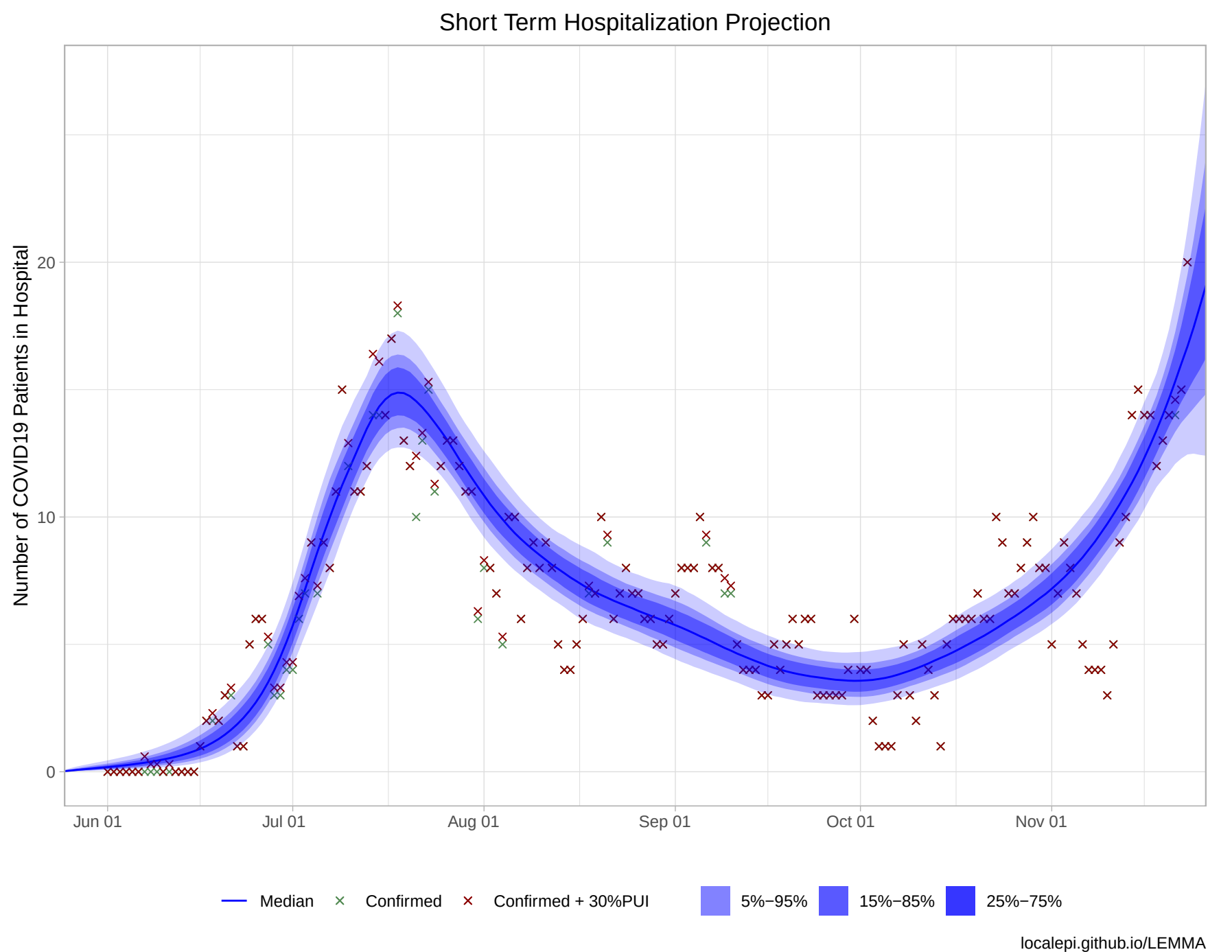
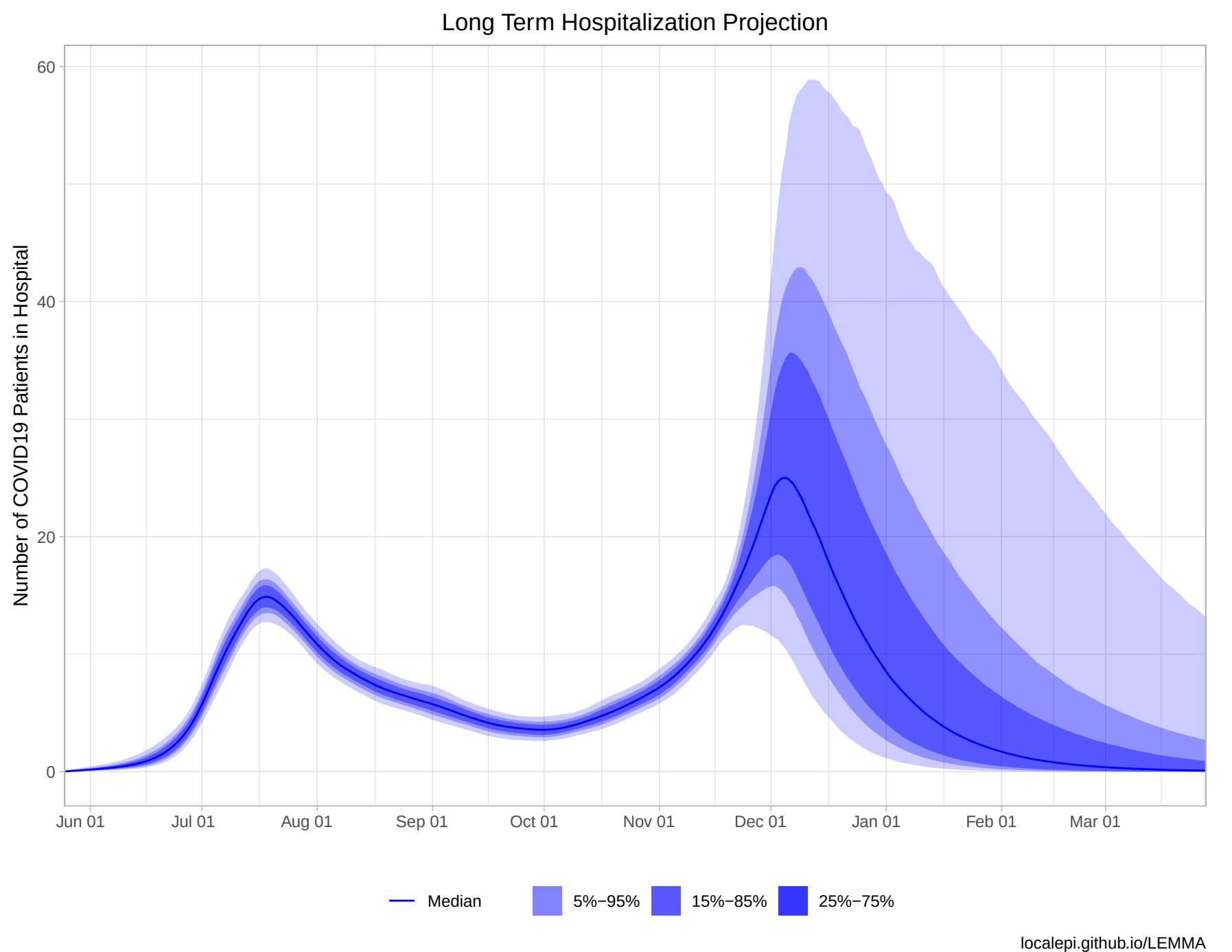
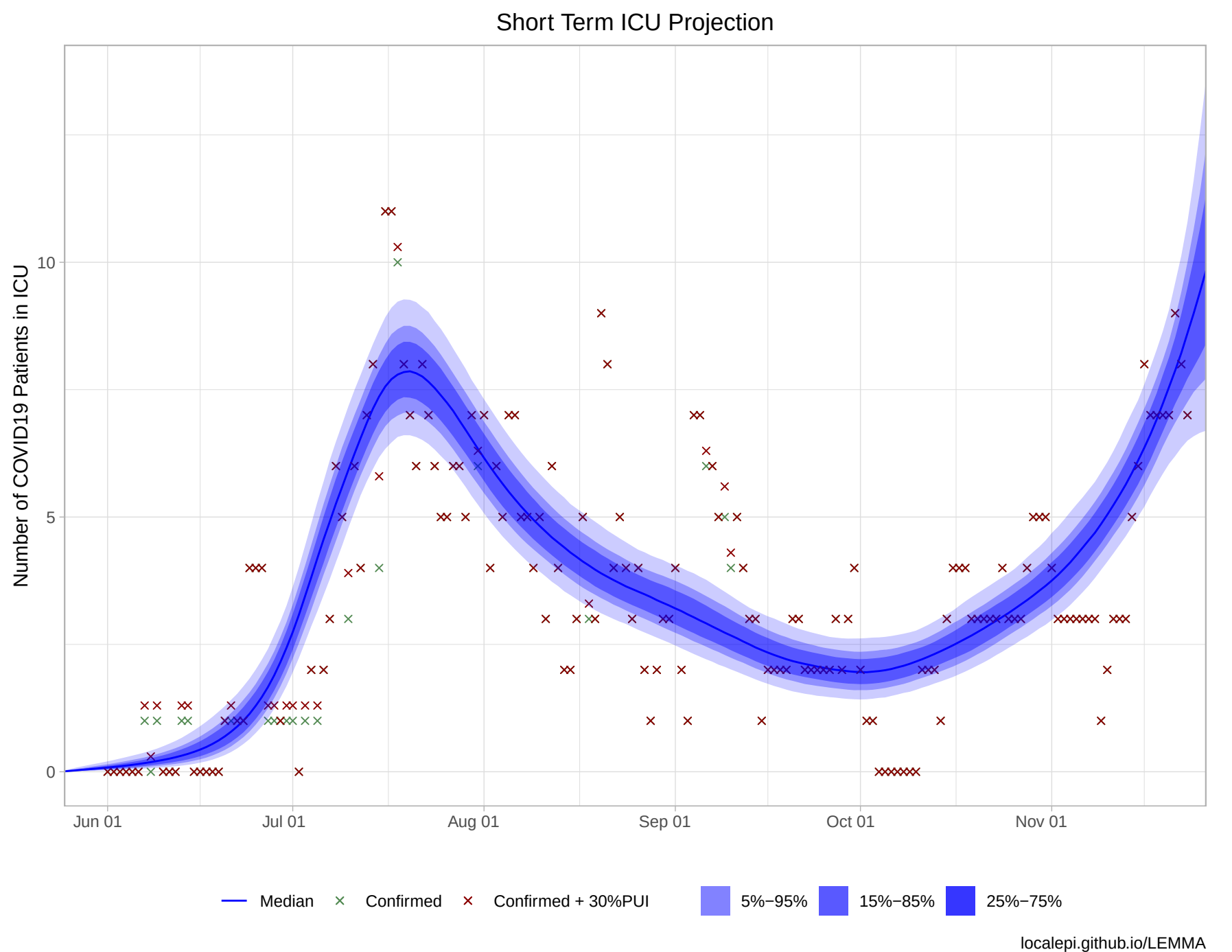
