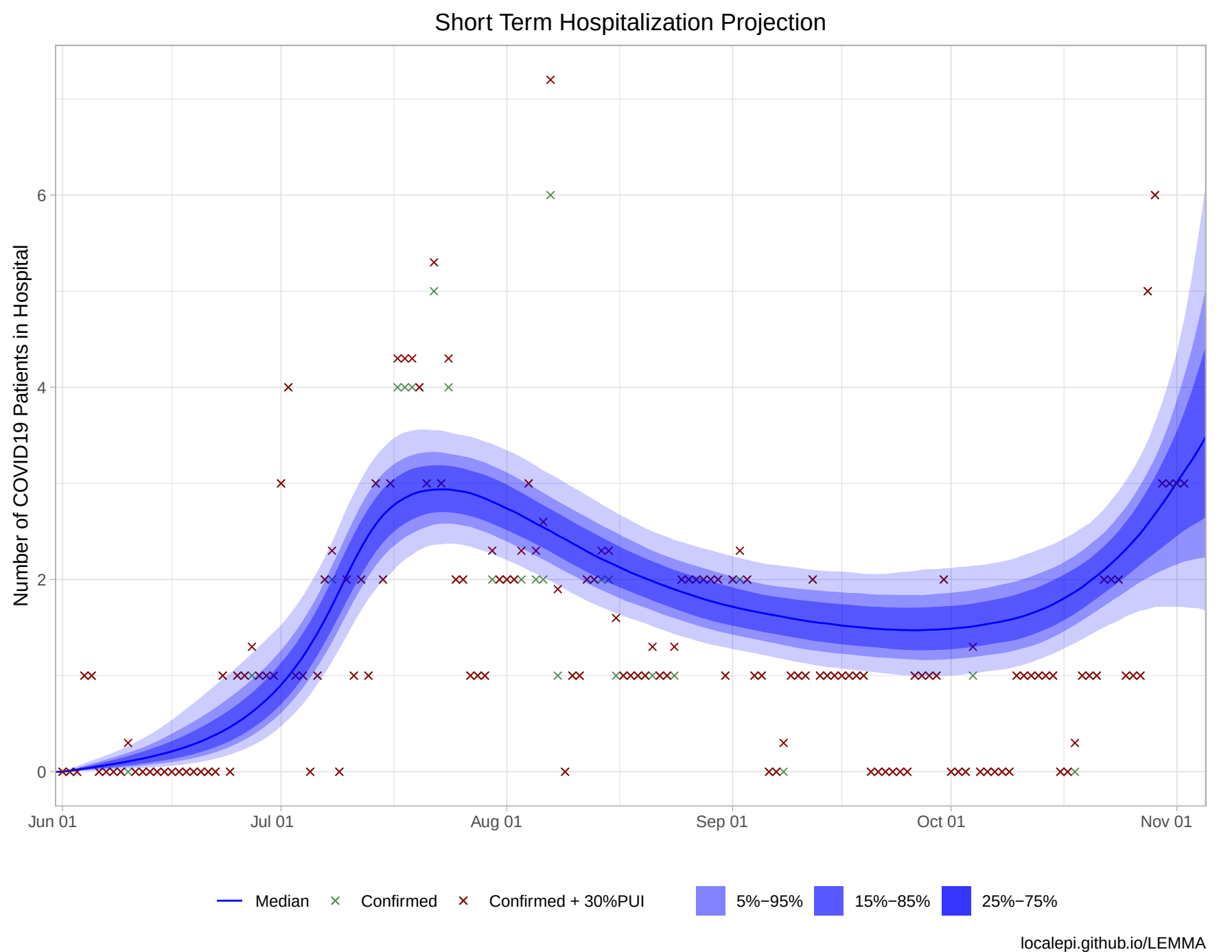
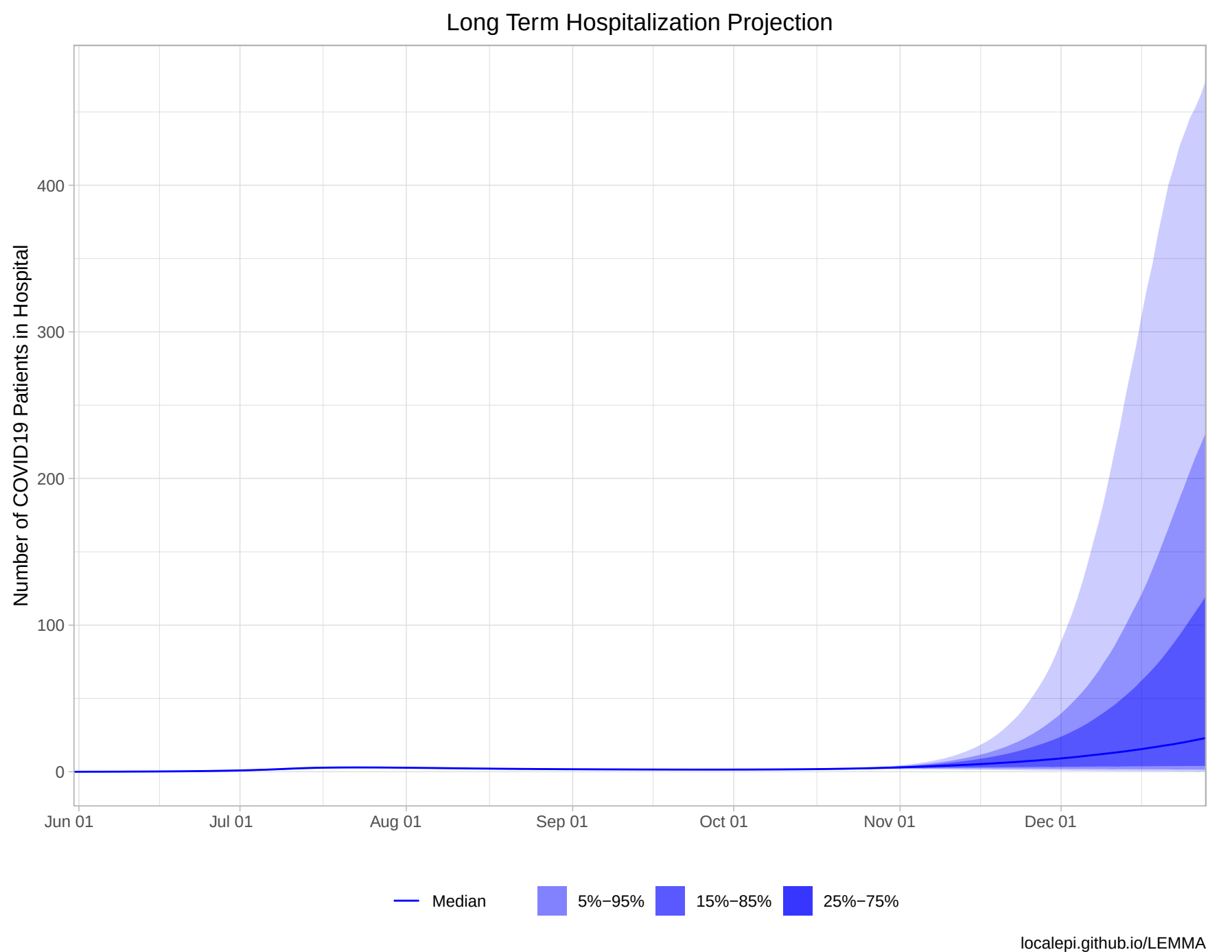
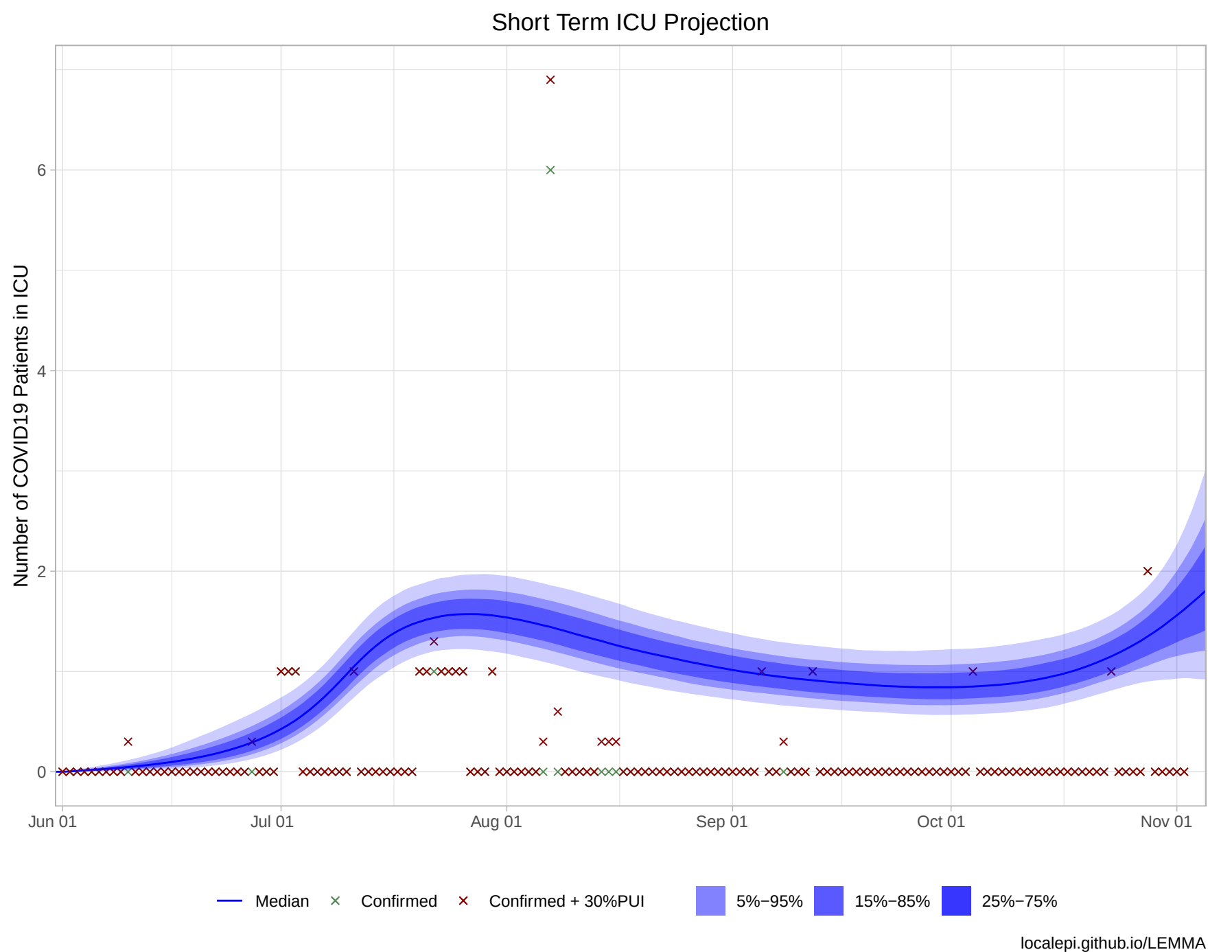
