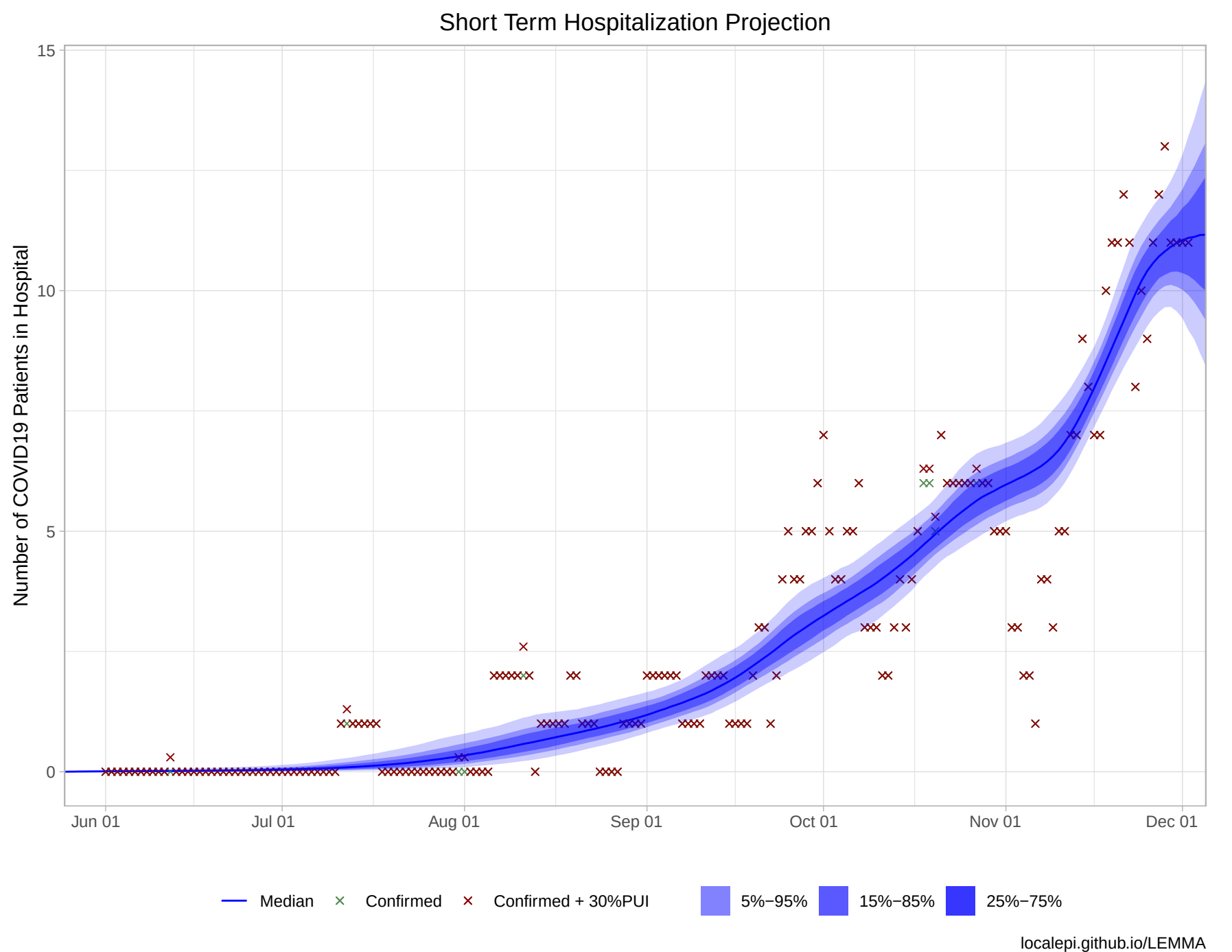
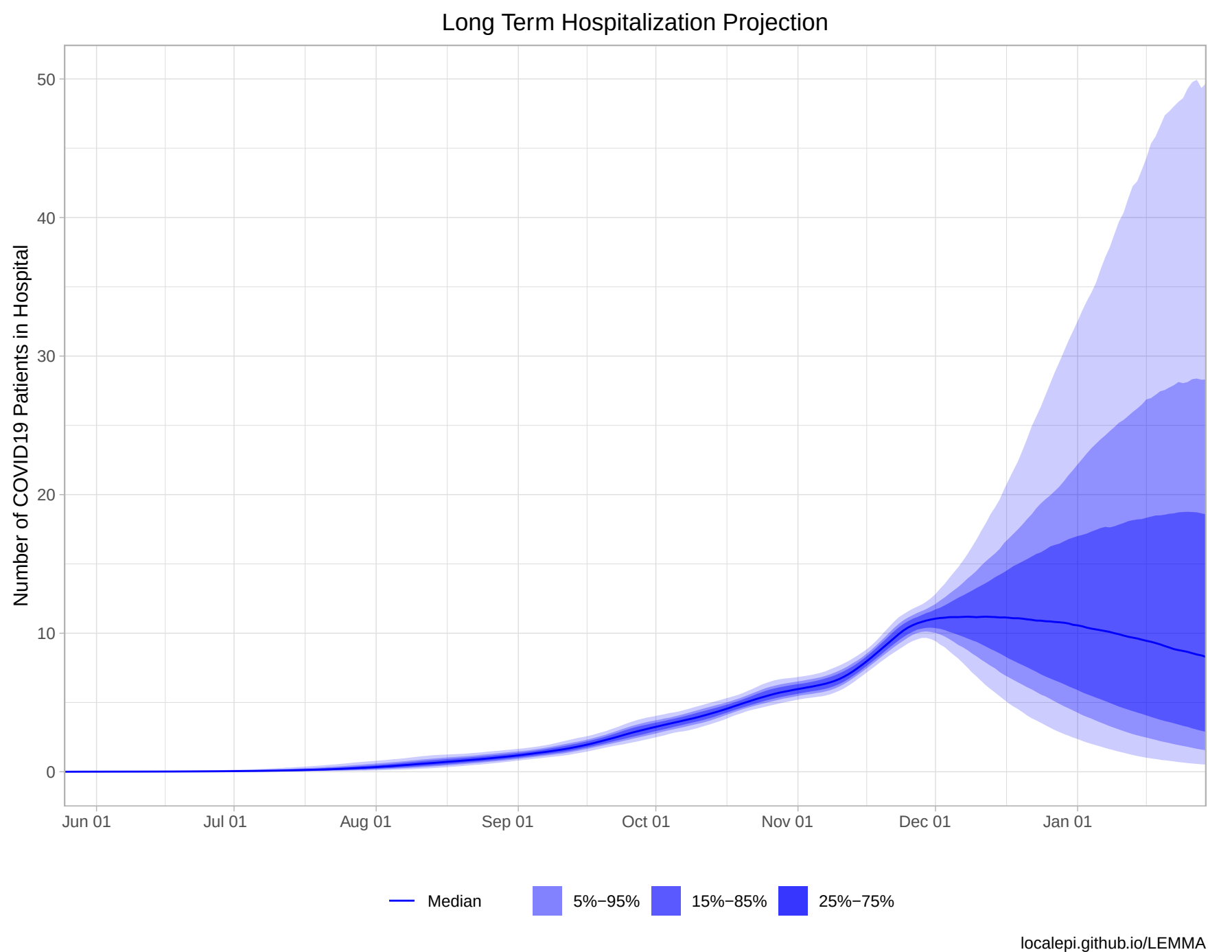
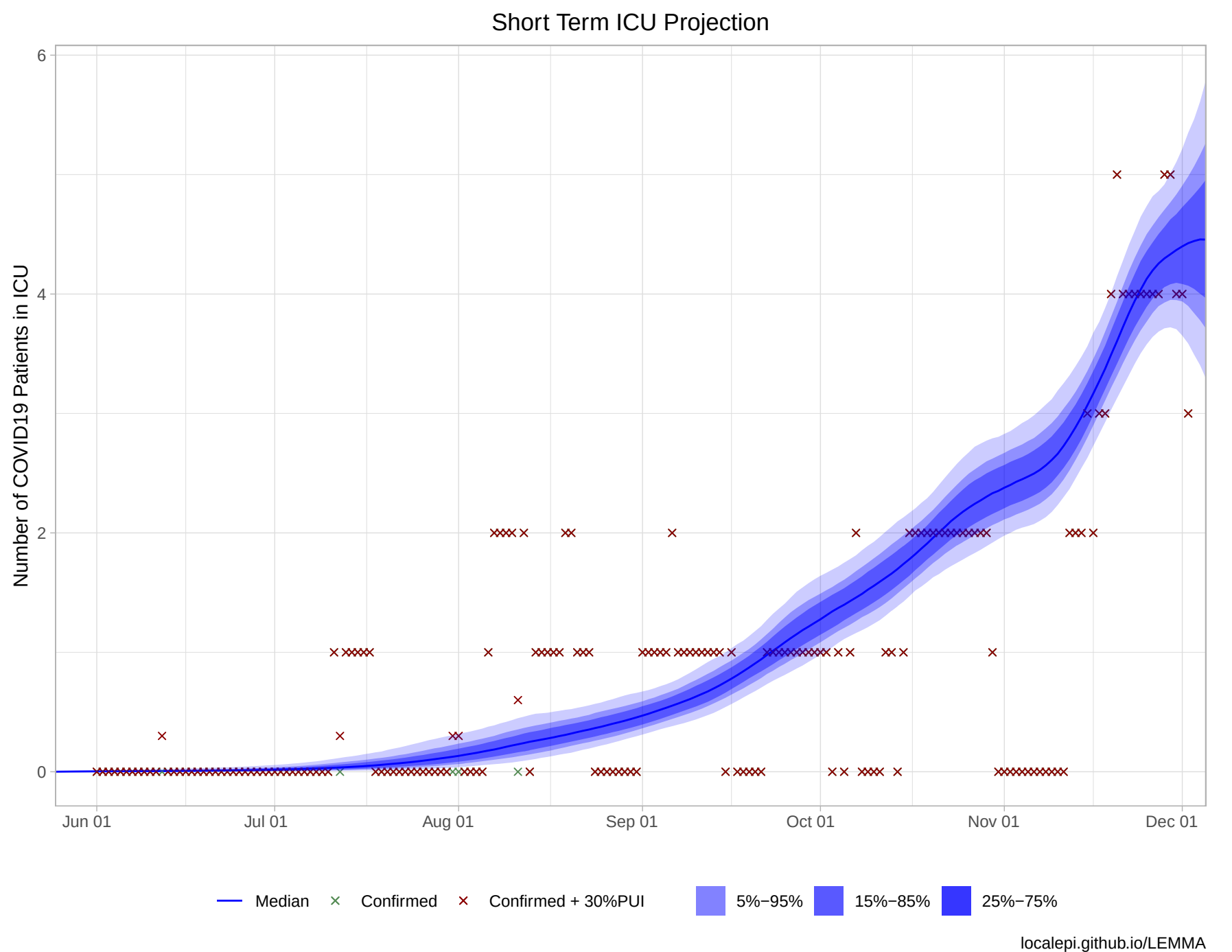
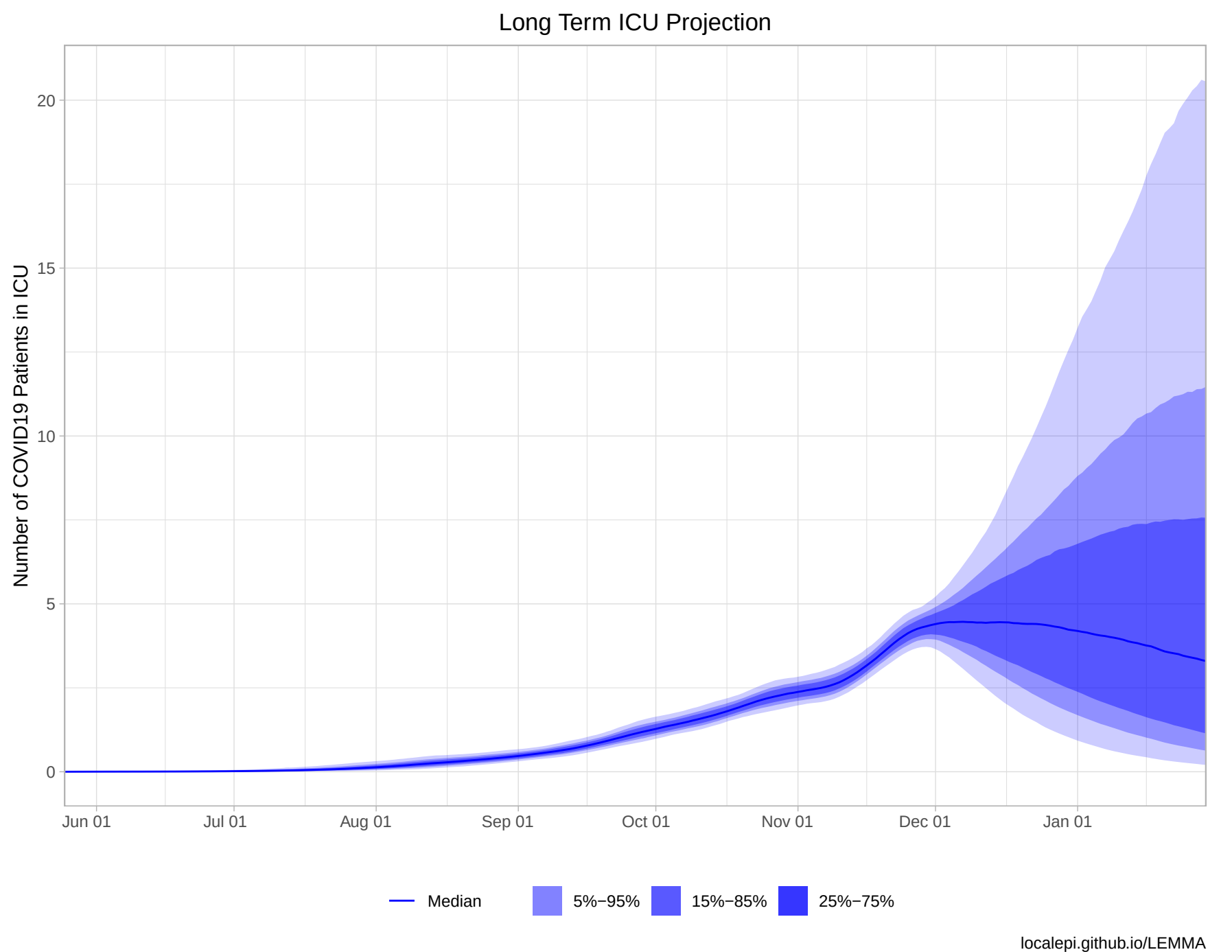
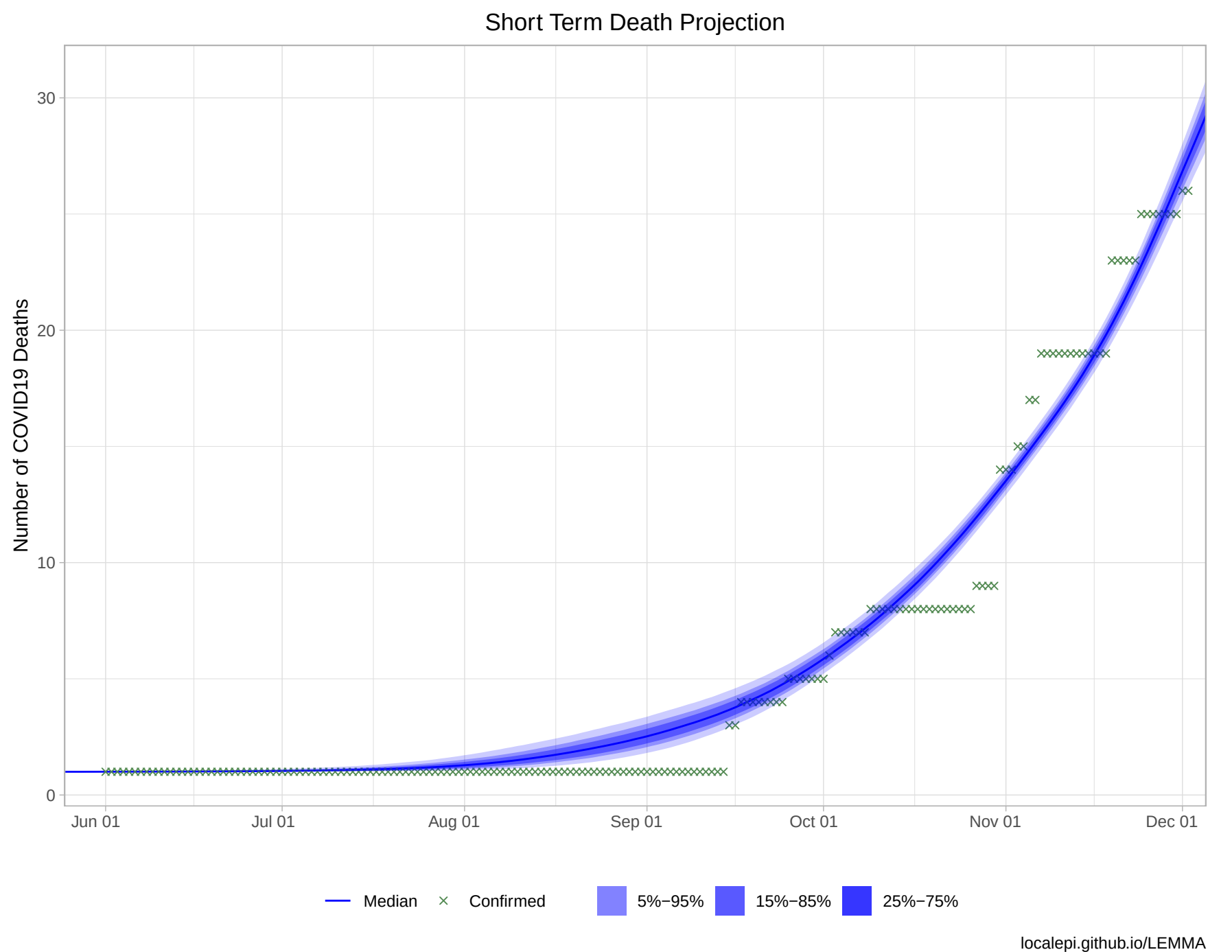
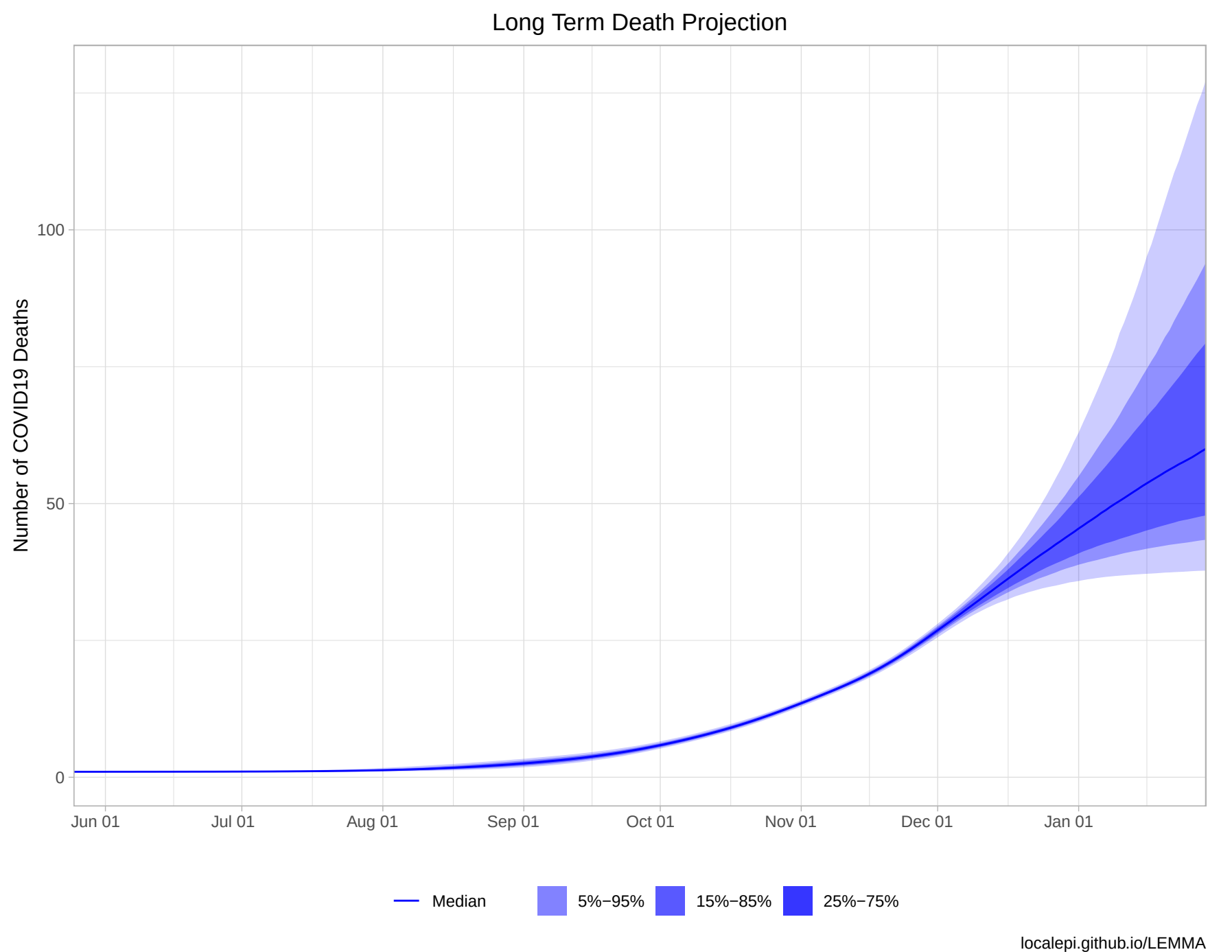

