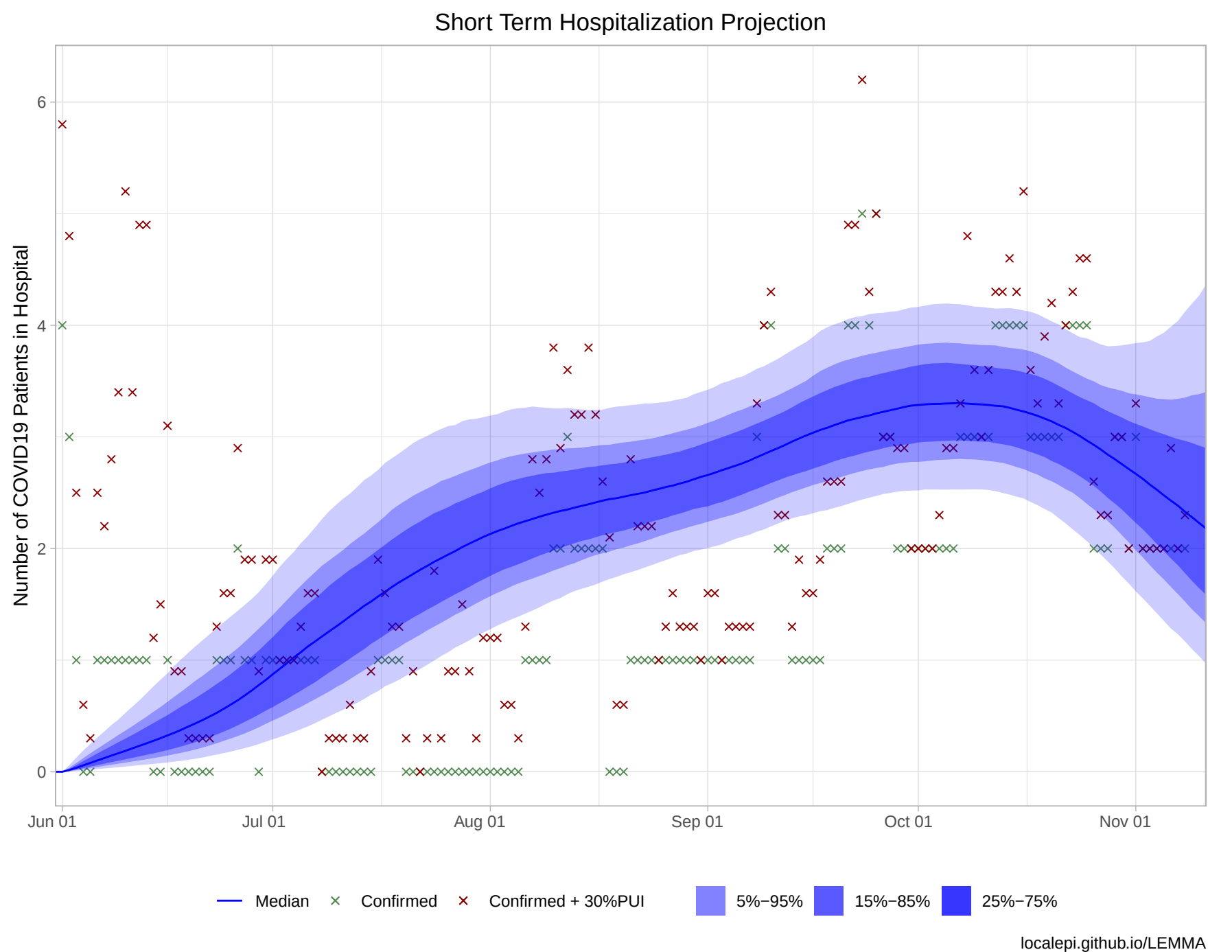
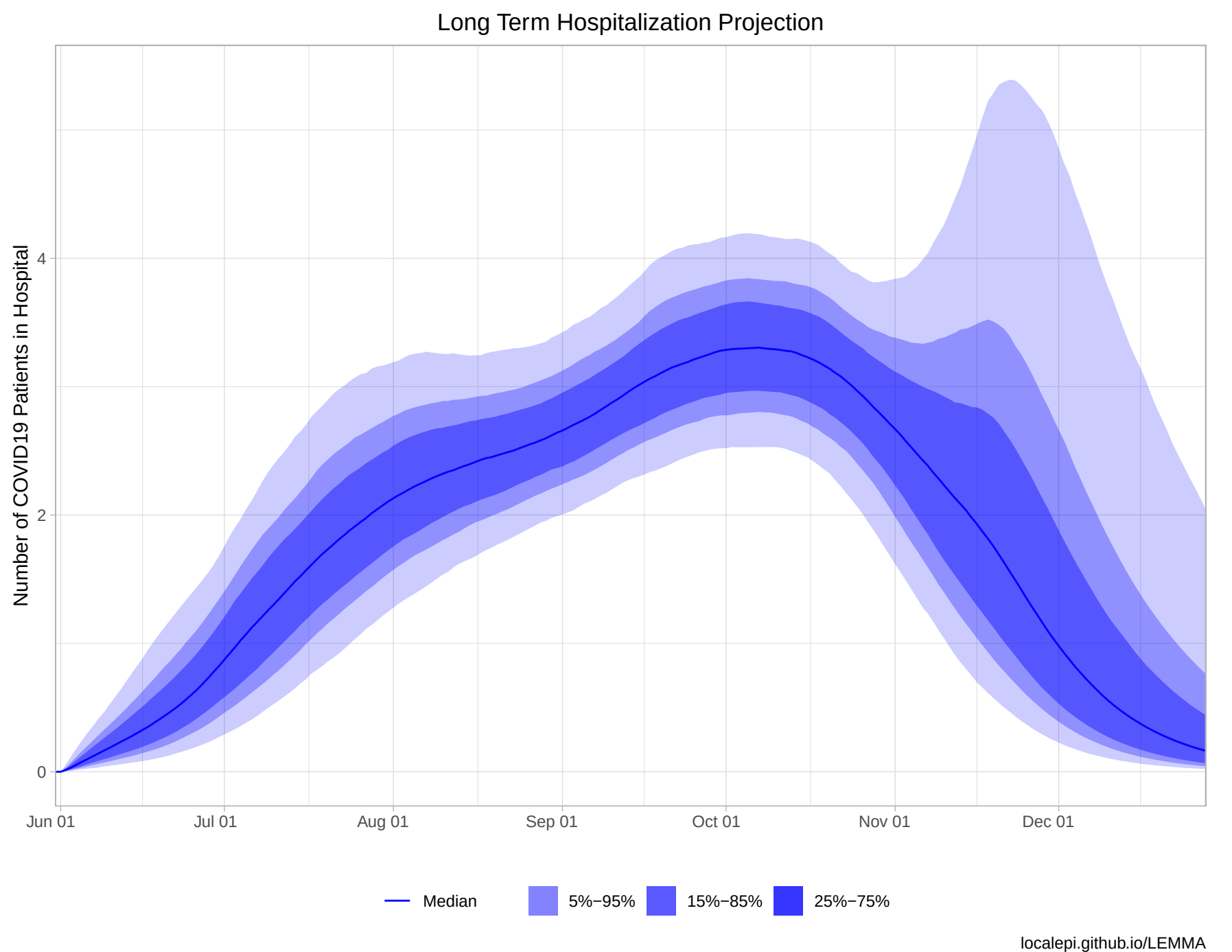
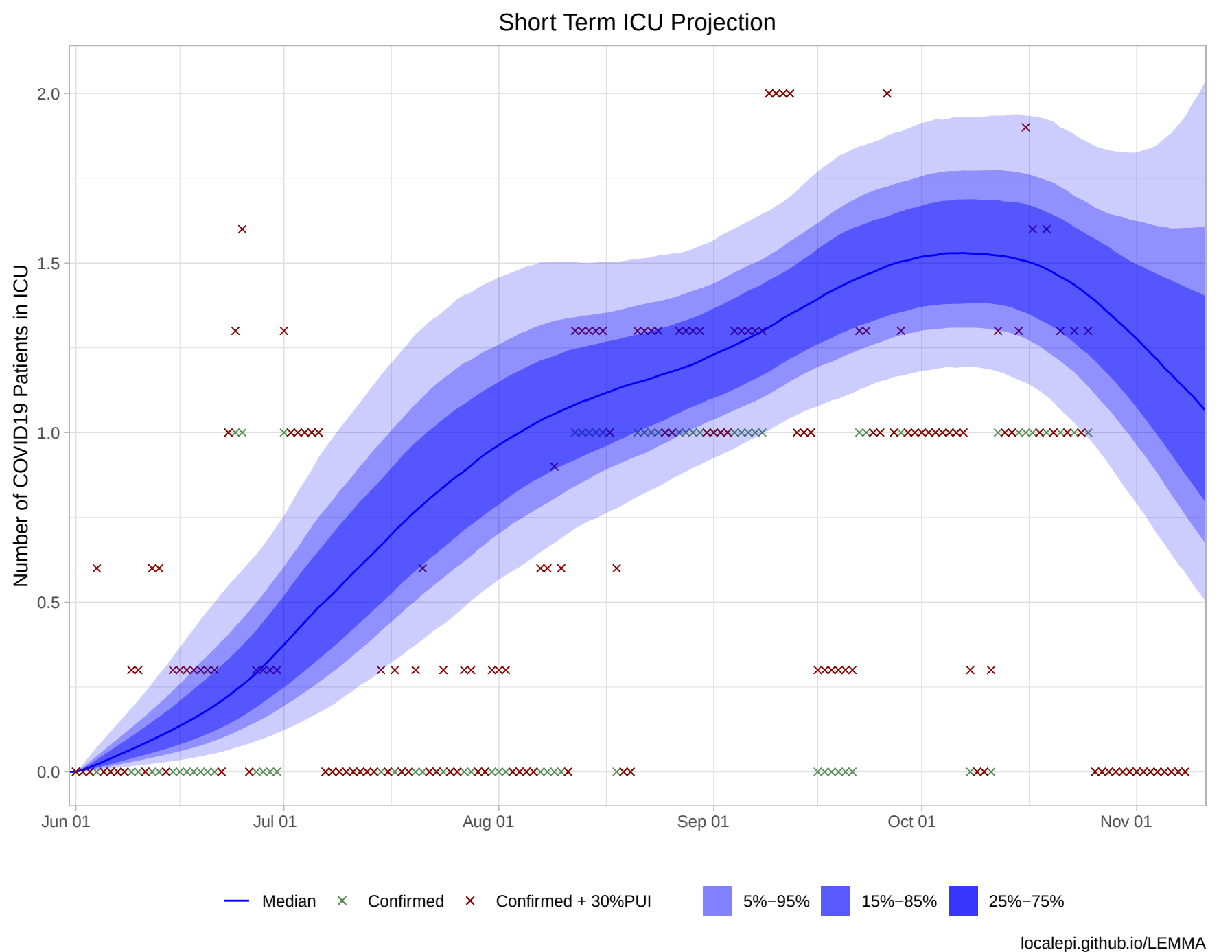
