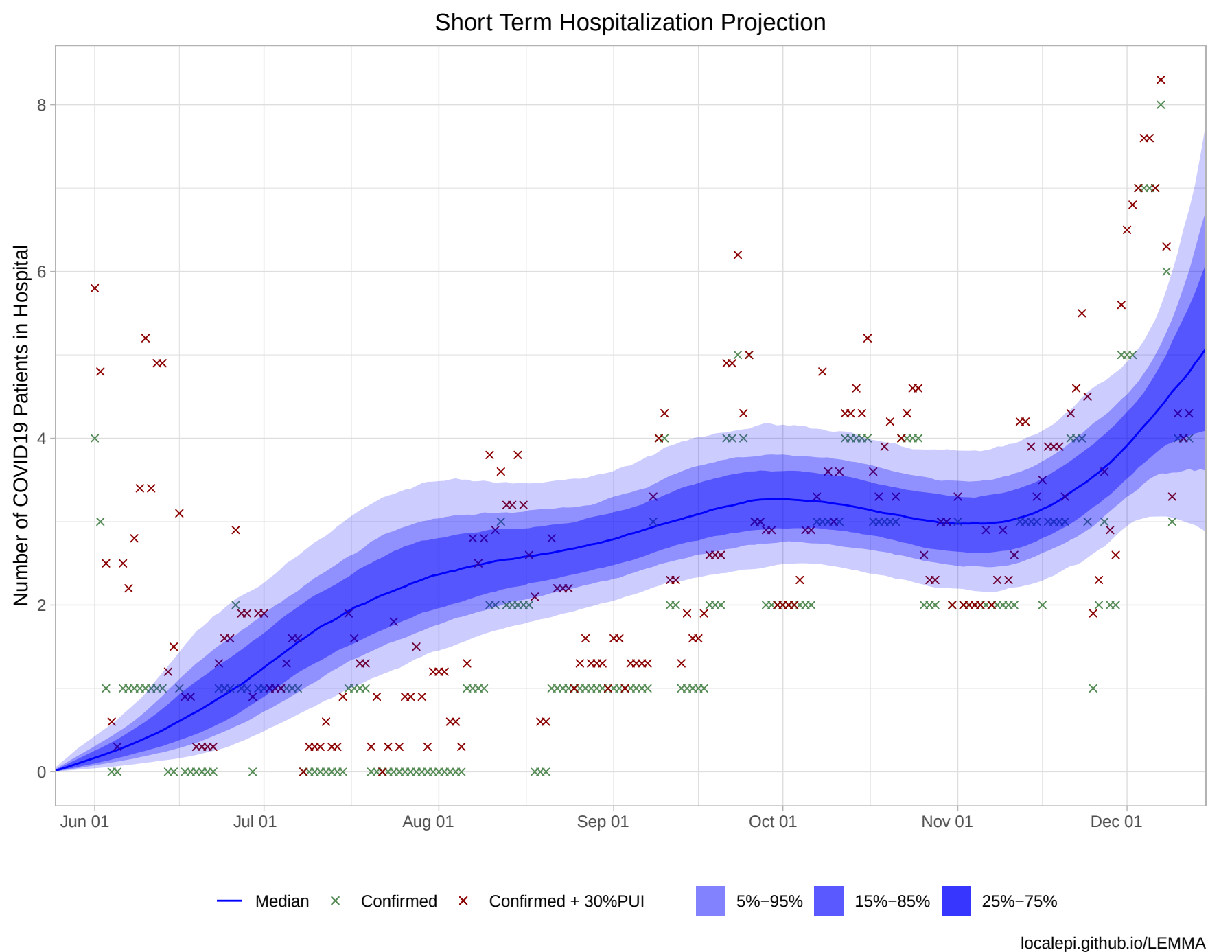
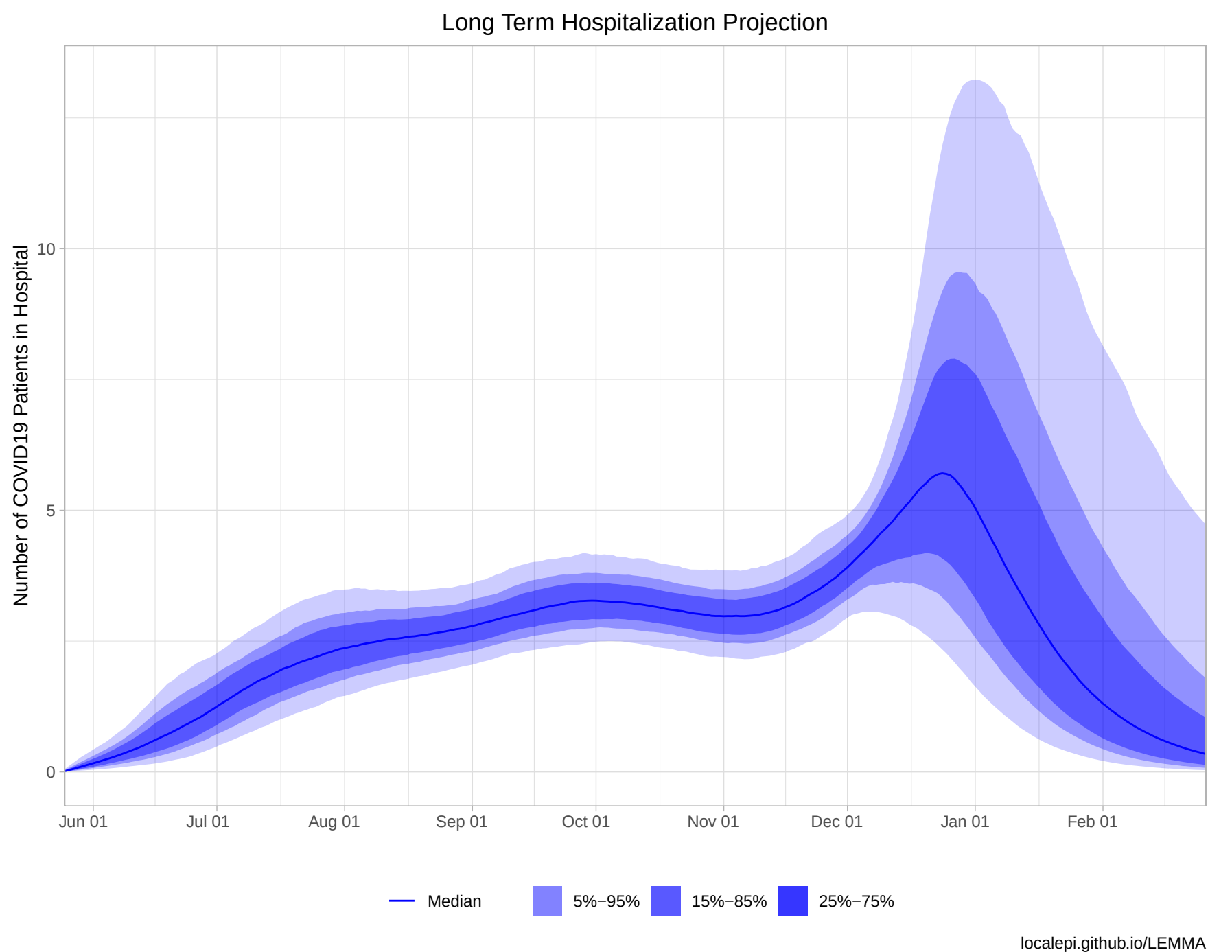
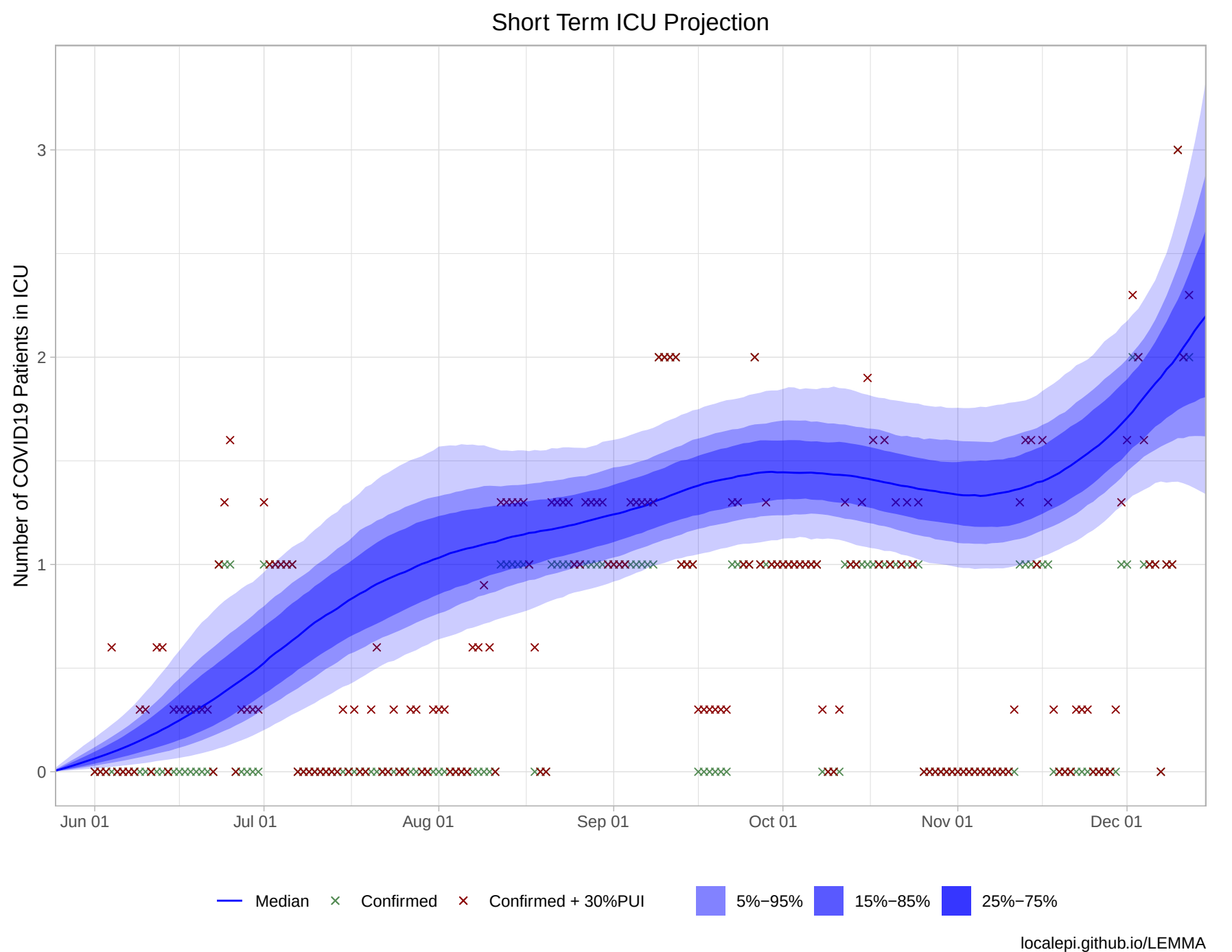