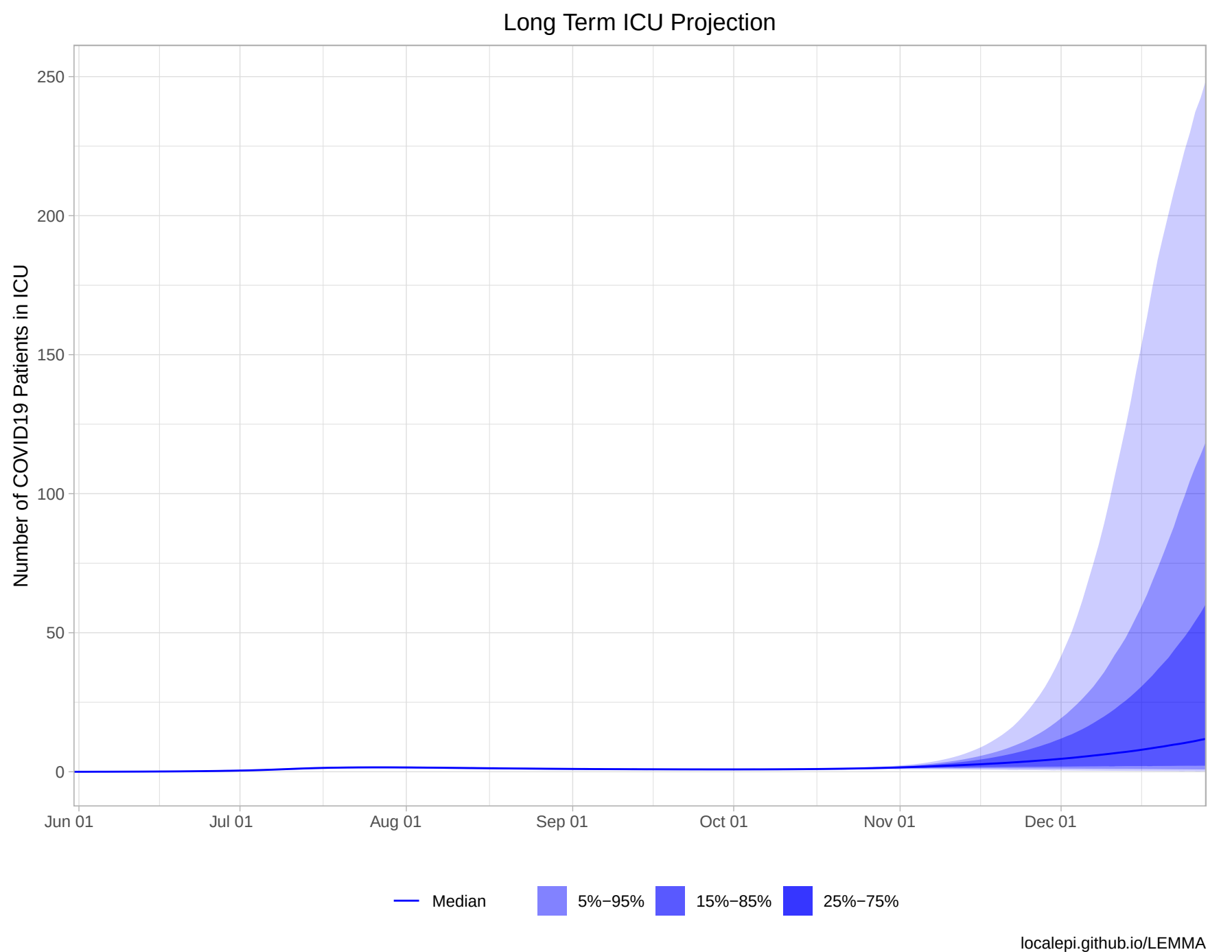
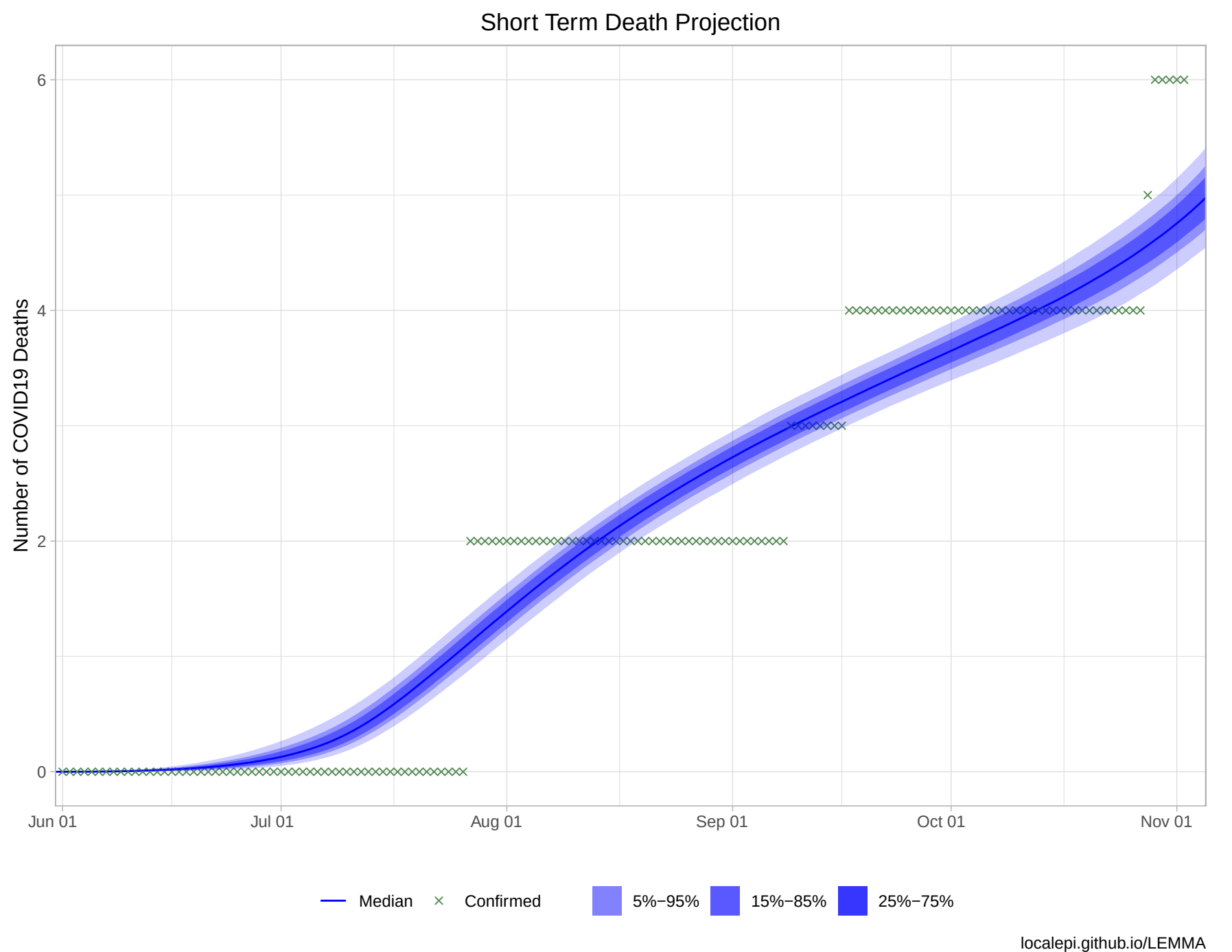
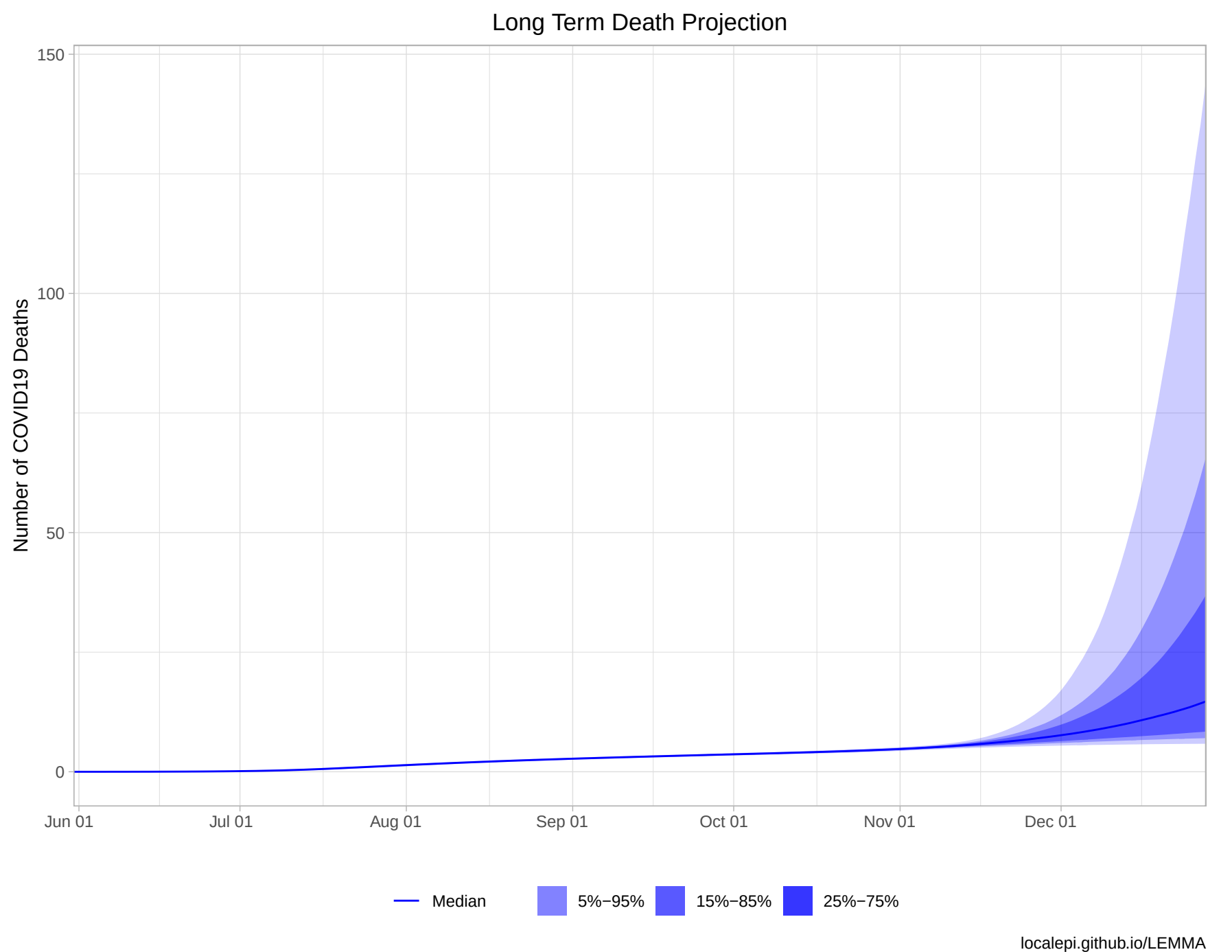