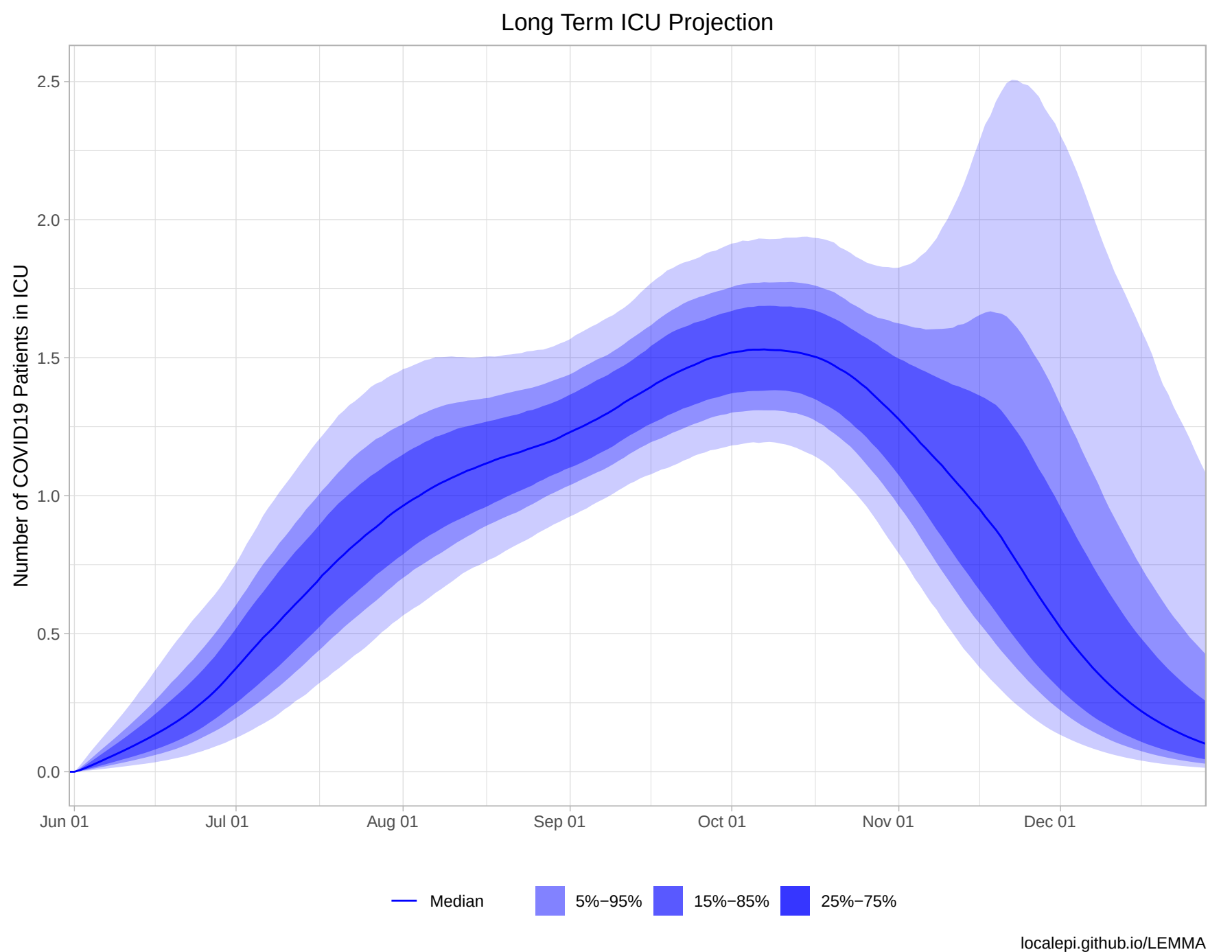
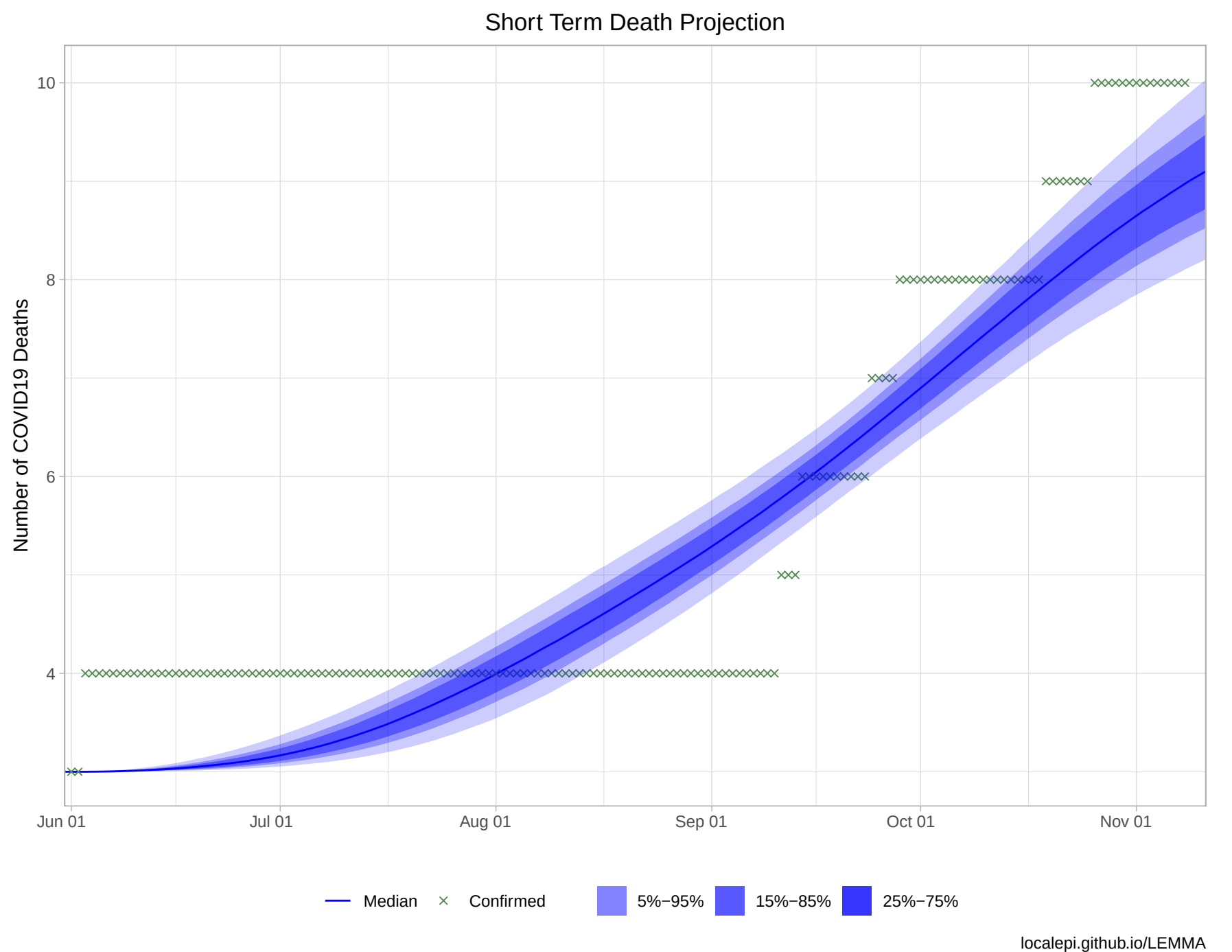
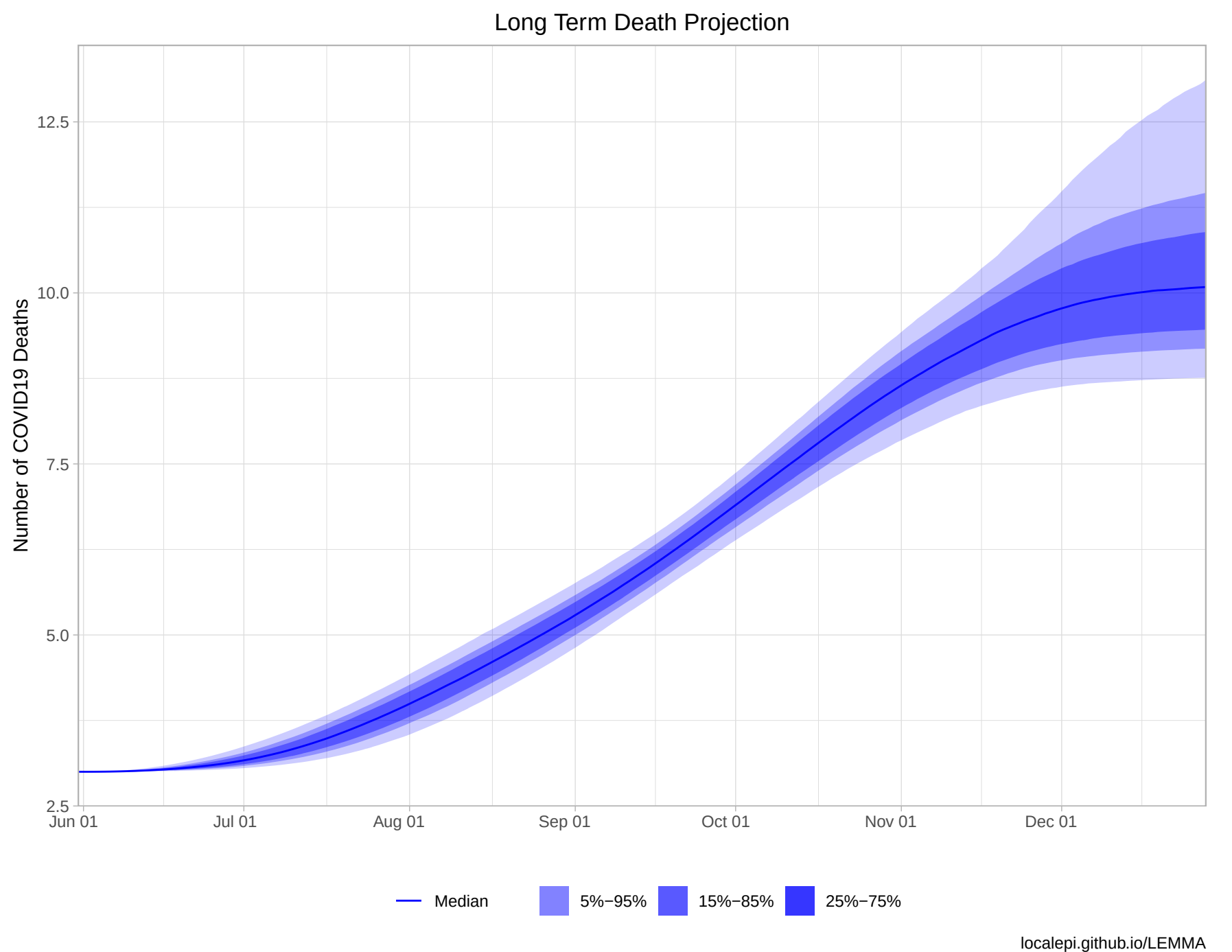

