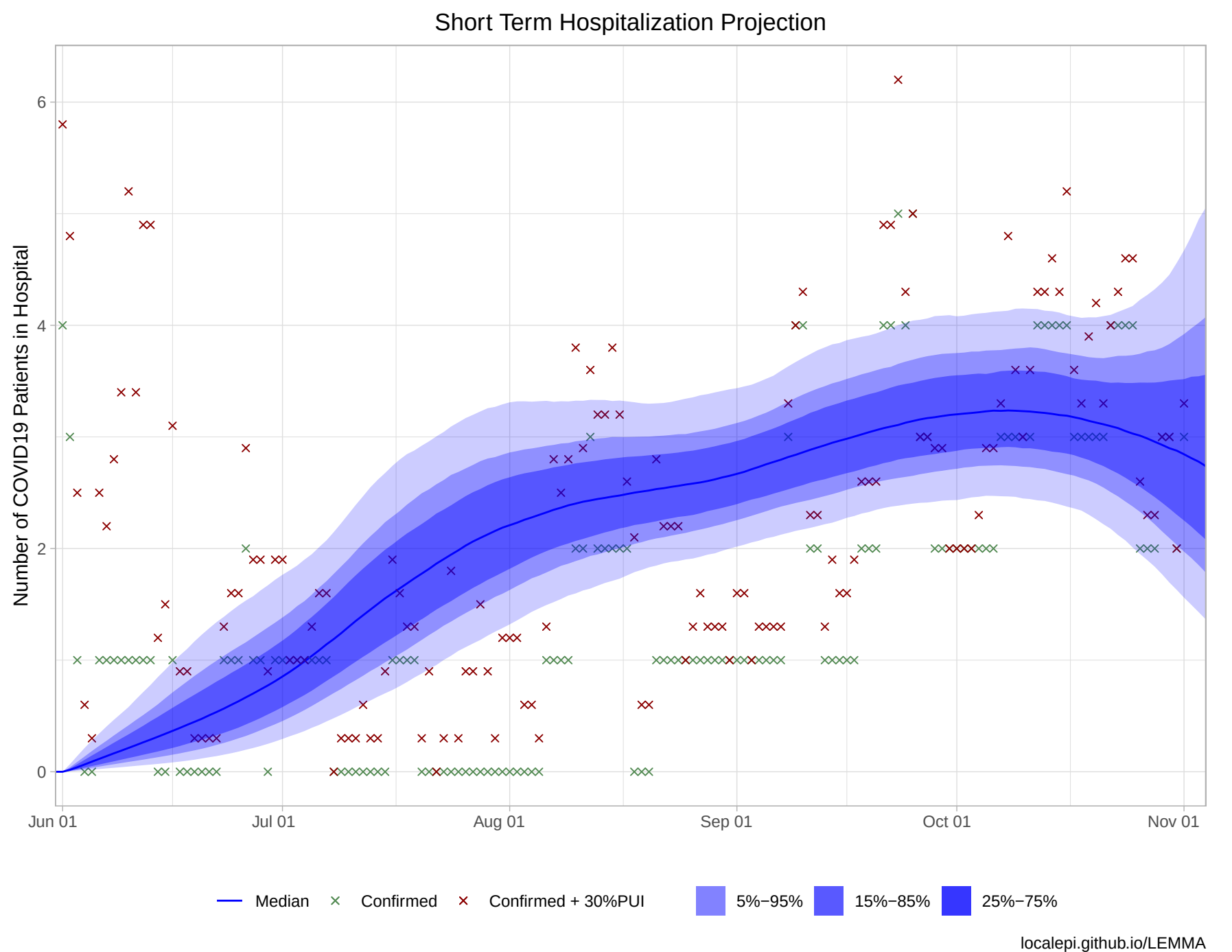
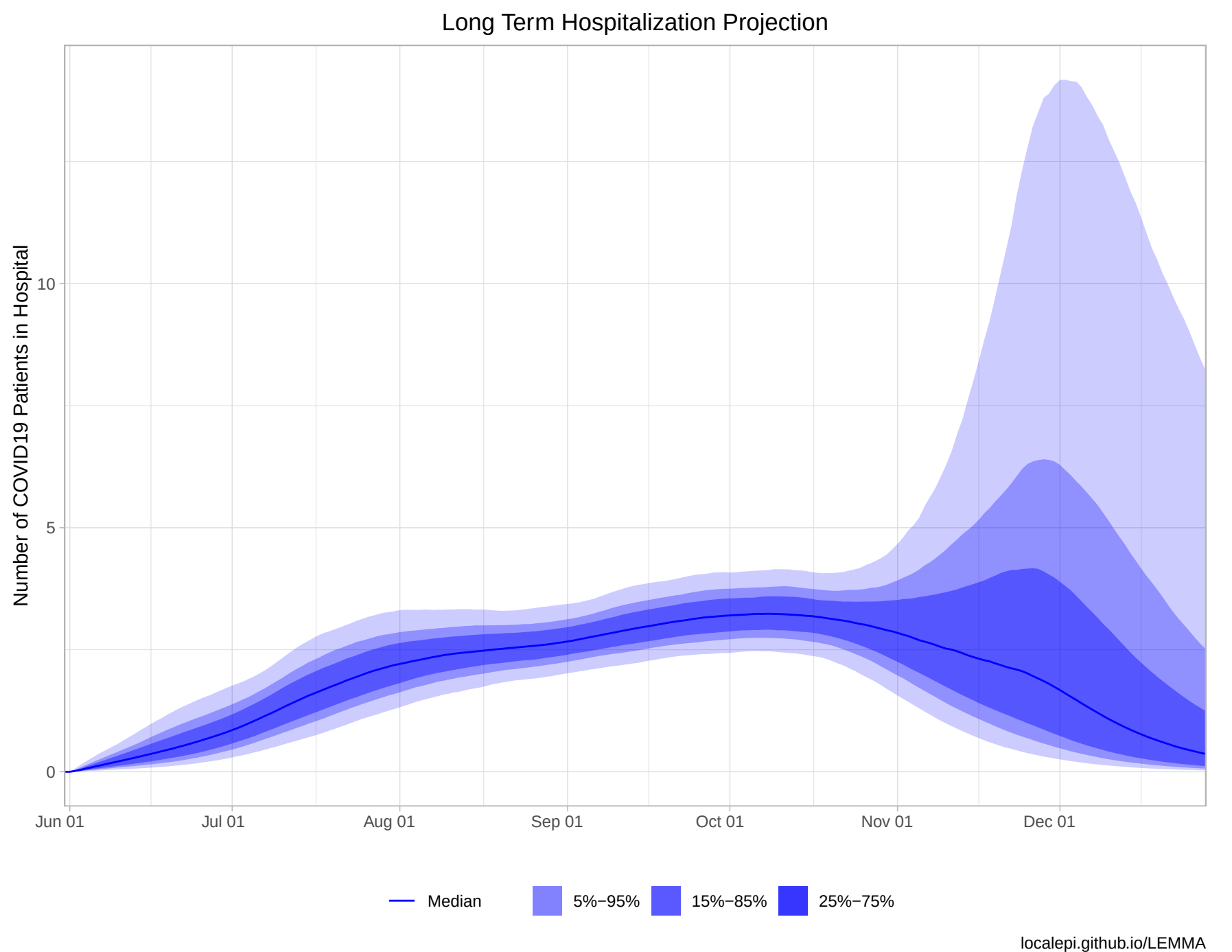
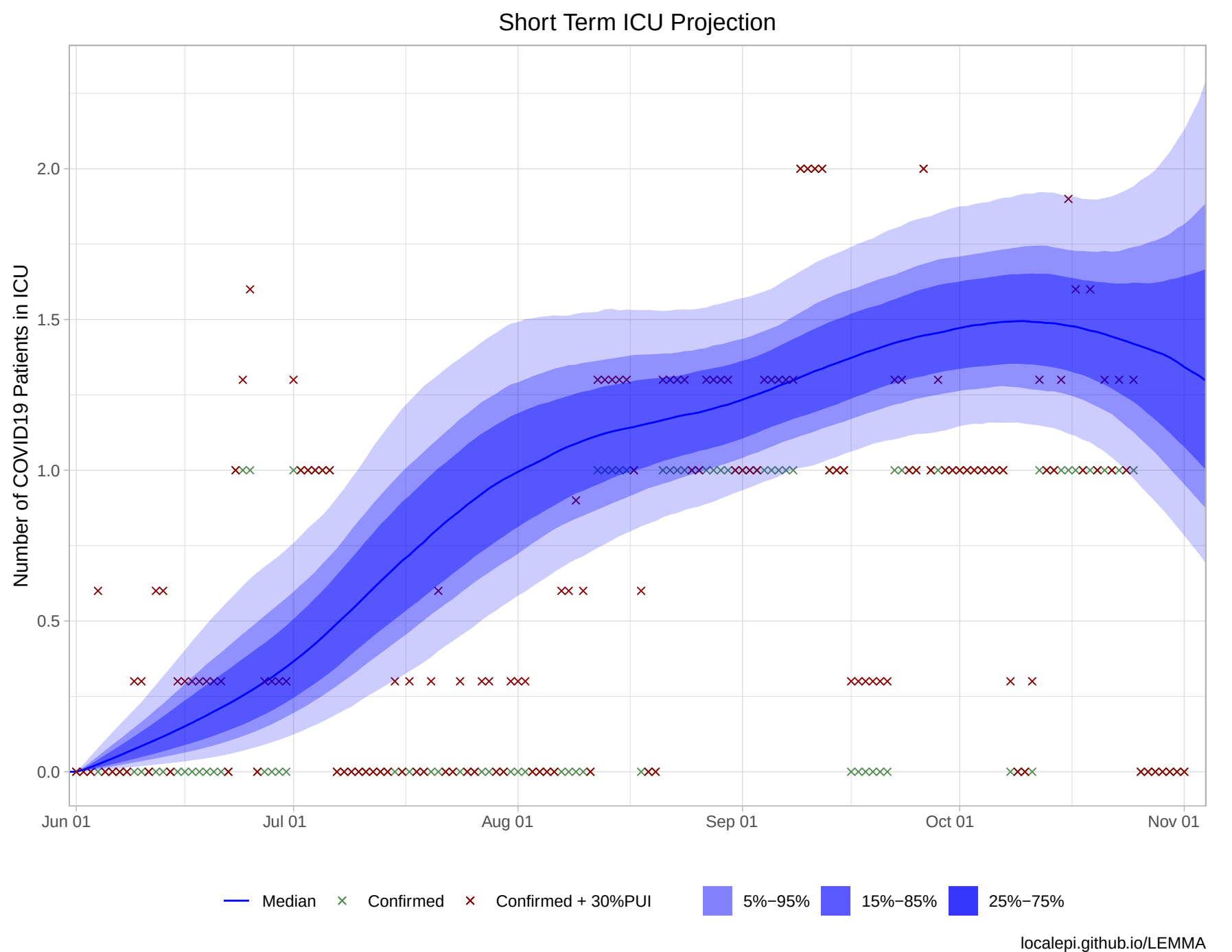
