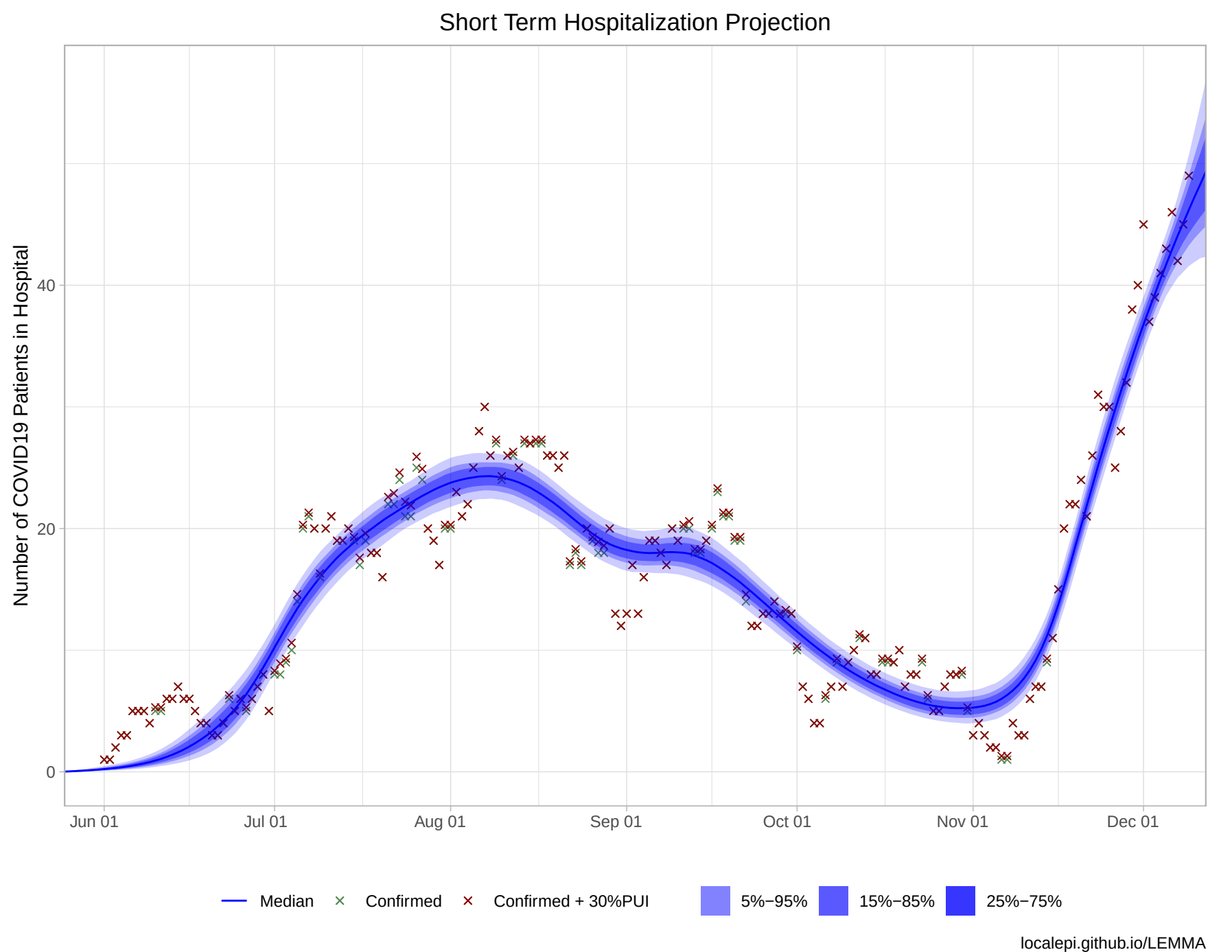
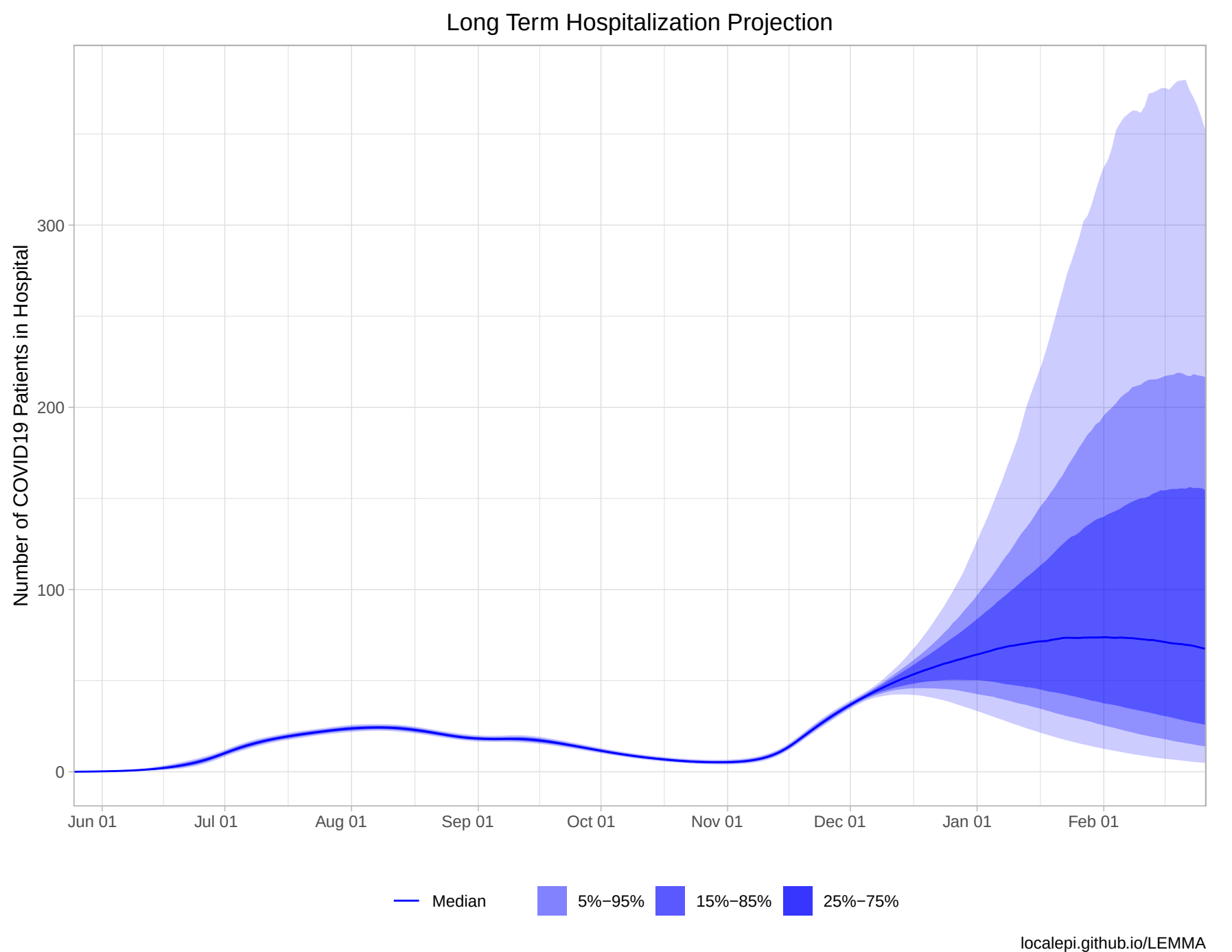
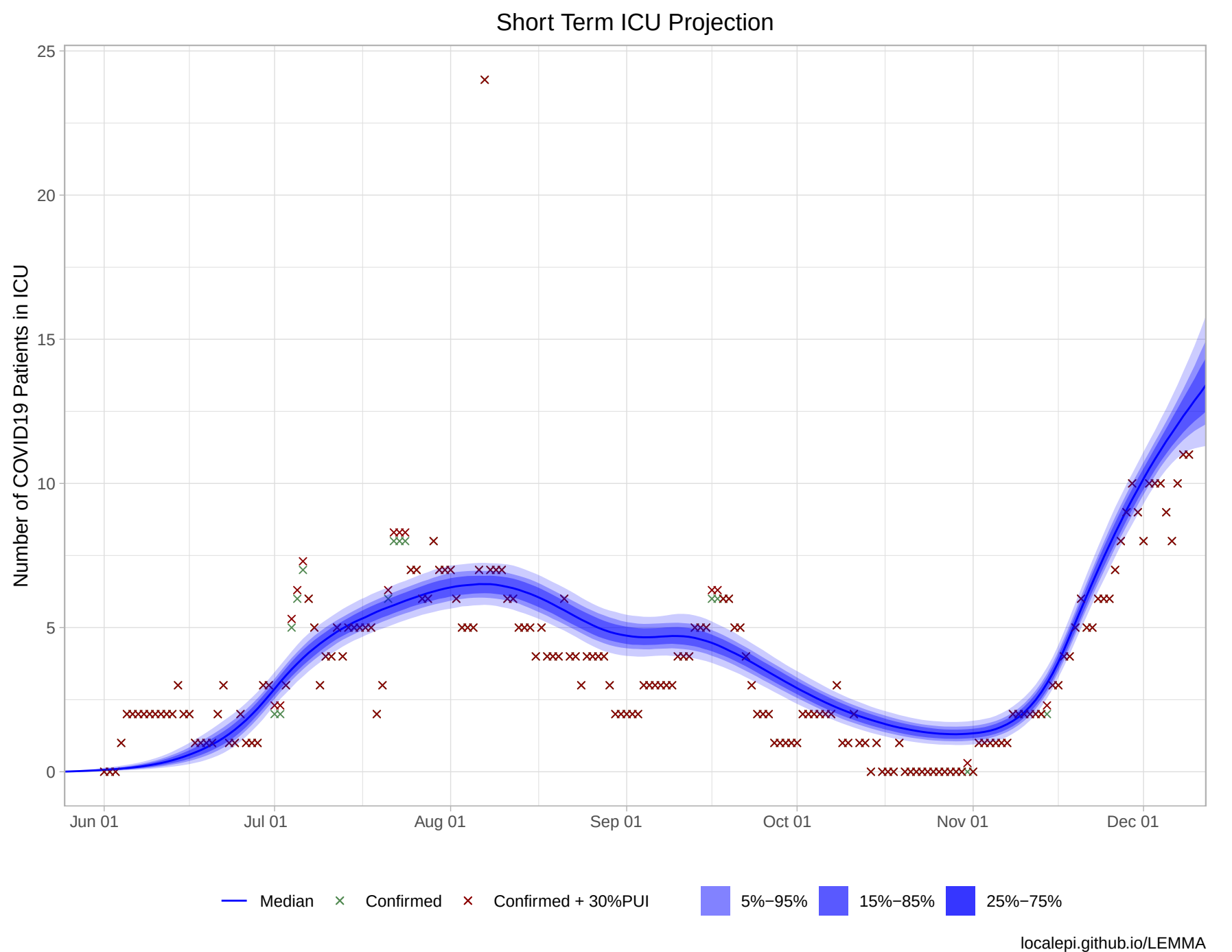
