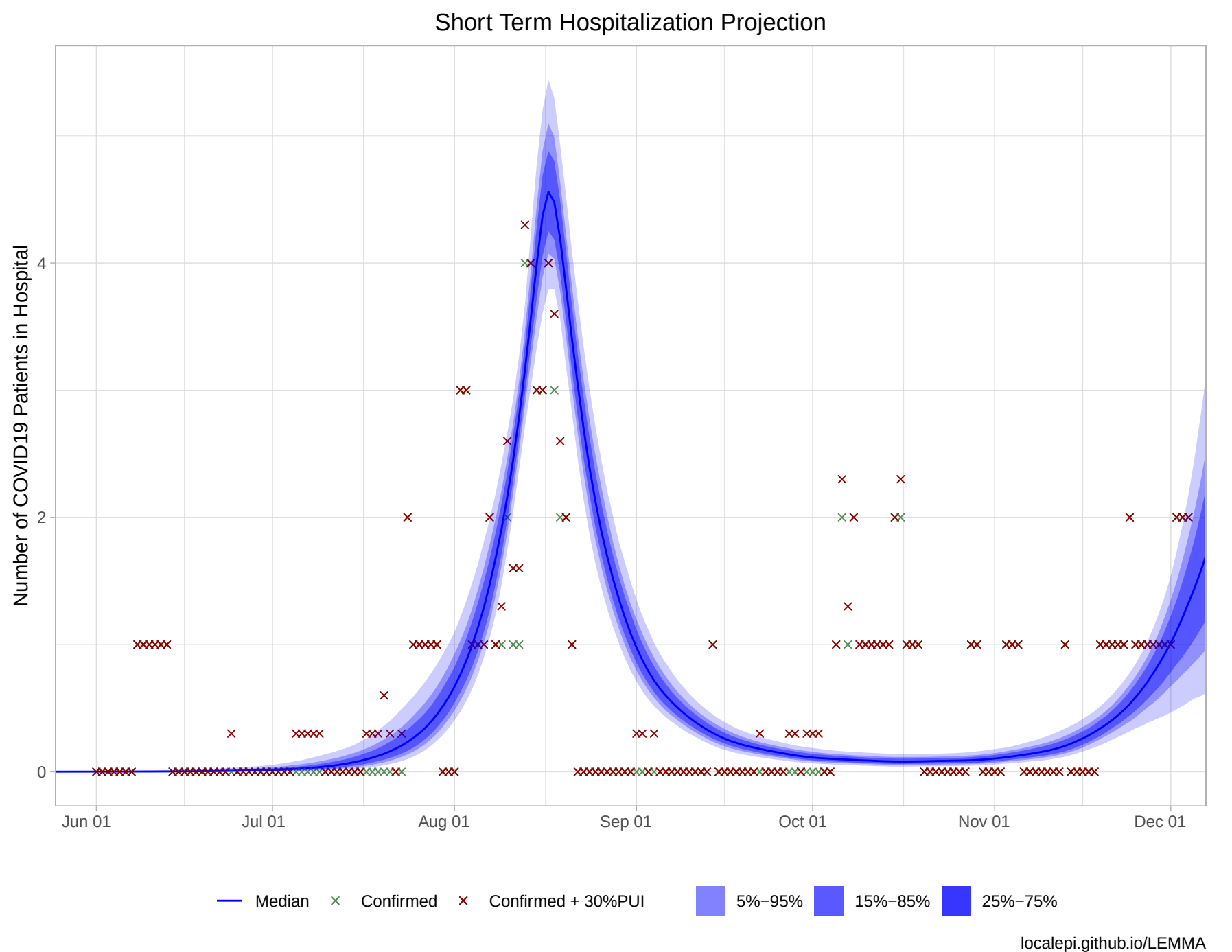
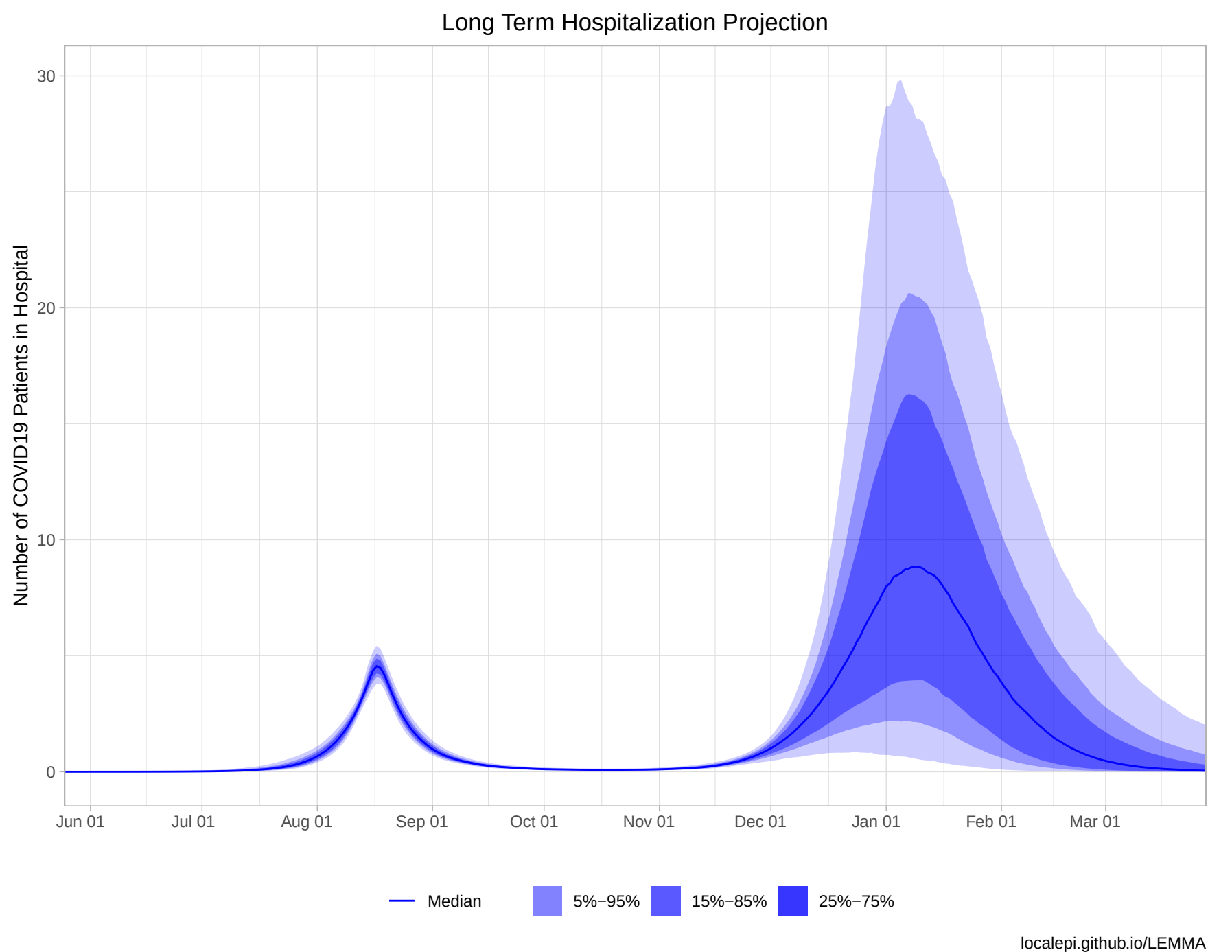
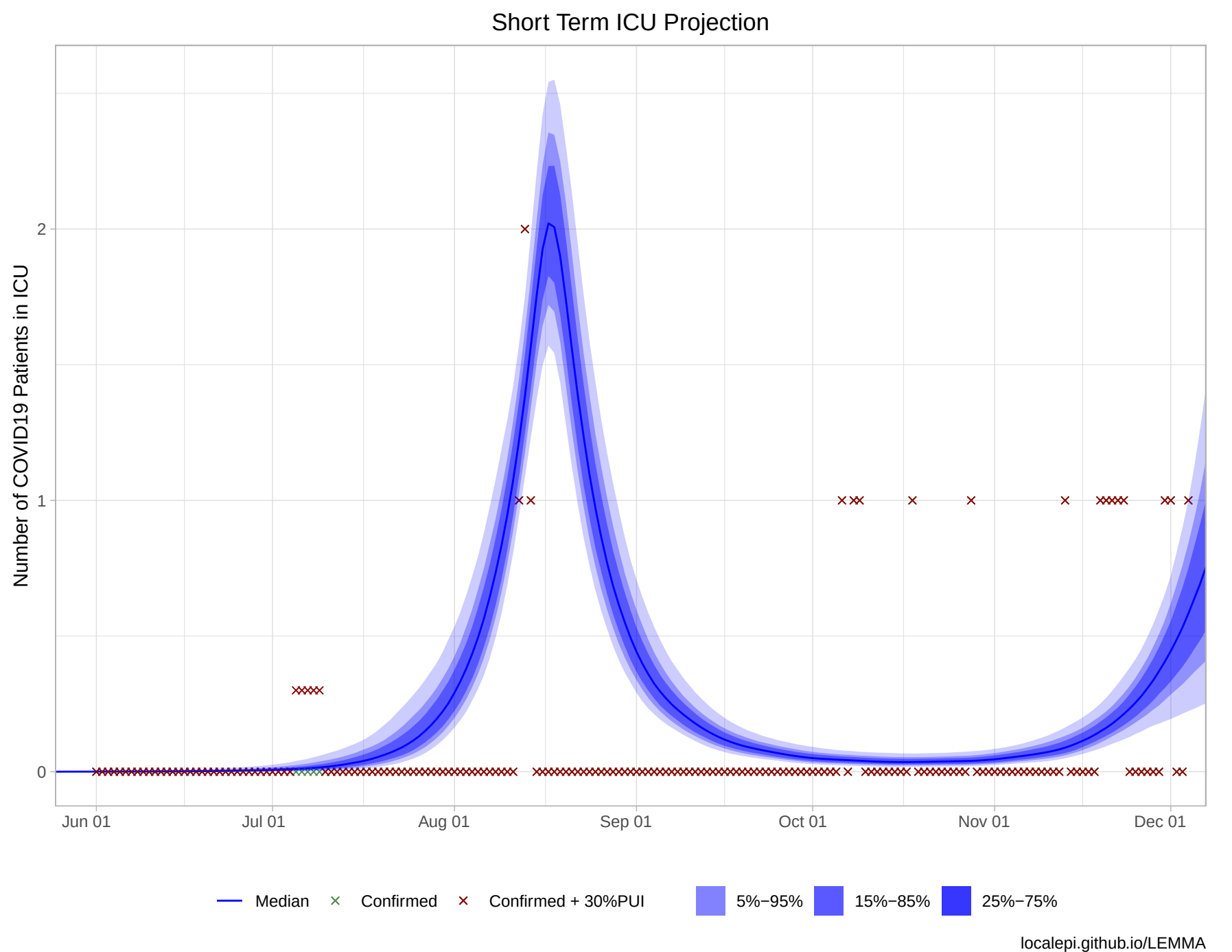
