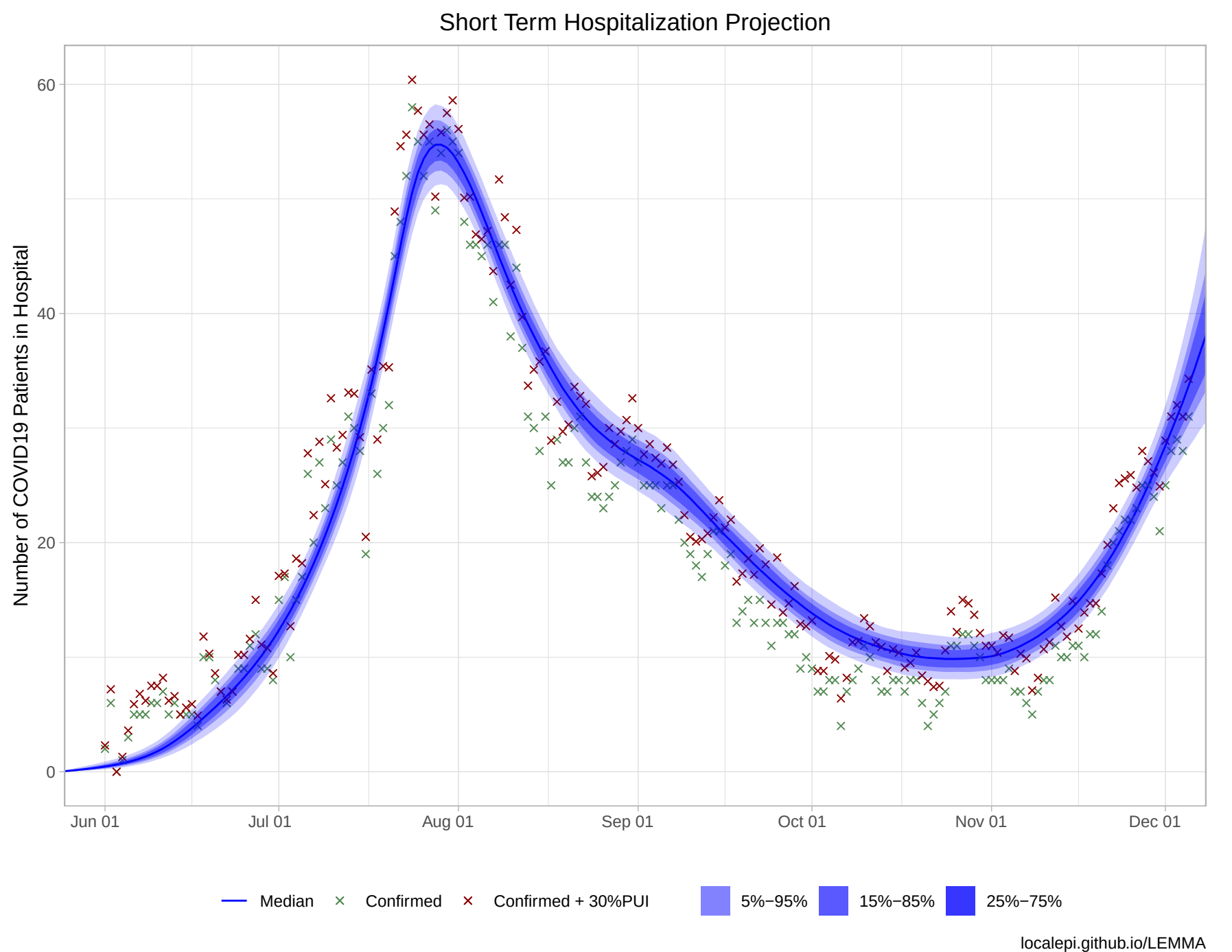
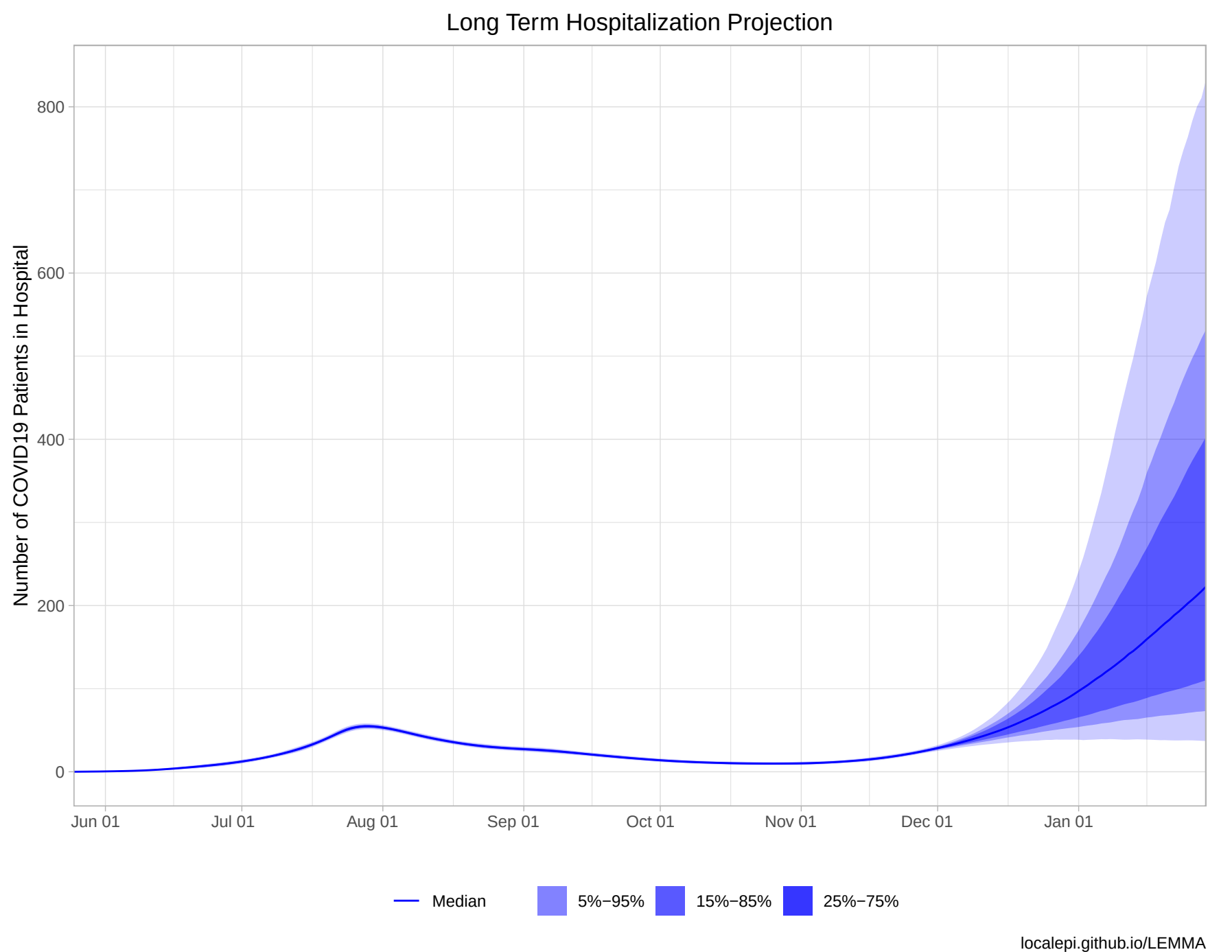
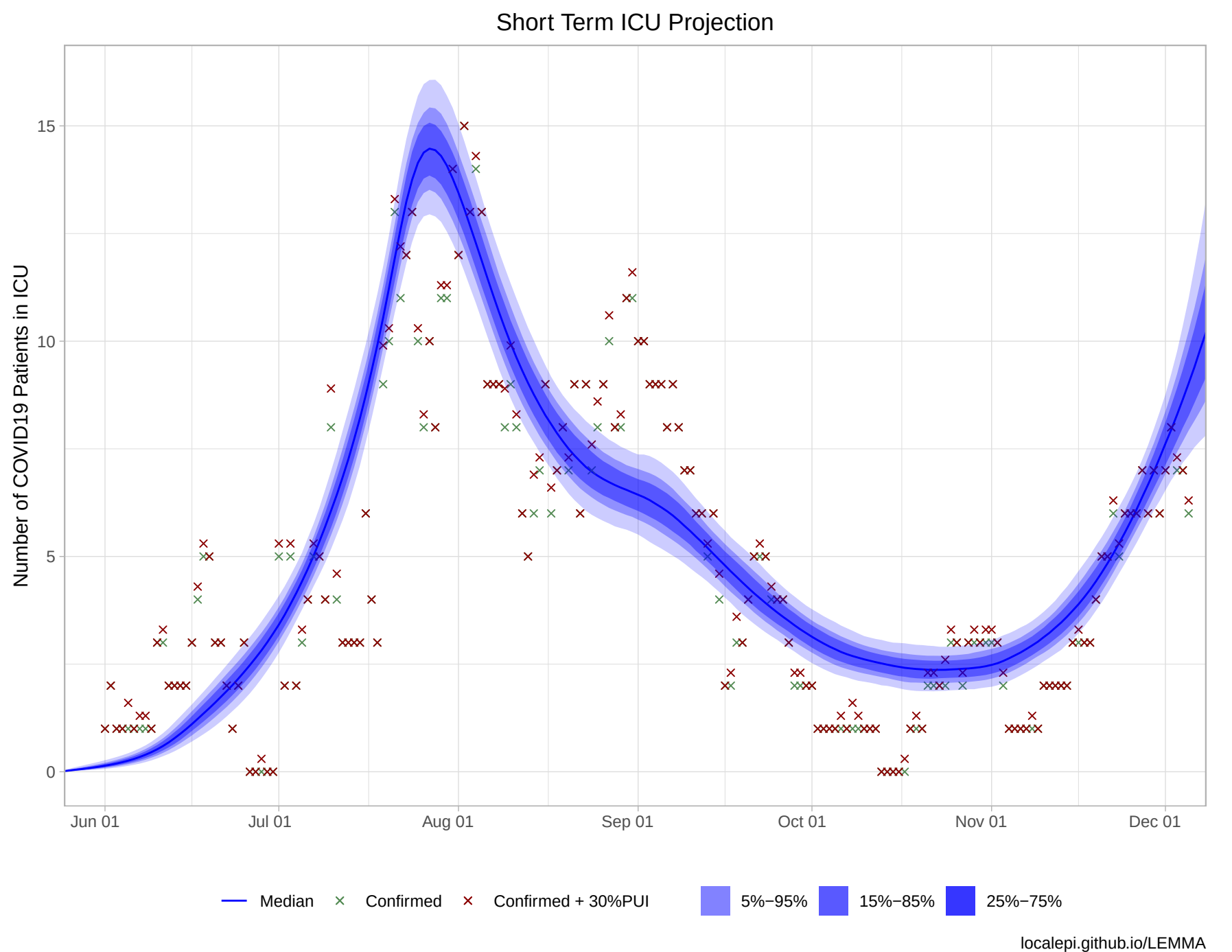