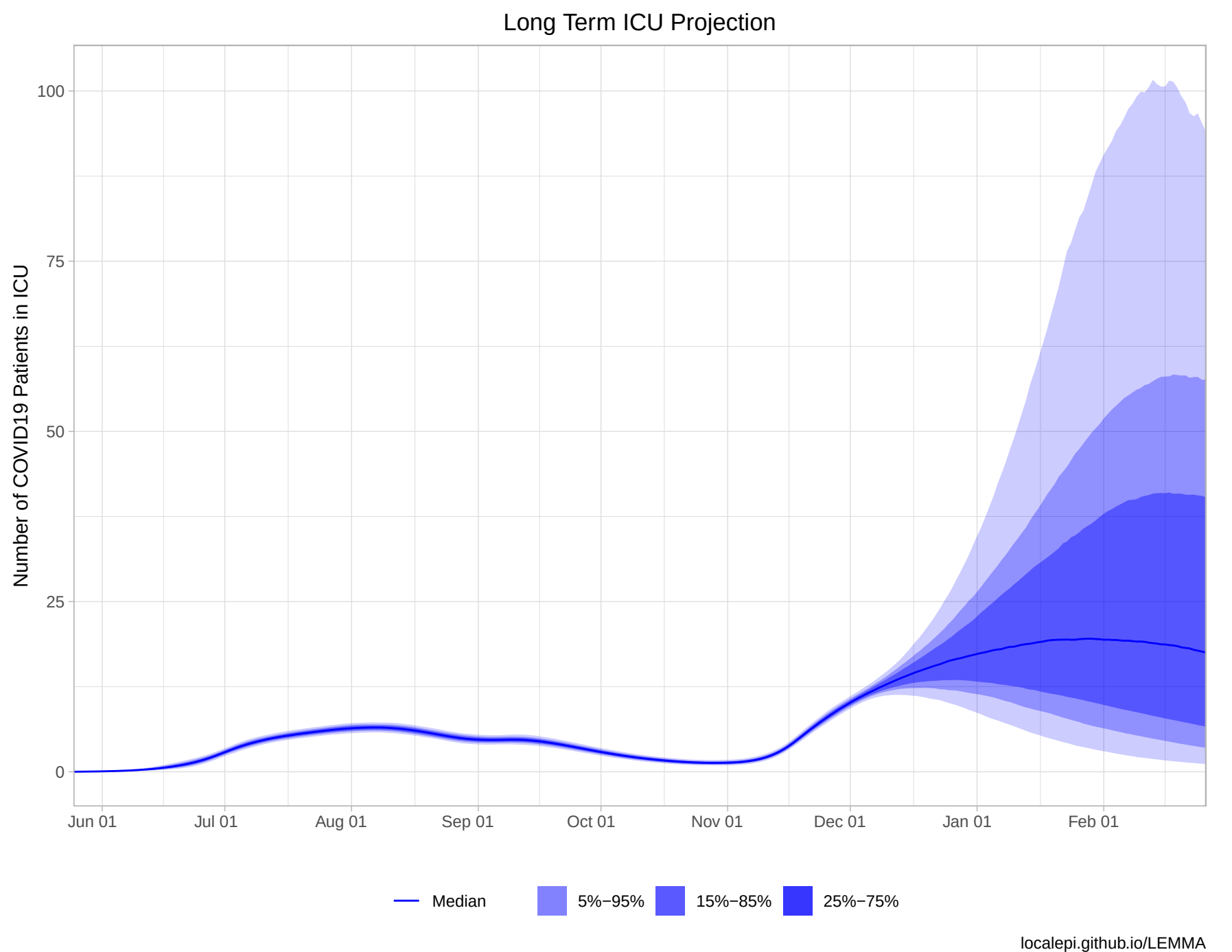
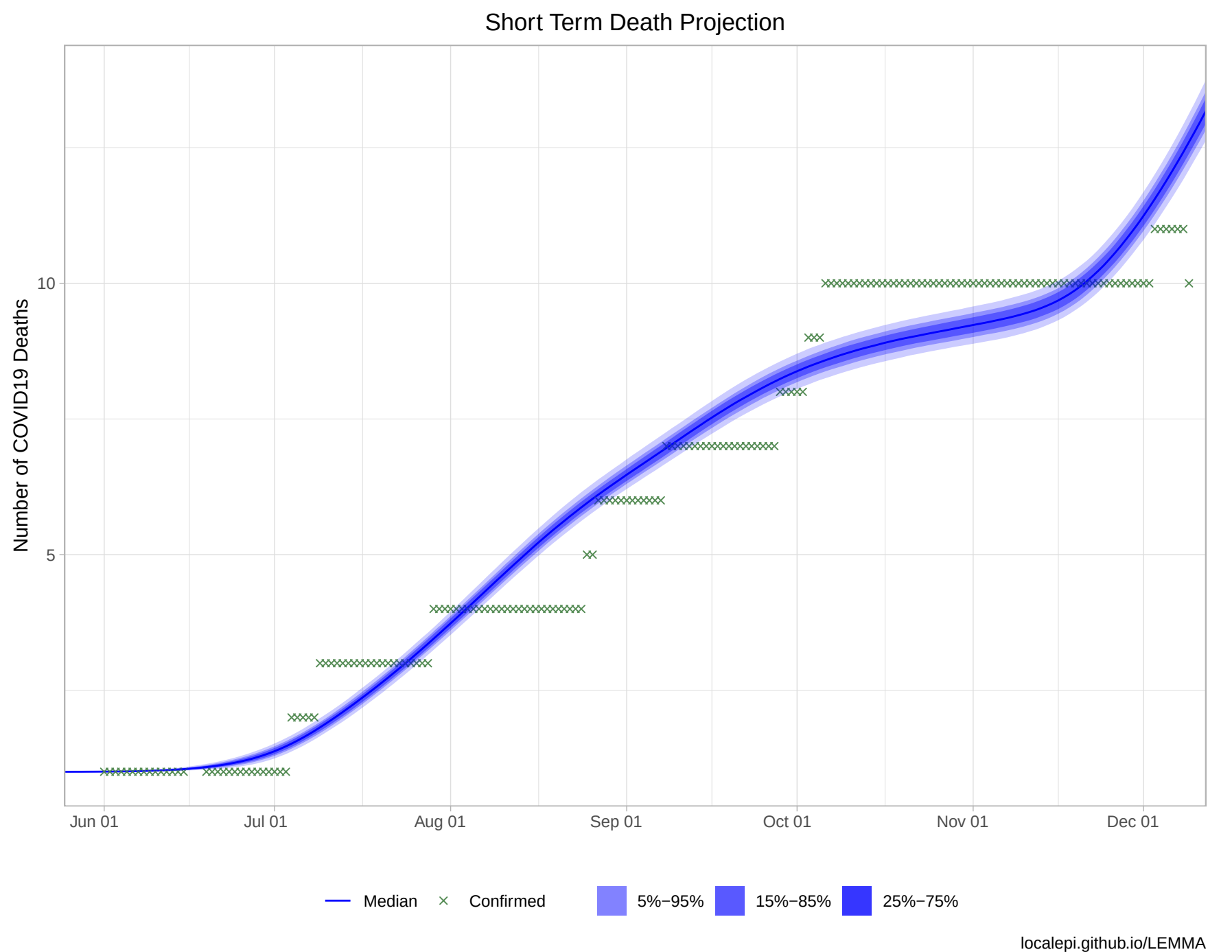
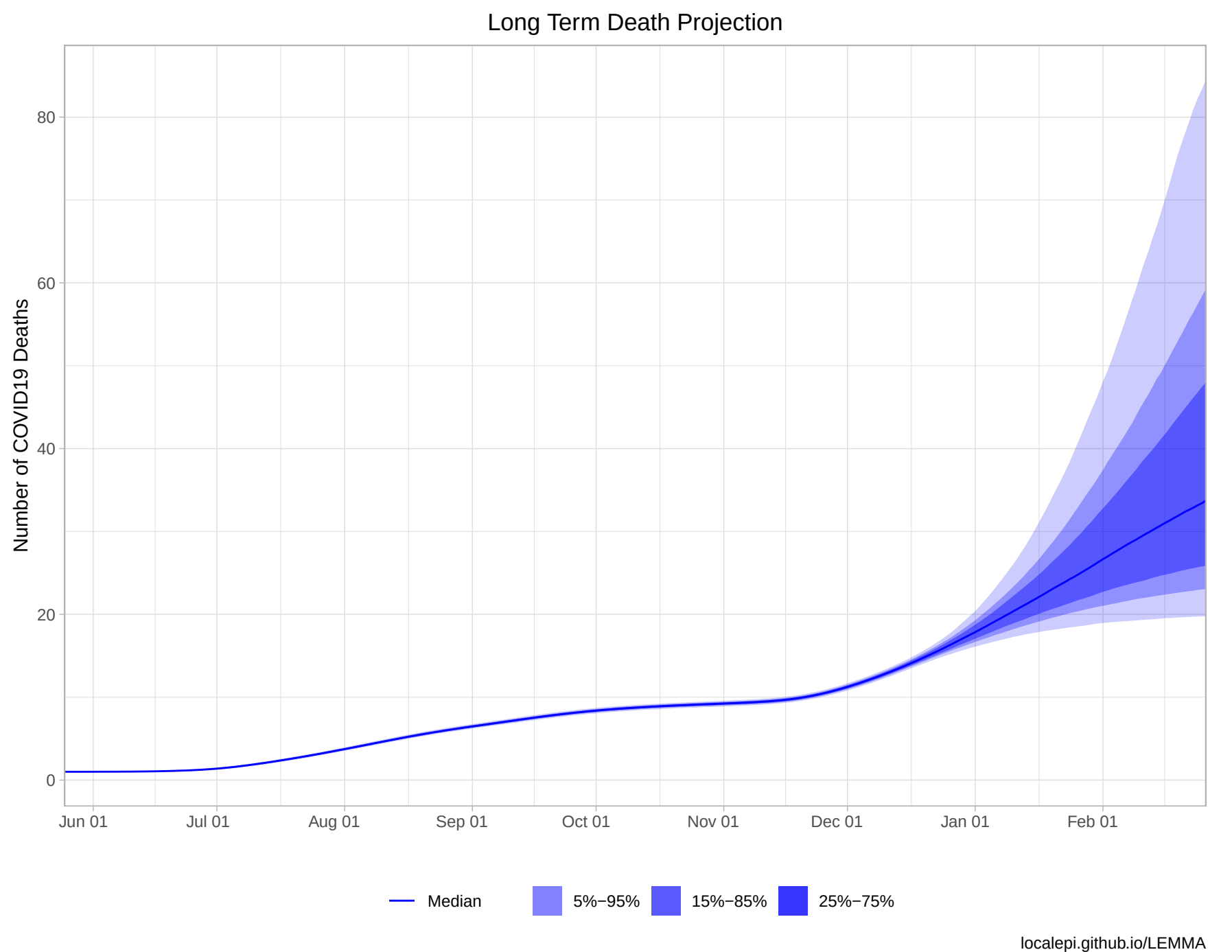