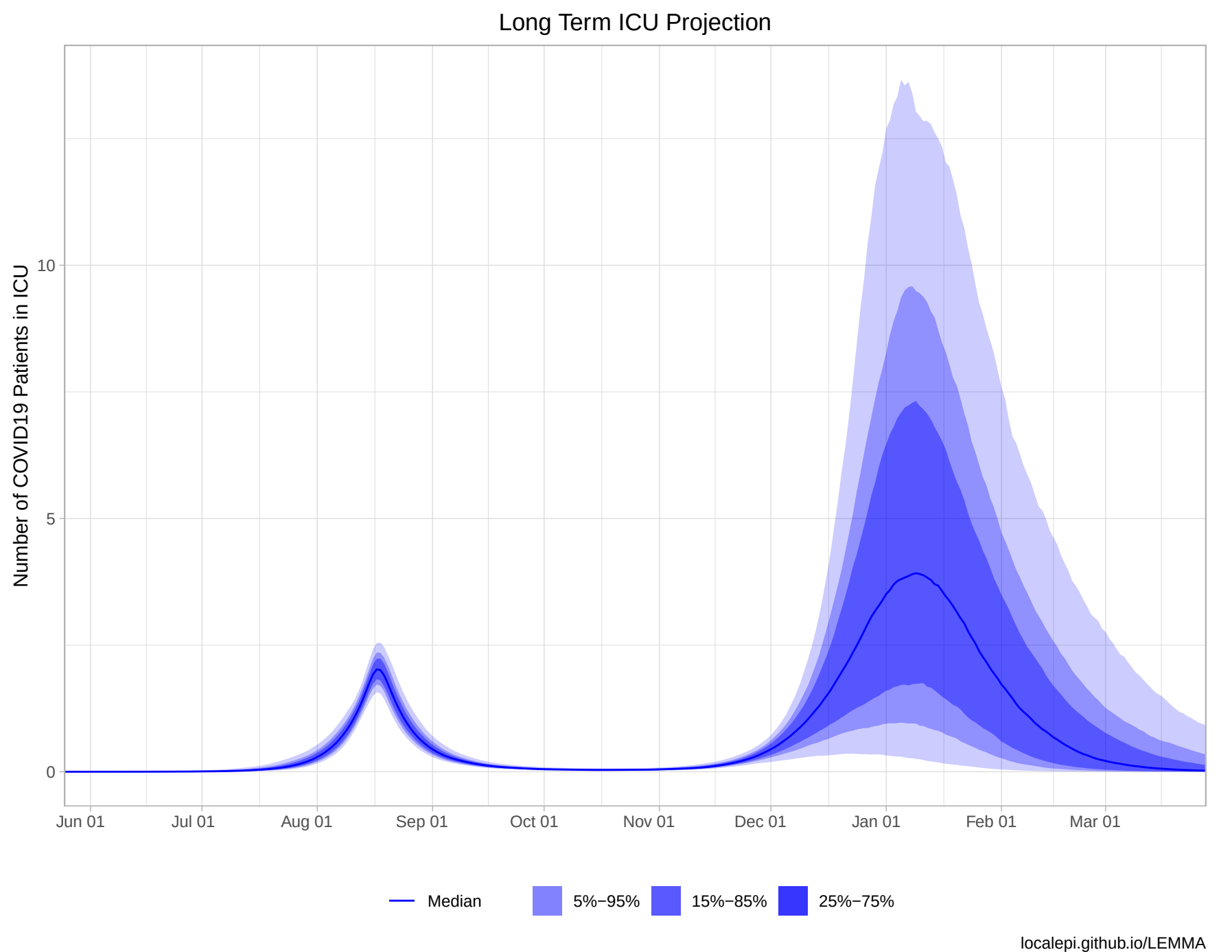
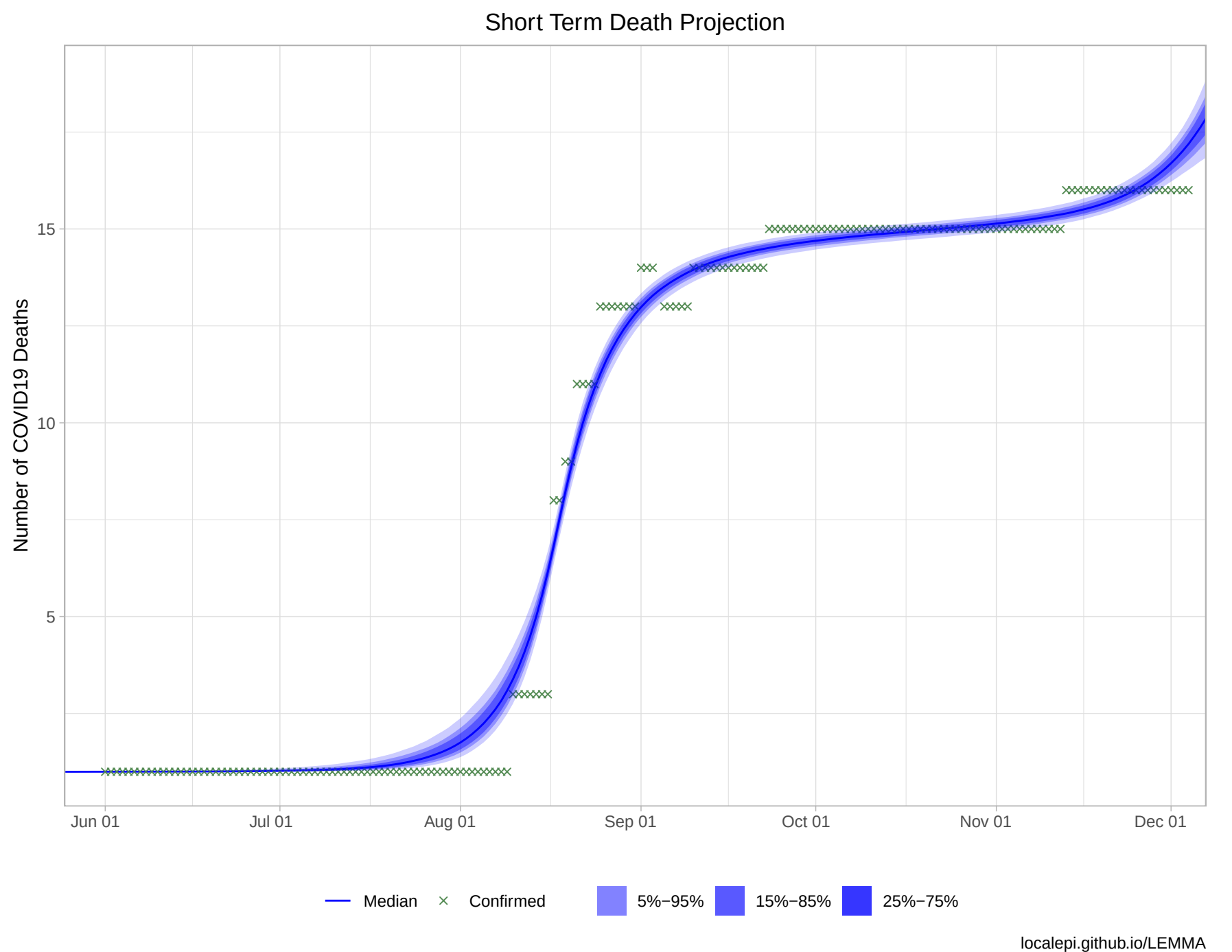
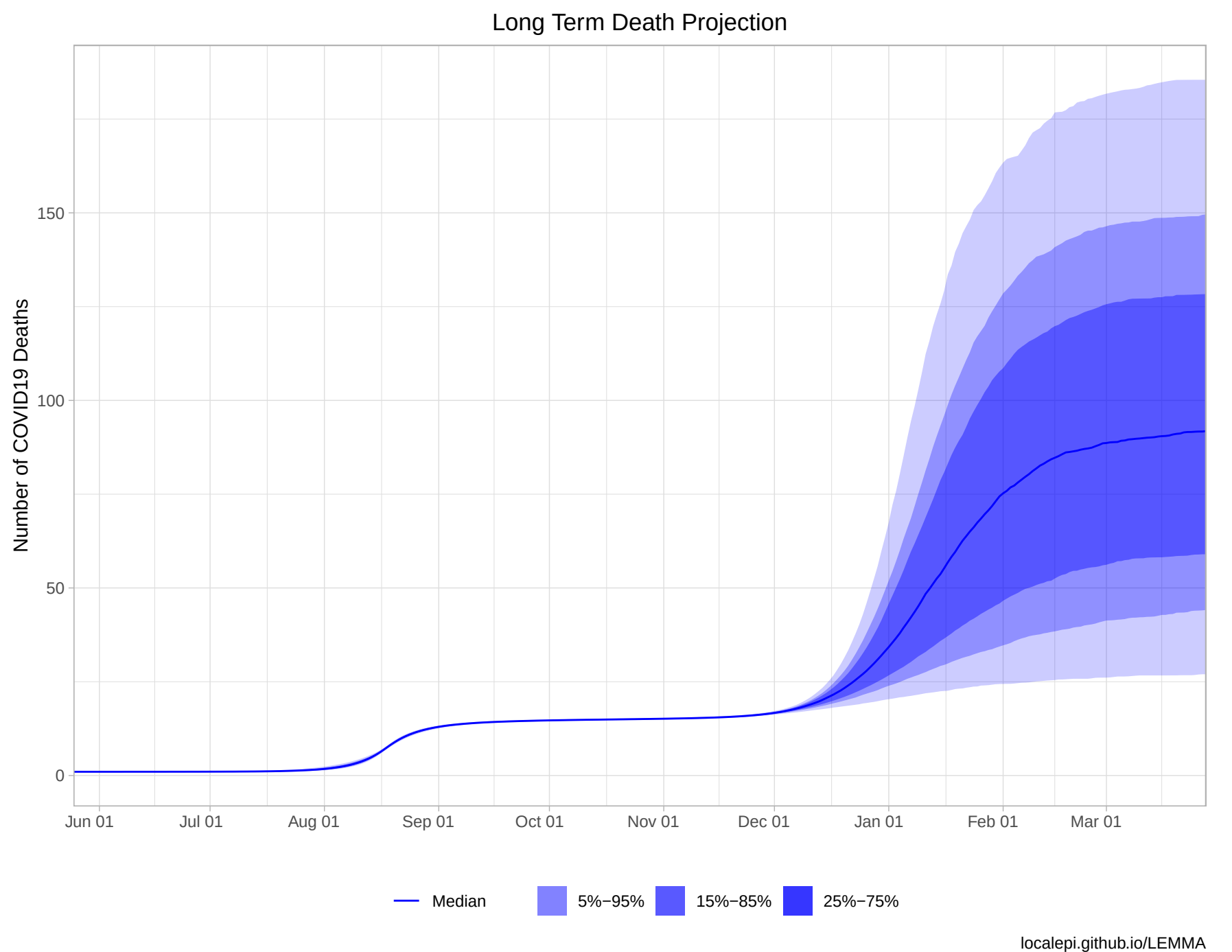