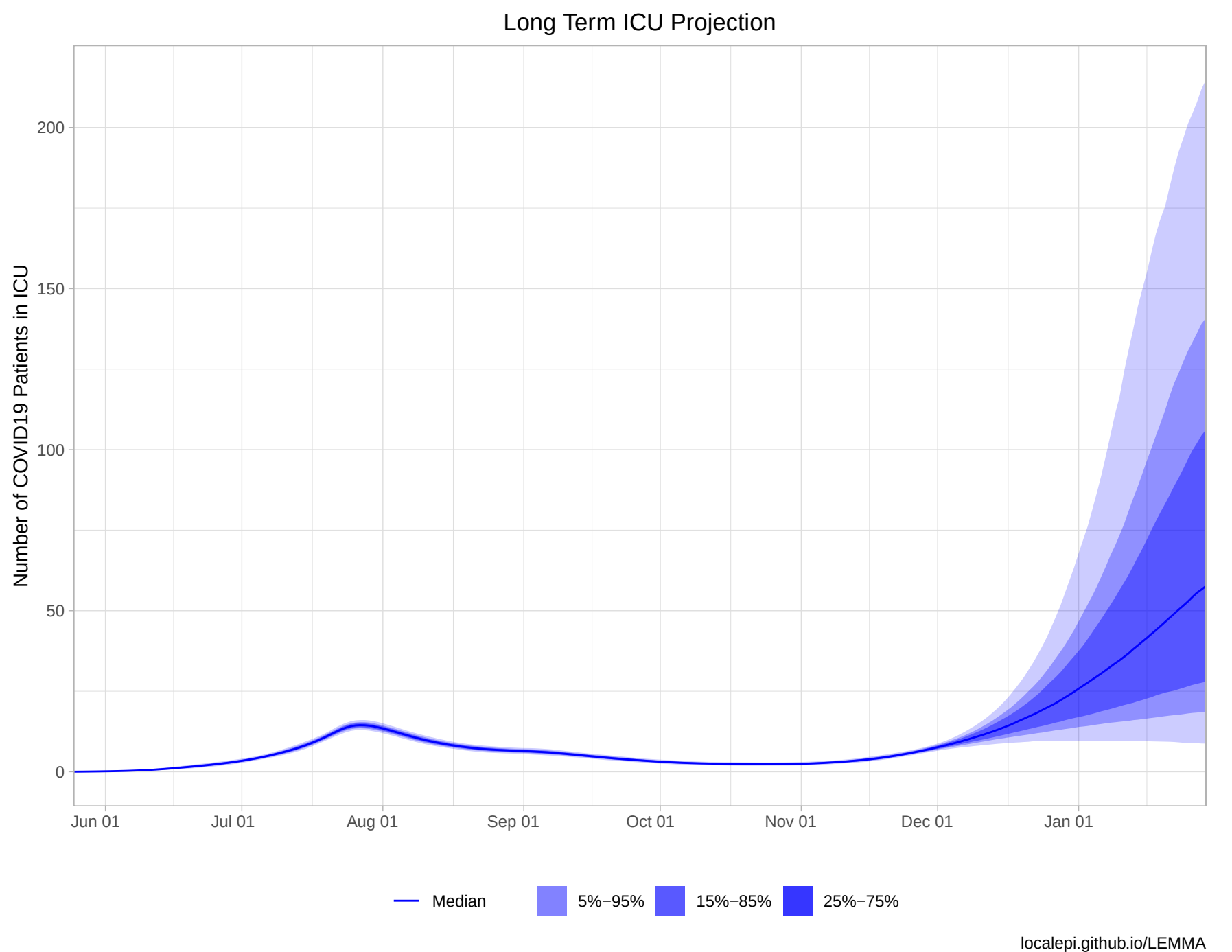
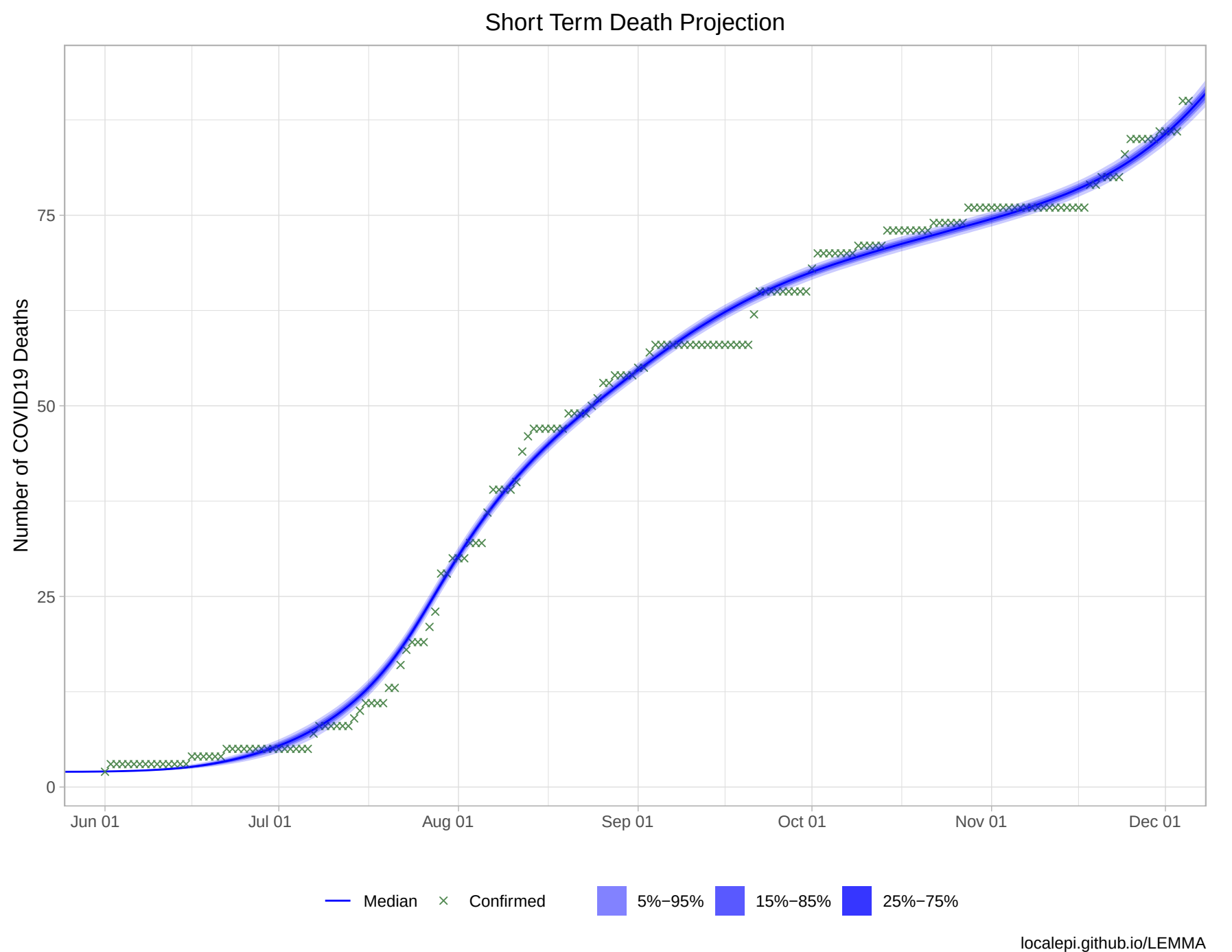
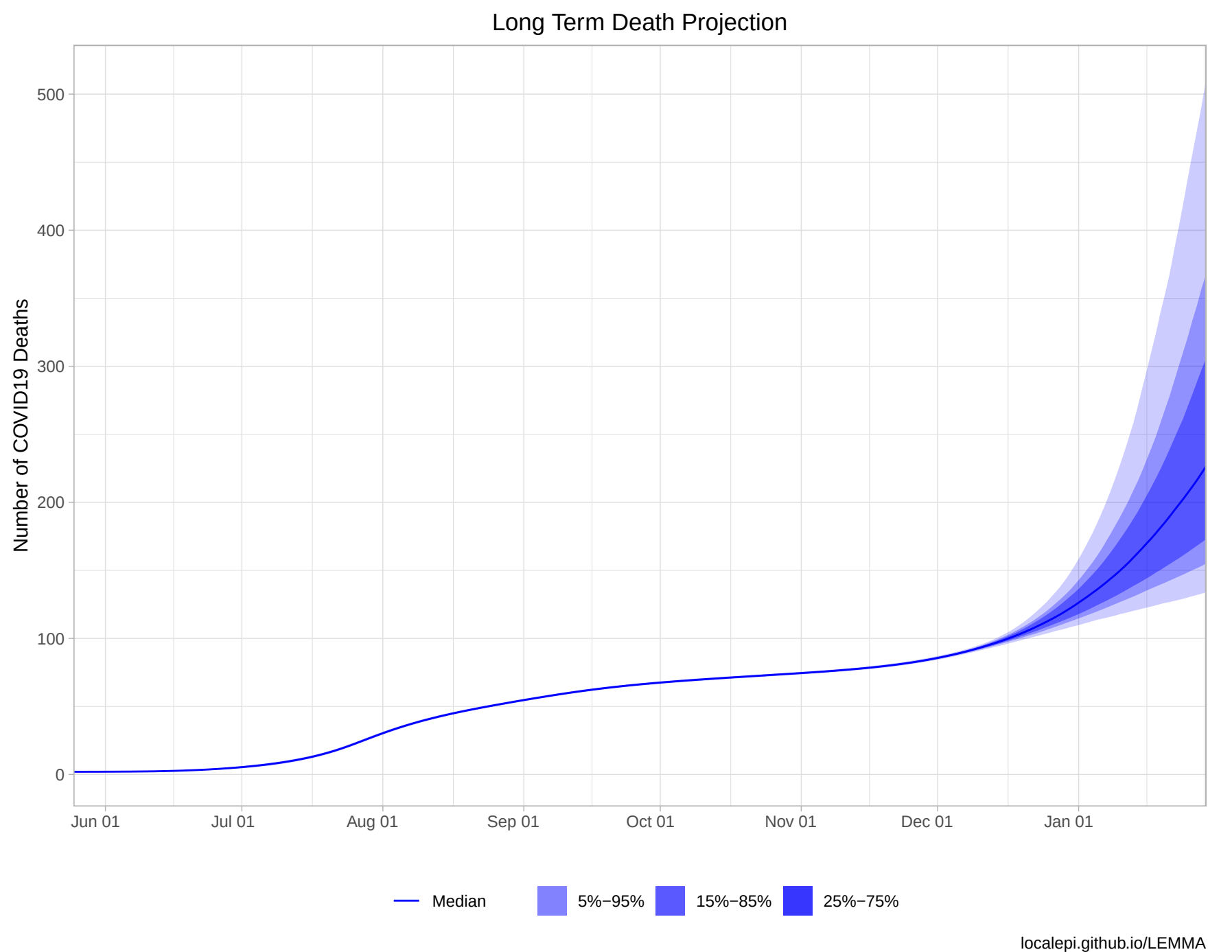