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
15
10
5
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

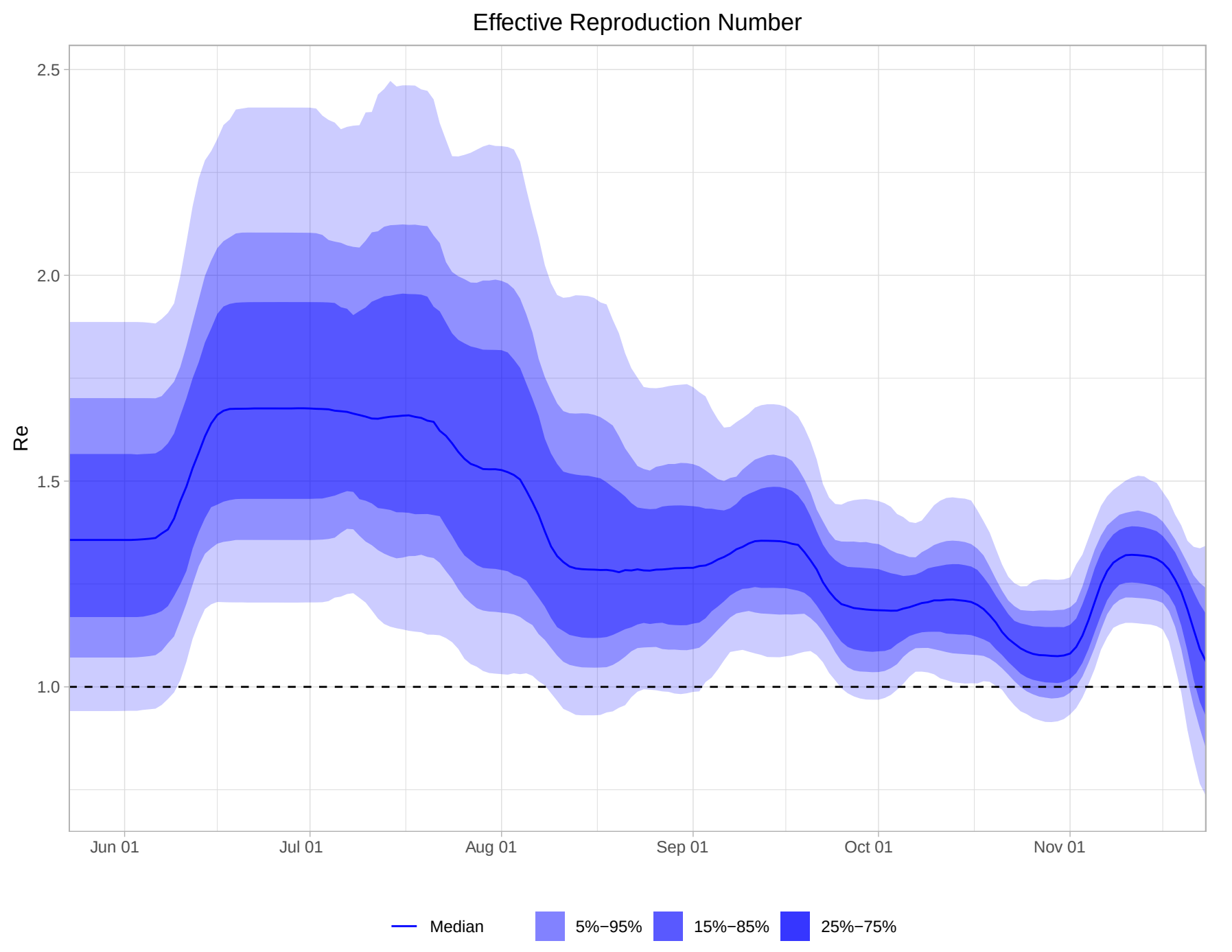

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
50
40
30
20
10
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short 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
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
20
15
10
5
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