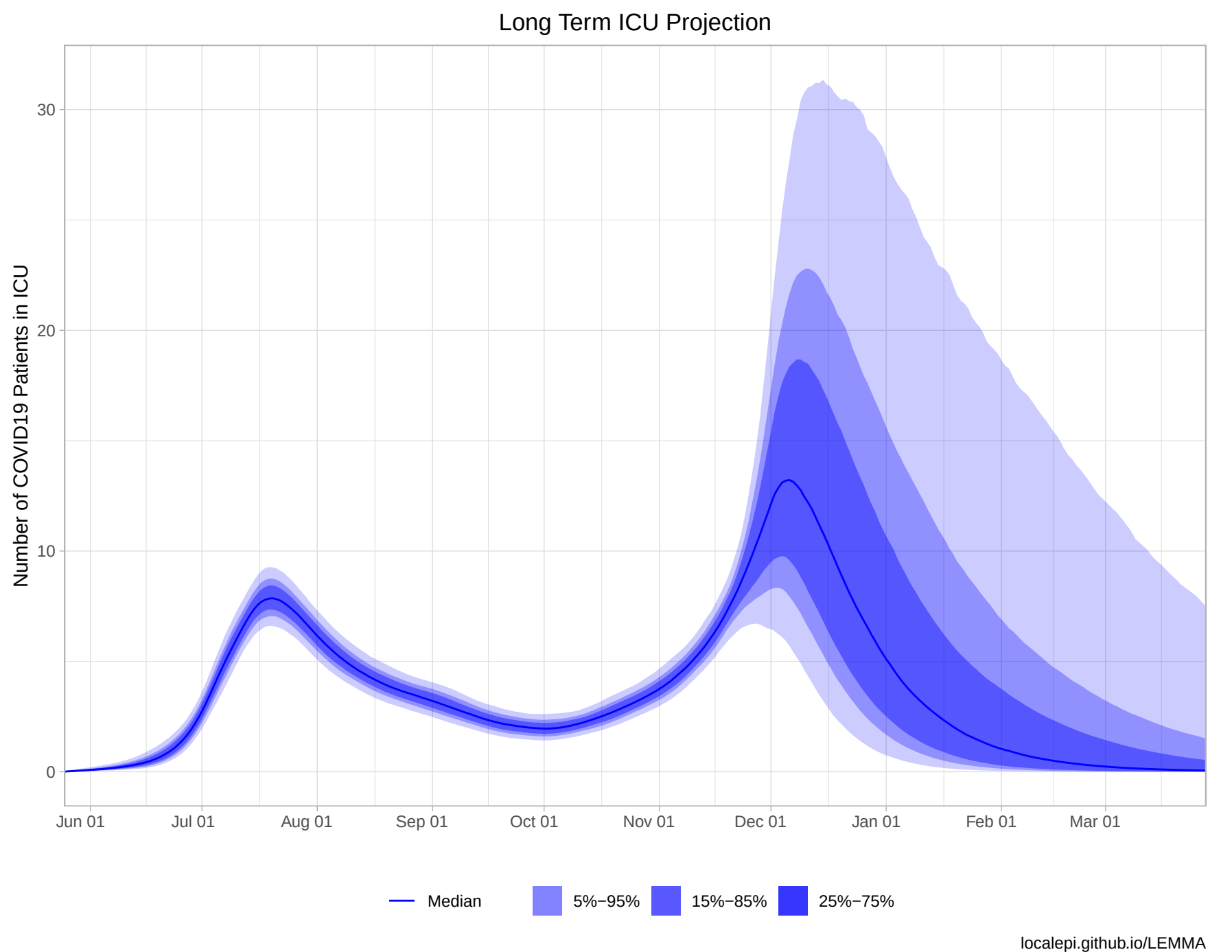
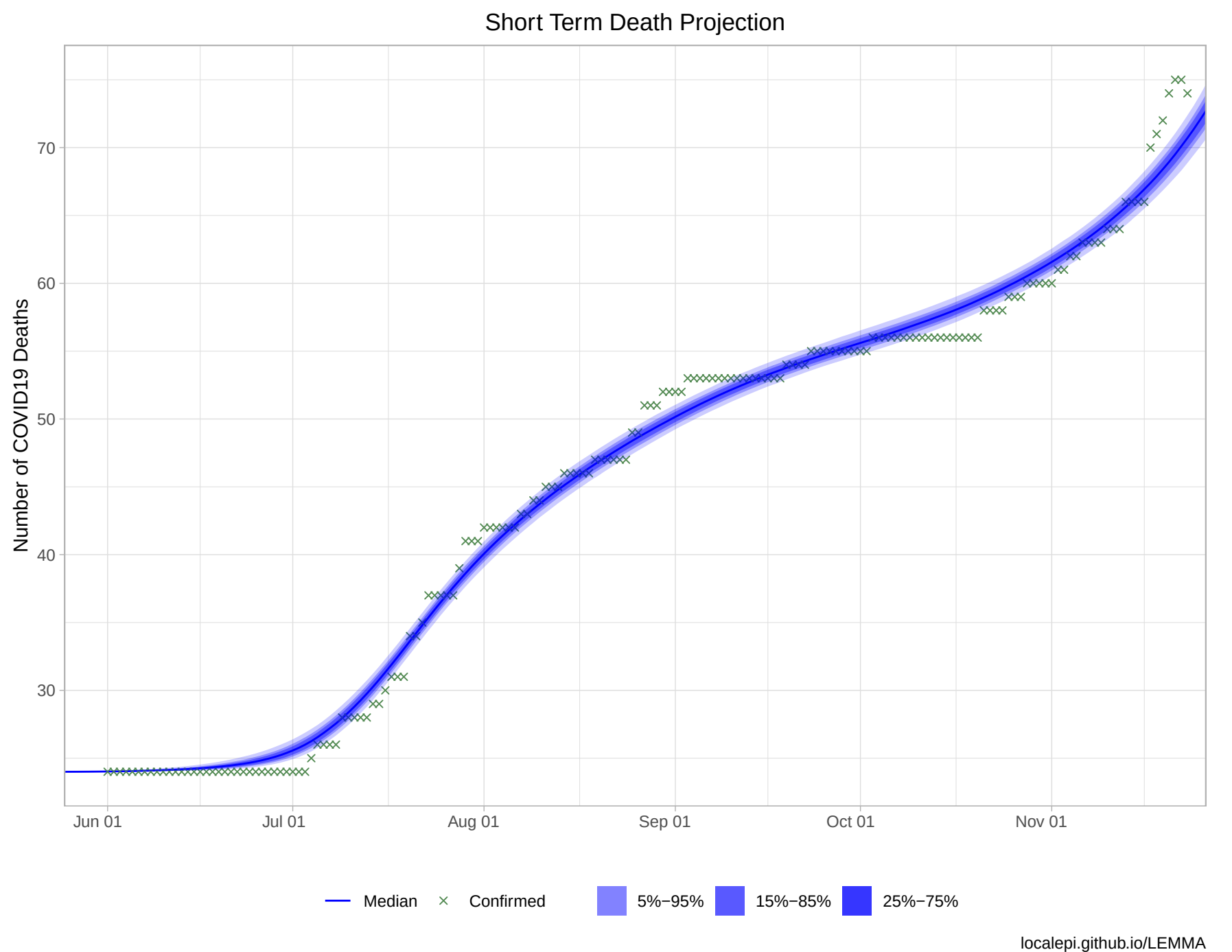
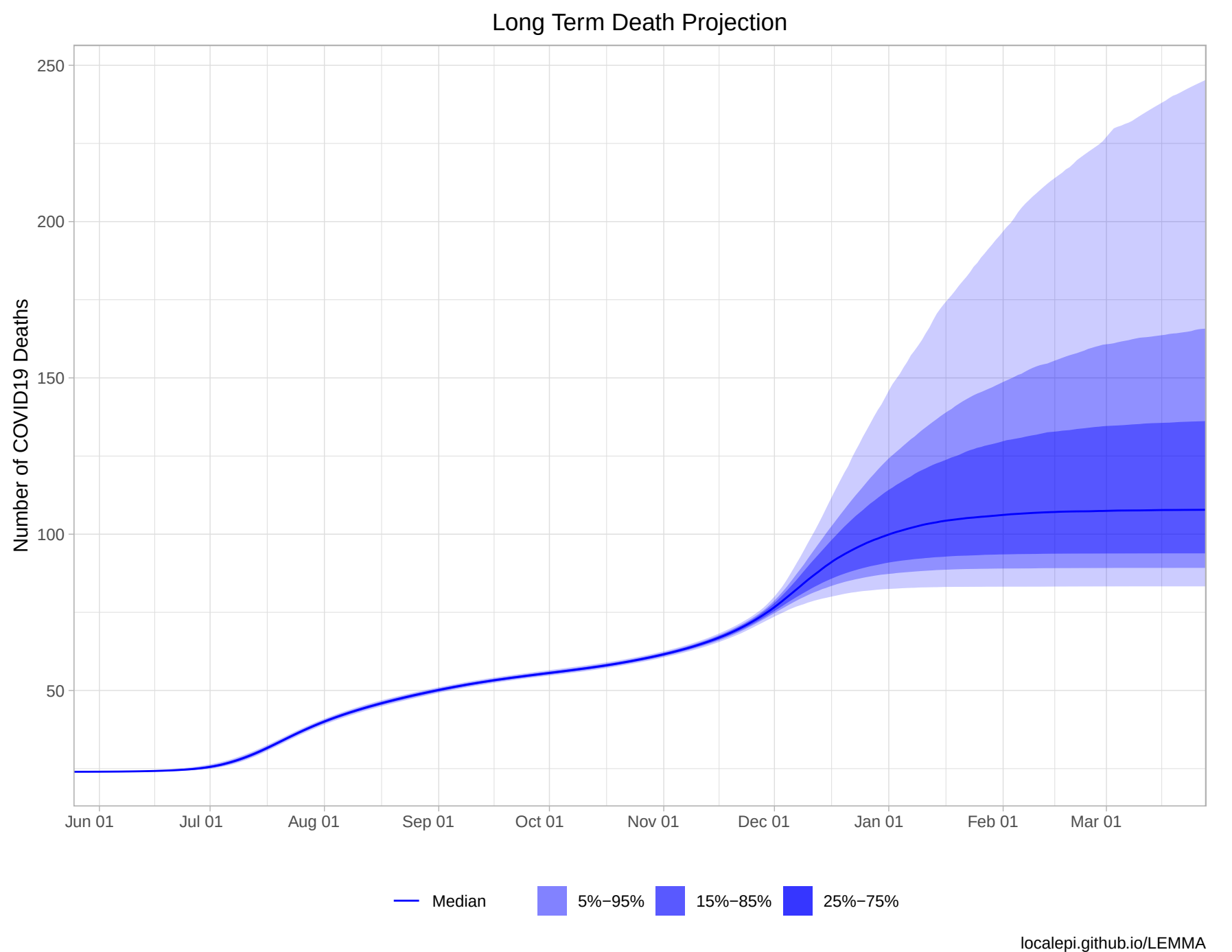

