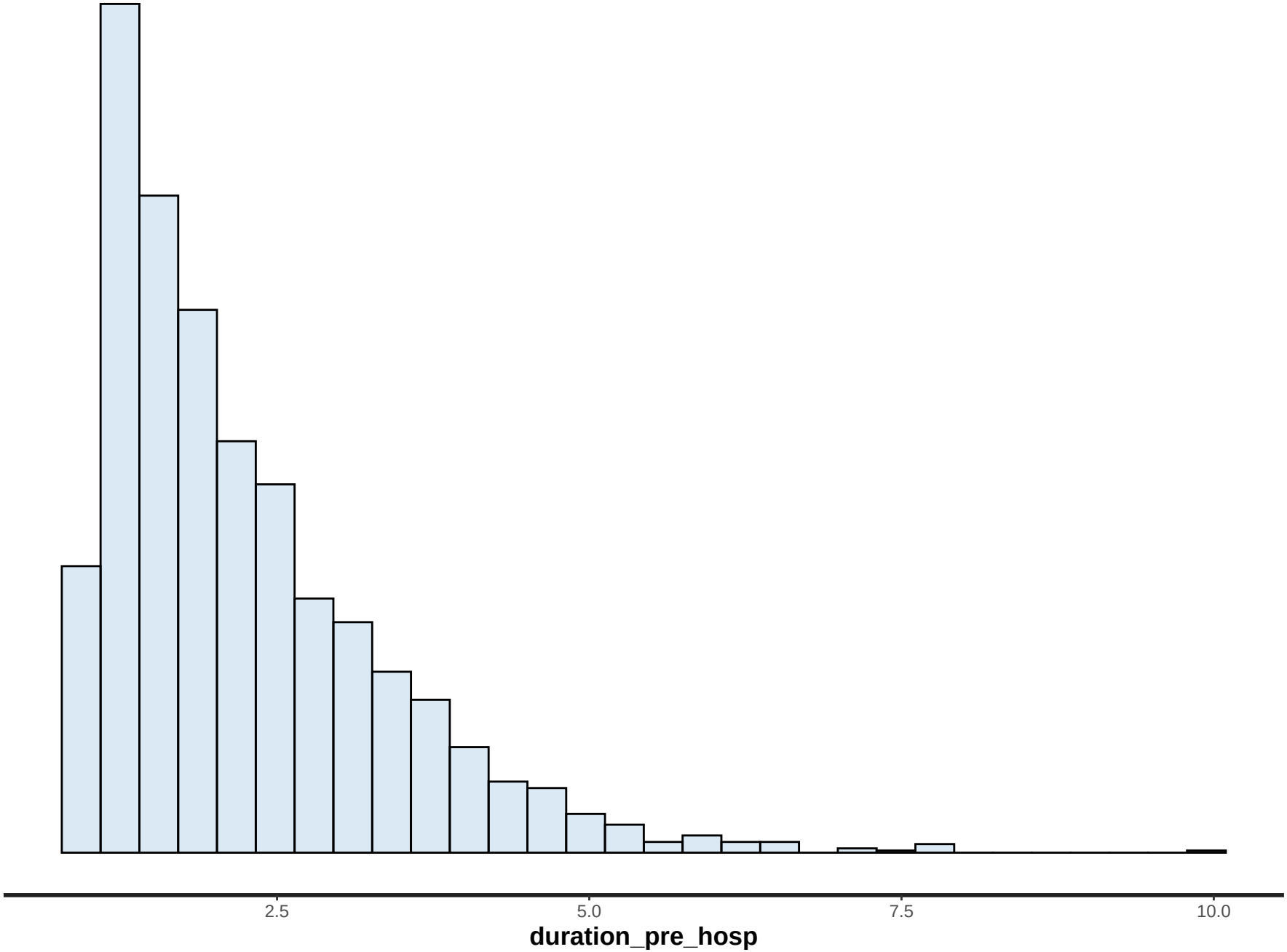
5%	10%	25%	50%	75%	90%	95%
0.96	0.99	1.03	1.08	1.14	1.19	1.22