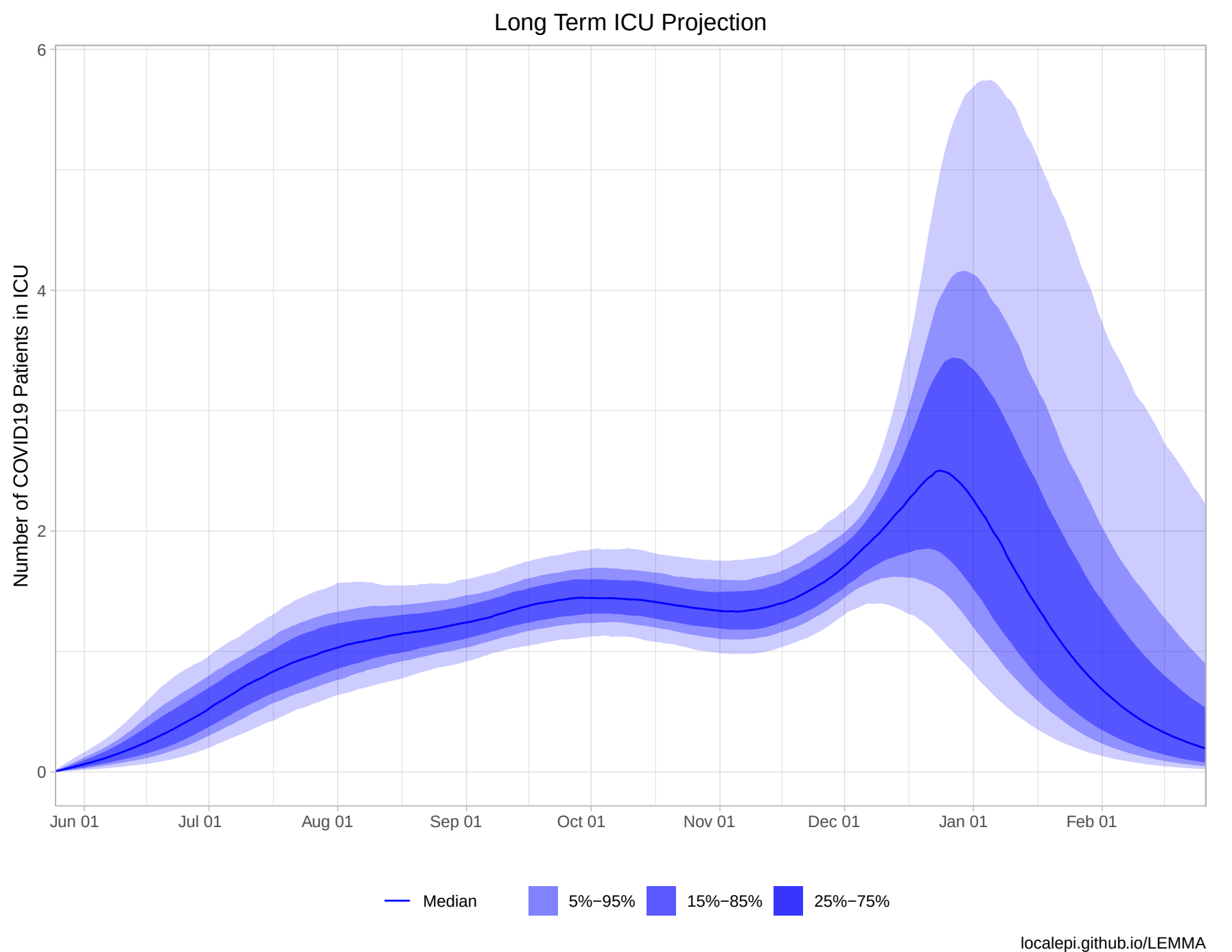
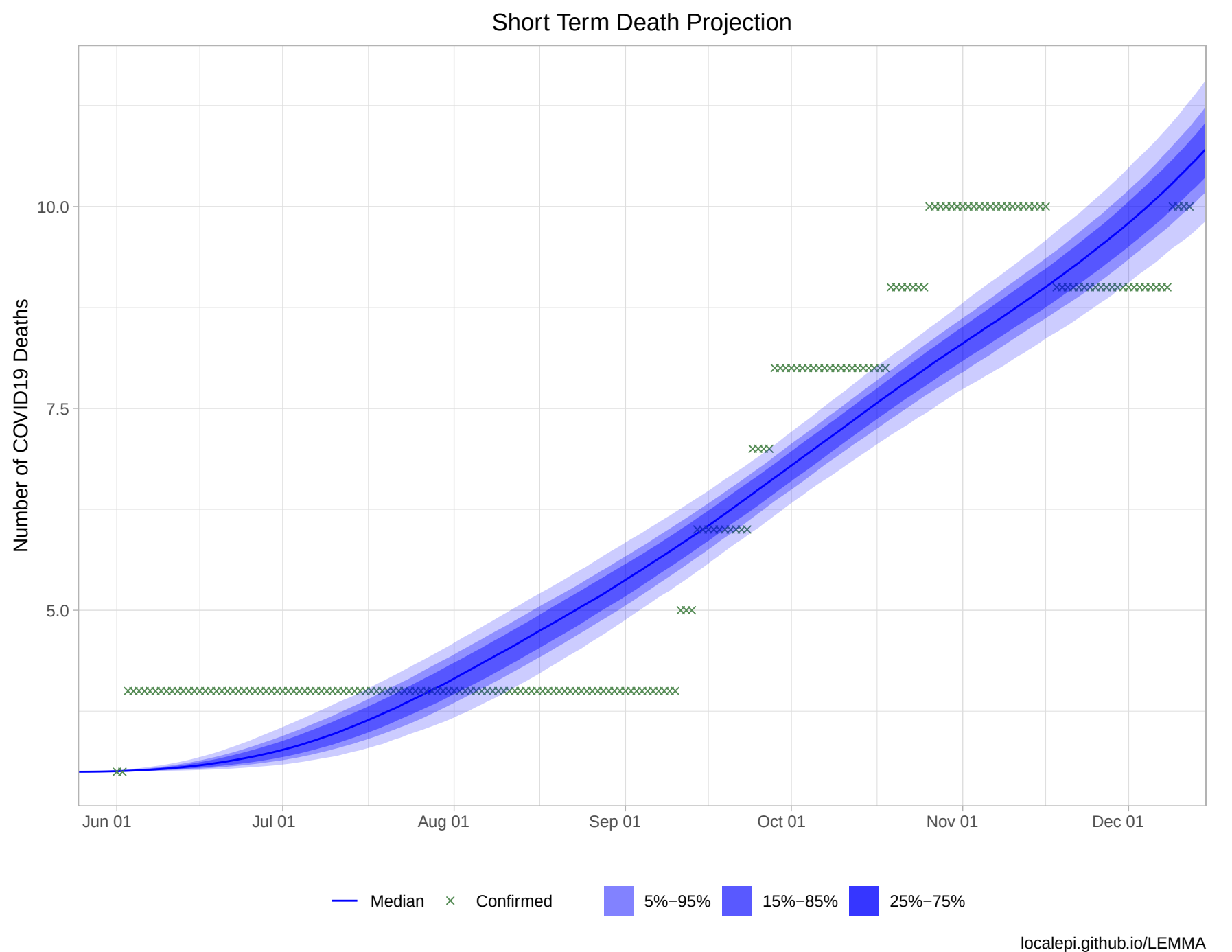
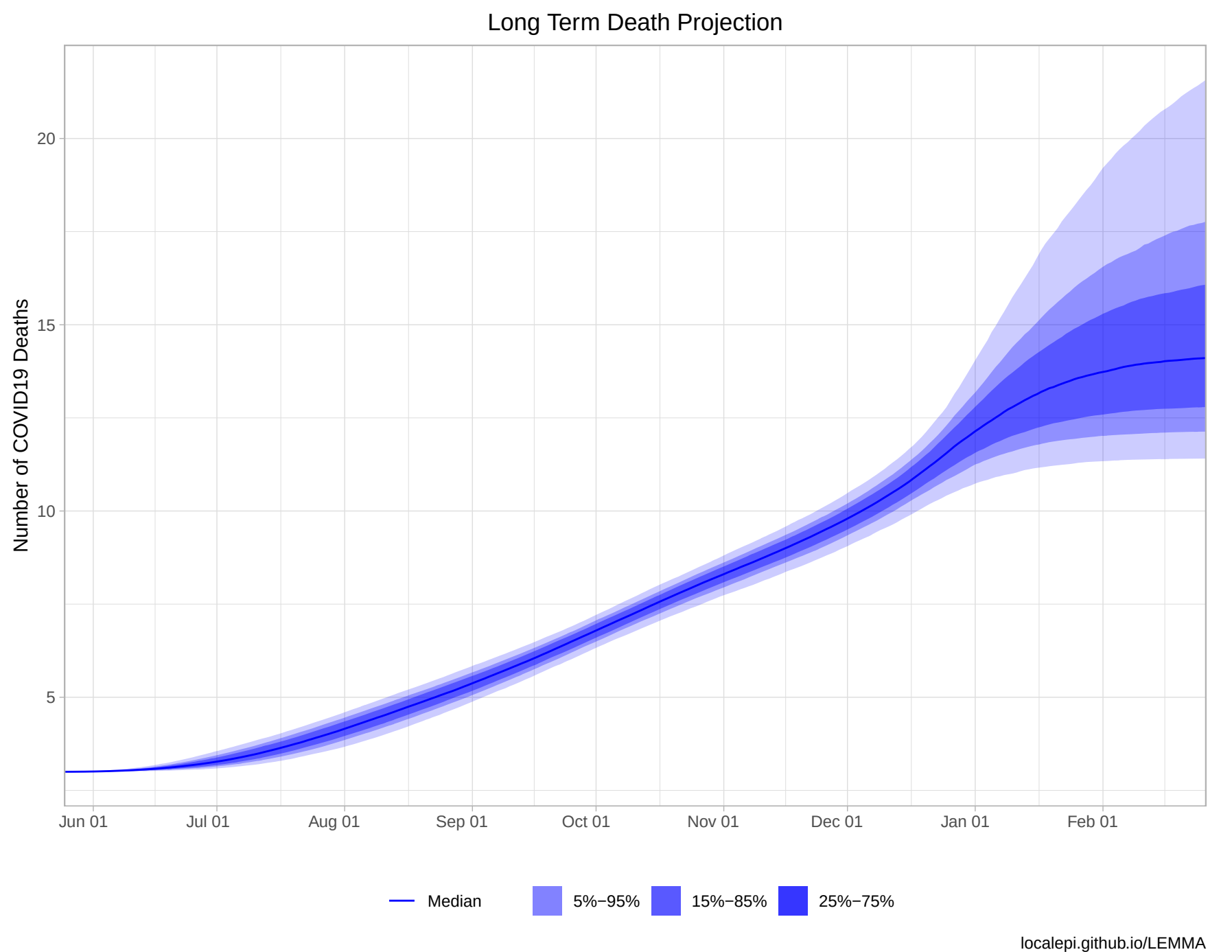