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
10
20
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

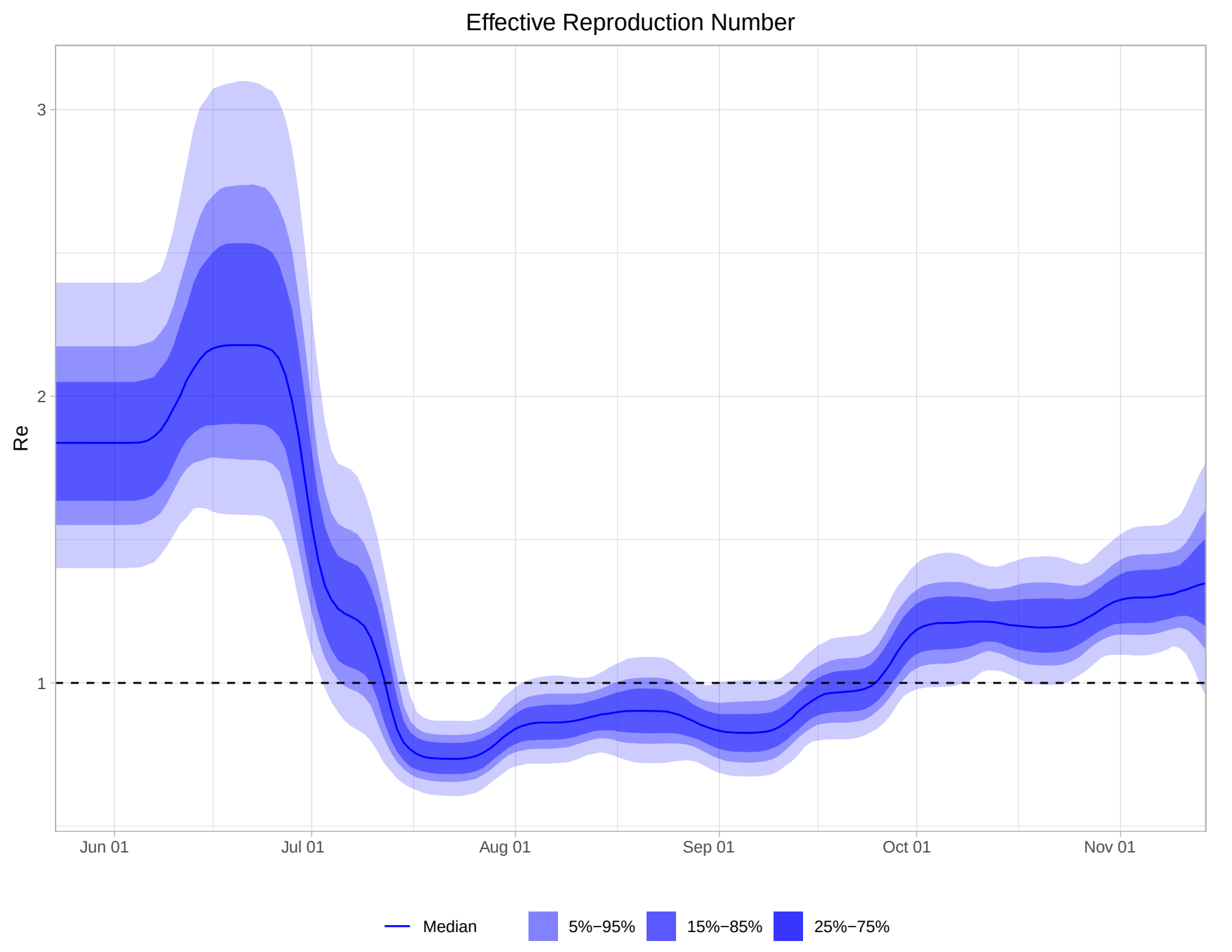

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
60
40
20
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
10
5
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
30
20
10
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

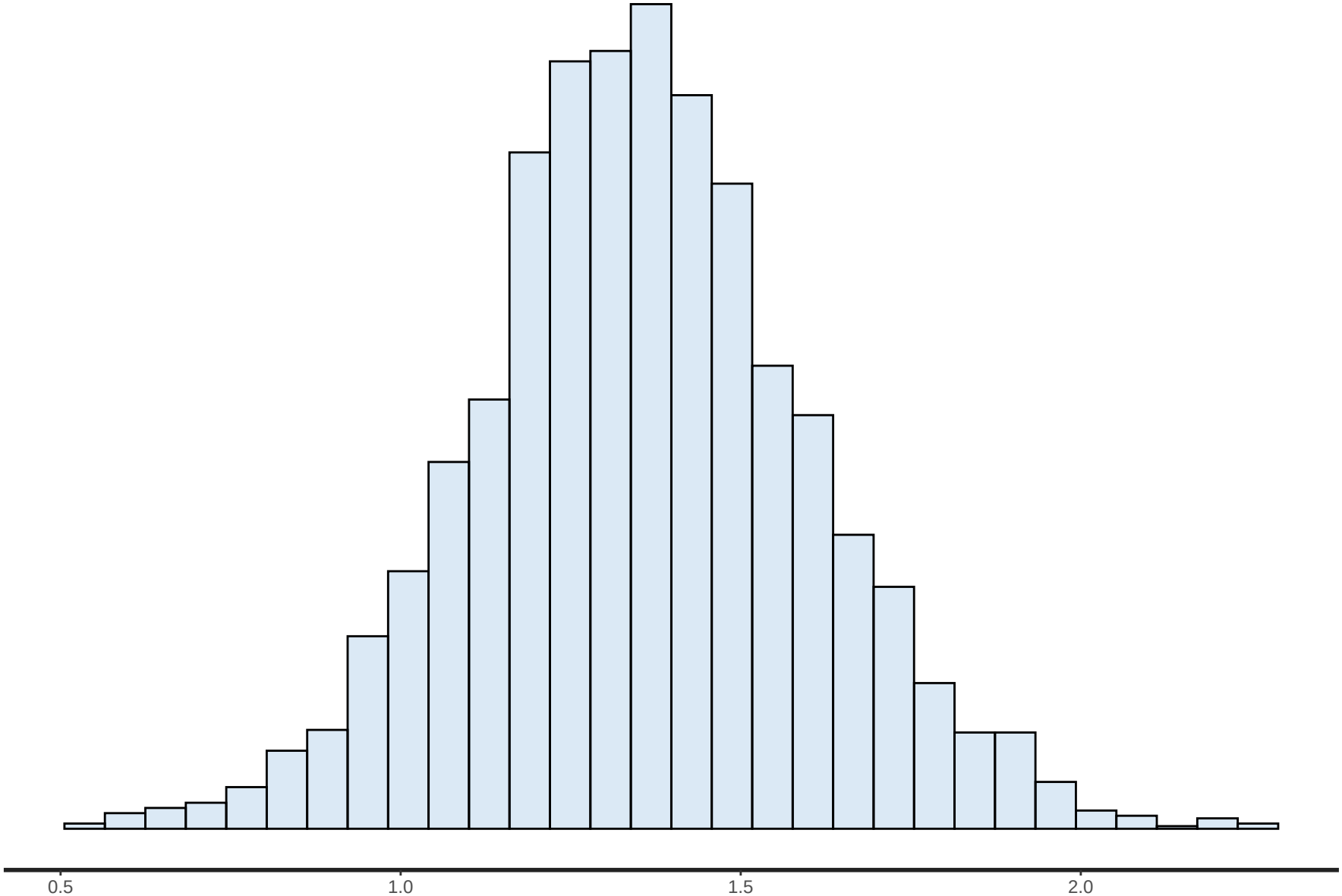

Short Term Death Projection
Number of COVID19 Deaths
70
60
50
40
30
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

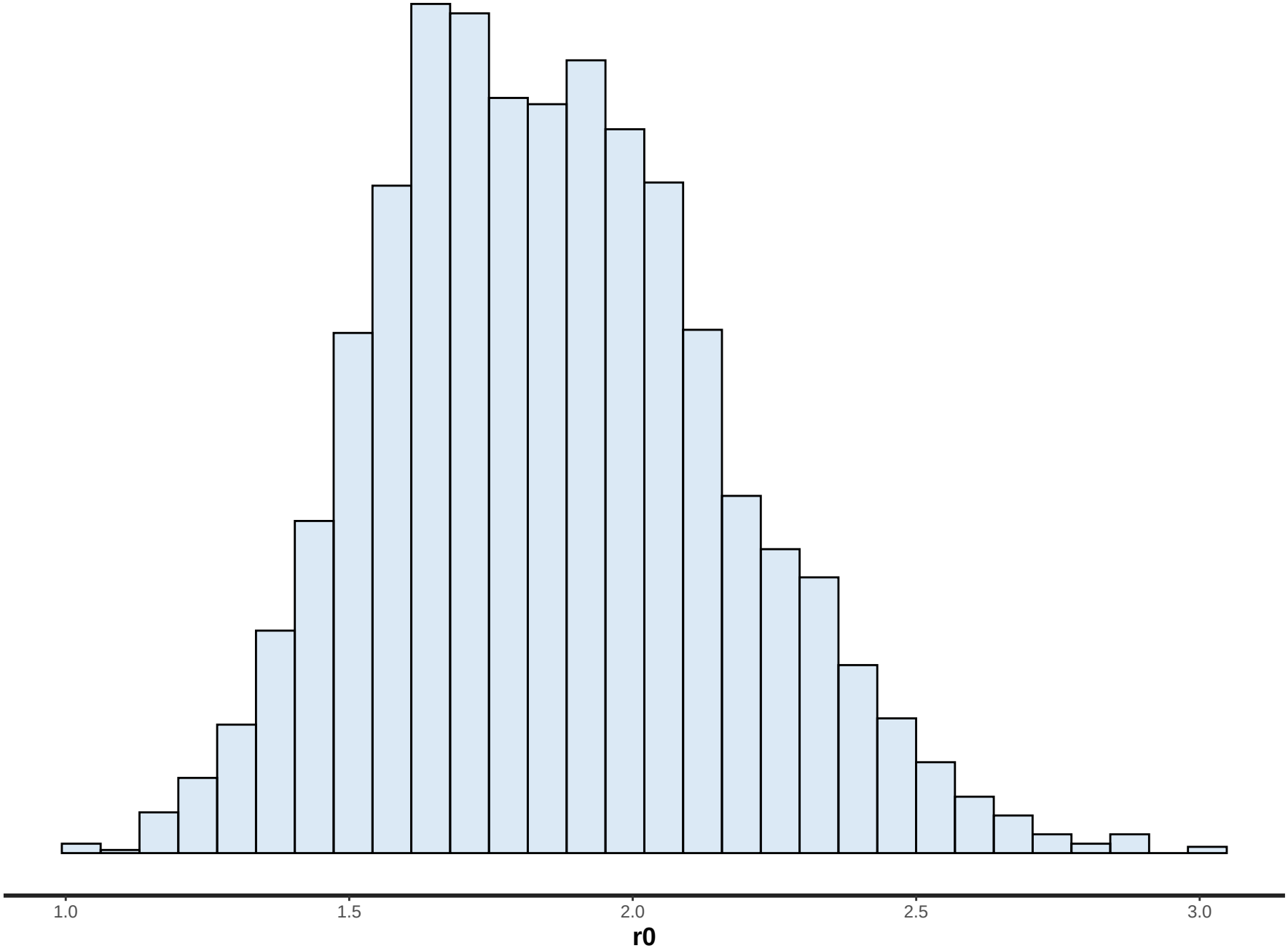

Long Term Death Projection
Number of COVID19 Deaths
250
200
150
100
50
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