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
2
4
6
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

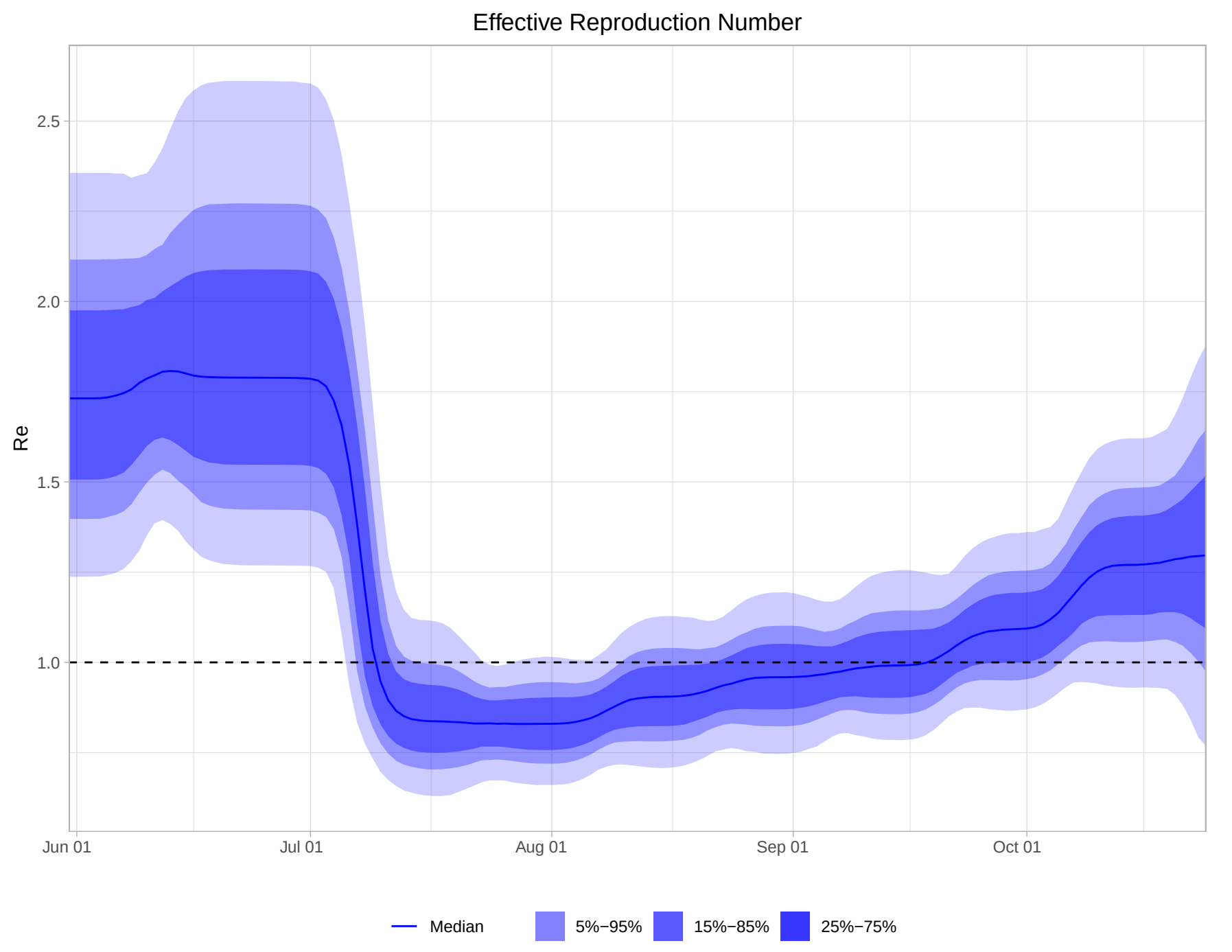

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
400
300
200
100
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
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 ICU Projection
Number of COVID19 Patients in ICU
250
200
150
100
50
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

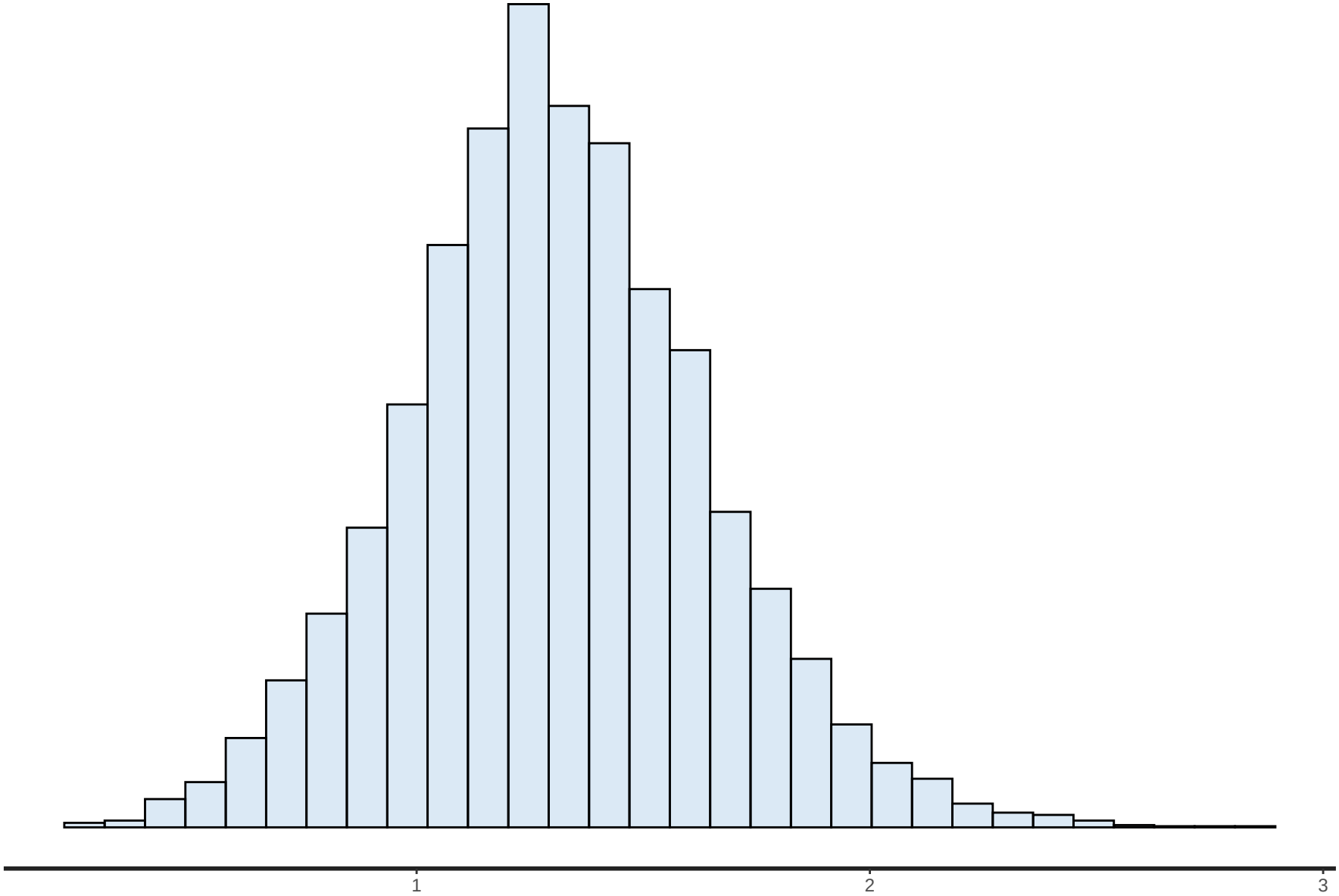

Short Term Death Projection
Number of COVID19 Deaths
6
4
2
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

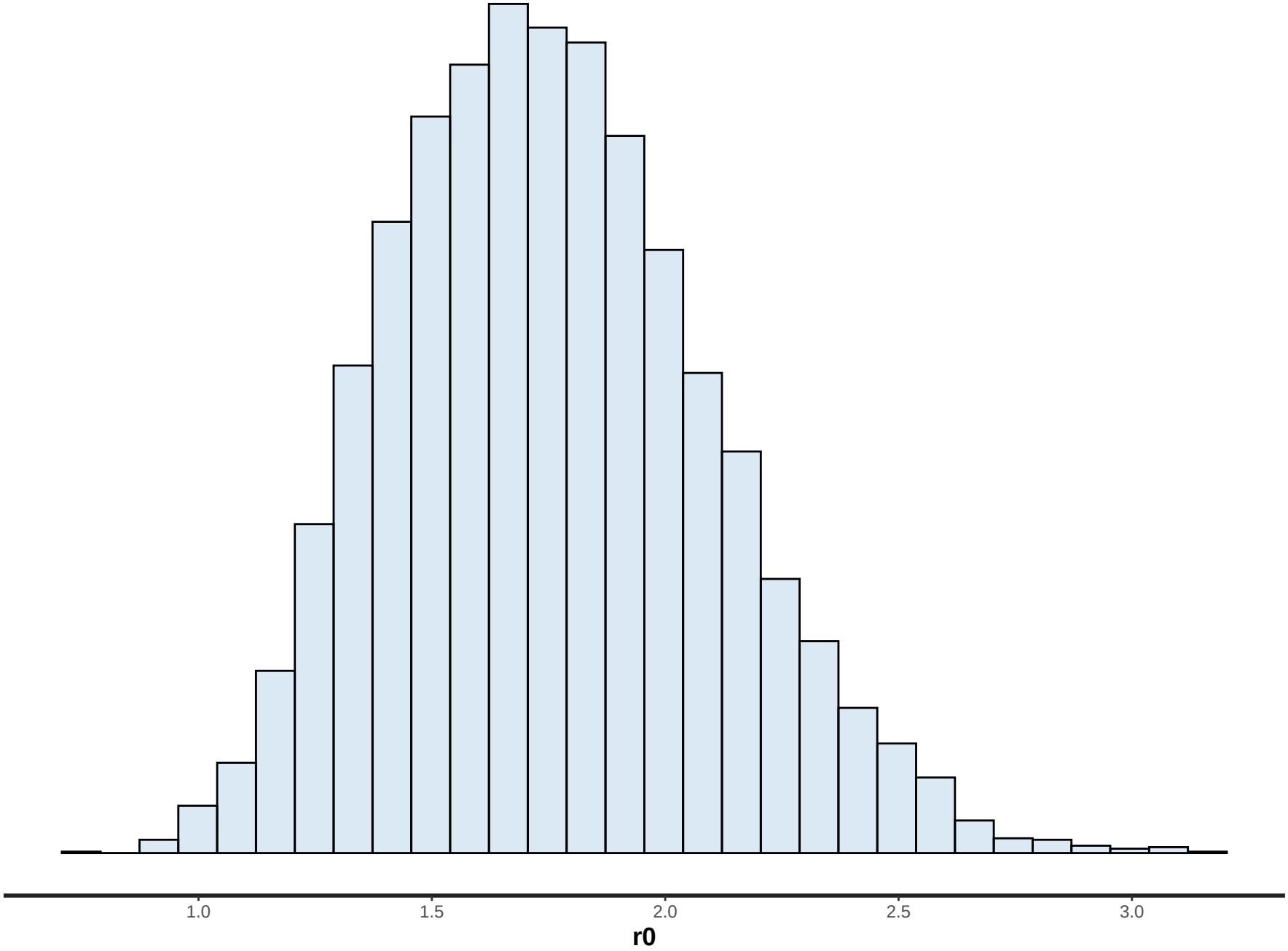

Long Term Death Projection
Number of COVID19 Deaths
150
100
50
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