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
60
40
20
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

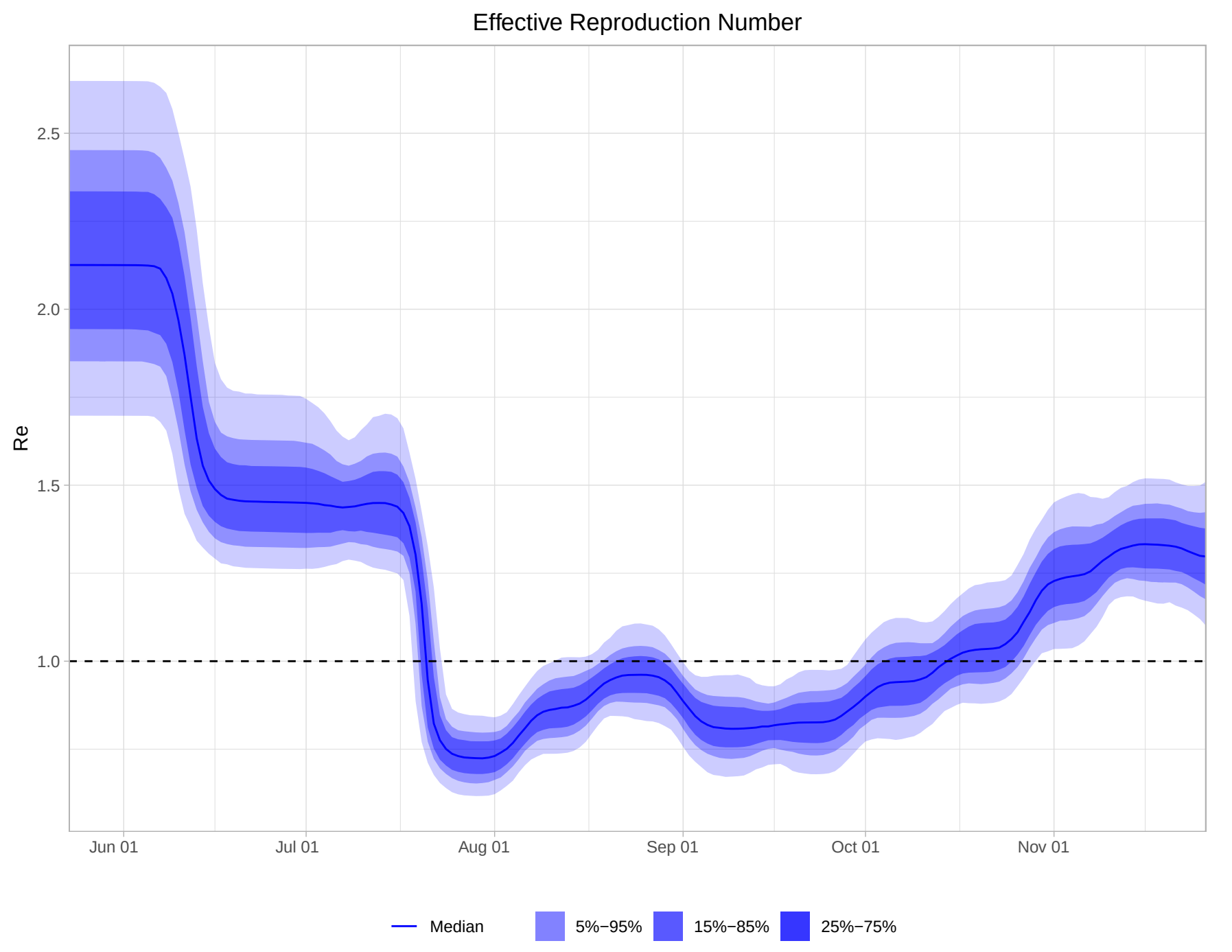

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
800
600
400
200
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
5
10
15
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
200
150
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

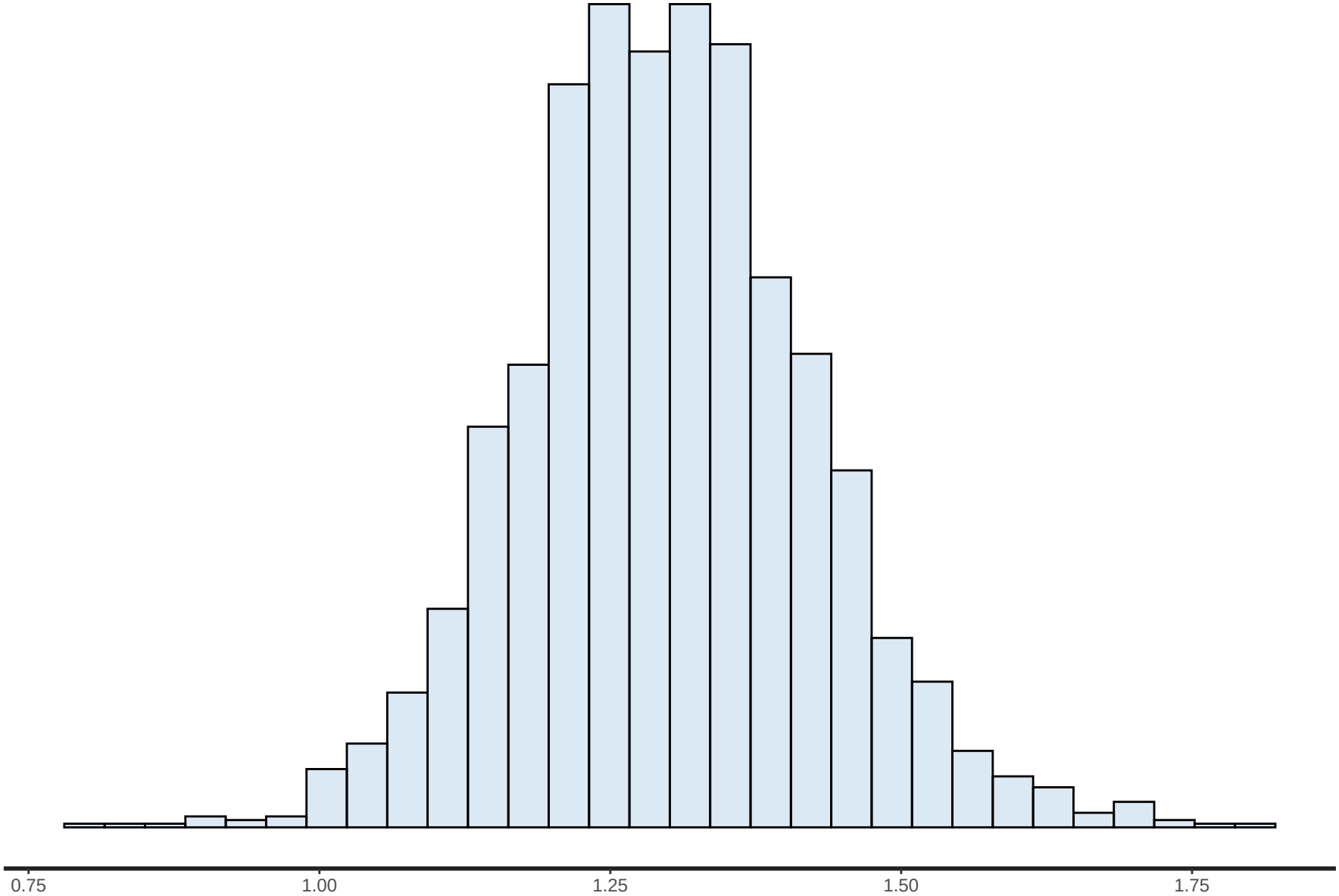

Short Term Death Projection
Number of COVID19 Deaths
0
25
50
75
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

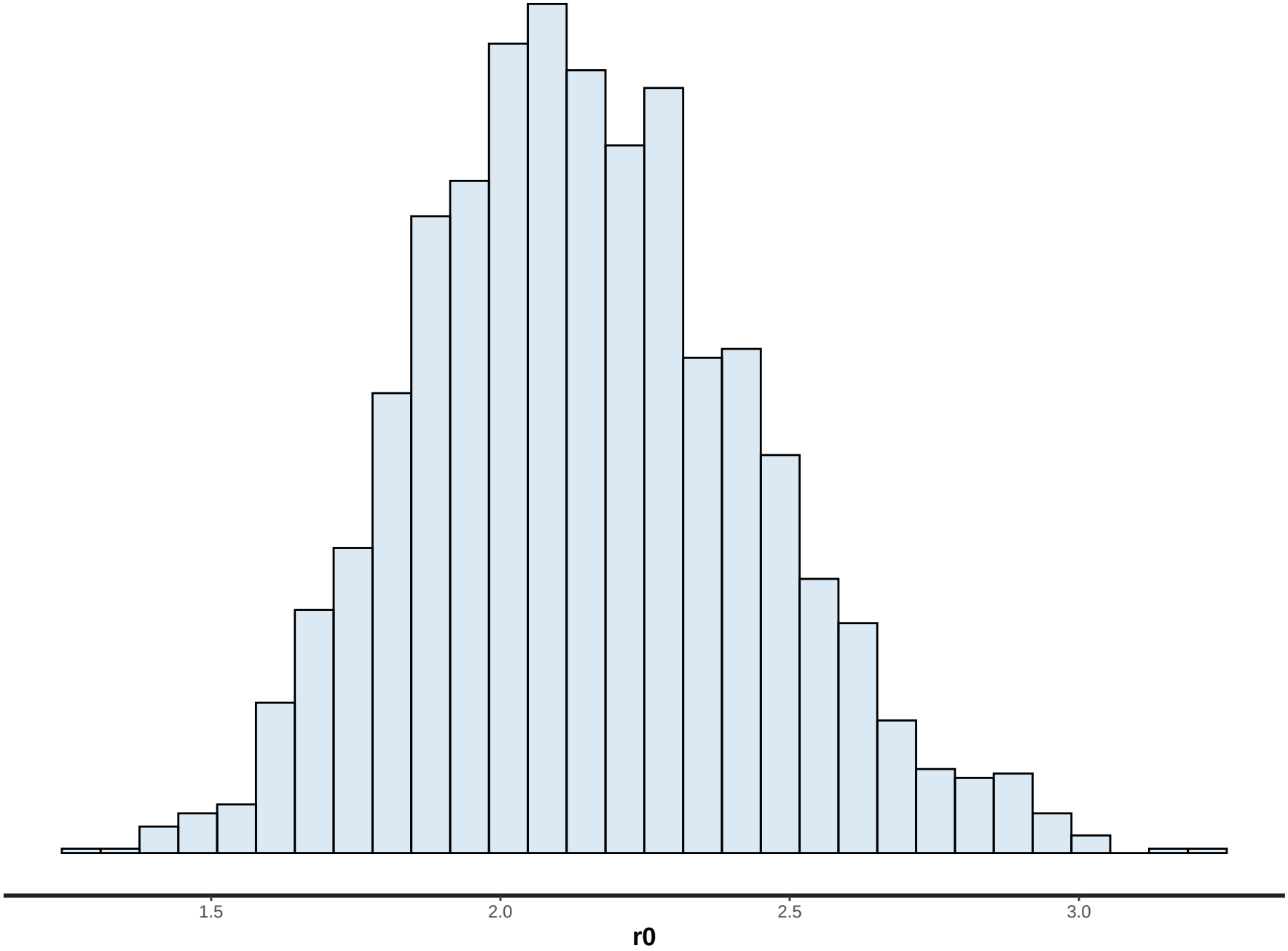

Long Term Death Projection
Number of COVID19 Deaths
500
400
300
200
100
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