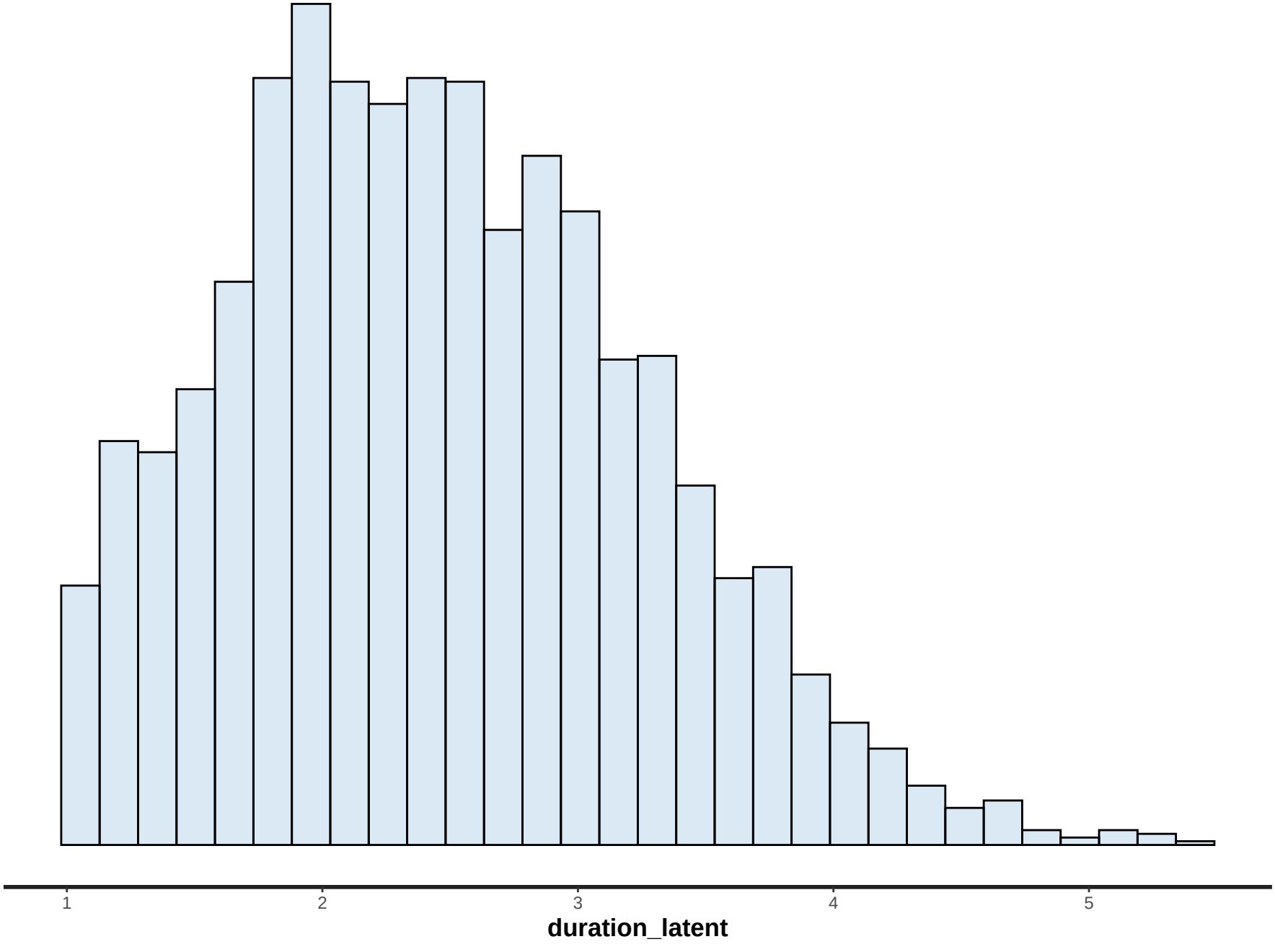

Effective Reproduction Number
Re
3
2
1
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
5%−95%
15%−85%
25%−75%

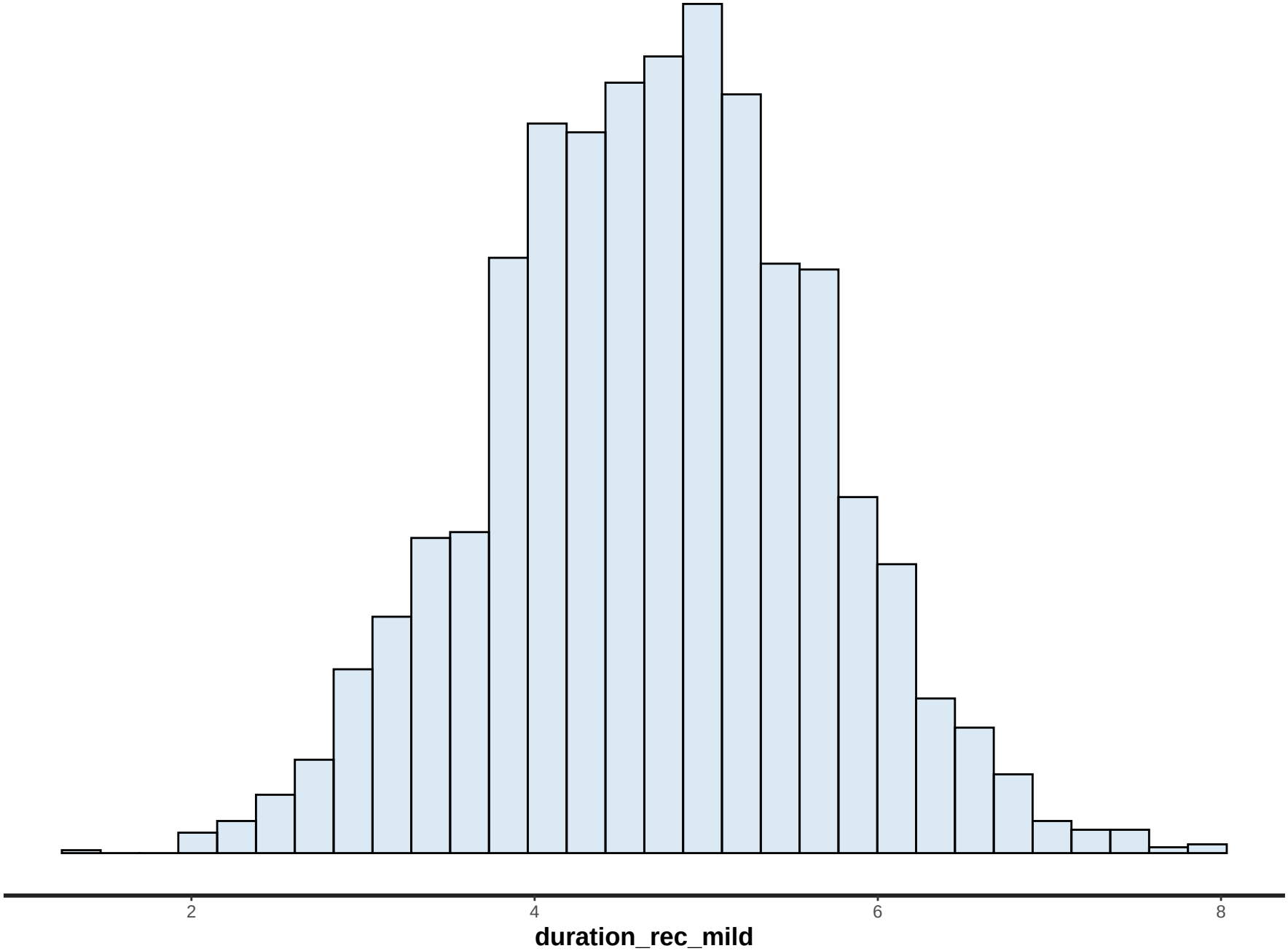
Rt as of 2020−11−14

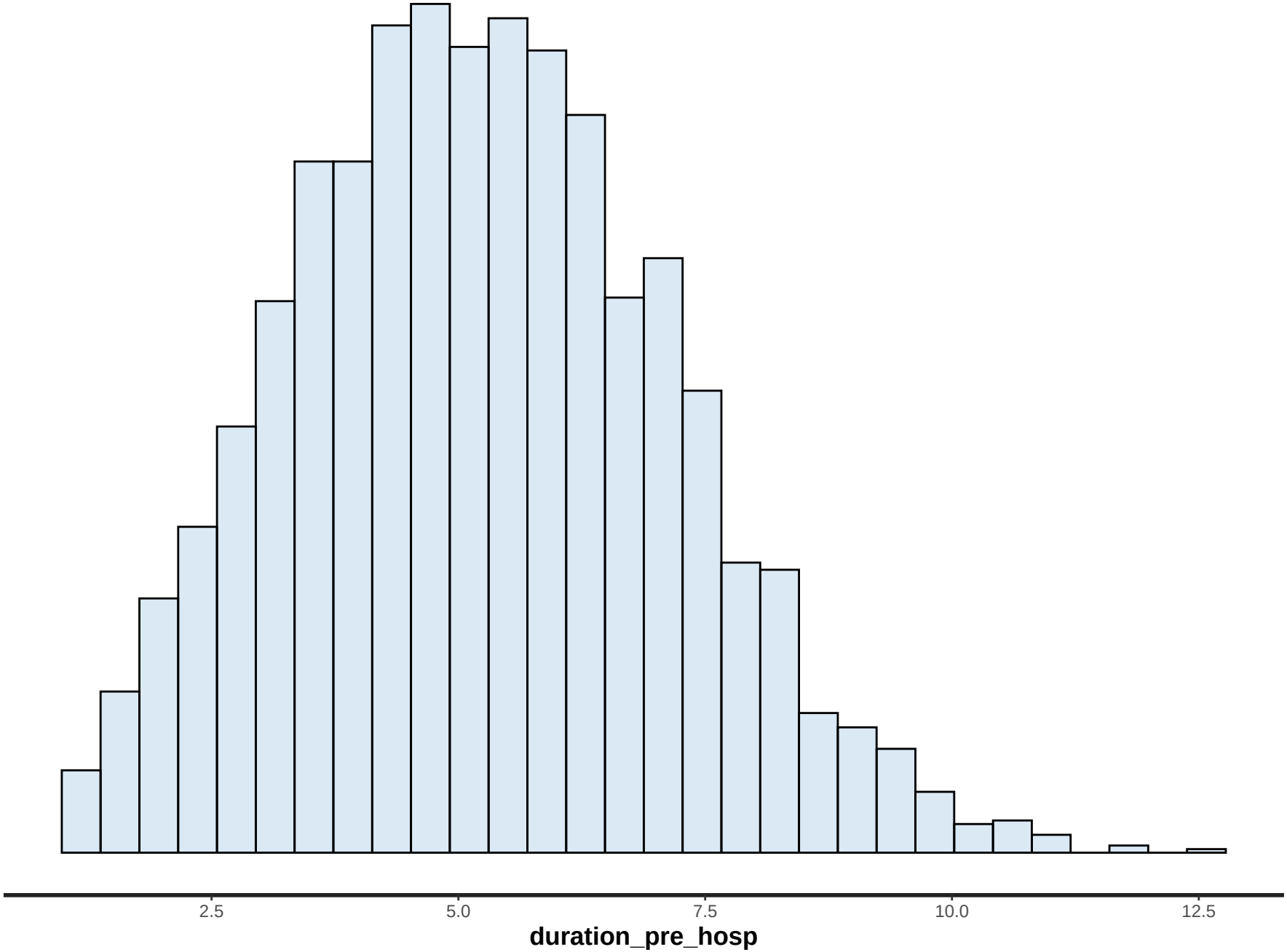
5%	10%	25%	50%	75%	90%	95%
0.95	1.05	1.20	1.35	1.50	1.67	1.77