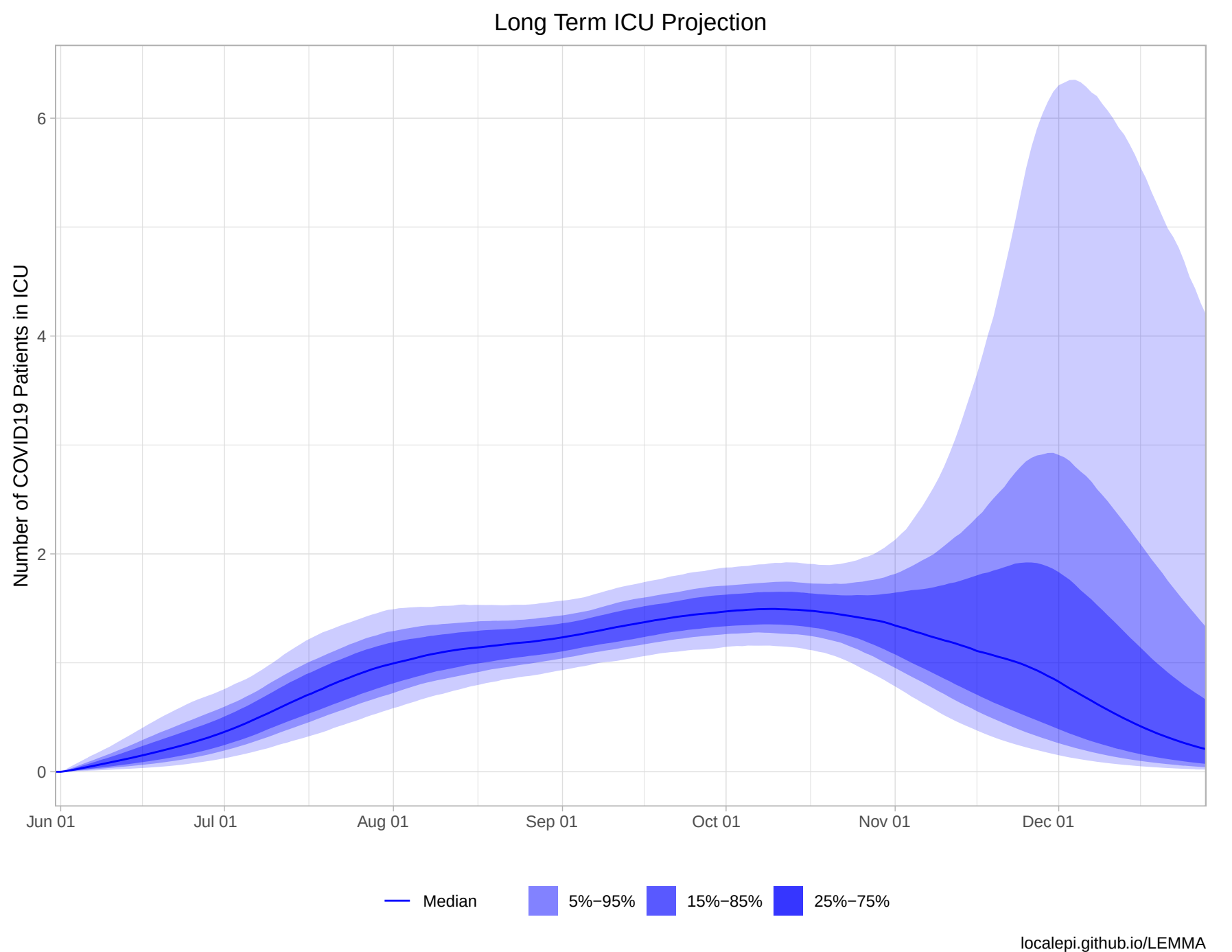
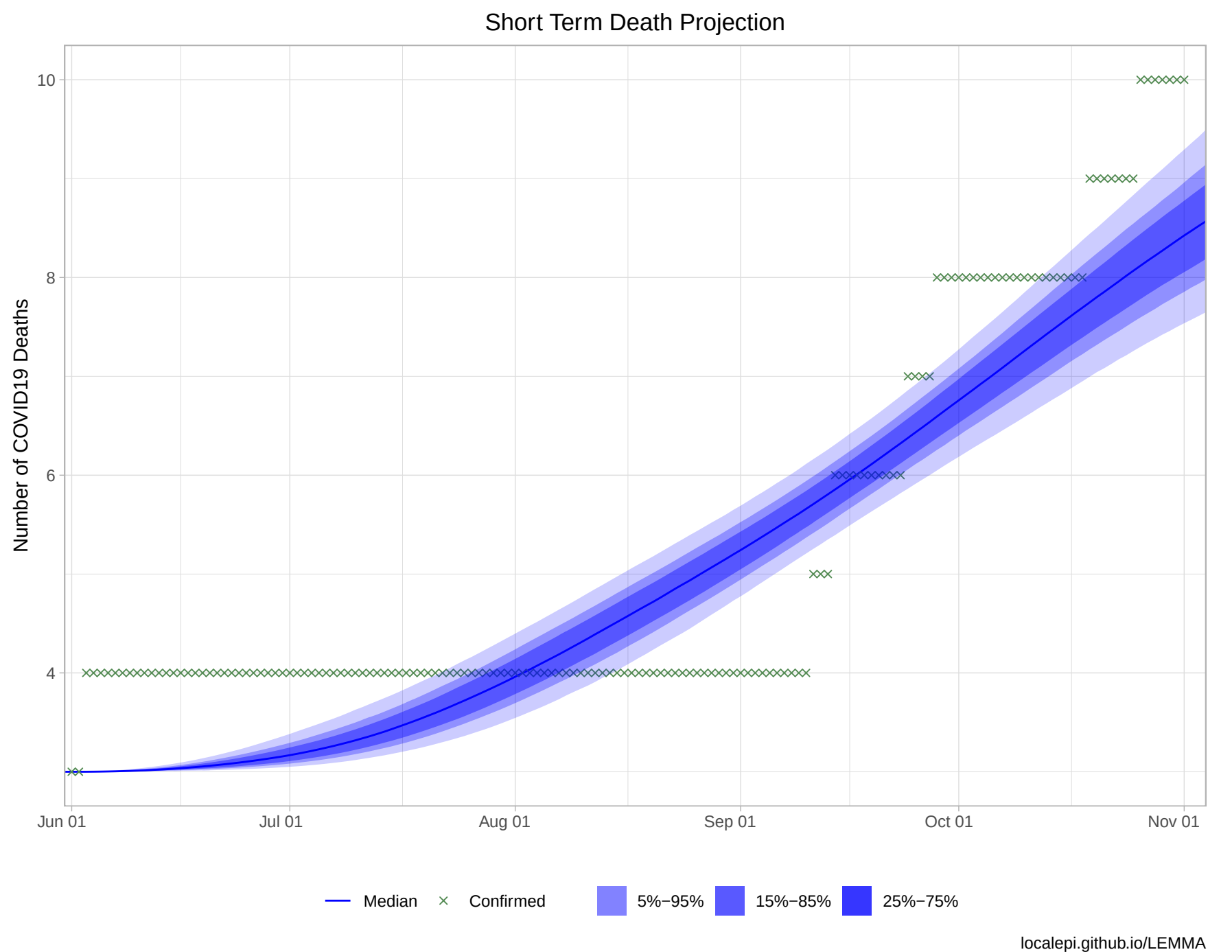
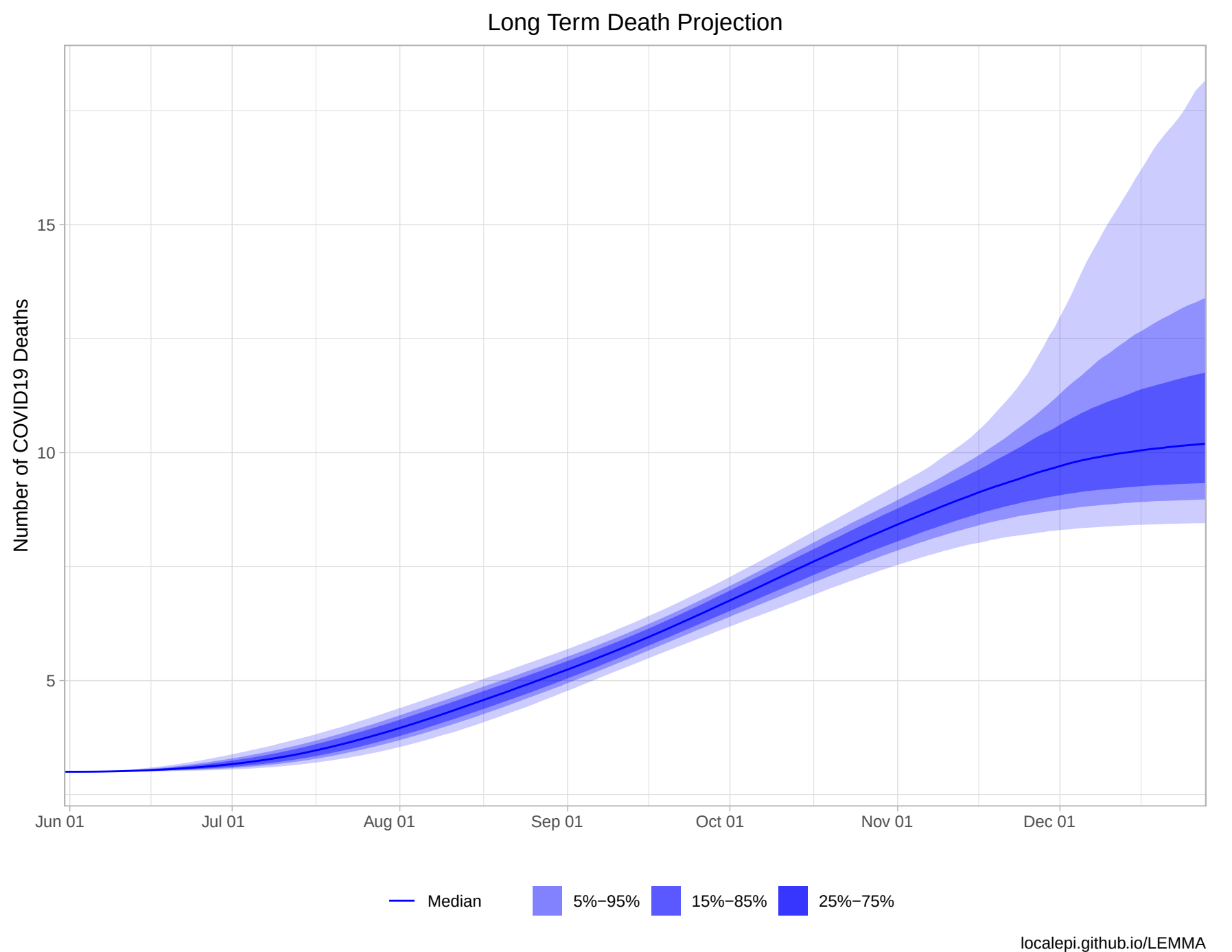