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
2
4
6
8
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

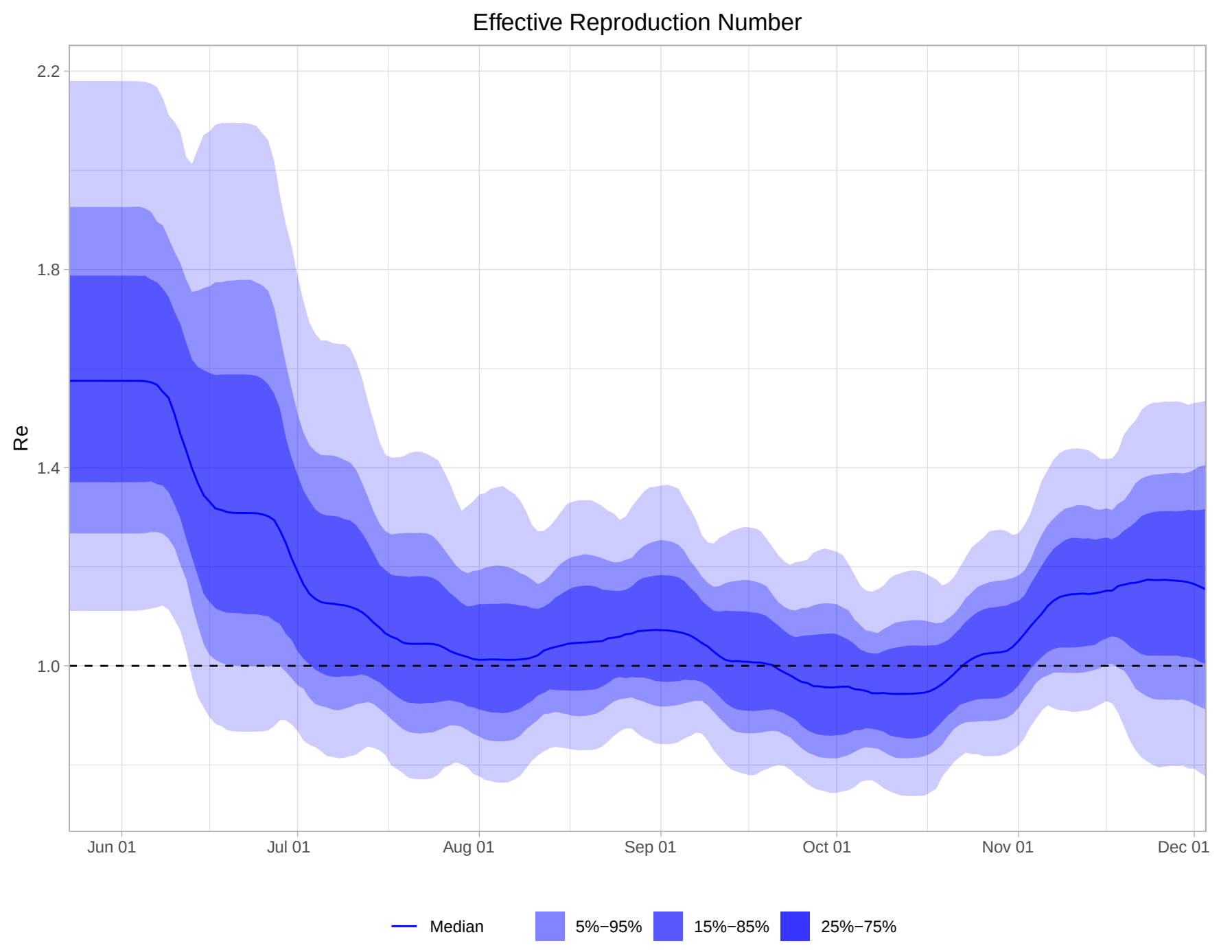

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
10
5
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
1
2
3
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 ICU Projection
Number of COVID19 Patients in ICU
6
4
2
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

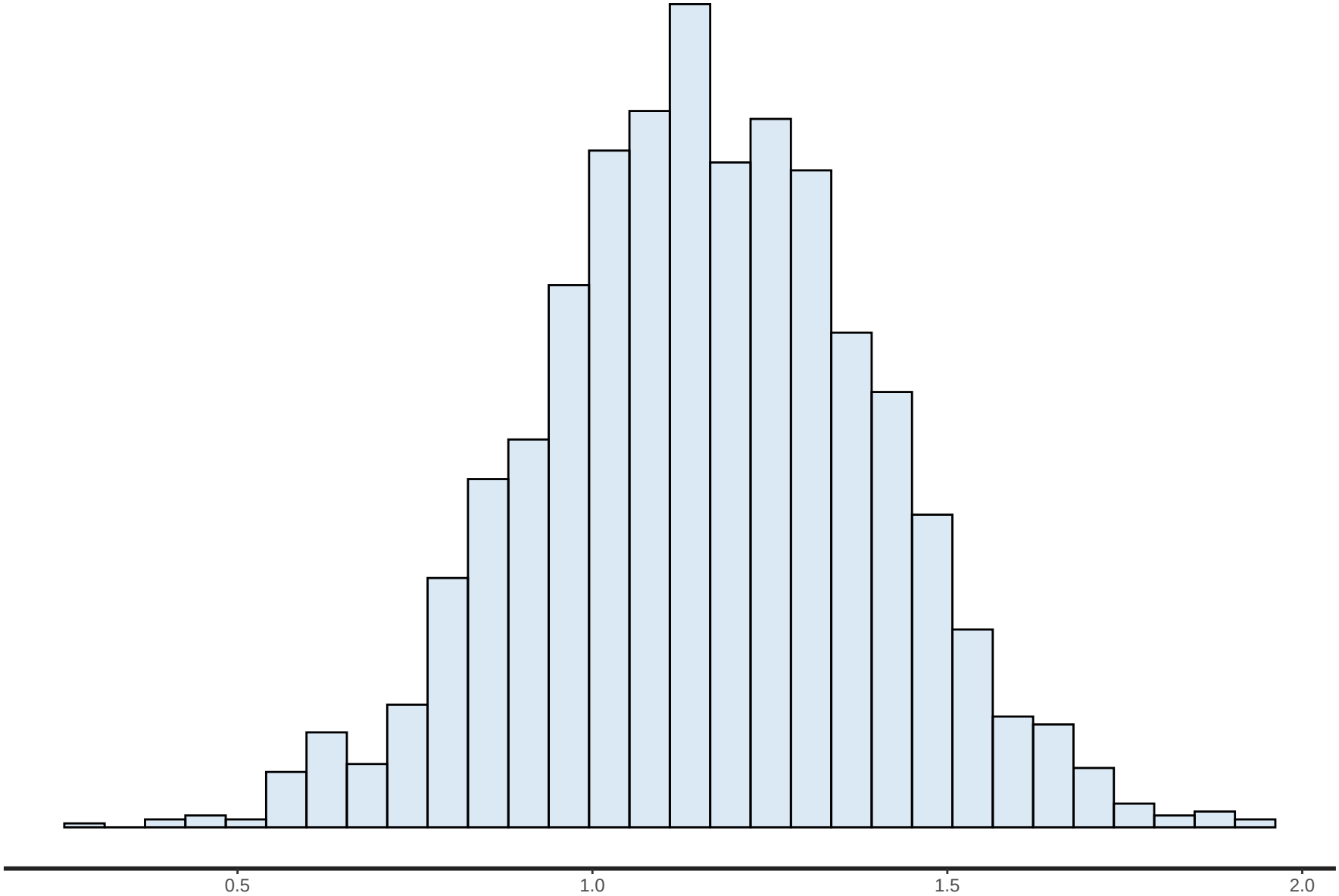

Short Term Death Projection
Number of COVID19 Deaths
10.0
7.5
5.0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

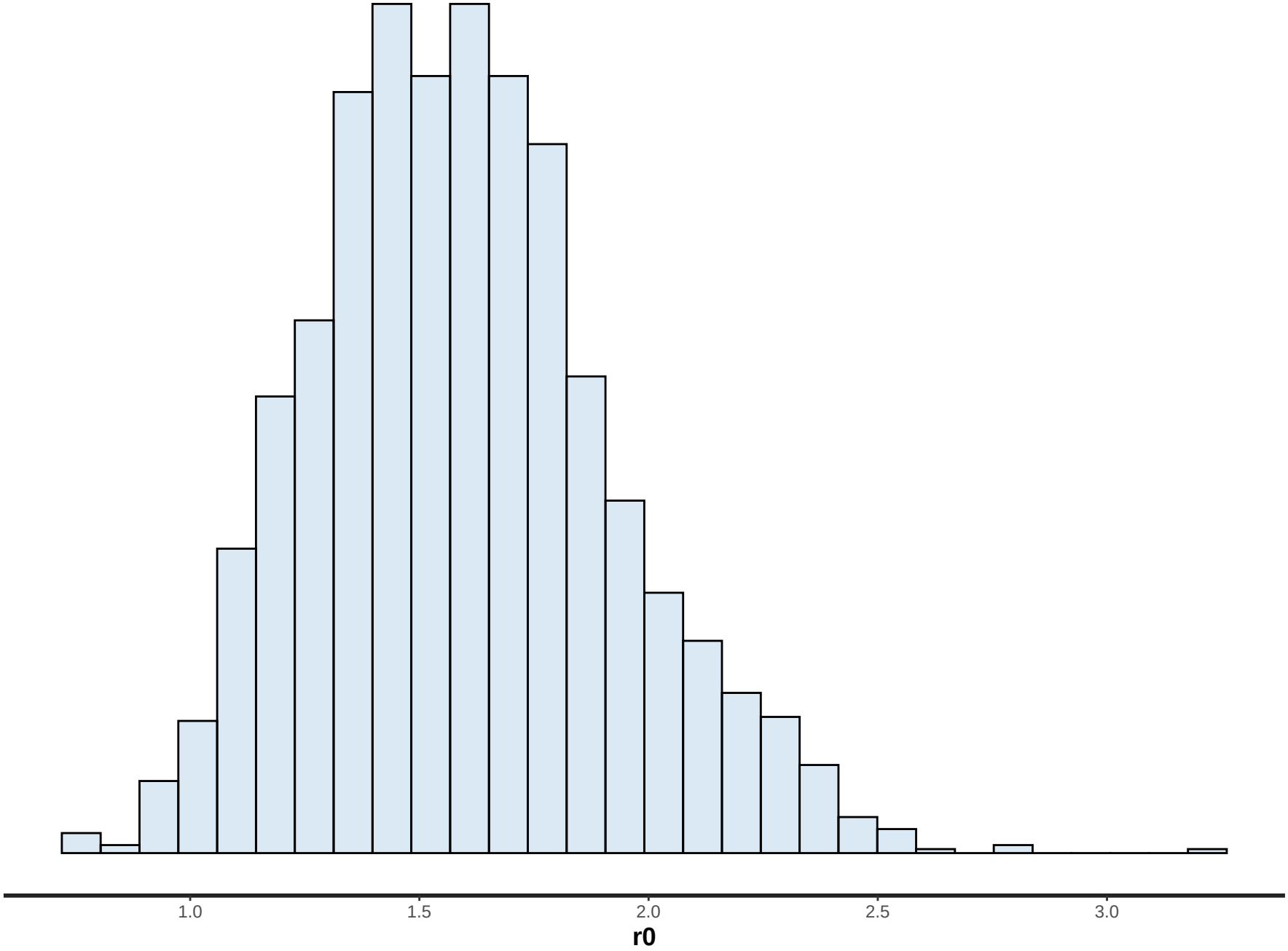

Long Term Death Projection
Number of COVID19 Deaths
20
15
10
5
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