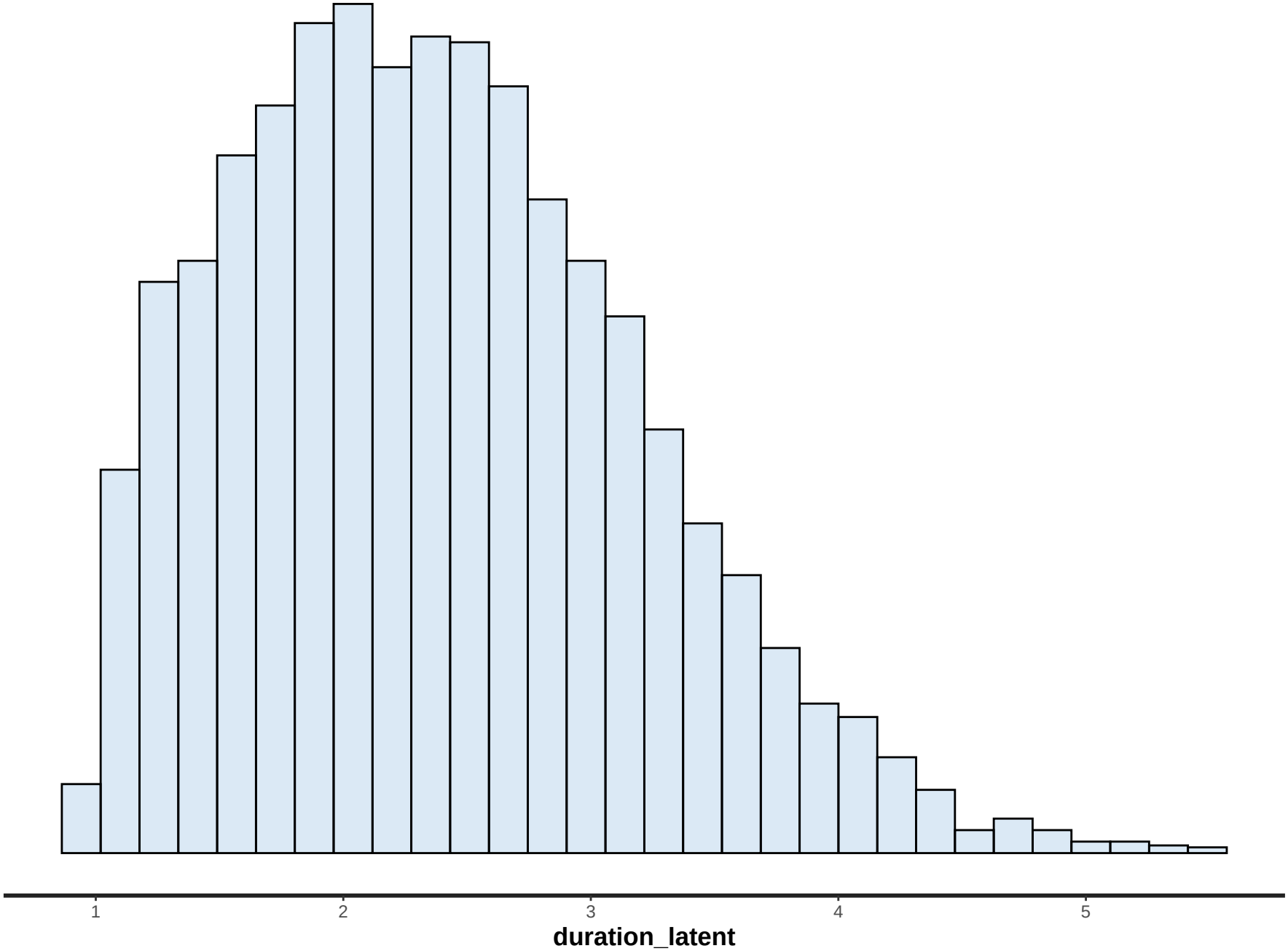

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Median
5%−95%
15%−85%
25%−75%

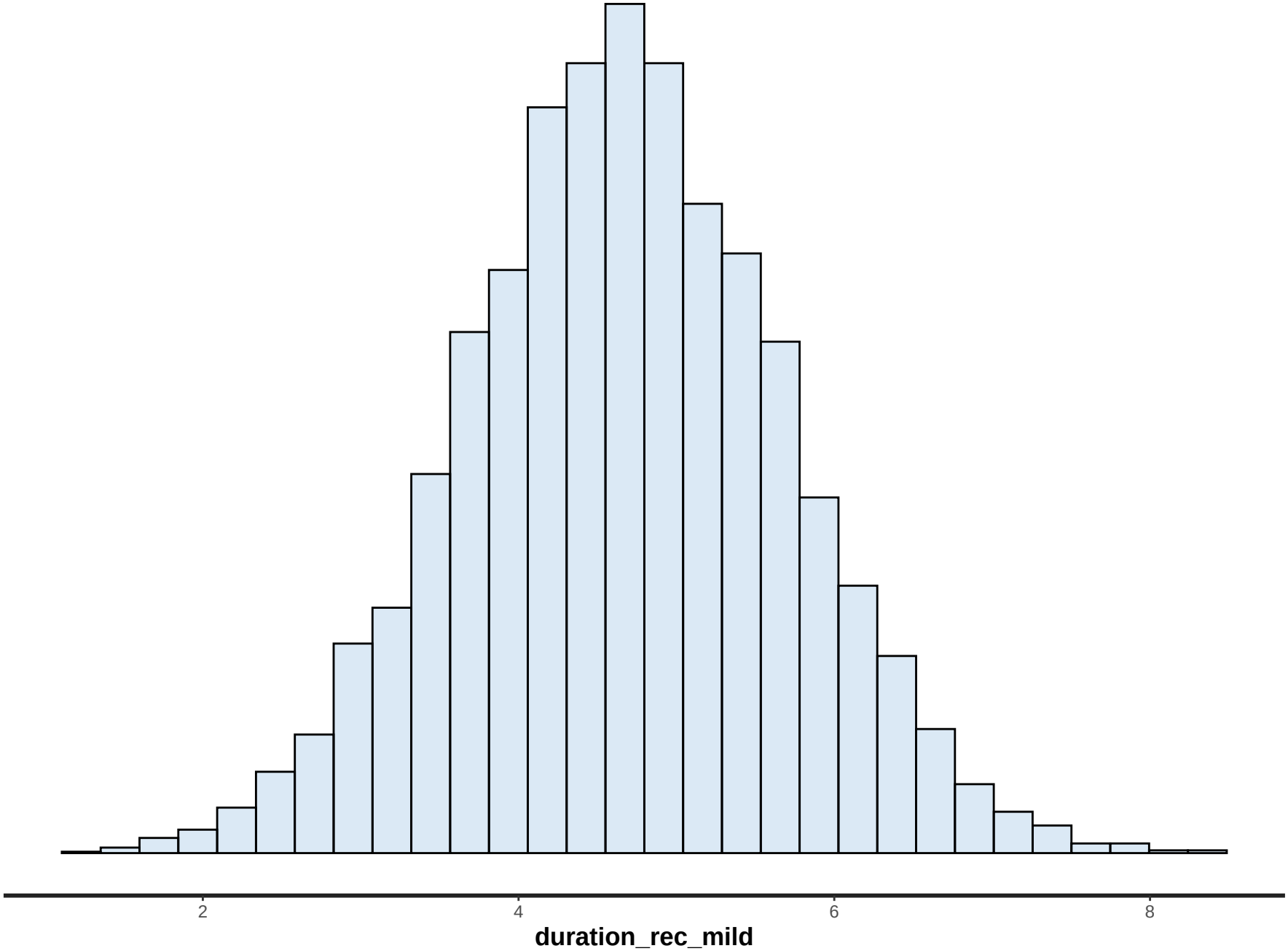
Rt as of 2020−10−24

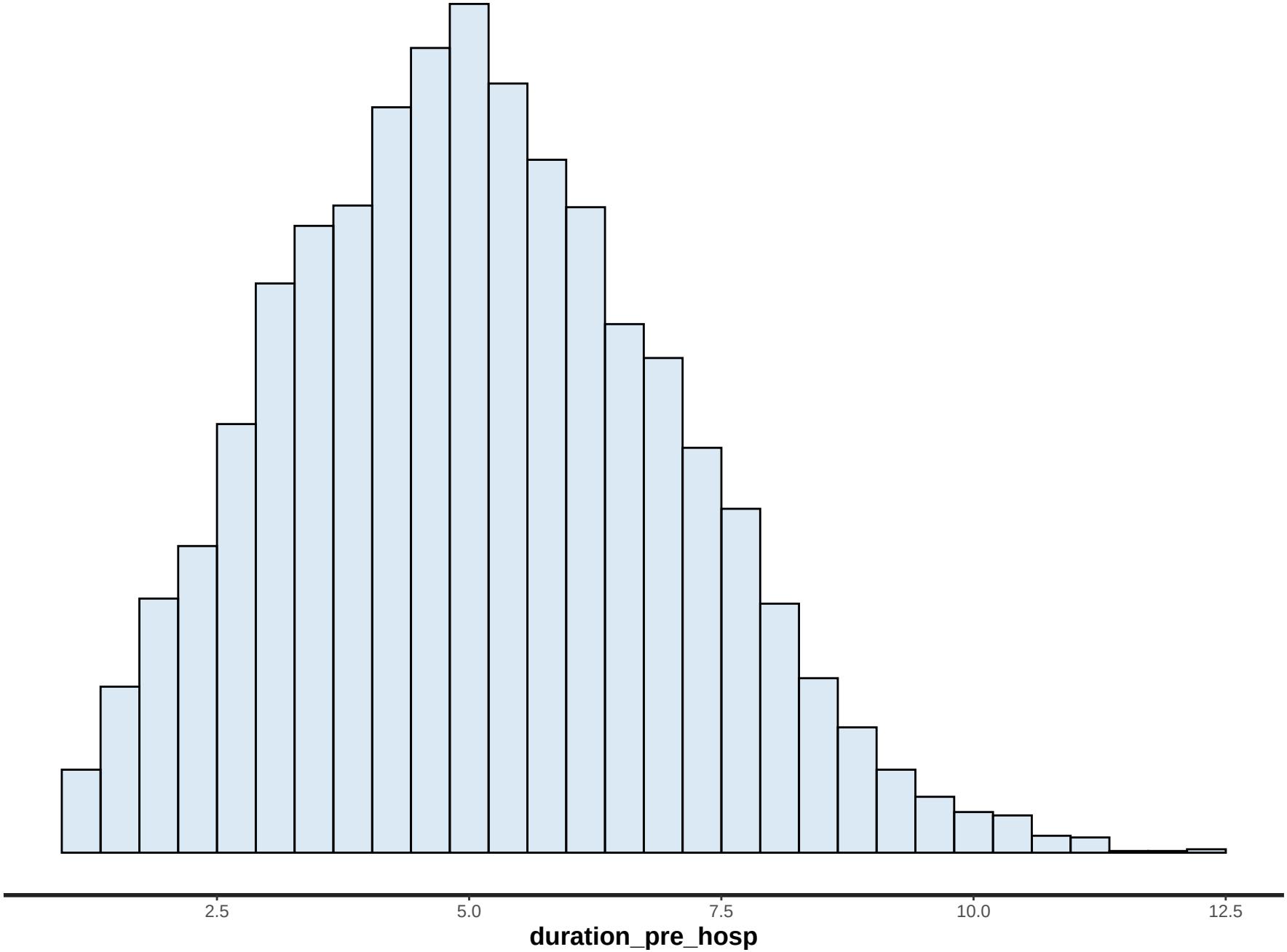
5%	10%	25%	50%	75%	90%	95%
0.77	0.89	1.09	1.30	1.52	1.74	1.88