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
2
4
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

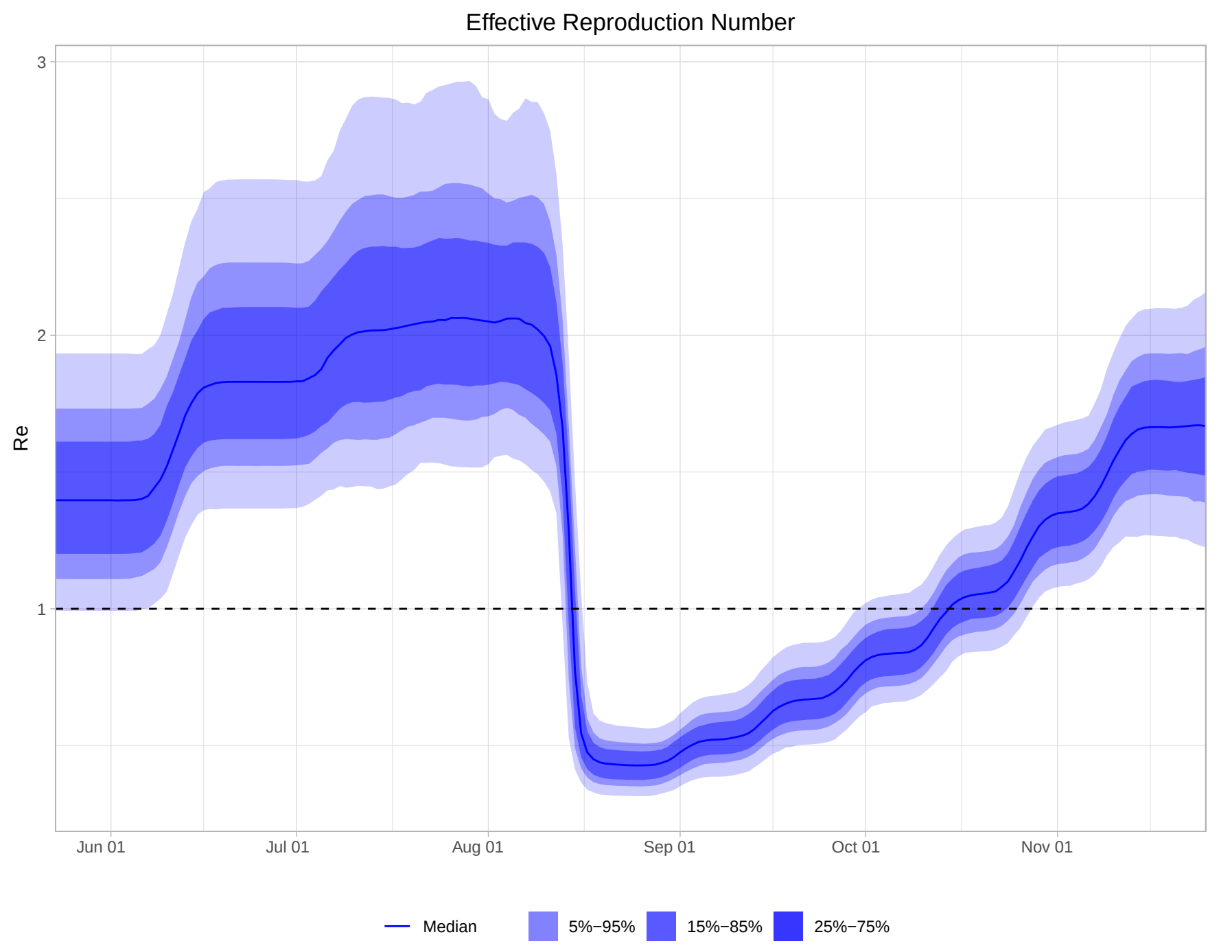

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
30
20
10
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
1
2
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
10
5
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

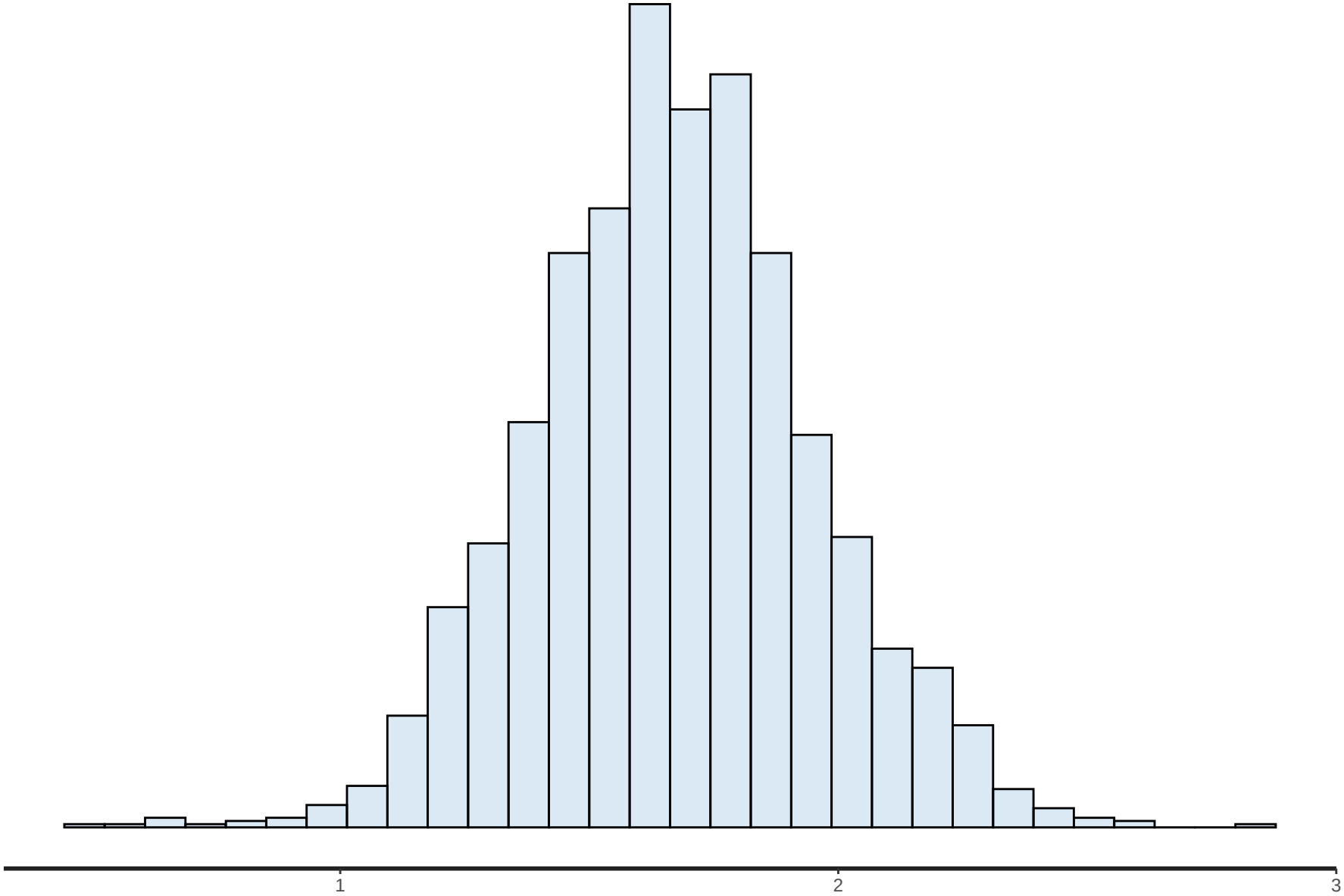

Short Term Death Projection
Number of COVID19 Deaths
15
10
5
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

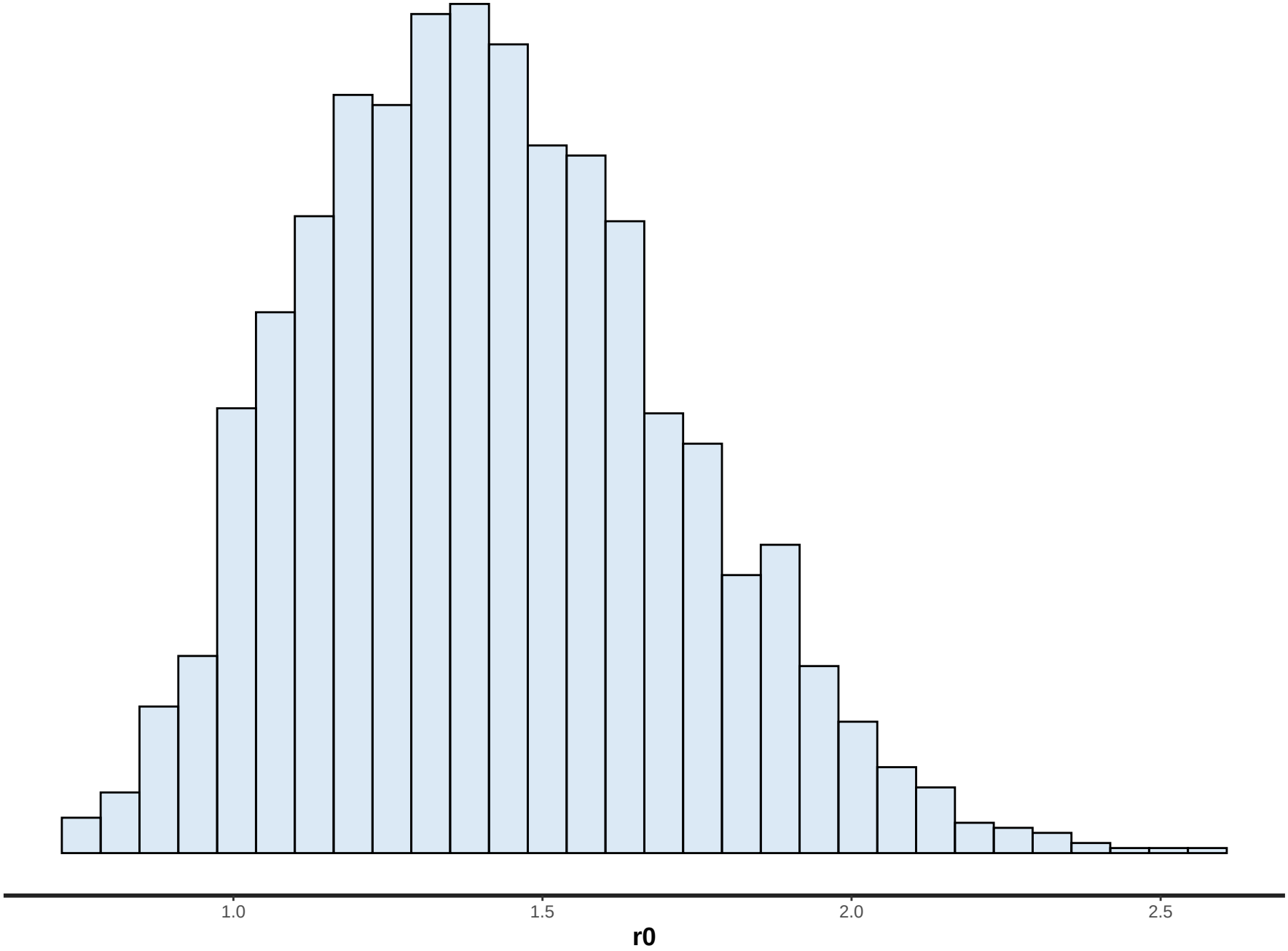

Long Term Death Projection
Number of COVID19 Deaths
150
100
50
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