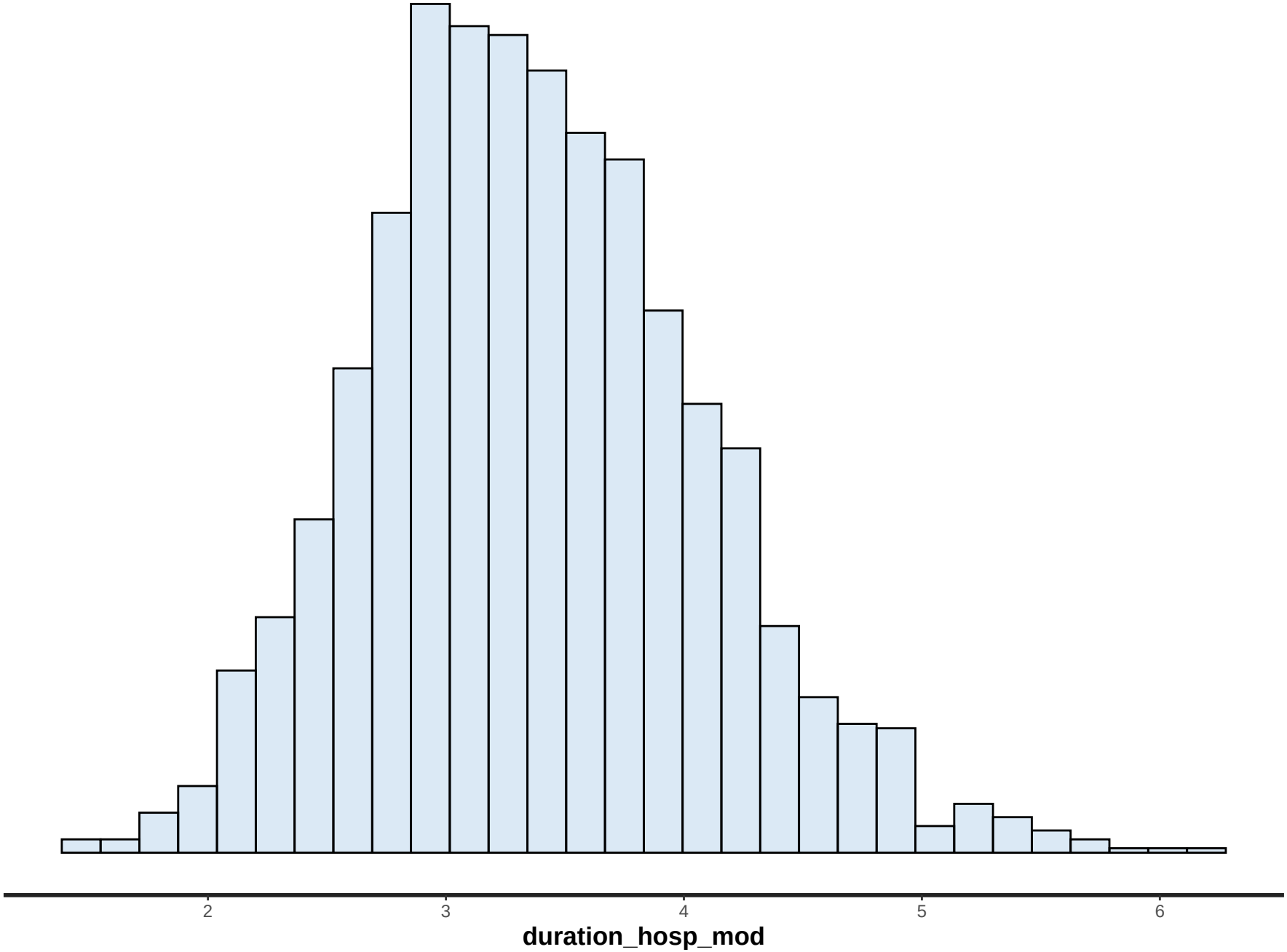


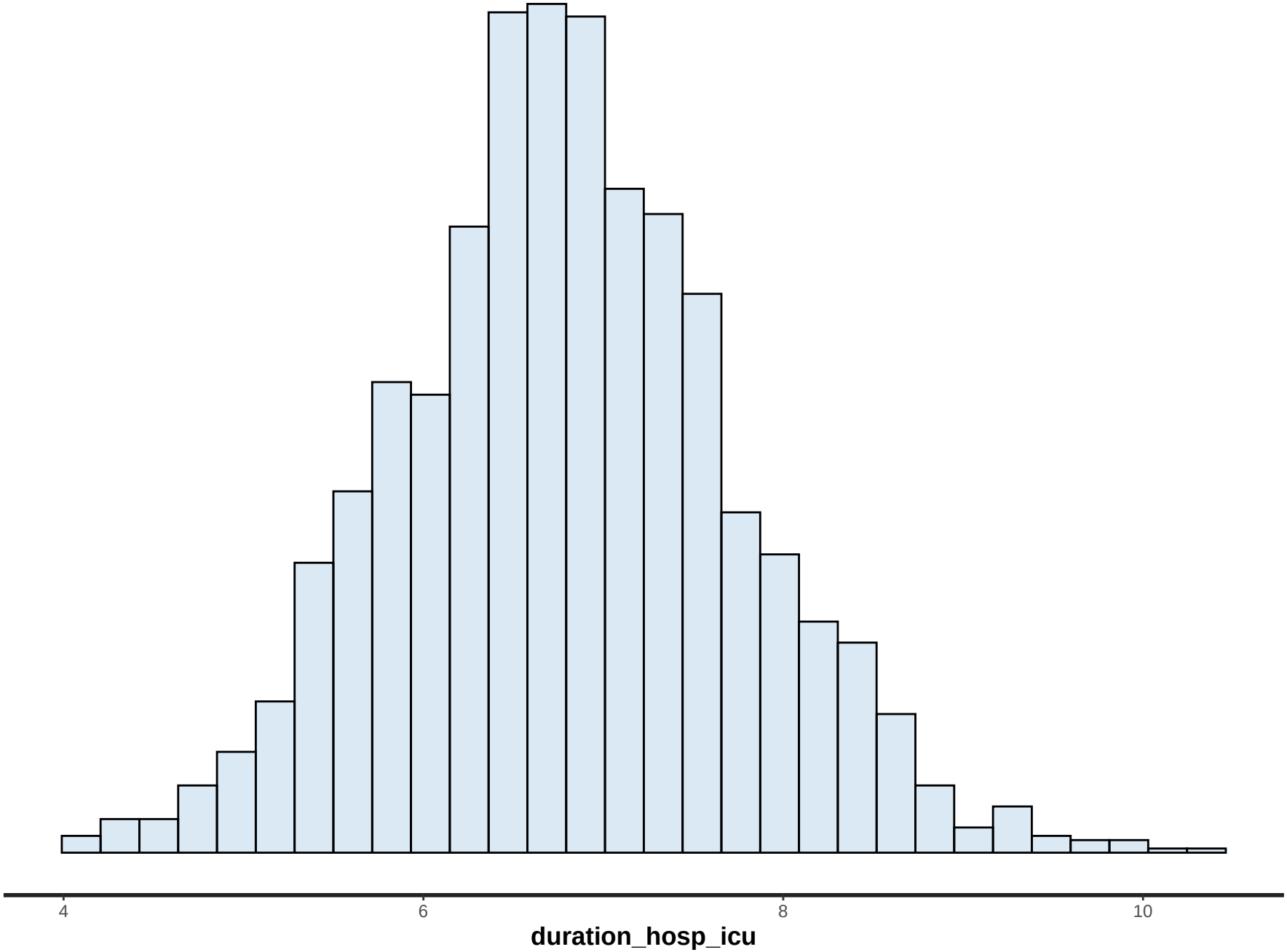

1.5
2.0
2.5
3.0
3.5
r0