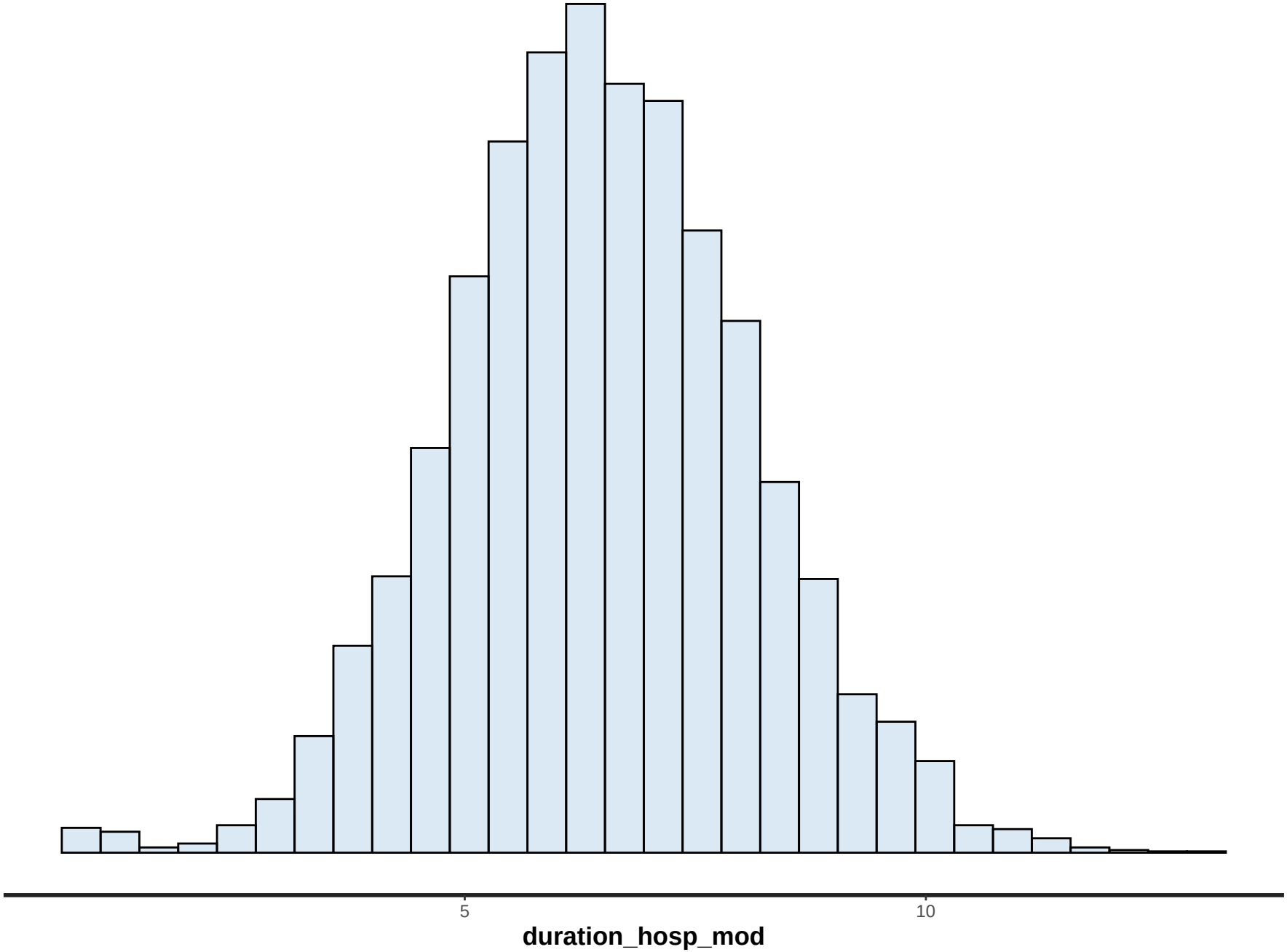


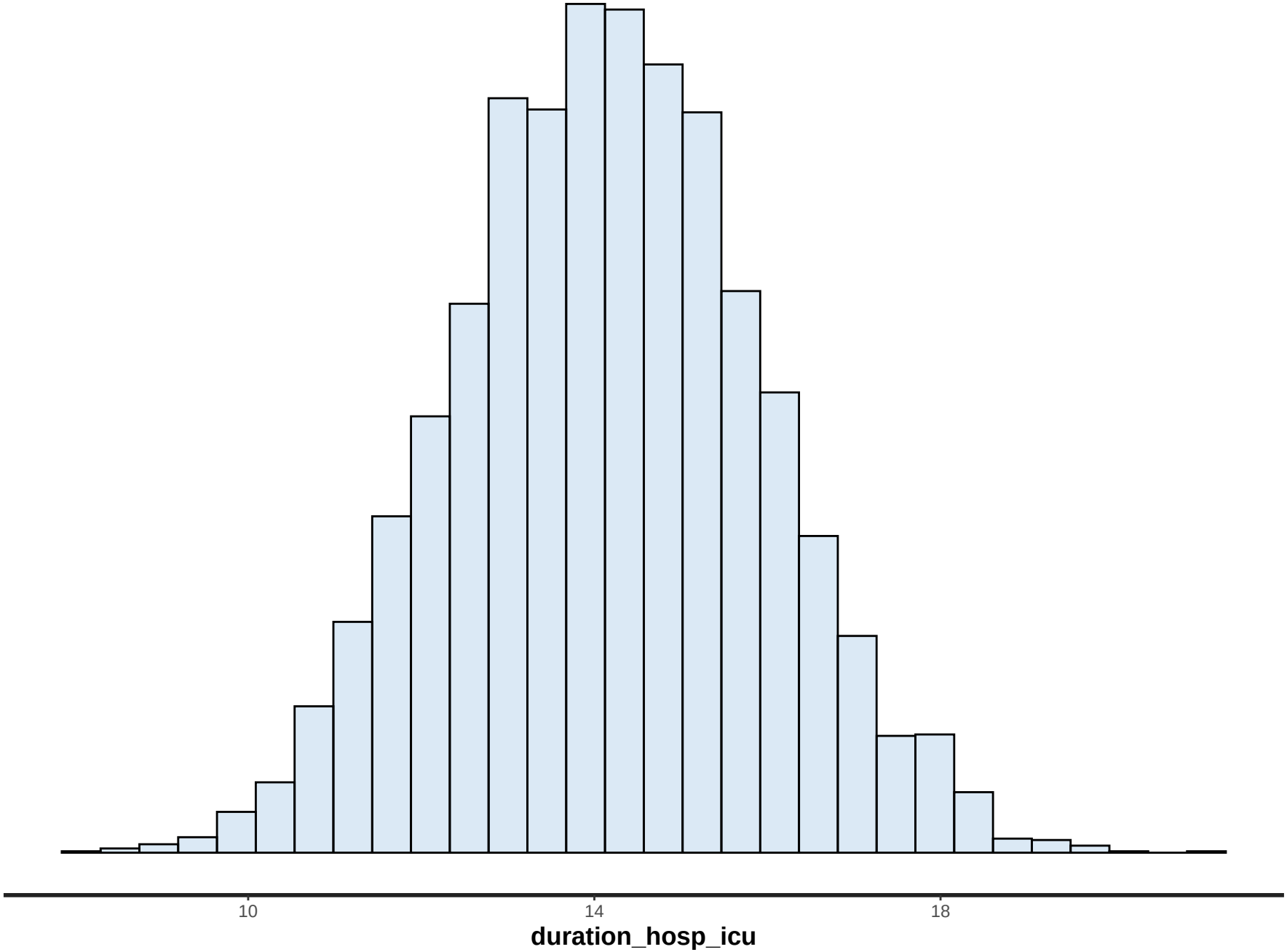

1.0
1.5
2.0
2.5
3.0
r0

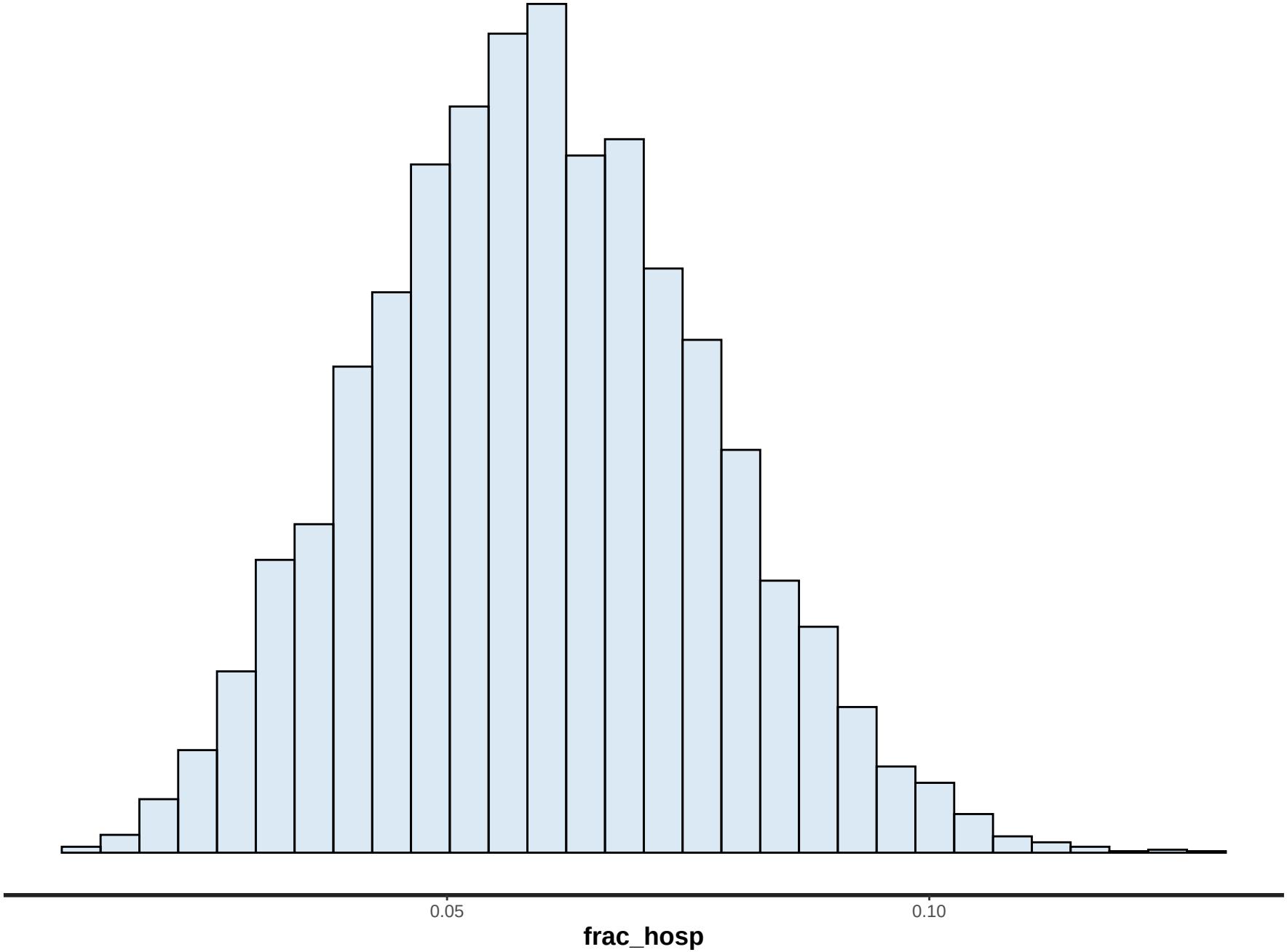

1
2
3
4
5
duration_latent

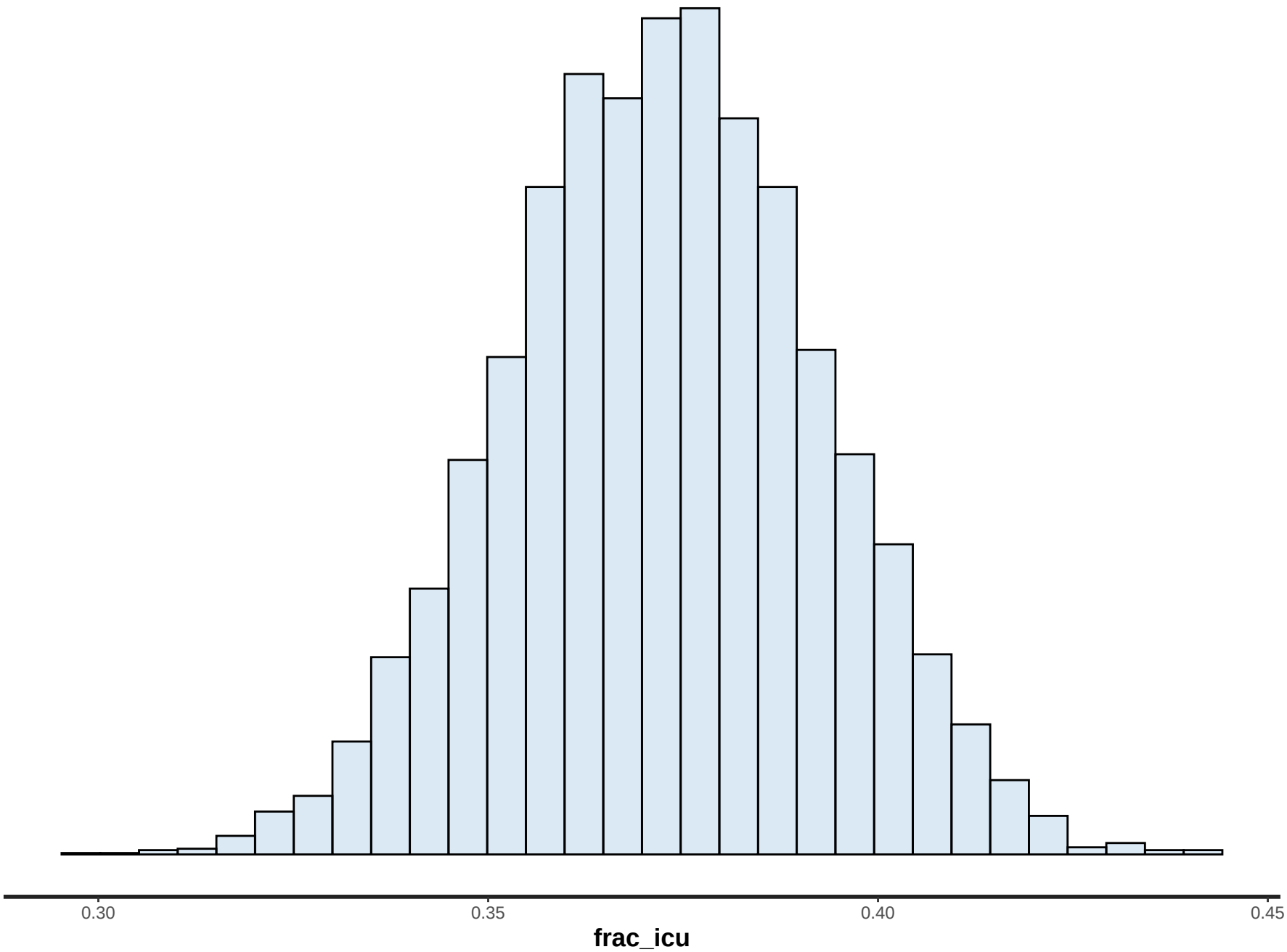

2
4
6
8
duration_rec_mild

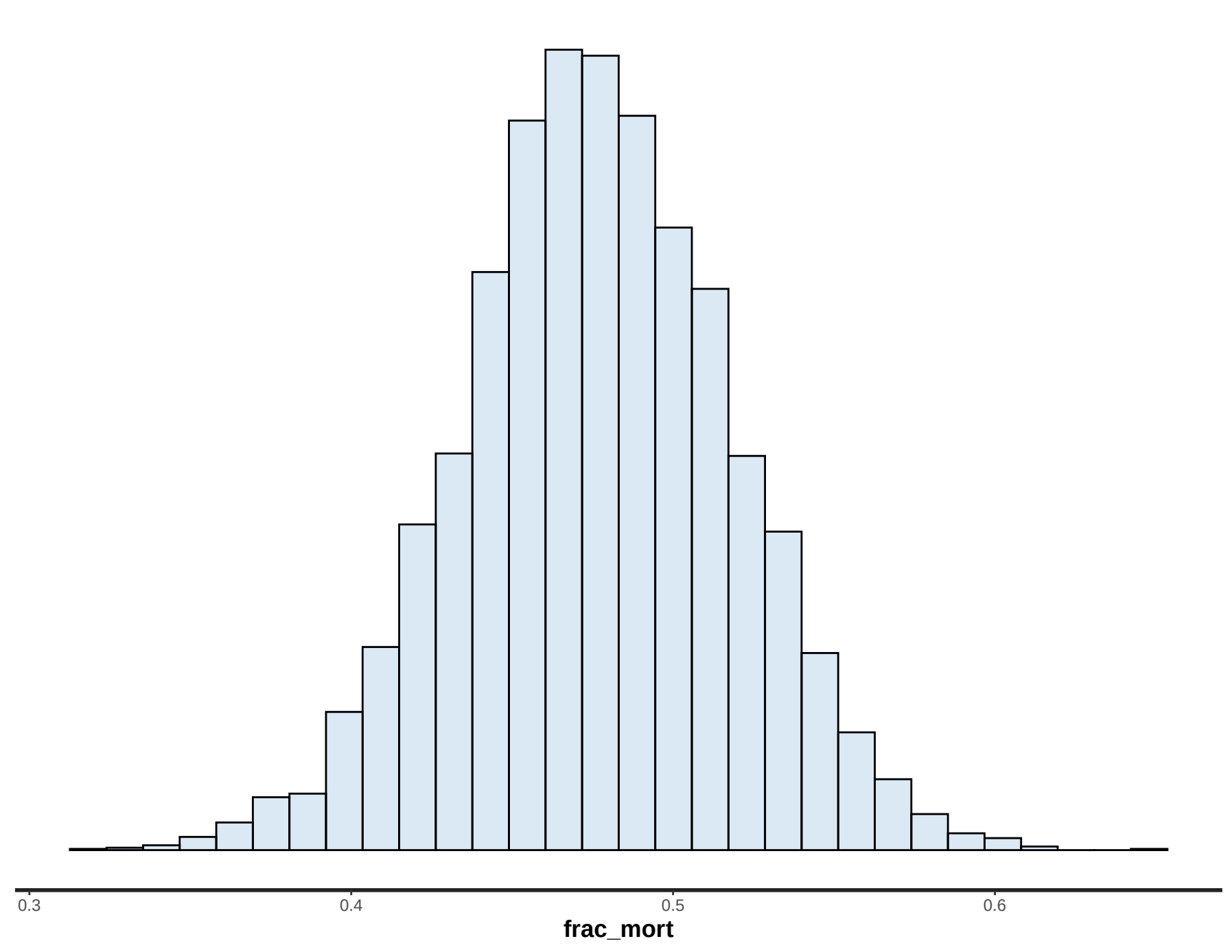

2.5
5.0
7.5
10.0
12.5
duration_pre_hosp

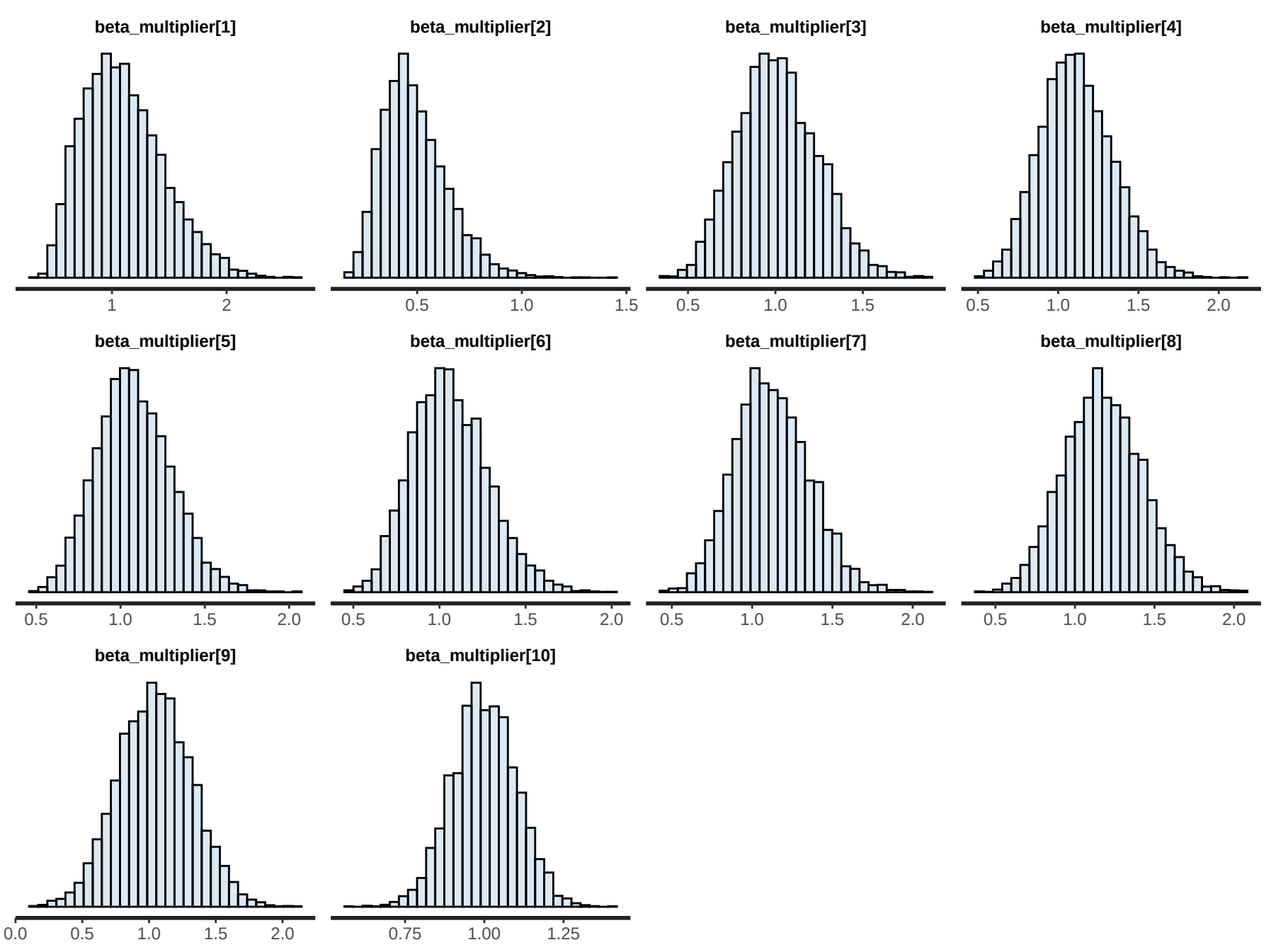