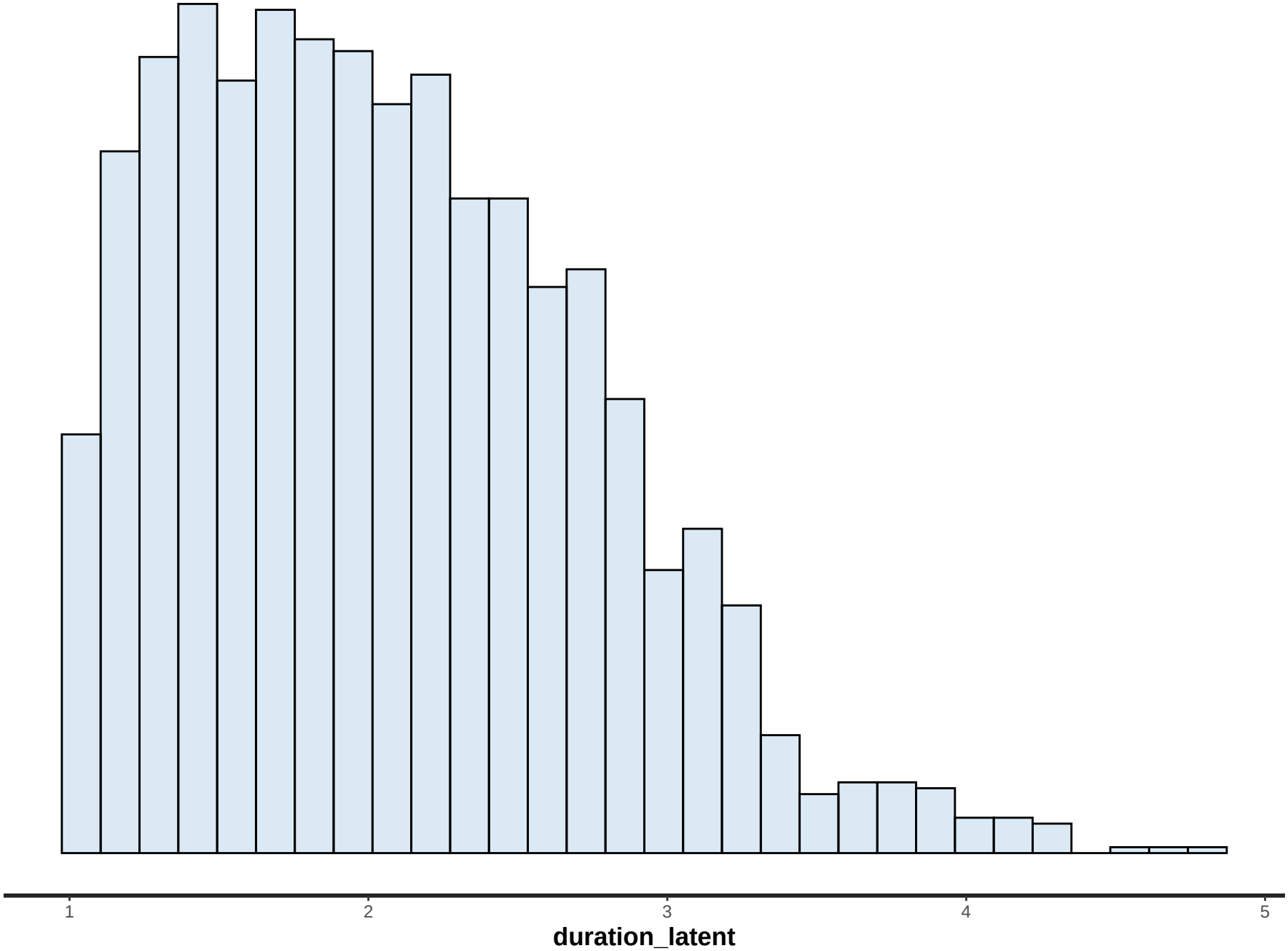

Effective Reproduction Number
Re
3
2
1
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
5%−95%
15%−85%
25%−75%