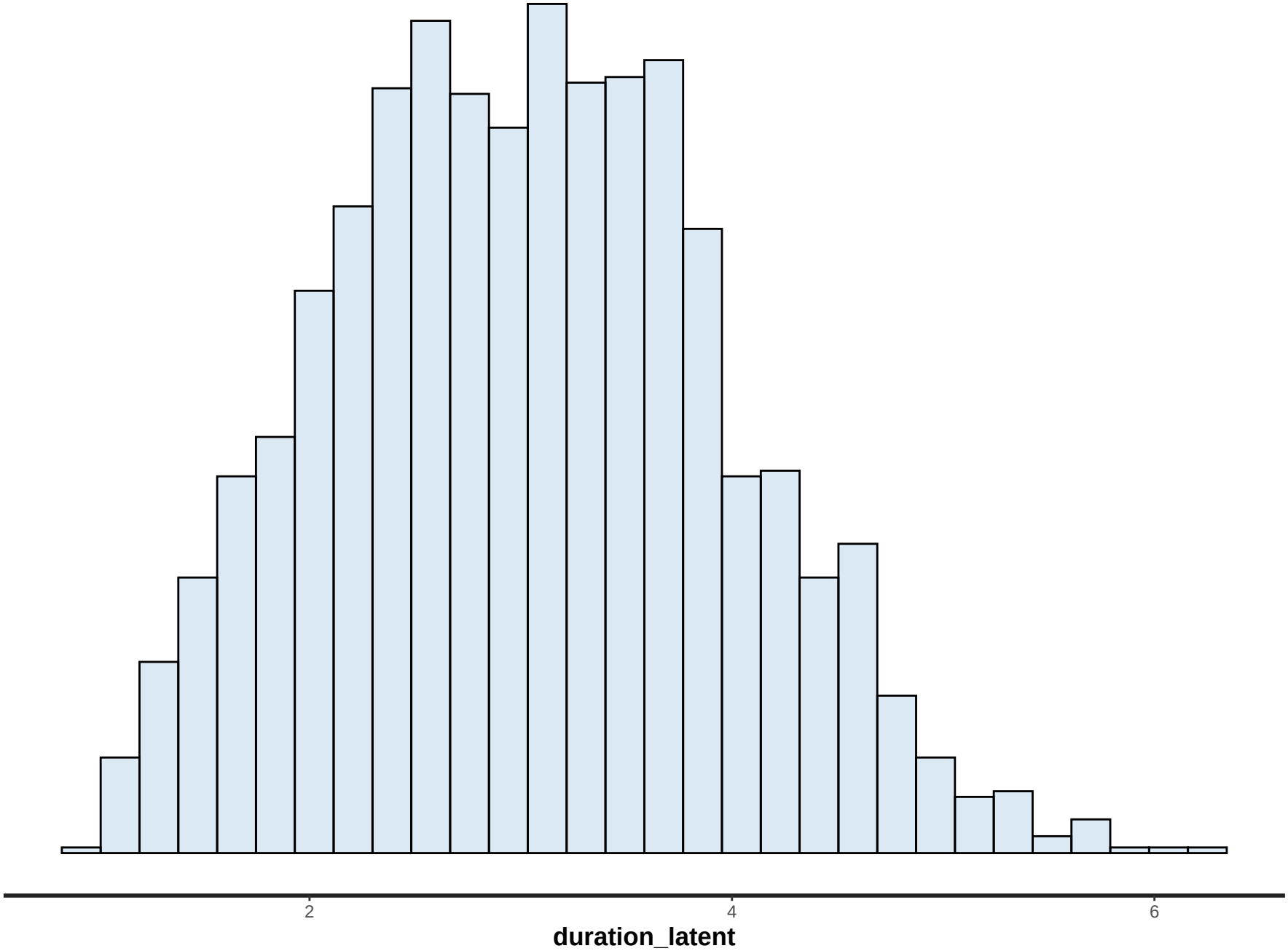

Effective Reproduction Number
Re
2.2
1.8
1.4
1.0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

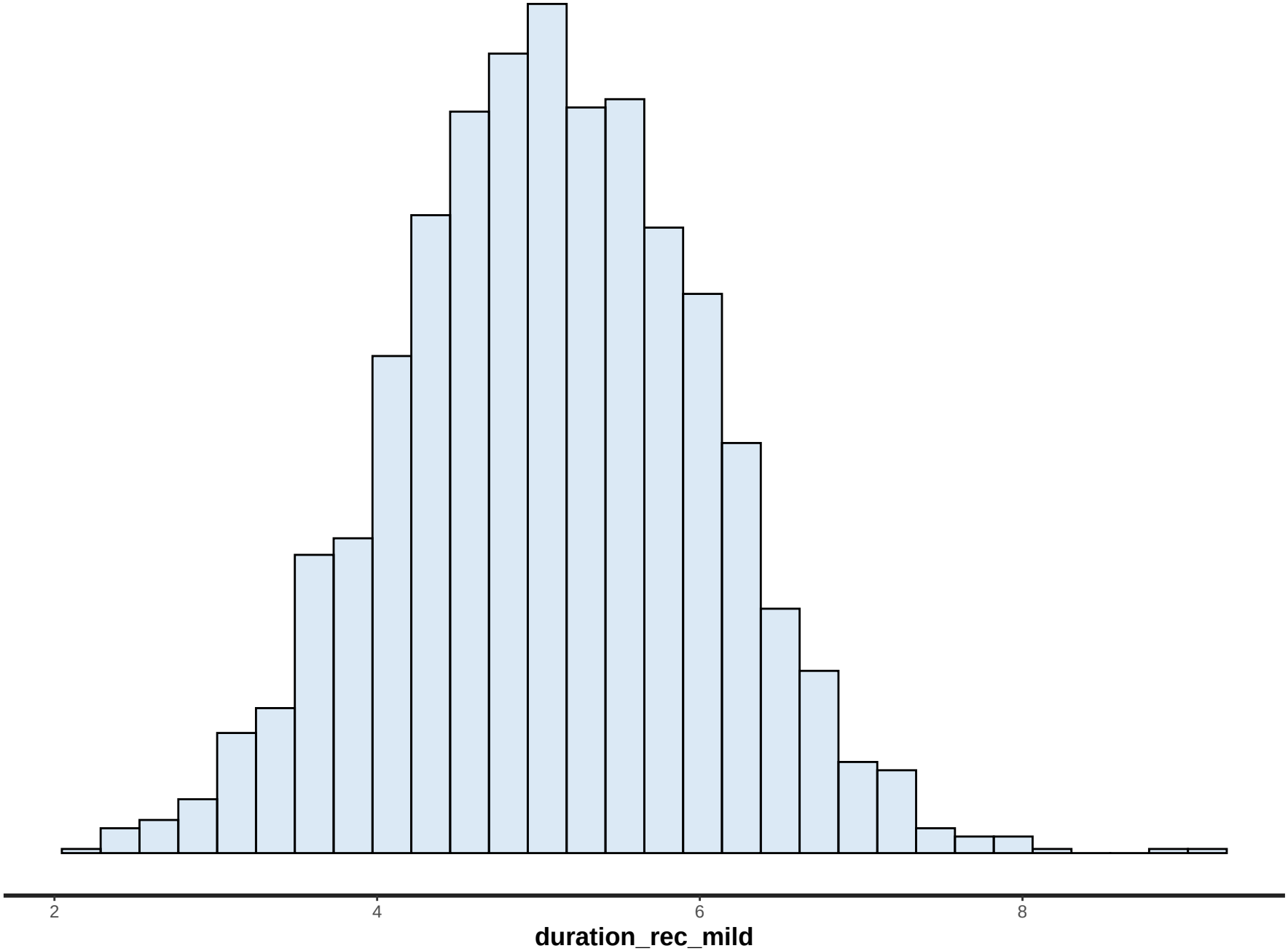
Rt as of 2020−12−03

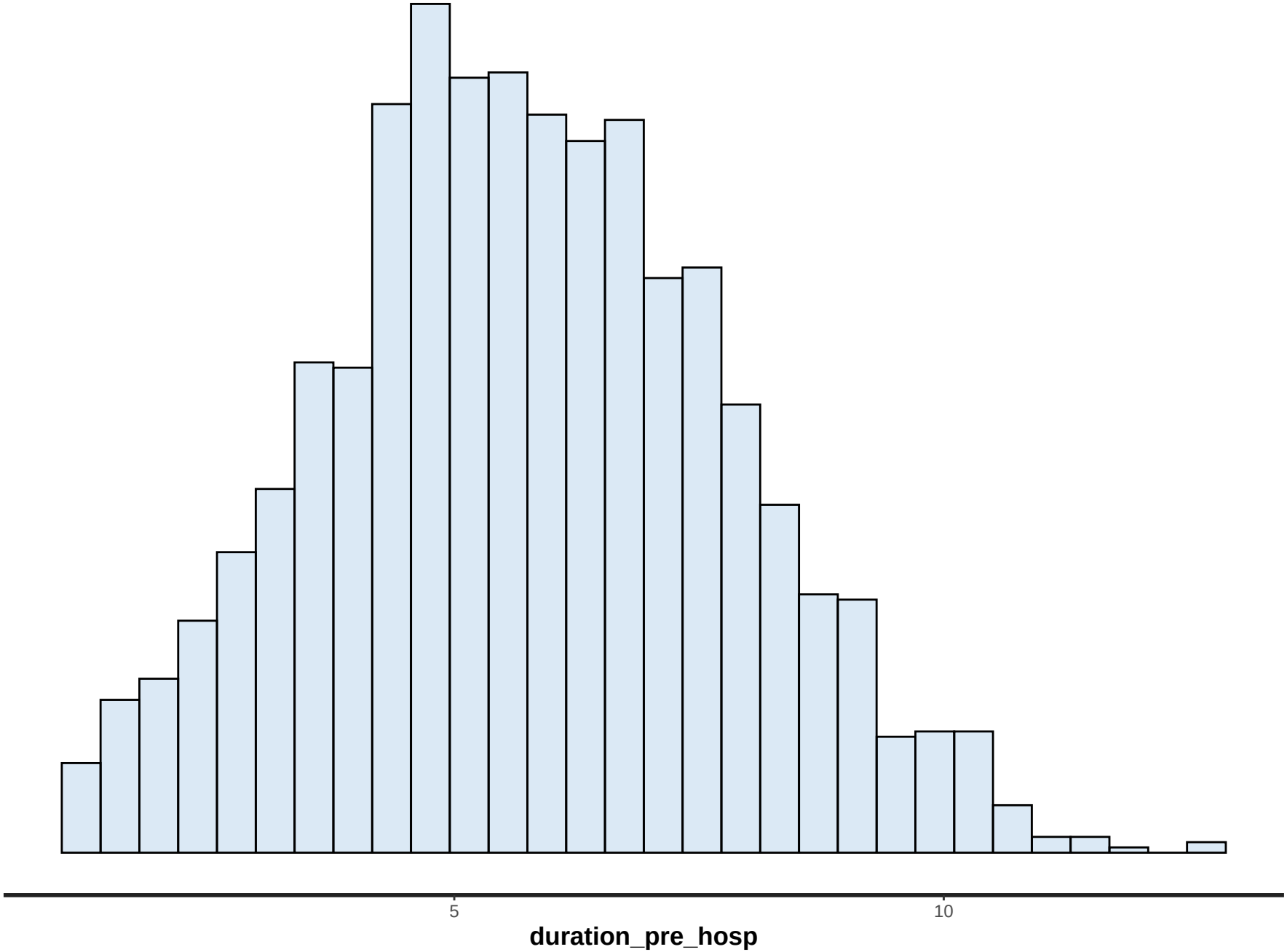
5%	10%	25%	50%	75%	90%	95%
0.78	0.86	1.00	1.15	1.32	1.46	1.53