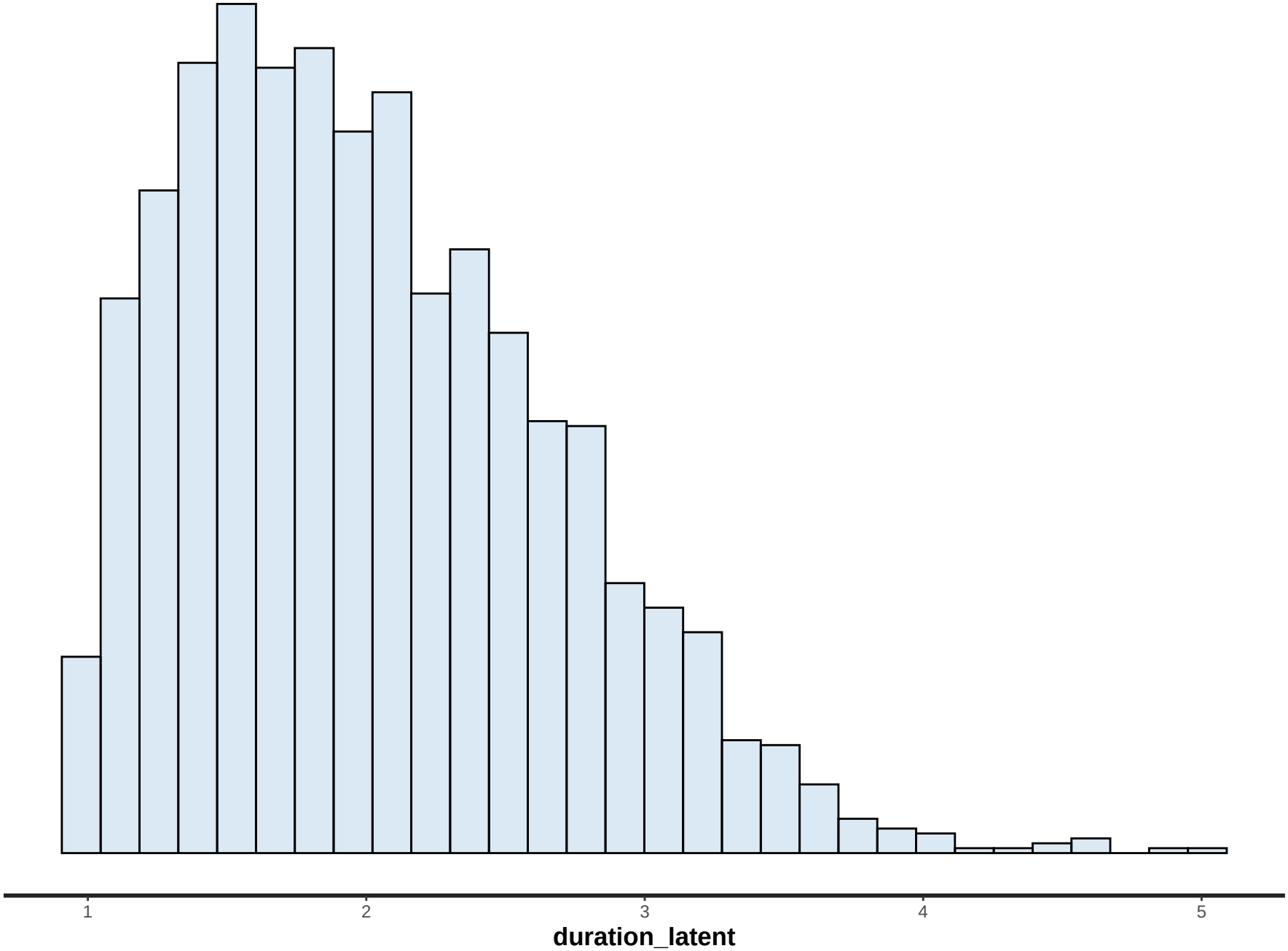

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
5%−95%
15%−85%
25%−75%

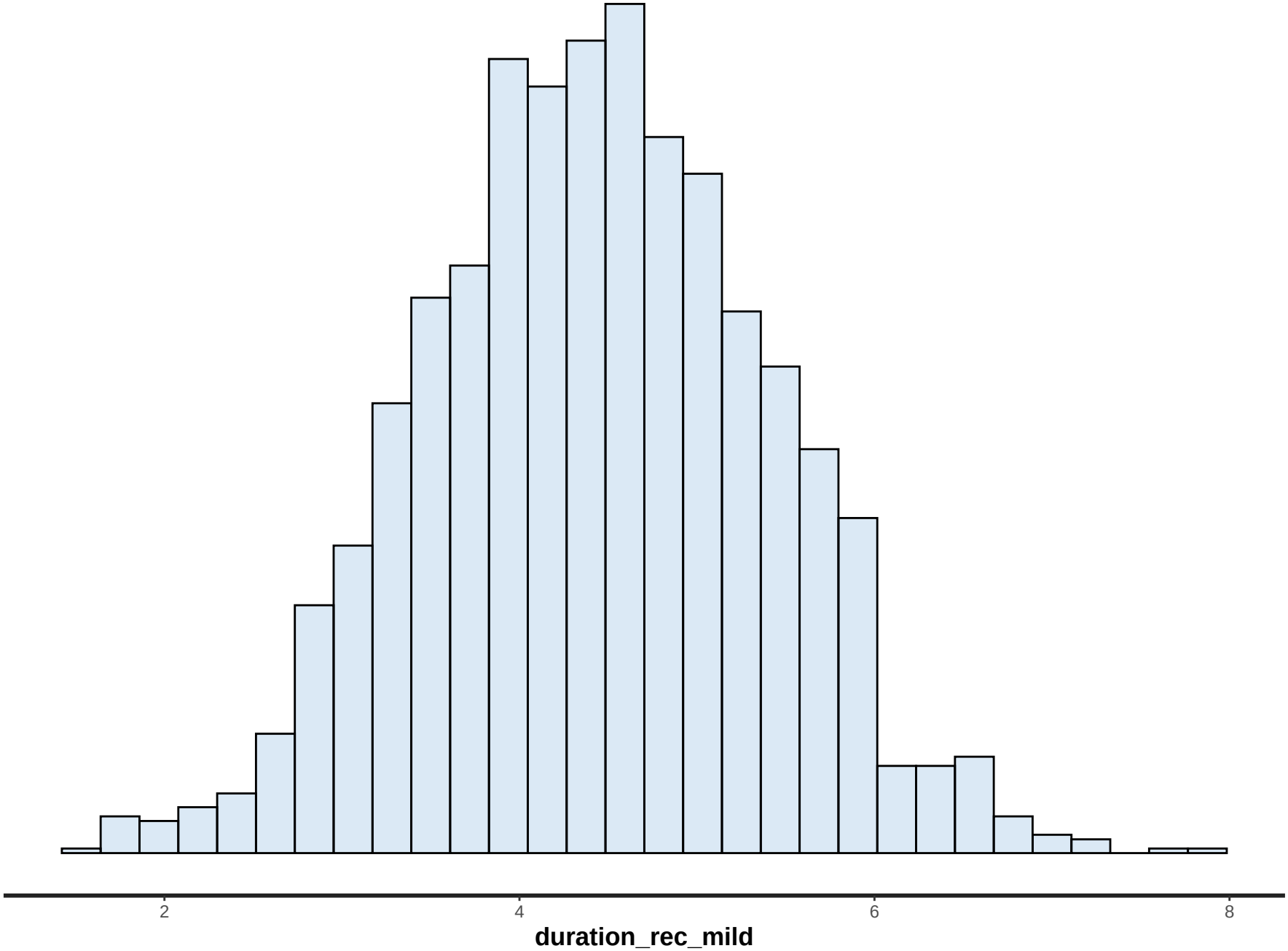
# Rt as of 2020−11−26

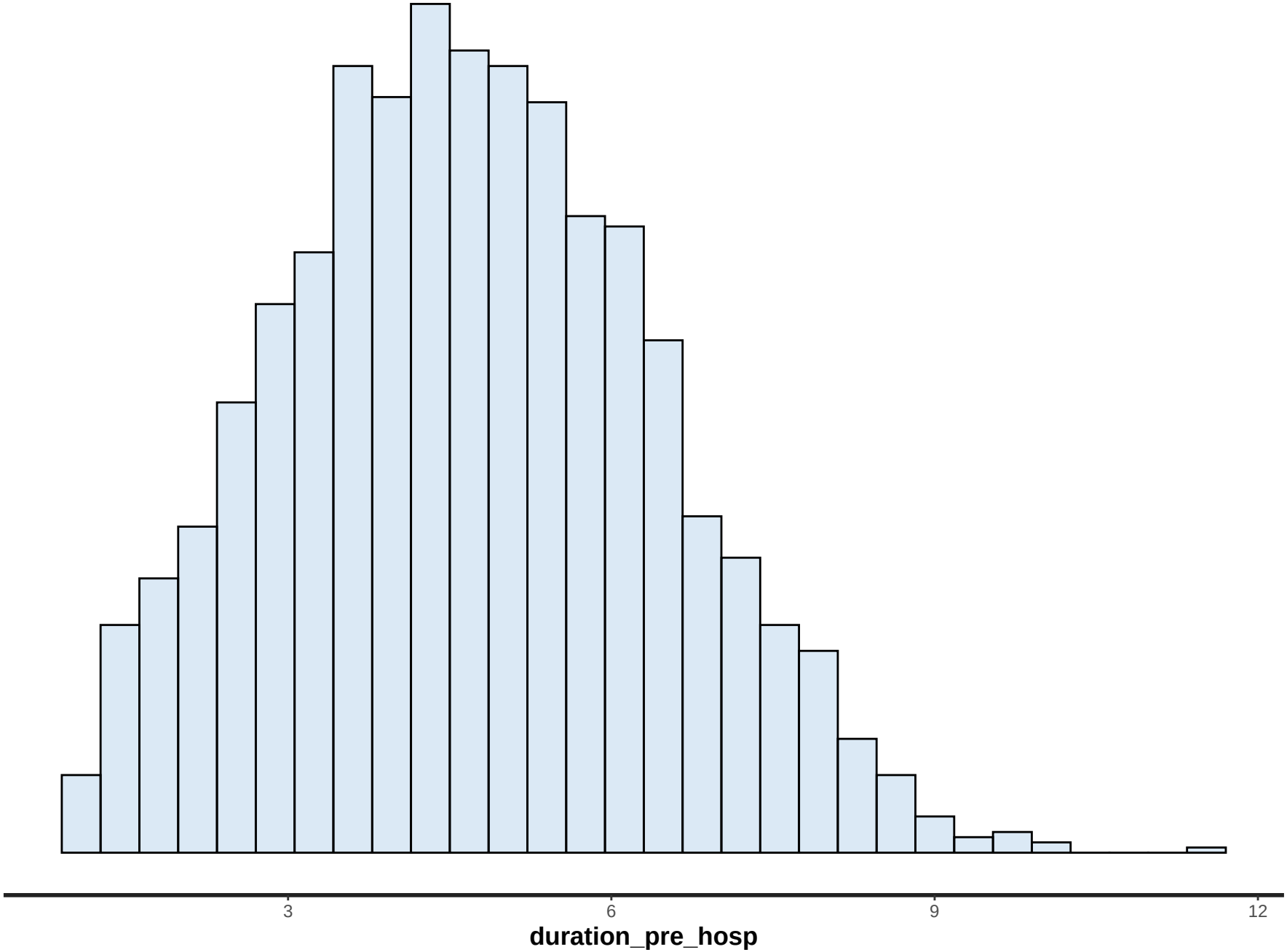
| 5% | 10% | 25% | 50% | 75% | 90% | 95% |
|---|---|---|---|---|---|---|
| 1.10 | 1.15 | 1.22 | 1.30 | 1.38 | 1.45 | 1.51 |