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
2
4
6
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

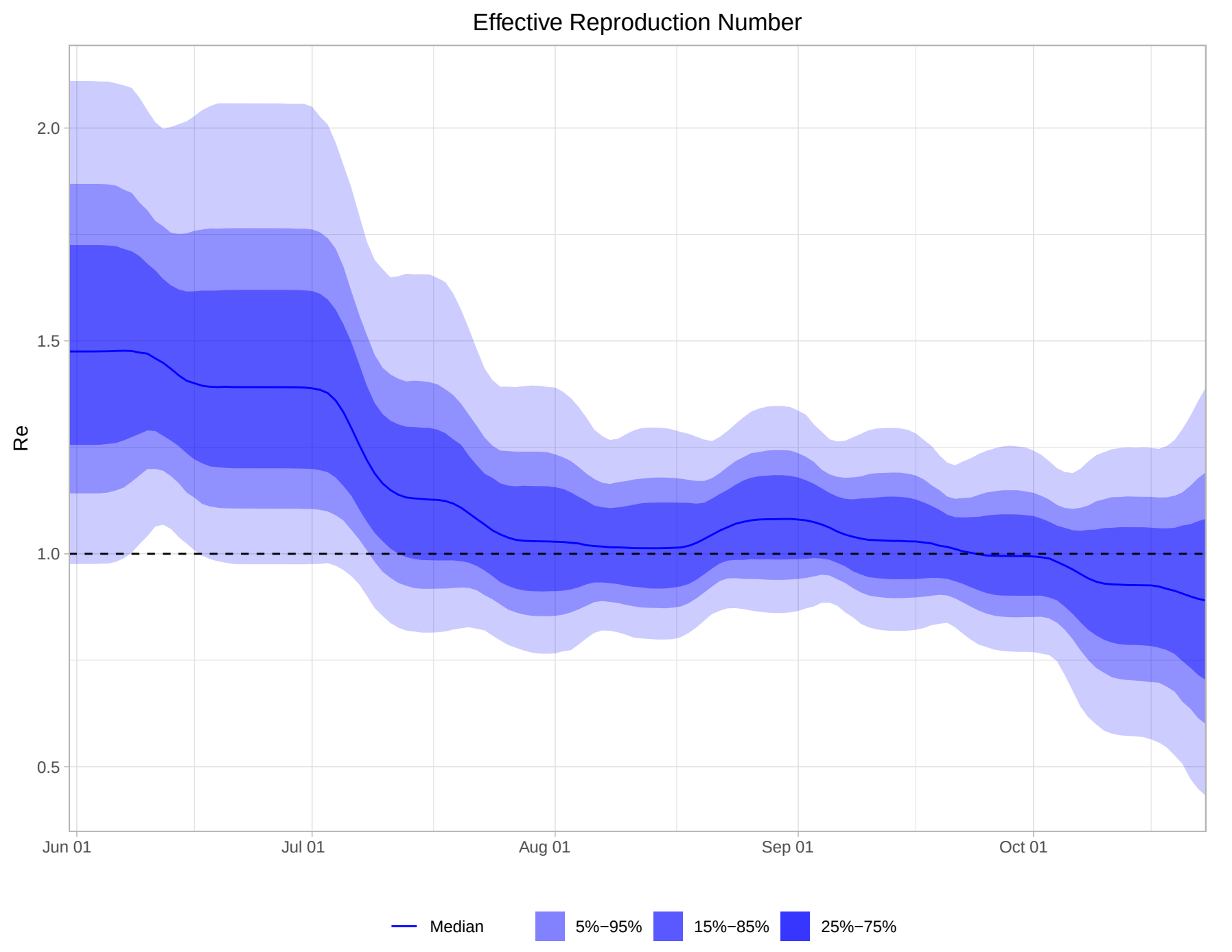

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
10
5
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
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
0
2
4
6
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

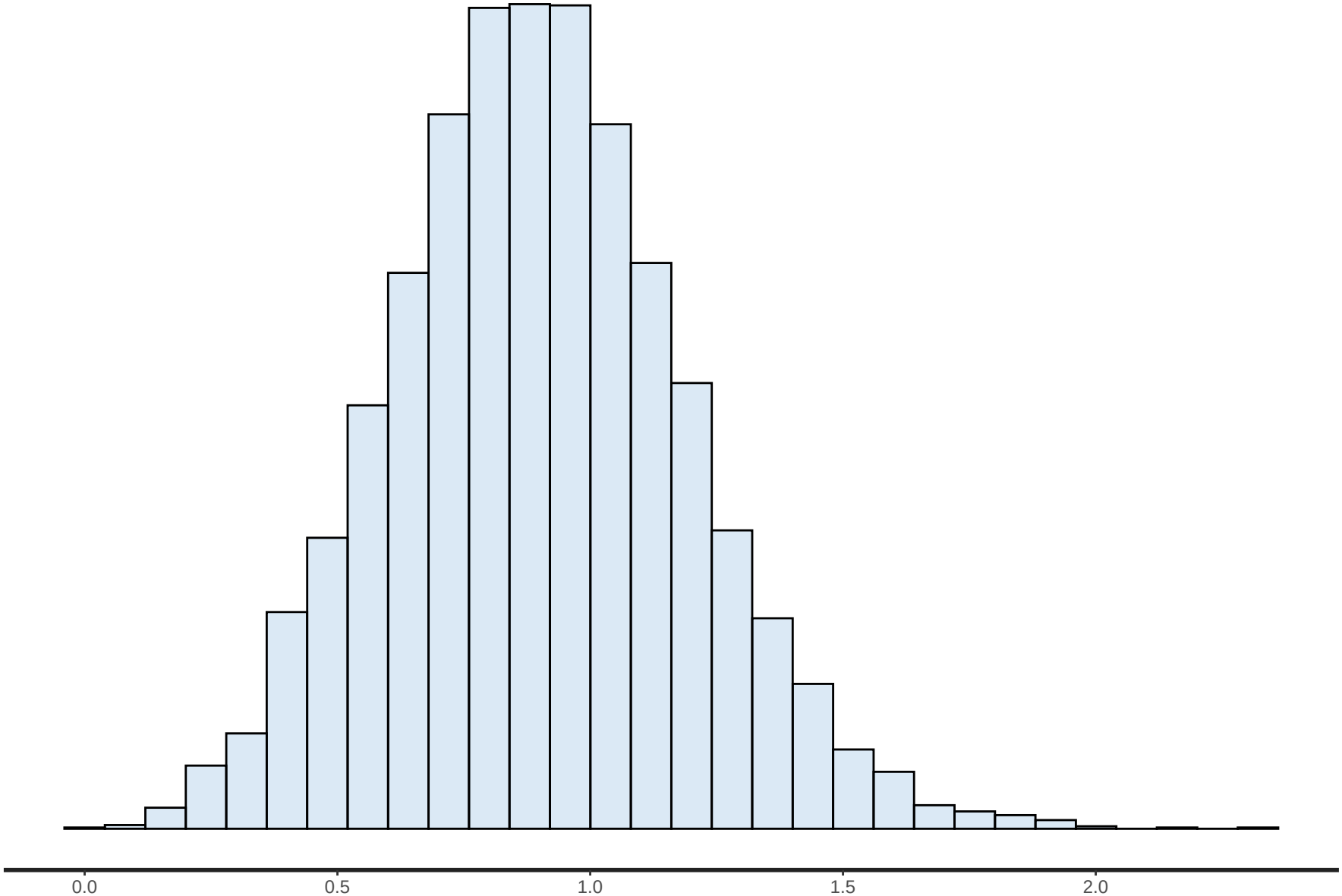

Short Term Death Projection
Number of COVID19 Deaths
10
8
6
4
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

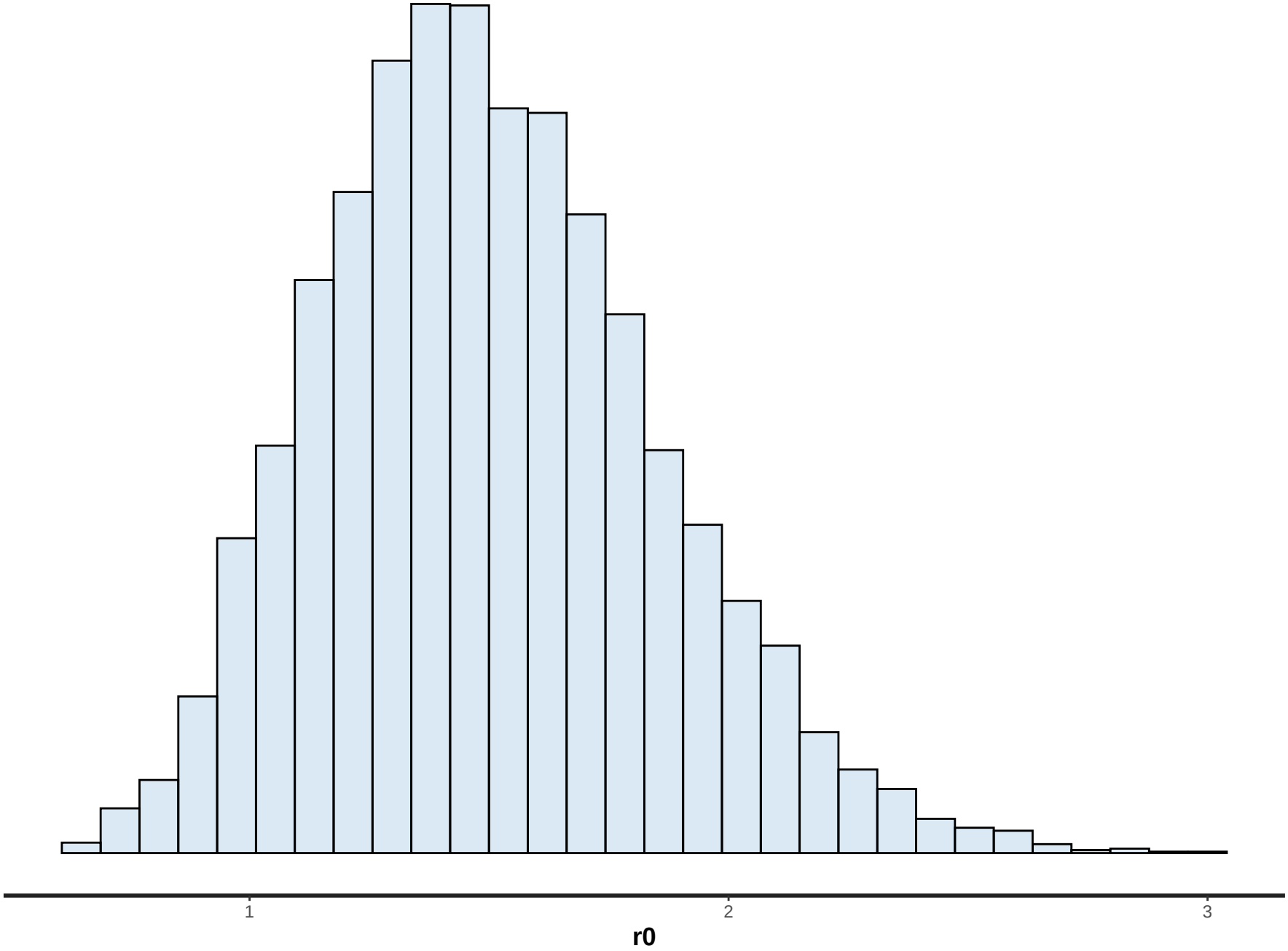

Long Term Death Projection
Number of COVID19 Deaths
15
10
5
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