5
10
duration_hosp_mod

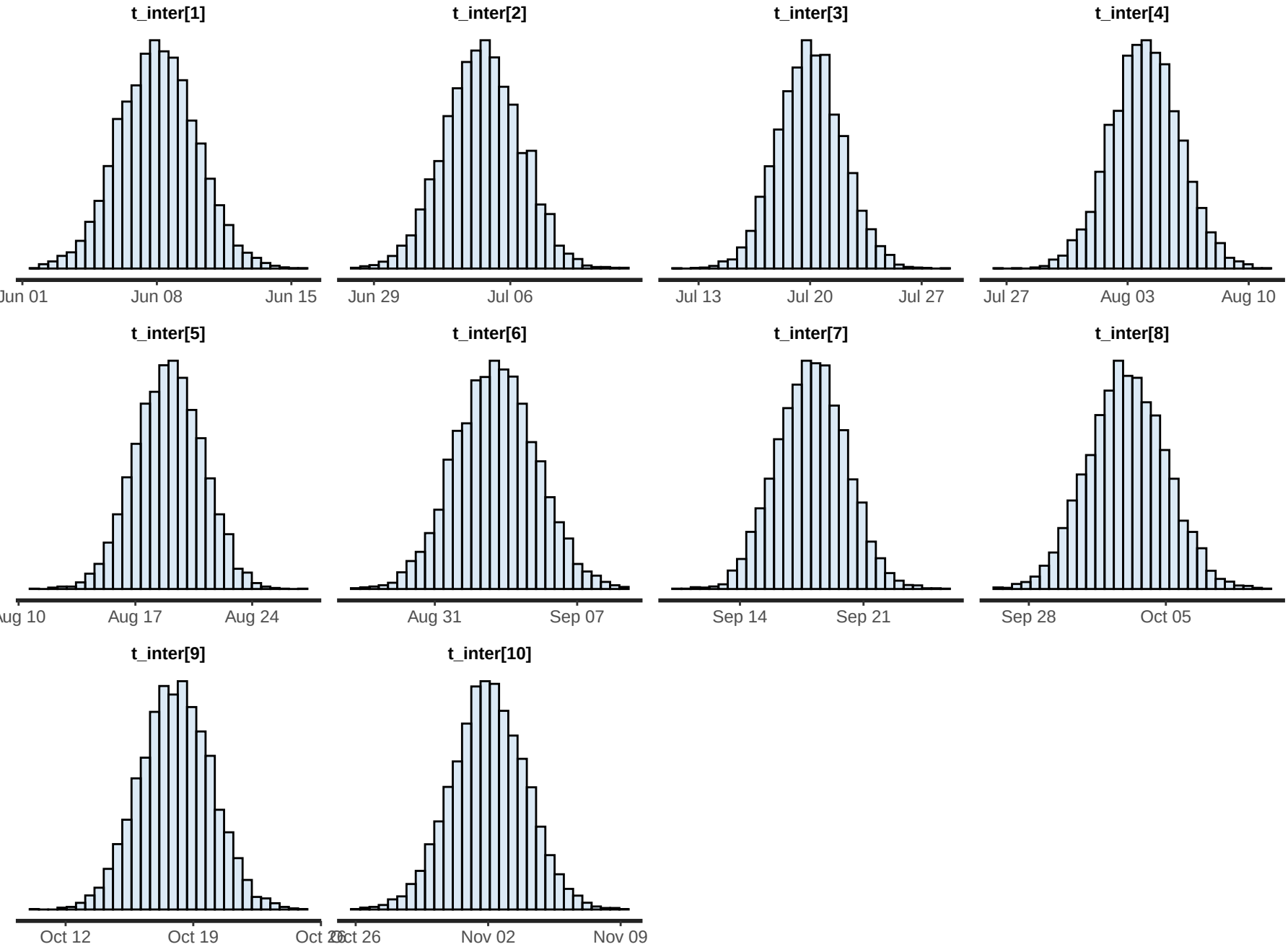

10
14
18
duration_hosp_icu

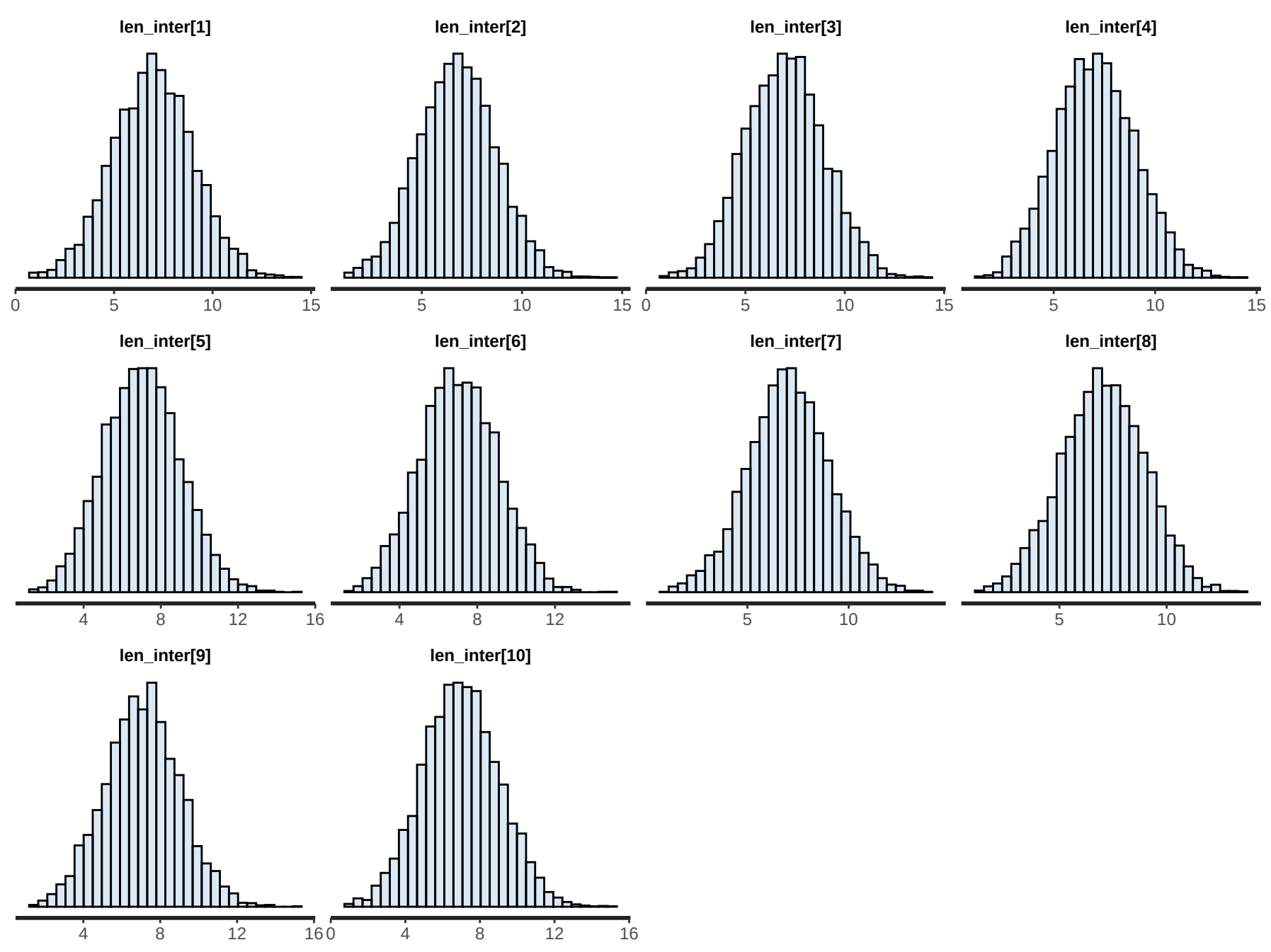

0.05
0.10
frac_hosp

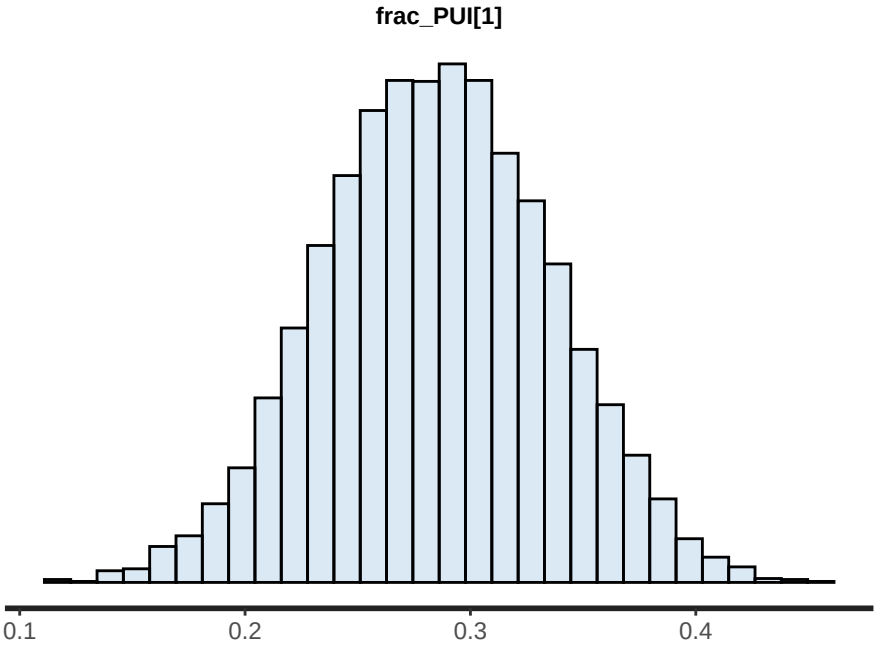

0.30
0.35
0.40
0.45
frac_icu

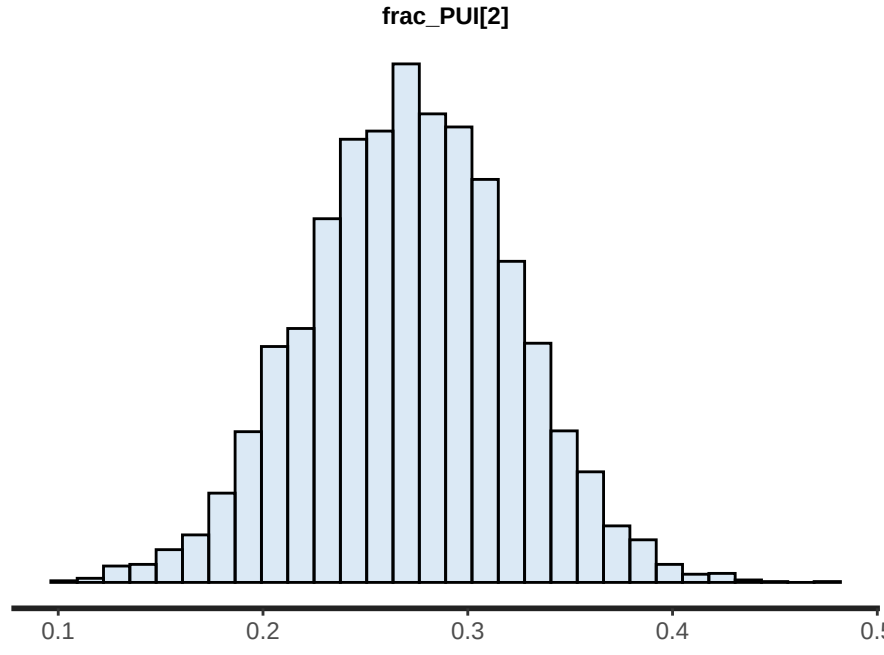

0.3
0.4
0.5
0.6
frac_mort

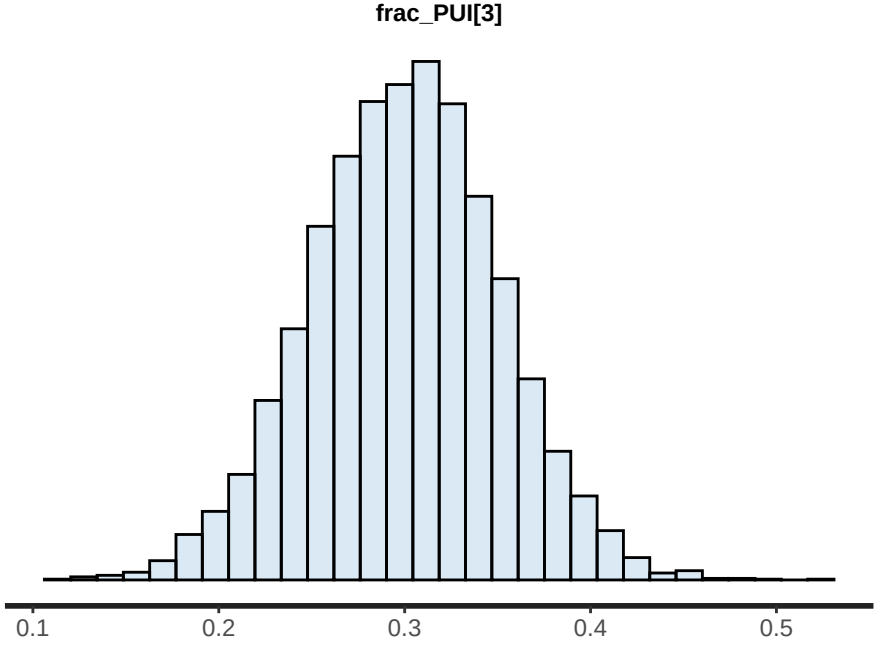

beta_multiplier[1]
1
2
beta_multiplier[2]
0.5
1.0
1.5
beta_multiplier[3]
0.5
1.0
1.5
beta_multiplier[4]
0.5
1.0
1.5
2.0
beta_multiplier[5]
0.5
1.0
1.5
2.0
beta_multiplier[6]
0.5
1.0
1.5
2.0
beta_multiplier[7]
0.5
1.0
1.5
2.0
beta_multiplier[8]
0.5
1.0
1.5
2.0
beta_multiplier[9]
0.0
0.5
1.0
1.5
2.0
beta_multiplier[10]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