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
2
4
6
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

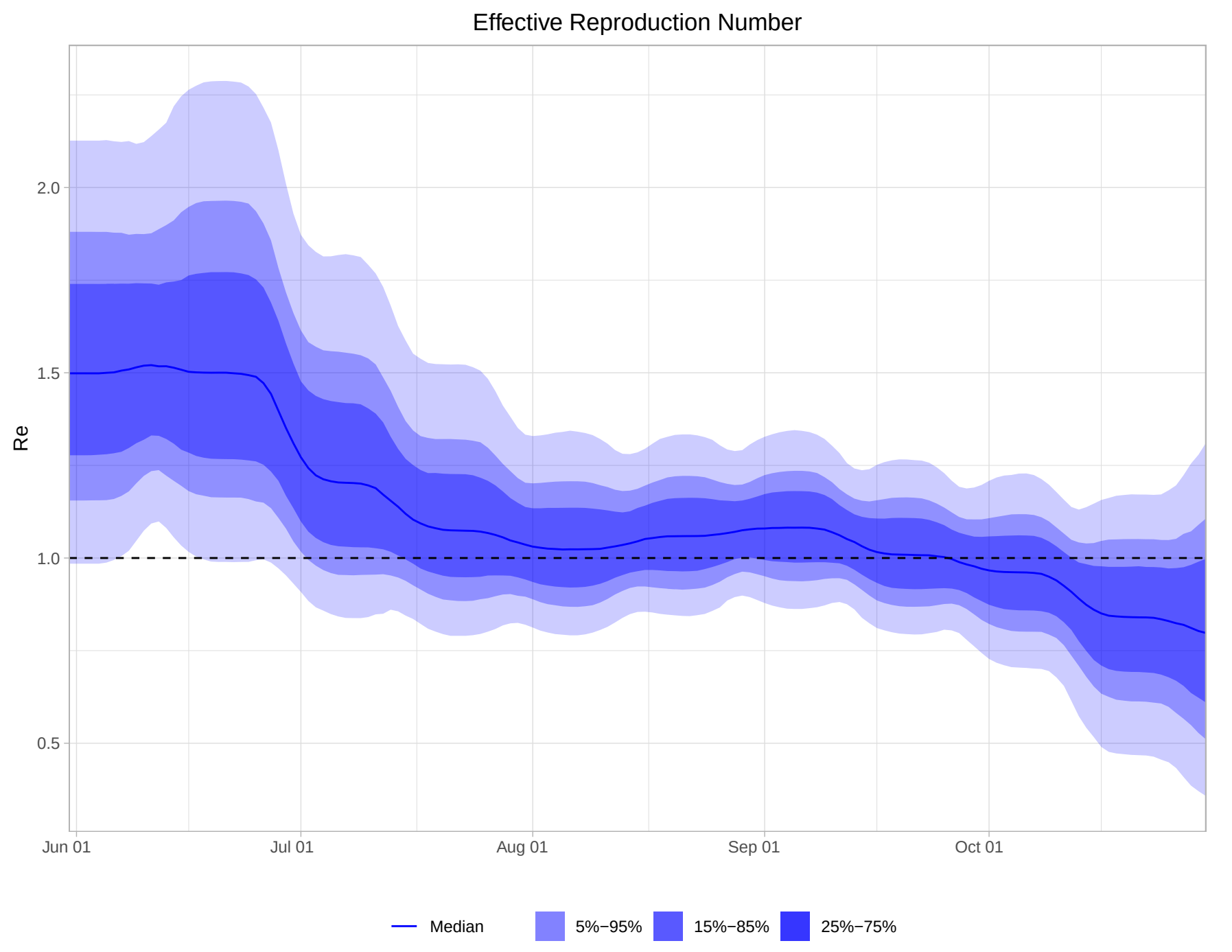

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
2
4
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
2.0
1.5
1.0
0.5
0.0
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
2.5
2.0
1.5
1.0
0.5
0.0
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

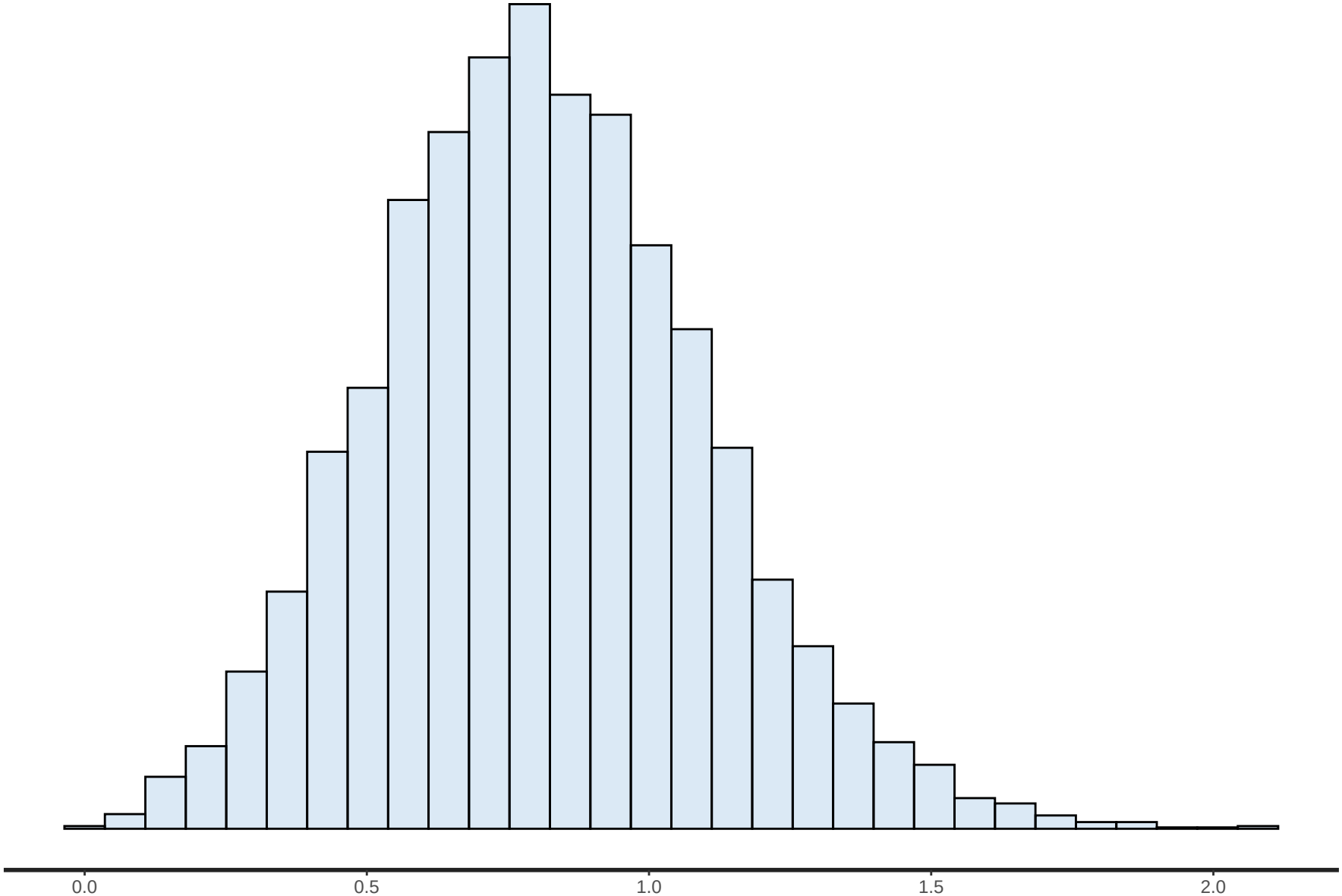

Short Term Death Projection
Number of COVID19 Deaths
10
8
6
4
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

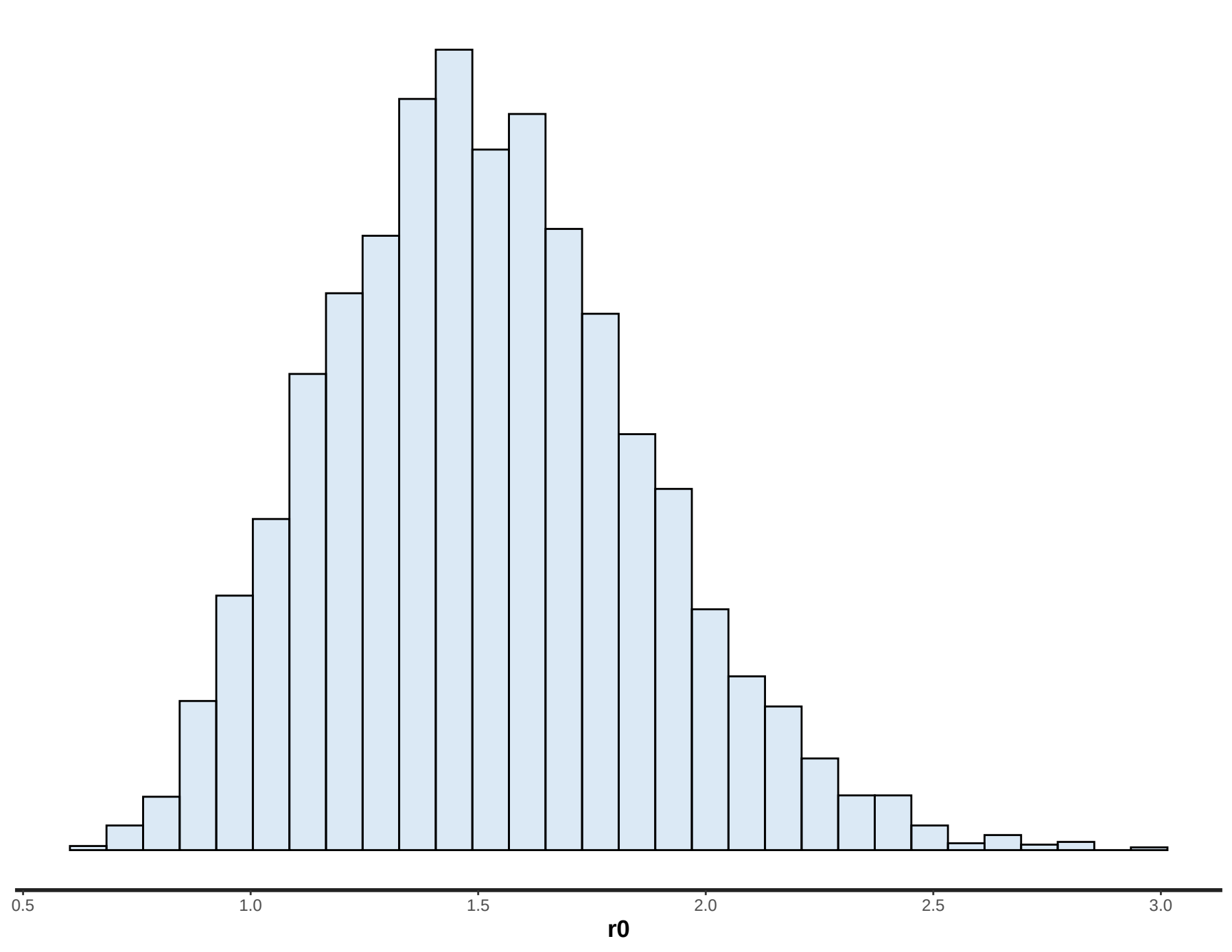

Long Term Death Projection
Number of COVID19 Deaths
12.5
10.0
7.5
5.0
2.5
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

