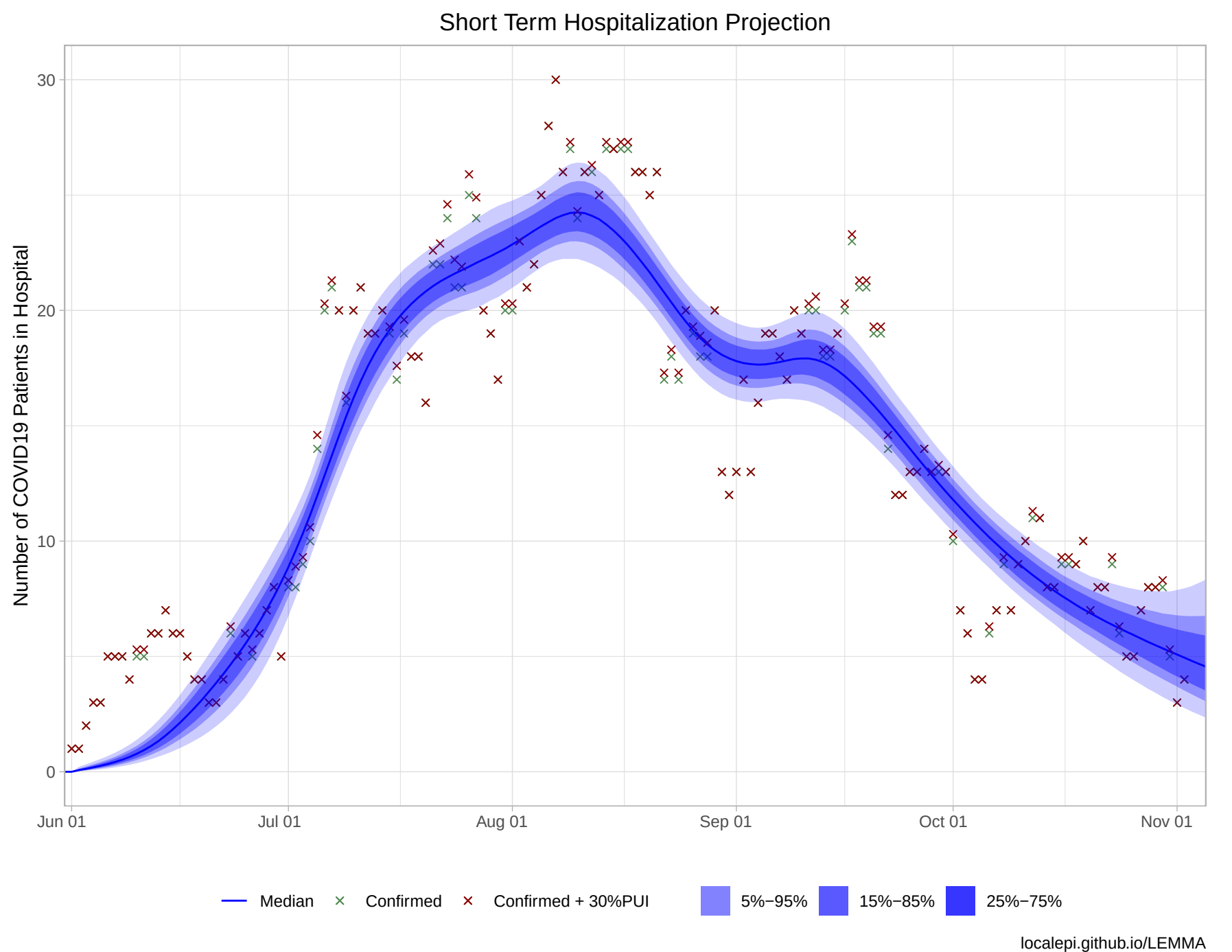
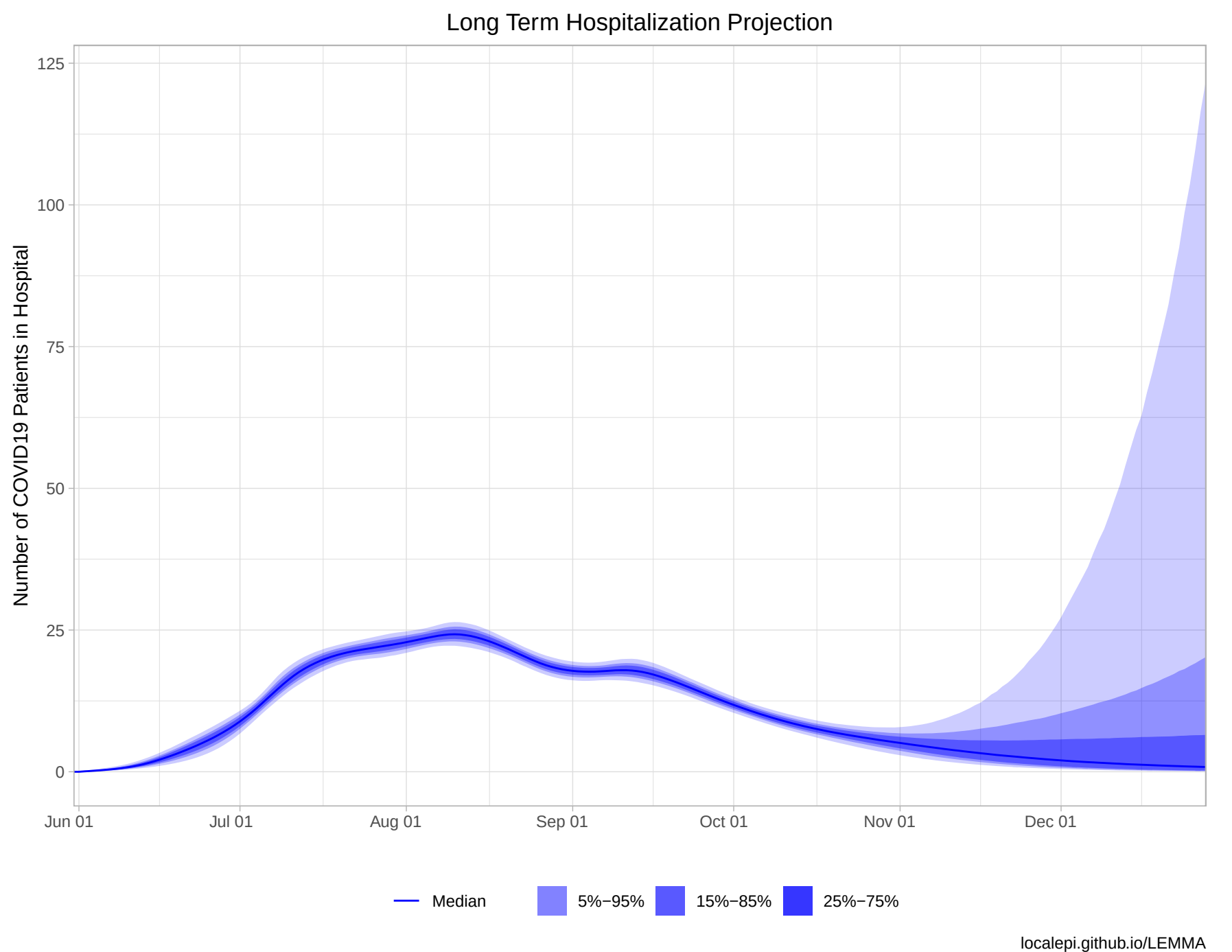
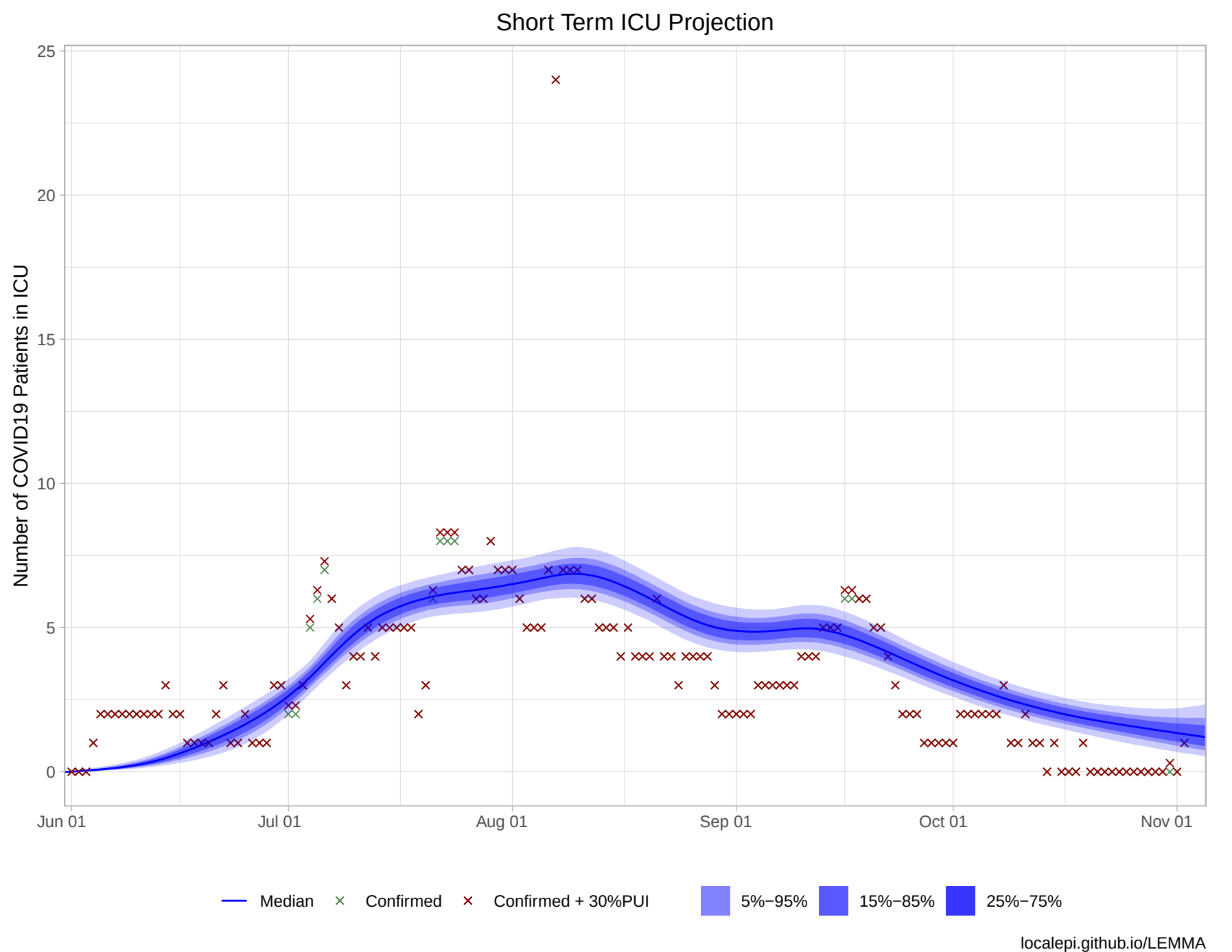