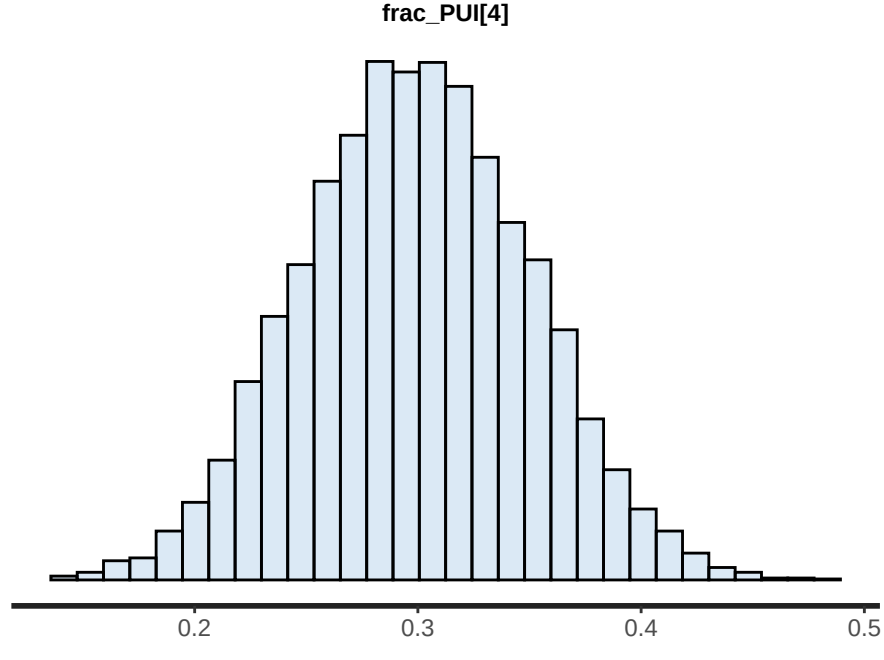

t_inter[1]
Jun 01
Jun 08
Jun 15
t_inter[2]
Jun 29
Jul 06
t_inter[3]
Jul 13
Jul 20
Jul 27
t_inter[4]
Jul 27
Aug 03
Aug 10
t_inter[5]
Aug 10
Aug 17
Aug 24
t_inter[6]
Aug 31
Sep 07
t_inter[7]
Sep 14
Sep 21
t_inter[8]
Sep 28
Oct 05
t_inter[9]
Oct 12
Oct 19
t_inter[10]
Oct 26
Nov 02
Nov 09

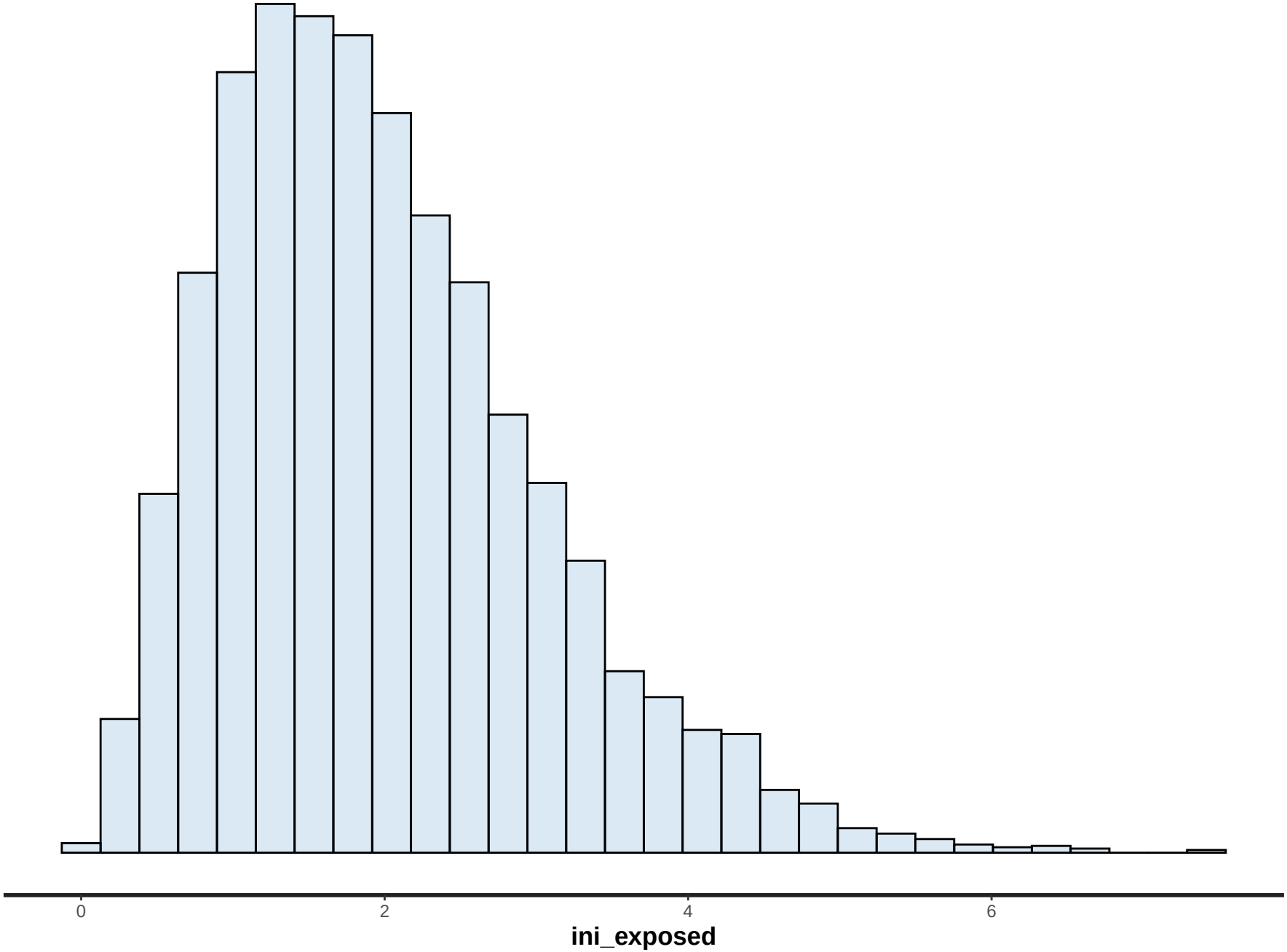

len_inter[1]
0
5
10
15
len_inter[2]
5
10
15
len_inter[3]
0
5
10
15
len_inter[4]
5
10
15
len_inter[5]
4
8
12
16
len_inter[6]
4
8
12
len_inter[7]
5
10
len_inter[8]
5
10
len_inter[9]
4
8
12
16
len_inter[10]
0
4
8
12
16

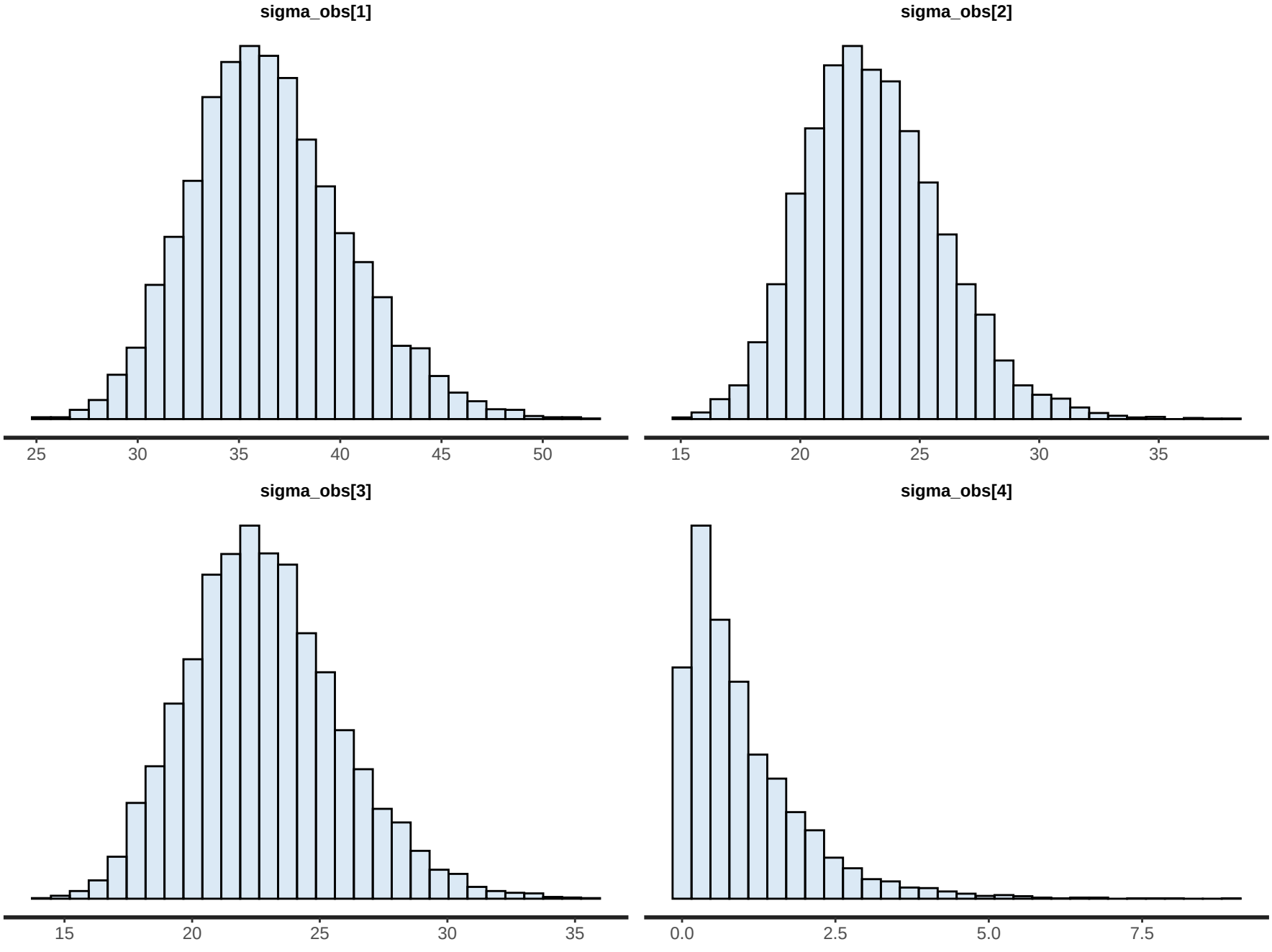

frac_PUI[1]
0.1
0.2
0.3
0.4


frac_PUI[2]
0.1
0.2
0.3
0.4
0.5


frac_PUI[3]
0.1
0.2
0.3
0.4
0.5


frac_PUI[4]
0.2
0.3
0.4
0.5


0
2
4
6
ini_exposed


sigma_obs[1]
25
30
35
40
45
50
sigma_obs[2]
15
20
25
30
35
sigma_obs[3]
15
20
25
30
35
sigma_obs[4]
0.0
2.5
5.0
7.5