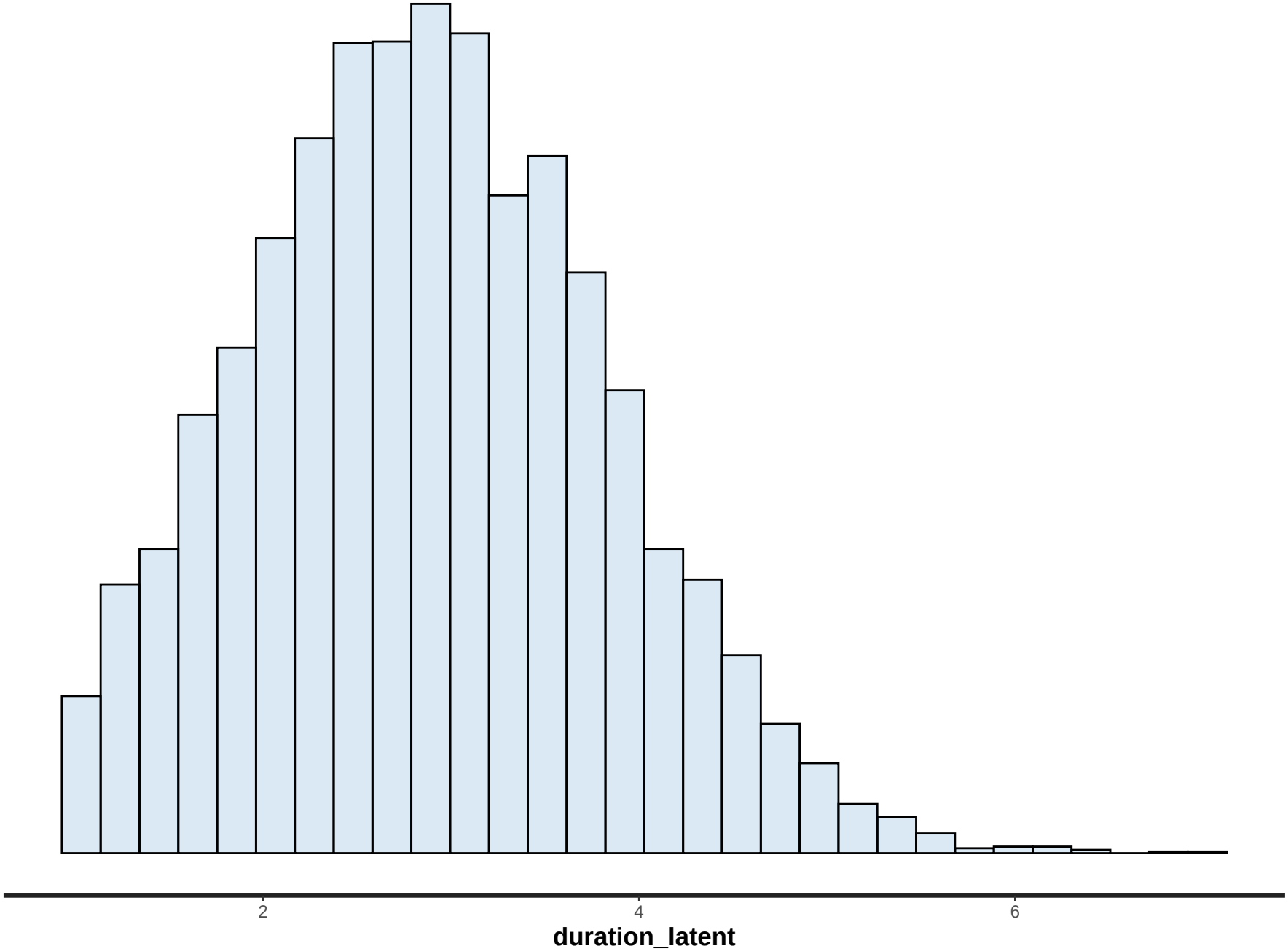

Effective Reproduction Number
Re
2.0
1.5
1.0
0.5
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Median
5%−95%
15%−85%
25%−75%

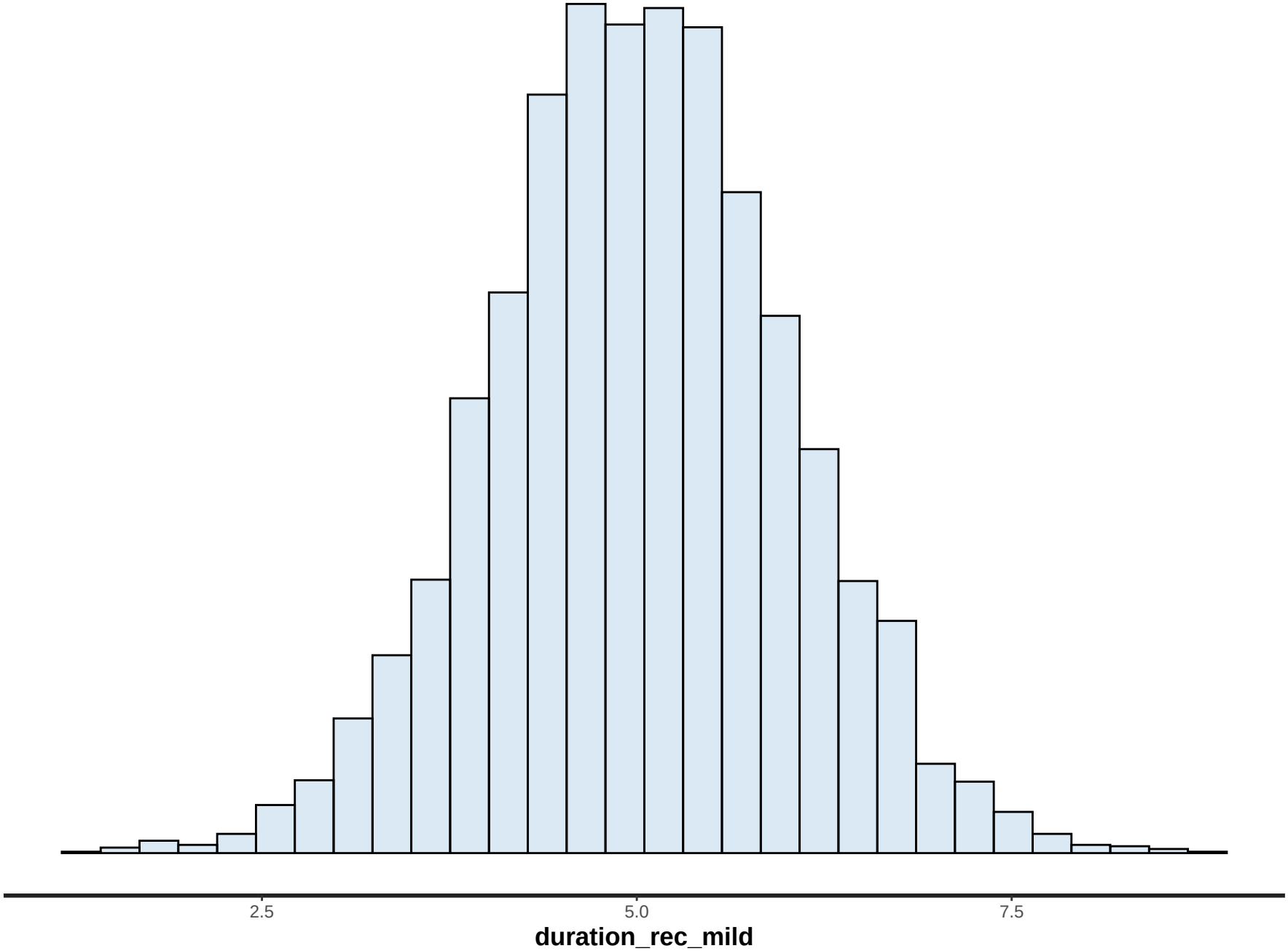
Rt as of 2020−10−30

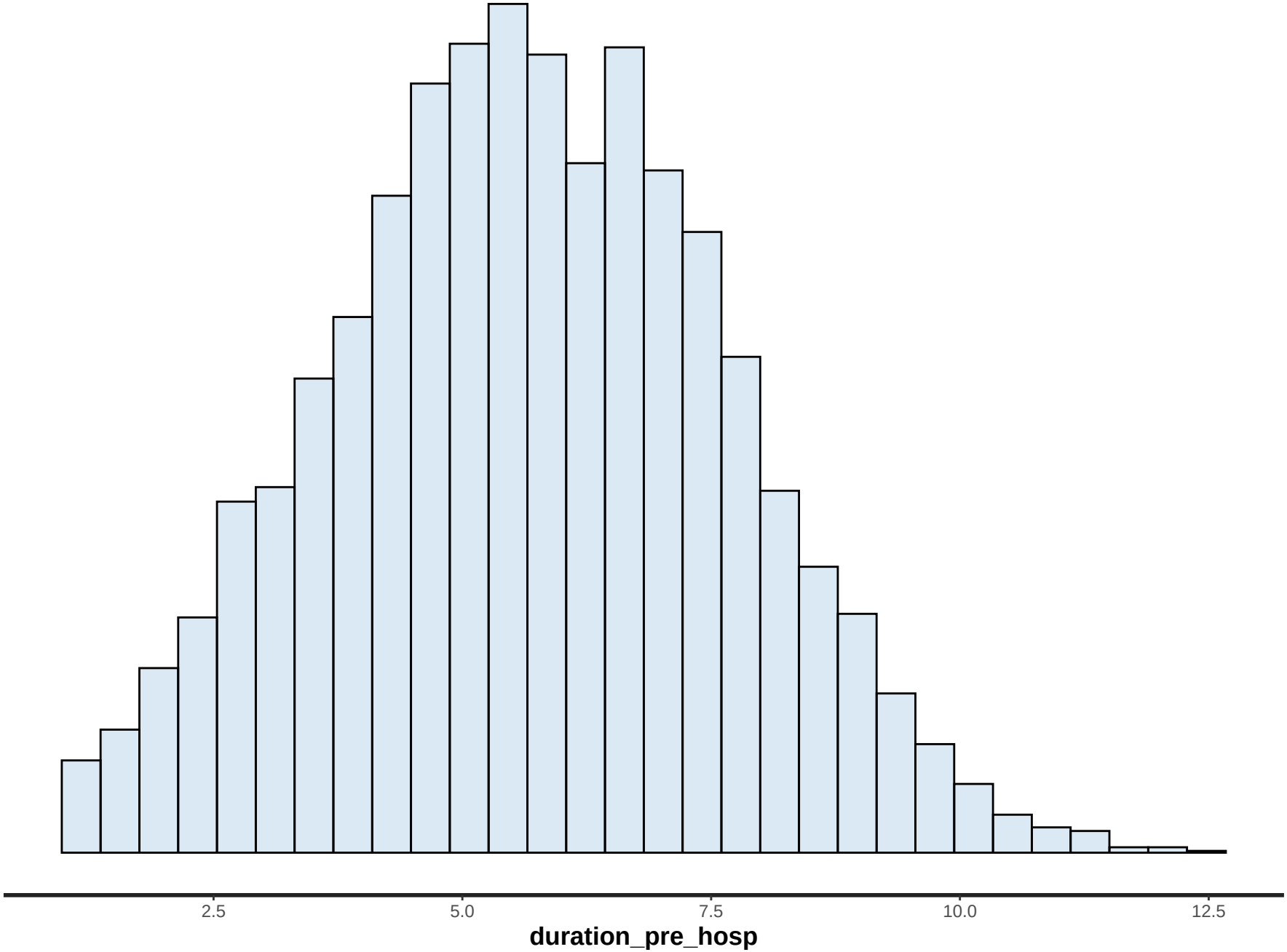
5%	10%	25%	50%	75%	90%	95%
0.36	0.45	0.61	0.80	1.00	1.18	1.31