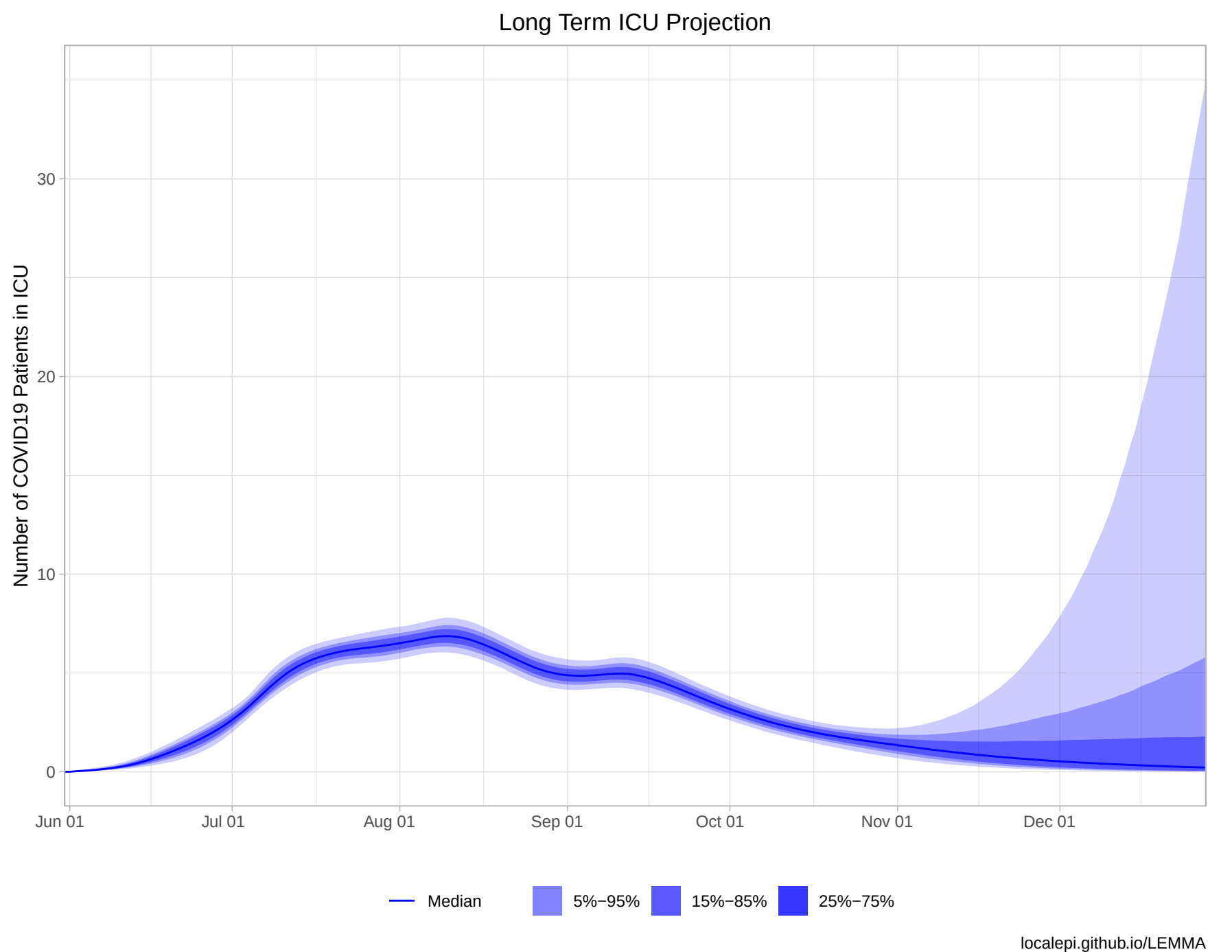
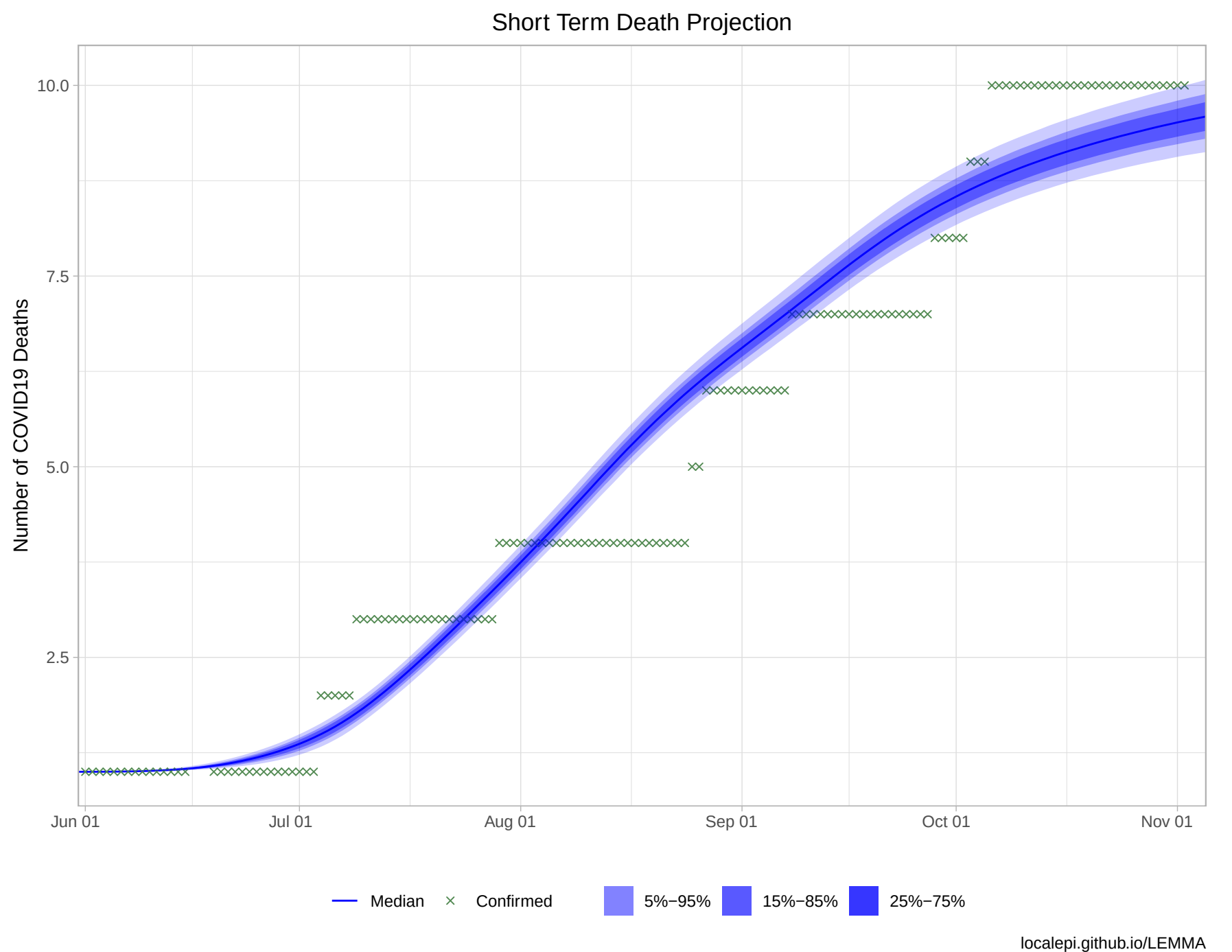
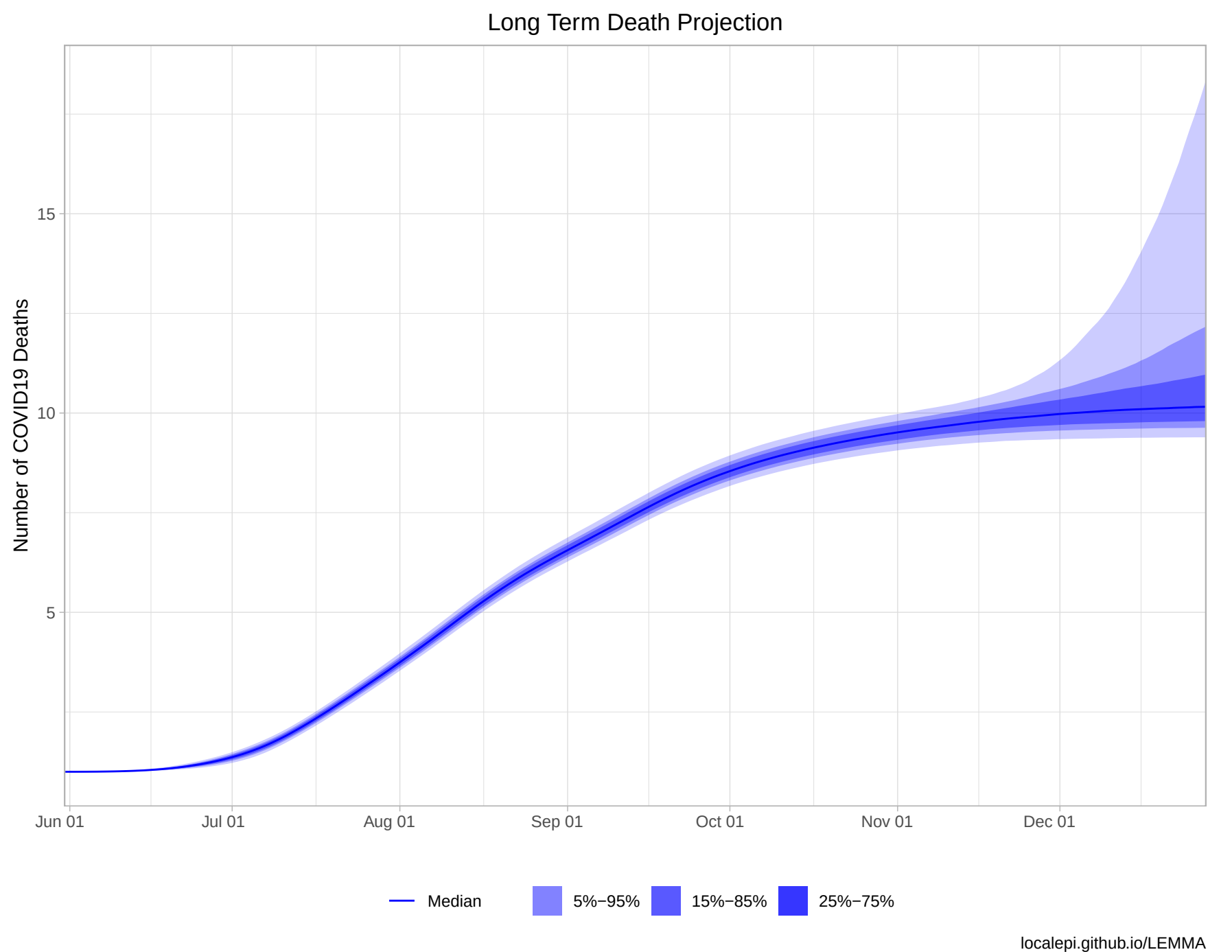