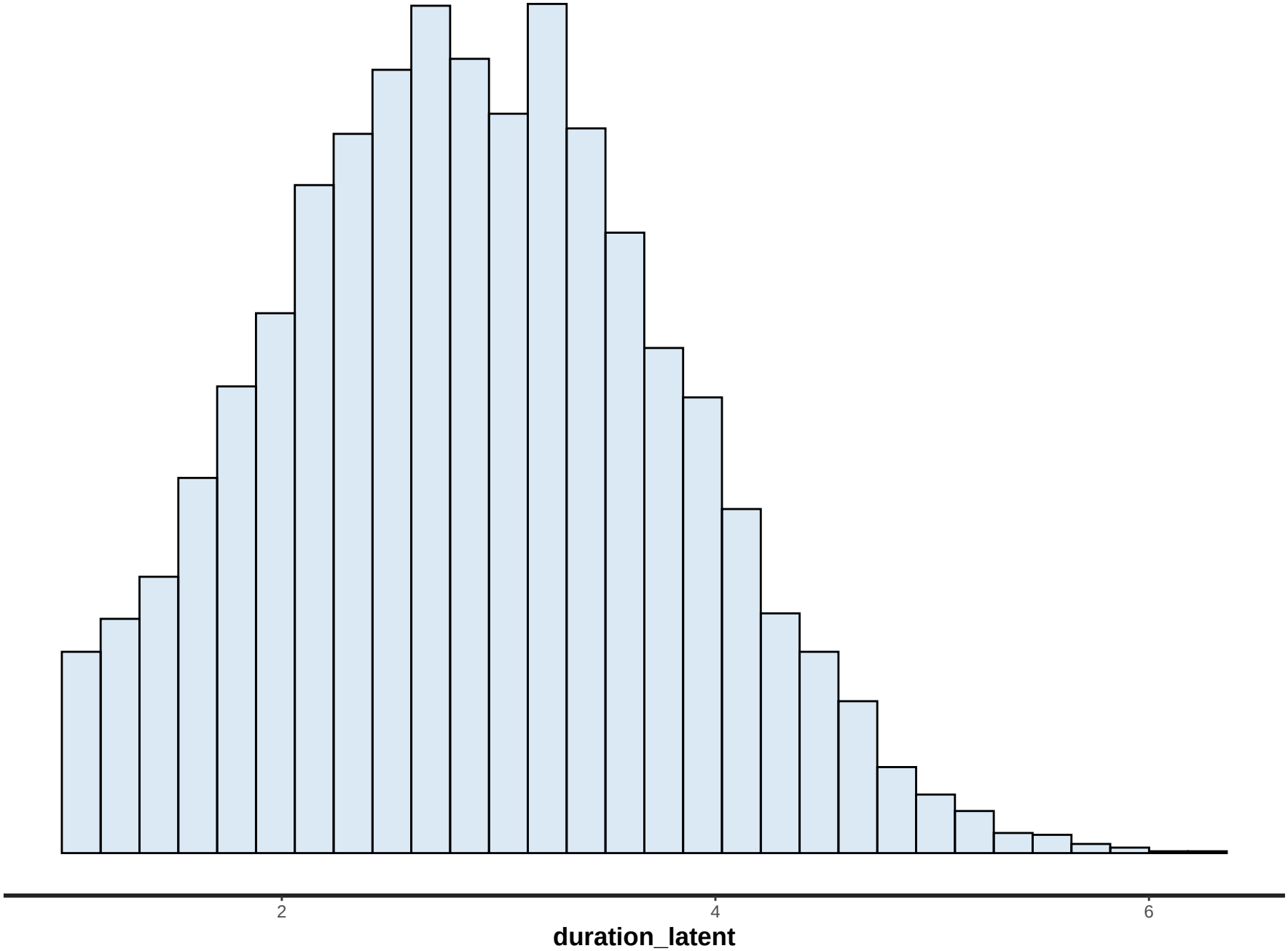

Effective Reproduction Number
Re
2.0
1.5
1.0
0.5
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Median
5%−95%
15%−85%
25%−75%

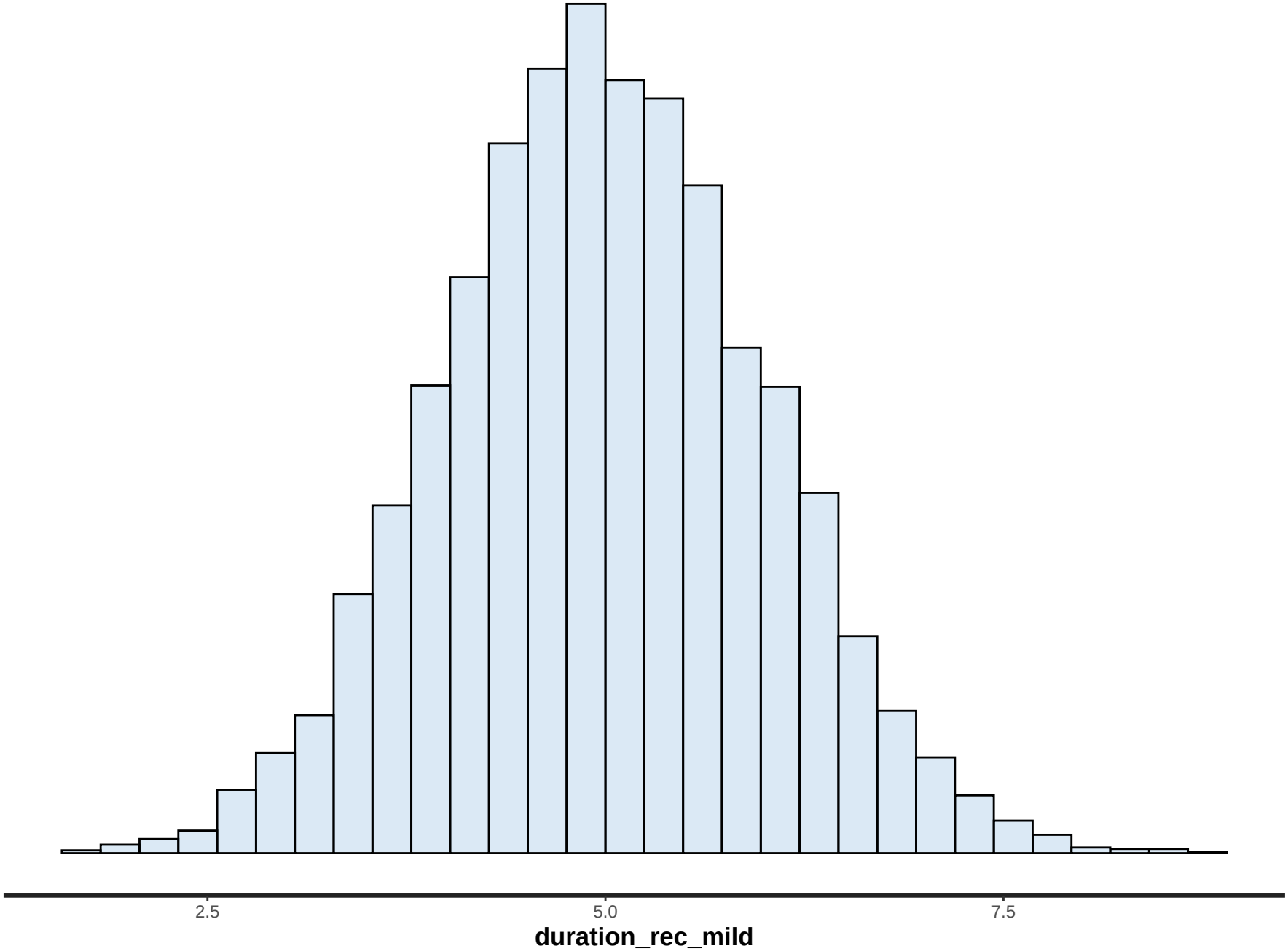
Rt as of 2020−10−23

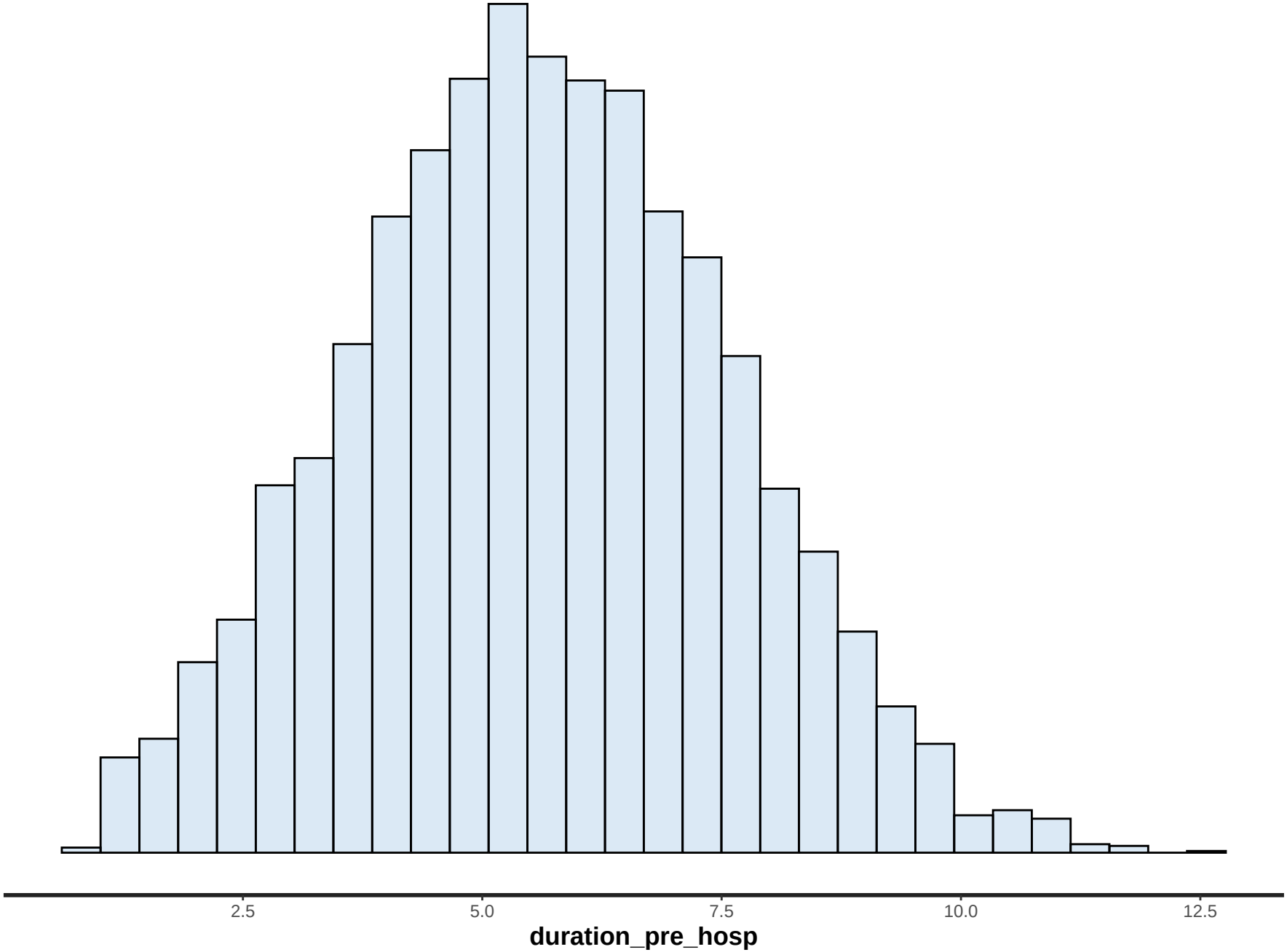
5%	10%	25%	50%	75%	90%	95%
0.43	0.53	0.70	0.89	1.08	1.26	1.39