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
20
40
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

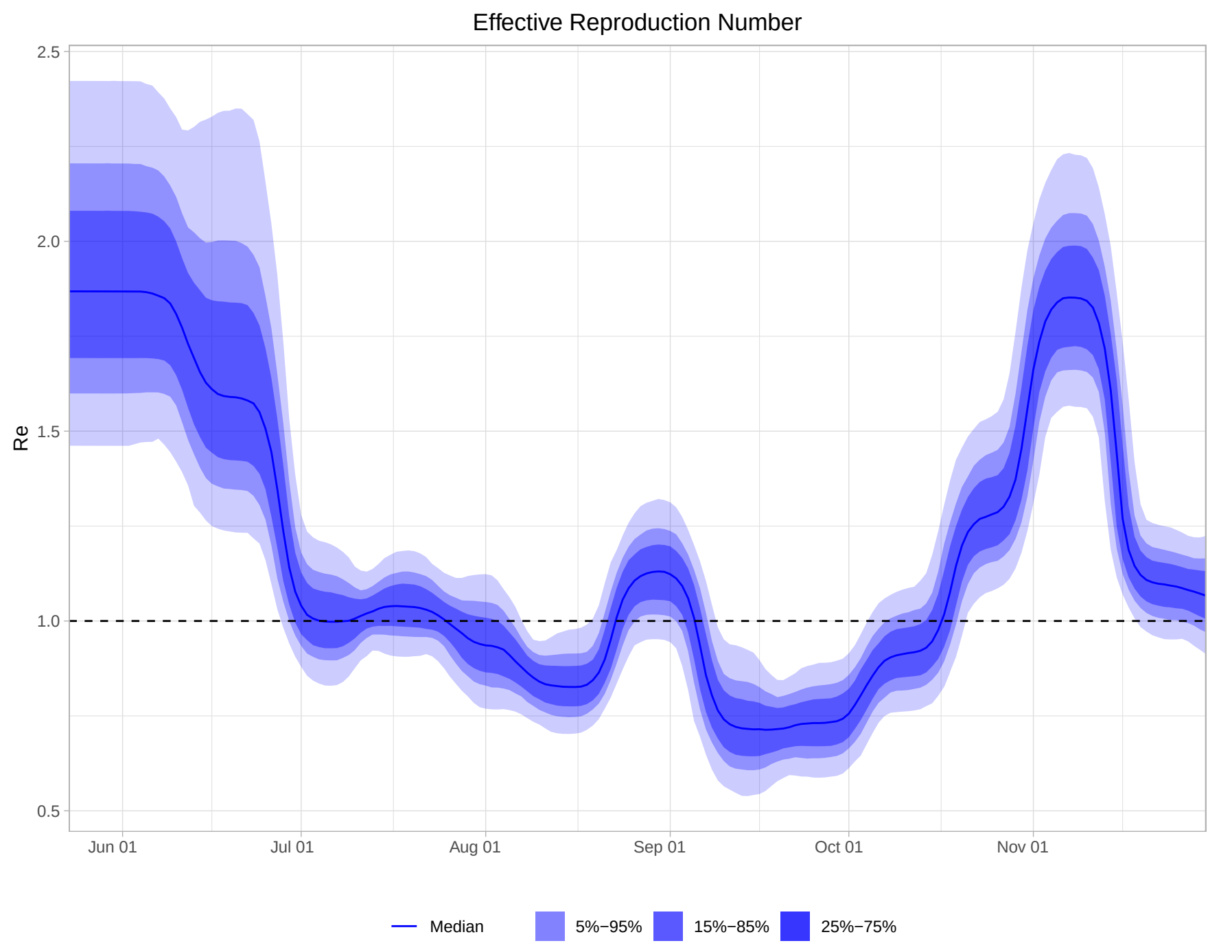

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
300
200
100
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
25
20
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 ICU Projection
Number of COVID19 Patients in ICU
100
75
50
25
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

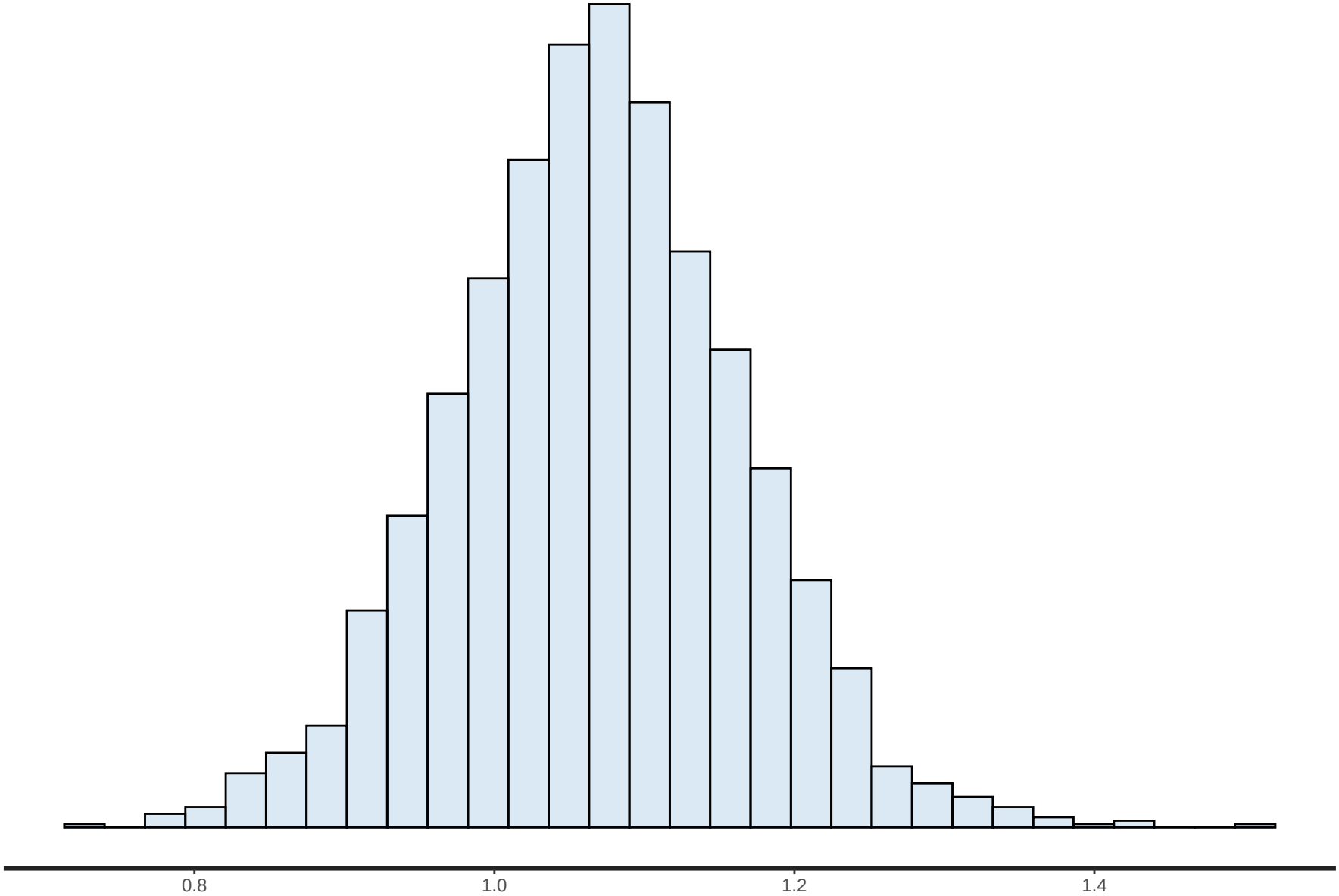

Short Term Death Projection
Number of COVID19 Deaths
10
5
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

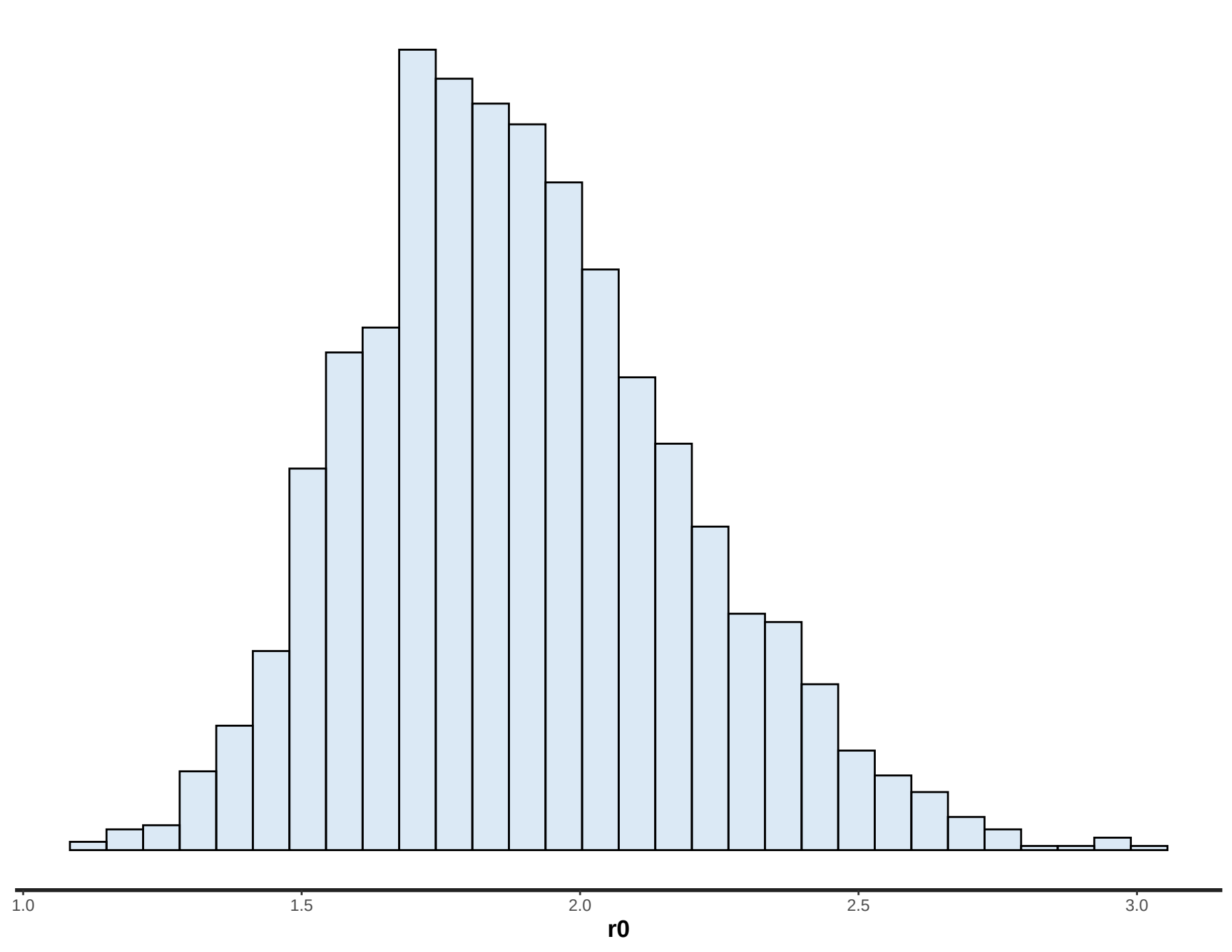

Long Term Death Projection
Number of COVID19 Deaths
0
20
40
60
80
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