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
30
20
10
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

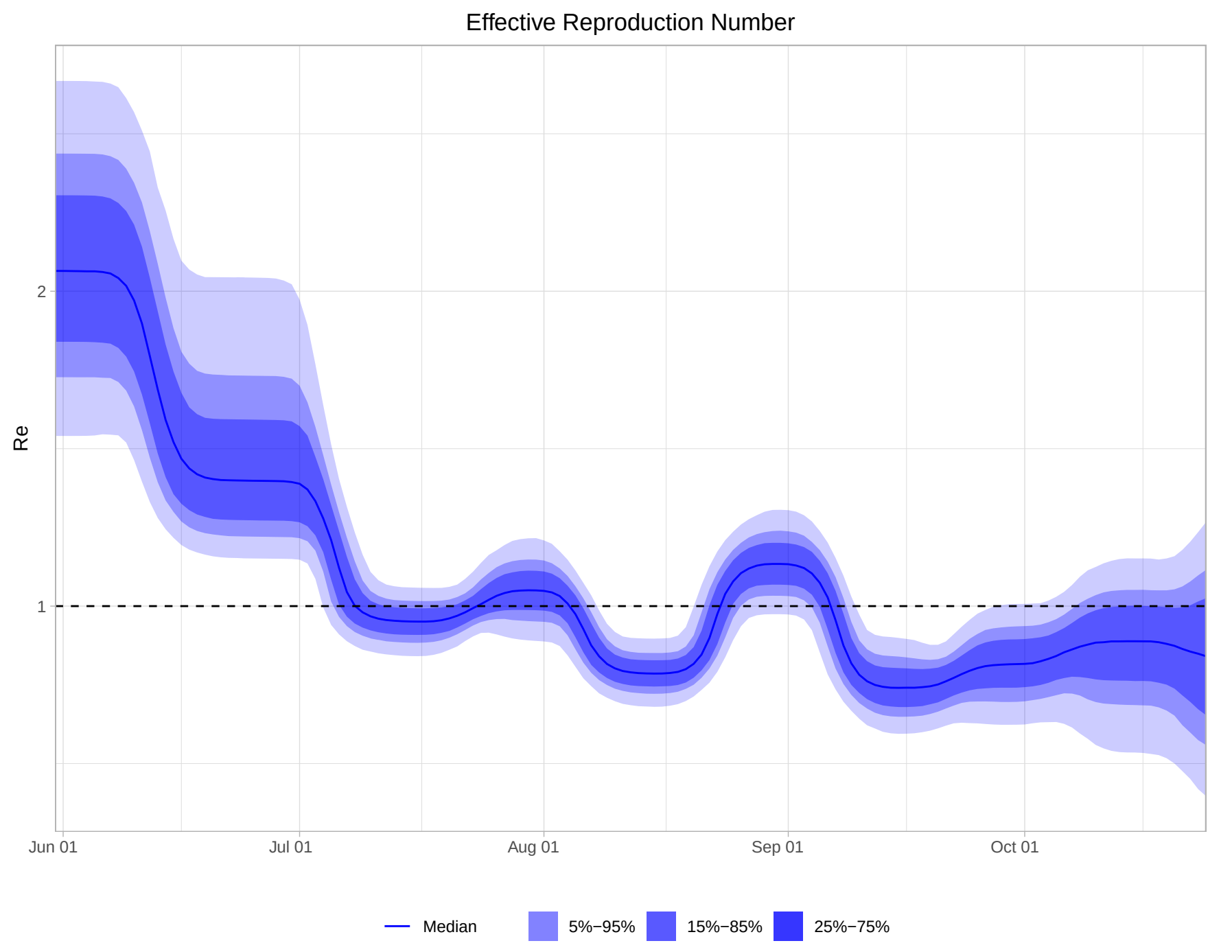

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
125
100
75
50
25
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
25
20
15
10
5
0
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
30
20
10
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

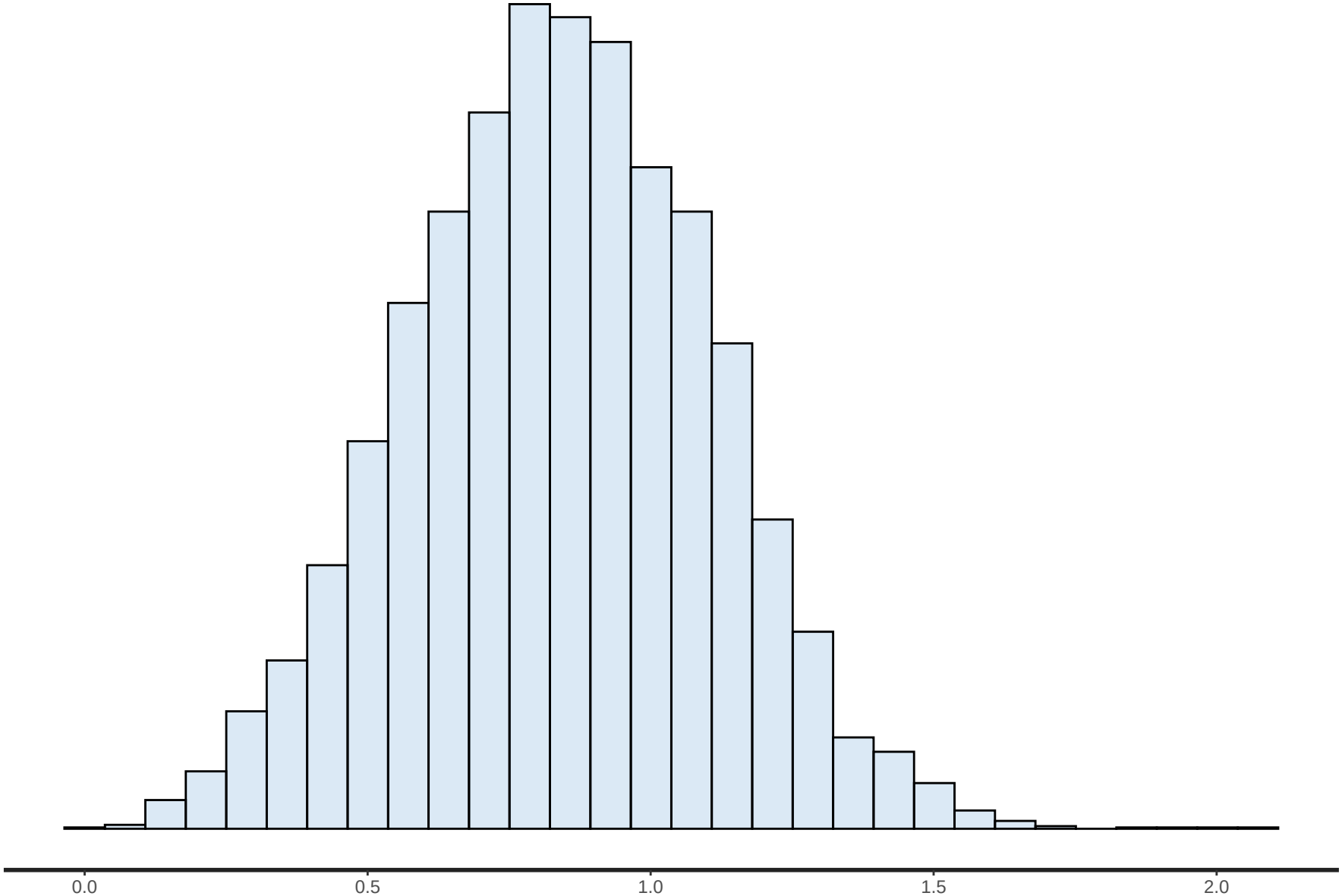

Short Term Death Projection
Number of COVID19 Deaths
10.0
7.5
5.0
2.5
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

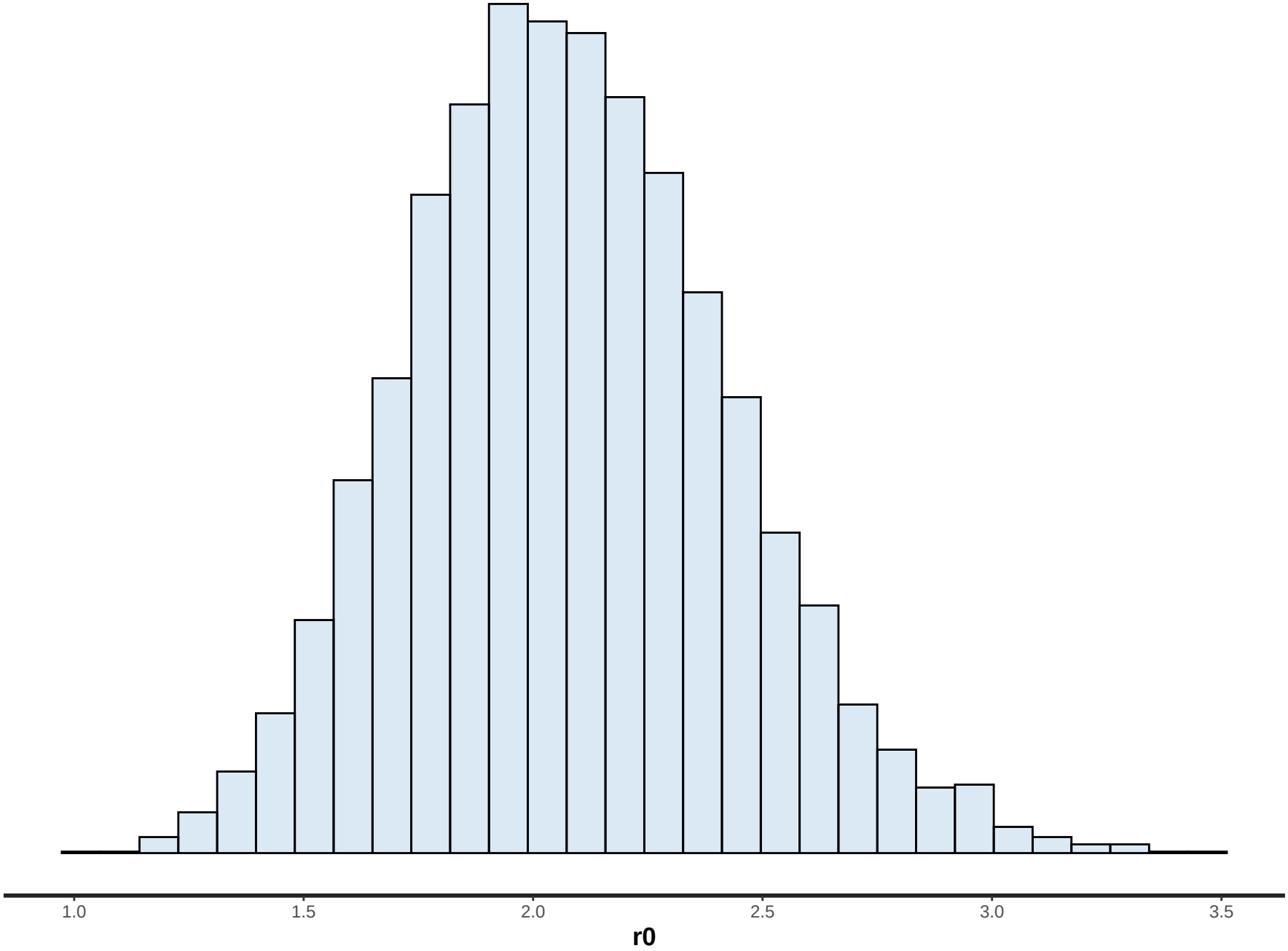

Long Term Death Projection
Number of COVID19 Deaths
15
10
5
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