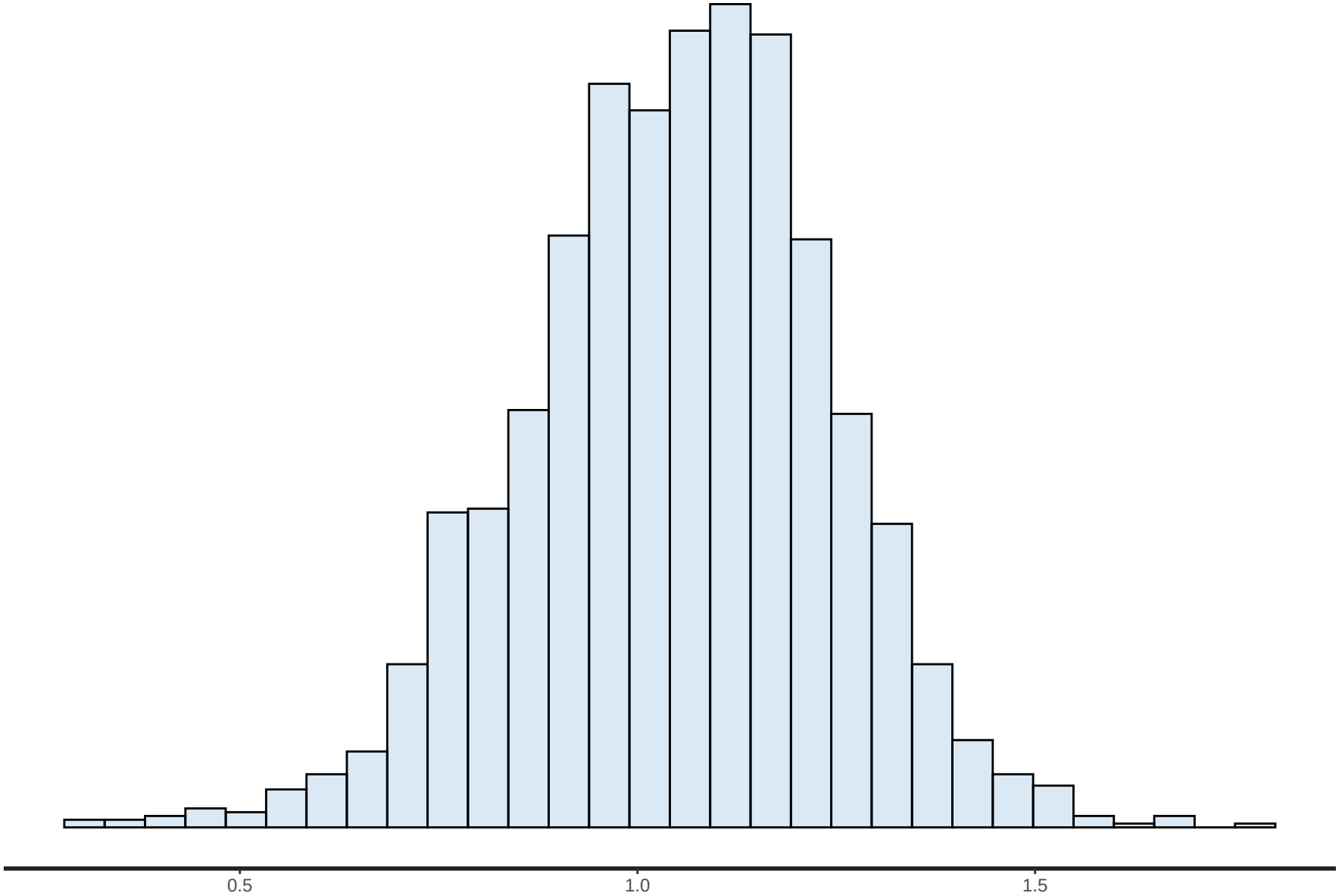

Short Term Death Projection
Number of COVID19 Deaths
0
10
20
30
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

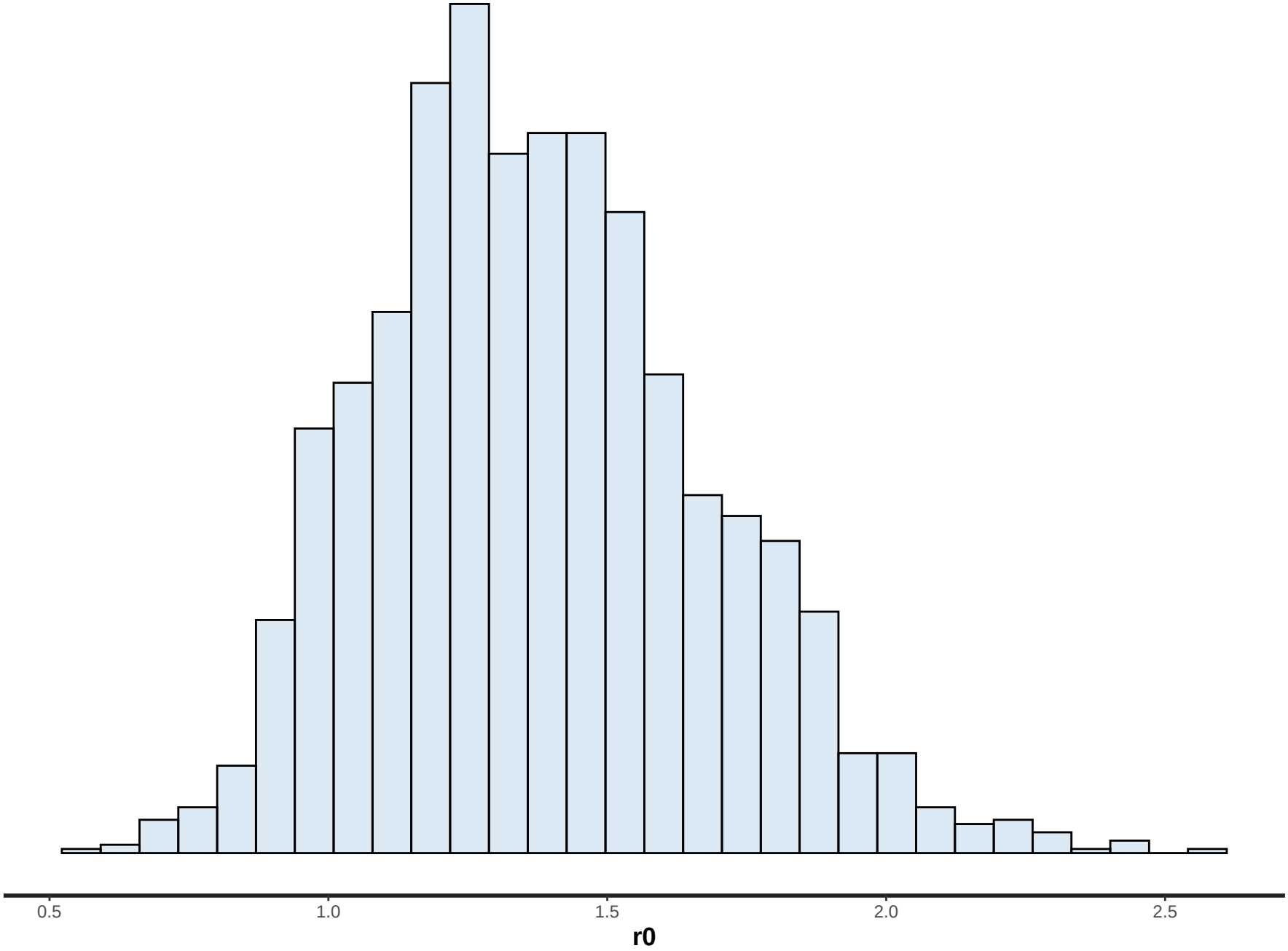

Long Term Death Projection
Number of COVID19 Deaths
100
50
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