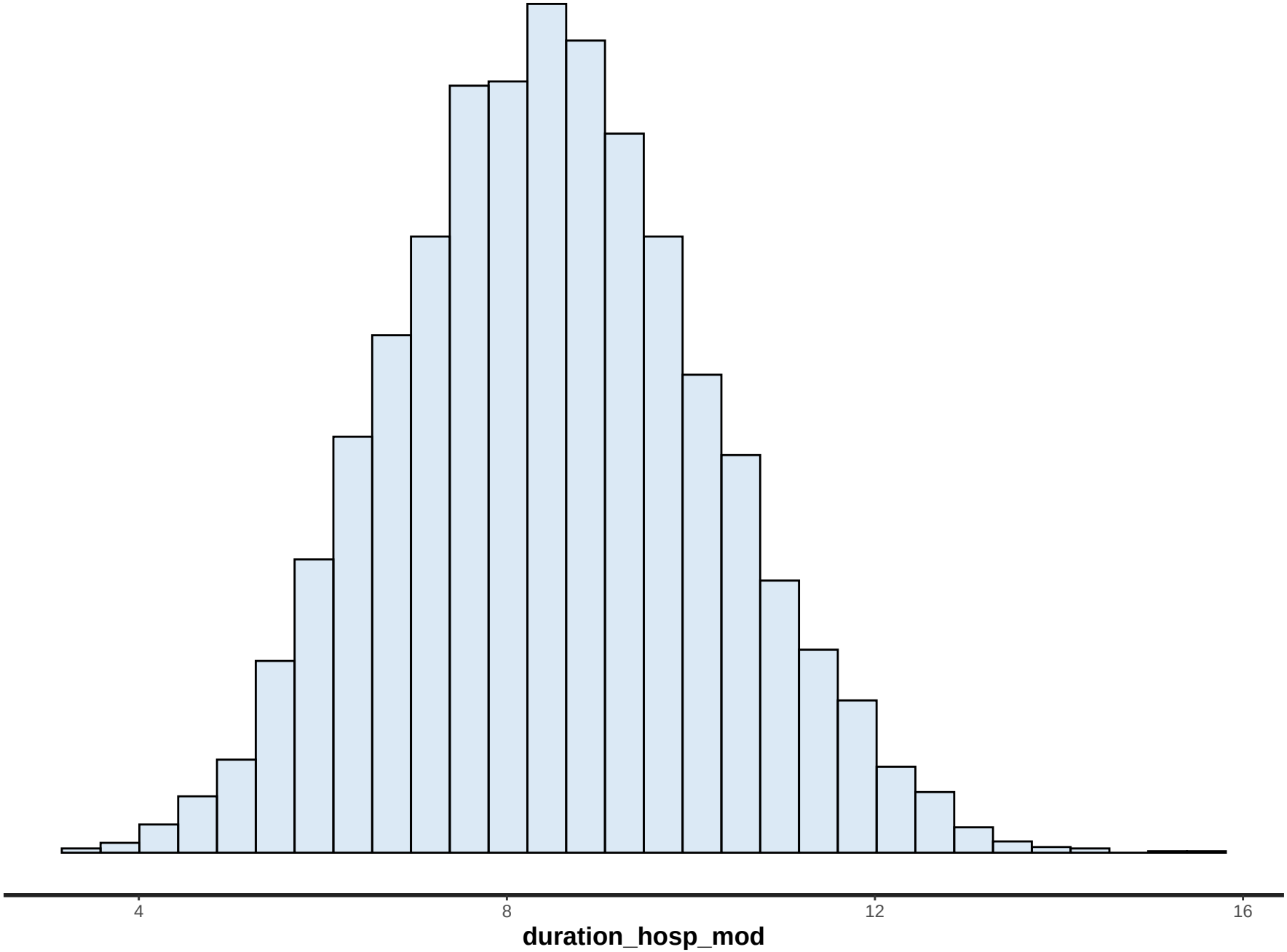


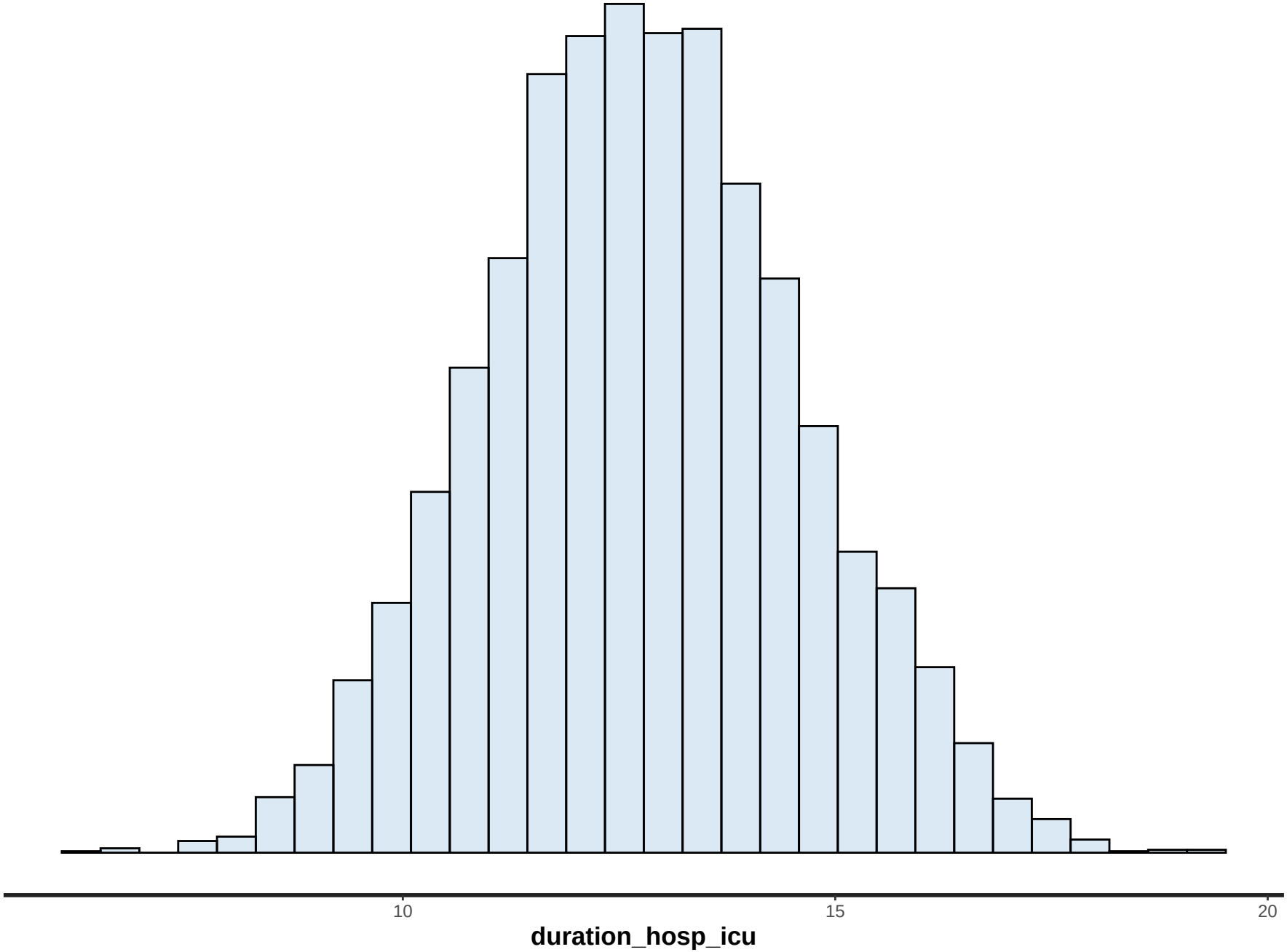

0.5
1.0
1.5
2.0
2.5
3.0
r0

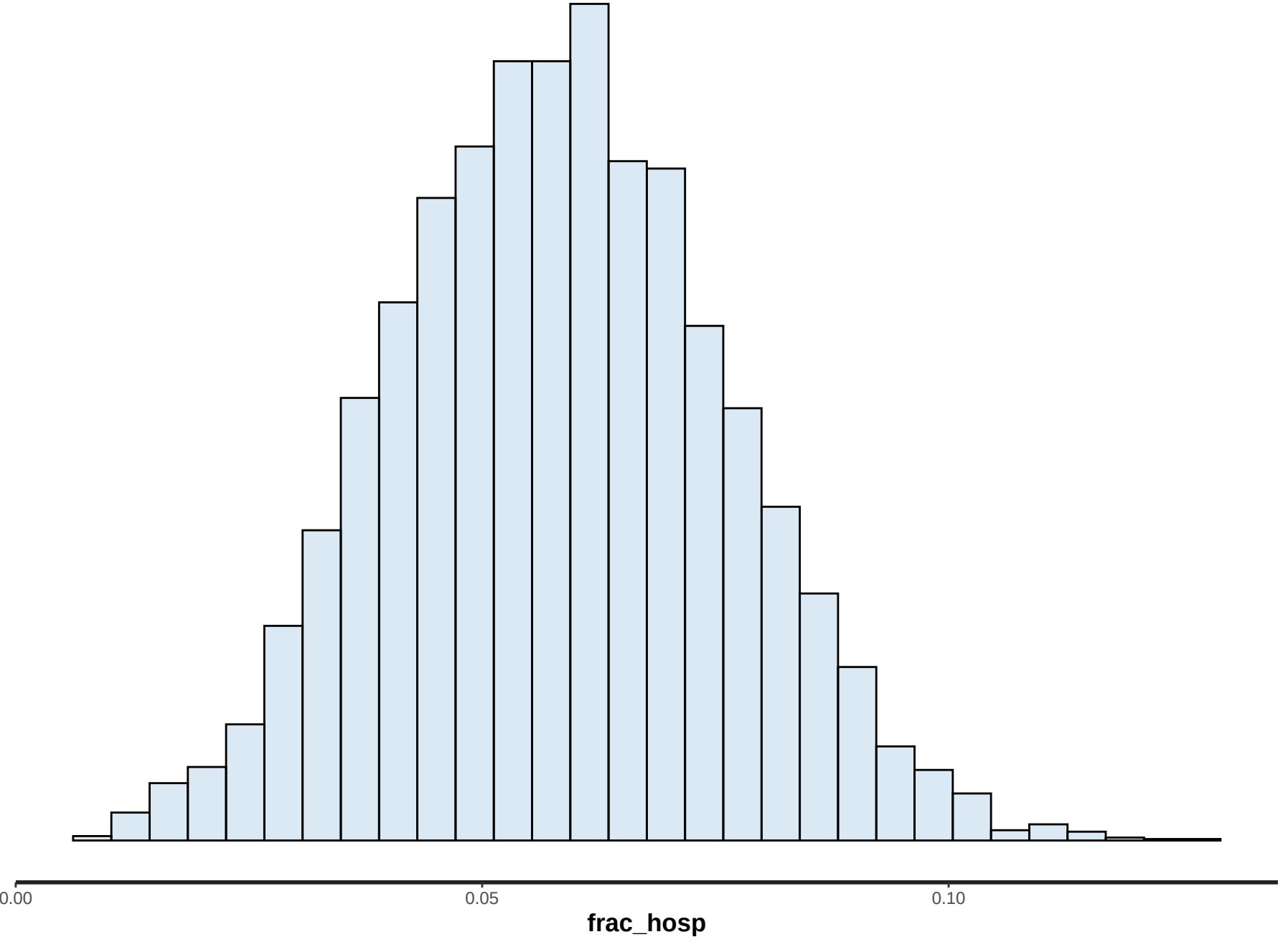

2
4
6
duration_latent

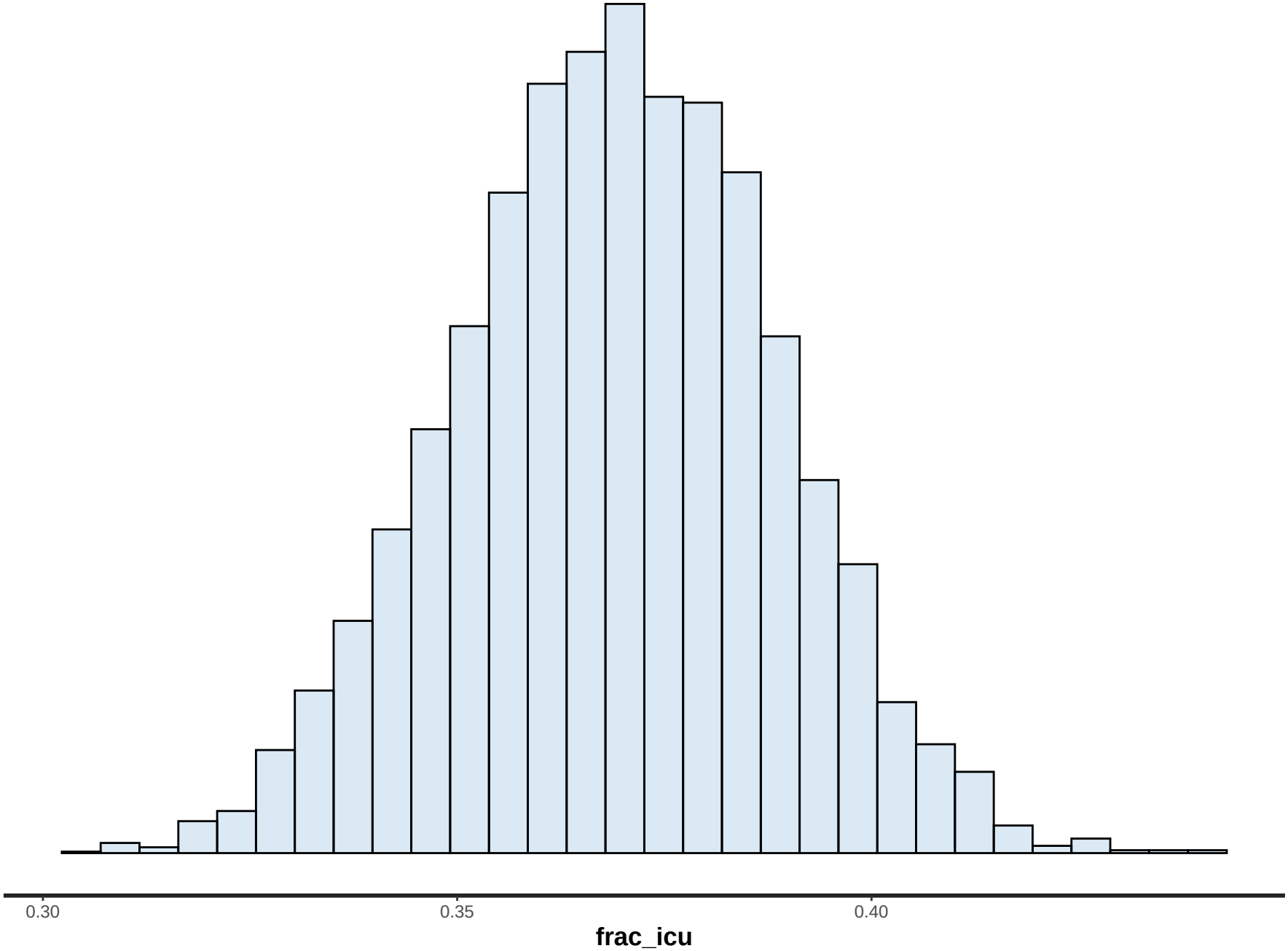

2.5
5.0
7.5
duration_rec_mild

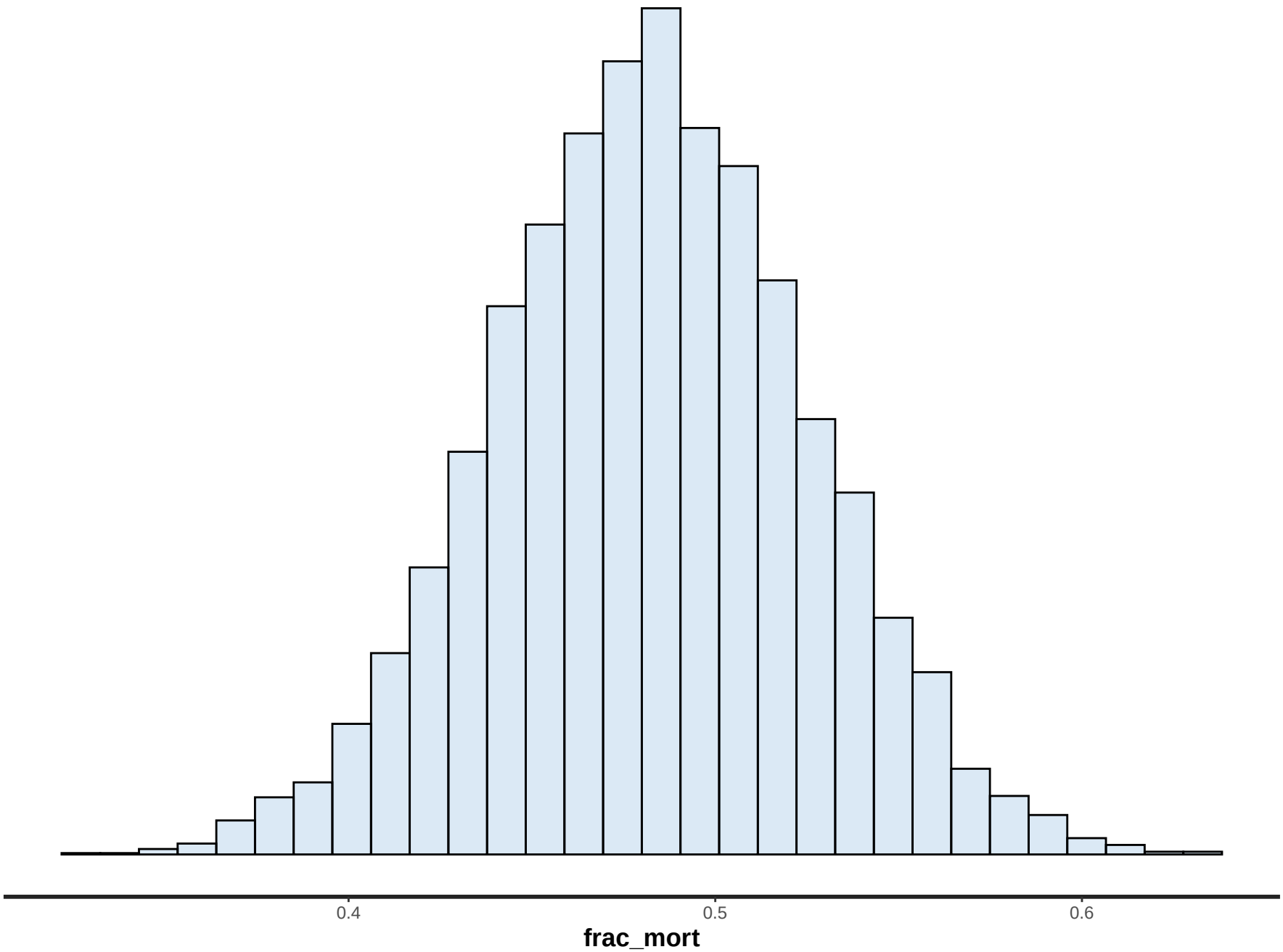

2.5
5.0
7.5
10.0
12.5
duration_pre_hosp

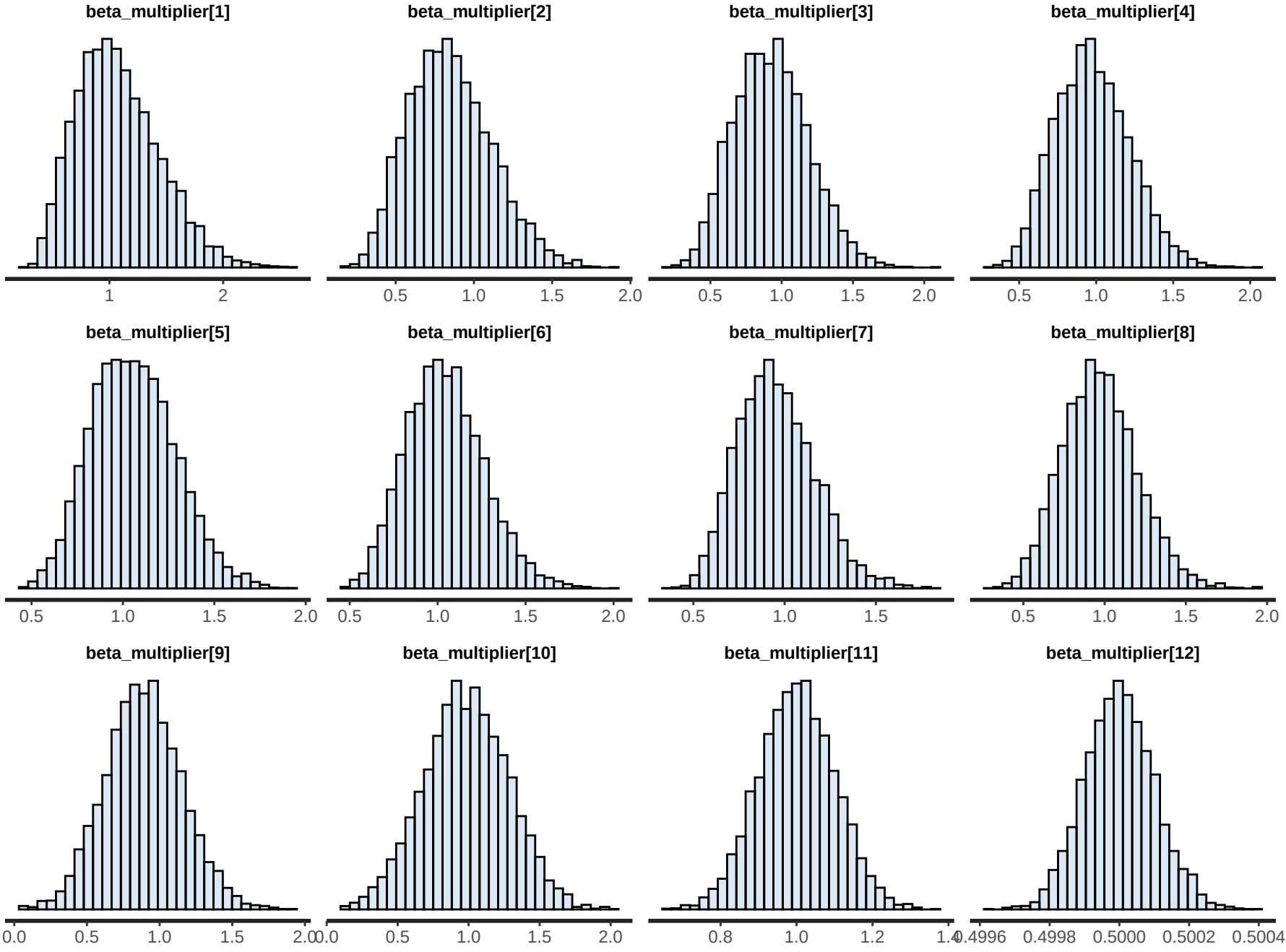

4
8
12