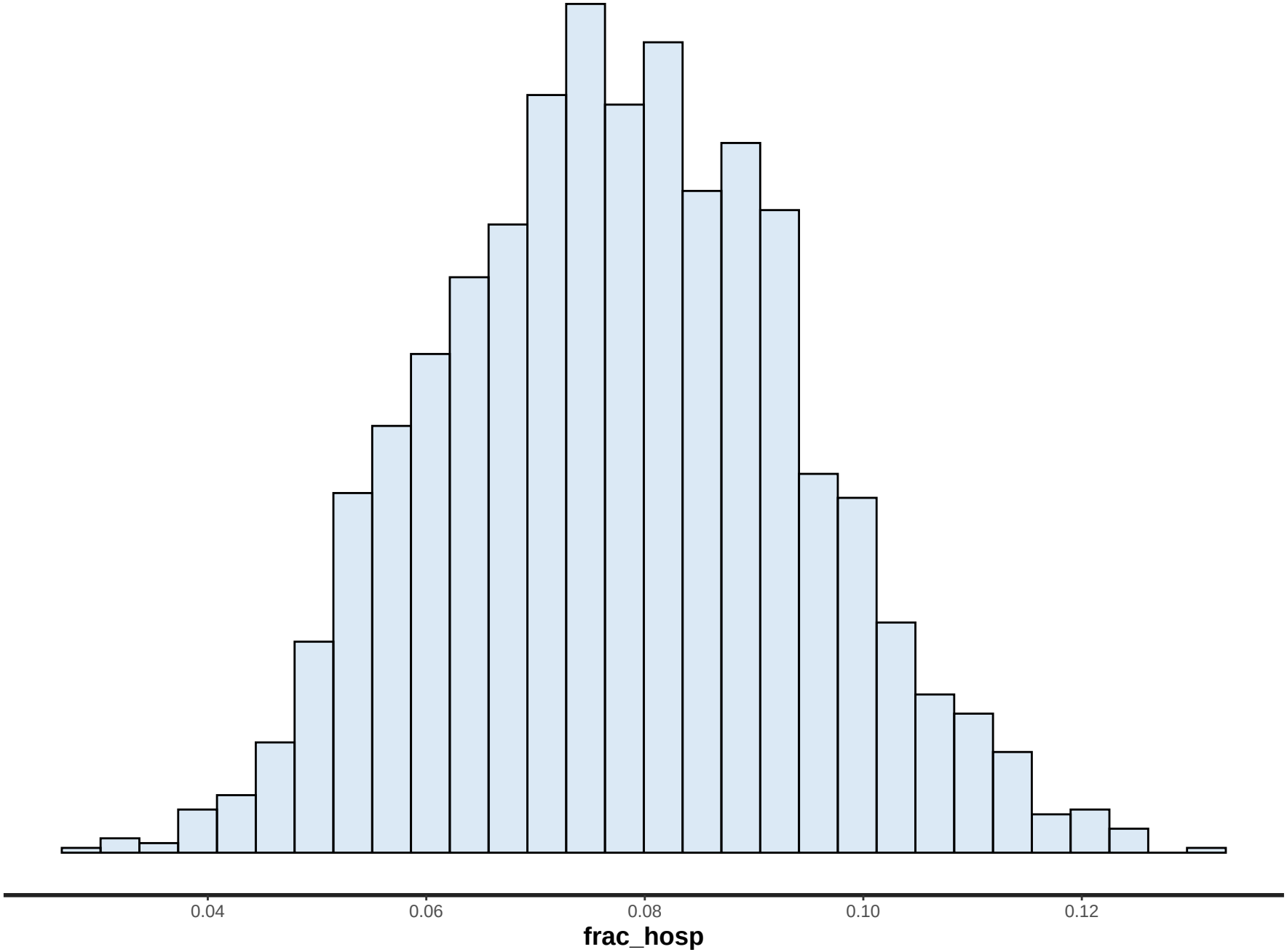

1.0
1.5
2.0
2.5
3.0
duration_latent


2
4
6
duration_rec_mild


2.5
5.0
7.5
10.0
duration_pre_hosp


2
3
4