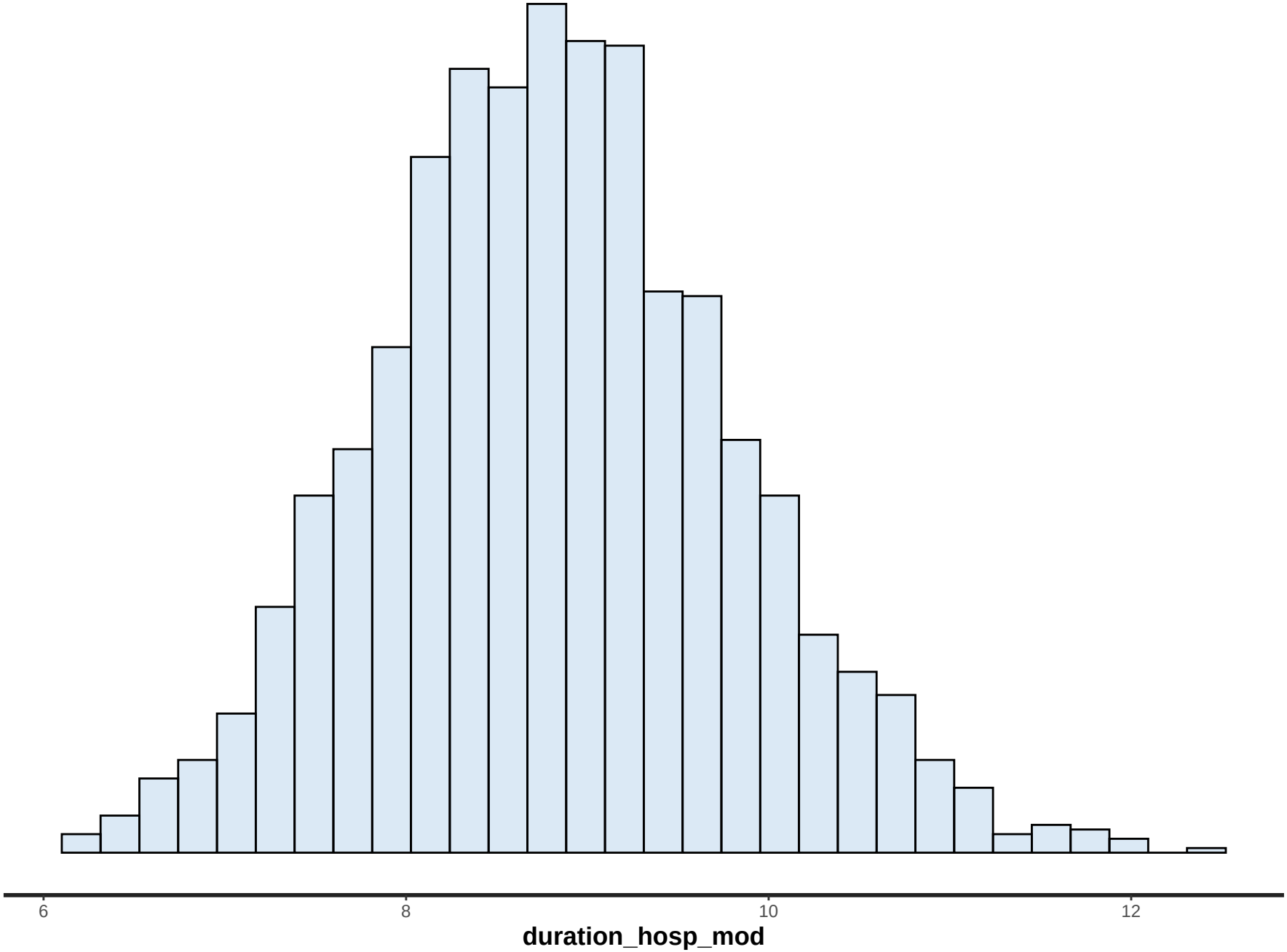


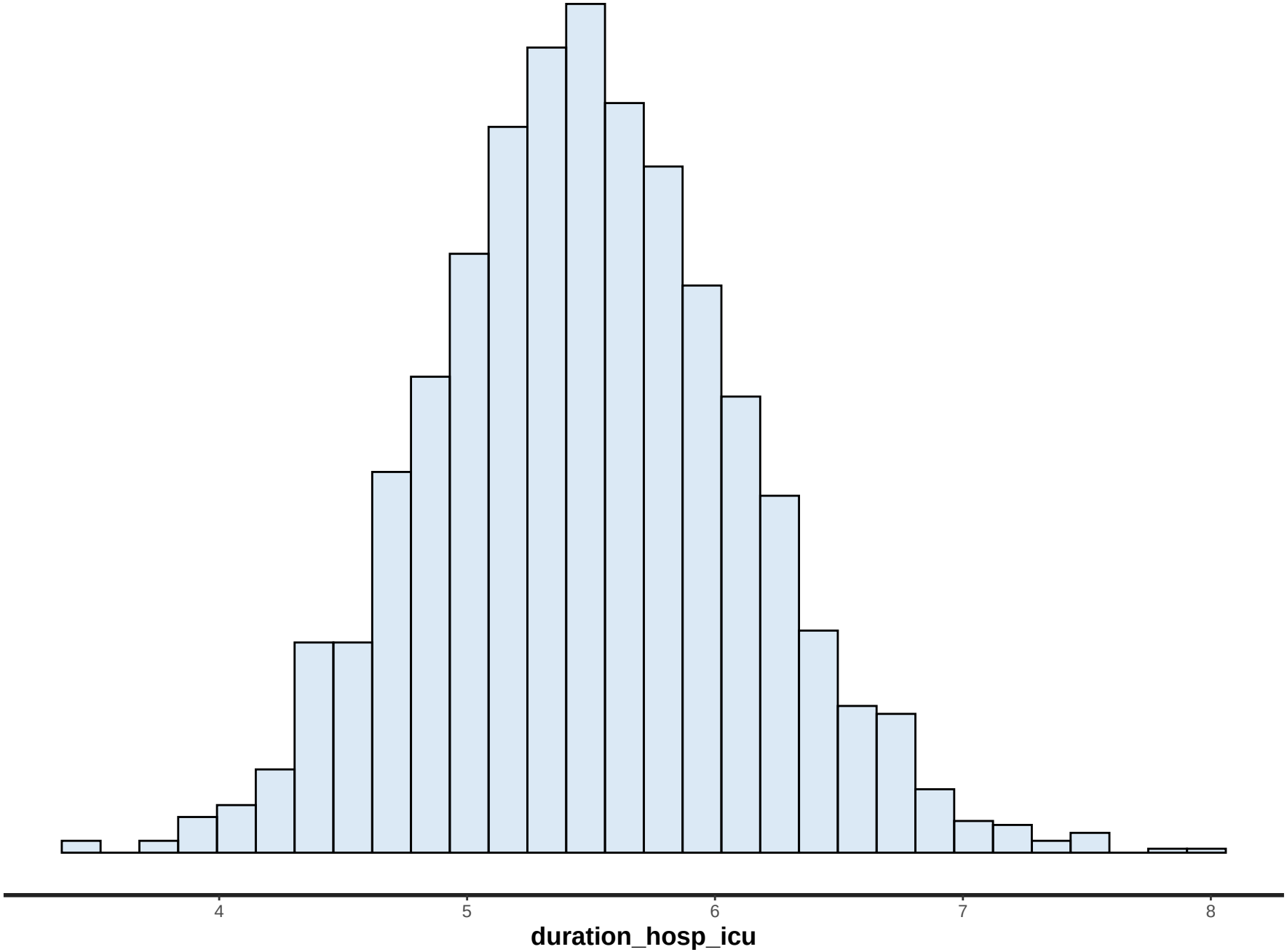

1.5
2.0
2.5
3.0
r0

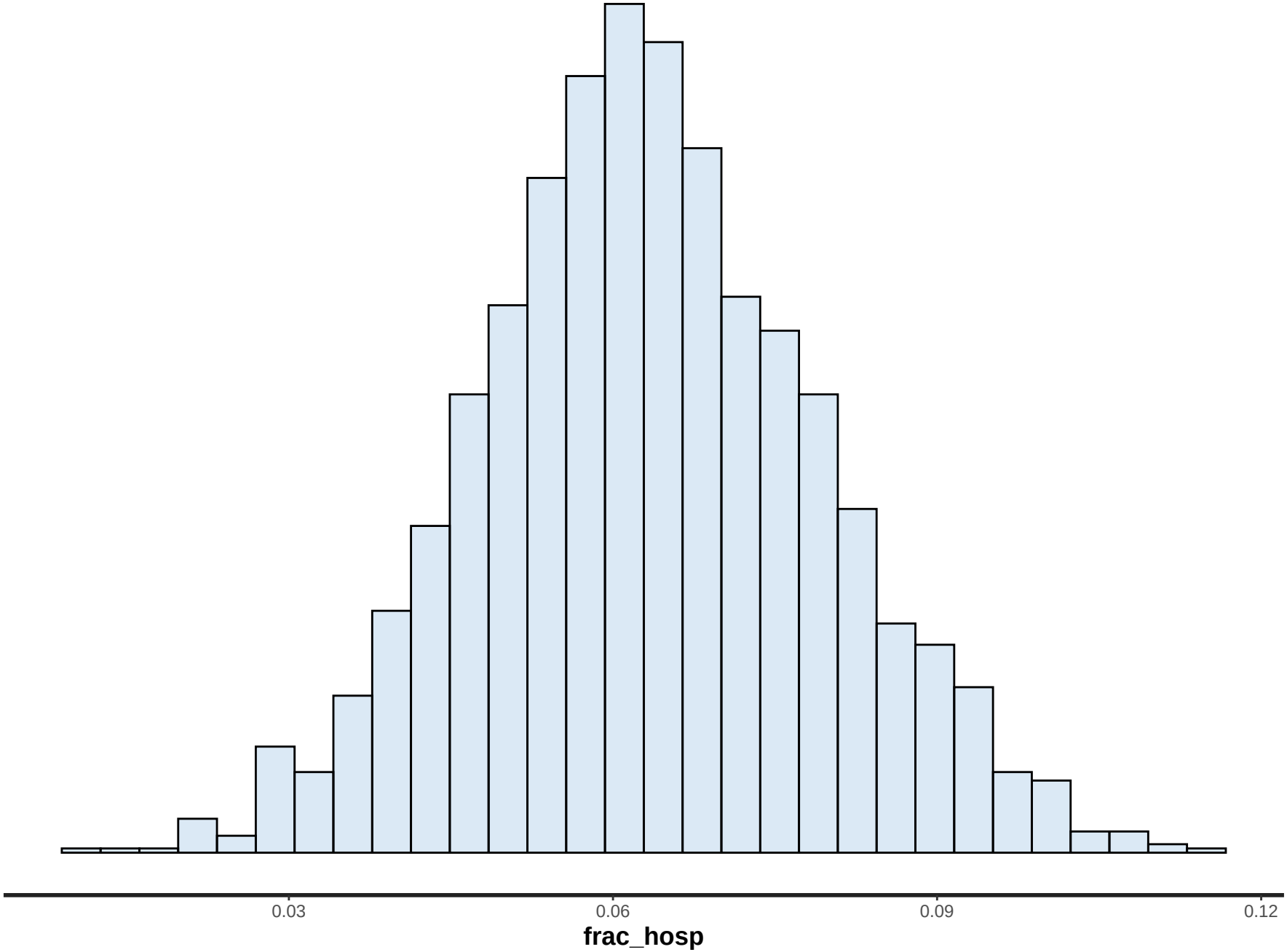

1
2
3
4
5
duration_latent

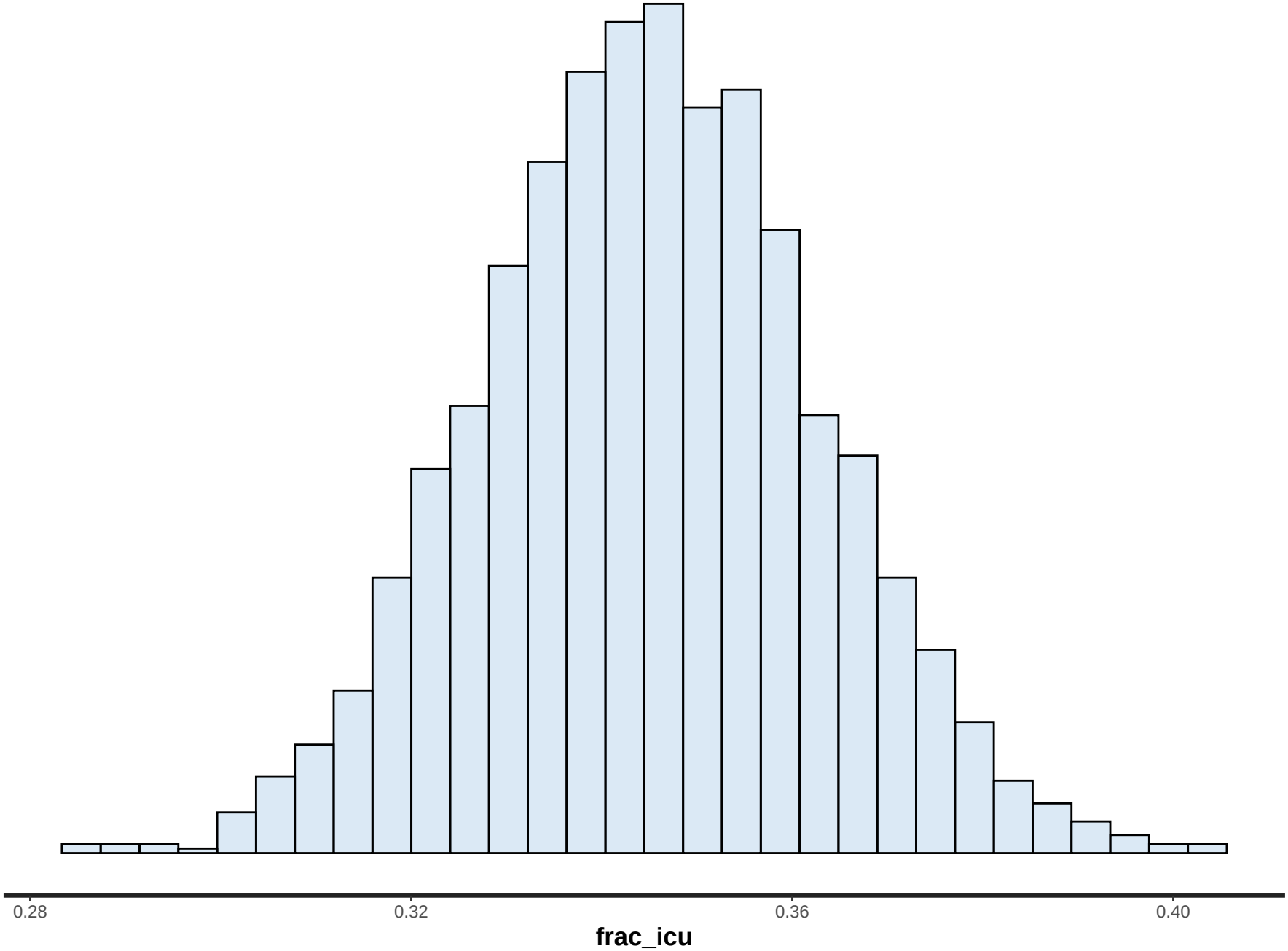

2
4
6
8
duration_rec_mild

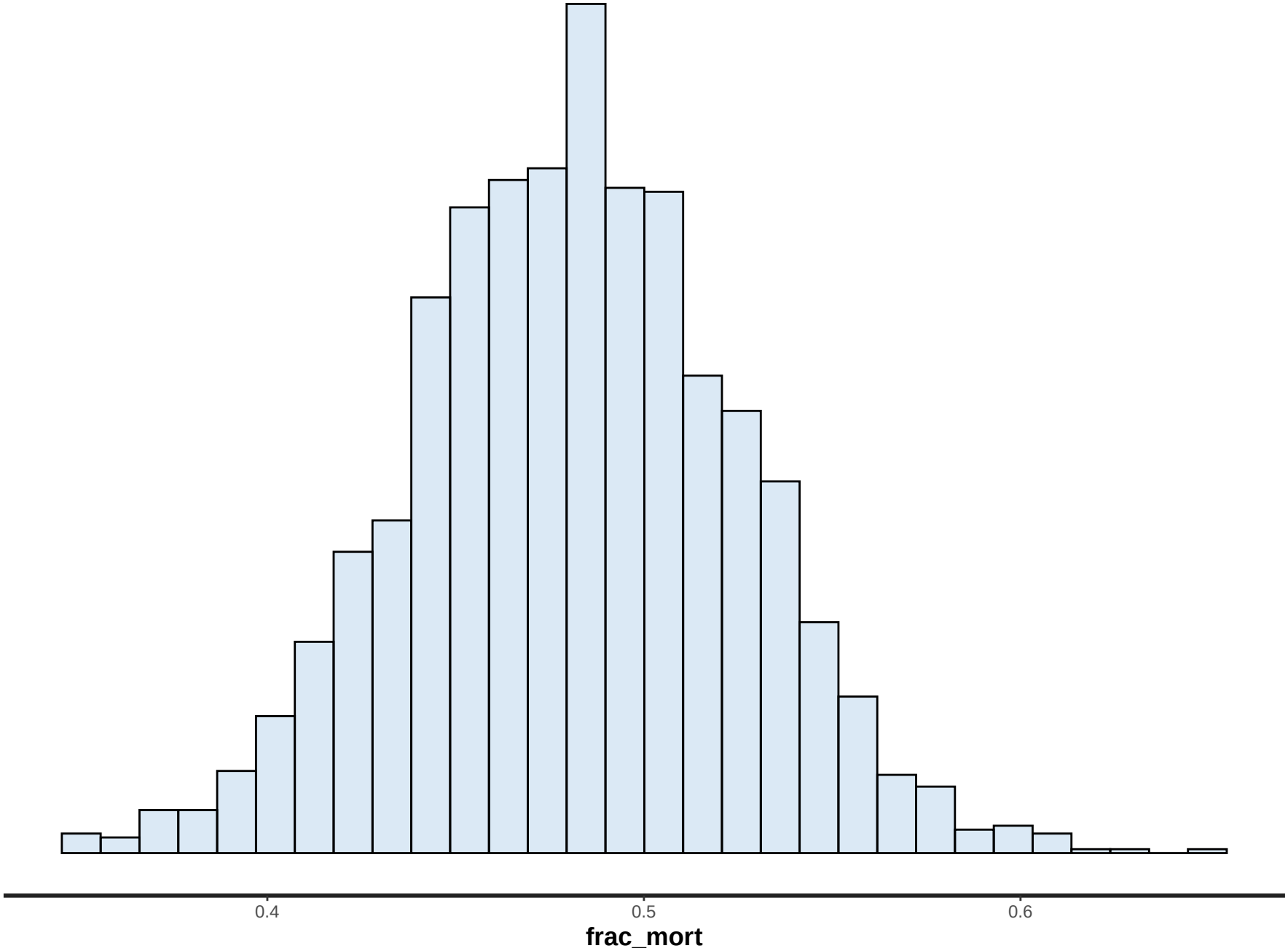

3
6
9
12
duration_pre_hosp

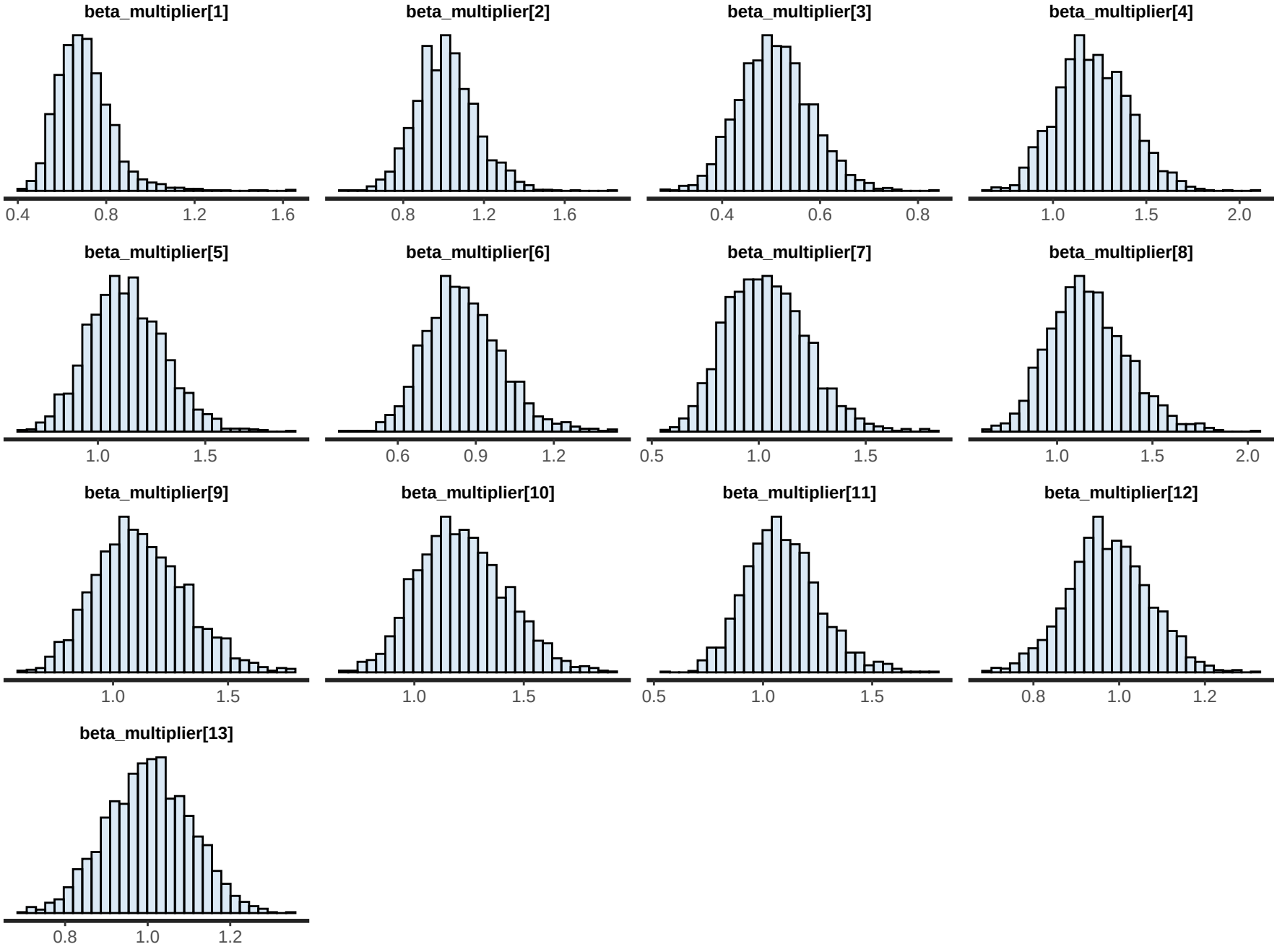

6
8
10
12