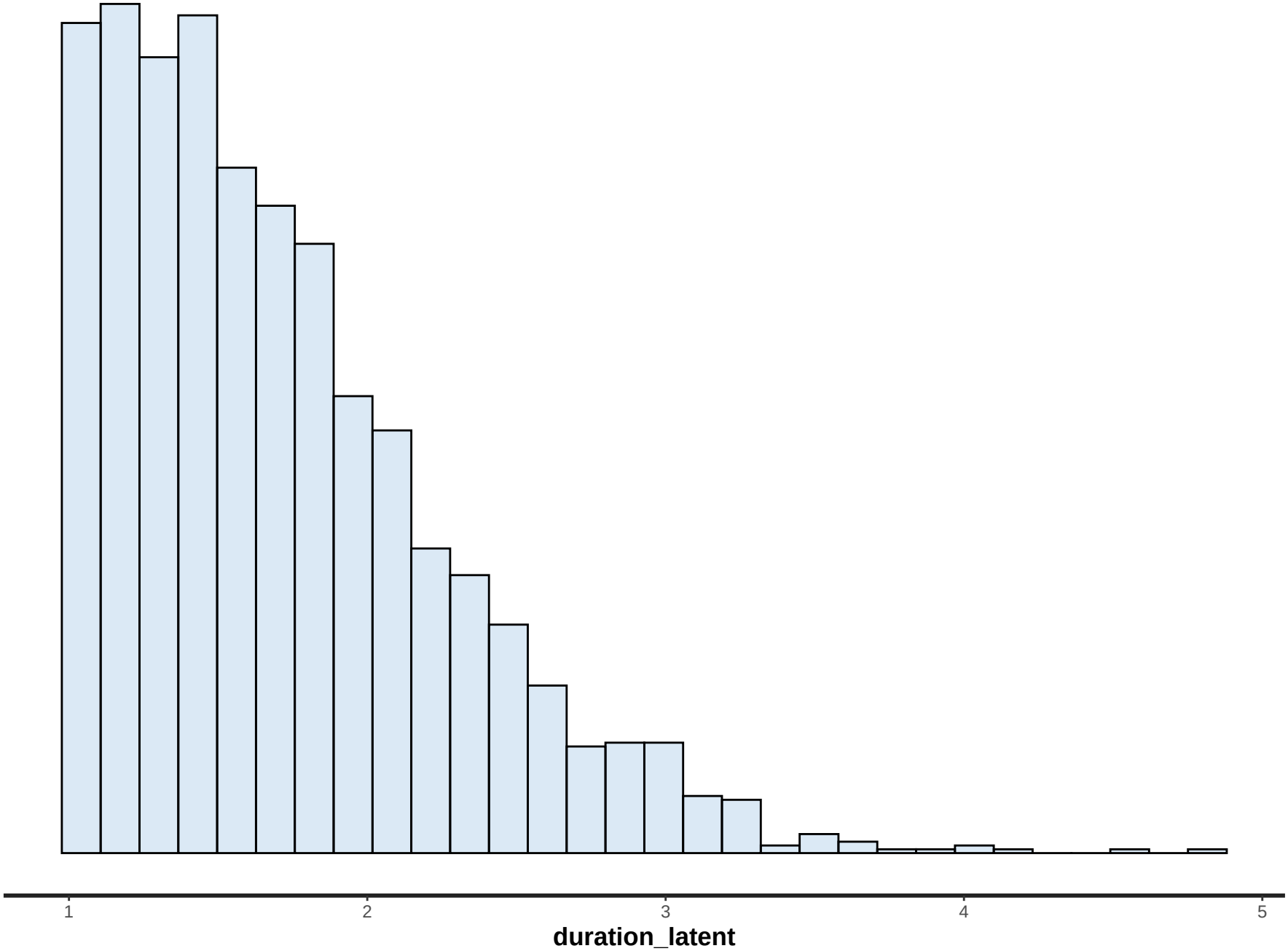

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
0.5
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
5%−95%
15%−85%
25%−75%

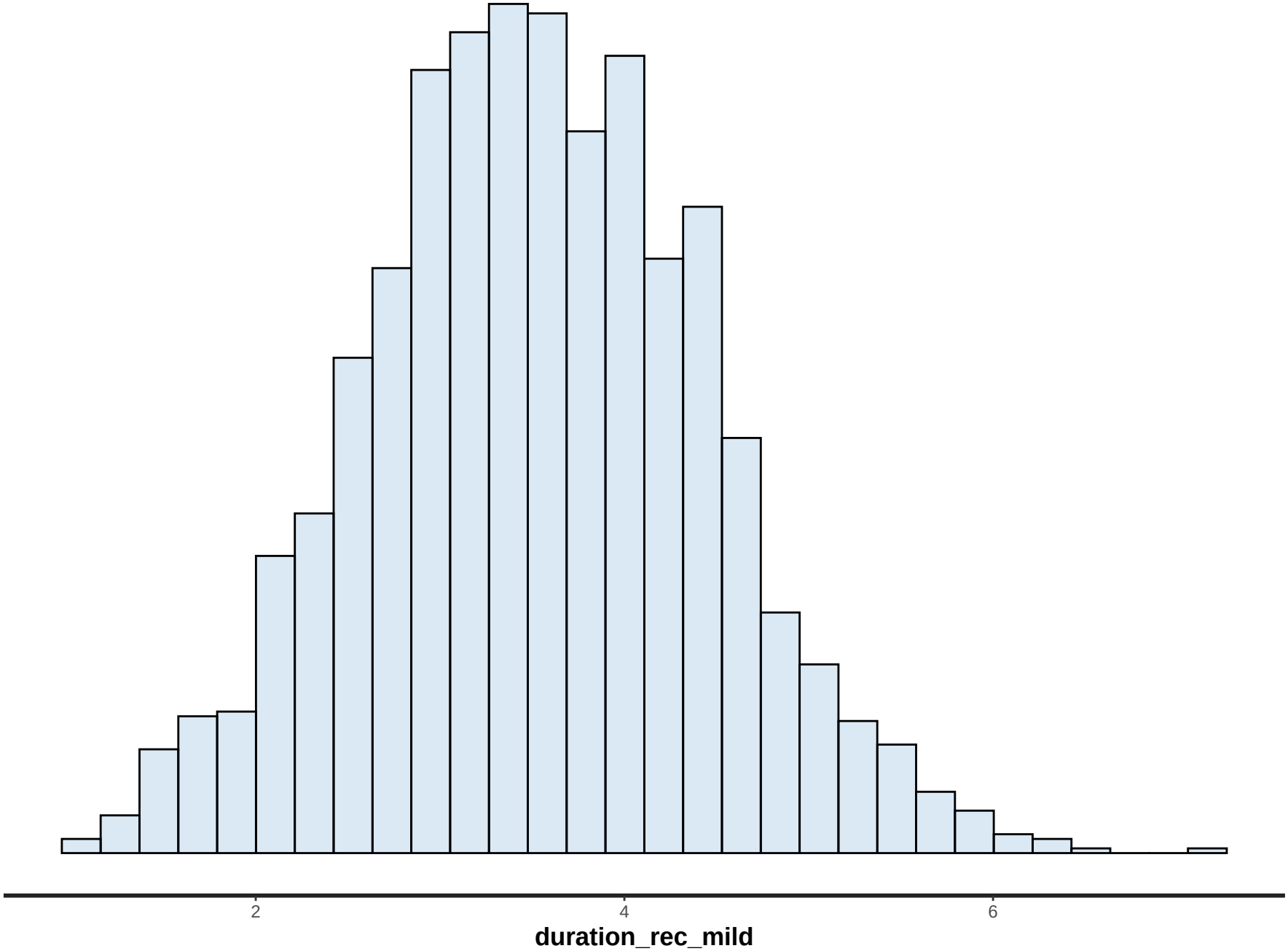
# Rt as of 2020−11−30

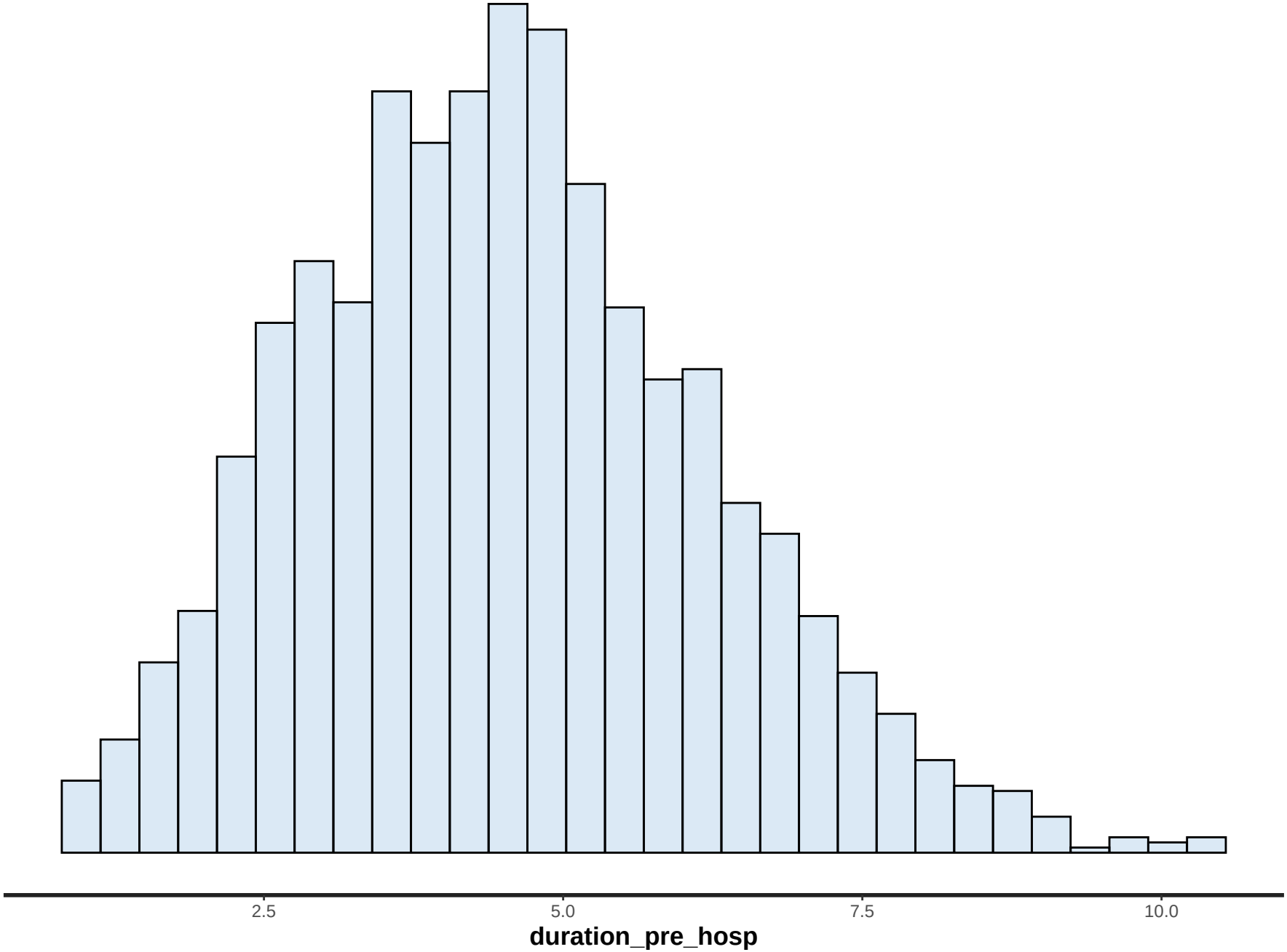
| 5% | 10% | 25% | 50% | 75% | 90% | 95% |
|---|---|---|---|---|---|---|
| 0.91 | 0.95 | 1.01 | 1.07 | 1.13 | 1.19 | 1.22 |