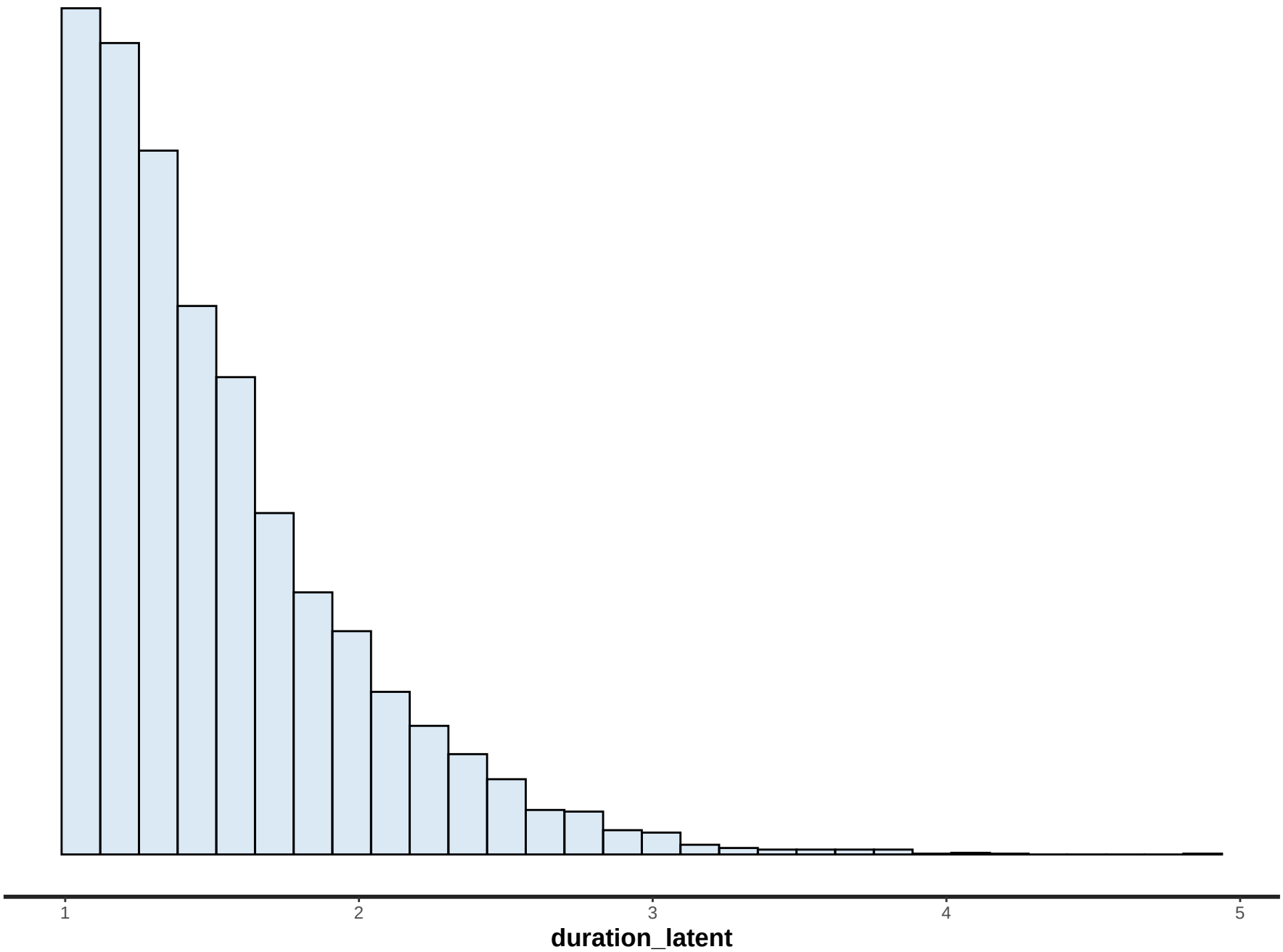

Effective Reproduction Number
Re
2
1
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Median
5%−95%
15%−85%
25%−75%

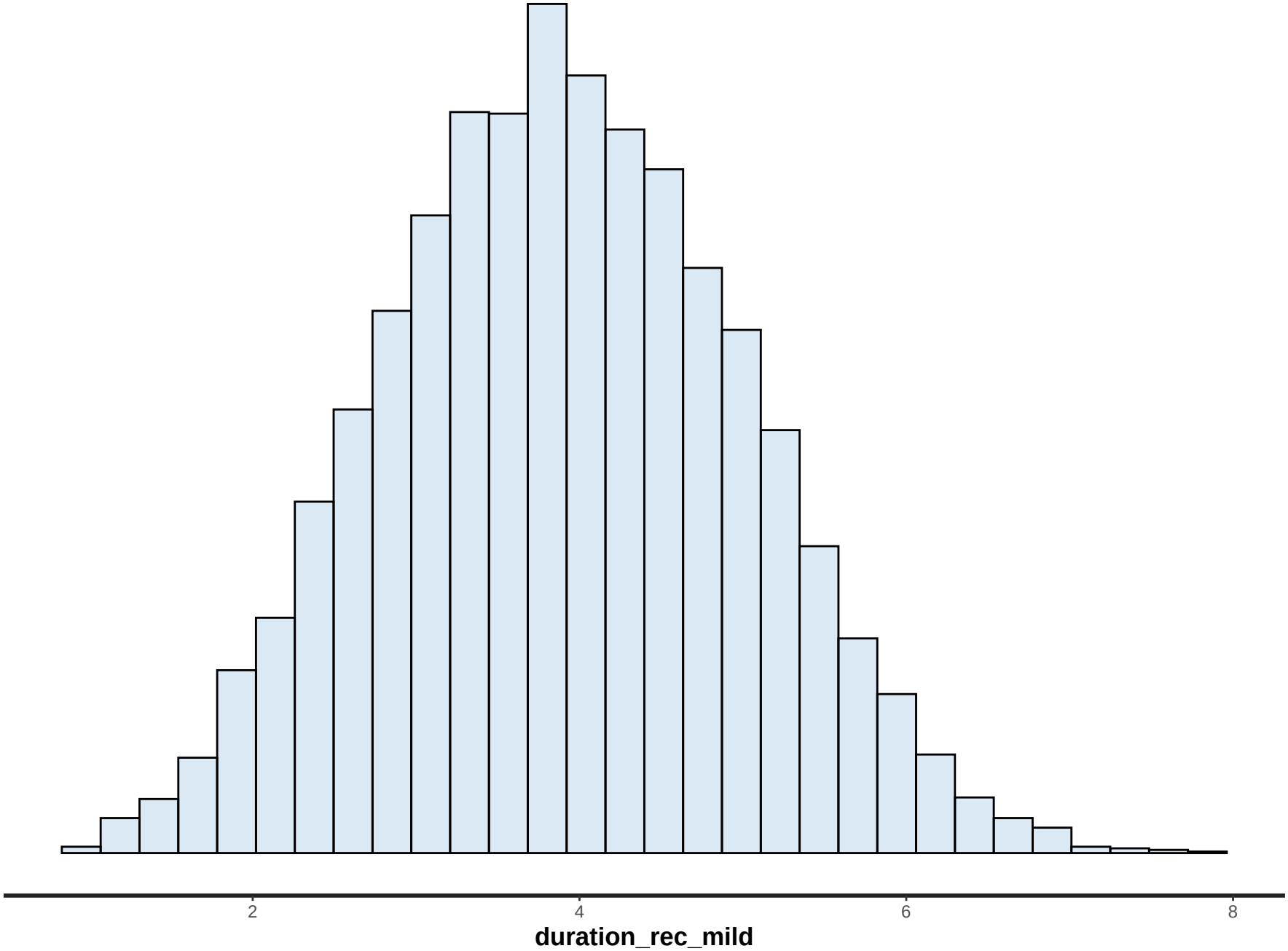
Rt as of 2020−10−24

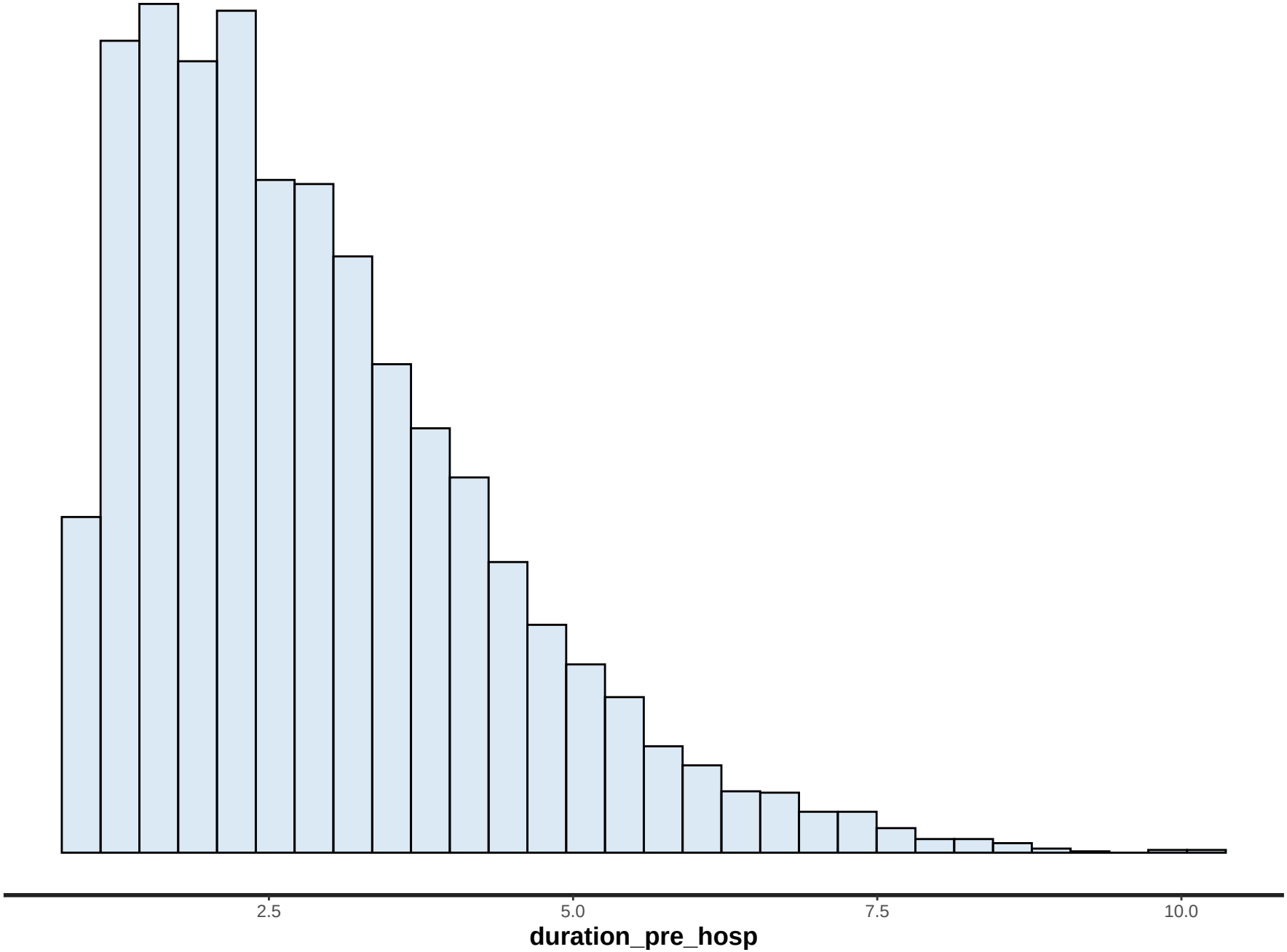
5%	10%	25%	50%	75%	90%	95%
0.40	0.50	0.65	0.84	1.03	1.17	1.27