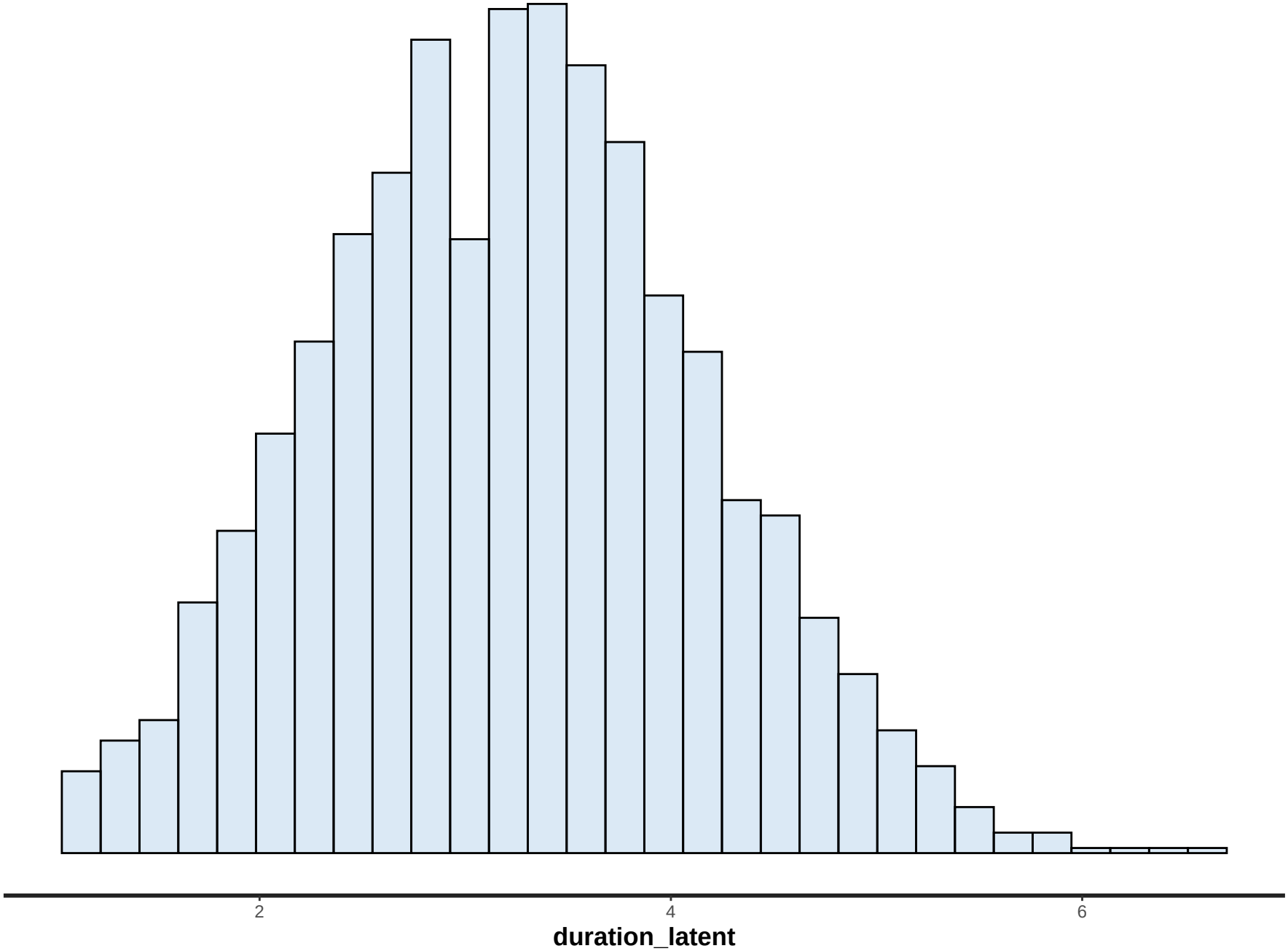

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
5%−95%
15%−85%
25%−75%

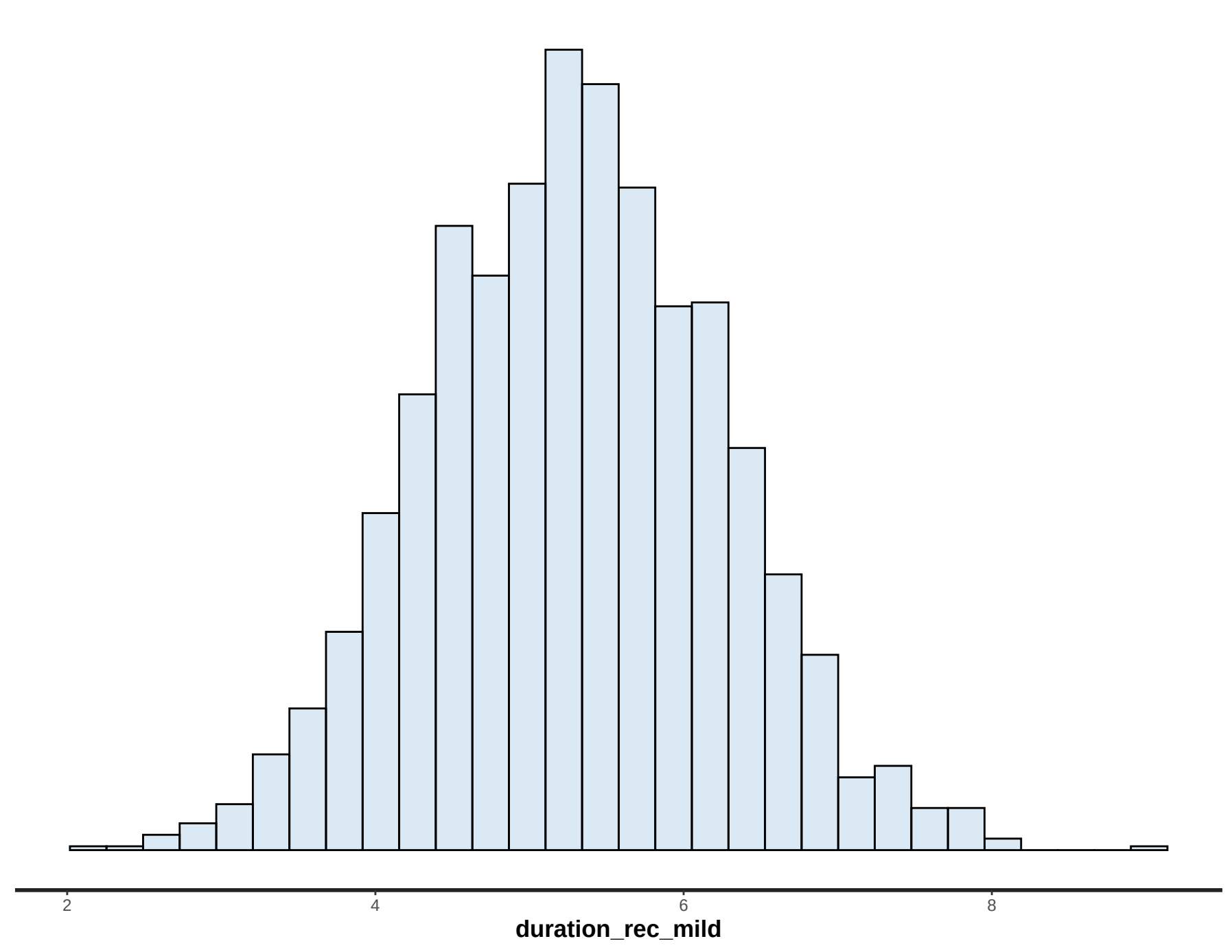
Rt as of 2020−11−23

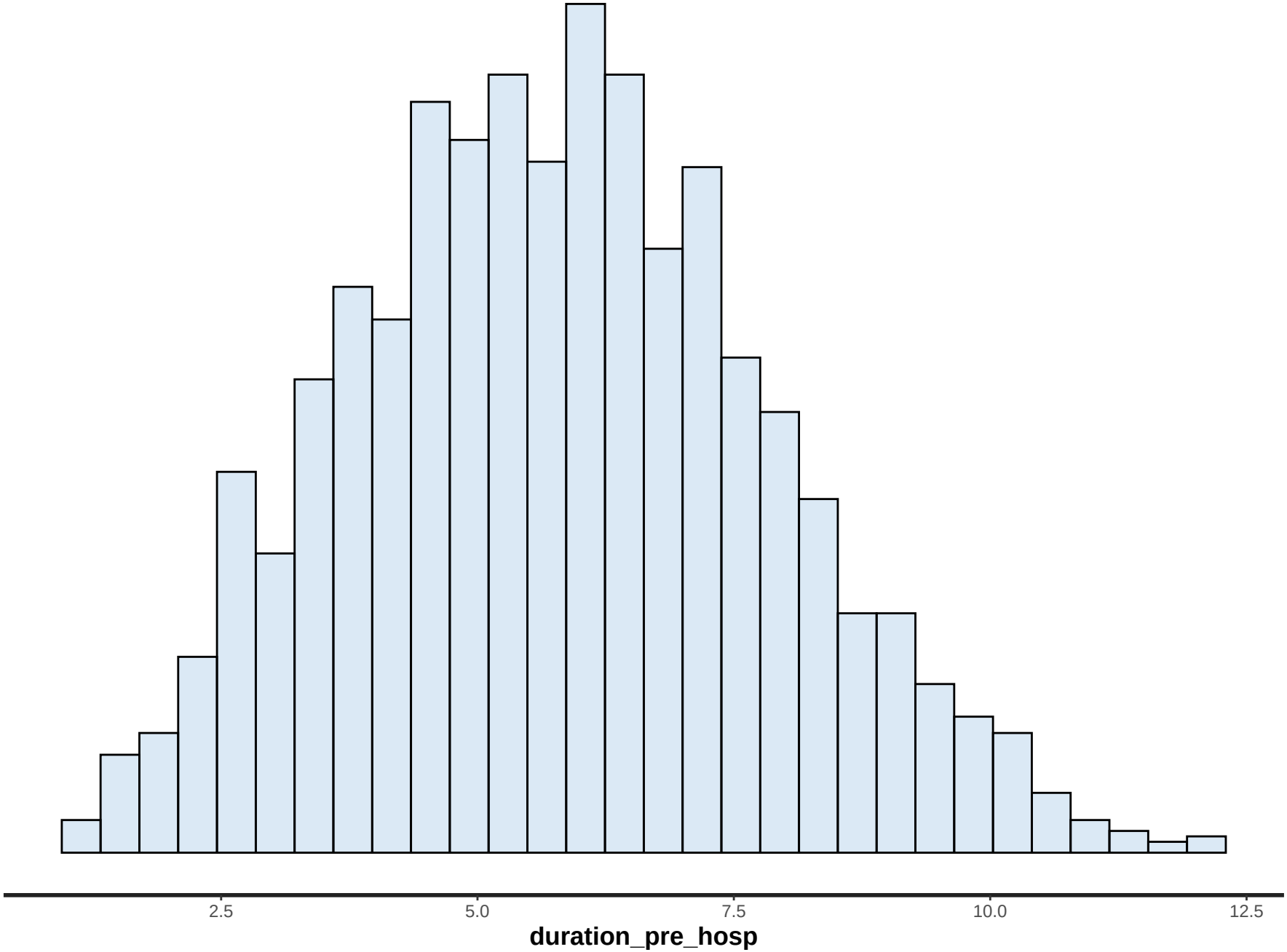
5%	10%	25%	50%	75%	90%	95%
0.73	0.80	0.93	1.06	1.18	1.28	1.34