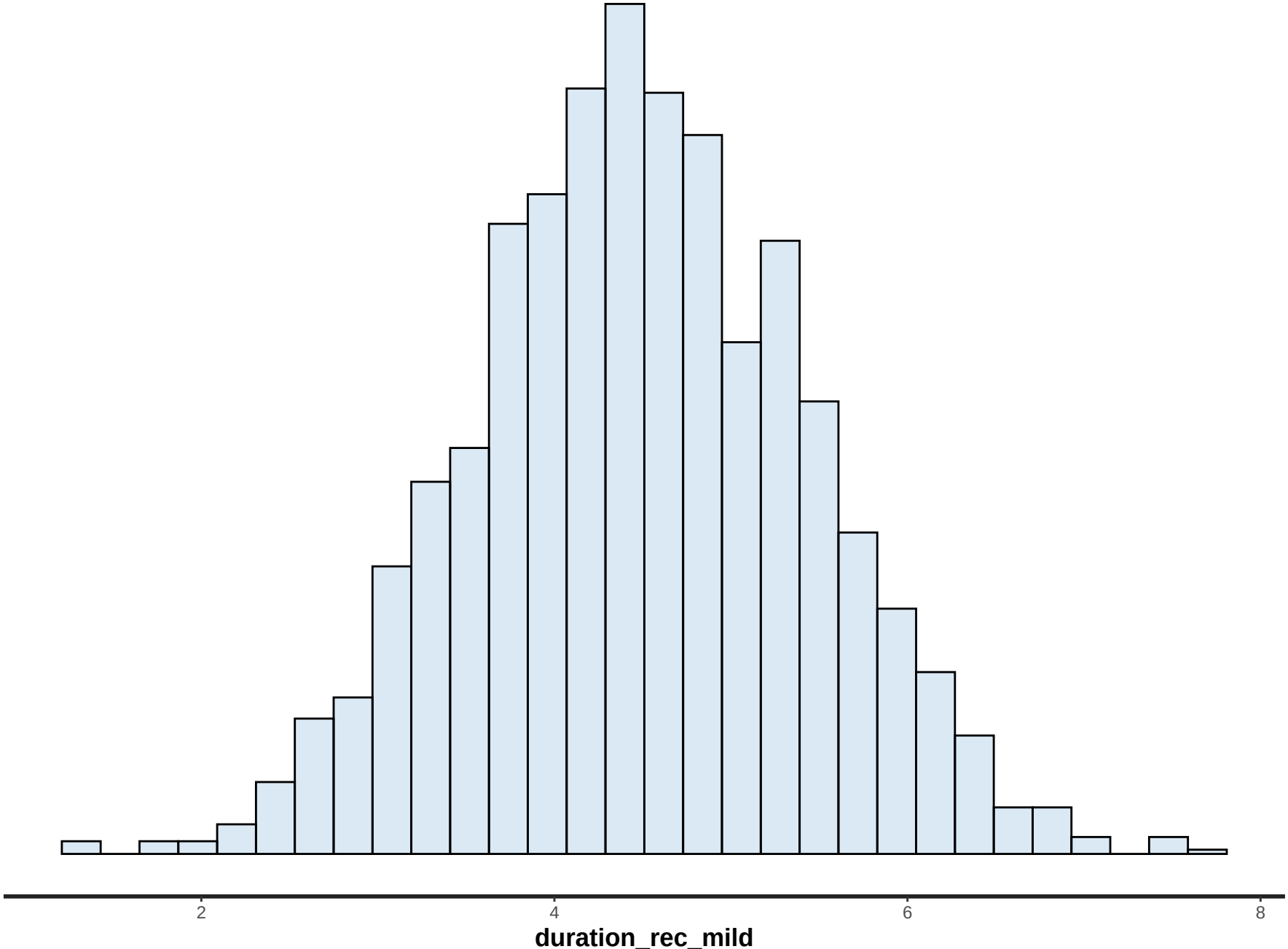
Rt as of 2020−11−25

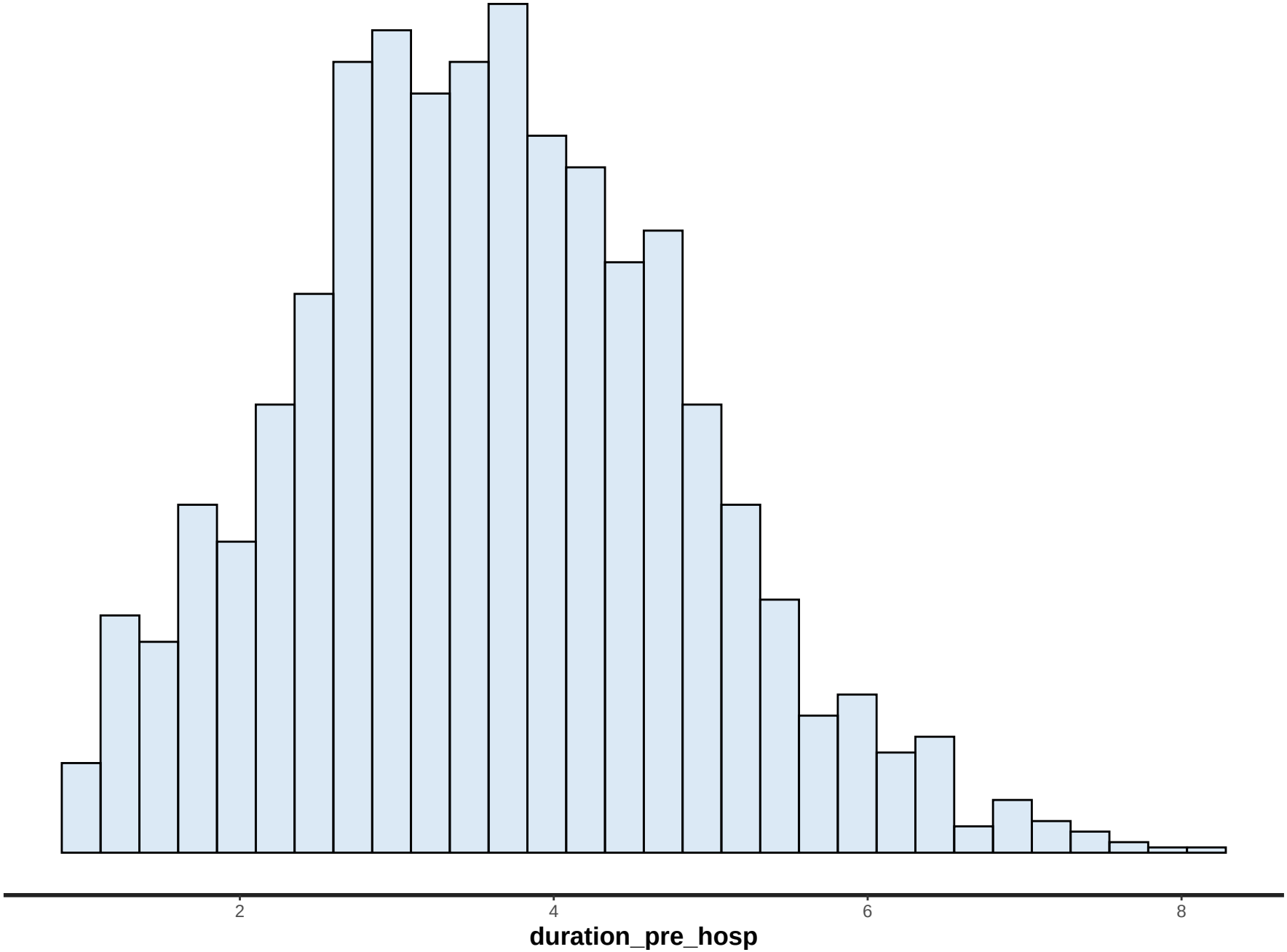
5%	10%	25%	50%	75%	90%	95%
1.23	1.32	1.49	1.67	1.85	2.03	2.16