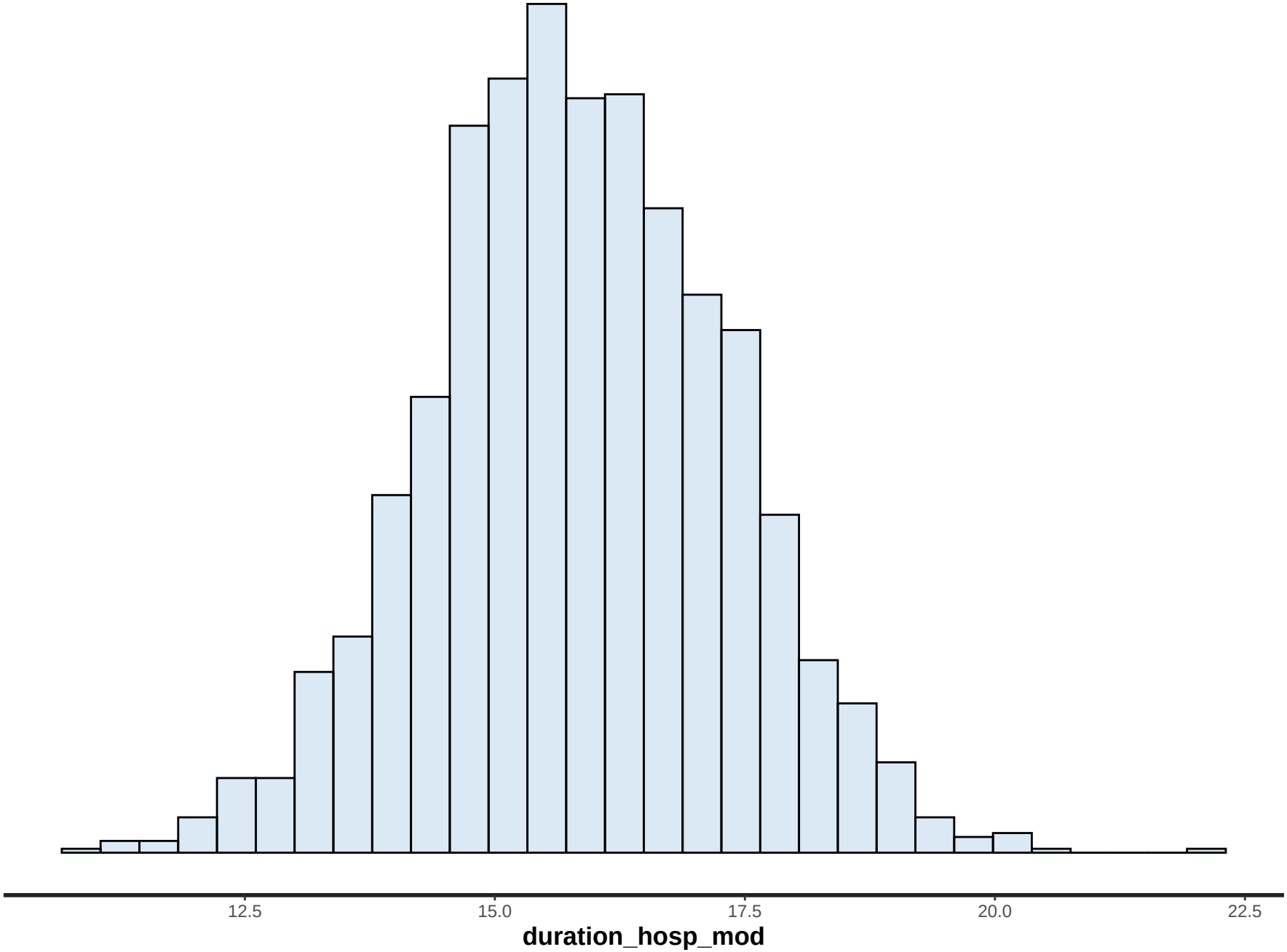


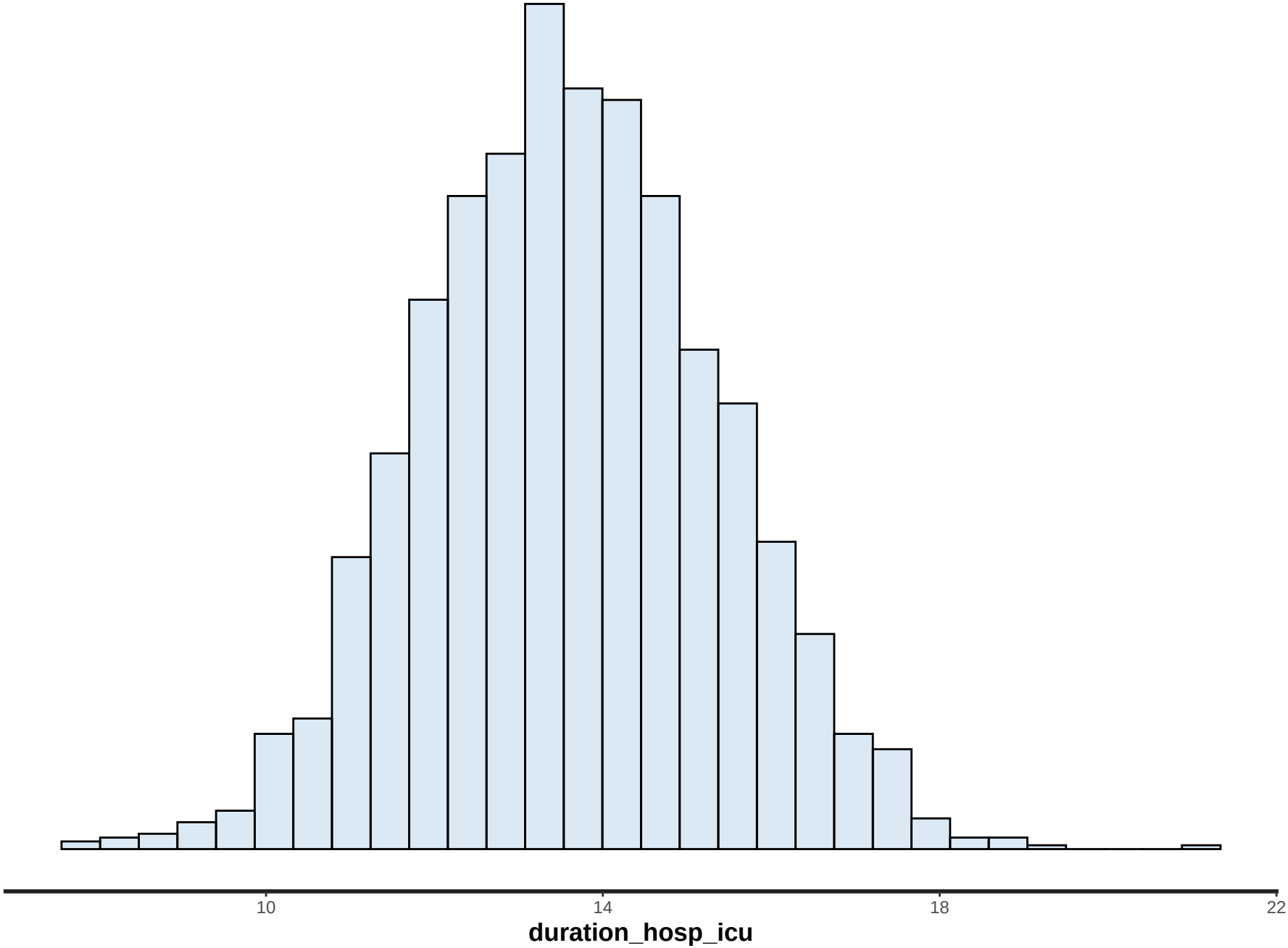

1.0
1.5
2.0
2.5
3.0
r0

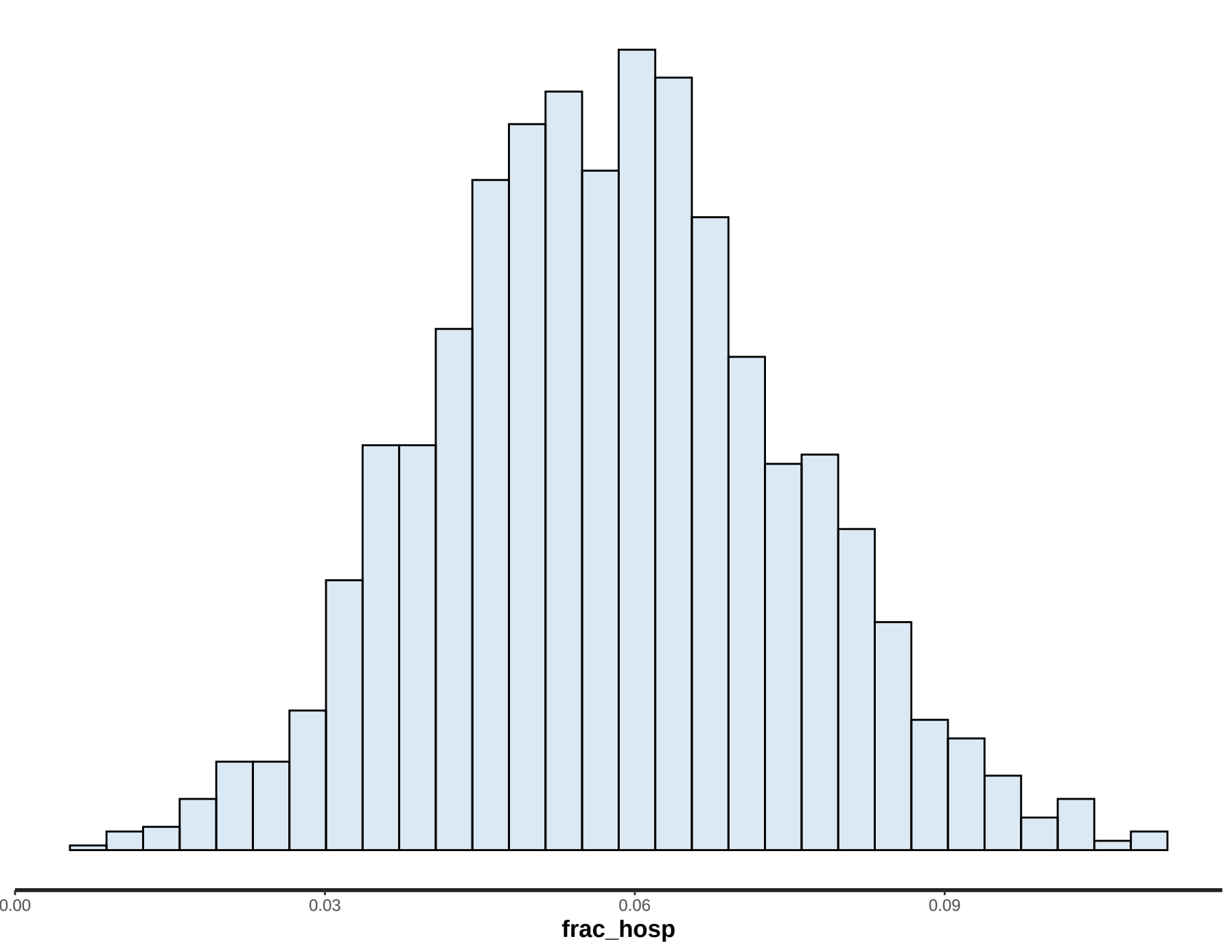

1
2
3
4
5
duration_latent

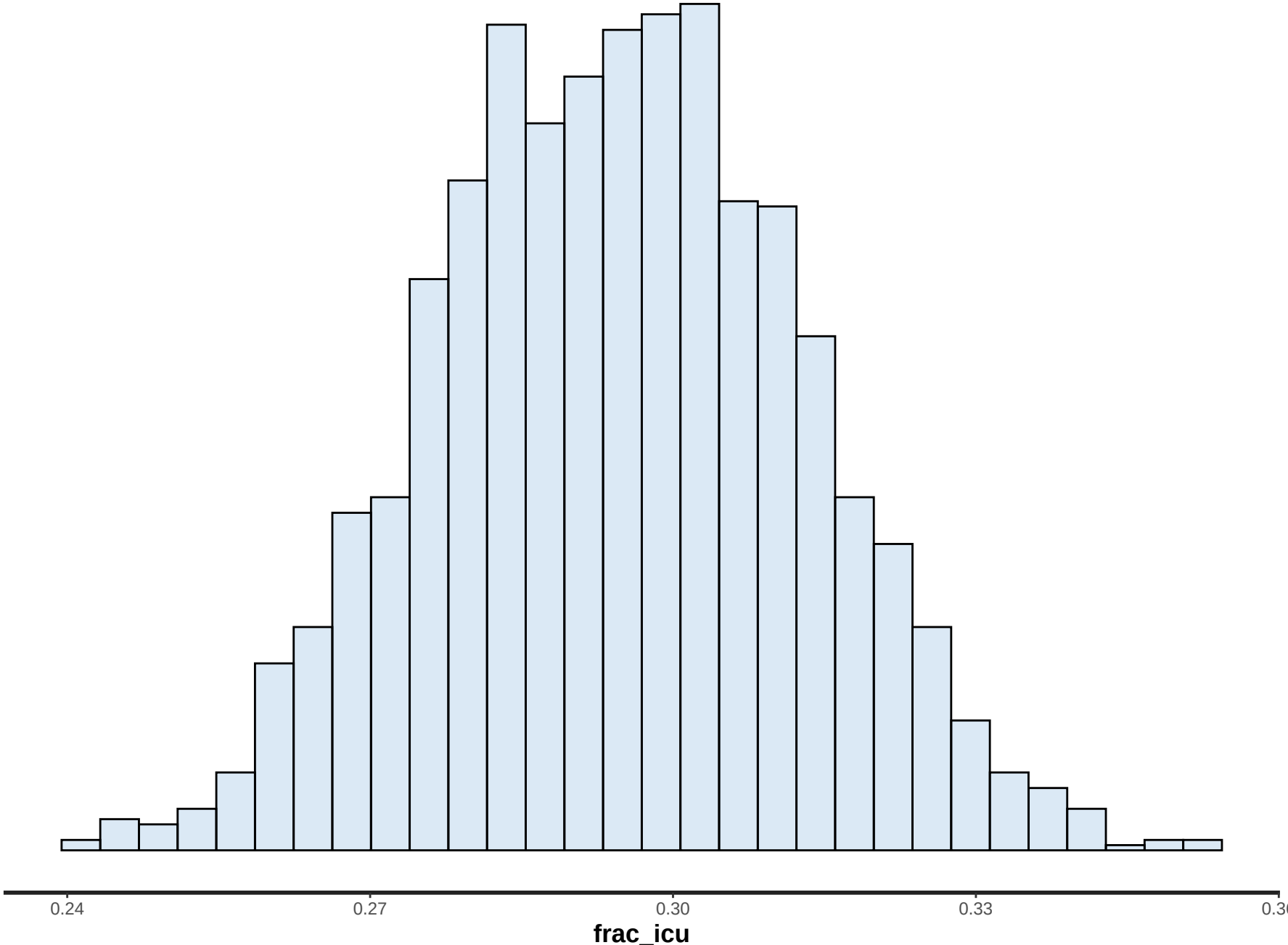

2
4
6
duration_rec_mild

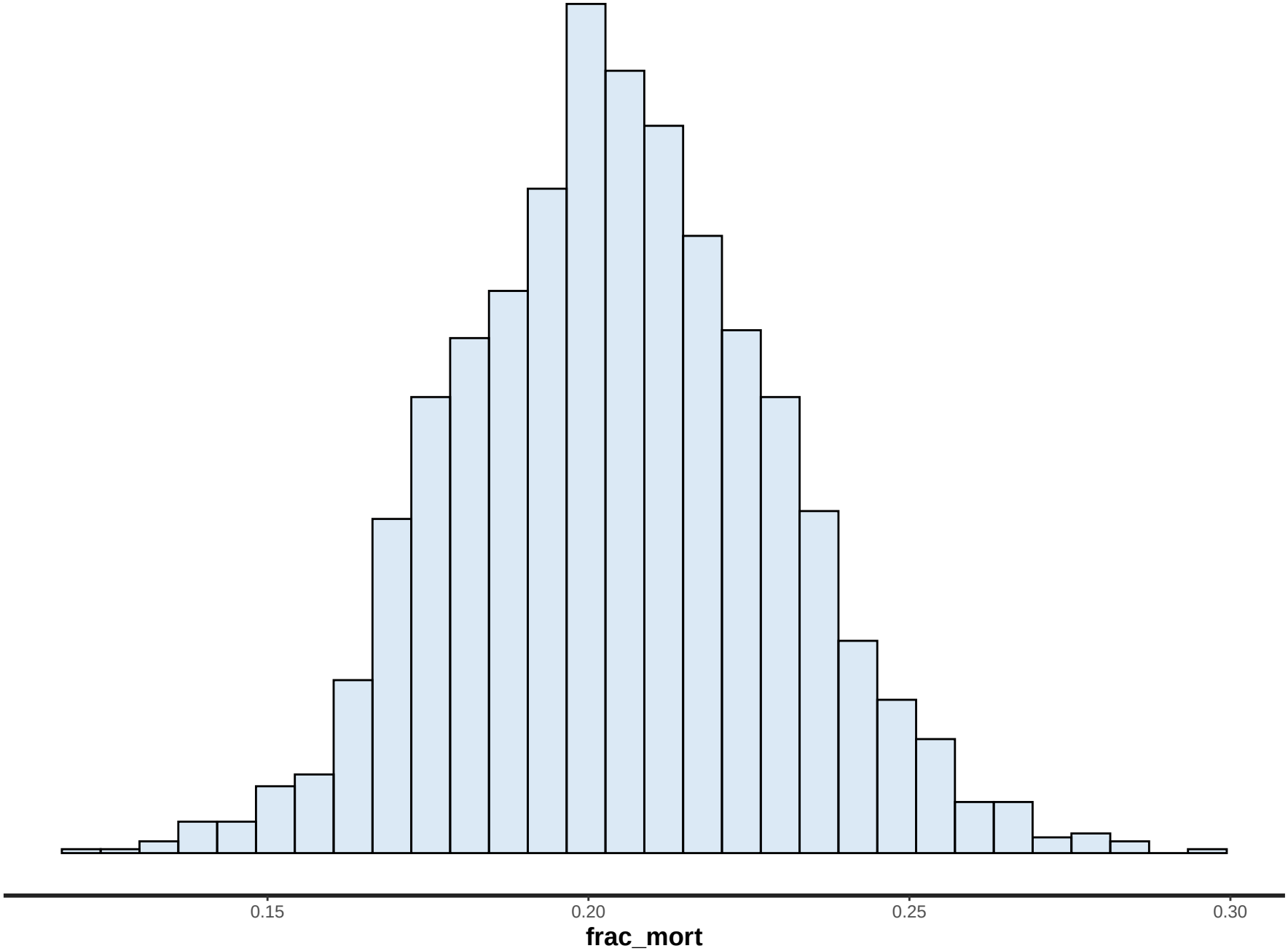

2.5
5.0
7.5
10.0
duration_pre_hosp

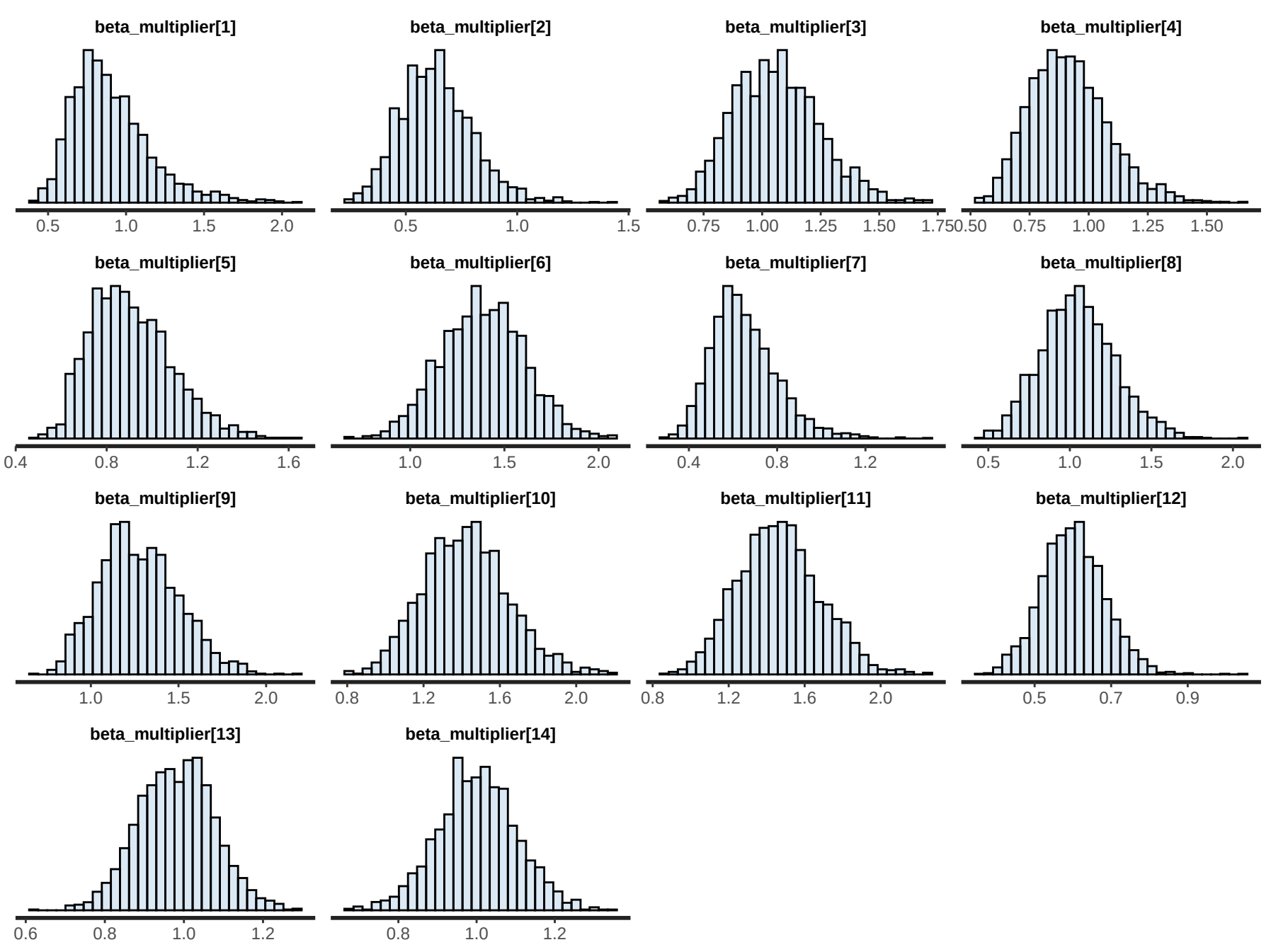

12.5
15.0
17.5
20.0
22.5
duration_hosp_mod