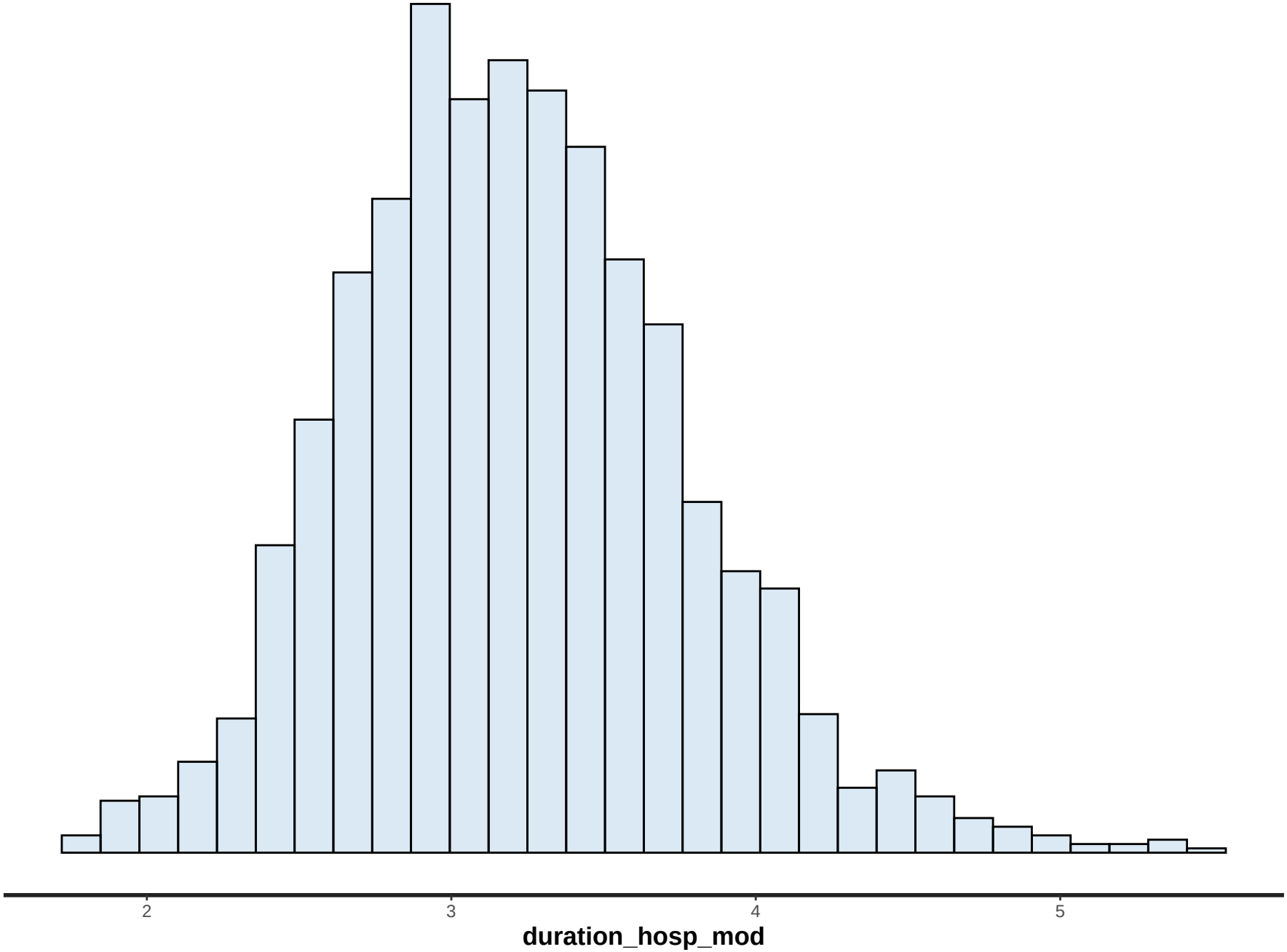


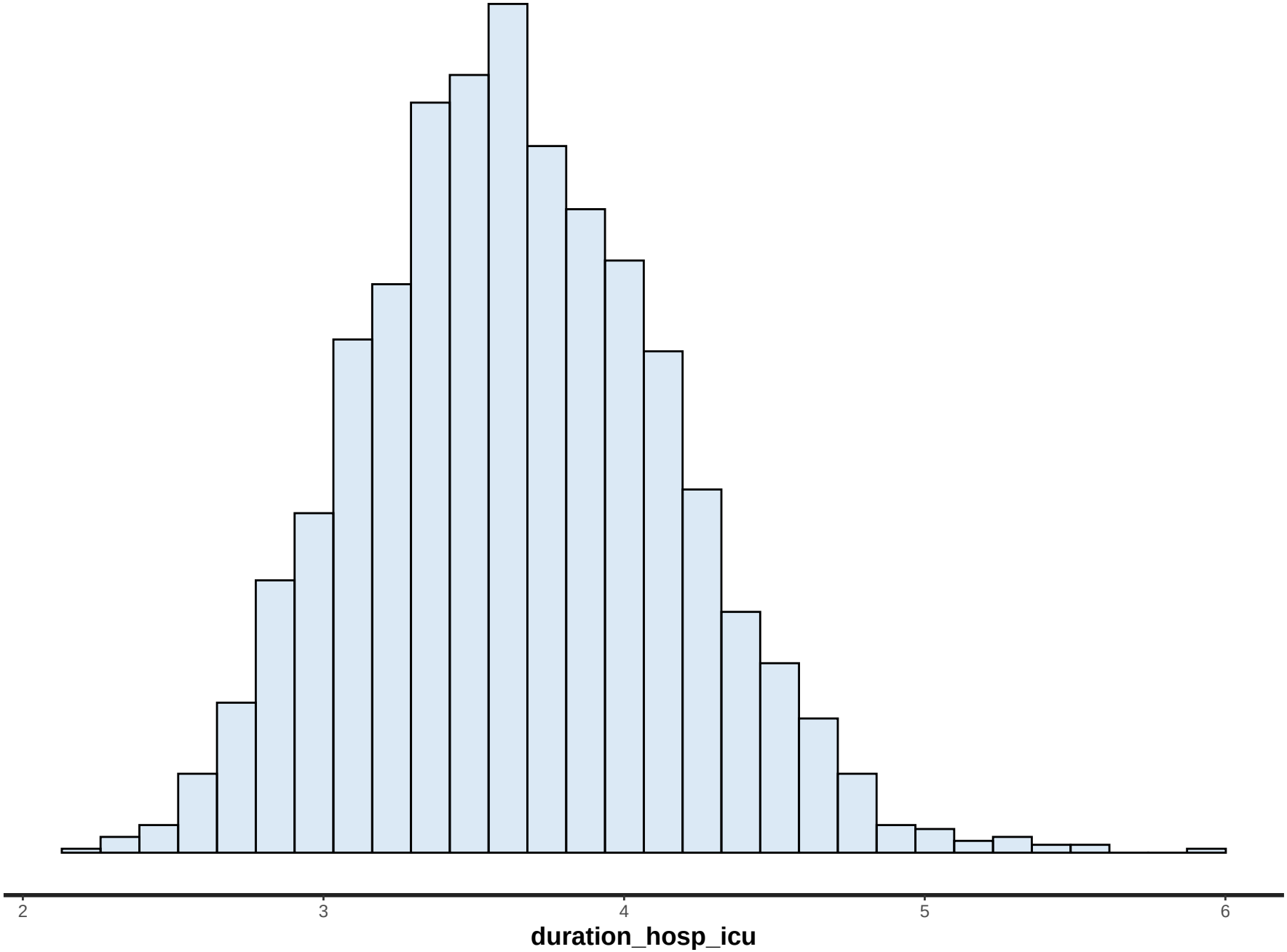

0.5
1.0
1.5
2.0
2.5
r0

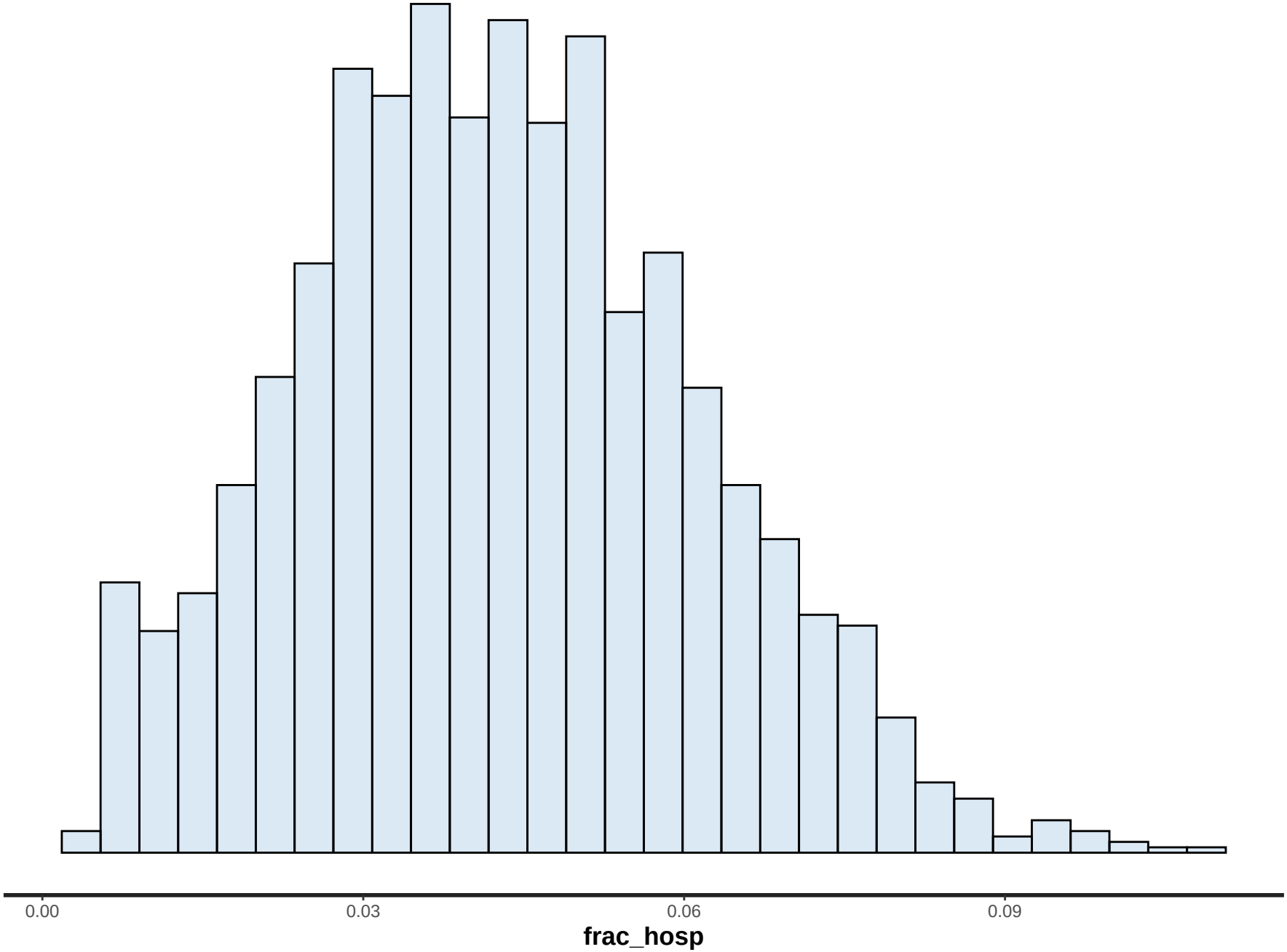

2
4
6
duration_latent

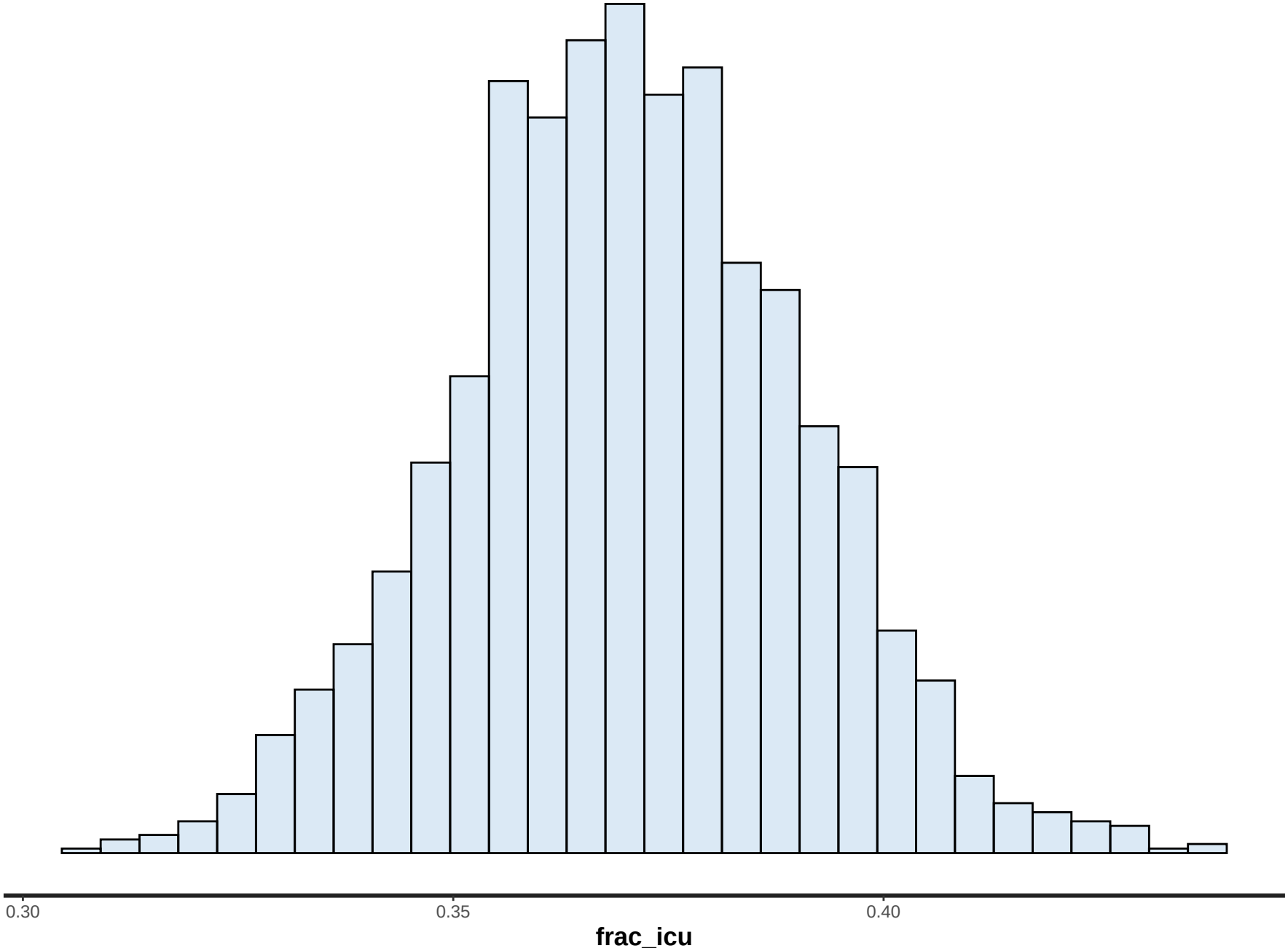

2
4
6
8
duration_rec_mild

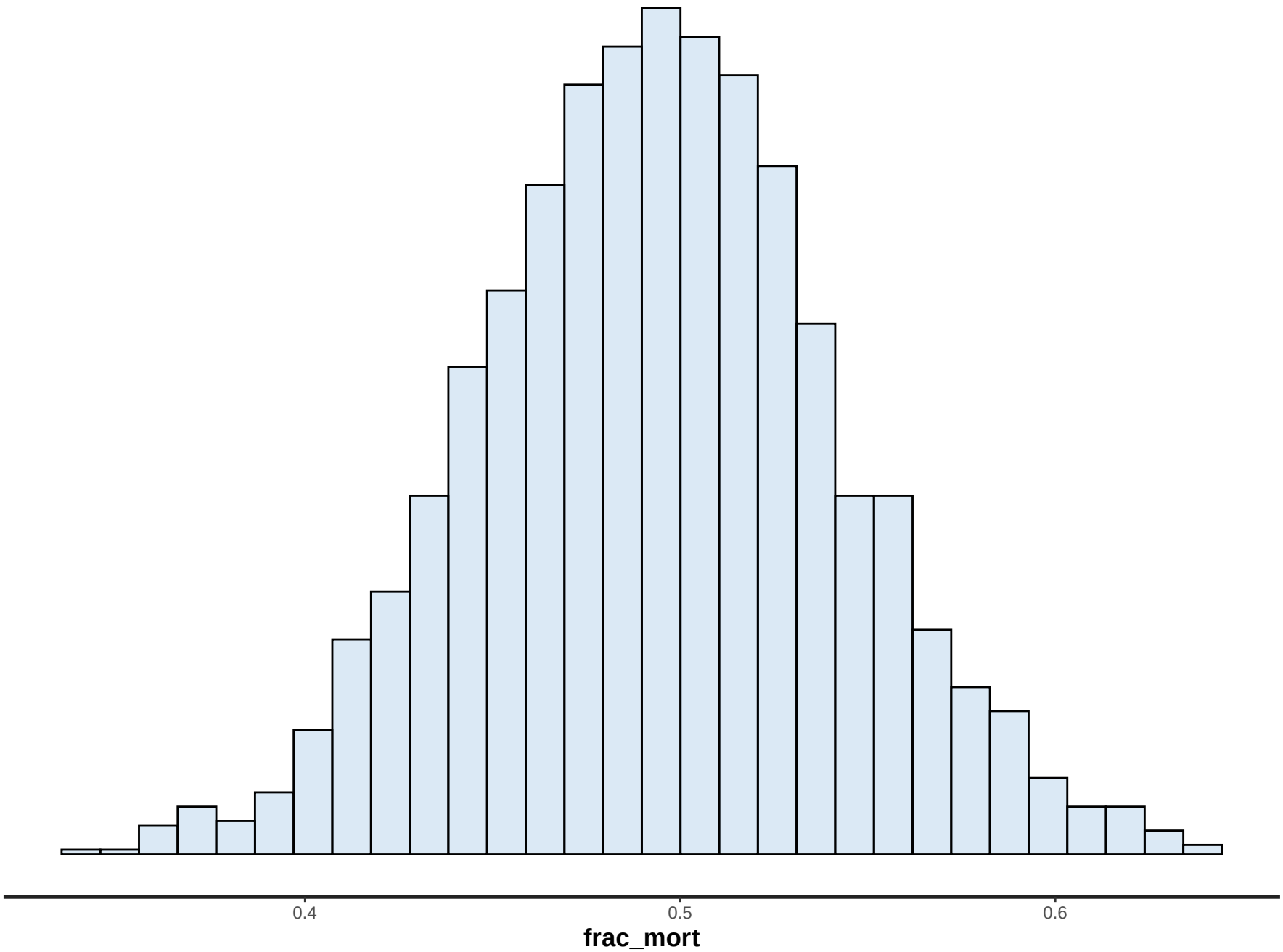

2.5
5.0
7.5
10.0
12.5
duration_pre_hosp

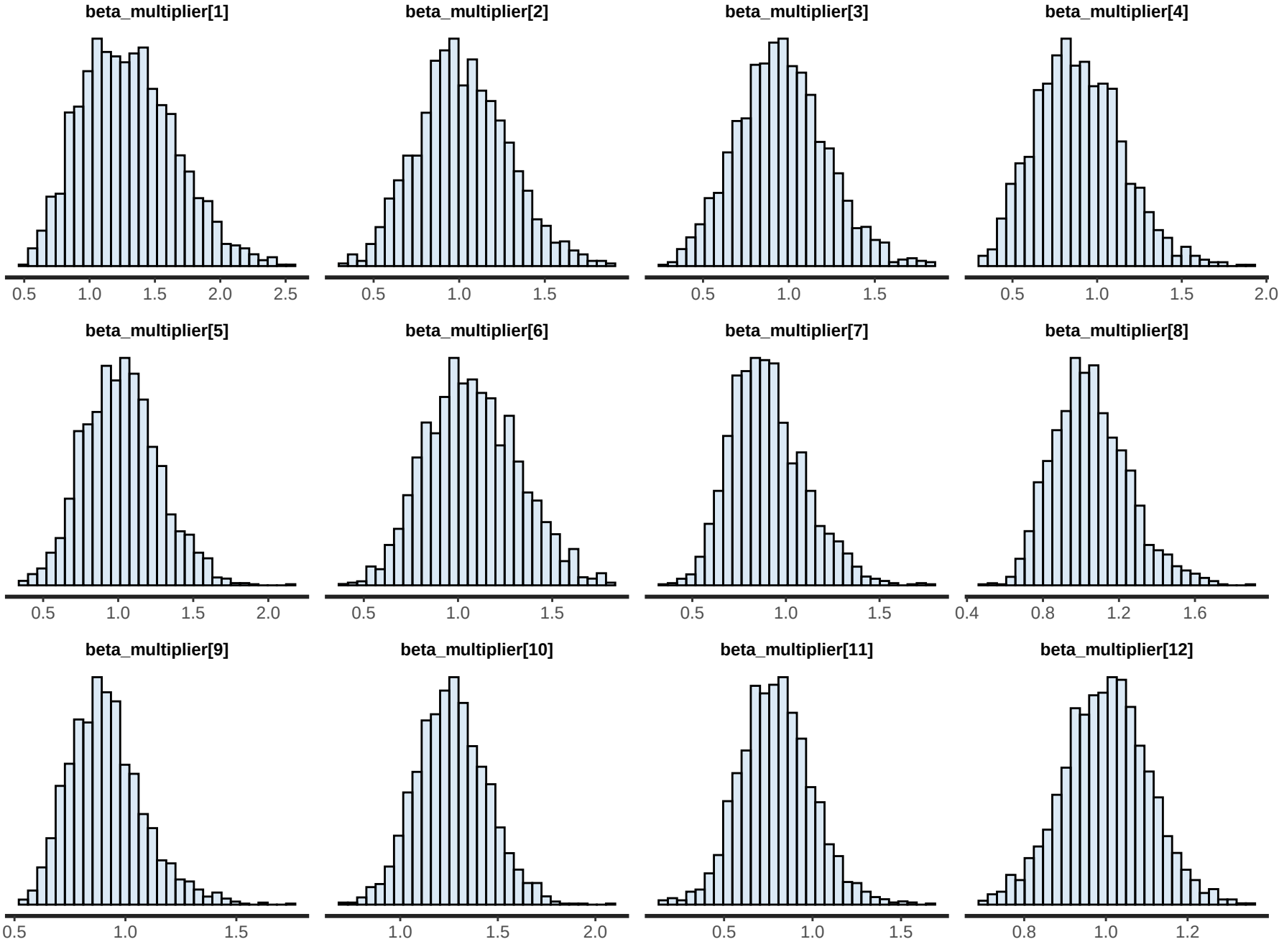

2
3
4
5
duration_hosp_mod

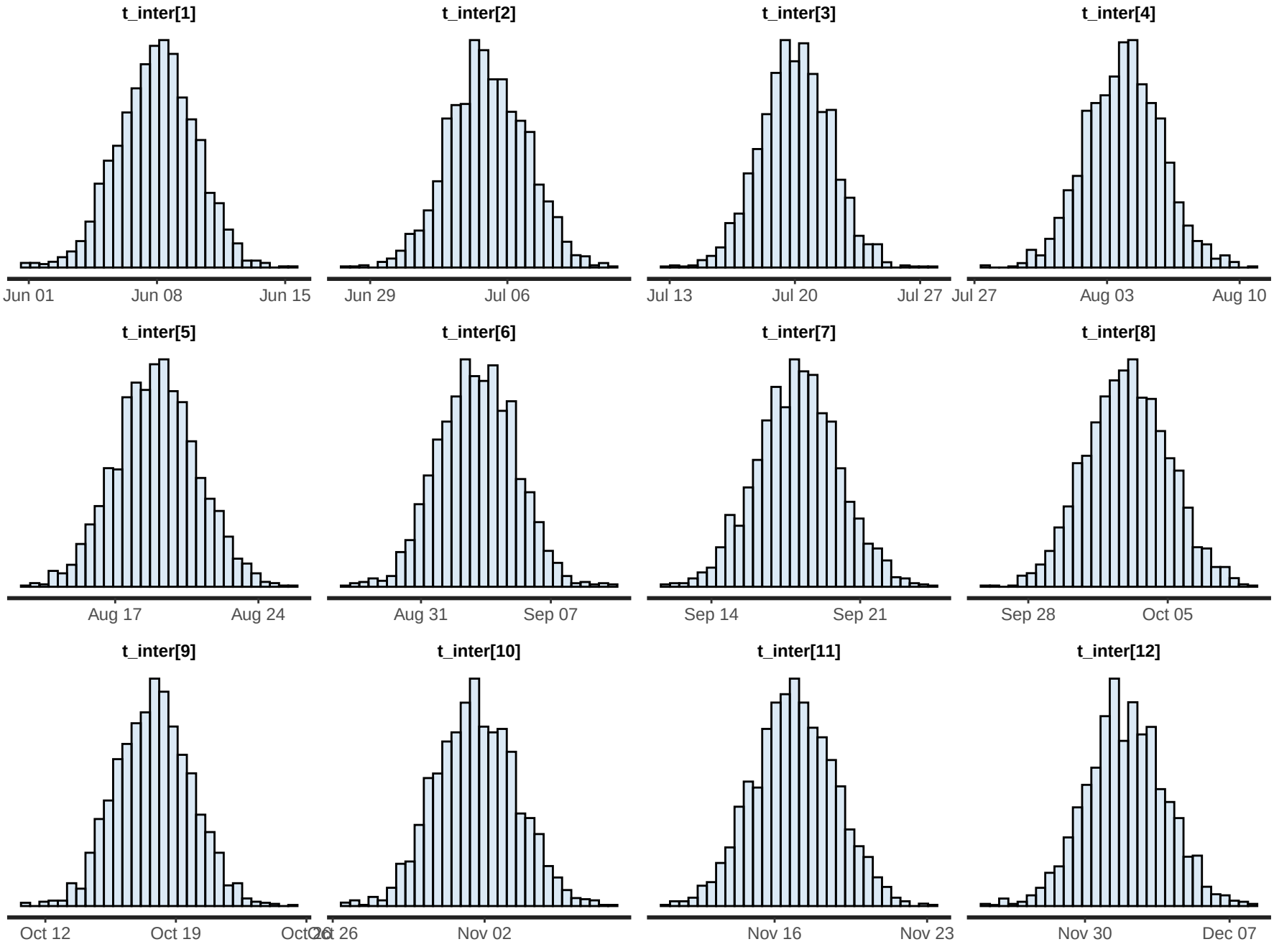

2
3
4
5
6
duration_hosp_icu

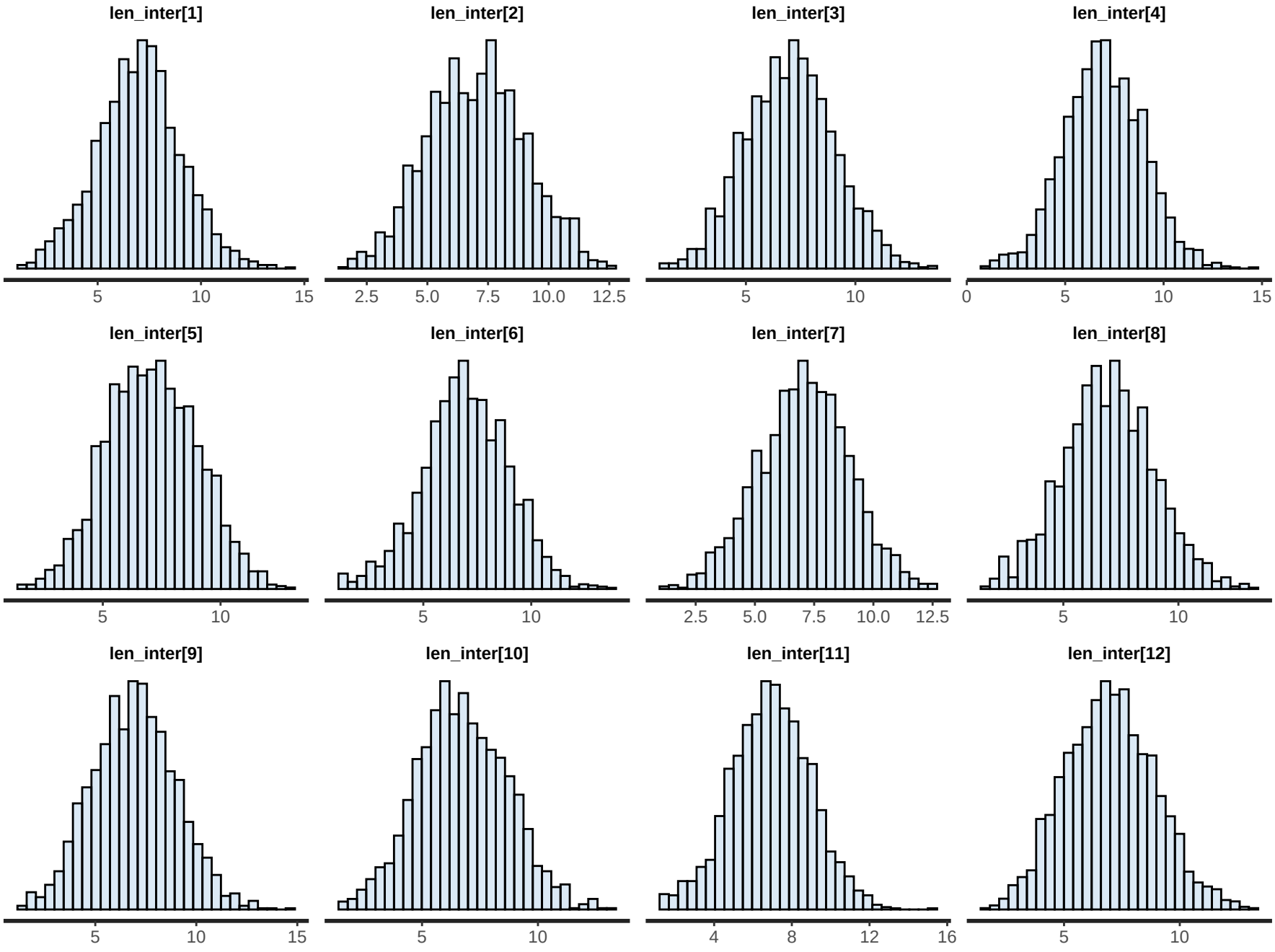