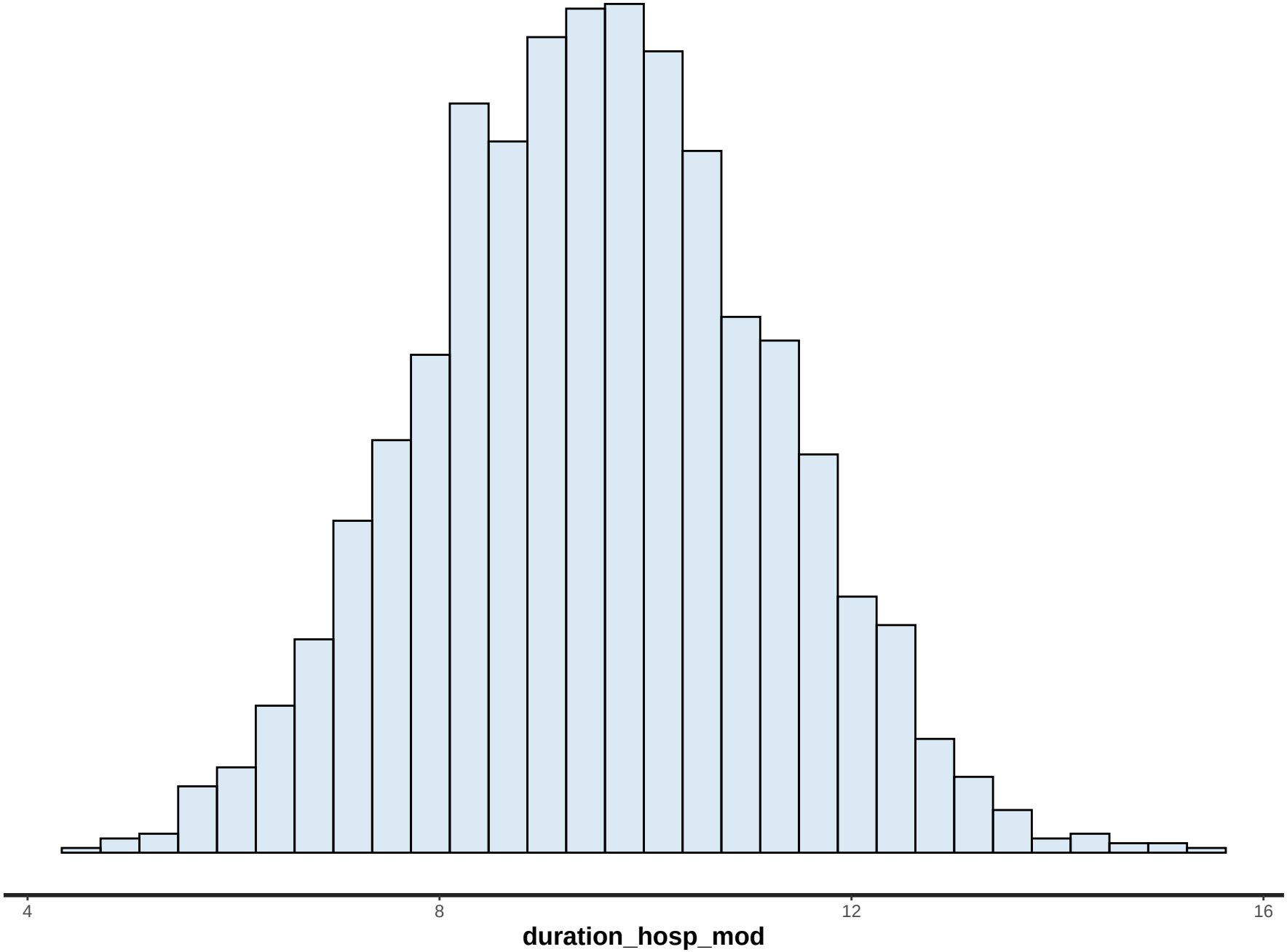


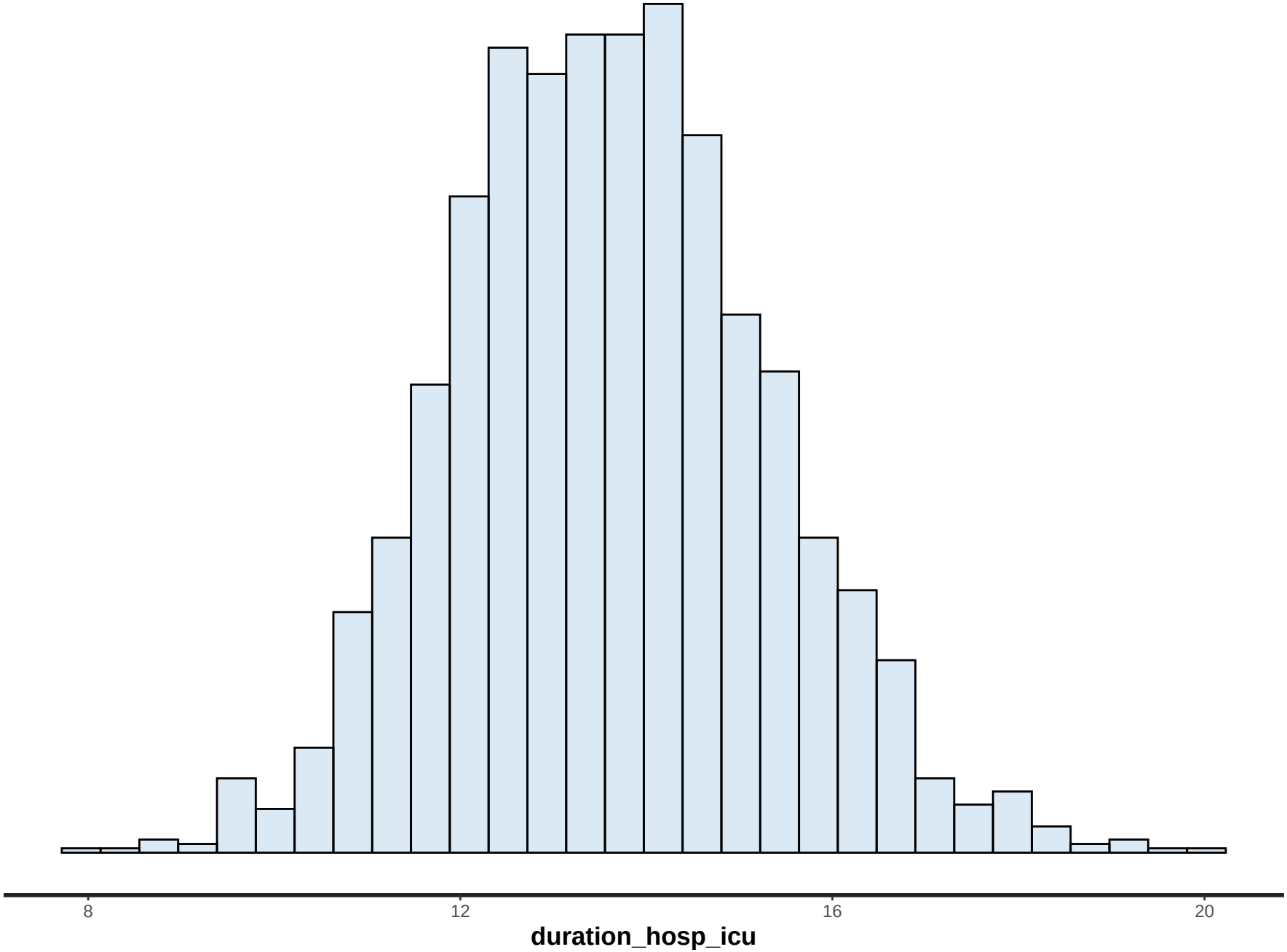

1.0
1.5
2.0
2.5
3.0
r0

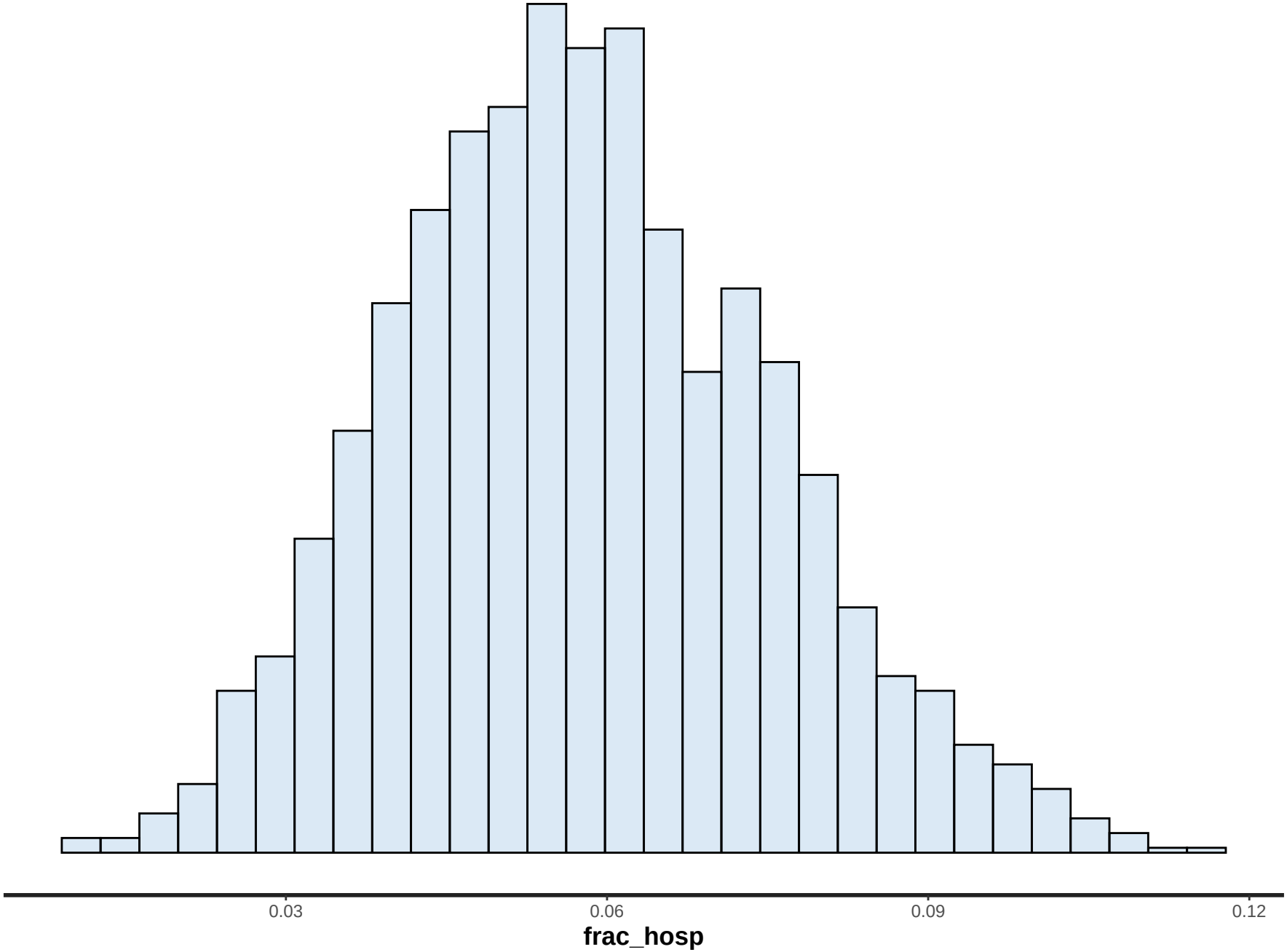

2
4
6
duration_latent

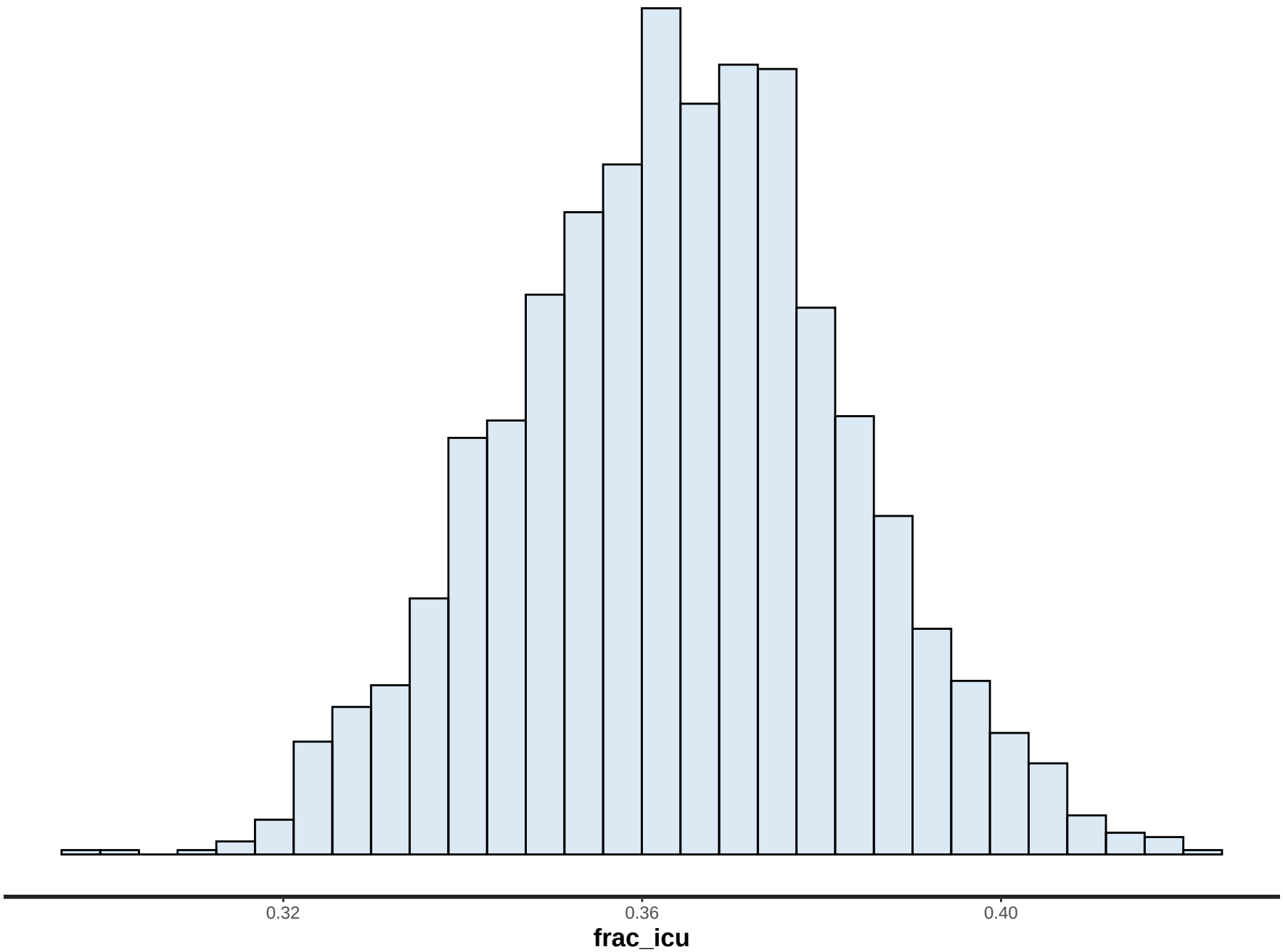

2
4
6
8
duration_rec_mild

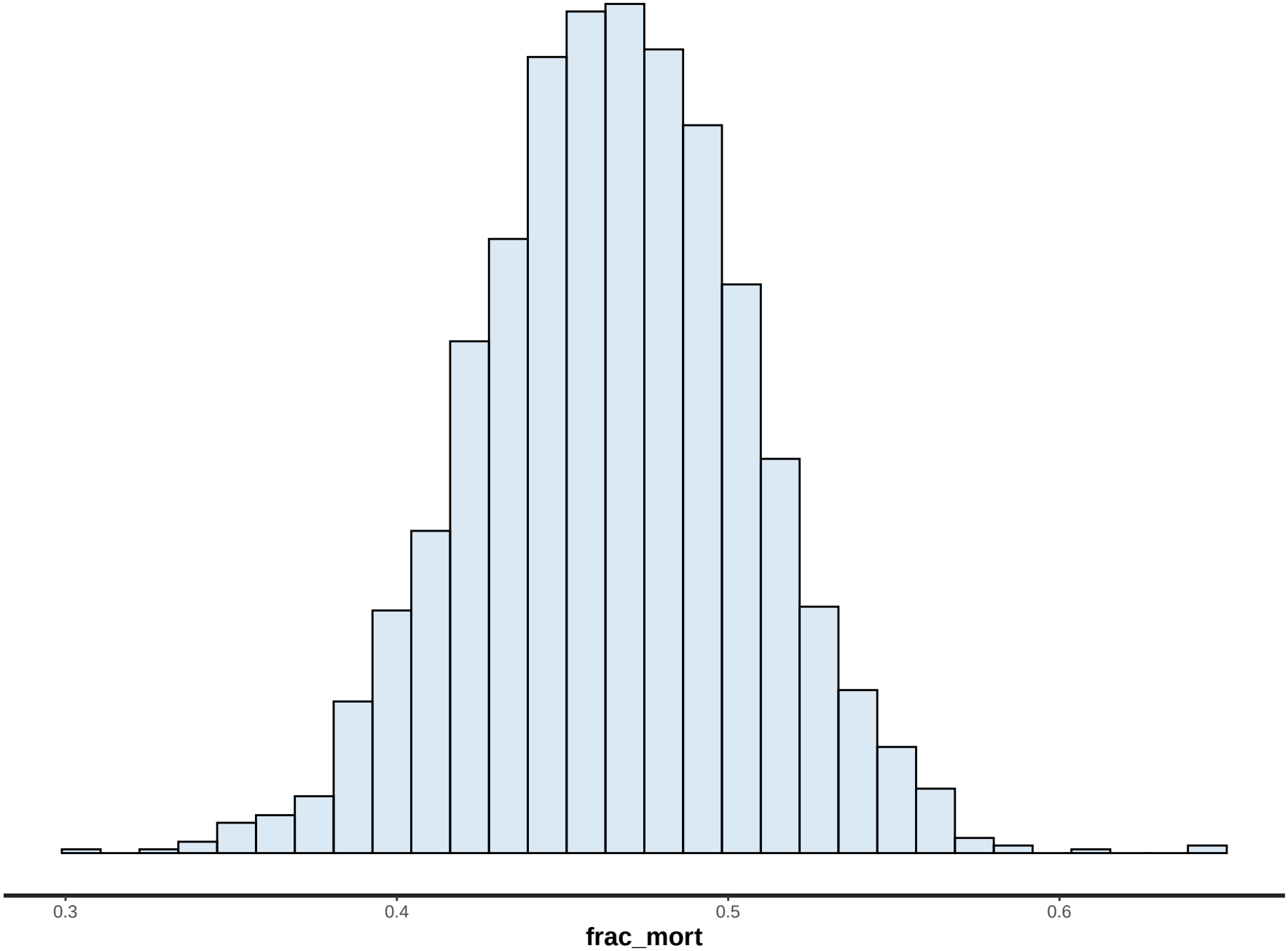

5
10
duration_pre_hosp

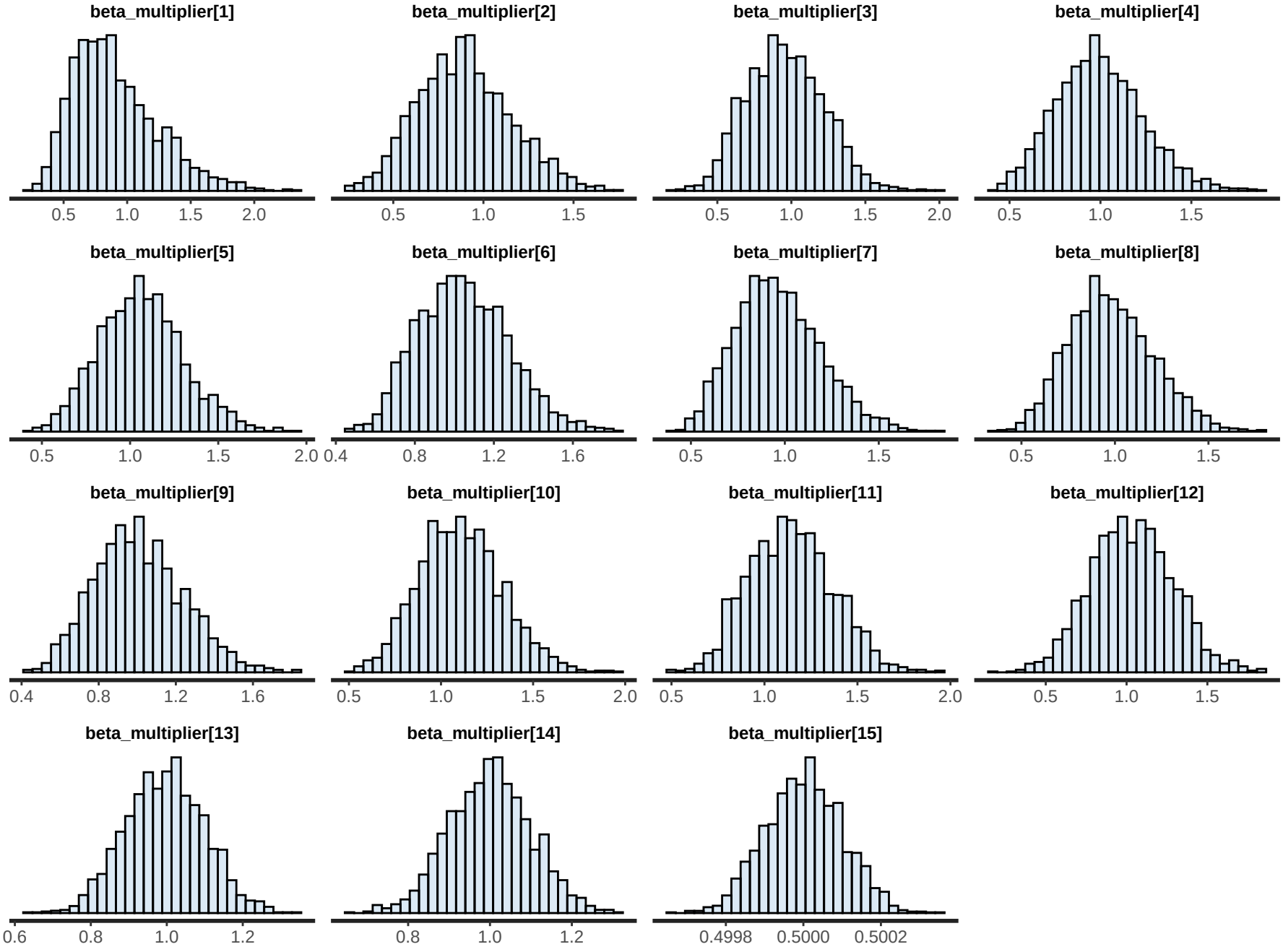

4
8
12
16
duration_hosp_mod

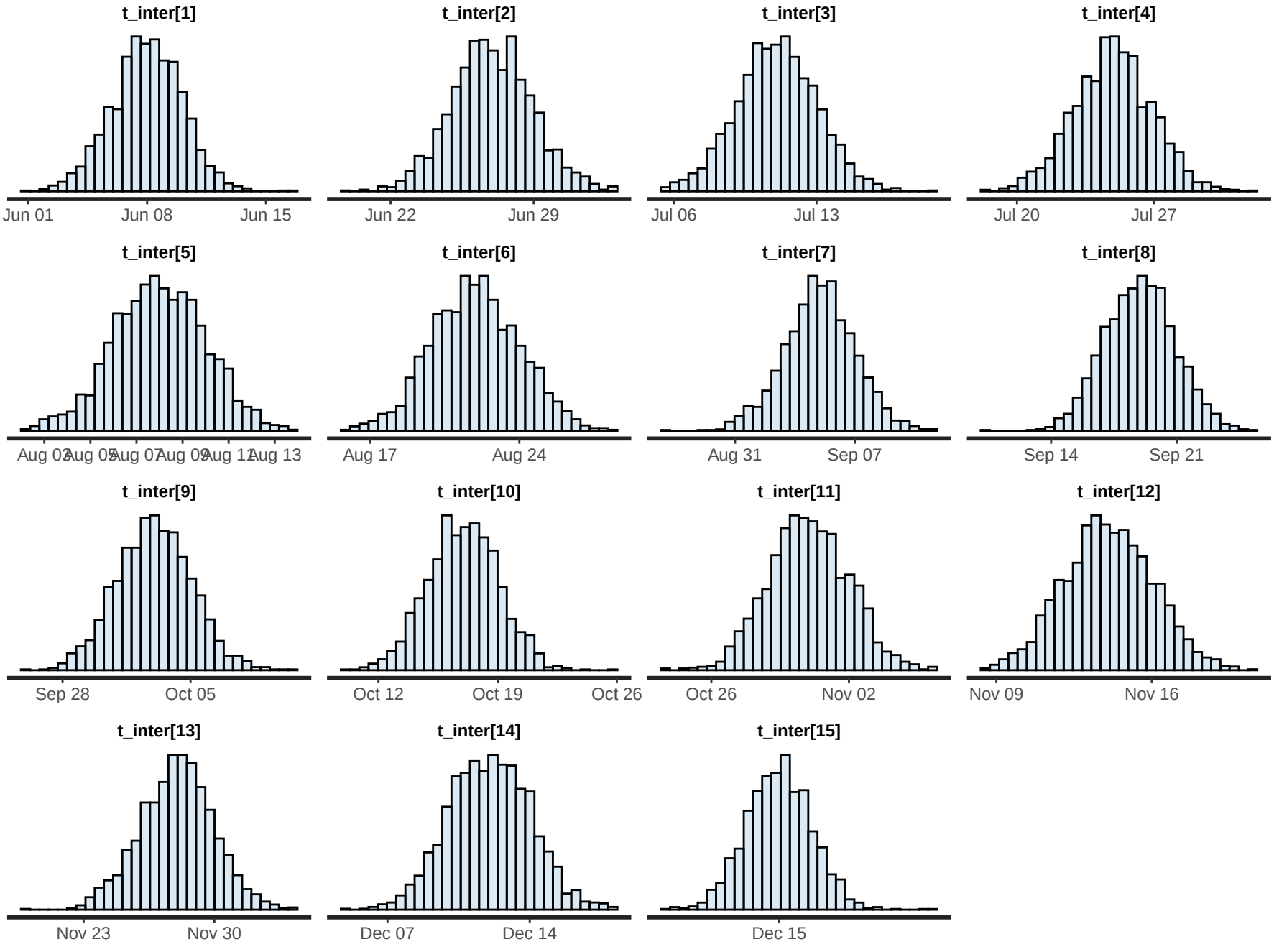

8
12
16
20
duration_hosp_icu

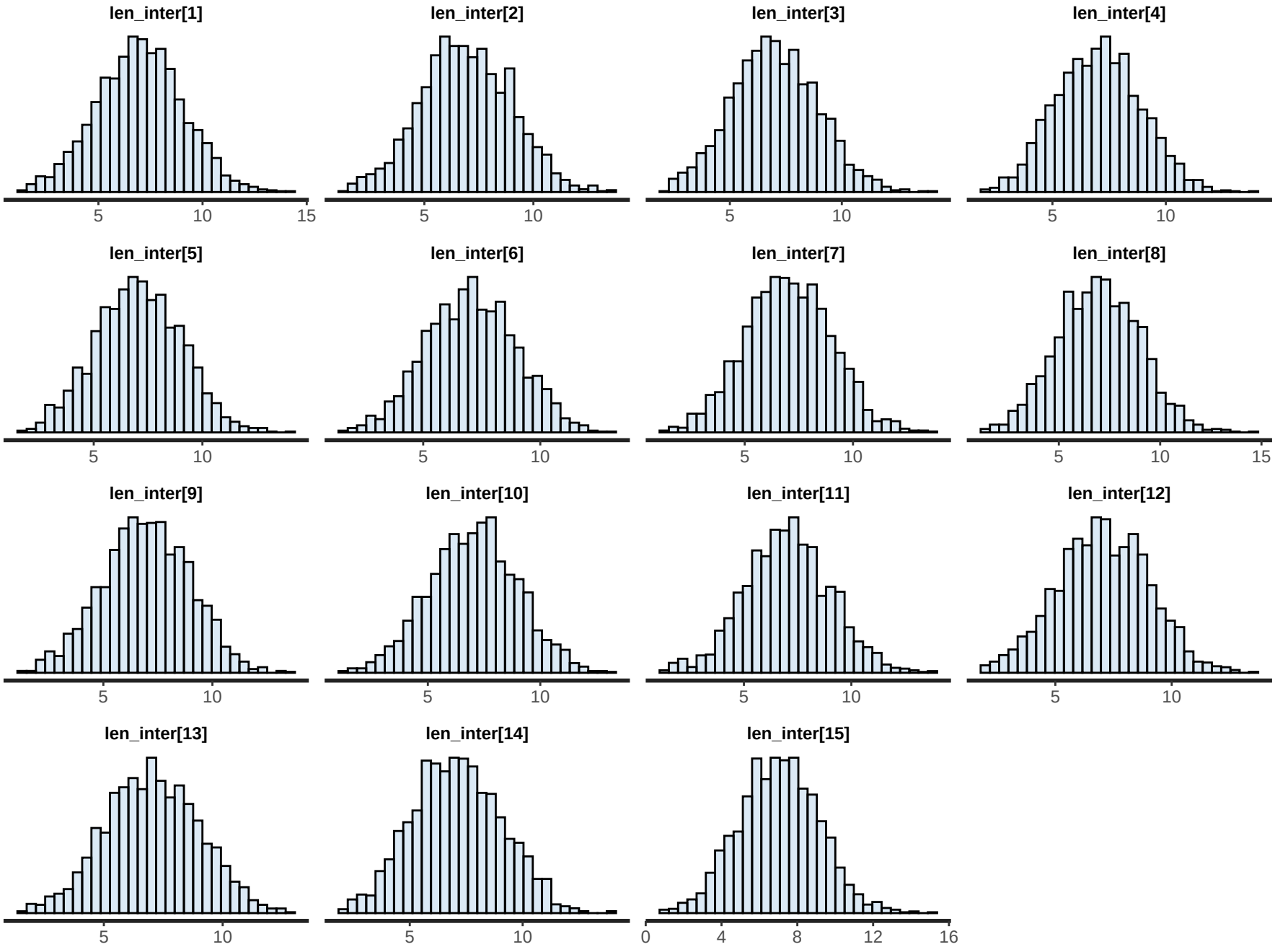

0.03
0.06