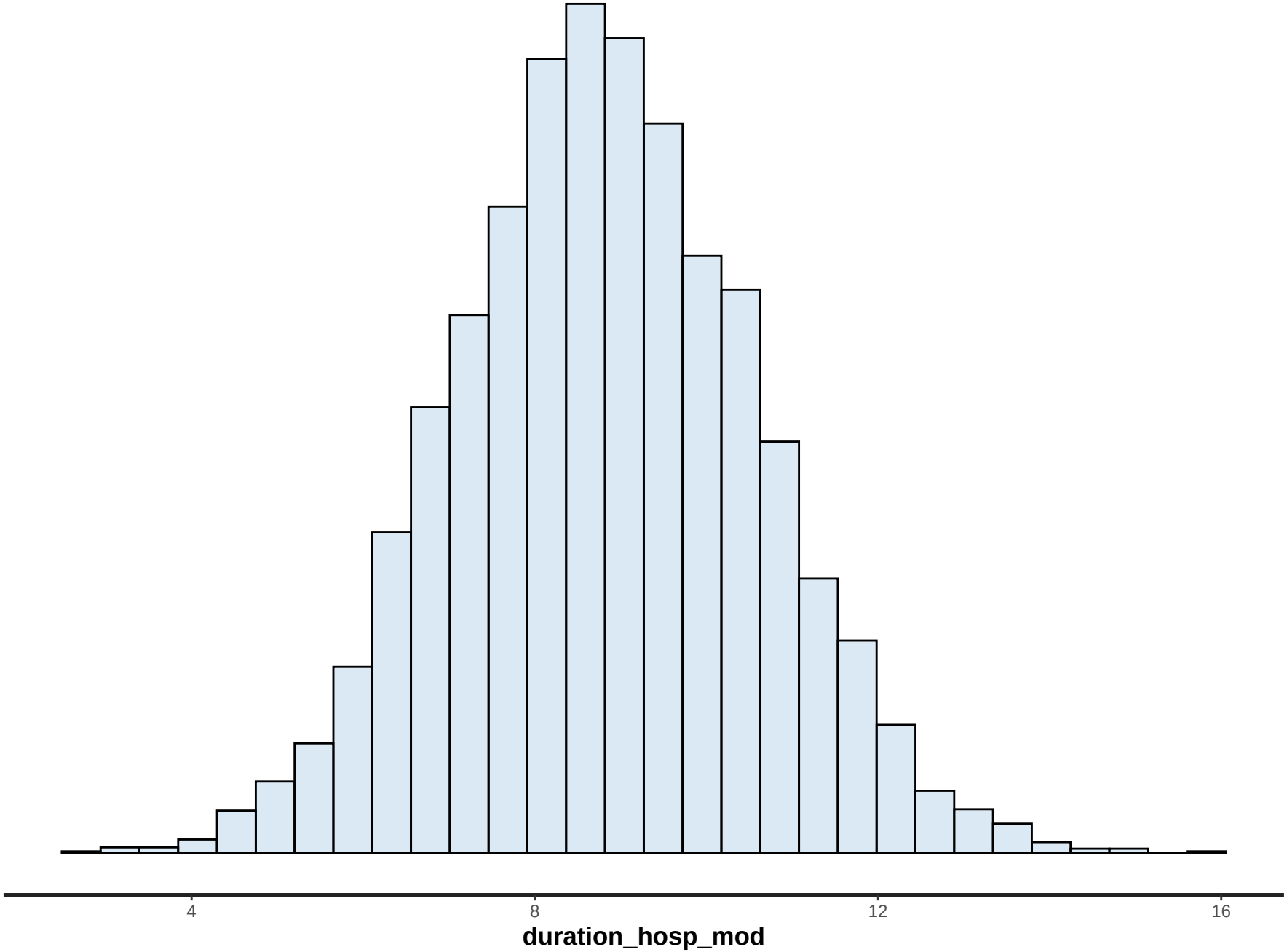


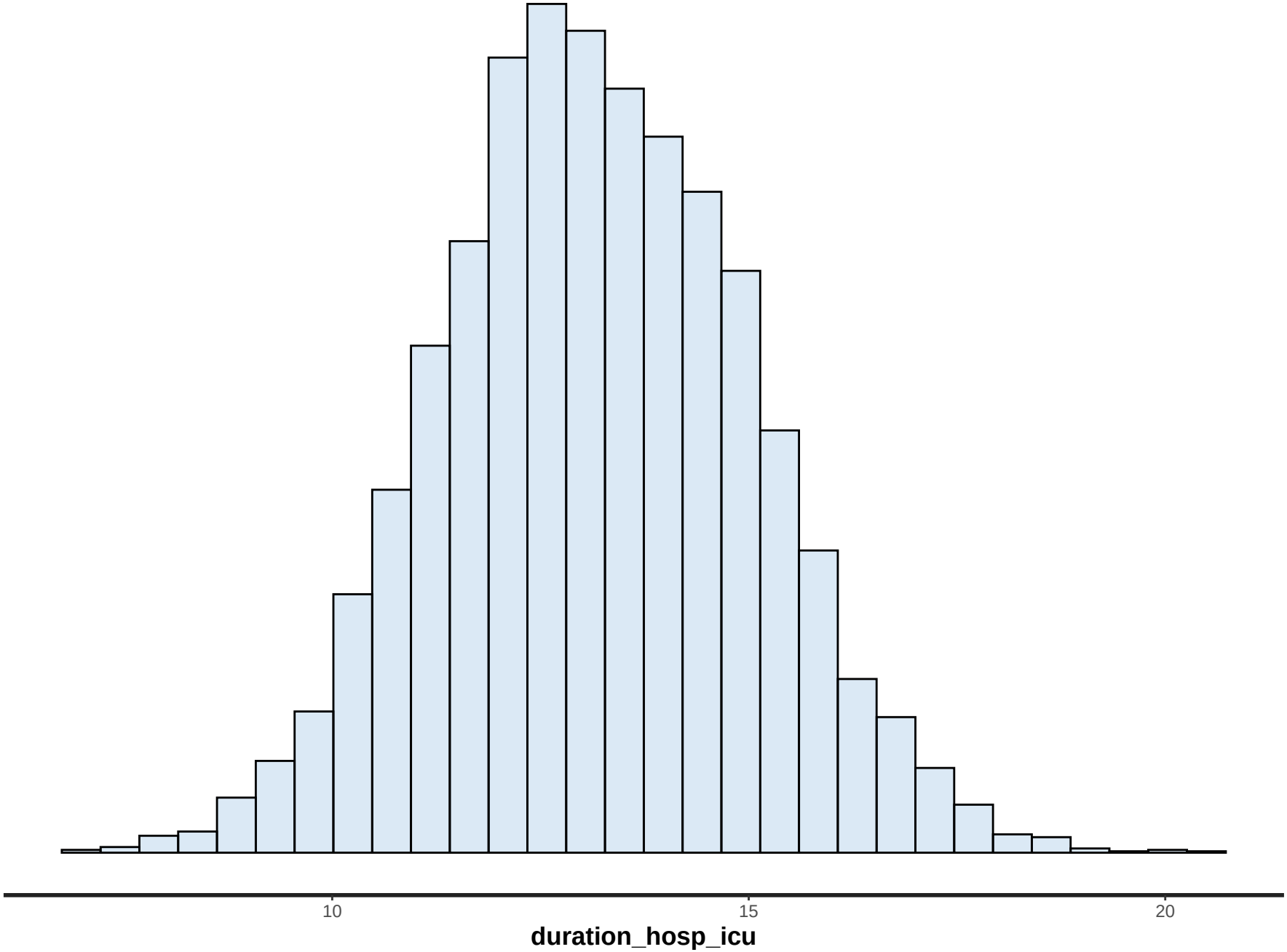

1
2
3
r0

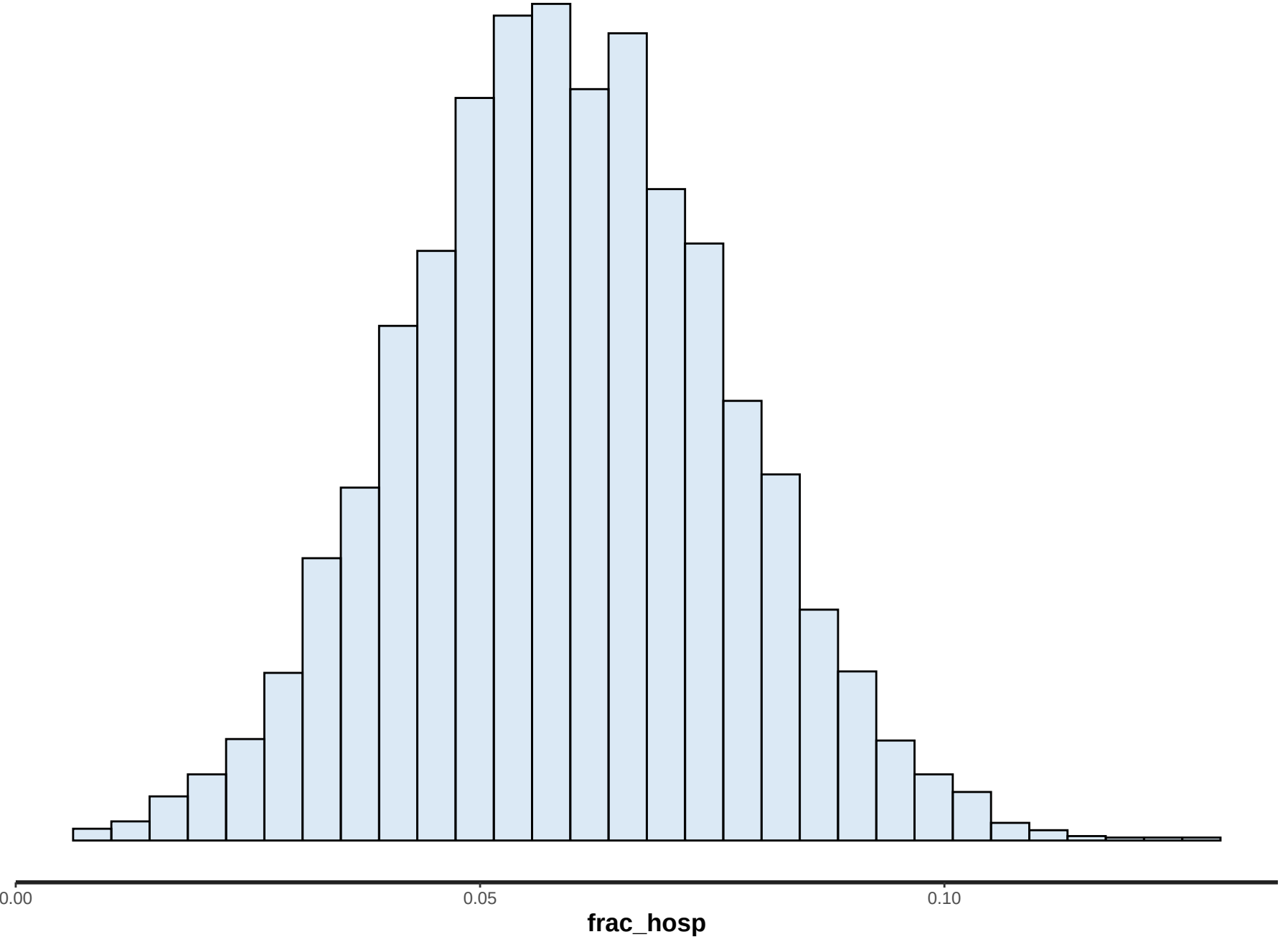

2
4
6
duration_latent

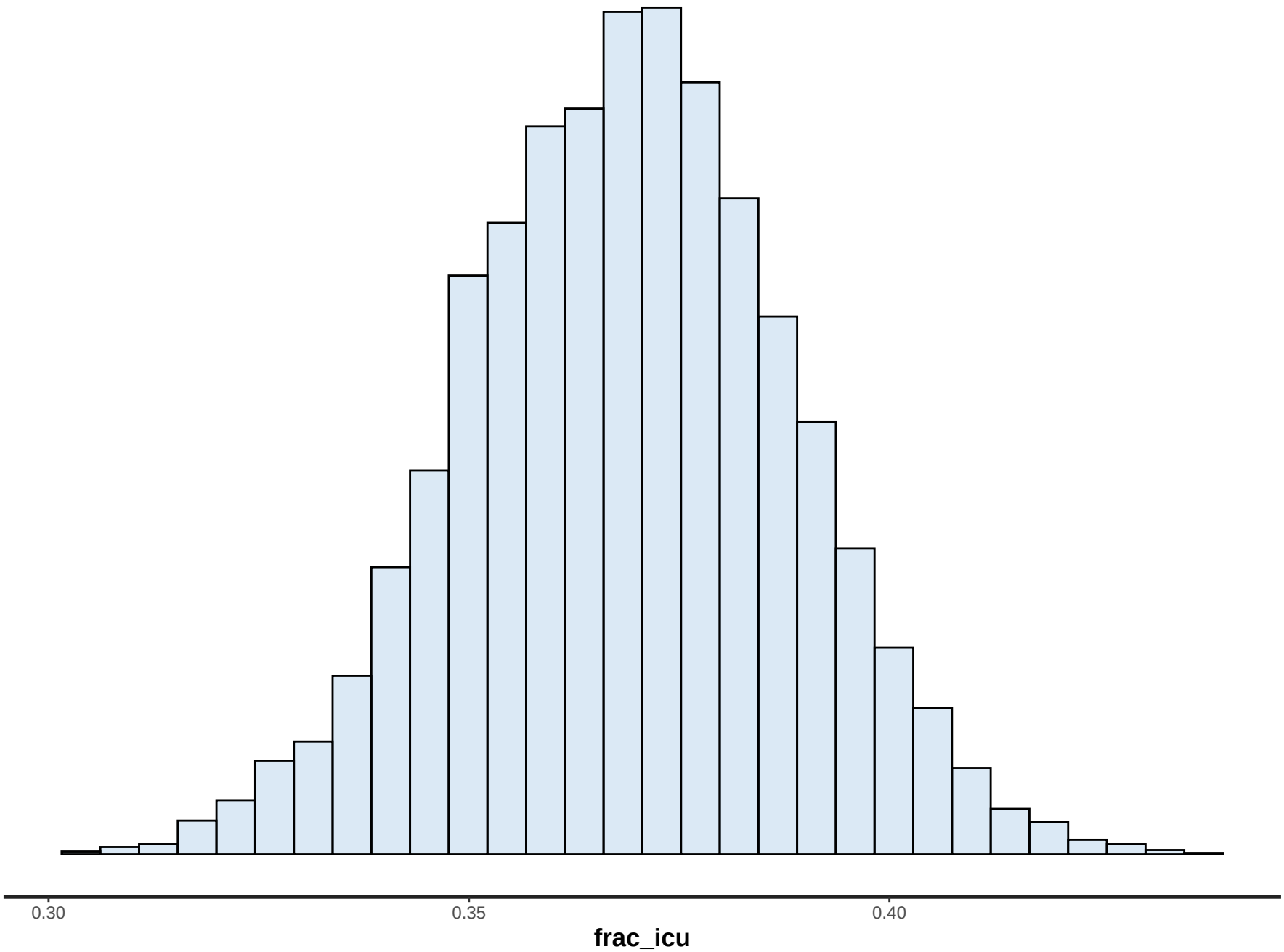

2.5
5.0
7.5
duration_rec_mild

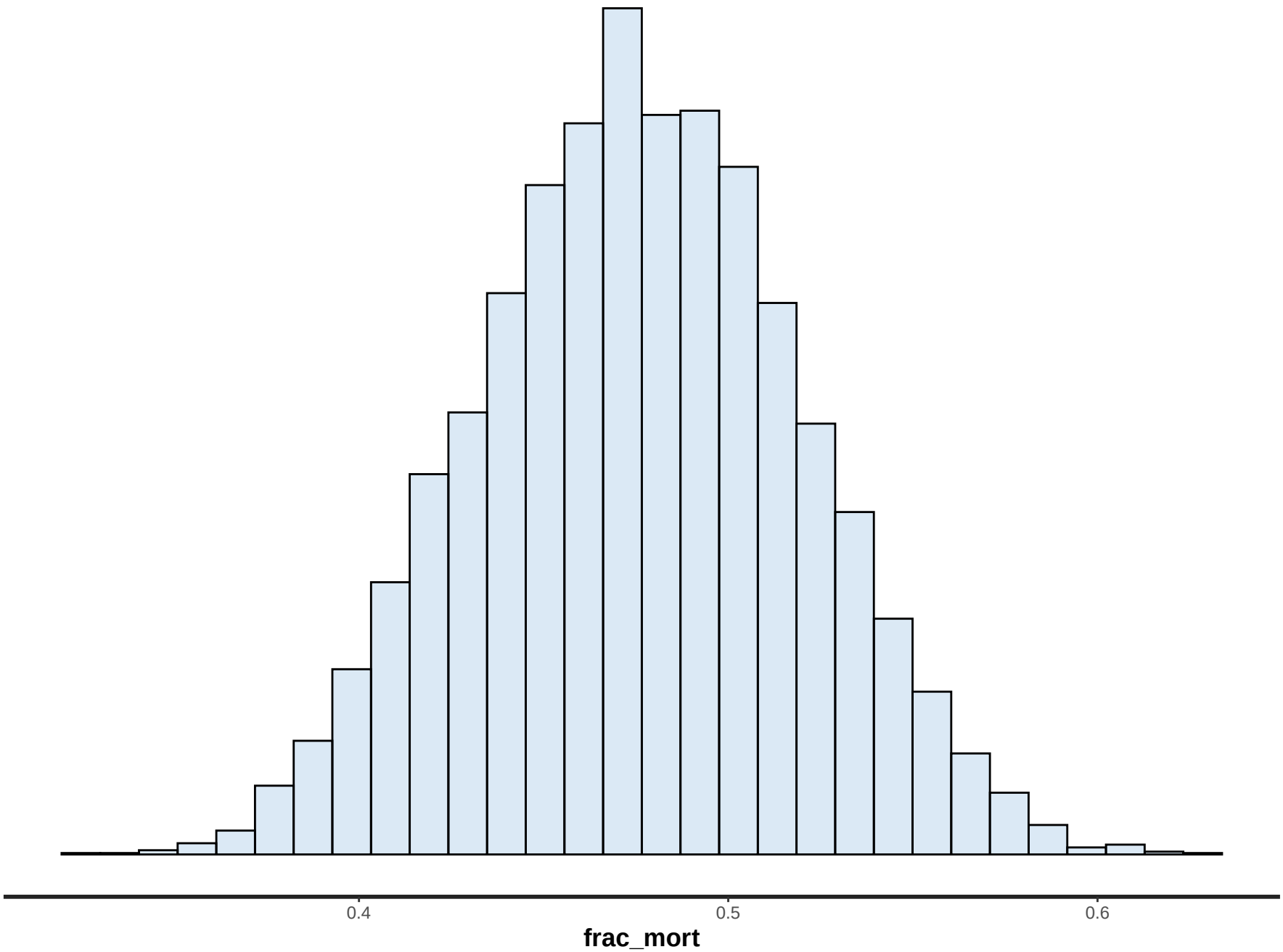

2.5
5.0
7.5
10.0
12.5
duration_pre_hosp

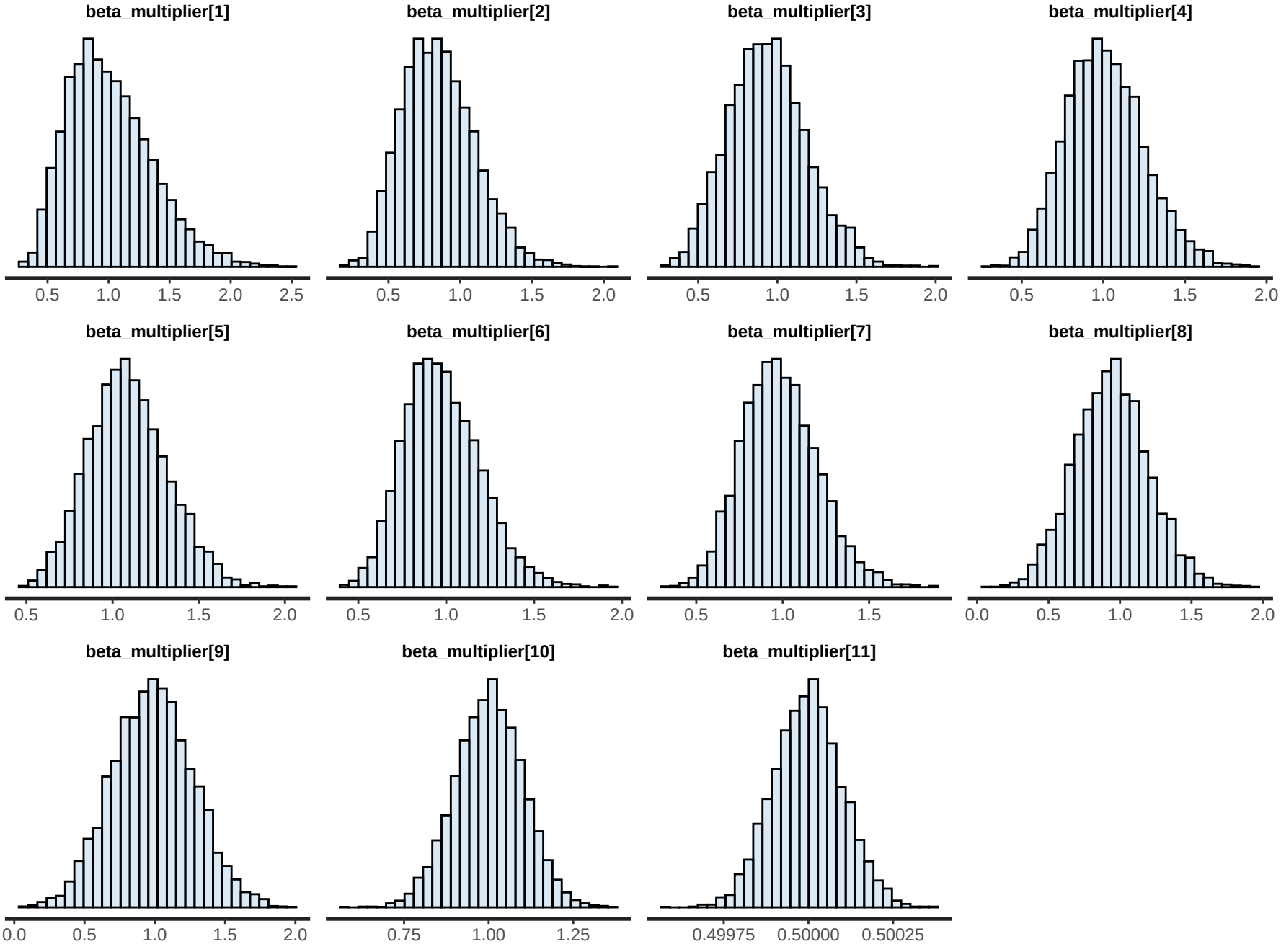

4
8
12
16
duration_hosp_mod