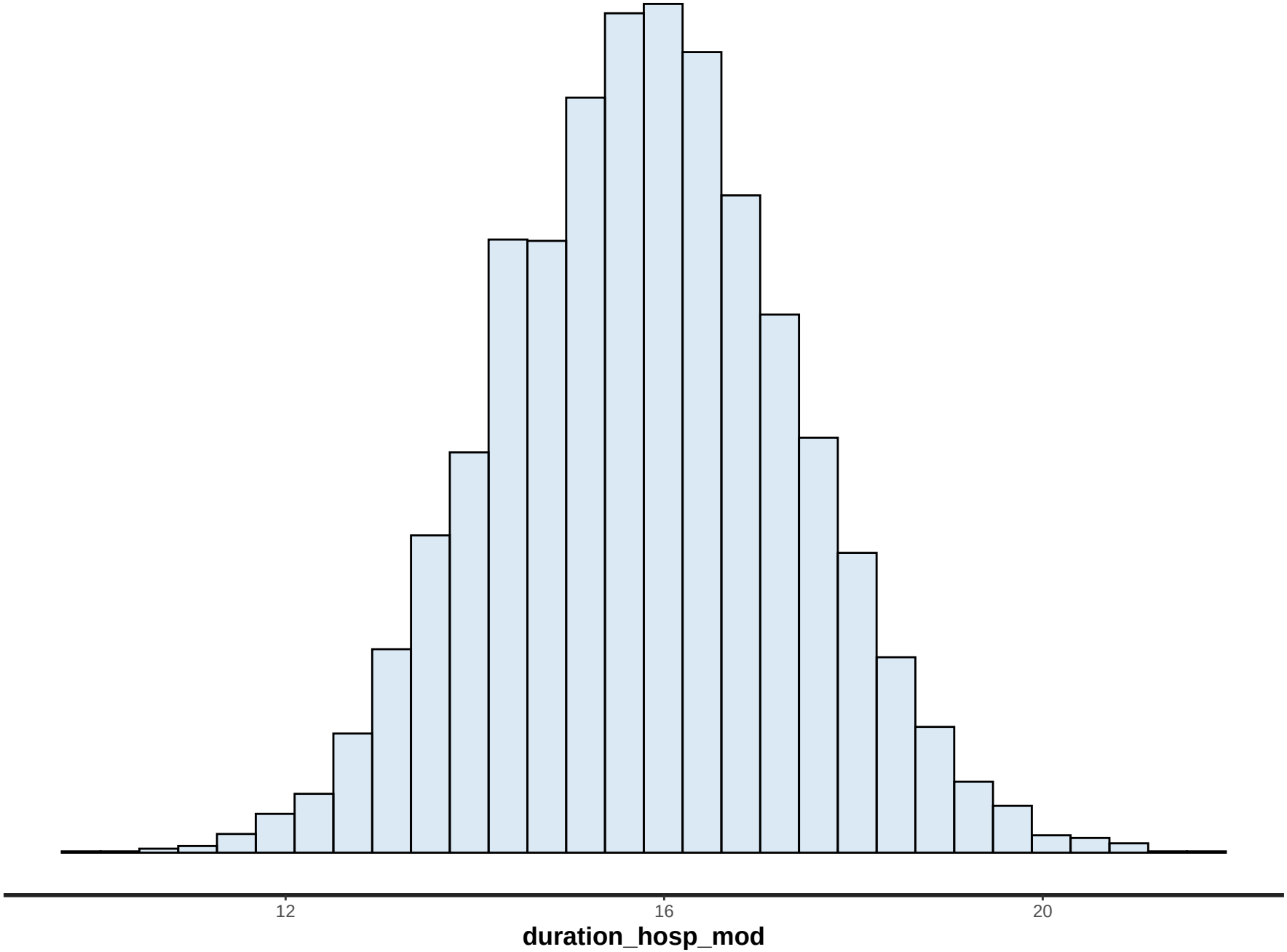


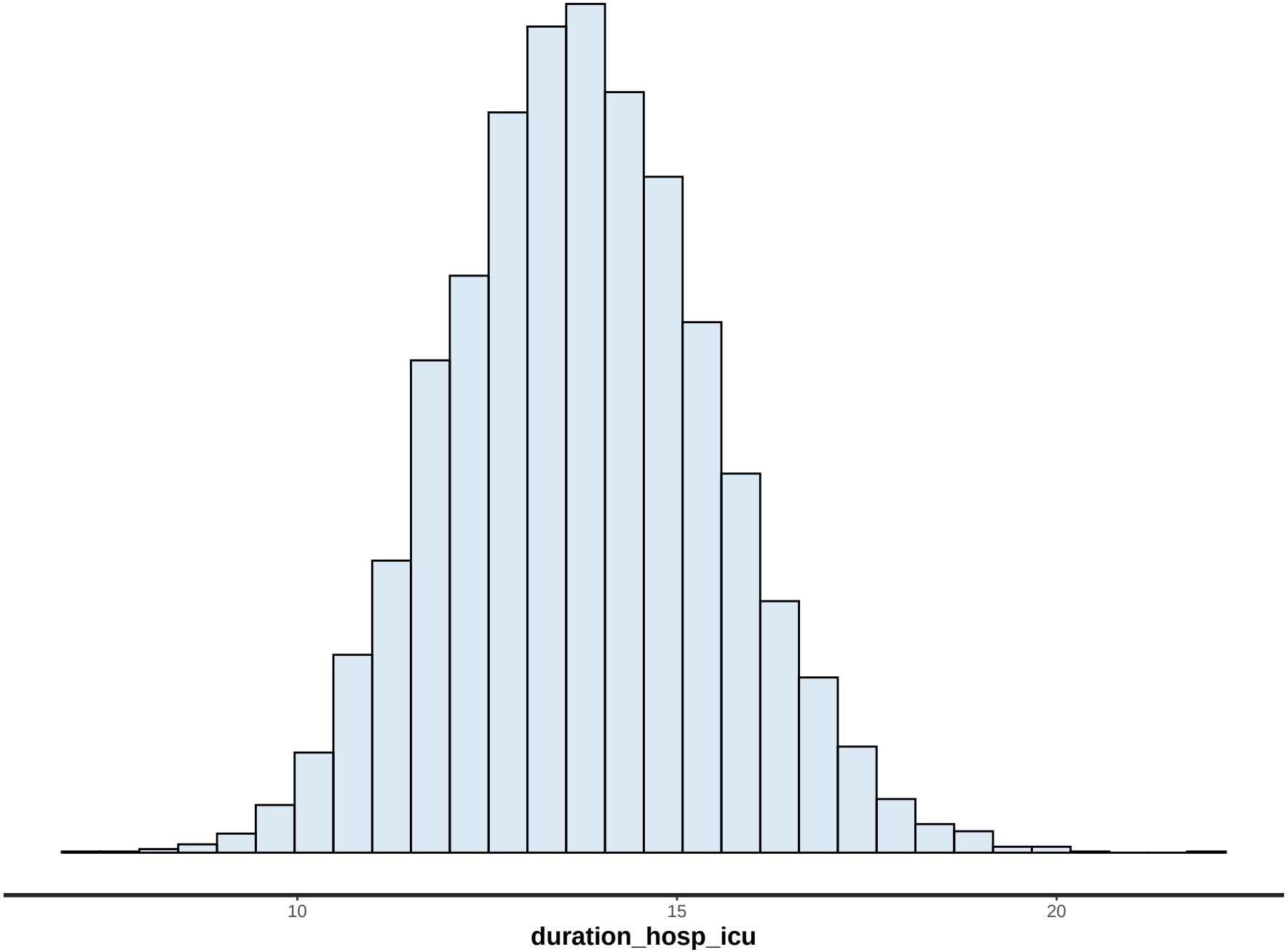

1.0
1.5
2.0
2.5
3.0
3.5
r0

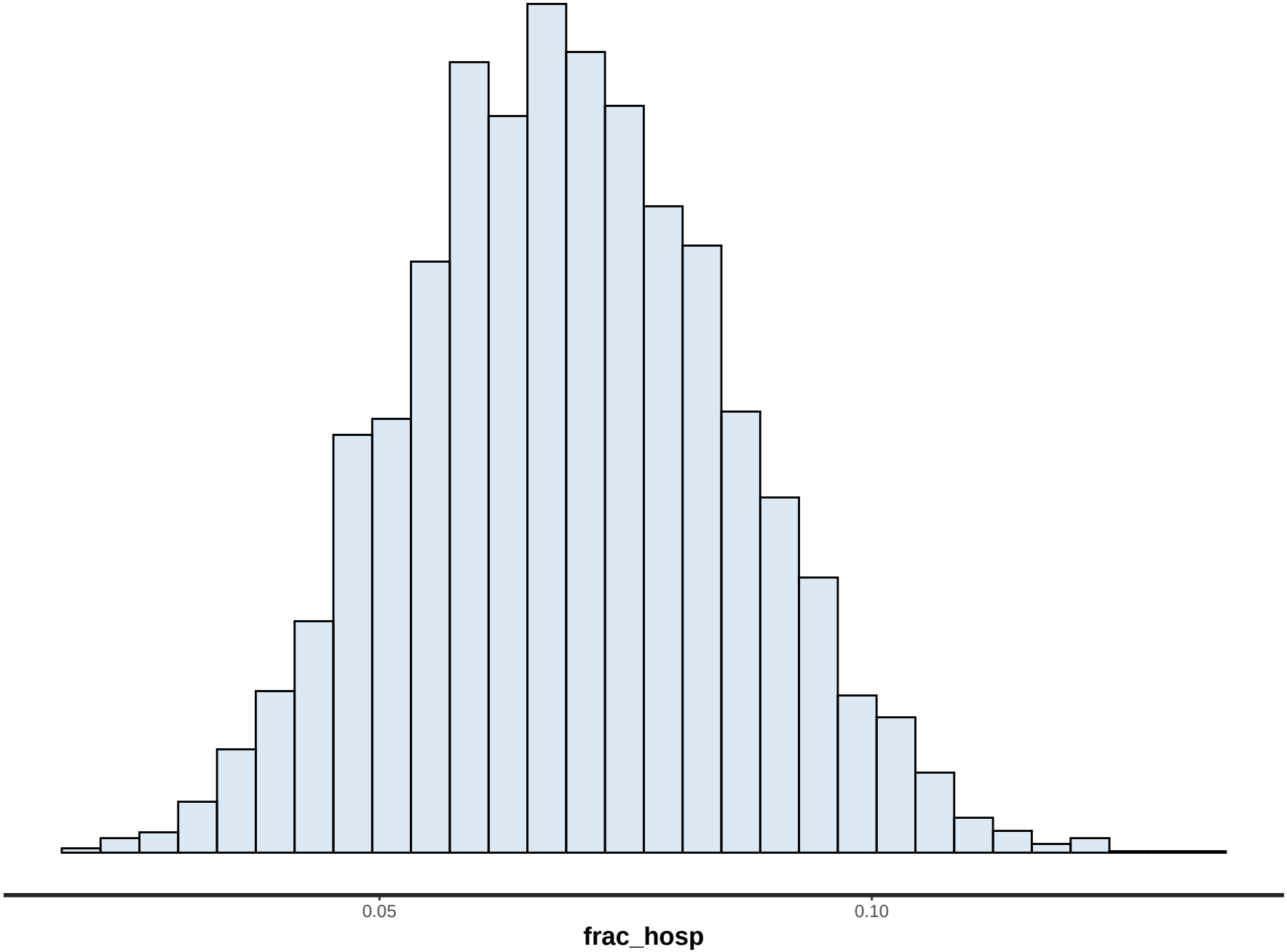

1
2
3
4
5
duration_latent

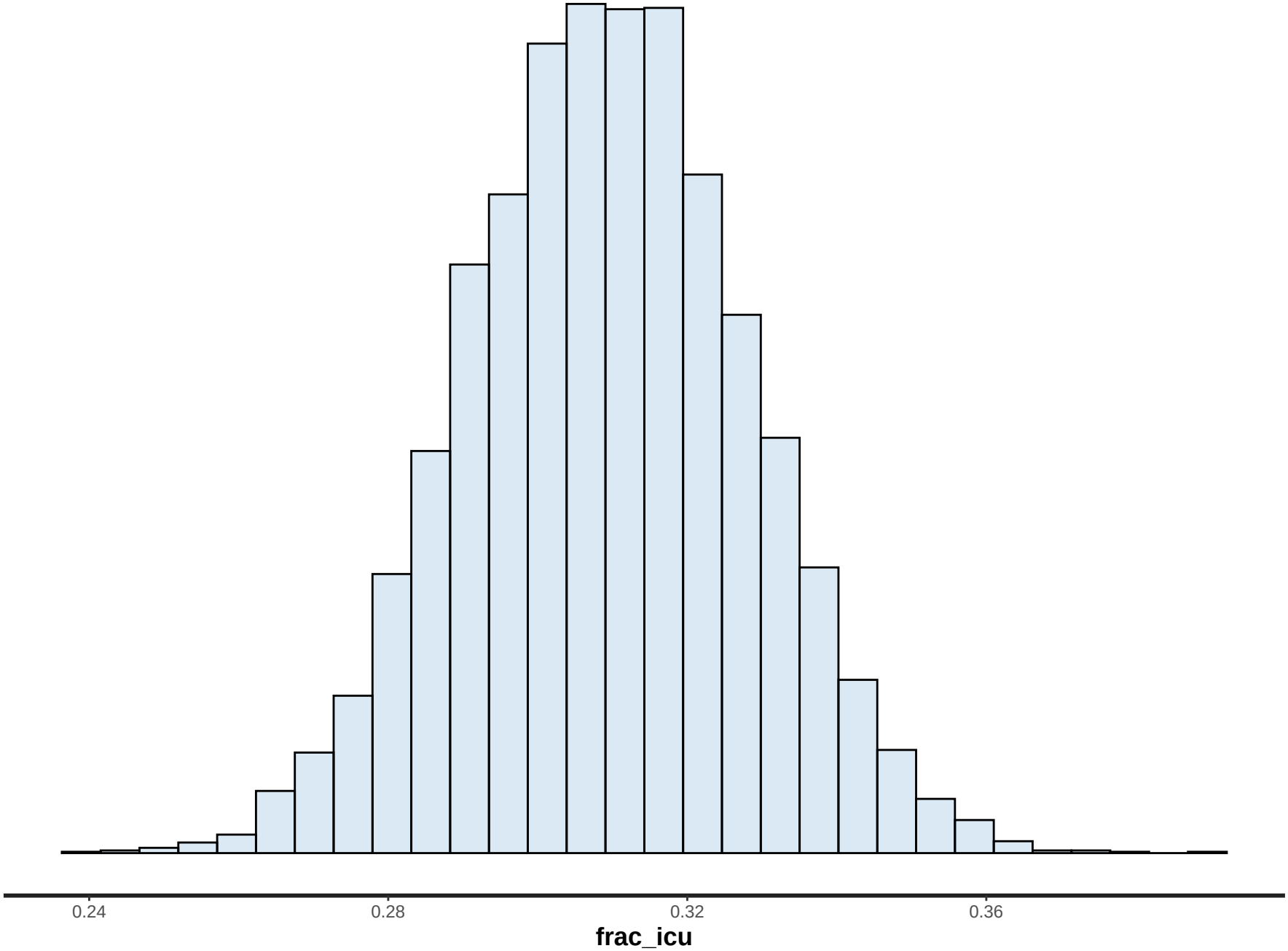

2
4
6
8
duration_rec_mild

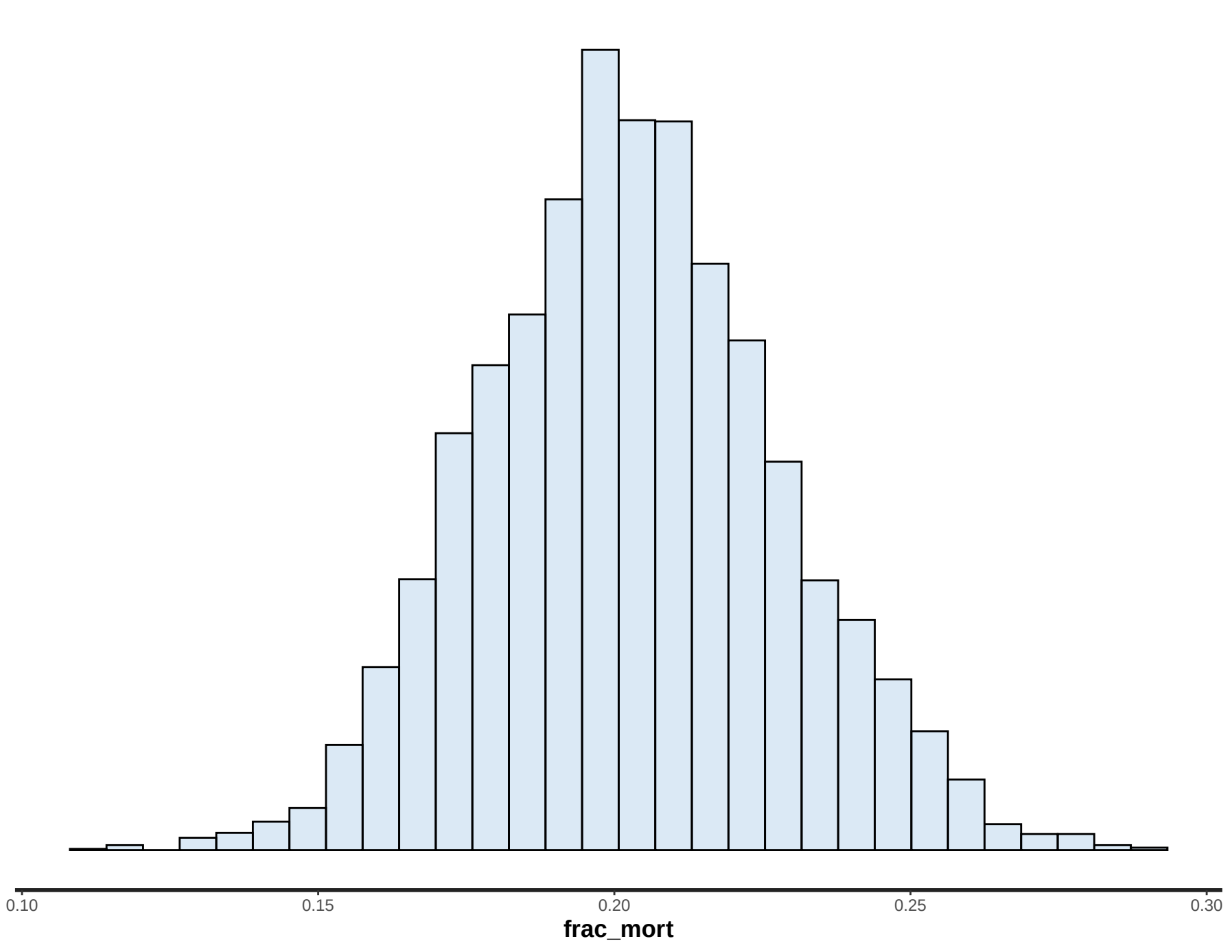

2.5
5.0
7.5
10.0
duration_pre_hosp

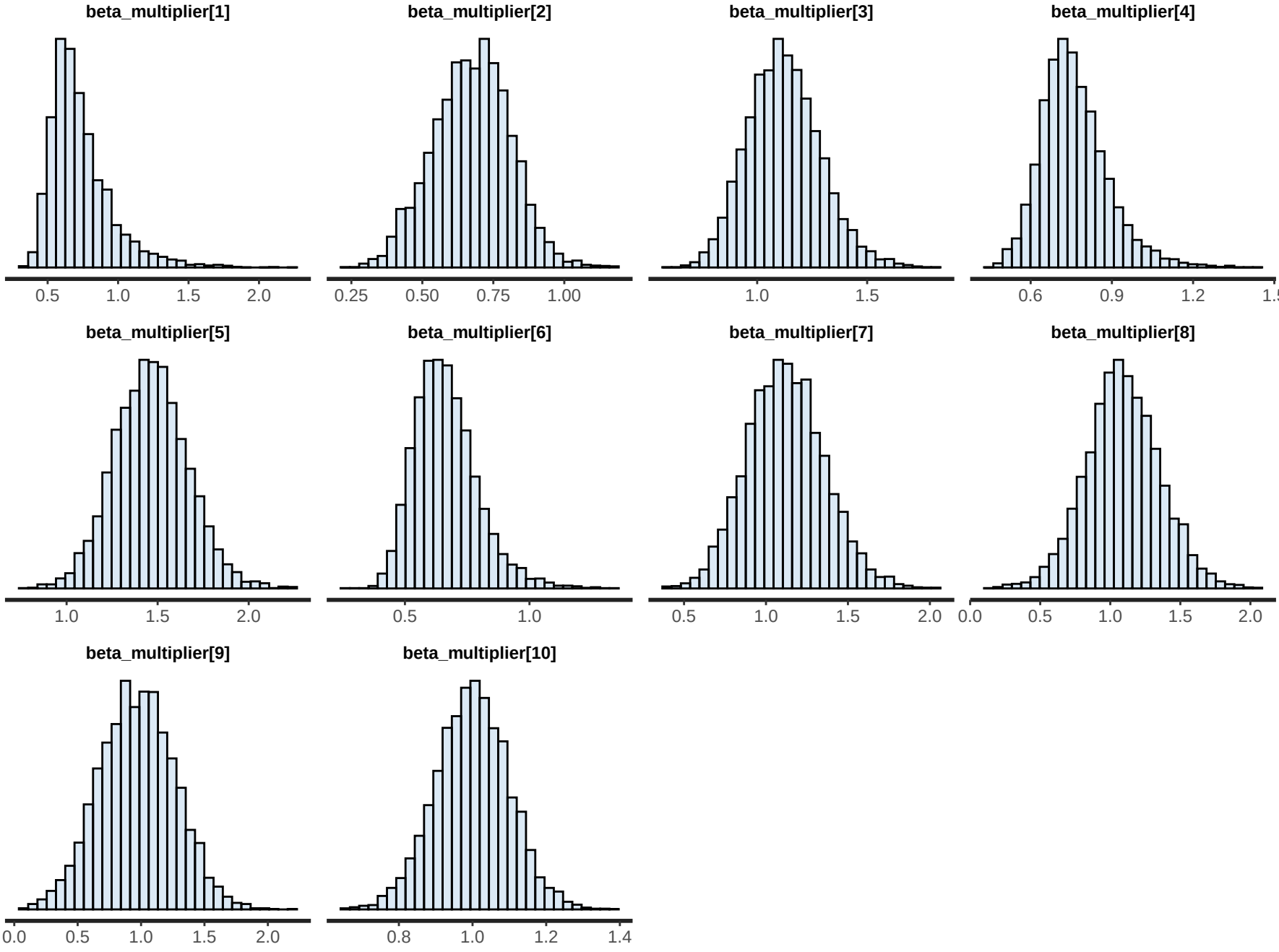