16
duration_hosp_mod

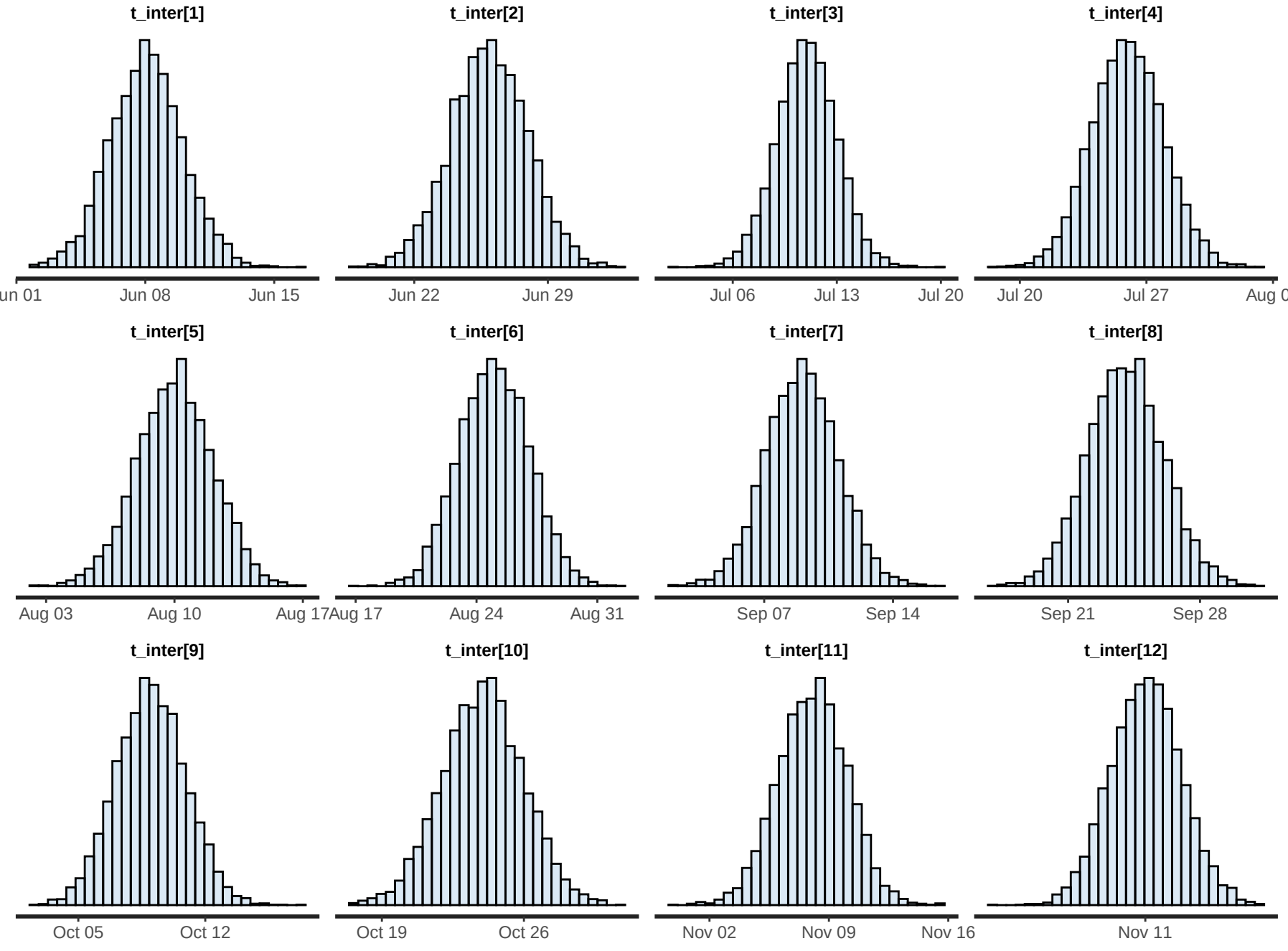

10
15
20
duration_hosp_icu

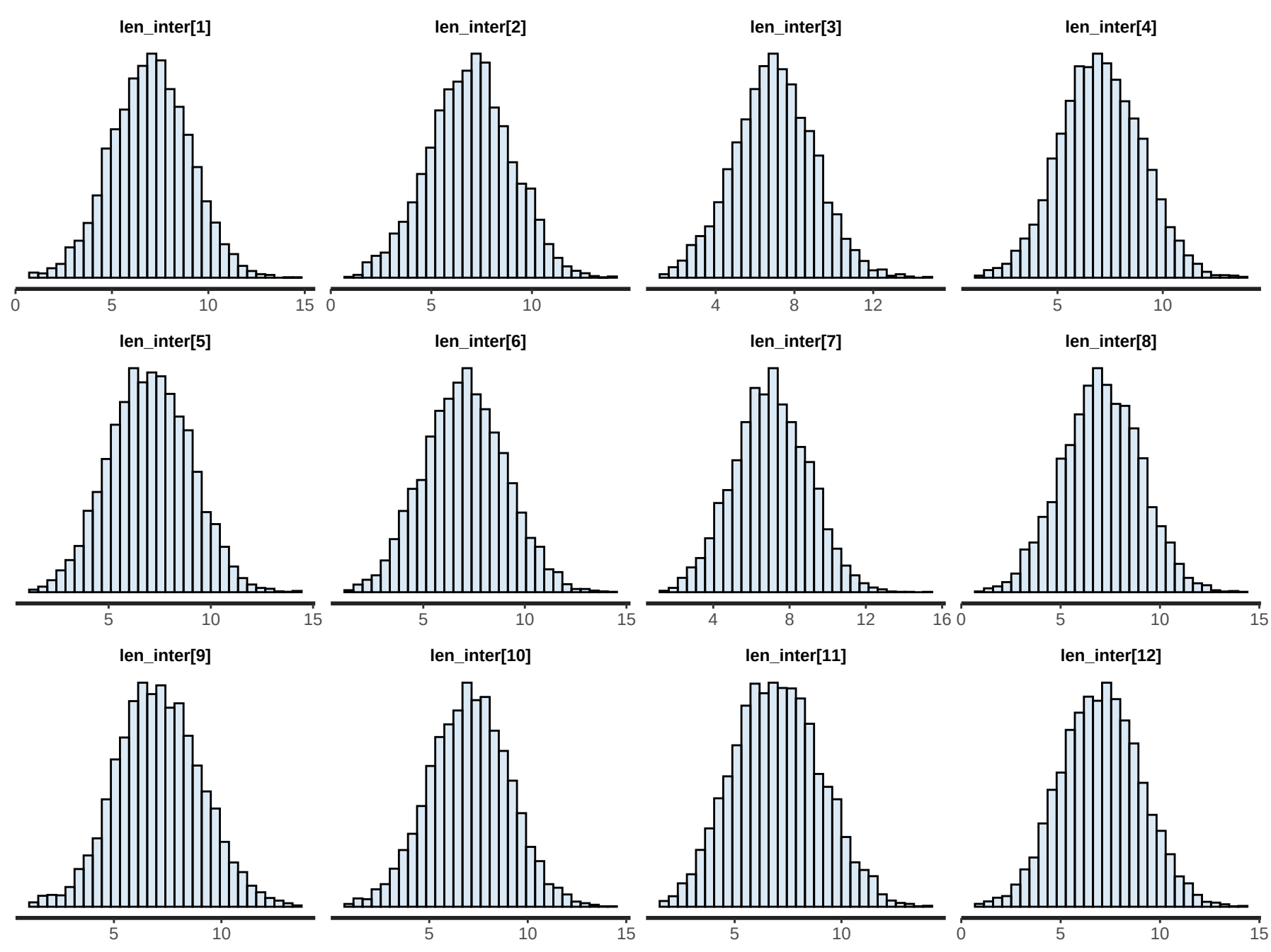

0.00
0.05
0.10
frac_hosp

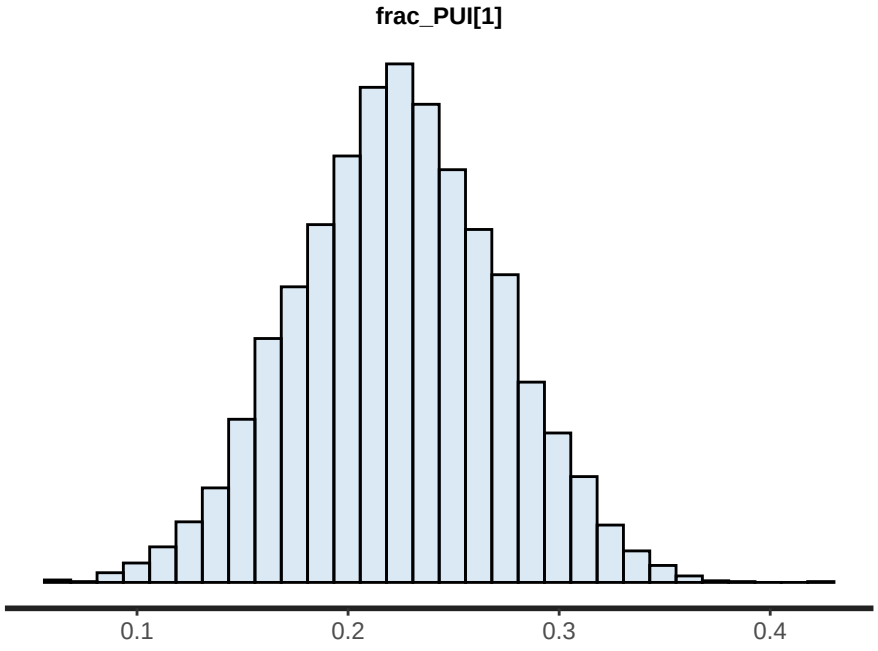

0.30
0.35
0.40
frac_icu

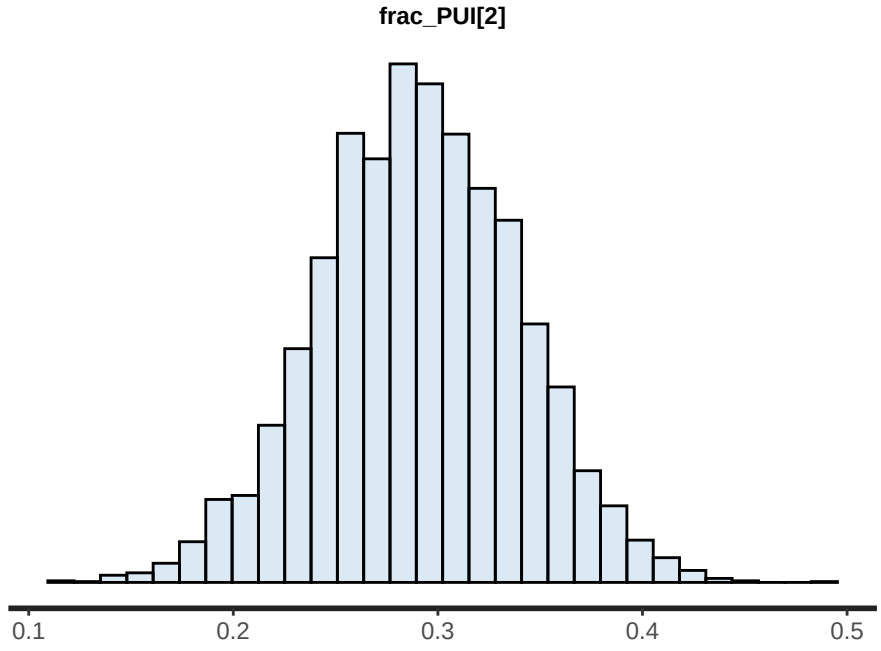

0.4
0.5
0.6
frac_mort

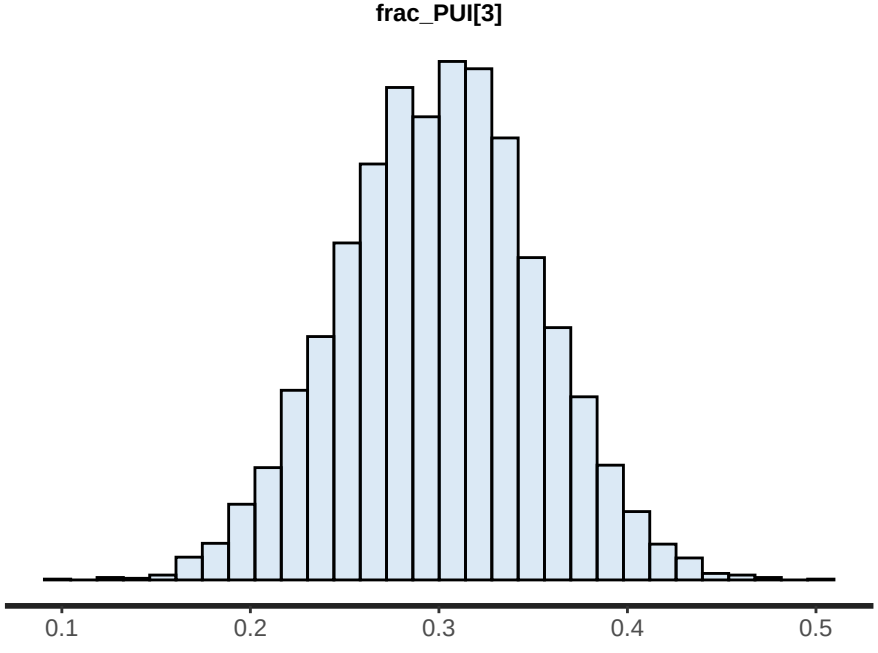

beta_multiplier[1]
1
2
beta_multiplier[2]
0.5
1.0
1.5
2.0
beta_multiplier[3]
0.5
1.0
1.5
2.0
beta_multiplier[4]
0.5
1.0
1.5
2.0
beta_multiplier[5]
0.5
1.0
1.5
2.0
beta_multiplier[6]
0.5
1.0
1.5
2.0
beta_multiplier[7]
0.5
1.0
1.5
beta_multiplier[8]
0.5
1.0
1.5
2.0
beta_multiplier[9]
0.0
0.5
1.0
1.5
2.0
beta_multiplier[10]
0.0
0.5
1.0
1.5
2.0
beta_multiplier[11]
0.8
1.0
1.2
1.4
beta_multiplier[12]
0.4996
0.4998
0.5000
0.5002
0.5004