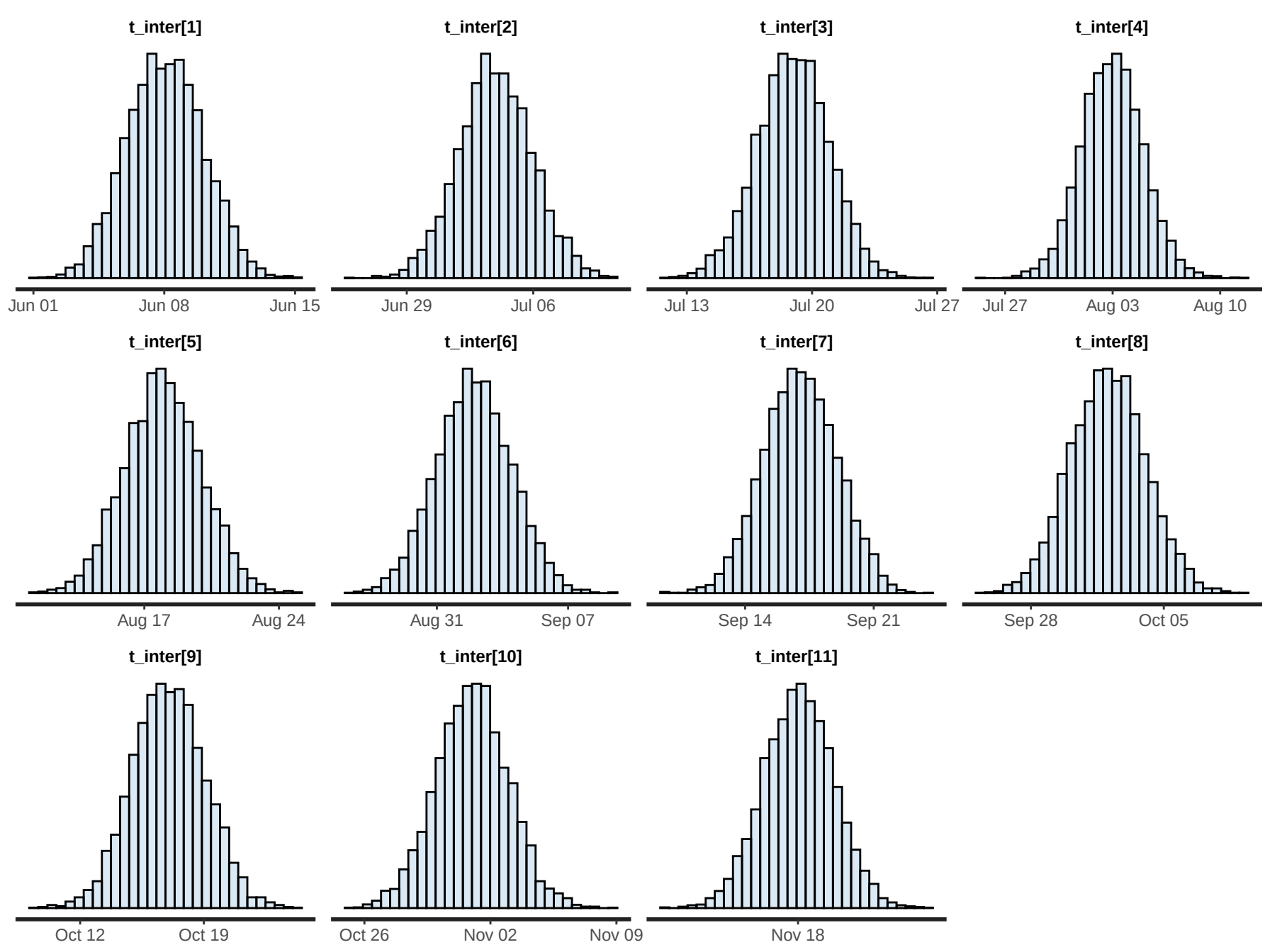

10
15
20
duration_hosp_icu

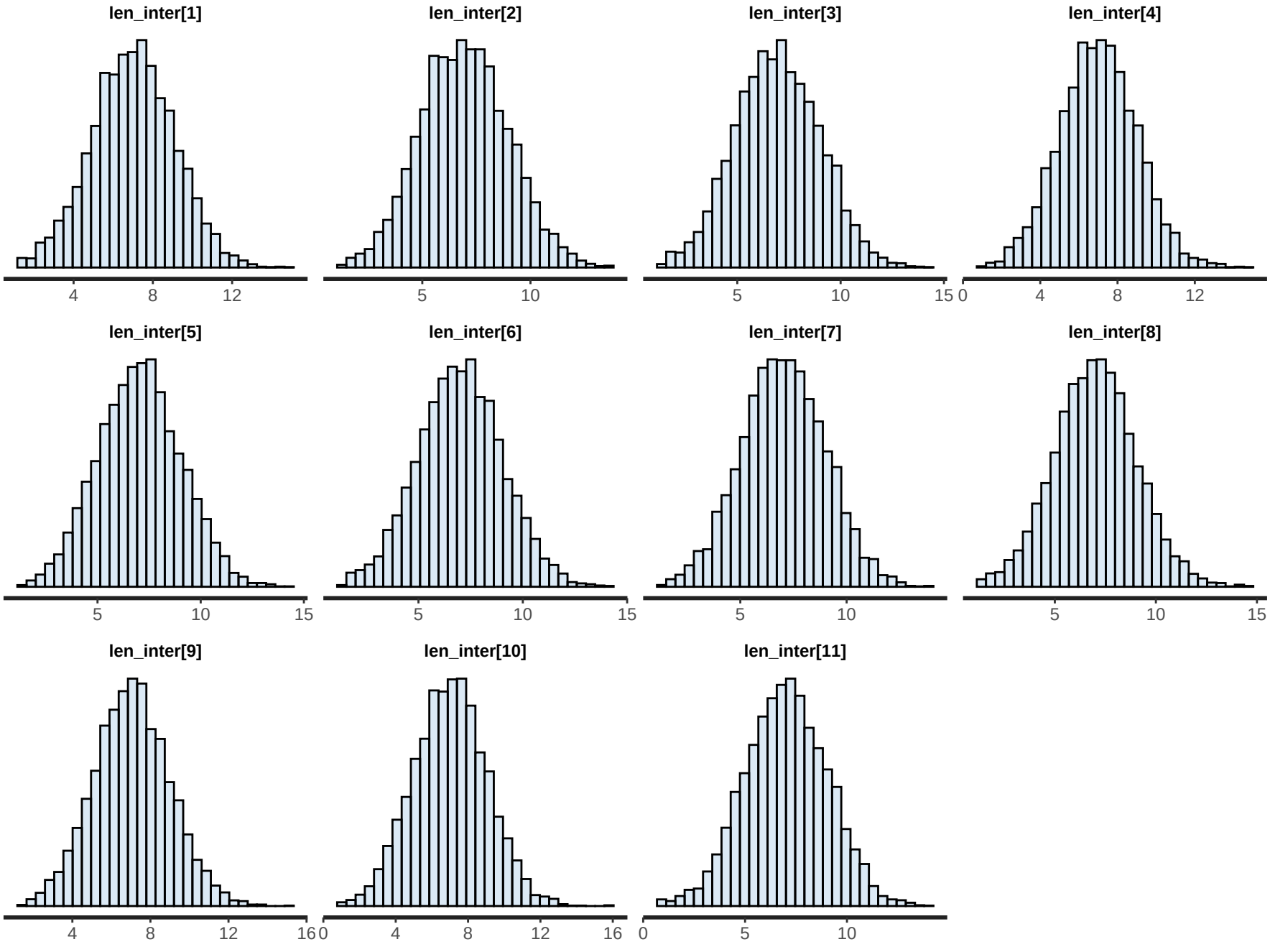

0.00
0.05
0.10
frac_hosp

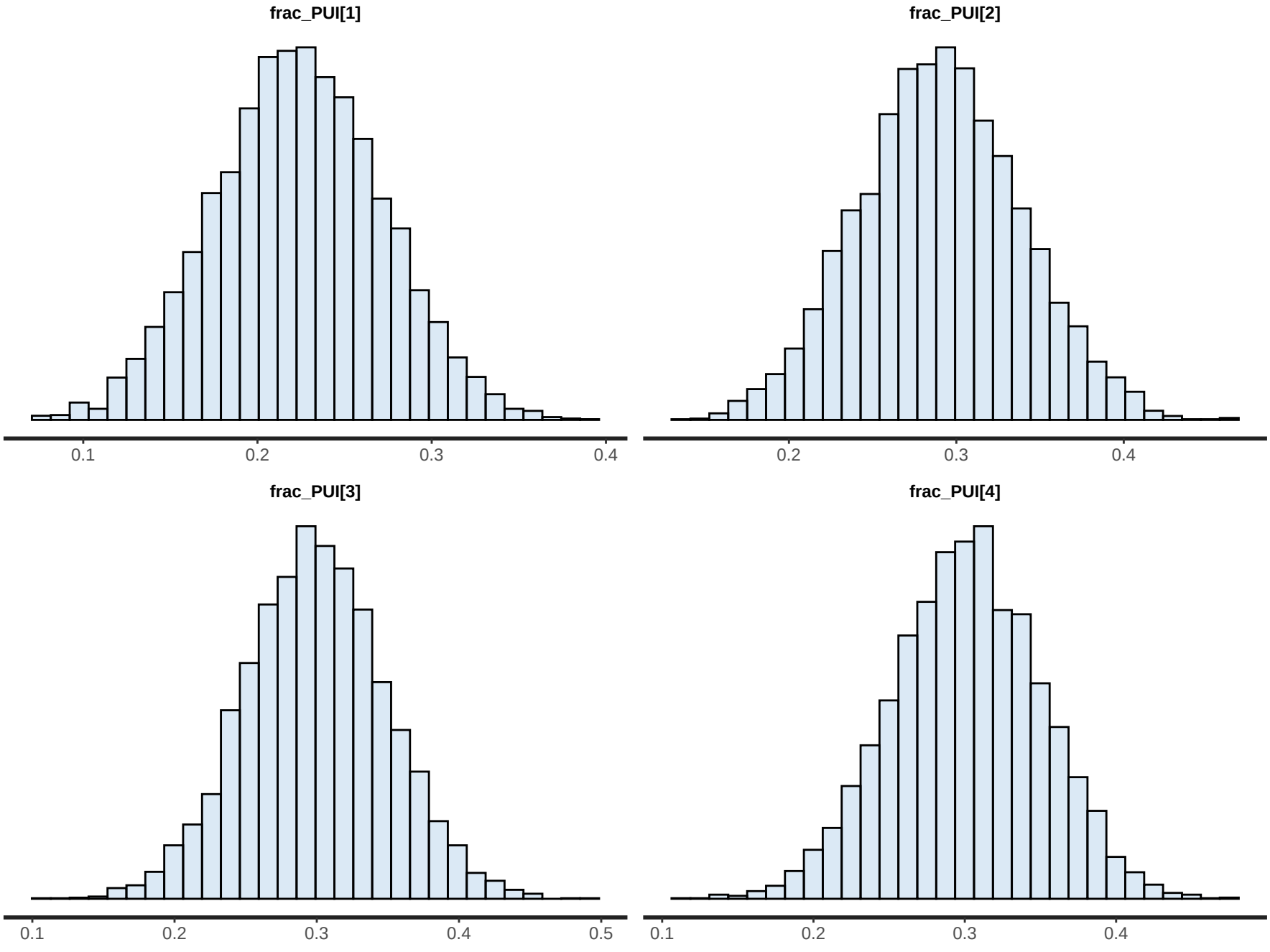

0.30
0.35
0.40
frac_icu

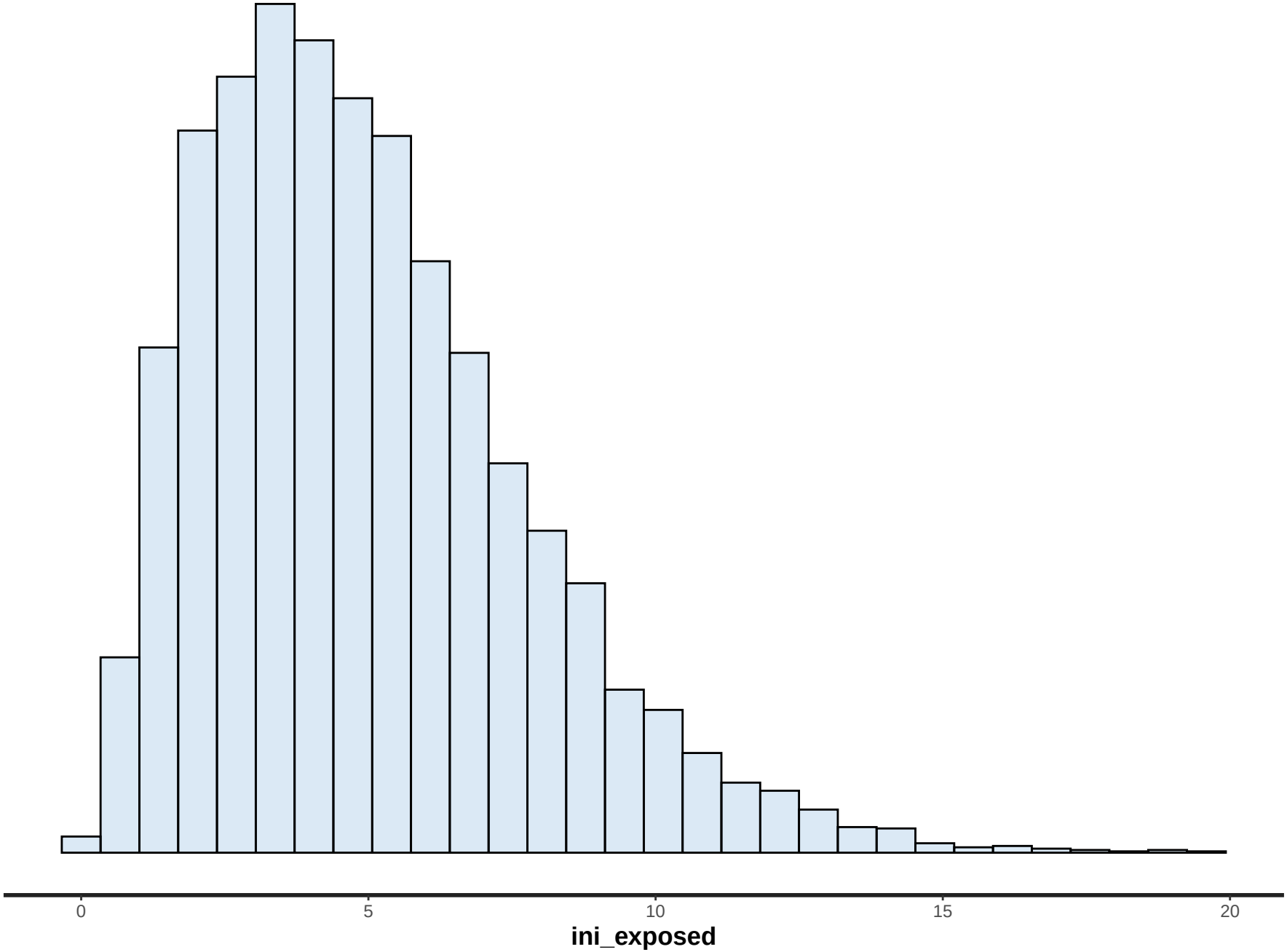

0.4
0.5
0.6
frac_mort

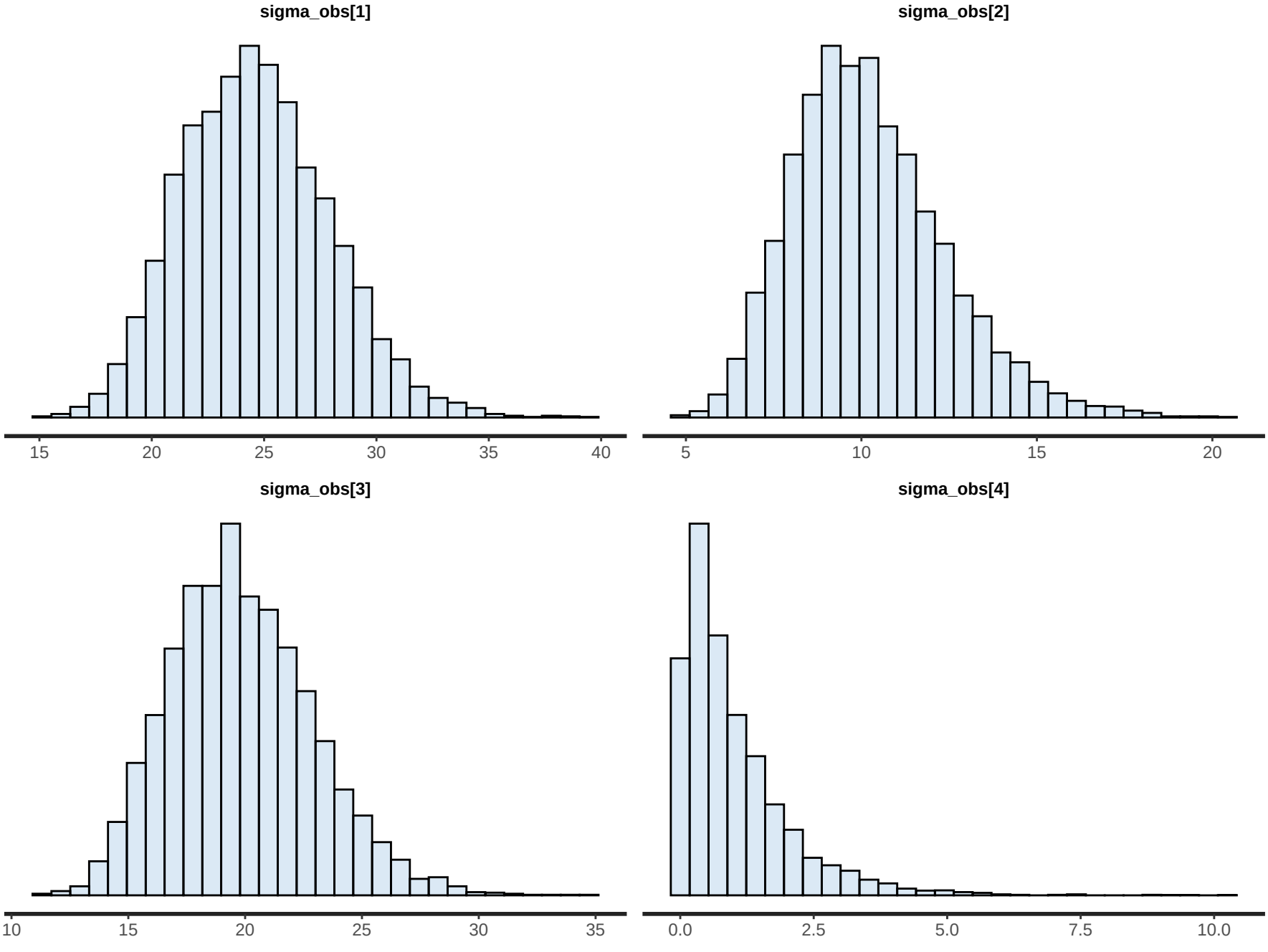

beta_multiplier[1]
0.5
1.0
1.5
2.0
2.5
beta_multiplier[2]
0.5
1.0
1.5
2.0
beta_multiplier[3]
0.5
1.0
1.5
2.0
beta_multiplier[4]
0.5
1.0
1.5
2.0
beta_multiplier[5]
0.5
1.0
1.5
2.0
beta_multiplier[6]
0.5
1.0
1.5
2.0
beta_multiplier[7]
0.5
1.0
1.5
beta_multiplier[8]
0.0
0.5
1.0
1.5
2.0
beta_multiplier[9]
0.0
0.5
1.0
1.5
2.0
beta_multiplier[10]
0.75
1.00
1.25
beta_multiplier[11]
0.49975
0.50000
0.50025


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]
Jul 27
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
t_inter[10]
Oct 26
Nov 02
Nov 09
t_inter[11]
Nov 18


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


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


0
5
10
15
20
ini_exposed


sigma_obs[1]
15
20
25
30
35
40
sigma_obs[2]
5
10
15
20
sigma_obs[3]
10
15
20
25
30
35
sigma_obs[4]
0.0
2.5
5.0
7.5
10.0