12
16
20
duration_hosp_mod

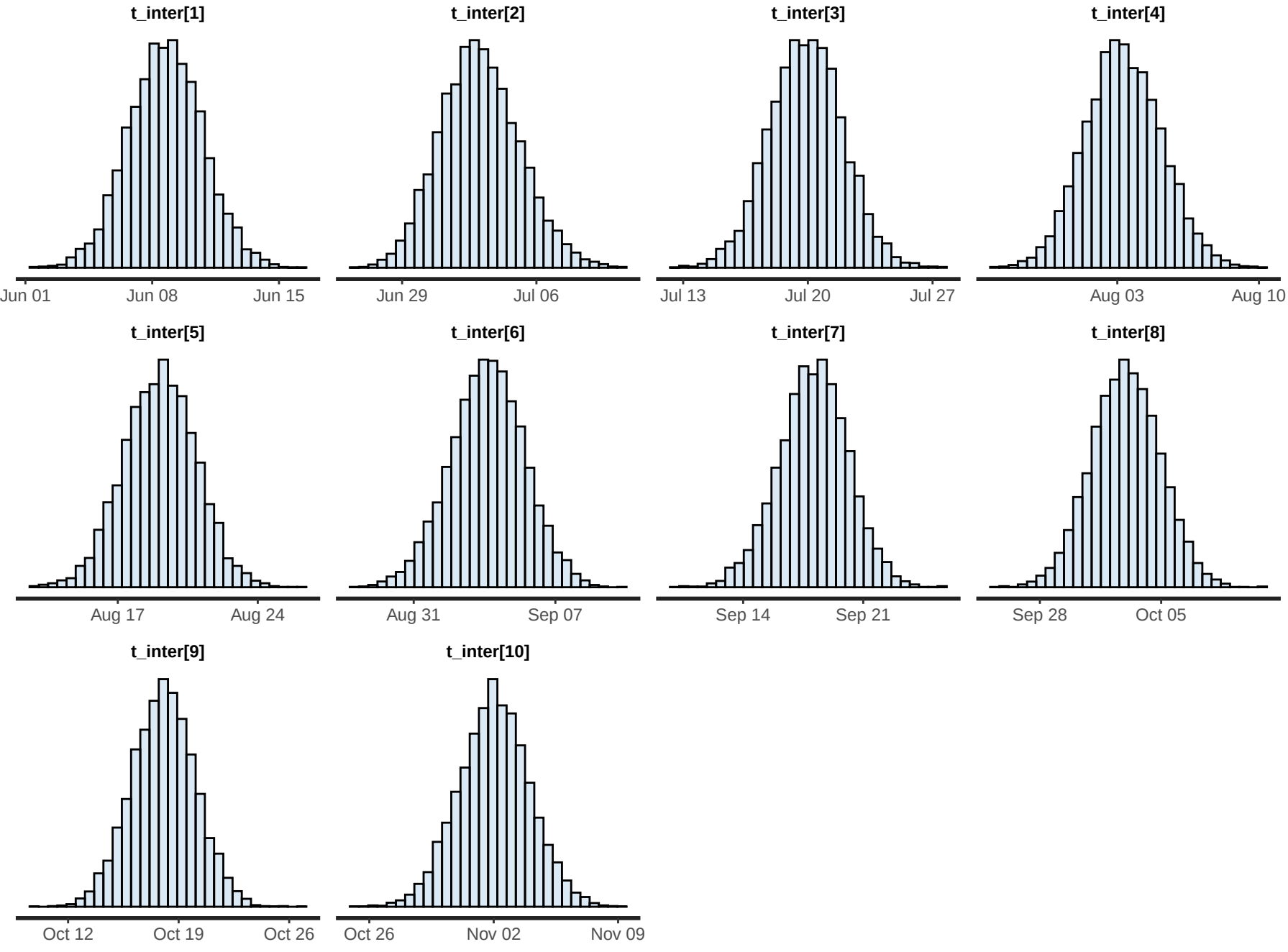

10
15
20
duration_hosp_icu

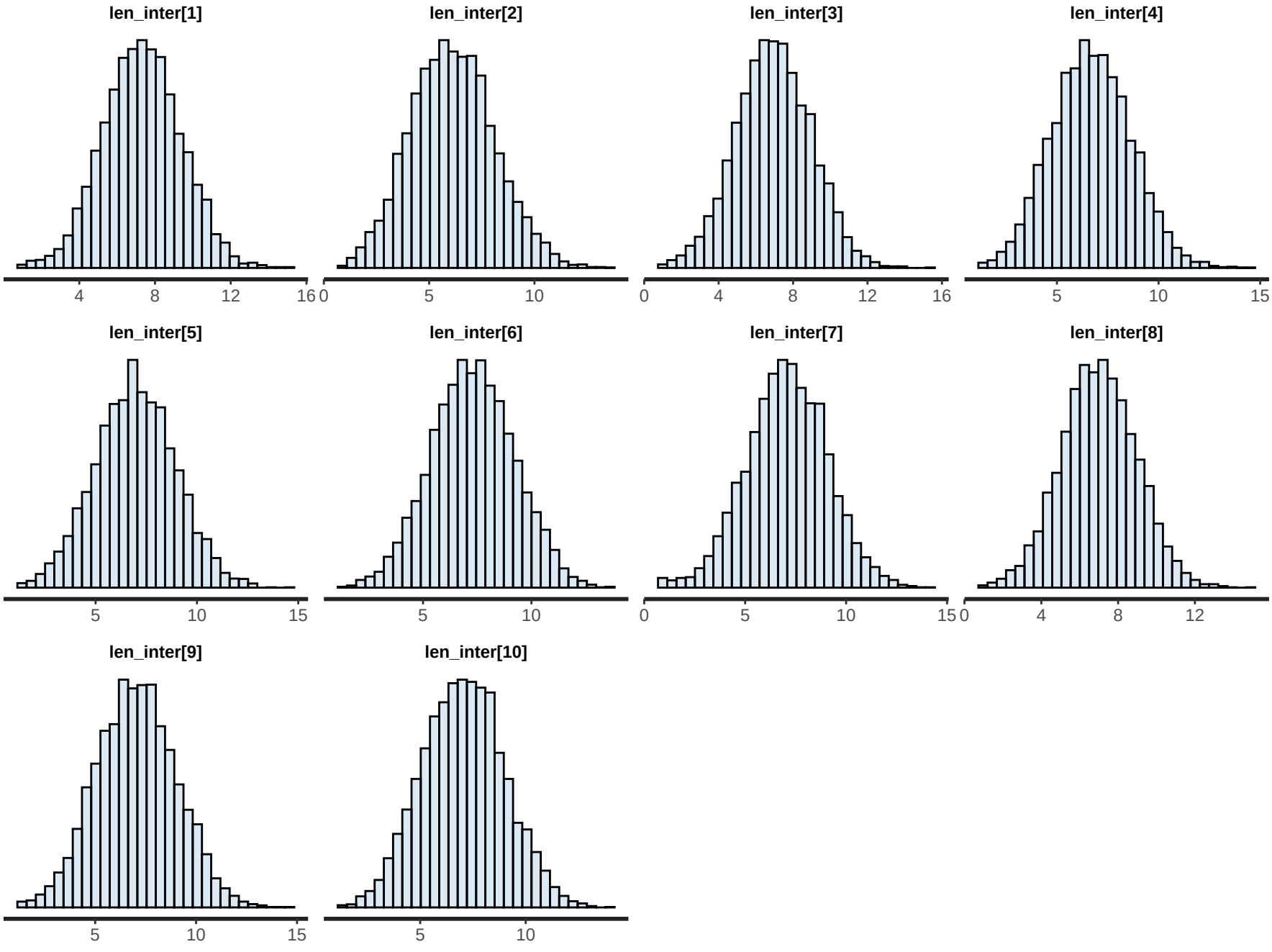

0.05
0.10
frac_hosp

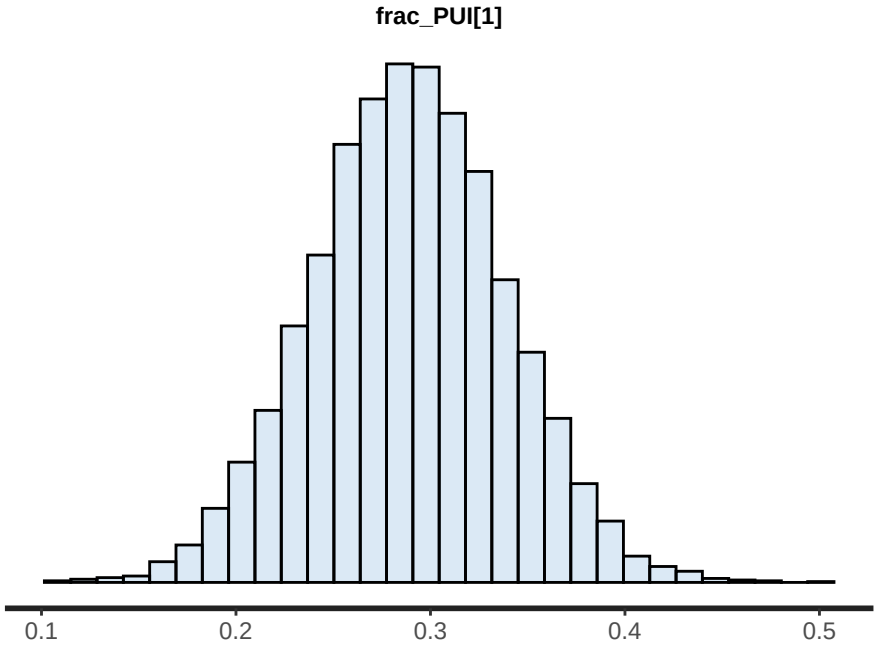

0.24
0.28
0.32
0.36
frac_icu

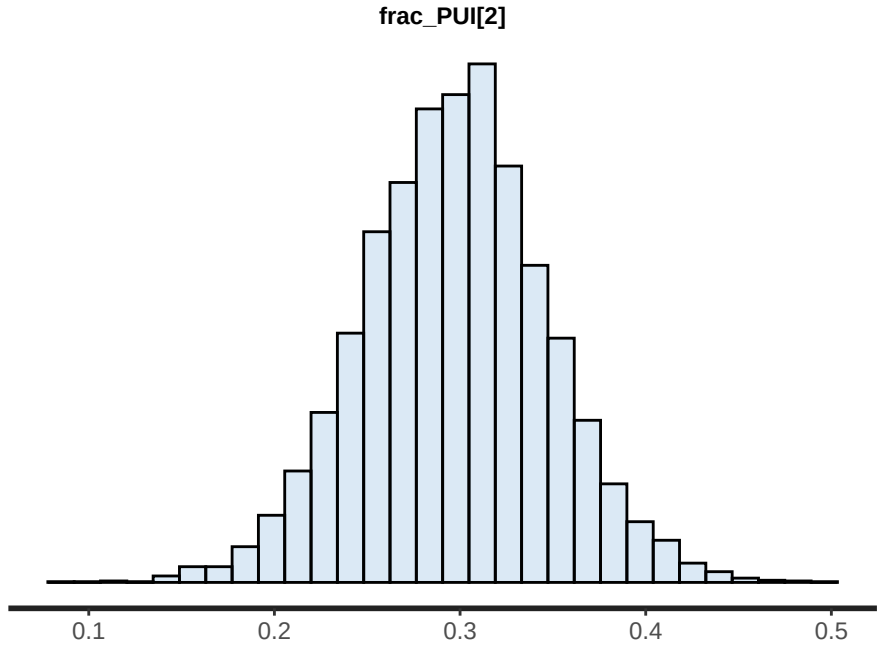

0.10
0.15
0.20
0.25
0.30
frac_mort

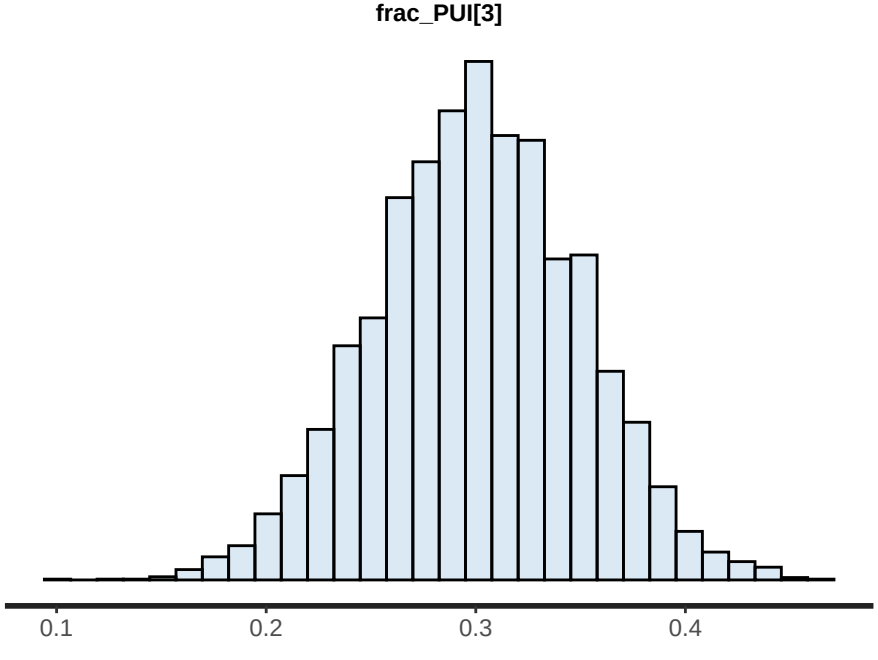

beta_multiplier[1]
0.5
1.0
1.5
2.0
beta_multiplier[2]
0.25
0.50
0.75
1.00
beta_multiplier[3]
1.0
1.5
beta_multiplier[4]
0.6
0.9
1.2
1.5
beta_multiplier[5]
1.0
1.5
2.0
beta_multiplier[6]
0.5
1.0
beta_multiplier[7]
0.5
1.0
1.5
2.0
beta_multiplier[8]
0.0
0.5
1.0
1.5
2.0
beta_multiplier[9]
0.0
0.5
1.0
1.5
2.0
beta_multiplier[10]
0.8
1.0
1.2
1.4