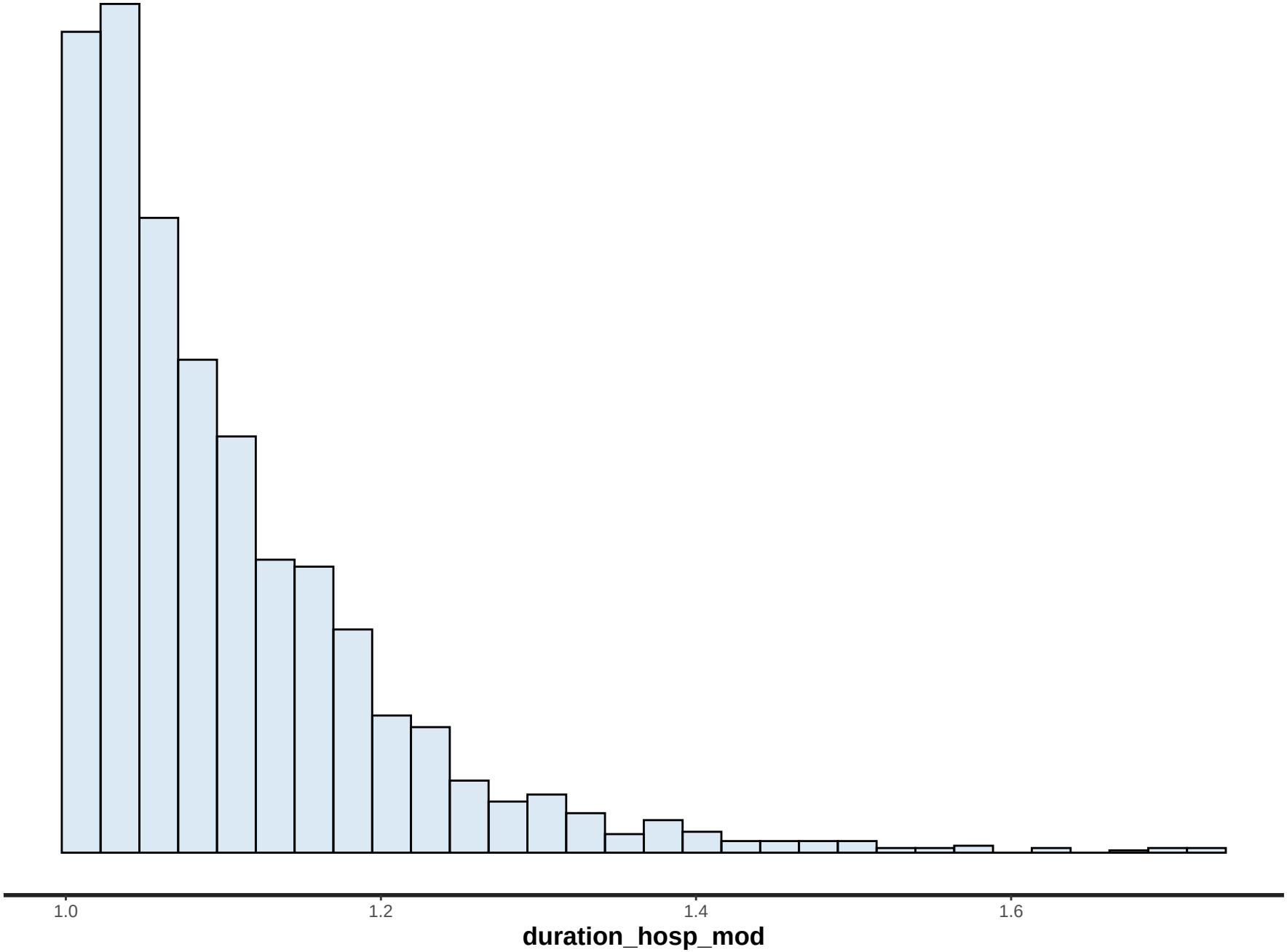


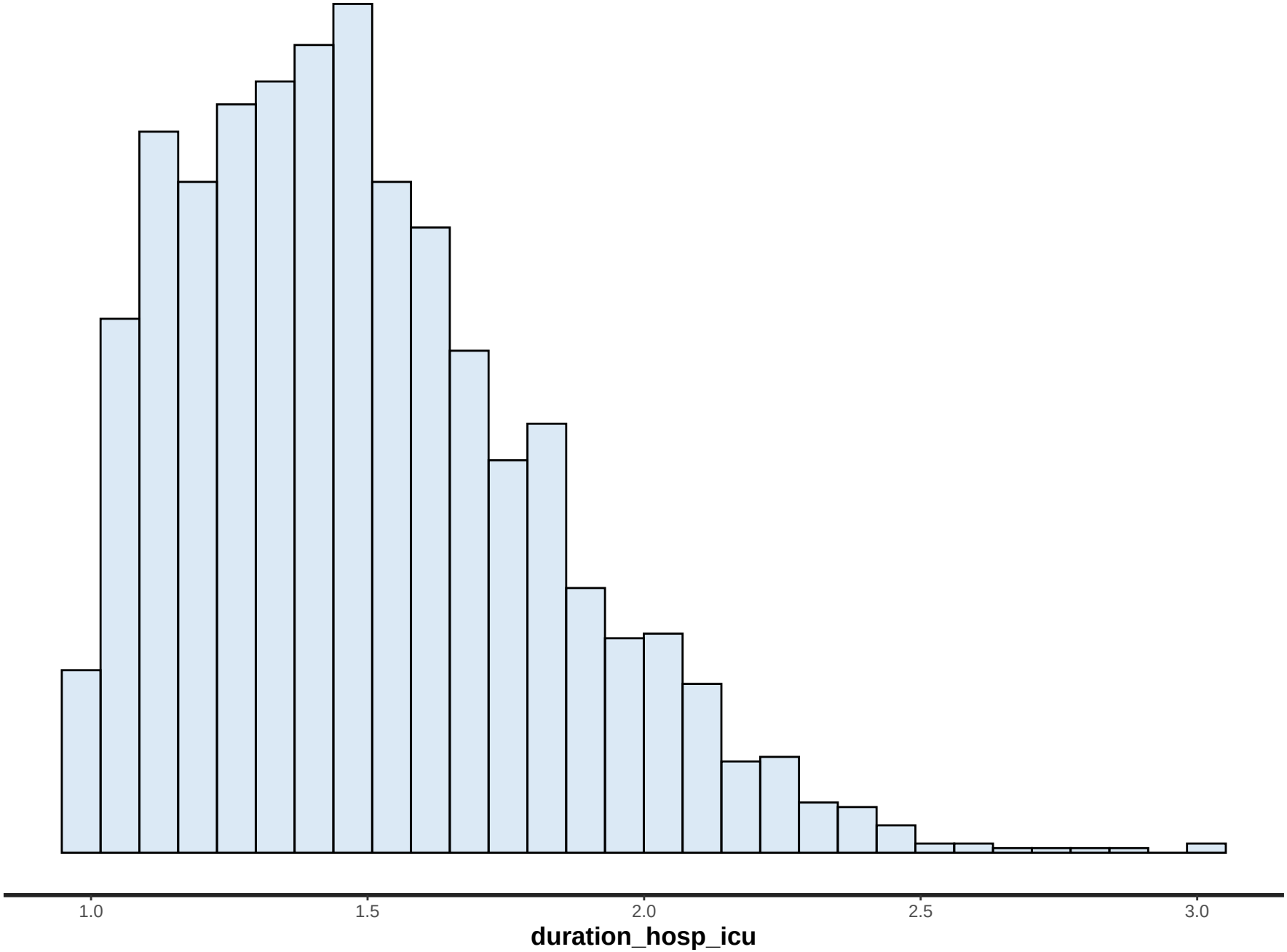

1.0
1.5
2.0
2.5
r0

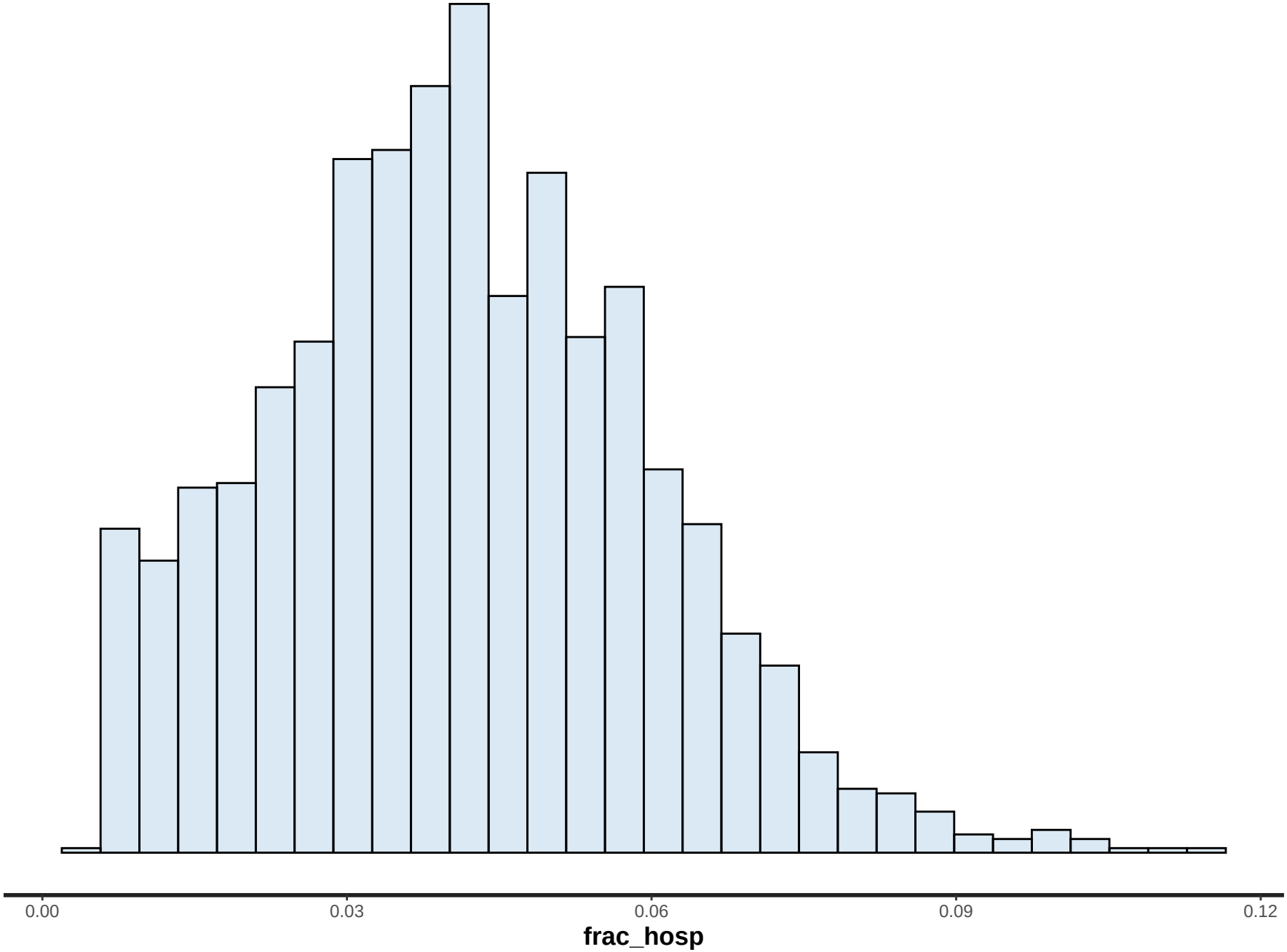

1
2
3
4
5
duration_latent

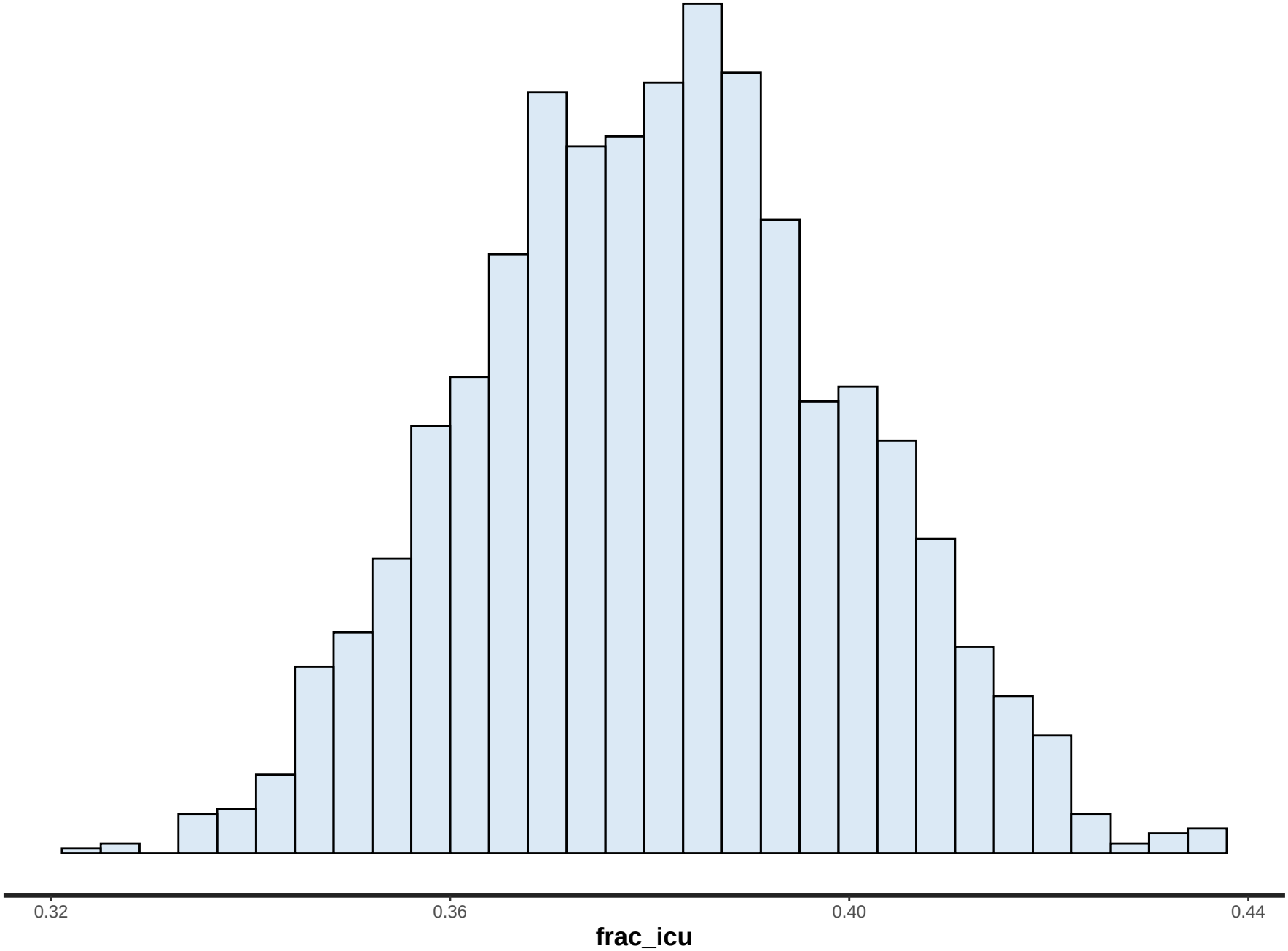

2
4
6
8
duration_rec_mild

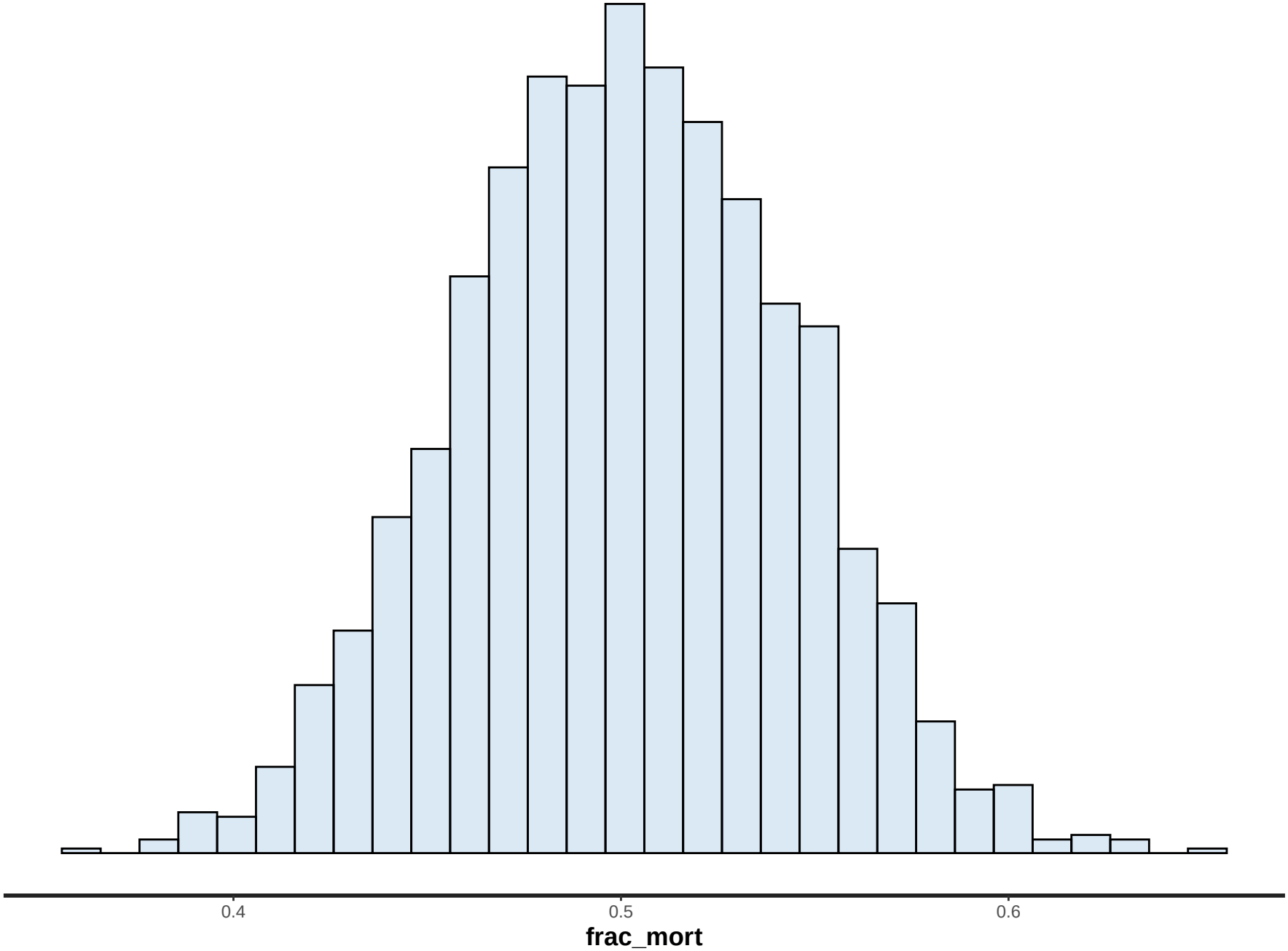

2
4
6
8
duration_pre_hosp

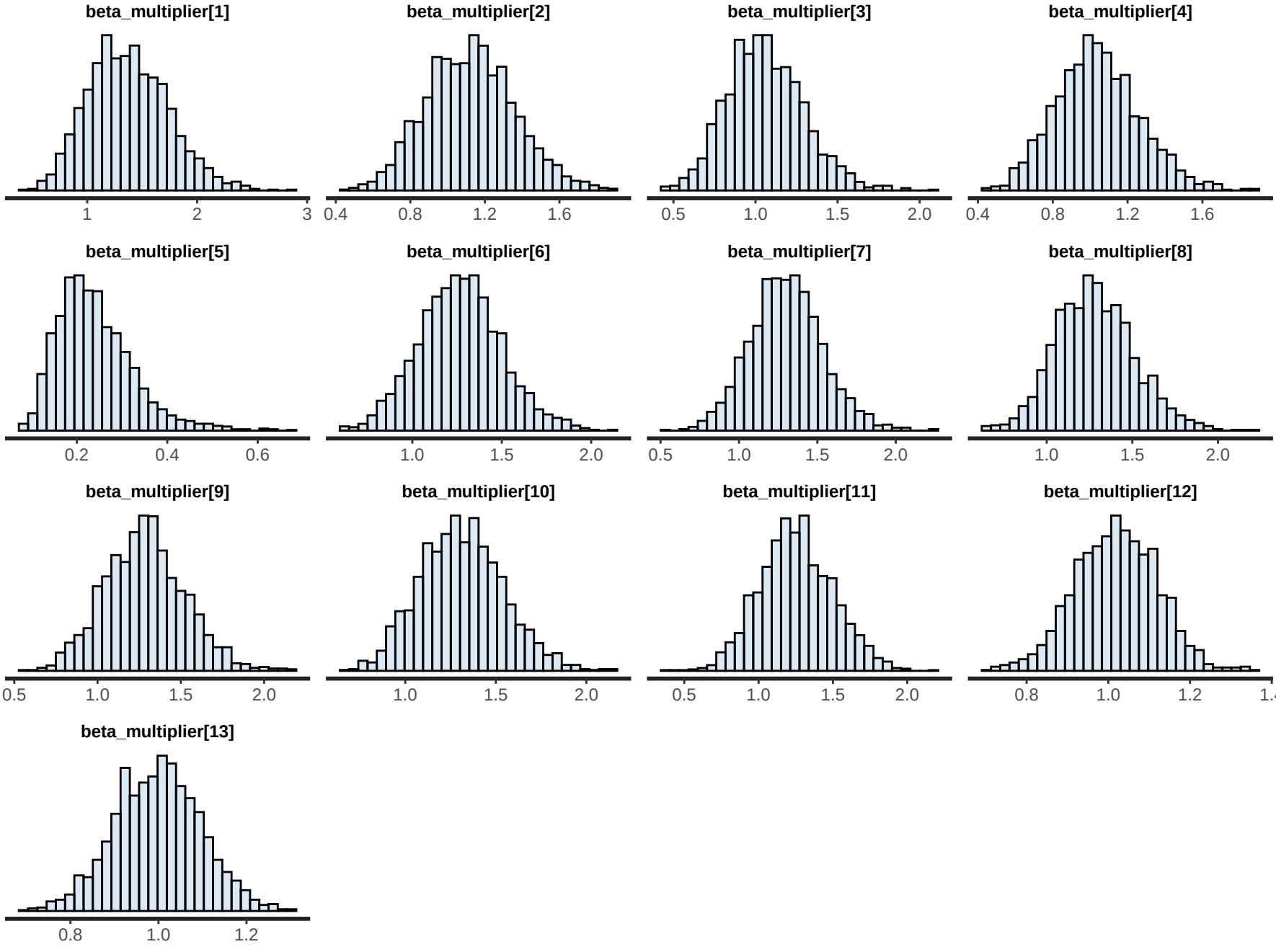

1.0
1.2
1.4
1.6
duration_hosp_mod

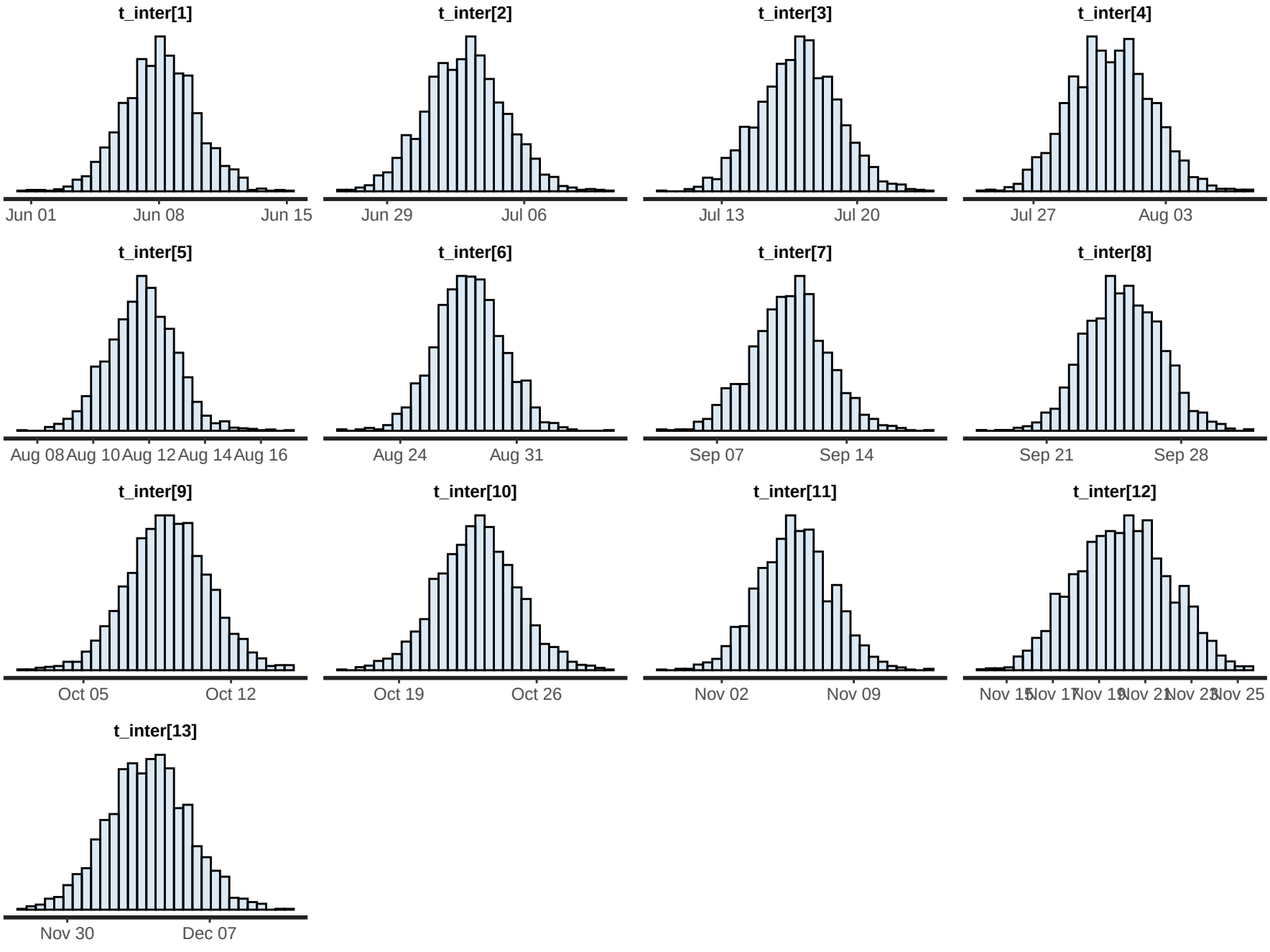

1.0
1.5
2.0
2.5
3.0
duration_hosp_icu

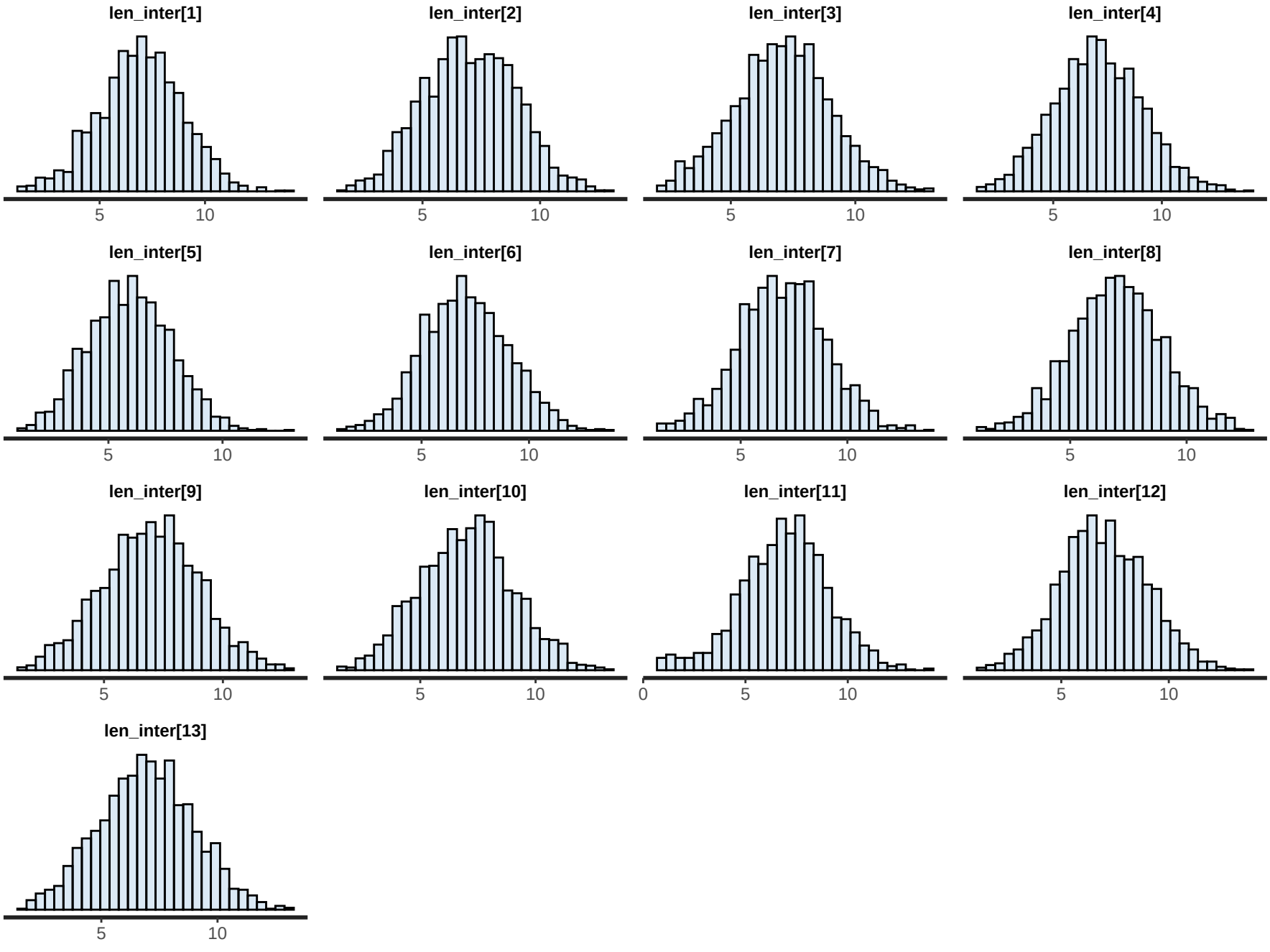

0.00
0.03
0.06