5
6
duration_hosp_mod


4
6
8
10
duration_hosp_icu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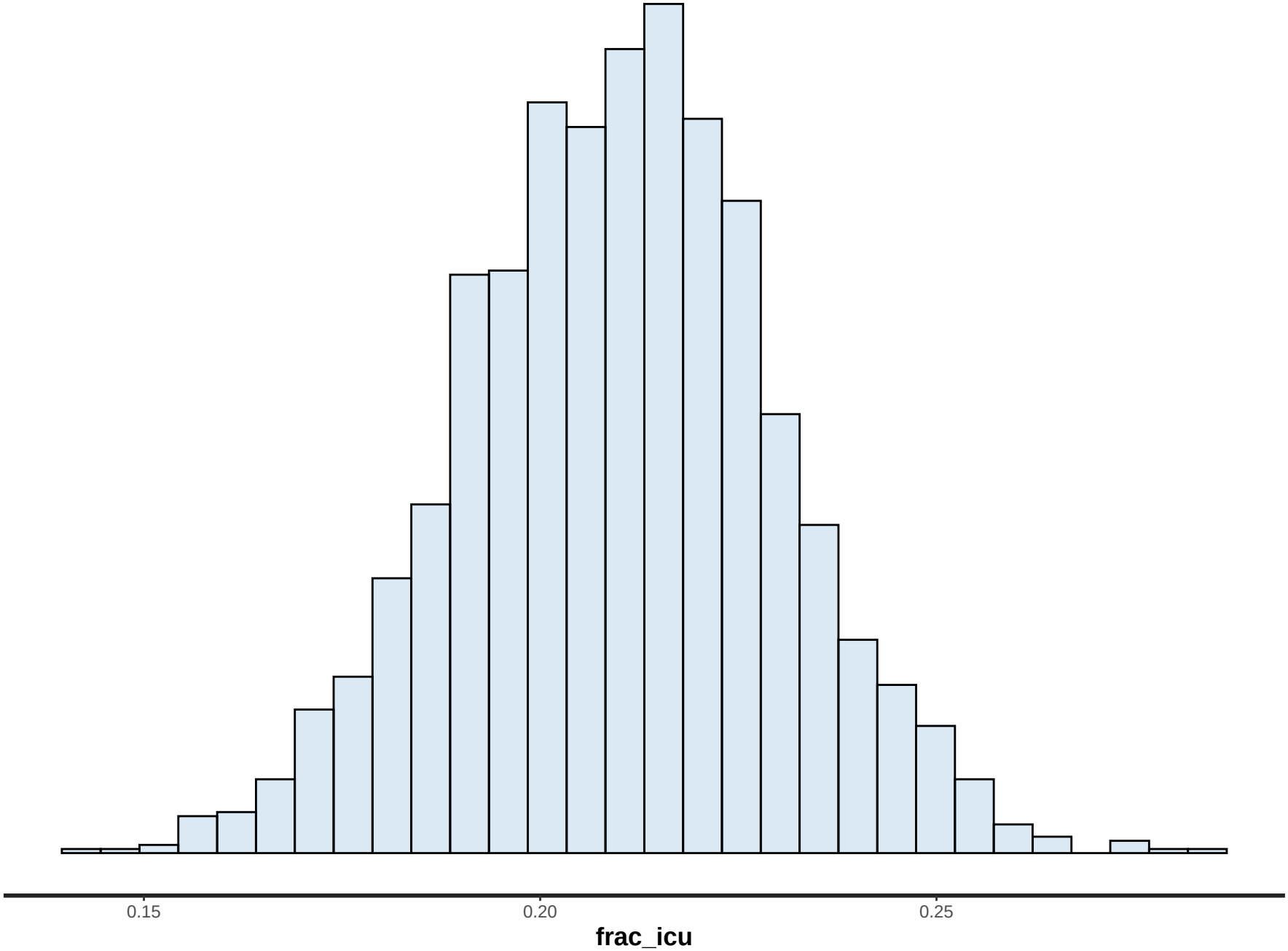