0.00
0.03
0.06
0.09
frac_hosp

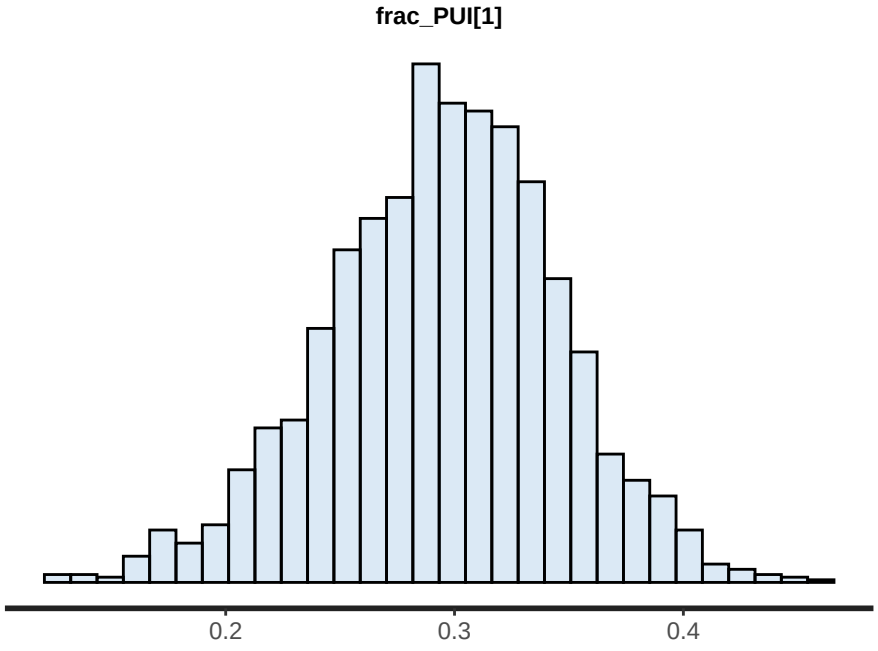

0.30
0.35
0.40
frac_icu

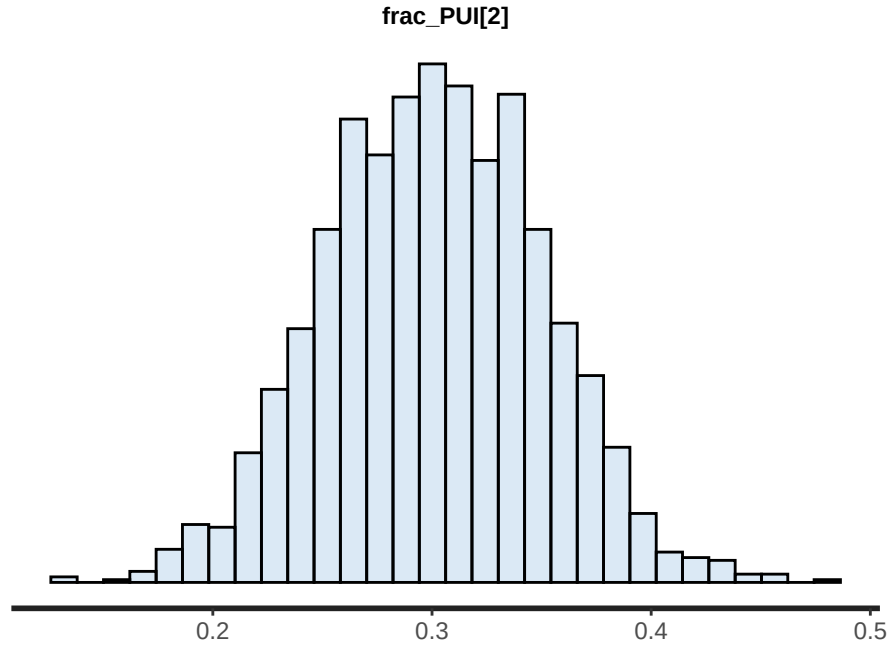

0.4
0.5
0.6
frac_mort

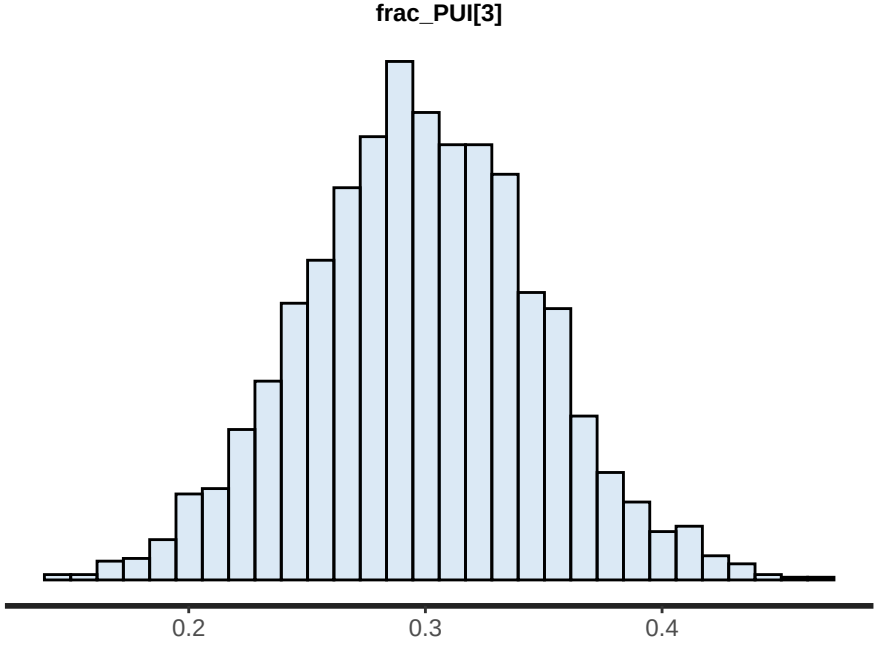

beta_multiplier[1]
0.5 1.0 1.5 2.0 2.5
beta_multiplier[2]
0.5 1.0 1.5
beta_multiplier[3]
0.5 1.0 1.5
beta_multiplier[4]
0.5 1.0 1.5 2.0
beta_multiplier[5]
0.5 1.0 1.5 2.0
beta_multiplier[6]
0.5 1.0 1.5
beta_multiplier[7]
0.5 1.0 1.5
beta_multiplier[8]
0.4 0.8 1.2 1.6
beta_multiplier[9]