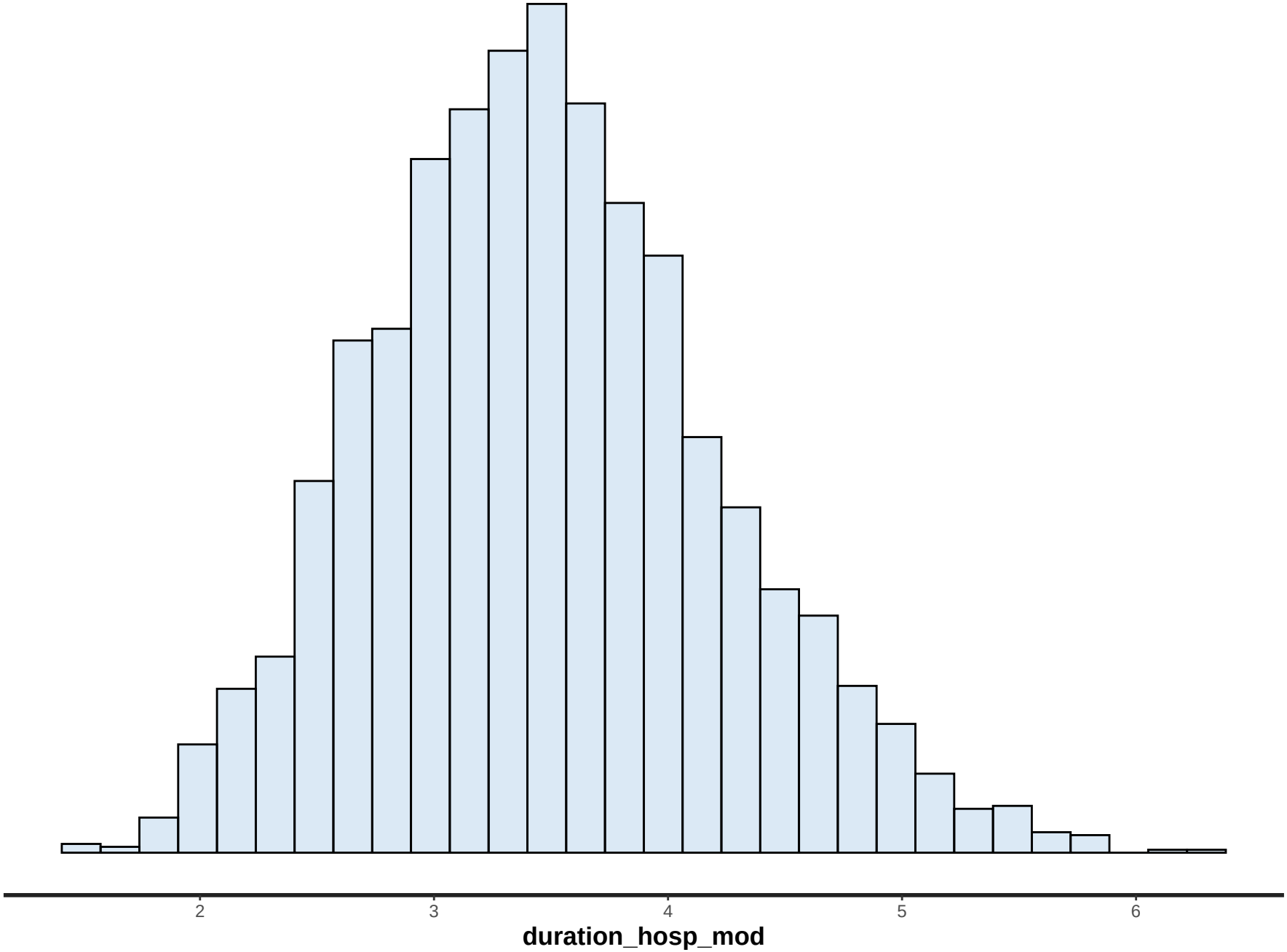


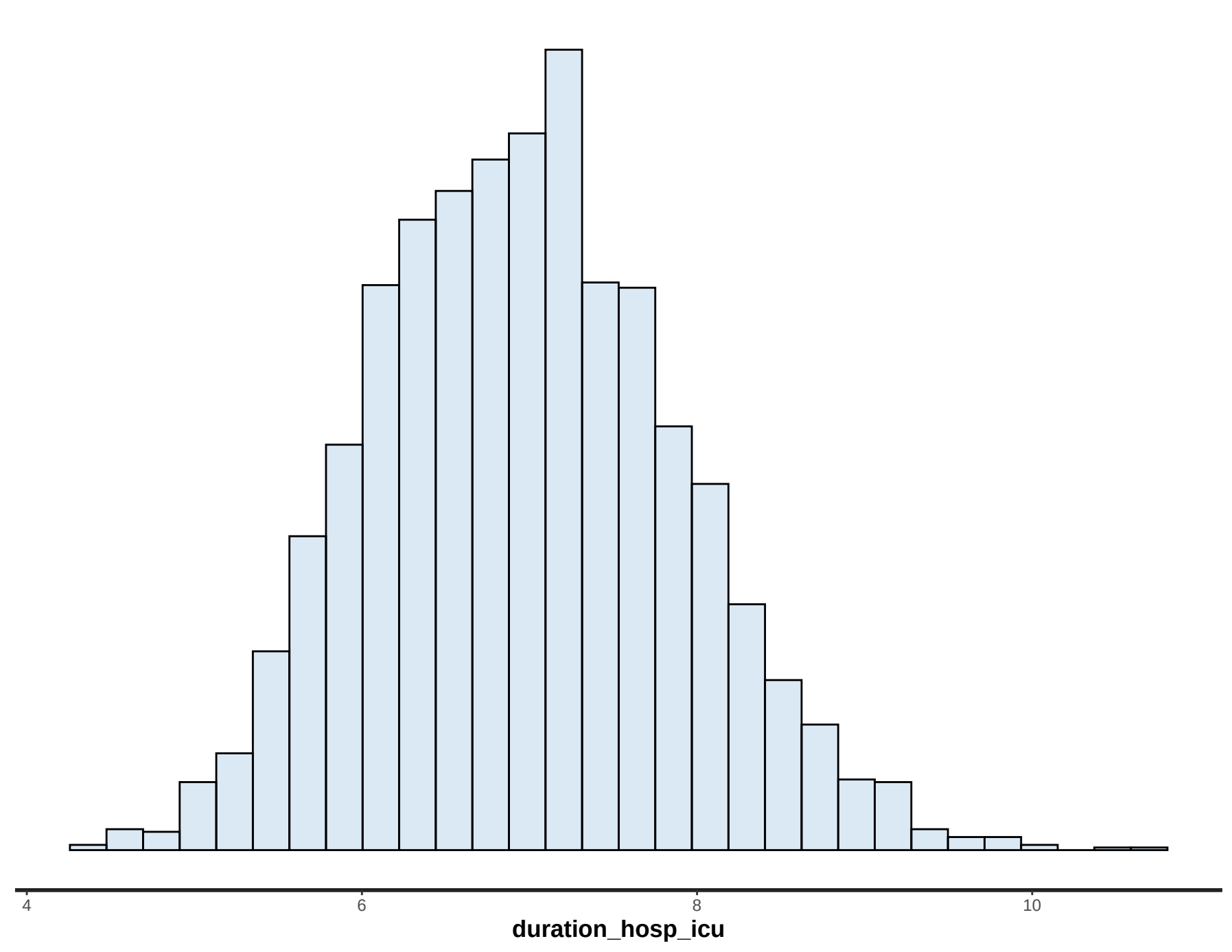

1.0
1.5
2.0
2.5
3.0
r0

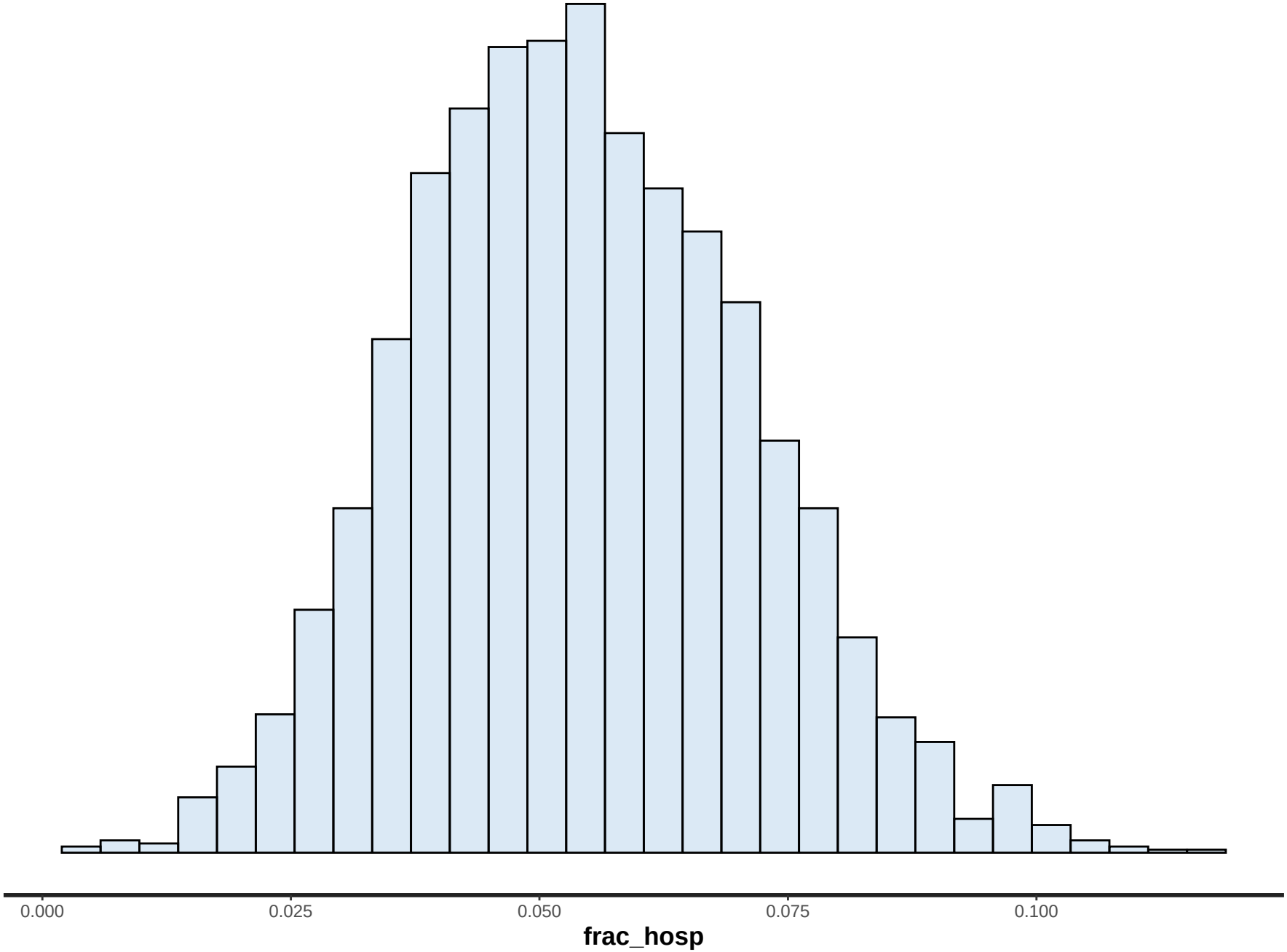

1
2
3
4
5
duration_latent

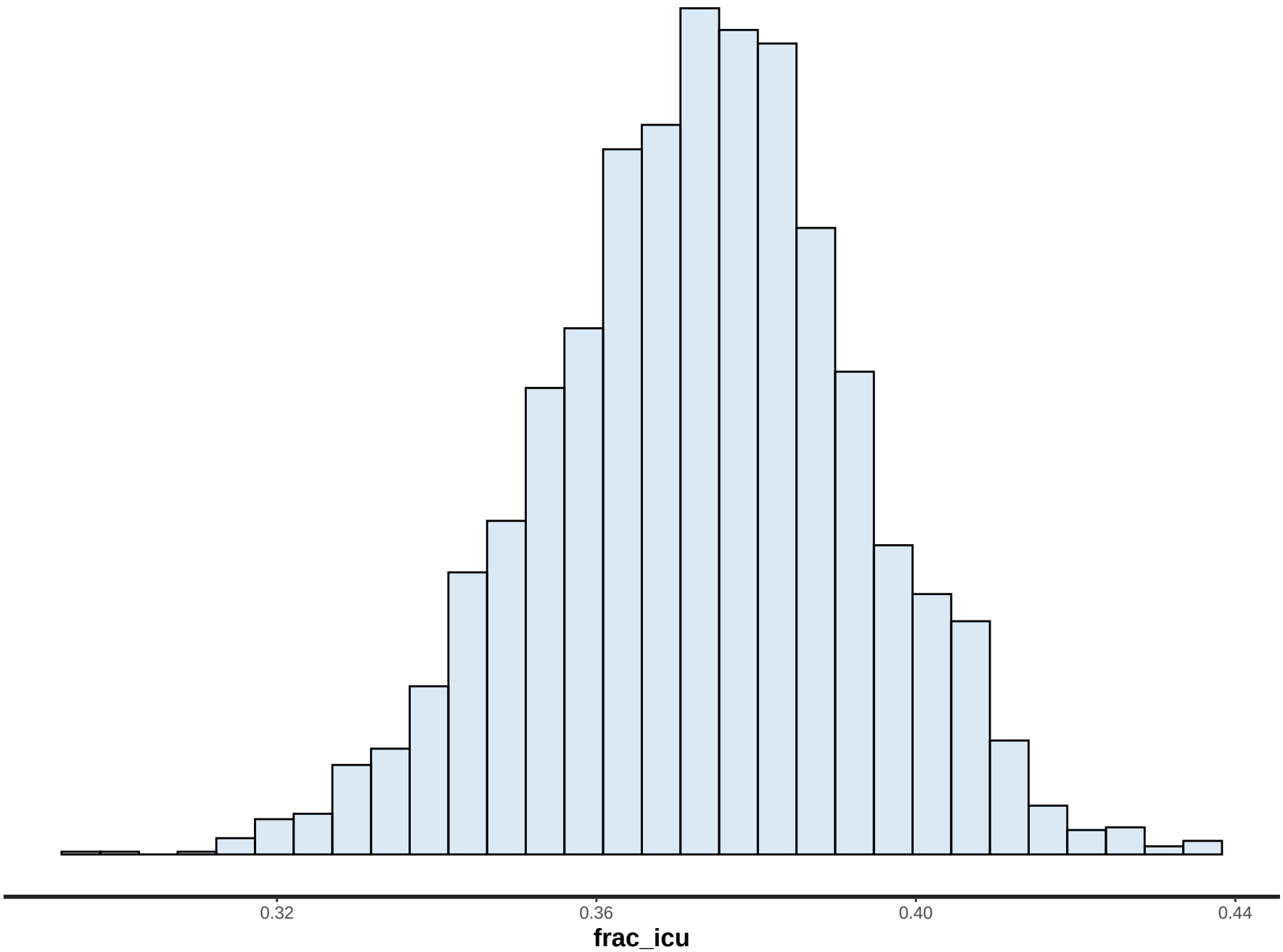

2
4
6
8
duration_rec_mild

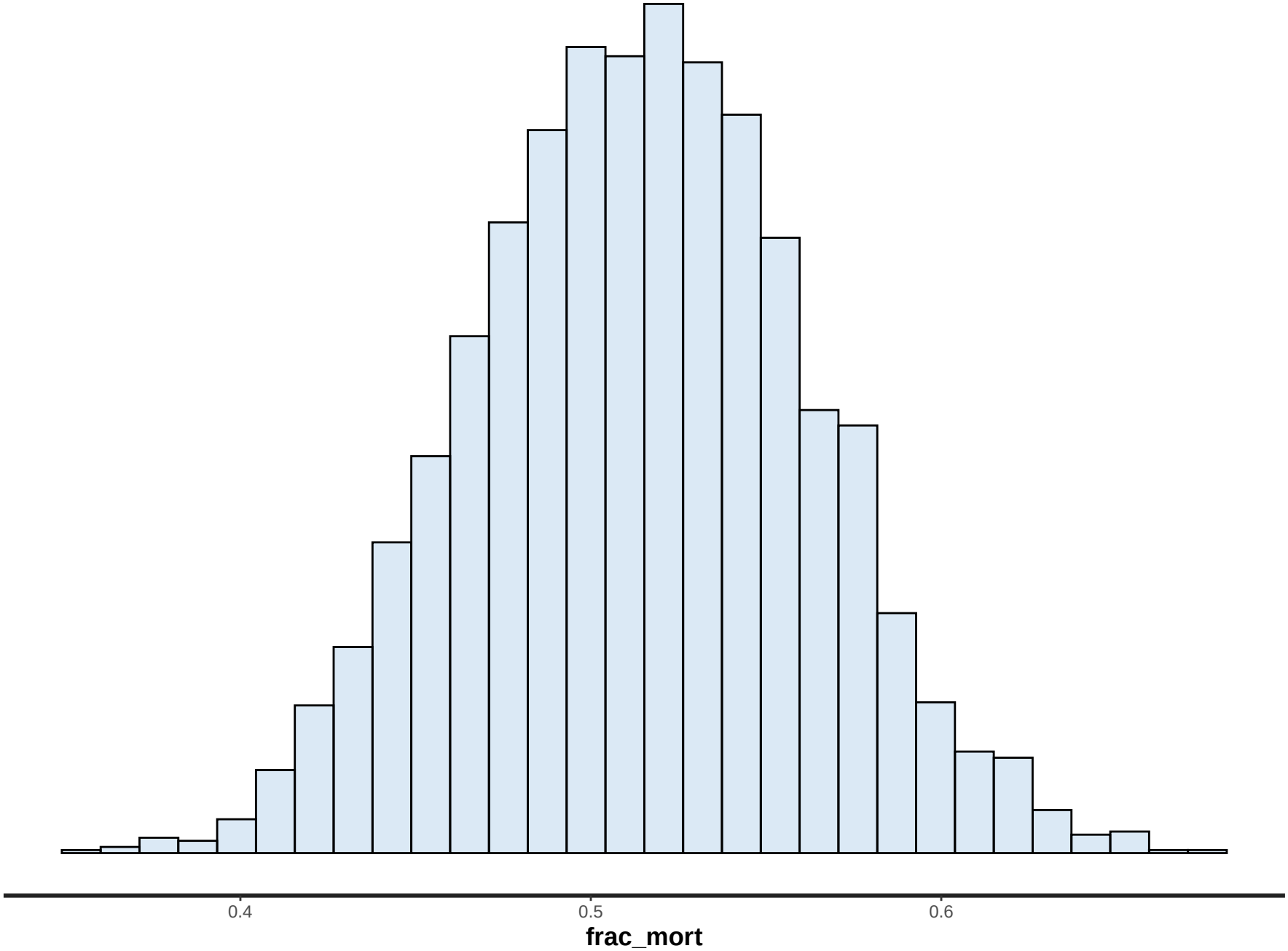

2.5
5.0
7.5
10.0
12.5
duration_pre_hosp

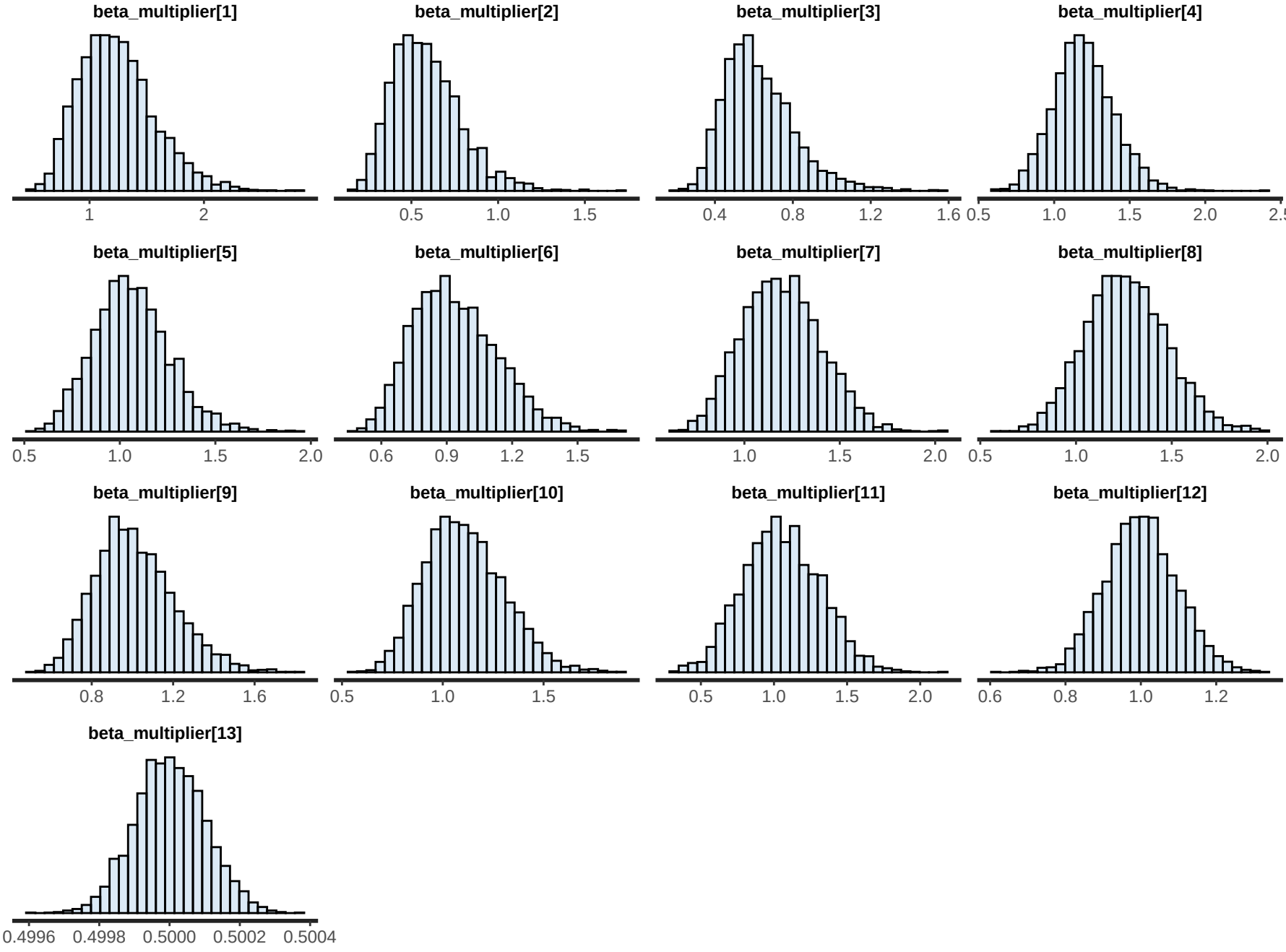

2
3
4
5
6
duration_hosp_mod