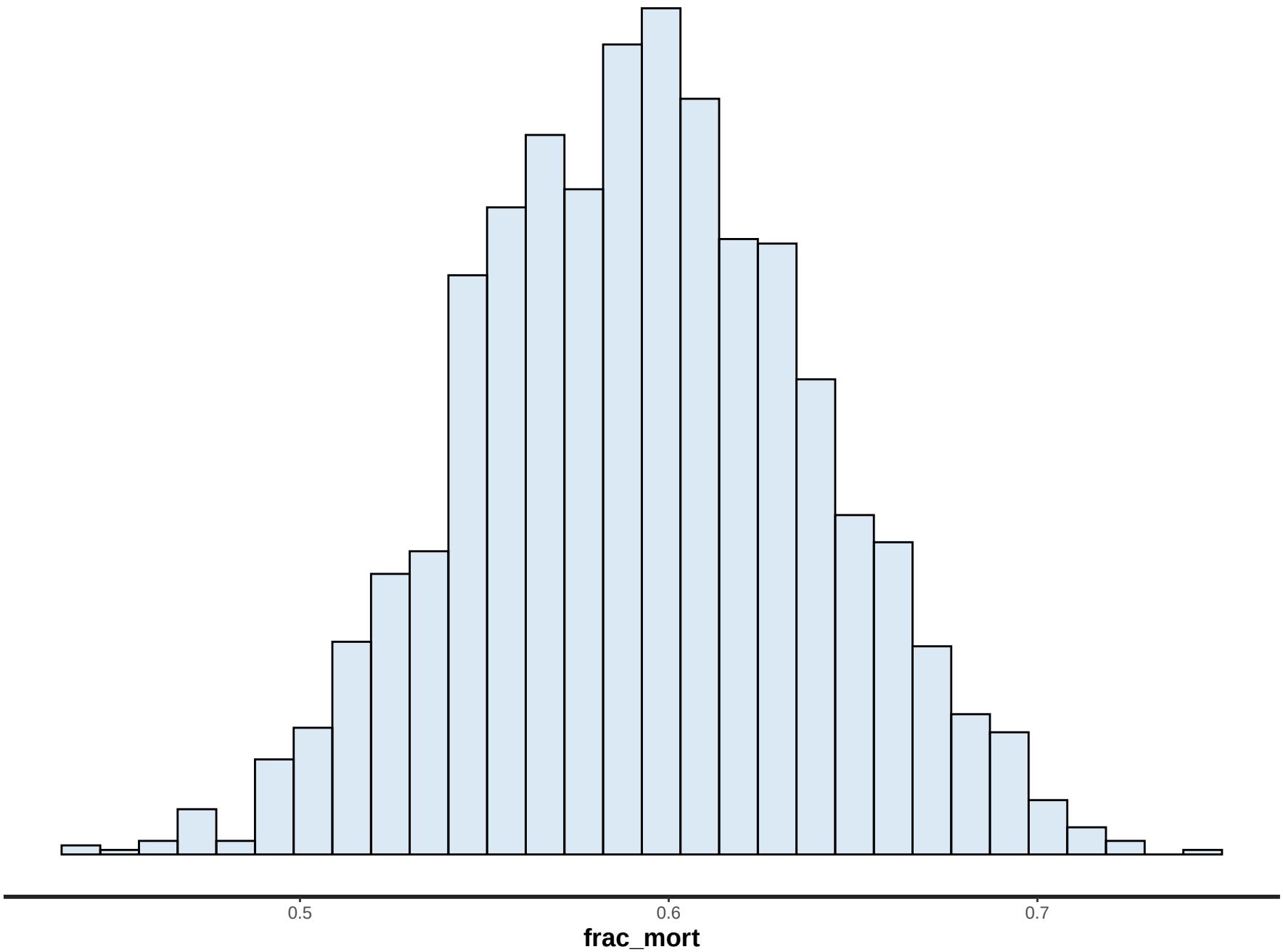
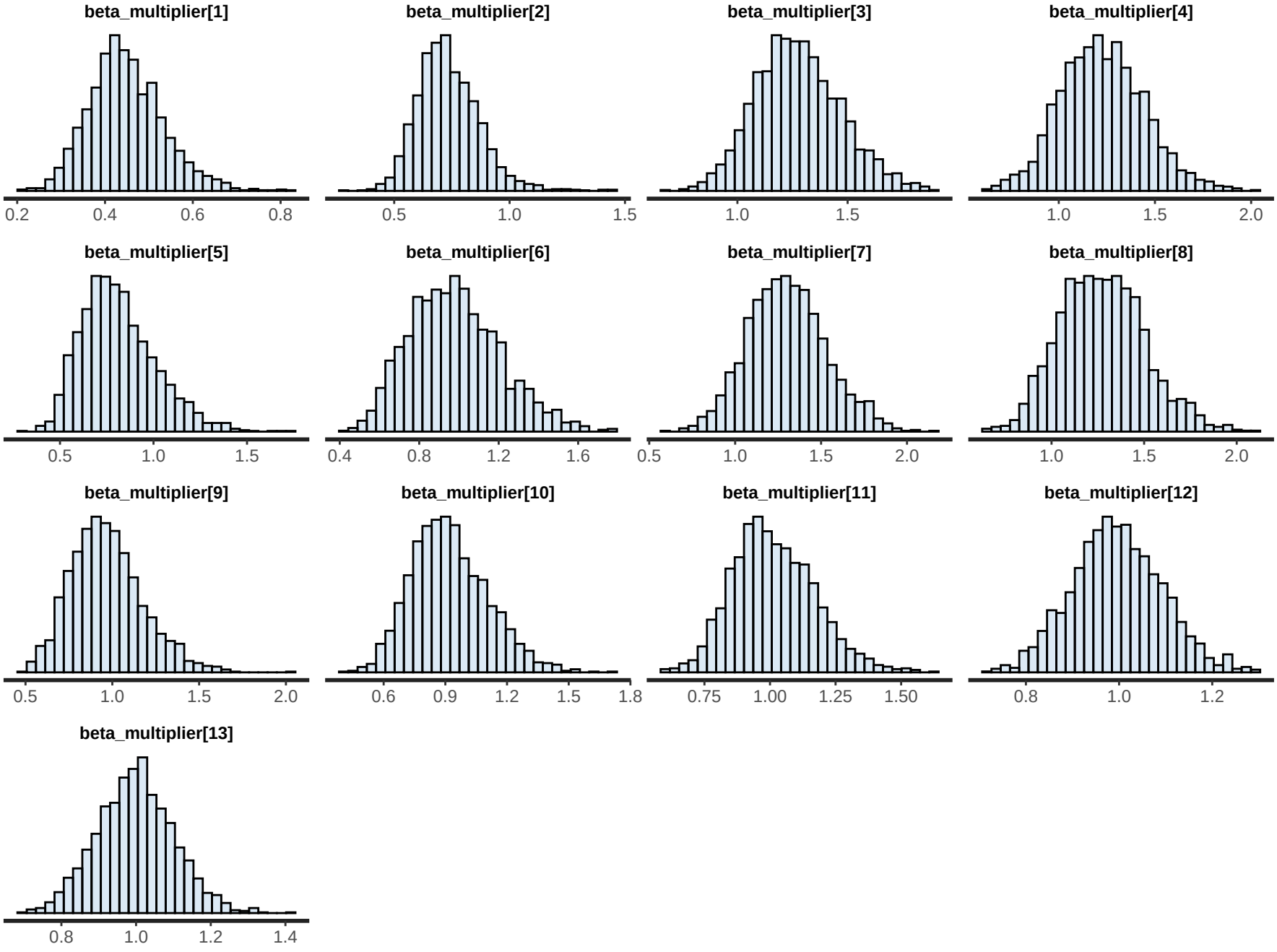
0.06
0.08
0.10
0.12
frac_hosp