duration_hosp_mod

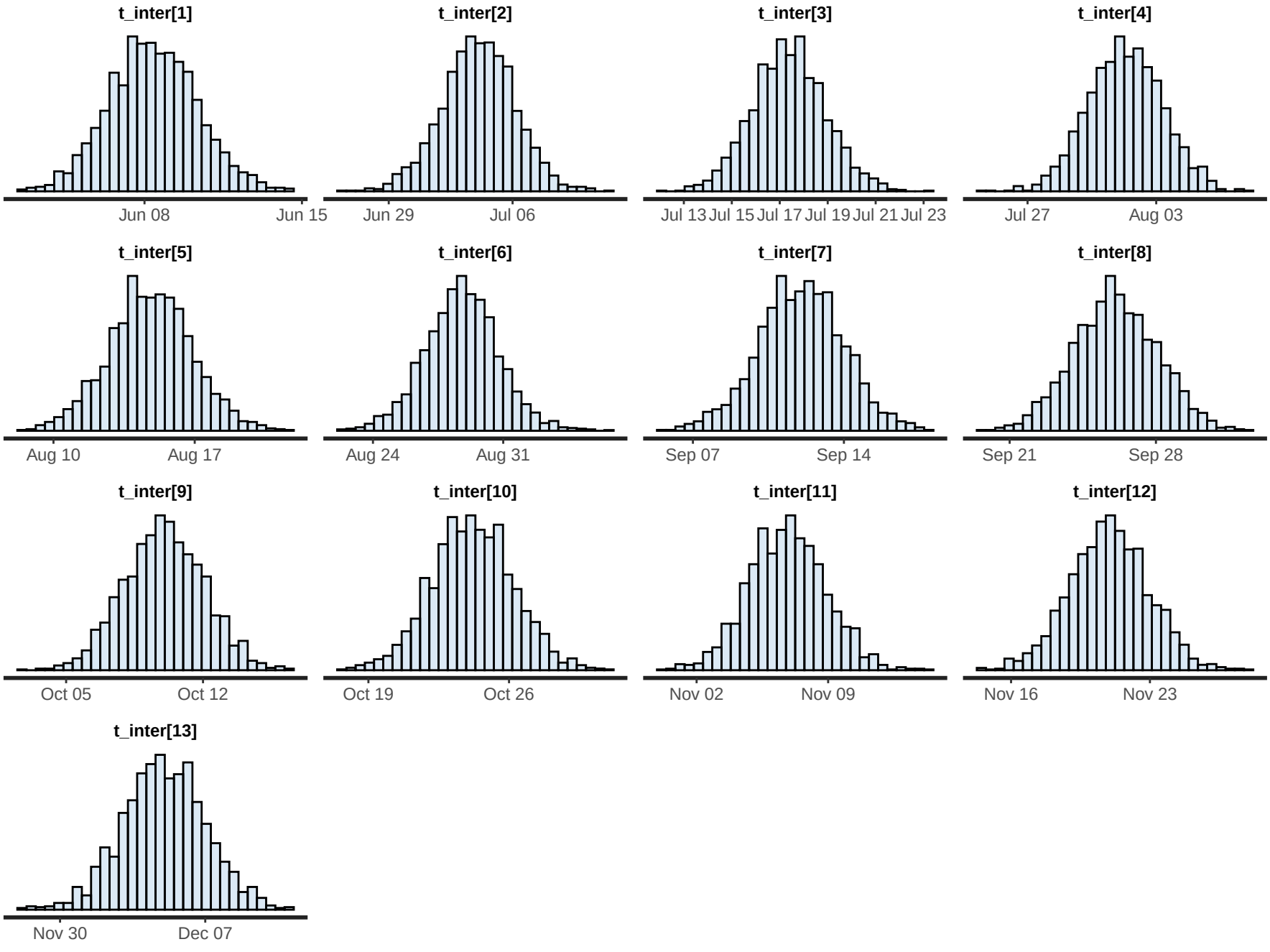

4
5
6
7
8
duration_hosp_icu

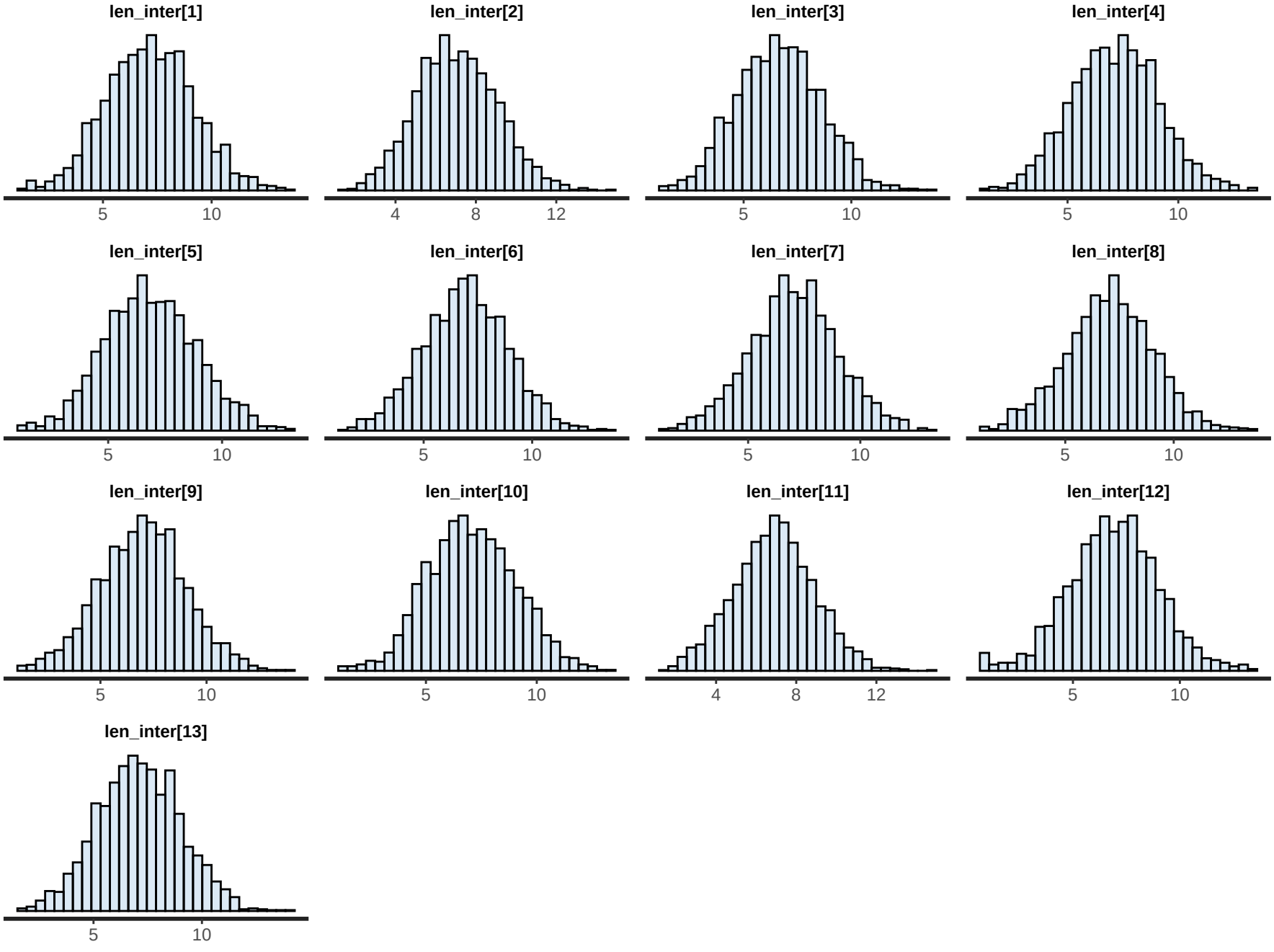

0.03
0.06
0.09
0.12
frac_hosp

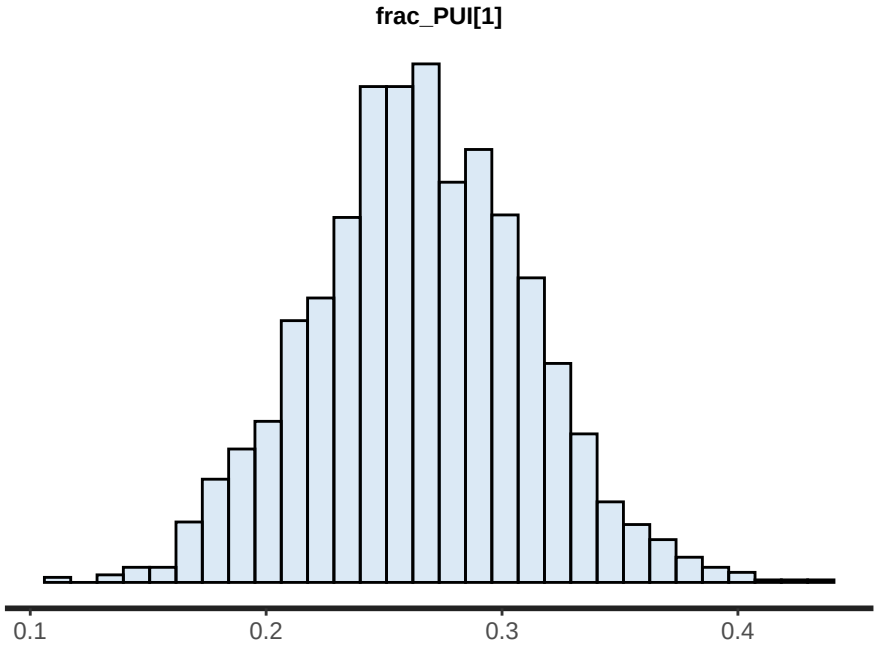

0.28
0.32
0.36
0.40
frac_icu

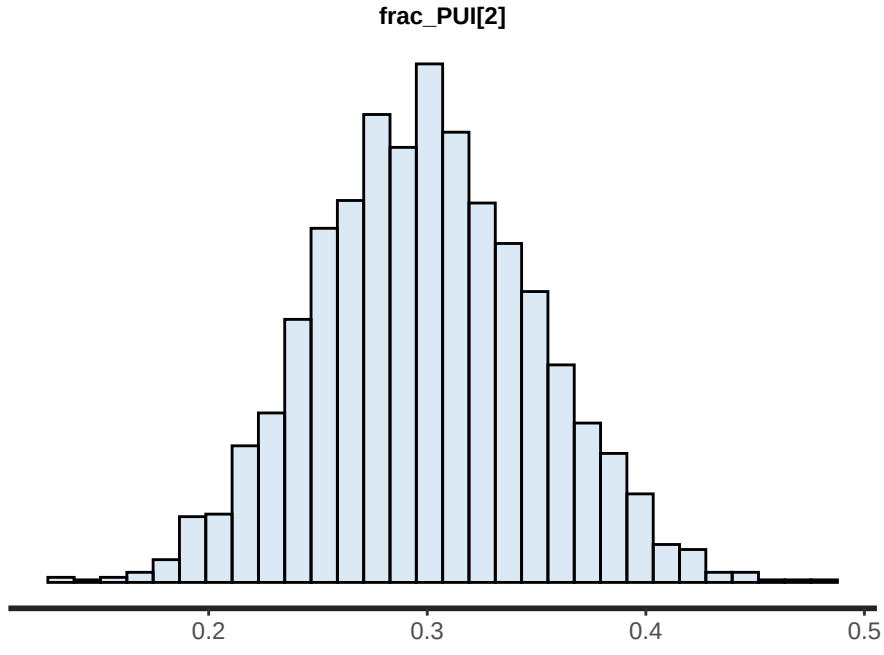

0.4
0.5
0.6
frac_mort

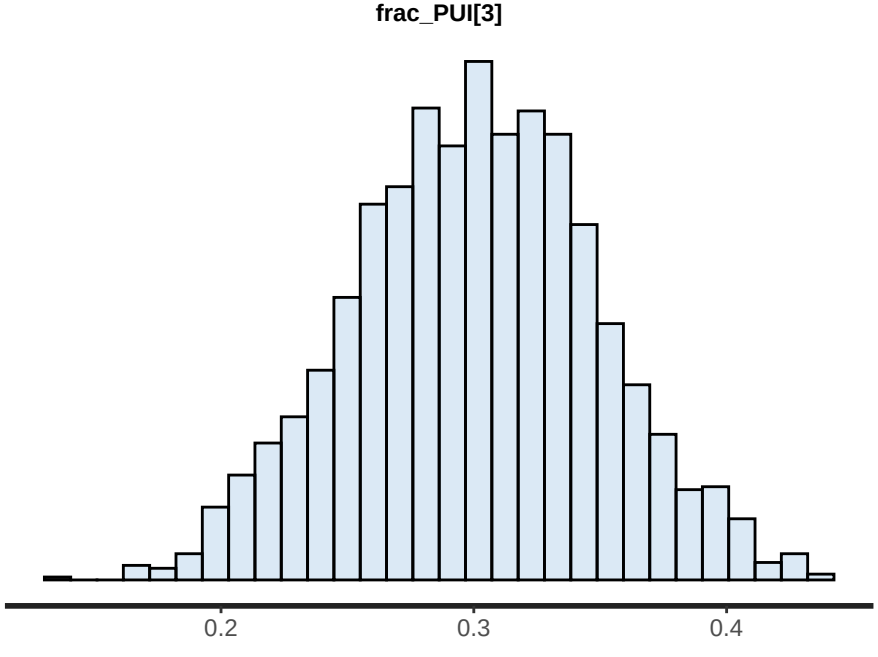

beta_multiplier[1]
0.4
0.8
1.2
1.6
beta_multiplier[2]
0.8
1.2
1.6
beta_multiplier[3]
0.4
0.6
0.8
beta_multiplier[4]
1.0
1.5
2.0
beta_multiplier[5]
1.0
1.5
beta_multiplier[6]
0.6
0.9
1.2
beta_multiplier[7]
0.5
1.0
1.5
beta_multiplier[8]
1.0
1.5
2.0
beta_multiplier[9]
1.0
1.5
beta_multiplier[10]
1.0
1.5
beta_multiplier[11]
0.5
1.0
1.5
beta_multiplier[12]
0.8
1.0
1.2
beta_multiplier[13]
0.8
1.0
1.2