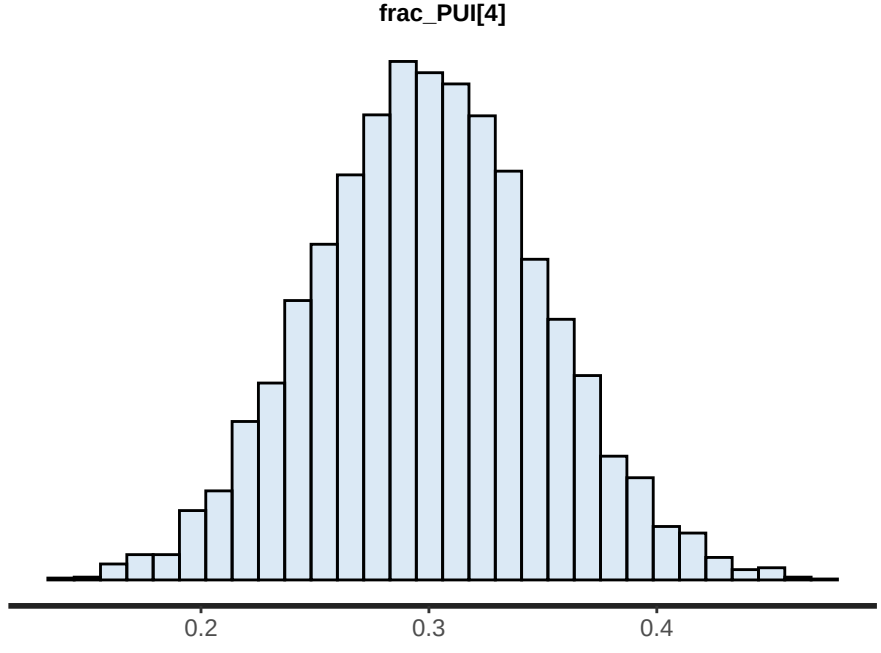

t_inter[1]
un 01
Jun 08
Jun 15
t_inter[2]
Jun 22
Jun 29
t_inter[3]
Jul 06
Jul 13
Jul 20
t_inter[4]
Jul 20
Jul 27
Aug 0
t_inter[5]
Aug 03
Aug 10
Aug 17
t_inter[6]
Aug 17
Aug 24
Aug 31
t_inter[7]
Sep 07
Sep 14
t_inter[8]
Sep 21
Sep 28
t_inter[9]
Oct 05
Oct 12
t_inter[10]
Oct 19
Oct 26
t_inter[11]
Nov 02
Nov 09
Nov 16
t_inter[12]
Nov 11

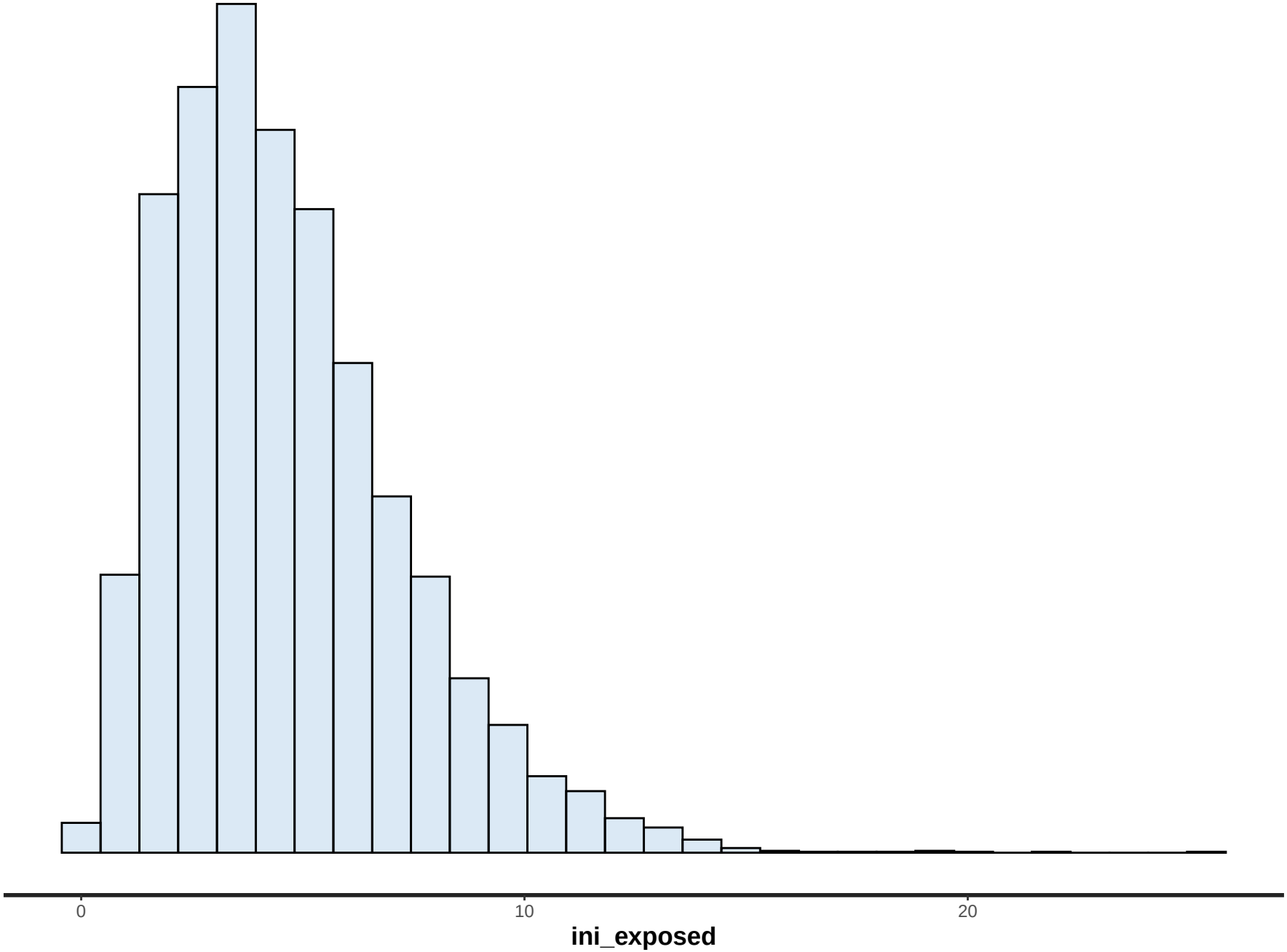

len_inter[1]
0
5
10
15
len_inter[2]
0
5
10
len_inter[3]
4
8
12
len_inter[4]
5
10
len_inter[5]
5
10
15
len_inter[6]
5
10
15
len_inter[7]
4
8
12
16
len_inter[8]
0
5
10
15
len_inter[9]
5
10
len_inter[10]
5
10
15
len_inter[11]
5
10
len_inter[12]
0
5
10
15

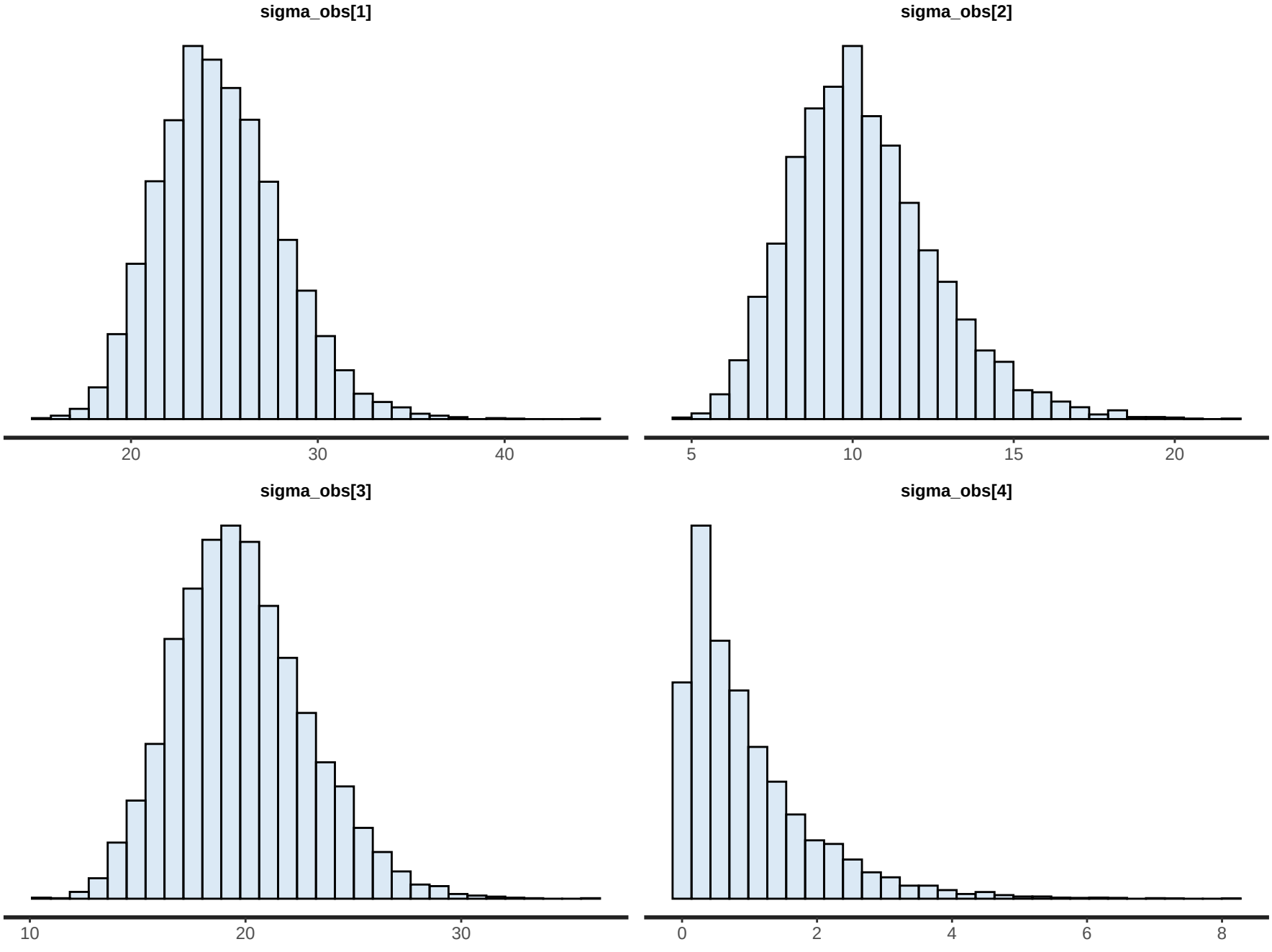

frac_PUI[1]
0.1
0.2
0.3
0.4


frac_PUI[2]
0.1
0.2
0.3
0.4
0.5


frac_PUI[3]
0.1
0.2
0.3
0.4
0.5


frac_PUI[4]
0.2
0.3
0.4


0
10
20
ini_exposed


sigma_obs[1]
20
30
40
sigma_obs[2]
5
10
15
20
sigma_obs[3]
10
20
30
sigma_obs[4]
0
2
4
6
8