0.15
0.20
0.25
frac_icu


0.5
0.6
0.7
frac_mort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0.2
0.4
0.6
0.8
beta_multiplier[2]
0.5
1.0
1.5
beta_multiplier[3]
1.0
1.5
beta_multiplier[4]
1.0
1.5
2.0
beta_multiplier[5]
0.5
1.0
1.5
beta_multiplier[6]
0.4
0.8
1.2
1.6
beta_multiplier[7]
0.5
1.0
1.5
2.0
beta_multiplier[8]
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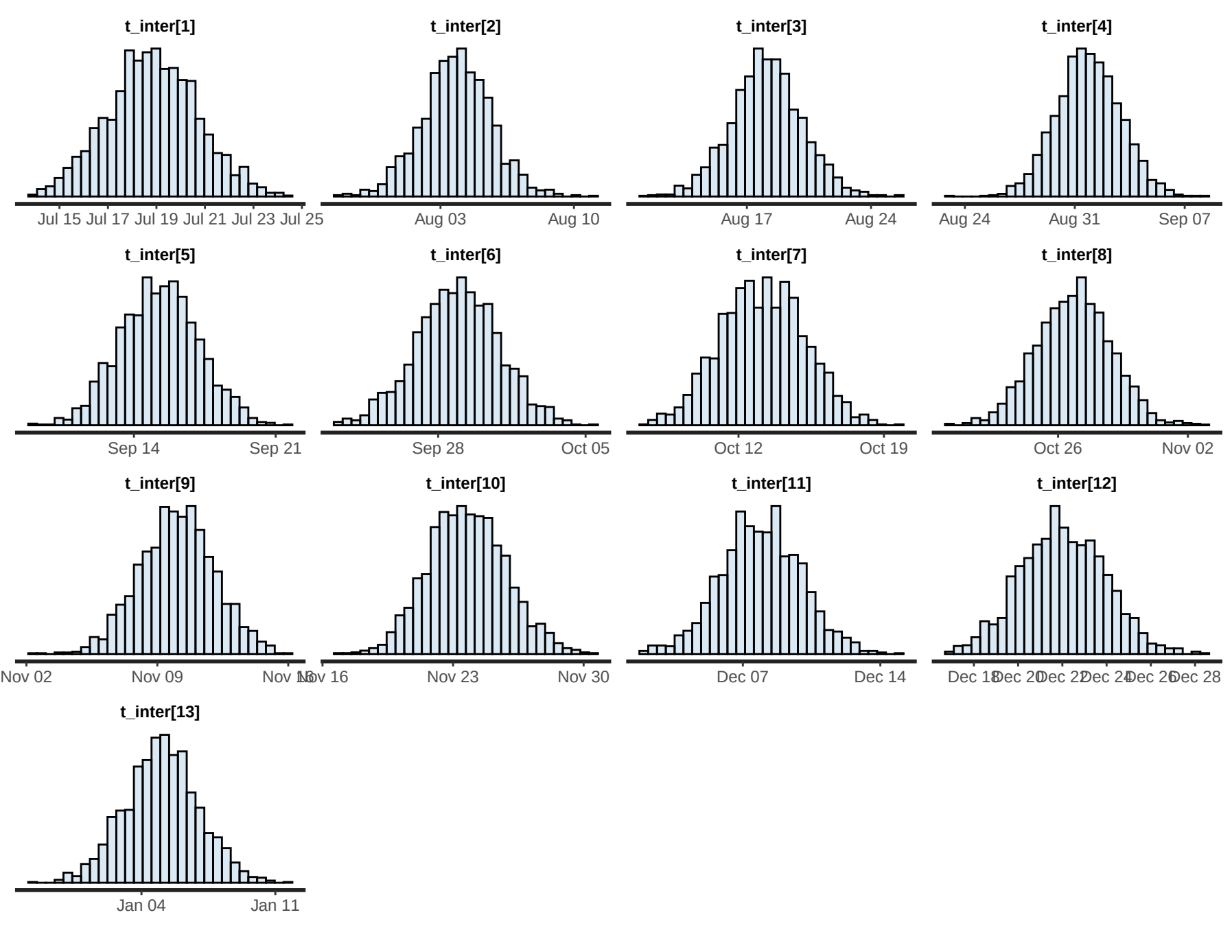
1.5
2.0
beta_multiplier[9]
0.5
1.0
1.5
2.0
beta_multiplier[10]
0.6
0.9
1.2
1.5
1.8
beta_multiplier[11]
0.75
1.00
1.25
1.50
beta_multiplier[12]
0.8
1.0
1.2
beta_multiplier[13]
0.8
1.0
1.2
1.4