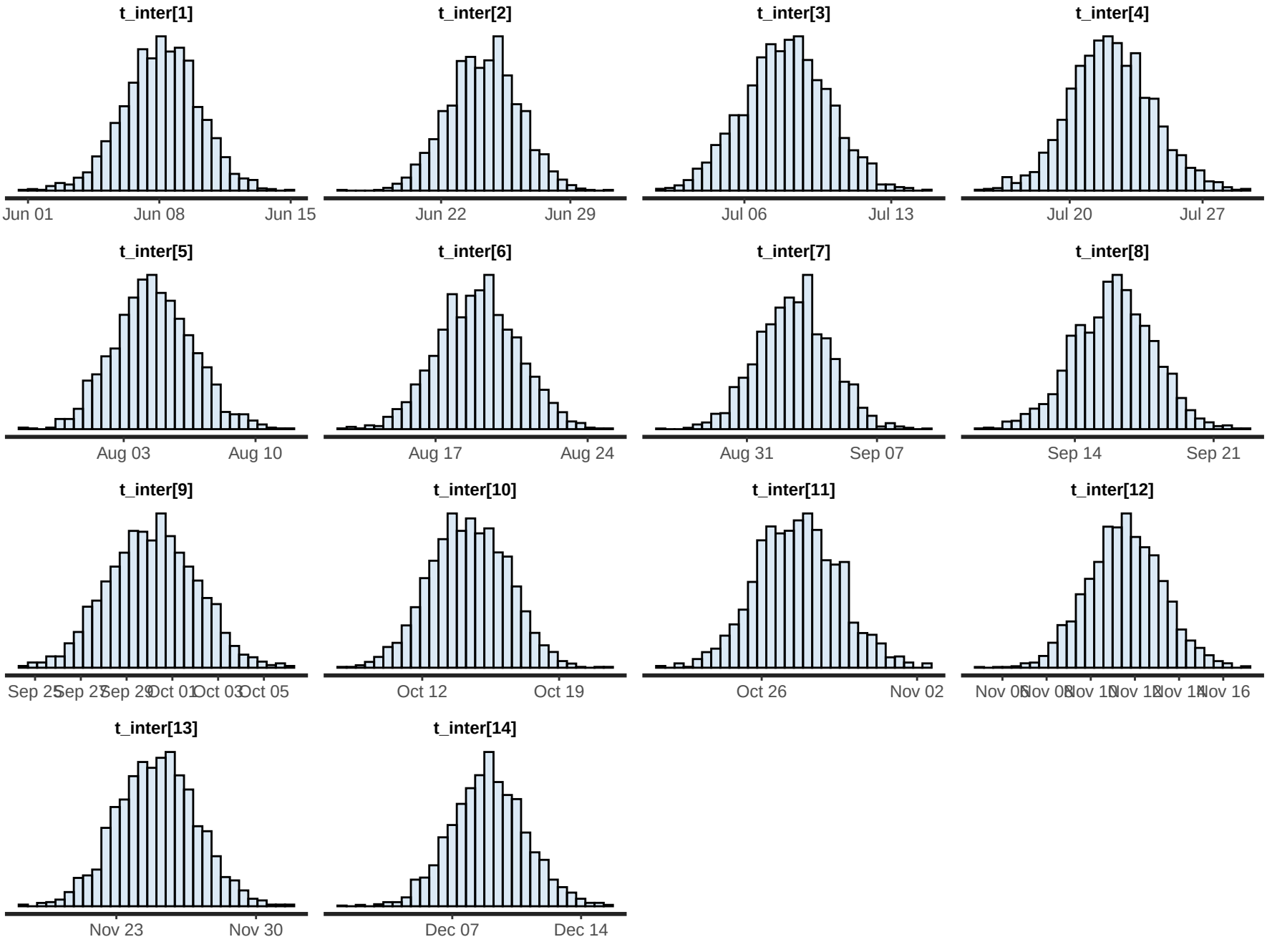

10
14
18
22
duration_hosp_icu

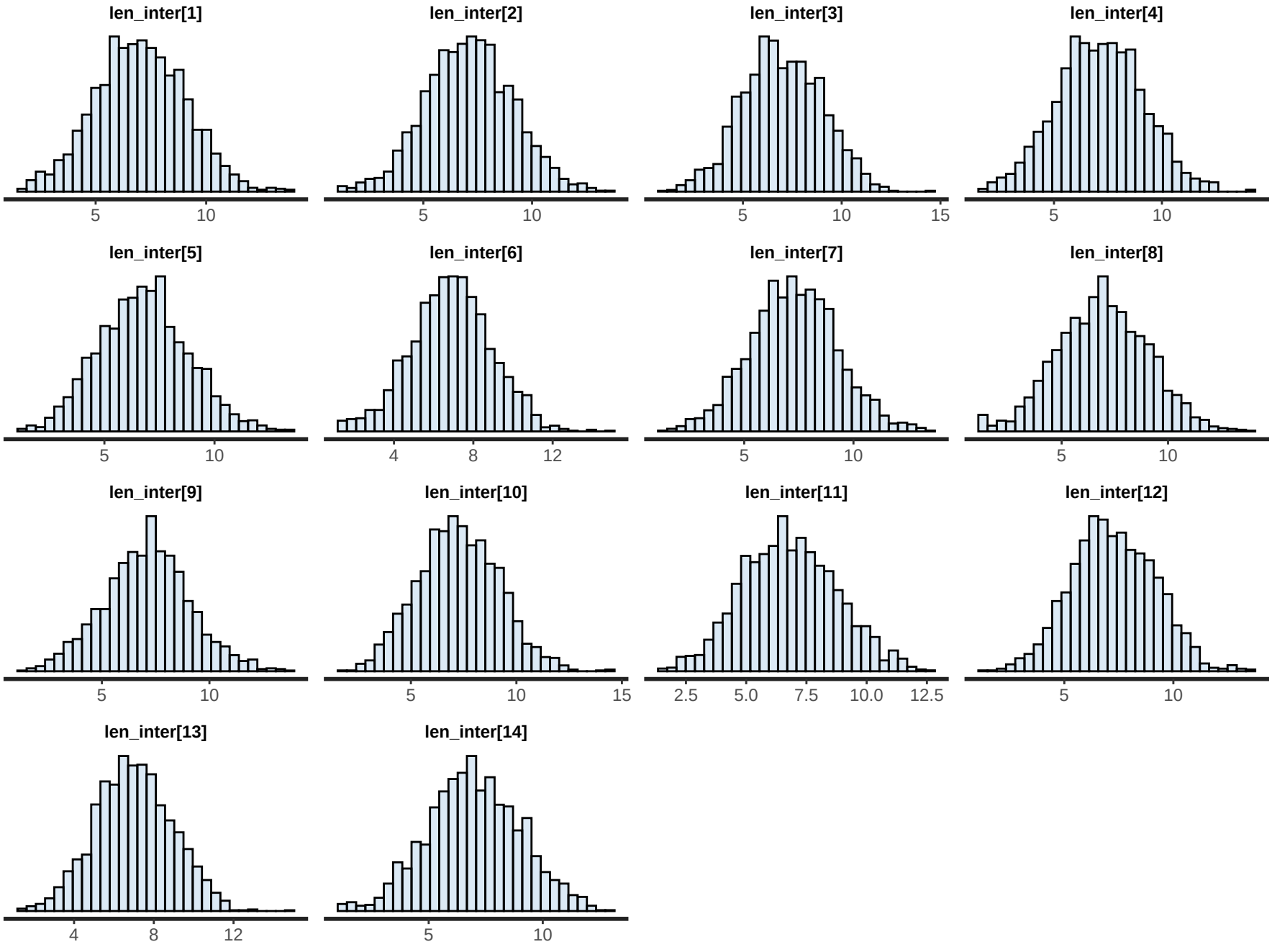

0.00
0.03
0.06
0.09
frac_hosp

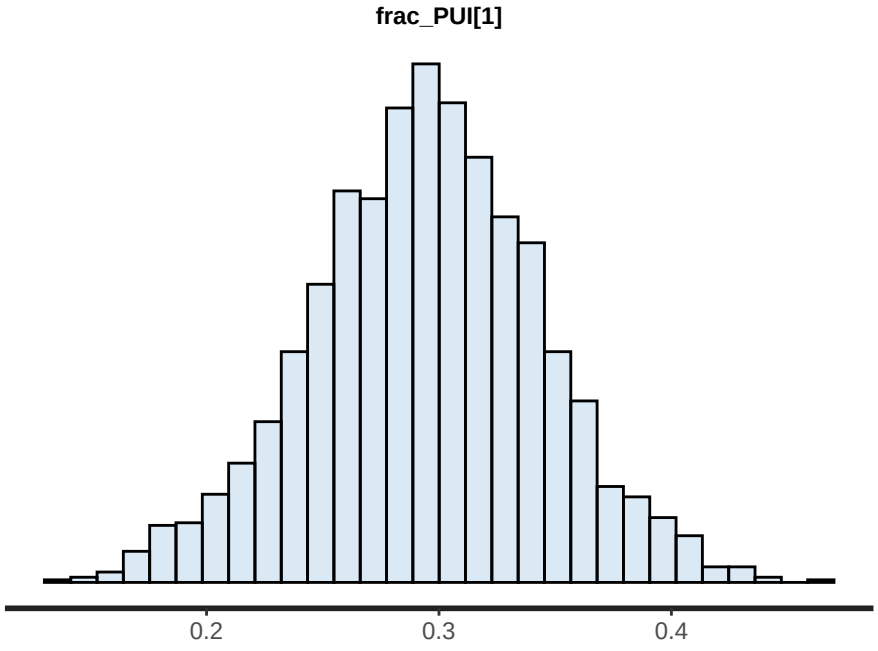

0.24
0.27
0.30
0.33
0.36
frac_icu

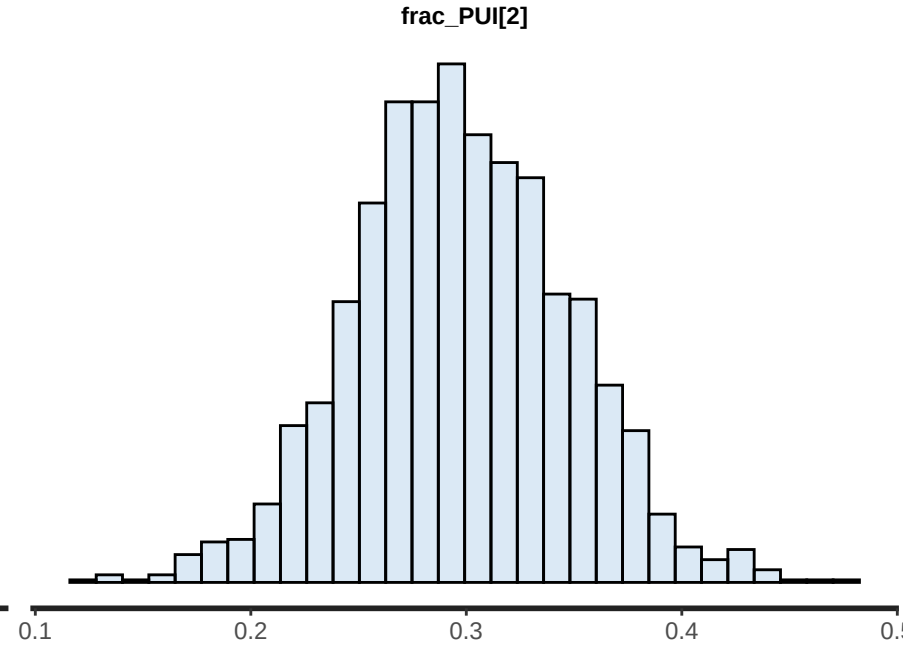

0.15
0.20
0.25
0.30
frac_mort

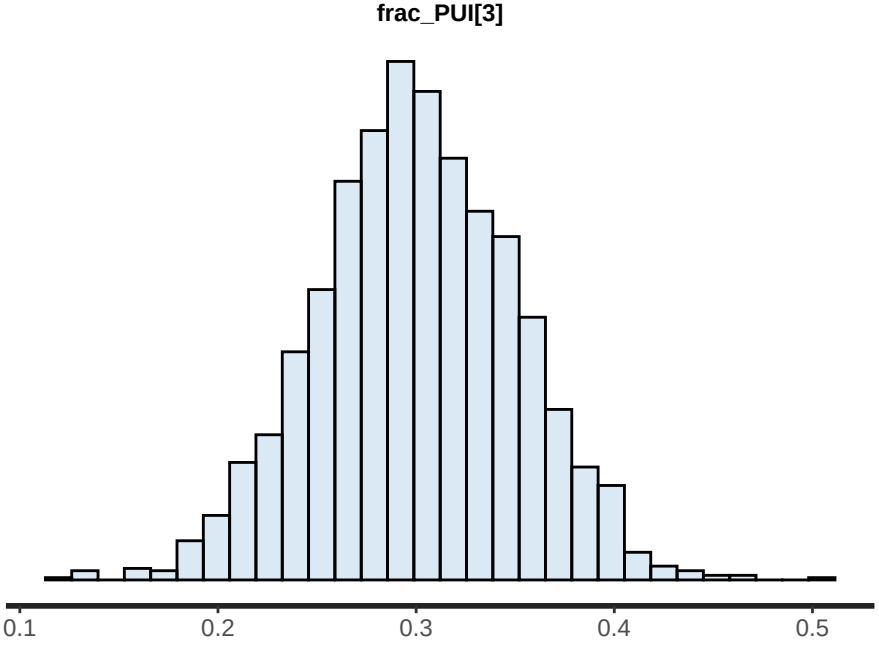

beta_multiplier[1]
0.5
1.0
1.5
2.0
beta_multiplier[2]
0.5
1.0
1.5
beta_multiplier[3]
0.75
1.00
1.25
1.50
1.75
beta_multiplier[4]
0.50
0.75
1.00
1.25
1.50
beta_multiplier[5]
0.4
0.8
1.2
1.6
beta_multiplier[6]
1.0
1.5
2.0
beta_multiplier[7]
0.4
0.8
1.2
beta_multiplier[8]
0.5
1.0
1.5
2.0
beta_multiplier[9]
1.0
1.5
2.0
beta_multiplier[10]
0.8
1.2
1.6
2.0
beta_multiplier[11]
0.8
1.2
1.6
2.0
beta_multiplier[12]
0.5
0.7
0.9
beta_multiplier[13]
0.6
0.8
1.0
1.2
beta_multiplier[14]
0.8
1.0
1.2