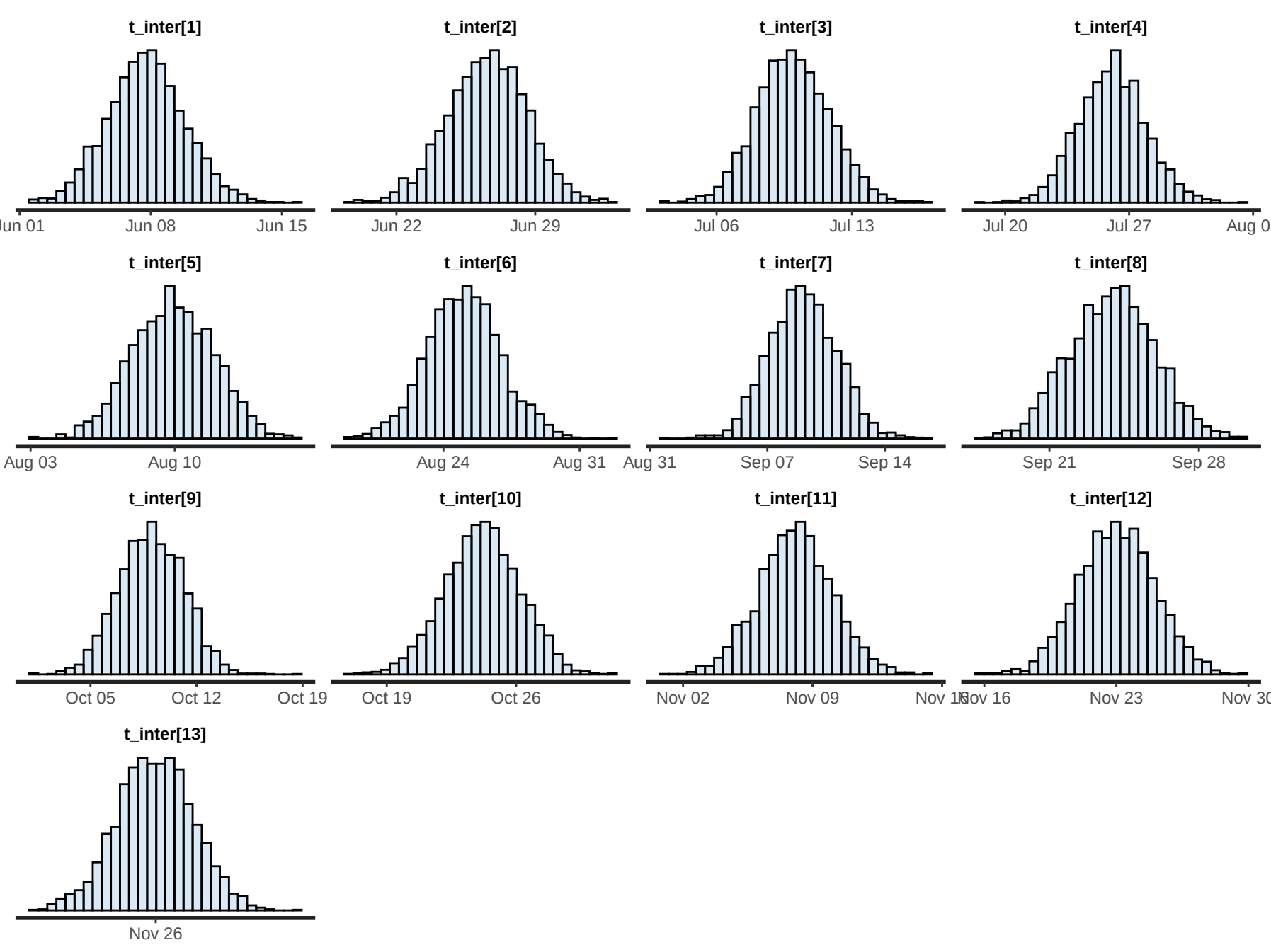

4
6
8
10
duration_hosp_icu

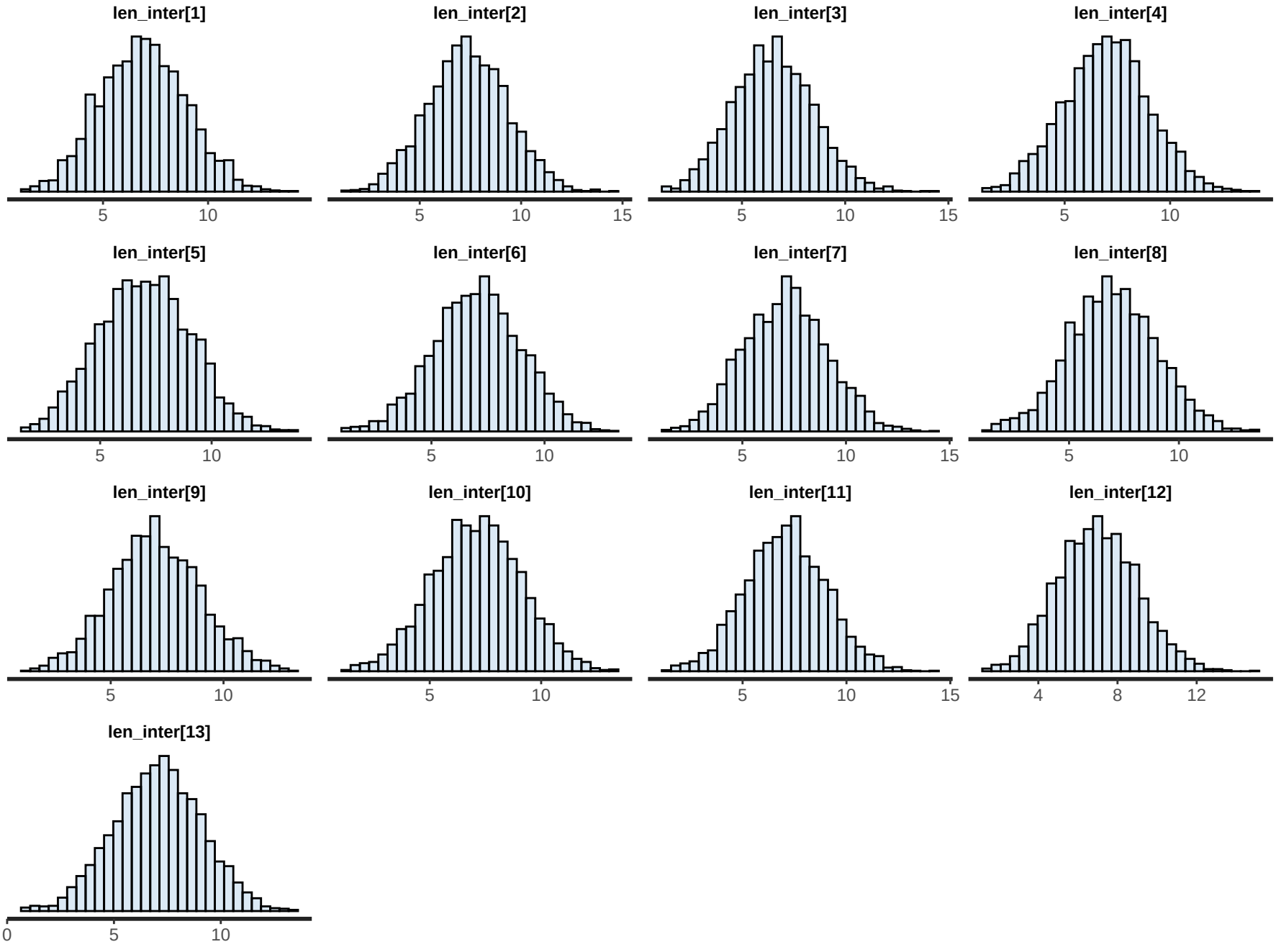

0.000
0.025
0.050
0.075
0.100
frac_hosp

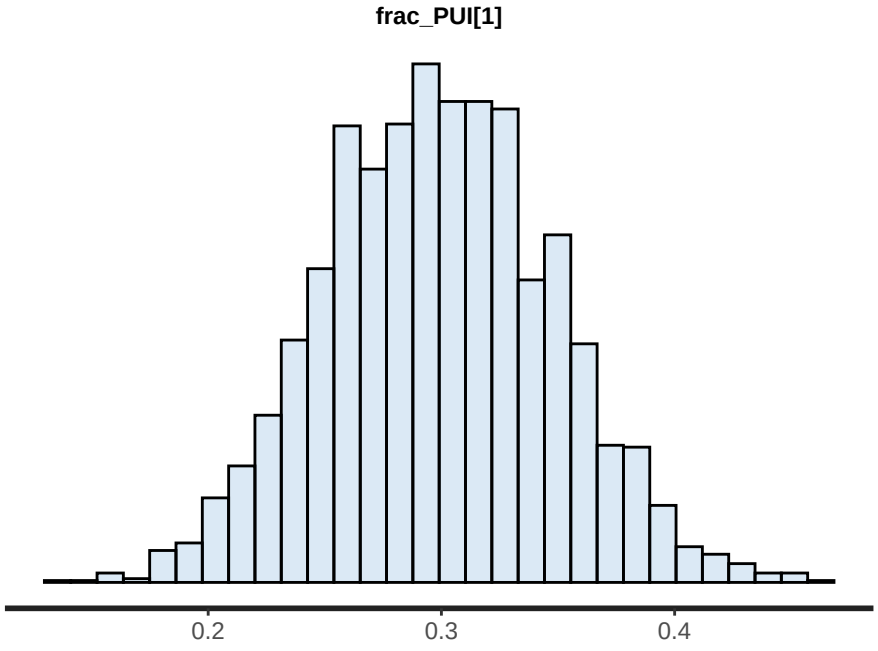

0.32
0.36
0.40
0.44
frac_icu

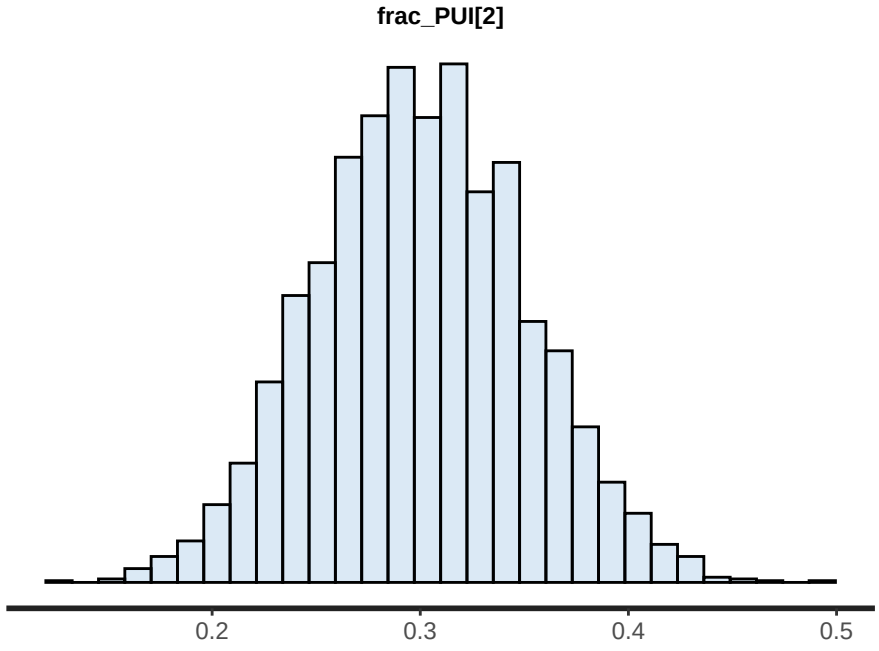

0.4
0.5
0.6
frac_mort

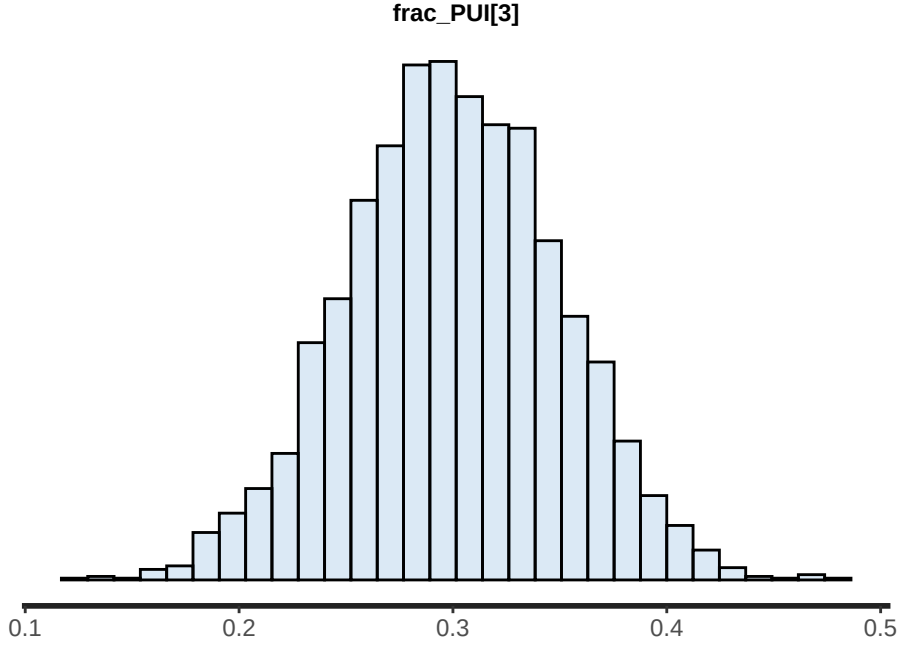

beta_multiplier[1]
1
2
beta_multiplier[2]
0.5
1.0
1.5
beta_multiplier[3]
0.4
0.8
1.2
1.6
beta_multiplier[4]
0.5
1.0
1.5
2.0
2.5
beta_multiplier[5]
0.5
1.0
1.5
2.0
beta_multiplier[6]
0.6
0.9
1.2
1.5
beta_multiplier[7]
1.0
1.5
2.0
beta_multiplier[8]
0.5
1.0
1.5
2.0
beta_multiplier[9]
0.8
1.2
1.6
beta_multiplier[10]
0.5
1.0
1.5
beta_multiplier[11]
0.5
1.0
1.5
2.0
beta_multiplier[12]
0.6
0.8
1.0
1.2
beta_multiplier[13]
0.4996
0.4998
0.5000
0.5002
0.5004