0.09
0.12
frac_hosp

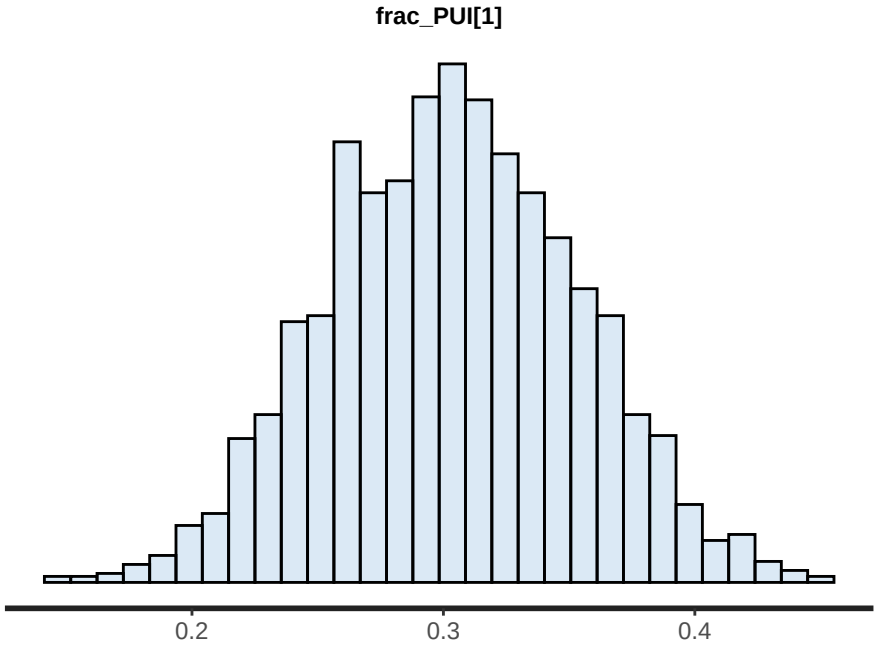

0.32
0.36
0.40
0.44
frac_icu

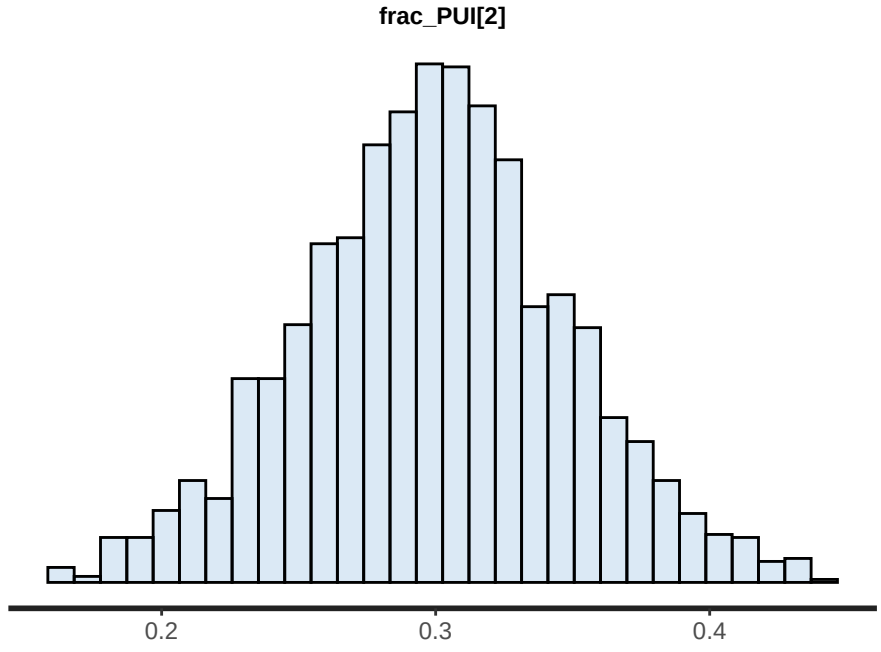

0.4
0.5
0.6
frac_mort

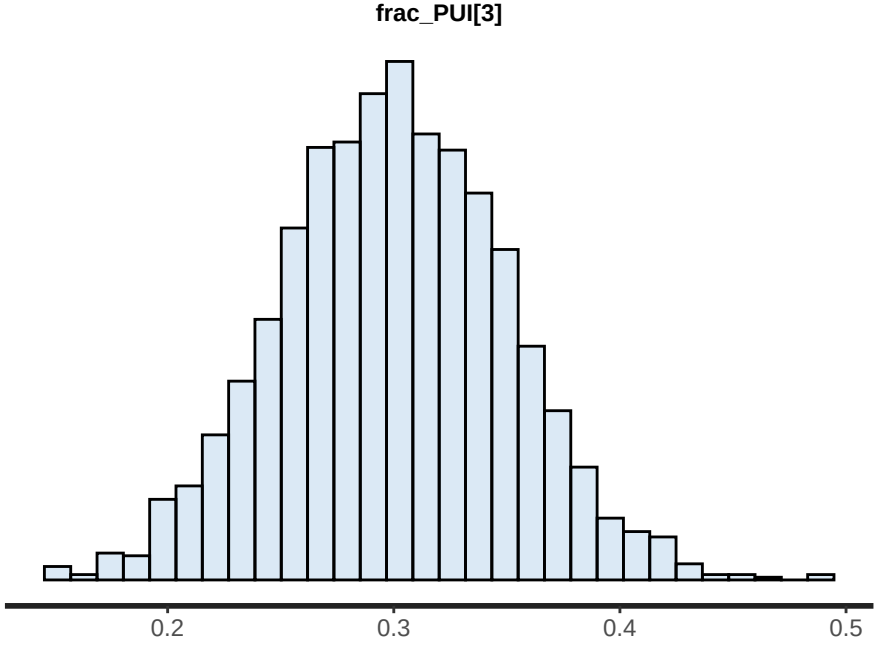

beta_multiplier[1]
1
2
3
beta_multiplier[2]
0.4
0.8
1.2
1.6
beta_multiplier[3]
0.5
1.0
1.5
2.0
beta_multiplier[4]
0.4
0.8
1.2
1.6
beta_multiplier[5]
0.2
0.4
0.6
beta_multiplier[6]
1.0
1.5
2.0
beta_multiplier[7]
0.5
1.0
1.5
2.0
beta_multiplier[8]
1.0
1.5
2.0
beta_multiplier[9]
0.5
1.0
1.5
2.0
beta_multiplier[10]
1.0
1.5
2.0