0.09
0.12
frac_hosp


0.32
0.36
0.40
frac_icu


0.3
0.4
0.5
0.6
frac_mort


beta_multiplier[1]
0.5 1.0 1.5 2.0
beta_multiplier[2]
0.5 1.0 1.5
beta_multiplier[3]
0.5 1.0 1.5 2.0
beta_multiplier[4]
0.5 1.0 1.5
beta_multiplier[5]
0.5 1.0 1.5 2.0
beta_multiplier[6]
0.4 0.8 1.2 1.6
beta_multiplier[7]
0.5 1.0 1.5
beta_multiplier[8]
0.5 1.0 1.5
beta_multiplier[9]
0.4 0.8 1.2 1.6
beta_multiplier[10]
0.5 1.0 1.5 2.0
beta_multiplier[11]
0.5 1.0 1.5 2.0
beta_multiplier[12]
0.5 1.0 1.5
beta_multiplier[13]
0.6 0.8 1.0 1.2
beta_multiplier[14]
0.8 1.0 1.2
beta_multiplier[15]
0.4998 0.5000 0.5002


t_inter[1]
Jun 01
Jun 08
Jun 15
t_inter[2]
Jun 22
Jun 29
t_inter[3]
Jul 06
Jul 13
t_inter[4]
Jul 20
Jul 27
t_inter[5]
Aug 03
Aug 05
Aug 07
Aug 09
Aug 11
Aug 13
t_inter[6]
Aug 17
Aug 24
t_inter[7]
Aug 31
Sep 07
t_inter[8]
Sep 14
Sep 21
t_inter[9]
Sep 28
Oct 05
t_inter[10]
Oct 12
Oct 19
Oct 26
t_inter[11]
Oct 26
Nov 02
t_inter[12]
Nov 09
Nov 16
t_inter[13]
Nov 23
Nov 30
t_inter[14]
Dec 07
Dec 14
t_inter[15]
Dec 15