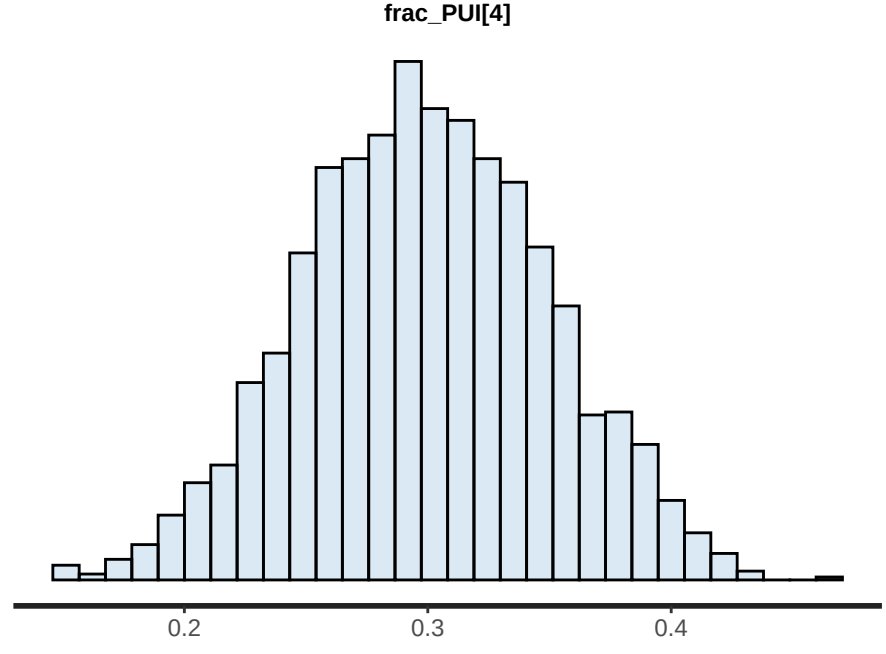

t_inter[1]
Jun 01
Jun 08
Jun 15
t_inter[2]
Jun 22
Jun 29
t_inter[3]
Jul 06
Jul 13
t_inter[4]
Jul 20
Jul 27
t_inter[5]
Aug 03
Aug 10
t_inter[6]
Aug 17
Aug 24
t_inter[7]
Aug 31
Sep 07
t_inter[8]
Sep 14
Sep 21
t_inter[9]
Sep 25
Sep 27
Sep 29
Oct 01
Oct 03
Oct 05
t_inter[10]
Oct 12
Oct 19
t_inter[11]
Oct 26
Nov 02
t_inter[12]
Nov 06
Nov 08
Nov 10
Nov 12
Nov 14
Nov 16
t_inter[13]
Nov 23
Nov 30
t_inter[14]
Dec 07
Dec 14

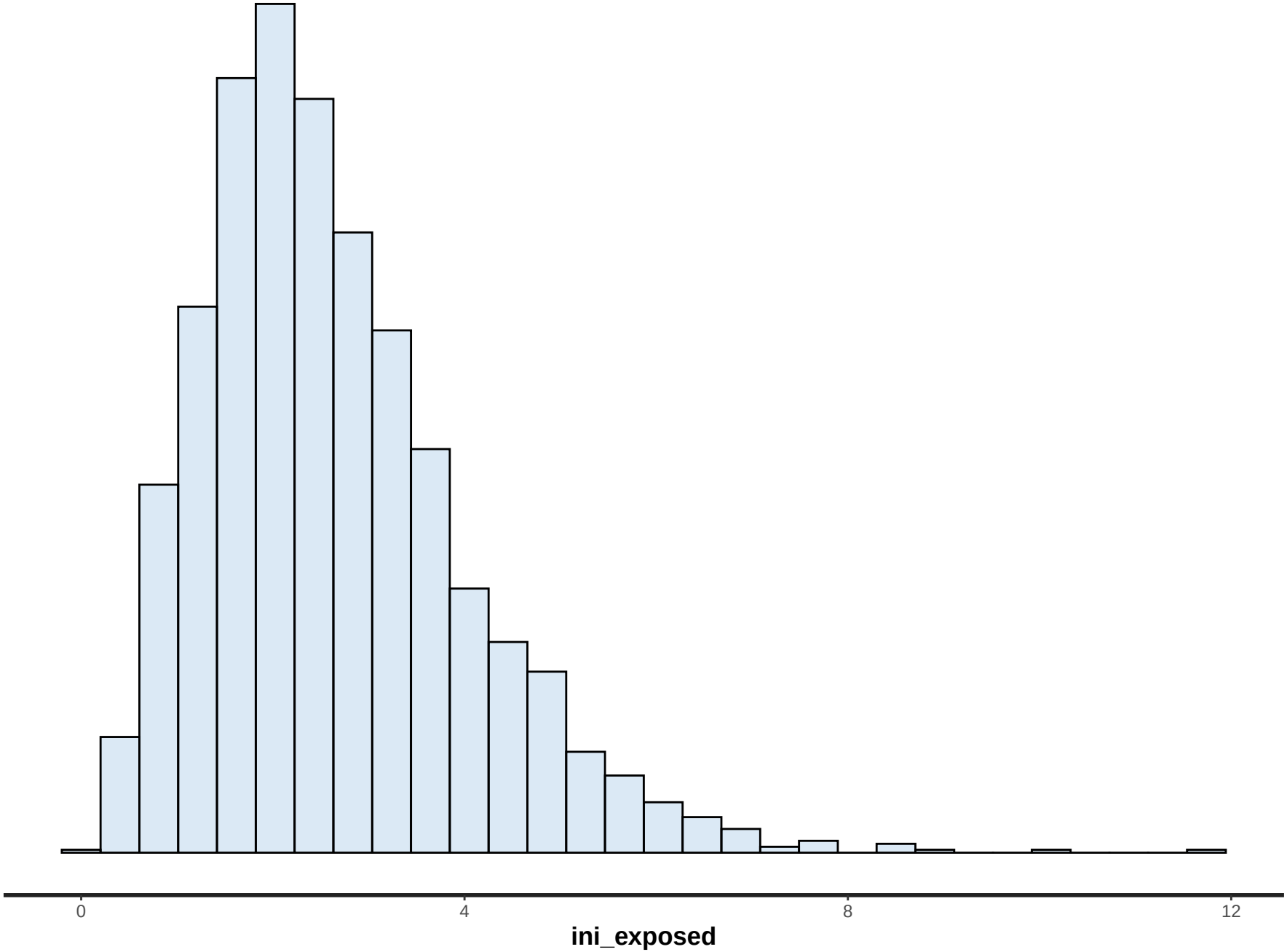

len_inter[1]
5
10
len_inter[2]
5
10
len_inter[3]
5
10
15
len_inter[4]
5
10
len_inter[5]
5
10
len_inter[6]
4
8
12
len_inter[7]
5
10
len_inter[8]
5
10
len_inter[9]
5
10
len_inter[10]
5
10
15
len_inter[11]
2.5
5.0
7.5
10.0
12.5
len_inter[12]
5
10
len_inter[13]
4
8
12
len_inter[14]
5
10

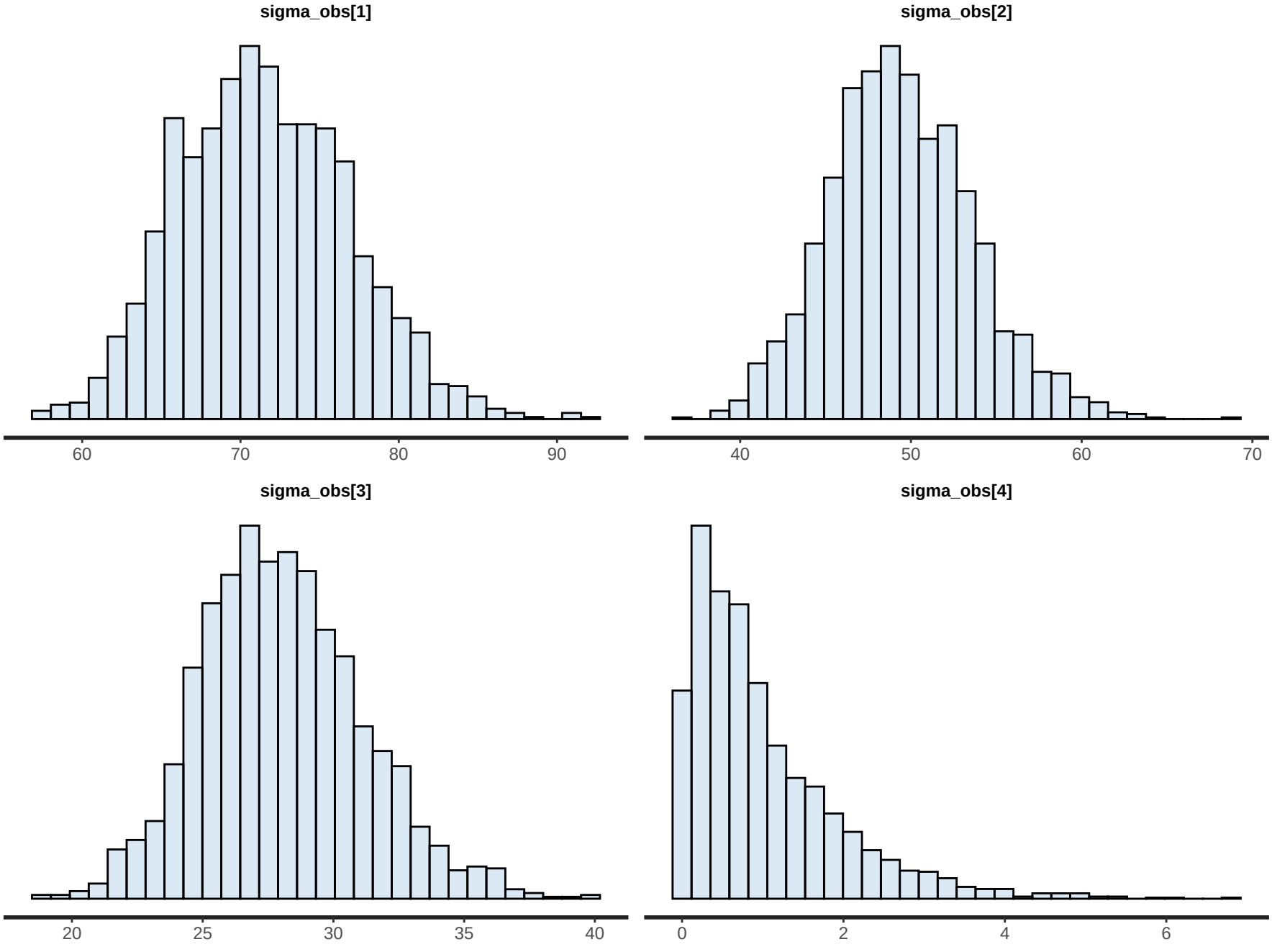

frac_PUI[1]
0.2
0.3
0.4


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
4
8
12
ini_exposed


sigma_obs[1]
60
70
80
90
sigma_obs[2]
40
50
60
70
sigma_obs[3]
20
25
30
35
40
sigma_obs[4]
0
2
4
6