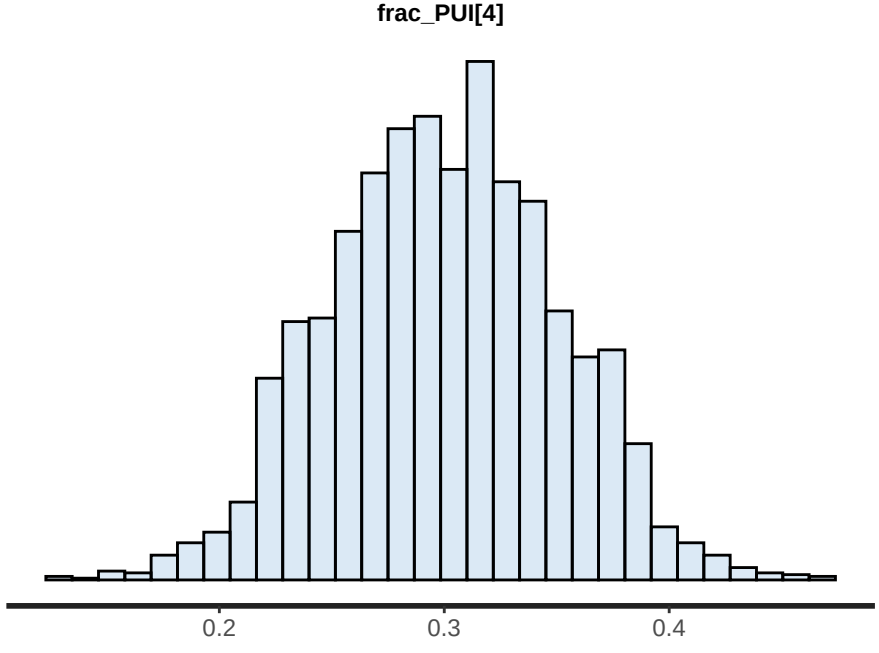

t_inter[1]
Jun 01
Jun 08
Jun 15
t_inter[2]
Jun 22
Jun 29
t_inter[3]
Jul 06
Jul 13
t_inter[4]
Jul 20
Jul 27
Aug 0
t_inter[5]
Aug 03
Aug 10
t_inter[6]
Aug 24
Aug 31
t_inter[7]
Aug 31
Sep 07
Sep 14
t_inter[8]
Sep 21
Sep 28
t_inter[9]
Oct 05
Oct 12
Oct 19
t_inter[10]
Oct 19
Oct 26
t_inter[11]
Nov 02
Nov 09
t_inter[12]
Nov 16
Nov 23
Nov 30
t_inter[13]
Nov 26

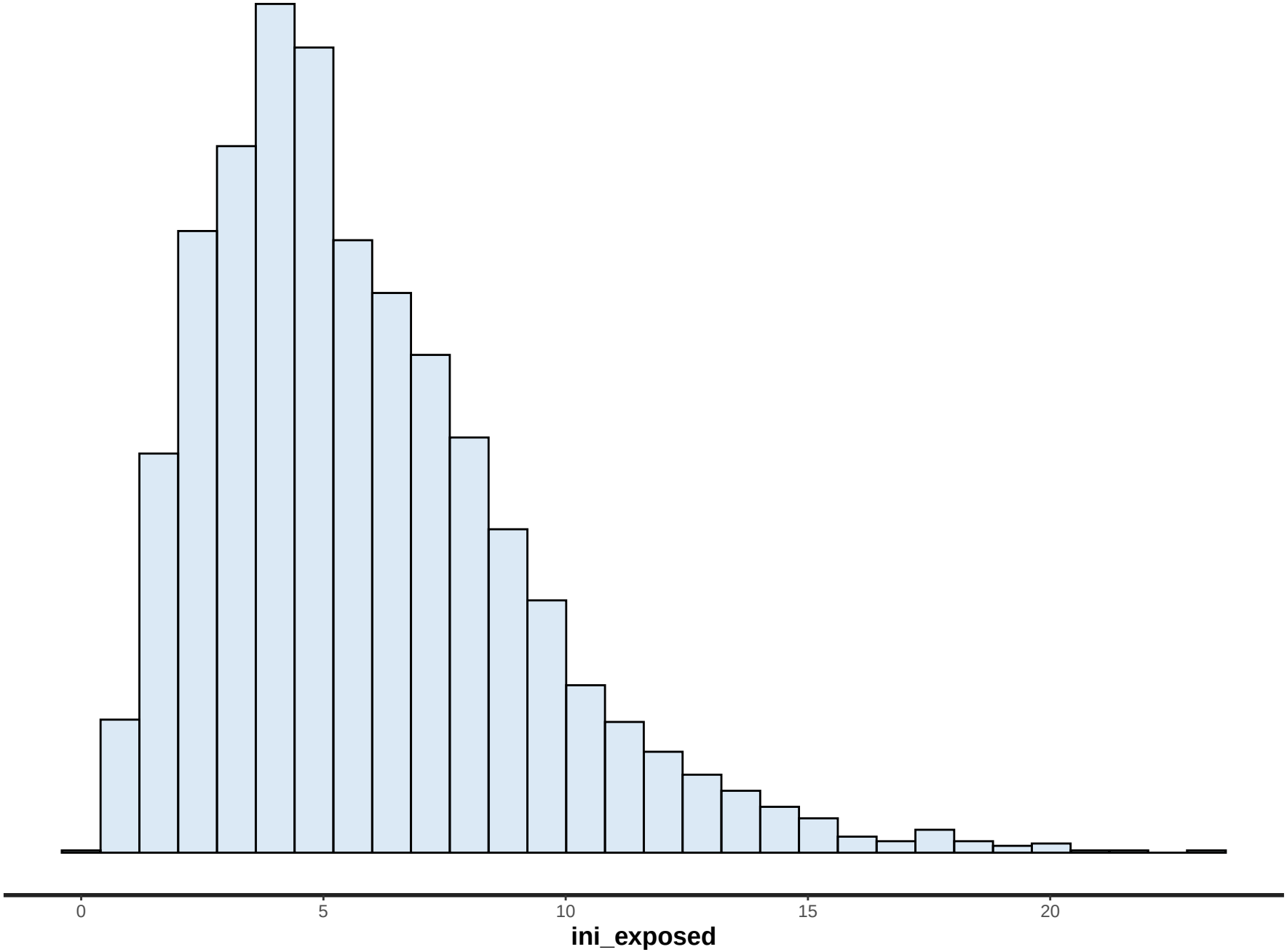

len_inter[1]
5
10
len_inter[2]
5
10
15
len_inter[3]
5
10
15
len_inter[4]
5
10
len_inter[5]
5
10
len_inter[6]
5
10
len_inter[7]
5
10
15
len_inter[8]
5
10
len_inter[9]
5
10
len_inter[10]
5
10
len_inter[11]
5
10
15
len_inter[12]
4
8
12
len_inter[13]
0
5
10

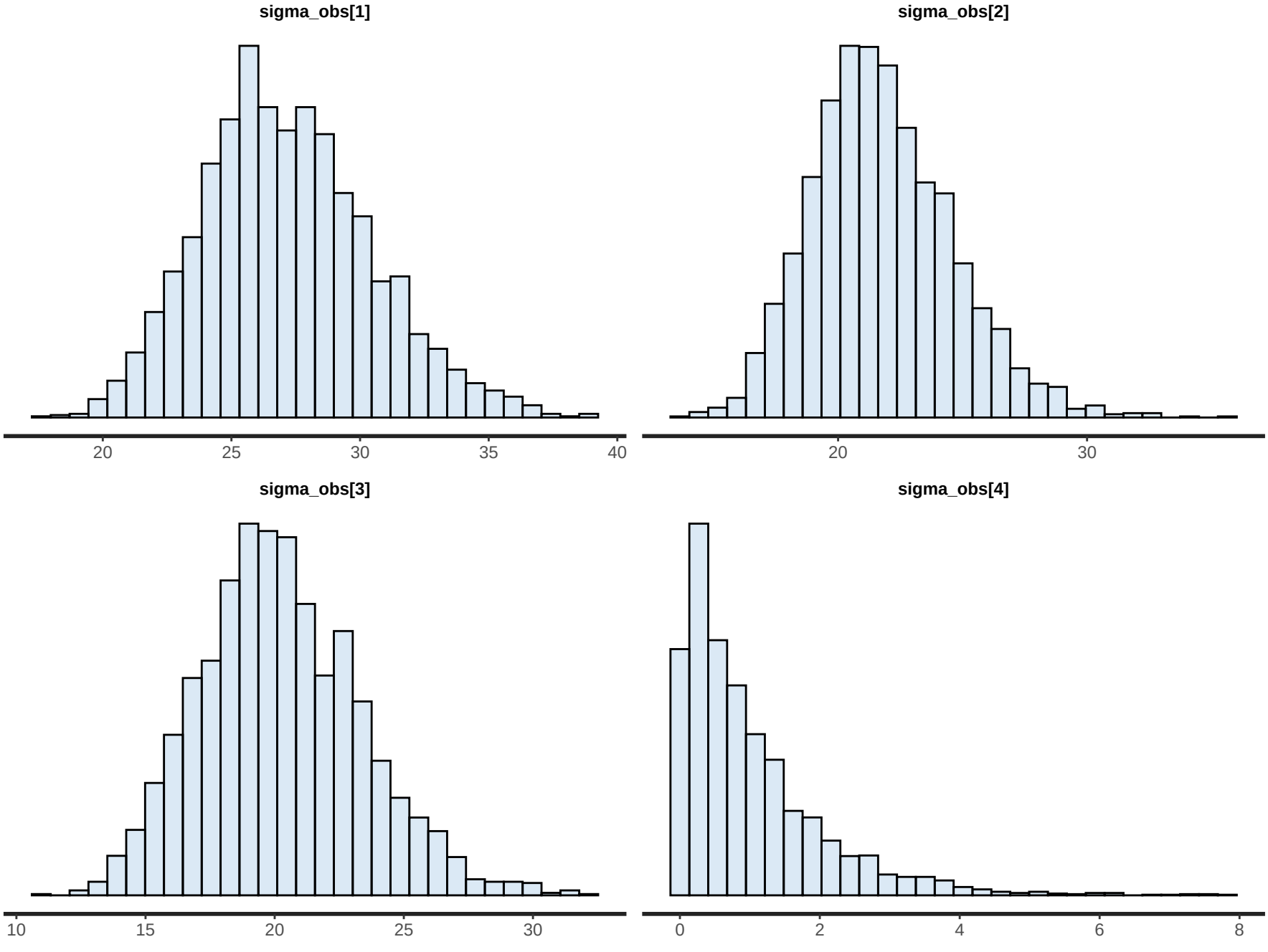

frac_PUI[1]
0.2
0.3
0.4


frac_PUI[2]
0.2
0.3
0.4
0.5


frac_PUI[3]
0.1
0.2
0.3
0.4
0.5


frac_PUI[4]
0.2
0.3
0.4


0
5
10
15
20
ini_exposed


sigma_obs[1]
20
25
30
35
40
sigma_obs[2]
20
30
sigma_obs[3]
10
15
20
25
30
sigma_obs[4]
0
2
4
6
8