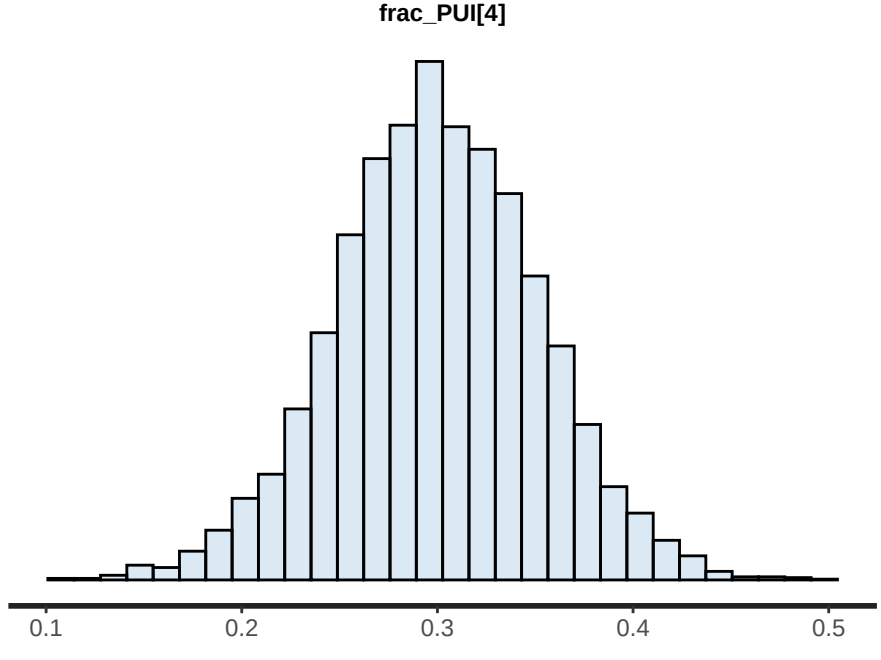

t_inter[1]
Jun 01
Jun 08
Jun 15
t_inter[2]
Jun 29
Jul 06
t_inter[3]
Jul 13
Jul 20
Jul 27
t_inter[4]
Aug 03
Aug 10
t_inter[5]
Aug 17
Aug 24
t_inter[6]
Aug 31
Sep 07
t_inter[7]
Sep 14
Sep 21
t_inter[8]
Sep 28
Oct 05
t_inter[9]
Oct 12
Oct 19
Oct 26
t_inter[10]
Oct 26
Nov 02
Nov 09

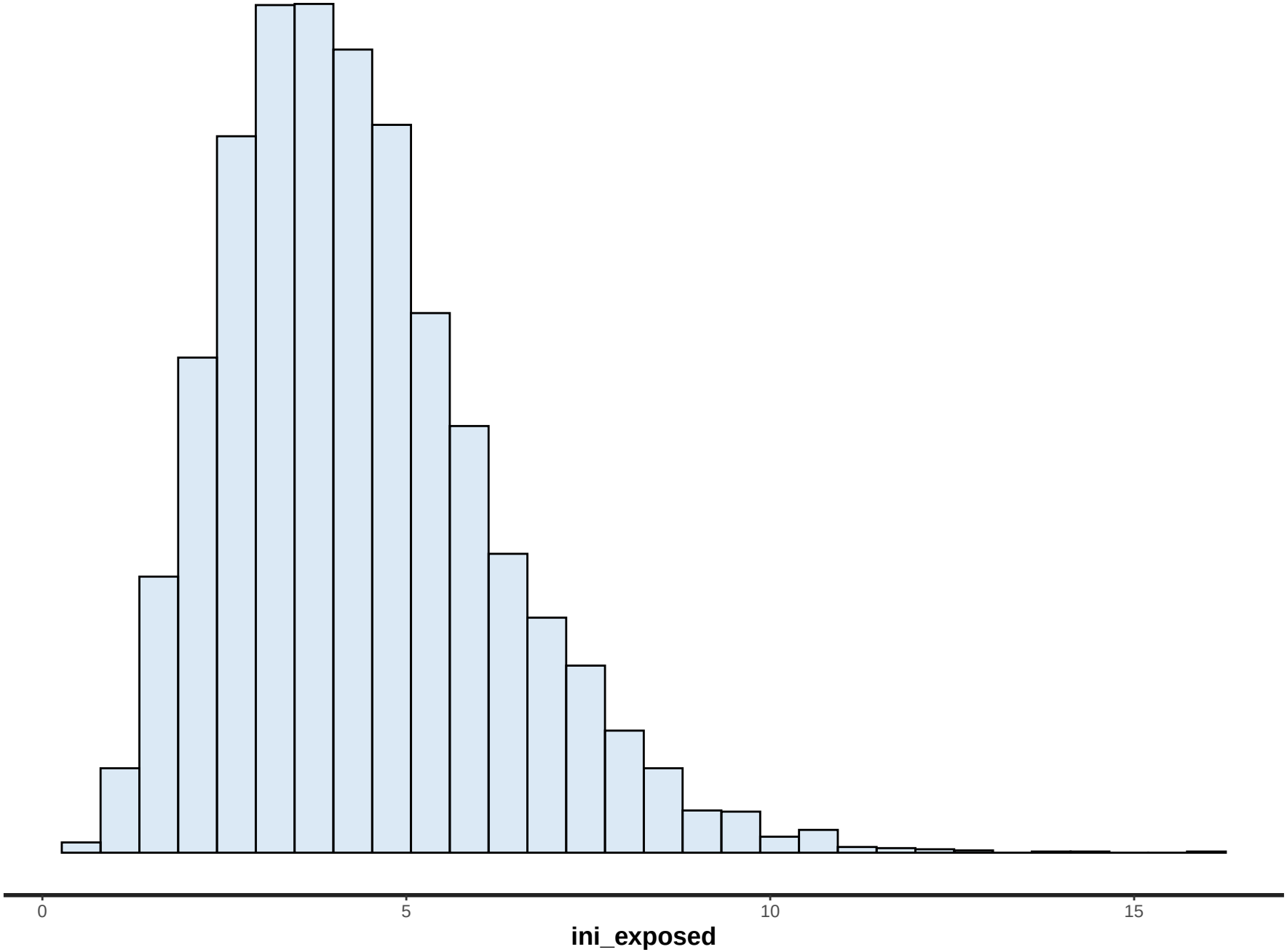

len_inter[1]
4
8
12
16
len_inter[2]
0
5
10
len_inter[3]
0
4
8
12
16
len_inter[4]
5
10
15
len_inter[5]
5
10
15
len_inter[6]
5
10
len_inter[7]
0
5
10
15
len_inter[8]
0
4
8
12
len_inter[9]
5
10
15
len_inter[10]
5
10

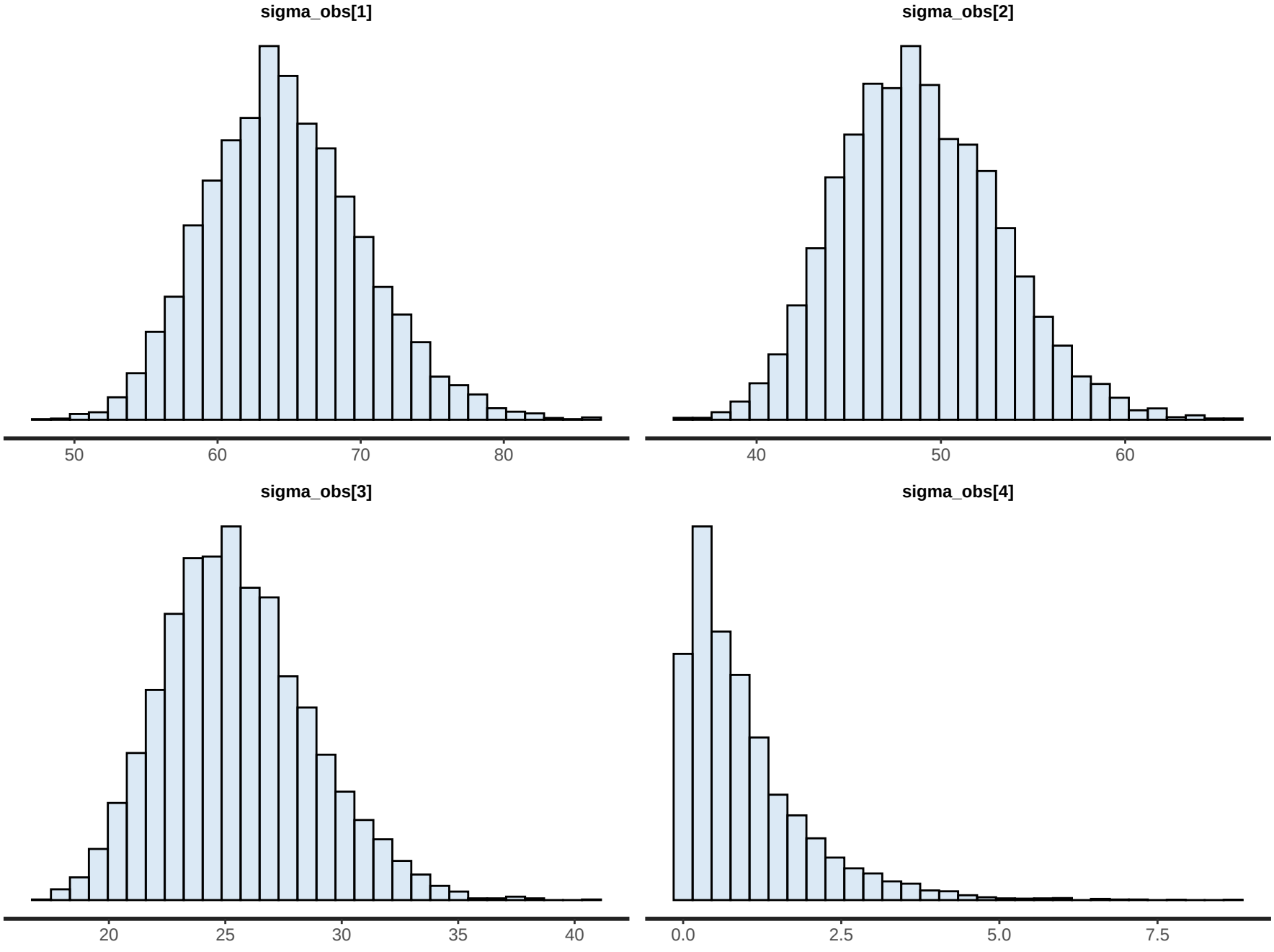

frac_PUI[1]
0.1
0.2
0.3
0.4
0.5


frac_PUI[2]
0.1
0.2
0.3
0.4
0.5


frac_PUI[3]
0.1
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]
50
60
70
80
sigma_obs[2]
40
50
60
sigma_obs[3]
20
25
30
35
40
sigma_obs[4]
0.0
2.5
5.0
7.5