0.5 1.0 1.5
beta_multiplier[10]
1.0 1.5 2.0
beta_multiplier[11]
0.5 1.0 1.5
beta_multiplier[12]
0.8 1.0 1.2

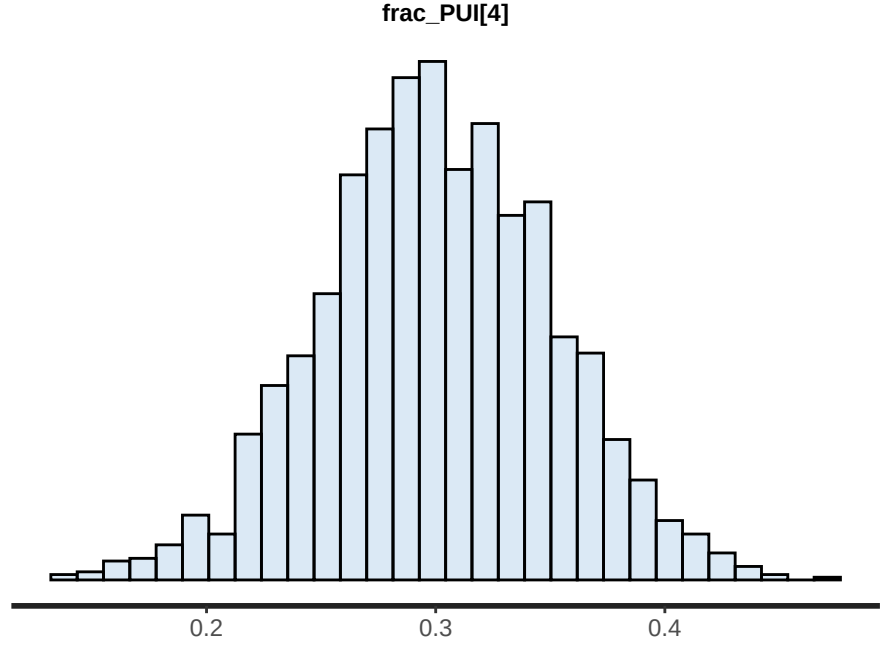

t_inter[1]
Jun 01
Jun 08
Jun 15
t_inter[2]
Jun 29
Jul 06
t_inter[3]
Jul 13
Jul 20
Jul 27
t_inter[4]
Jul 27
Aug 03
Aug 10
t_inter[5]
Aug 17
Aug 24
t_inter[6]
Aug 31
Sep 07
t_inter[7]
Sep 14
Sep 21
t_inter[8]
Sep 28
Oct 05
t_inter[9]
Oct 12
Oct 19
Oct 26
t_inter[10]
Oct 26
Nov 02
t_inter[11]
Nov 16
Nov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