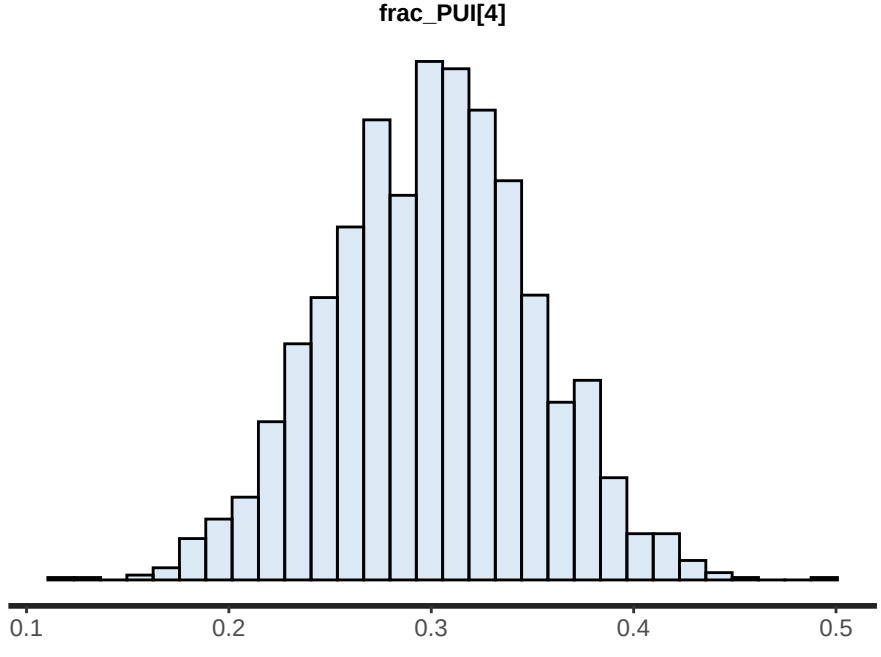

t_inter[1]
Jun 08
Jun 15
t_inter[2]
Jun 29
Jul 06
t_inter[3]
Jul 13
Jul 15
Jul 17
Jul 19
Jul 21
Jul 23
t_inter[4]
Jul 27
Aug 03
t_inter[5]
Aug 10
Aug 17
t_inter[6]
Aug 24
Aug 31
t_inter[7]
Sep 07
Sep 14
t_inter[8]
Sep 21
Sep 28
t_inter[9]
Oct 05
Oct 12
t_inter[10]
Oct 19
Oct 26
t_inter[11]
Nov 02
Nov 09
t_inter[12]
Nov 16
Nov 23
t_inter[13]
Nov 30
Dec 07

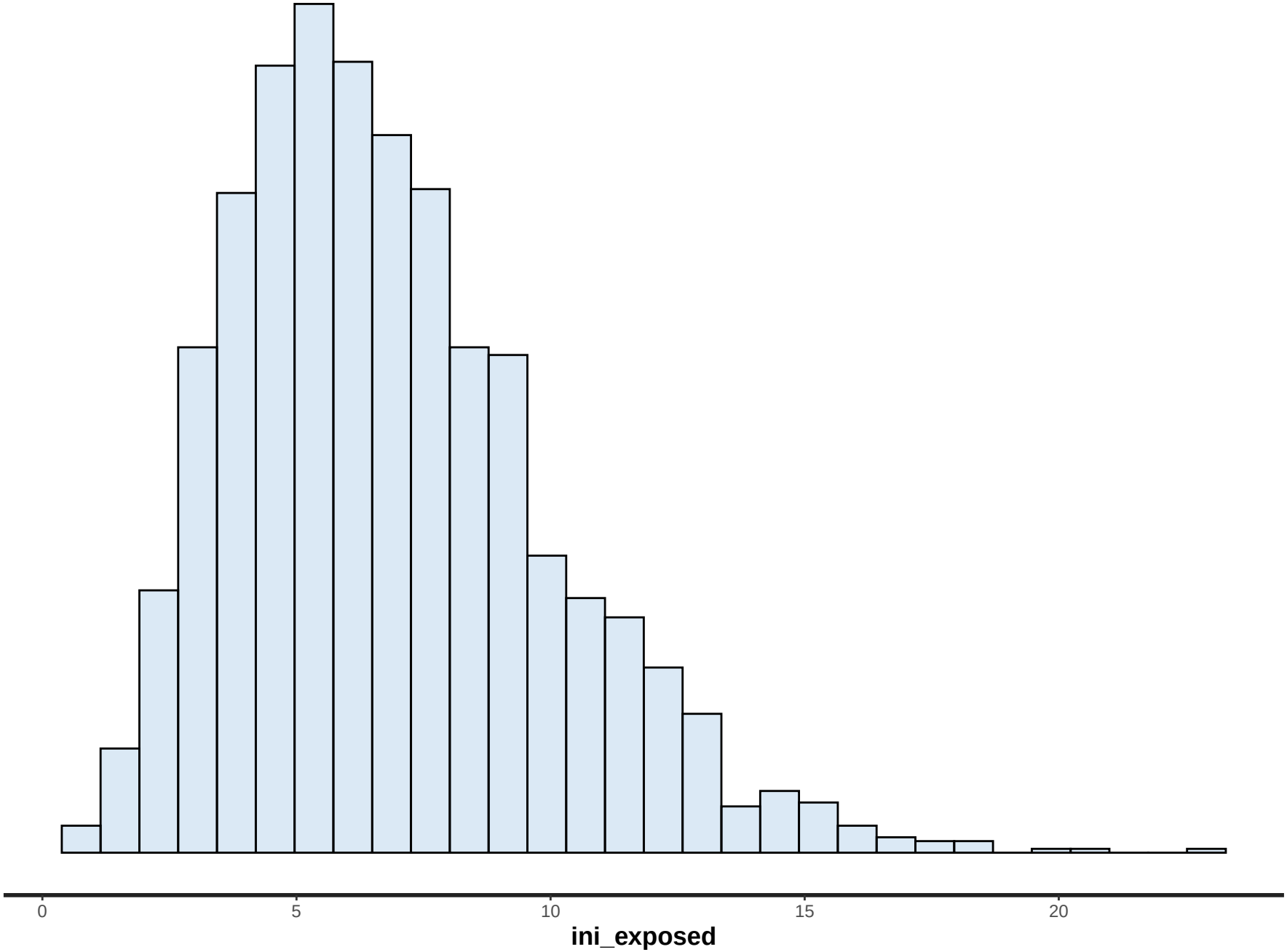

len_inter[1]
5
10
len_inter[2]
4
8
12
len_inter[3]
5
10
len_inter[4]
5
10
len_inter[5]
5
10
len_inter[6]
5
10
len_inter[7]
5
10
len_inter[8]
5
10
len_inter[9]
5
10
len_inter[10]
5
10
len_inter[11]
4
8
12
len_inter[12]
5
10
len_inter[13]
5
10

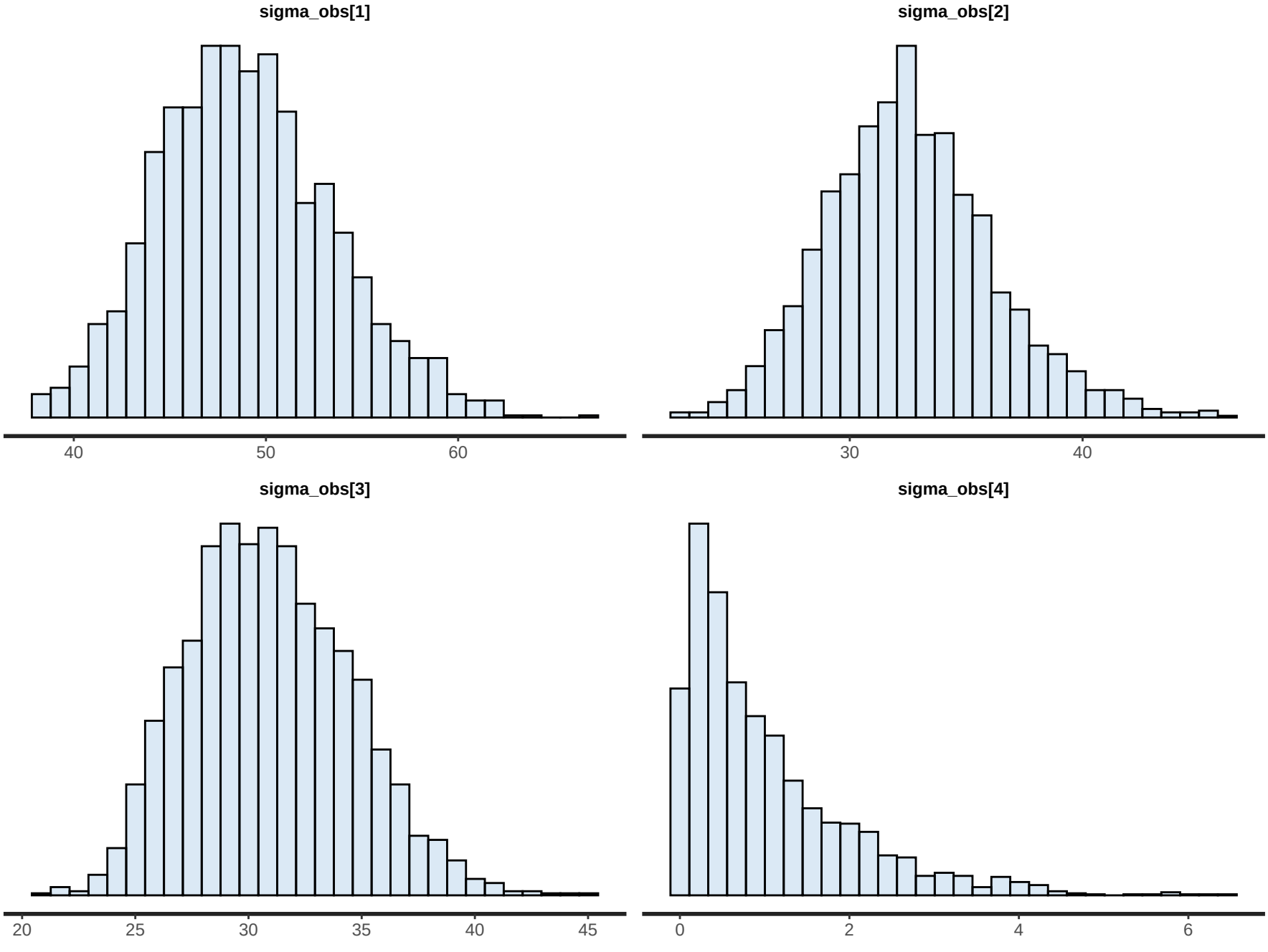

frac_PUI[1]
0.1
0.2
0.3
0.4


frac_PUI[2]
0.2
0.3
0.4
0.5


frac_PUI[3]
0.2
0.3
0.4


frac_PUI[4]
0.1
0.2
0.3
0.4
0.5


0
5
10
15
20
ini_exposed


sigma_obs[1]
40
50
60
sigma_obs[2]
30
40
sigma_obs[3]
20
25
30
35
40
45
sigma_obs[4]
0
2
4
6