len_inter[1]
5
10
15
len_inter[2]
5
10
len_inter[3]
5
10
len_inter[4]
5
10
len_inter[5]
5
10
len_inter[6]
5
10
len_inter[7]
5
10
len_inter[8]
5
10
15
len_inter[9]
5
10
len_inter[10]
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len_inter[11]
5
10
len_inter[12]
5
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len_inter[13]
5
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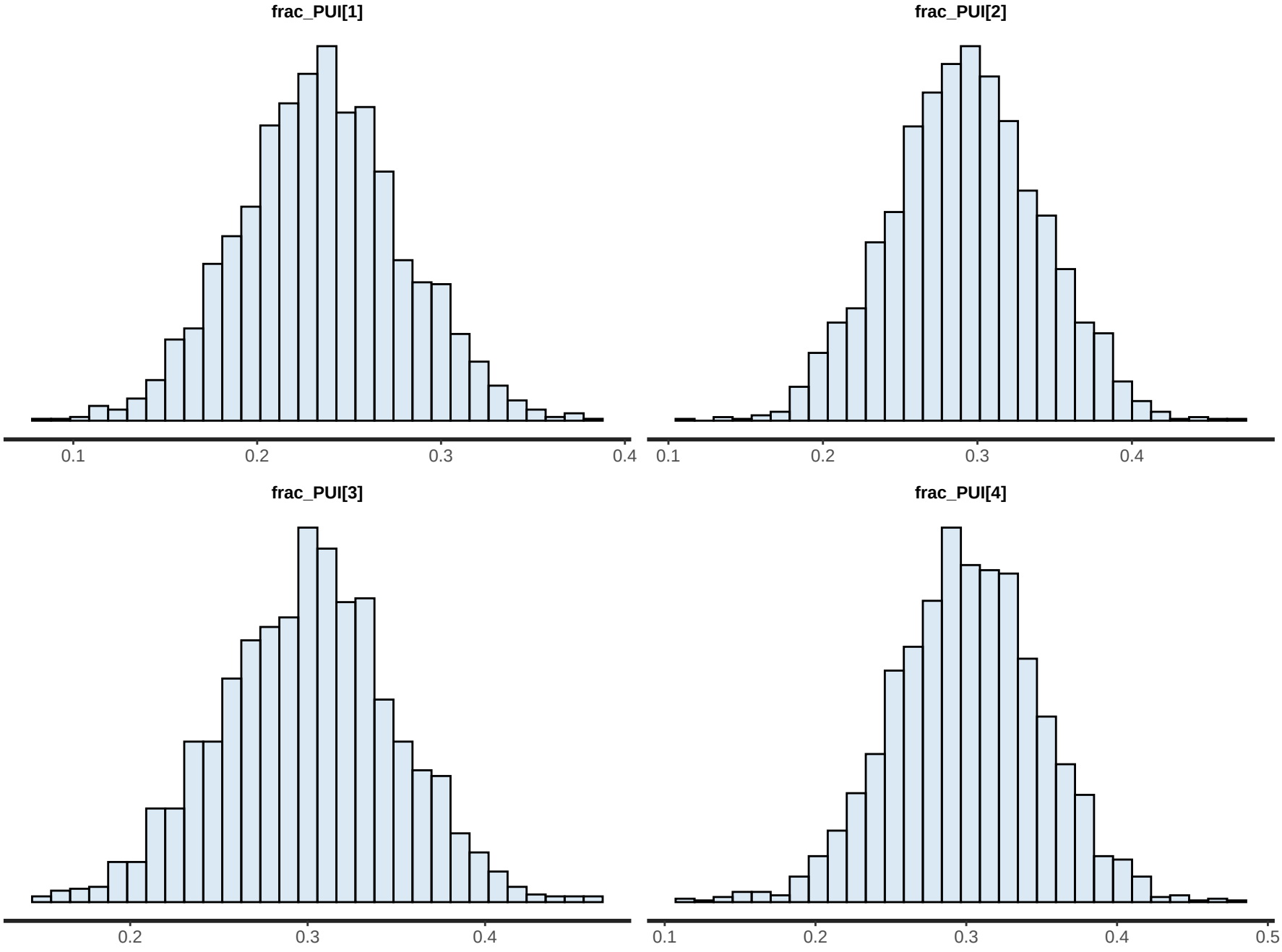
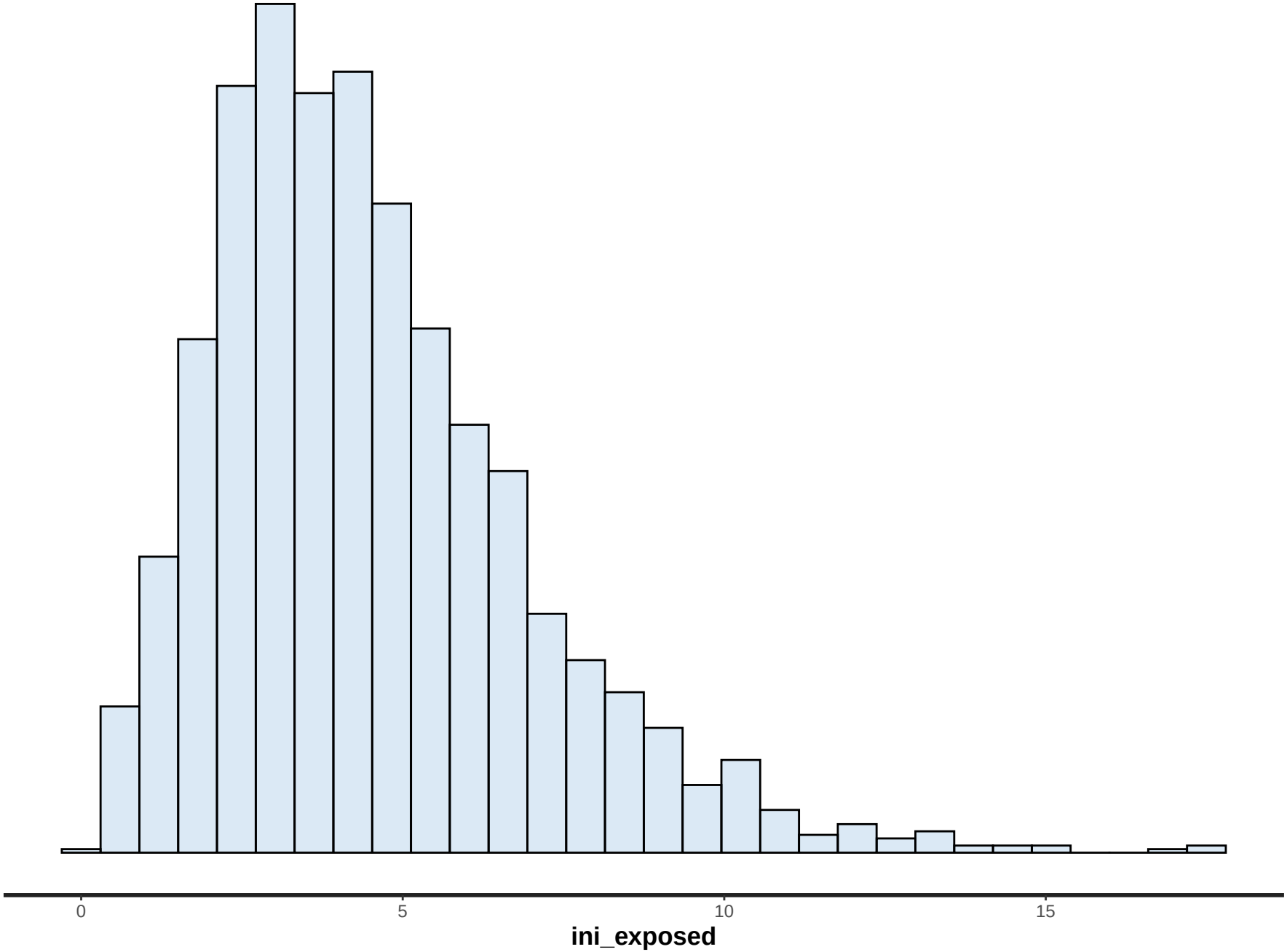
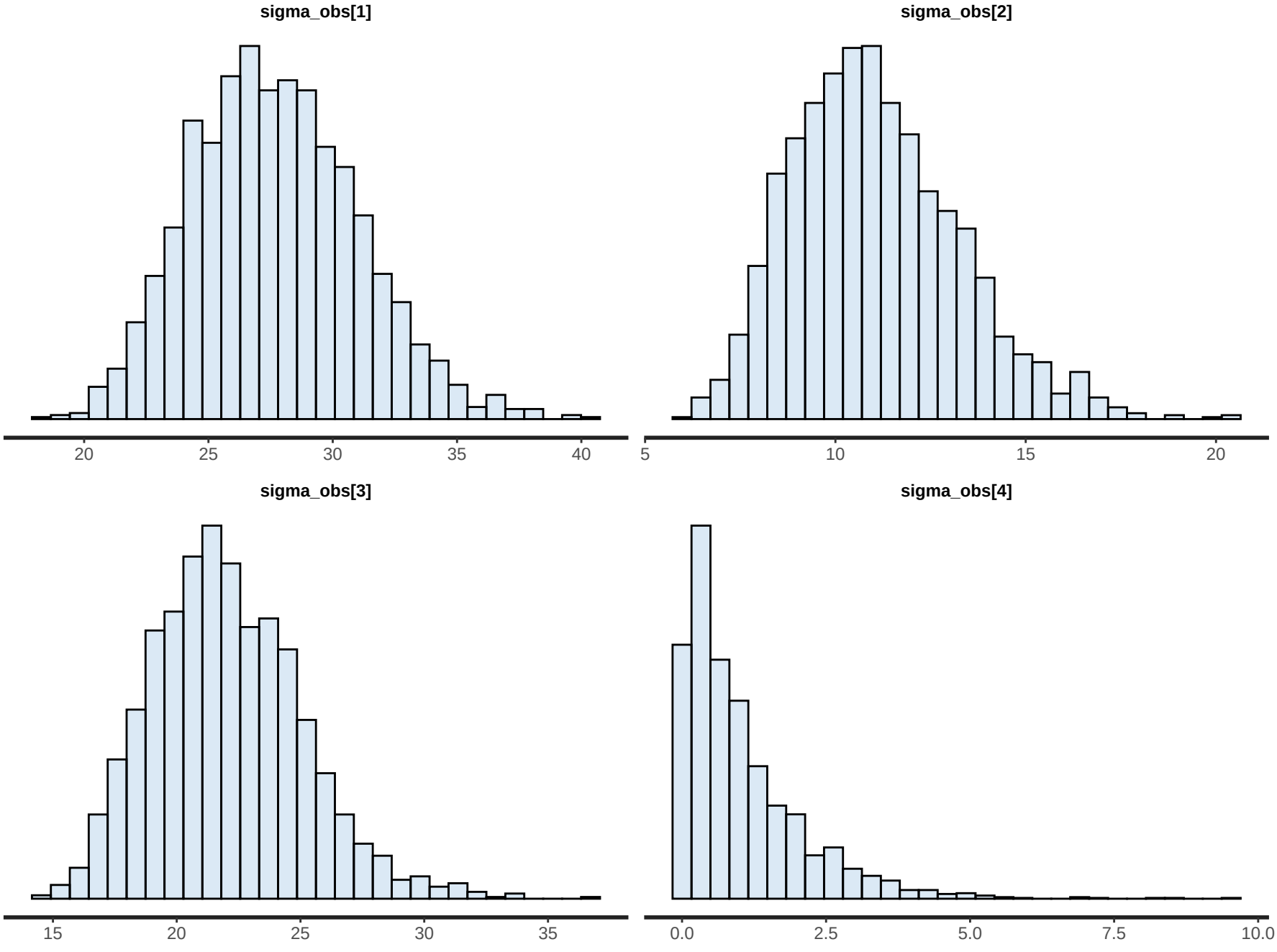
len_inter[14]
5
10
len_inter[15]
0
4
8
12
16


frac_PUI[1]
0.1
0.2
0.3
0.4
frac_PUI[2]
0.1
0.2
0.3
0.4
frac_PUI[3]
0.2
0.3
0.4
frac_PUI[4]
0.1
0.2
0.3
0.4
0.5


0
5
10
15
ini_exposed


sigma_obs[1]
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sigma_obs[3]
15
20
25
30
35
sigma_obs[4]
0.0
2.5
5.0
7.5
10.0