t_inter[1]
Jul 15 Jul 17 Jul 19 Jul 21 Jul 23 Jul 25
t_inter[2]
Aug 03
Aug 10
t_inter[3]
Aug 17
Aug 24
t_inter[4]
Aug 24
Aug 31
Sep 07
t_inter[5]
Sep 14
Sep 21
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Sep 28
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t_inter[7]
Oct 12
Oct 19
t_inter[8]
Oct 26
Nov 02
t_inter[9]
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Nov 09
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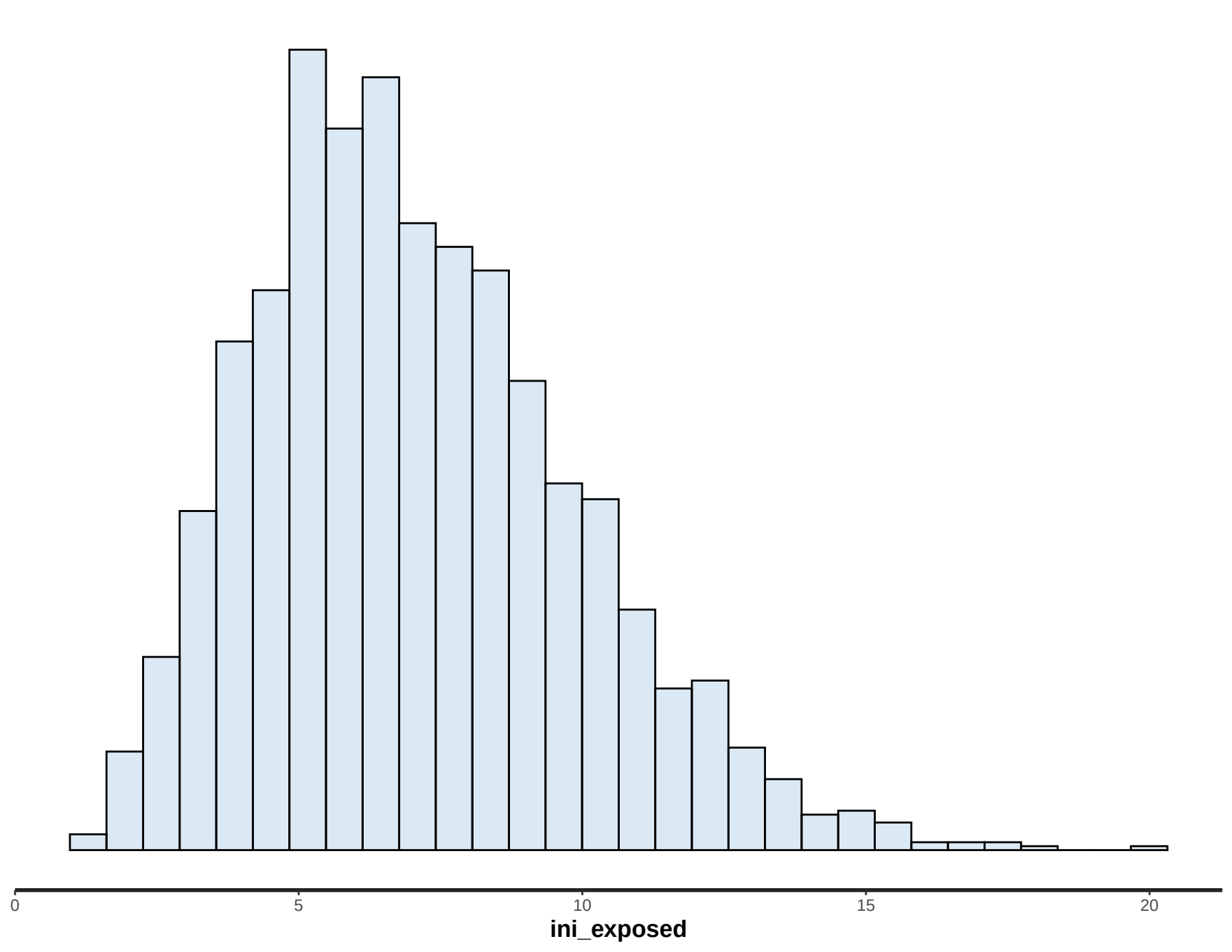
t_inter[10]
Nov 16
Nov 23
Nov 30
t_inter[11]
Dec 07
Dec 14
t_inter[12]
Dec 18
Dec 20
Dec 22
Dec 24
Dec 26
Dec 28
t_inter[13]
Jan 04
Jan 11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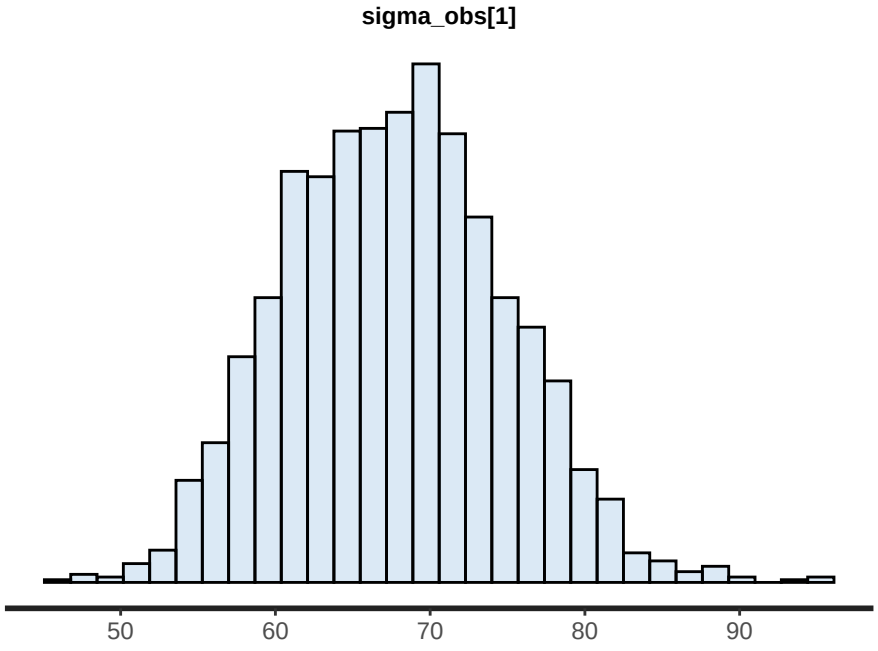
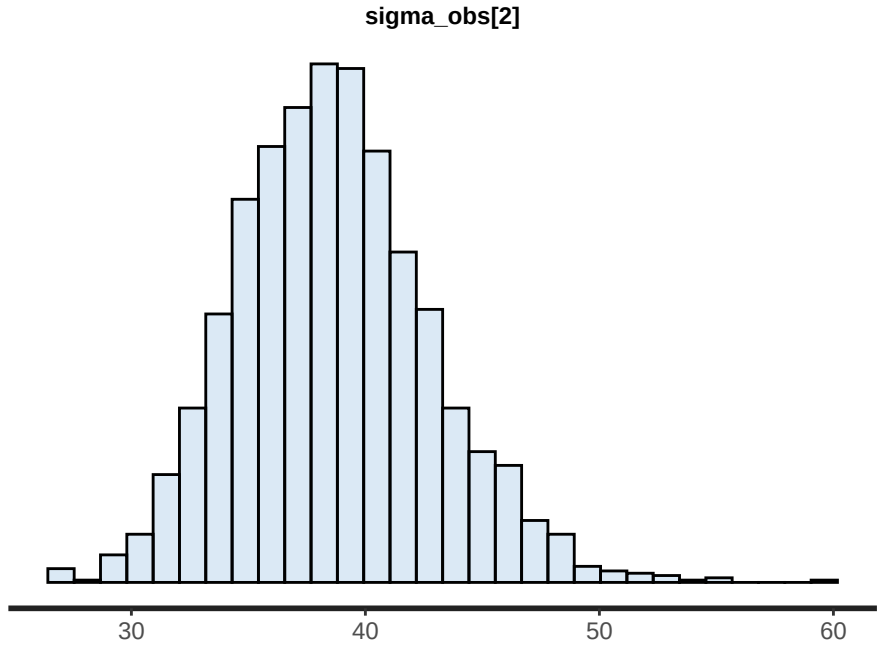
5
10
15
20
ini_exposed