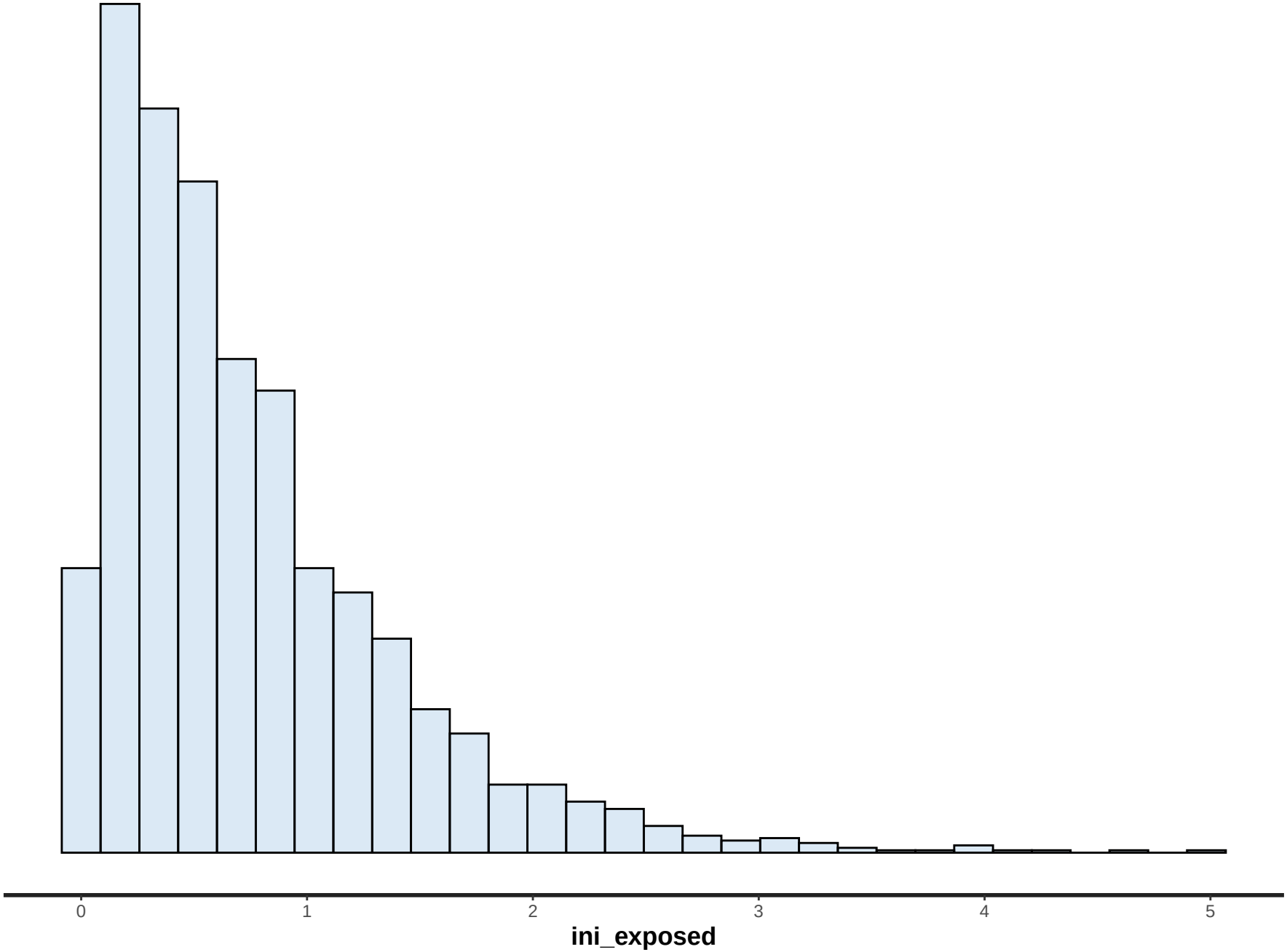

len_inter[1]
5
10
15
len_inter[2]
2.5
5.0
7.5
10.0
12.5
len_inter[3]
5
10
len_inter[4]
0
5
10
15
len_inter[5]
5
10
len_inter[6]
5
10
len_inter[7]
2.5
5.0
7.5
10.0
12.5
len_inter[8]
5
10
len_inter[9]
5
10
15
len_inter[10]
5
10
len_inter[11]
4
8
12
16
len_inter[12]
5
10

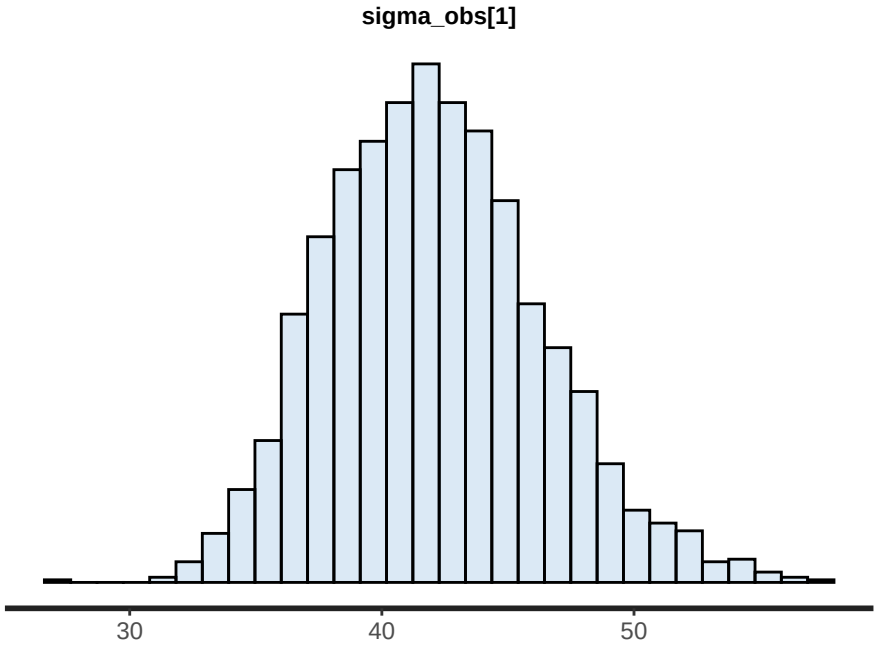

frac_PUI[1]
0.2
0.3
0.4

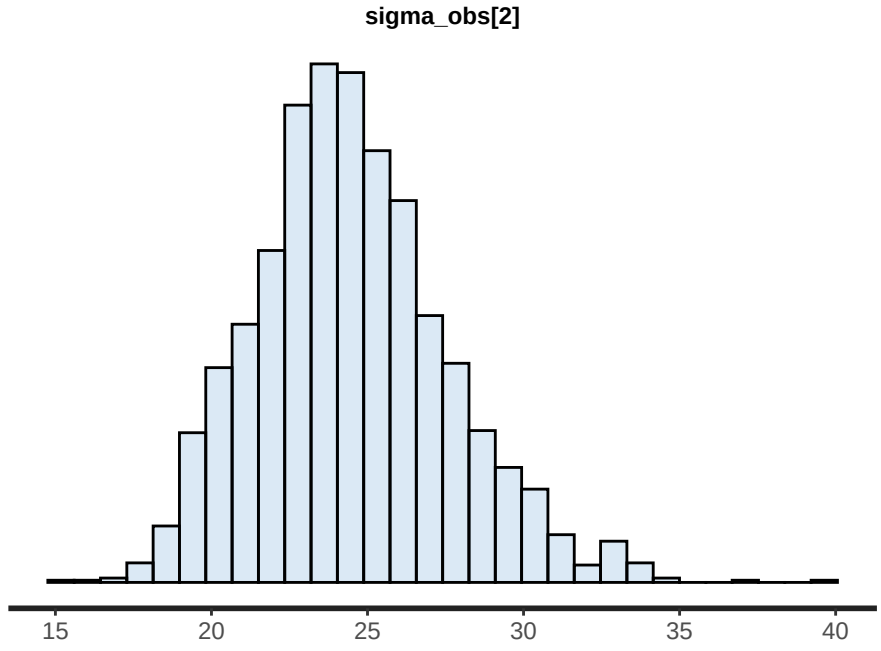

frac_PUI[2]
0.2
0.3
0.4
0.5

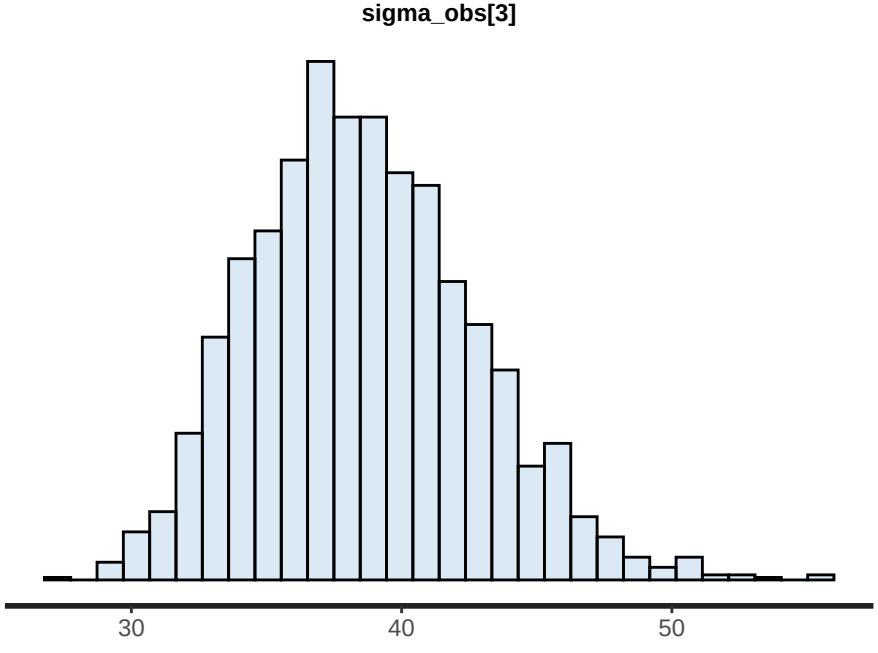

frac_PUI[3]
0.2
0.3
0.4

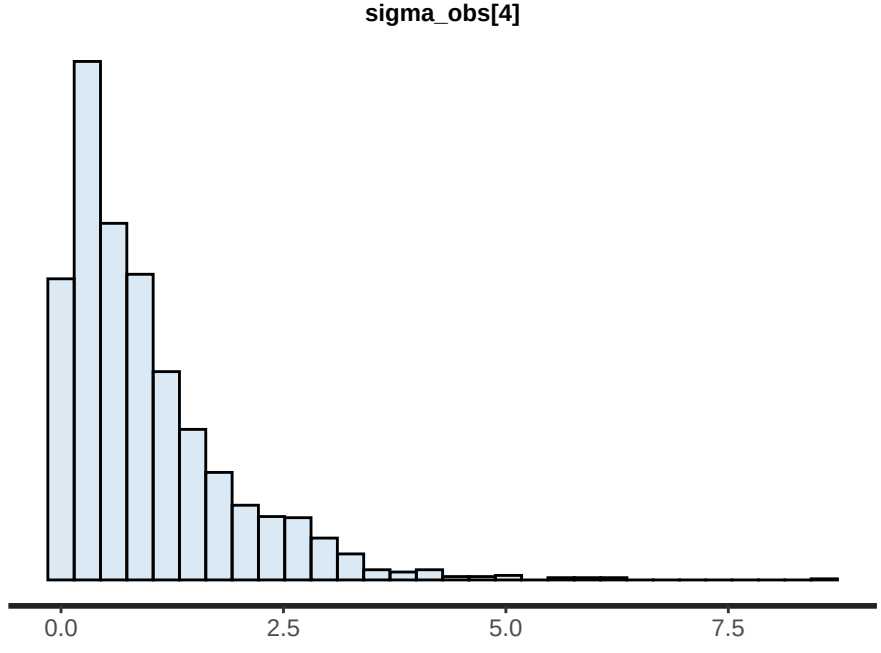

frac_PUI[4]
0.2
0.3
0.4


0
1
2
3
4
5
ini_exposed


sigma_obs[1]
30
40
50


sigma_obs[2]
15
20
25
30
35
40


sigma_obs[3]
30
40
50


sigma_obs[4]
0.0
2.5
5.0
7.5