sigma_obs[1]
50
60
70
80
90


sigma_obs[2]
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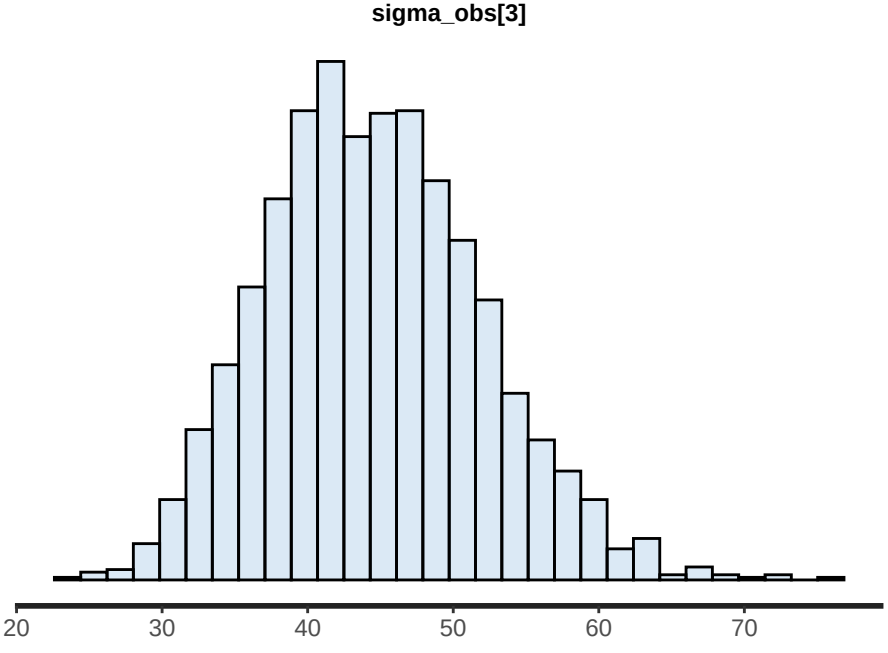
40
50
60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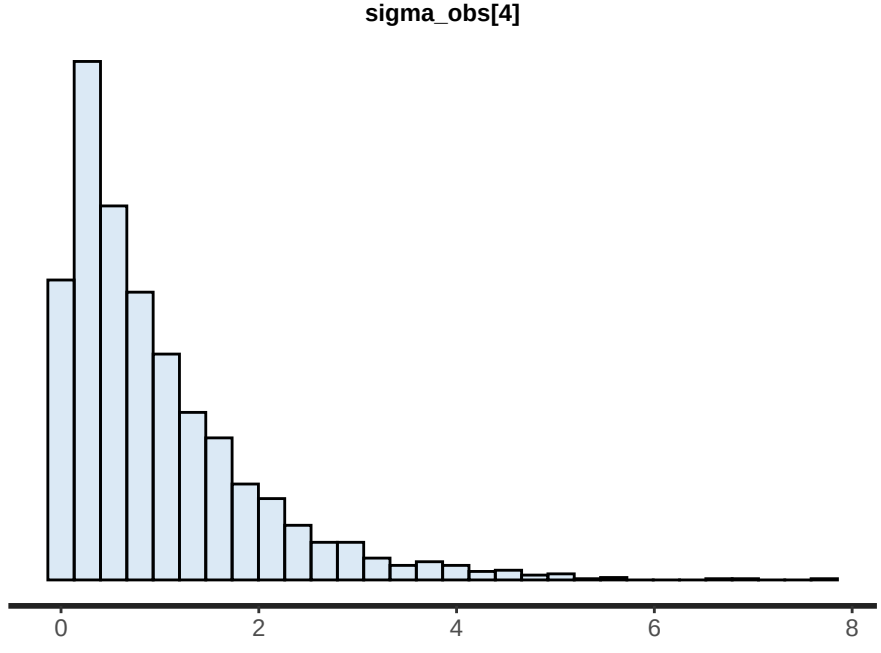
40
50
60
70


sigma_obs[4]
0
2
4
6
8