beta_multiplier[11]
0.5
1.0
1.5
2.0
beta_multiplier[12]
0.8
1.0
1.2
1.4
beta_multiplier[13]
0.8
1.0
1.2

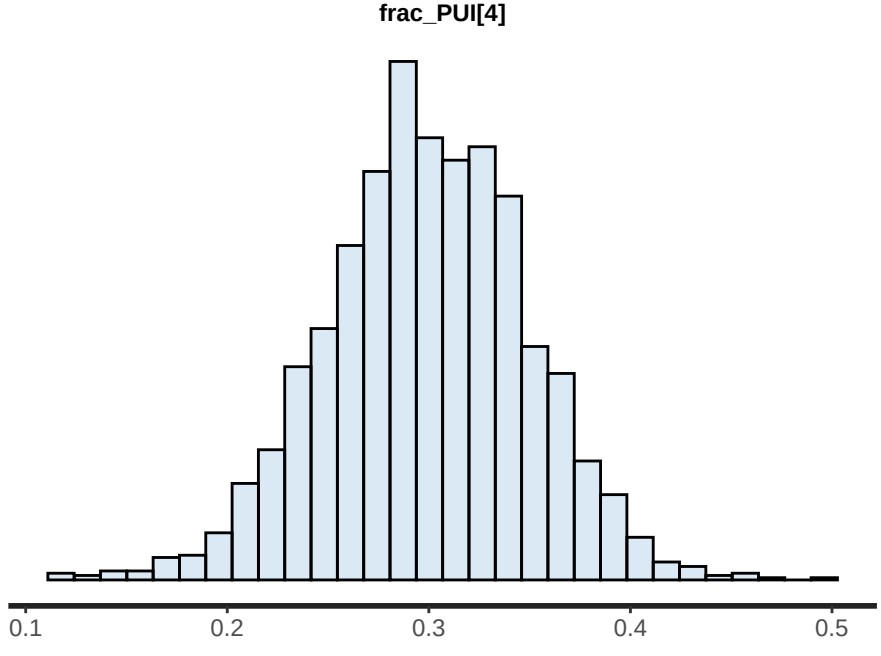

t_inter[1]
Jun 01
Jun 08
Jun 15
t_inter[2]
Jun 29
Jul 06
t_inter[3]
Jul 13
Jul 20
t_inter[4]
Jul 27
Aug 03
t_inter[5]
Aug 08
Aug 10
Aug 12
Aug 14
Aug 16
t_inter[6]
Aug 24
Aug 31
t_inter[7]
Sep 07
Sep 14
t_inter[8]
Sep 21
Sep 28
t_inter[9]
Oct 05
Oct 12
t_inter[10]
Oct 19
Oct 26
t_inter[11]
Nov 02
Nov 09
t_inter[12]
Nov 15
Nov 17
Nov 19
Nov 21
Nov 23
Nov 25
t_inter[13]
Nov 30
Dec 07

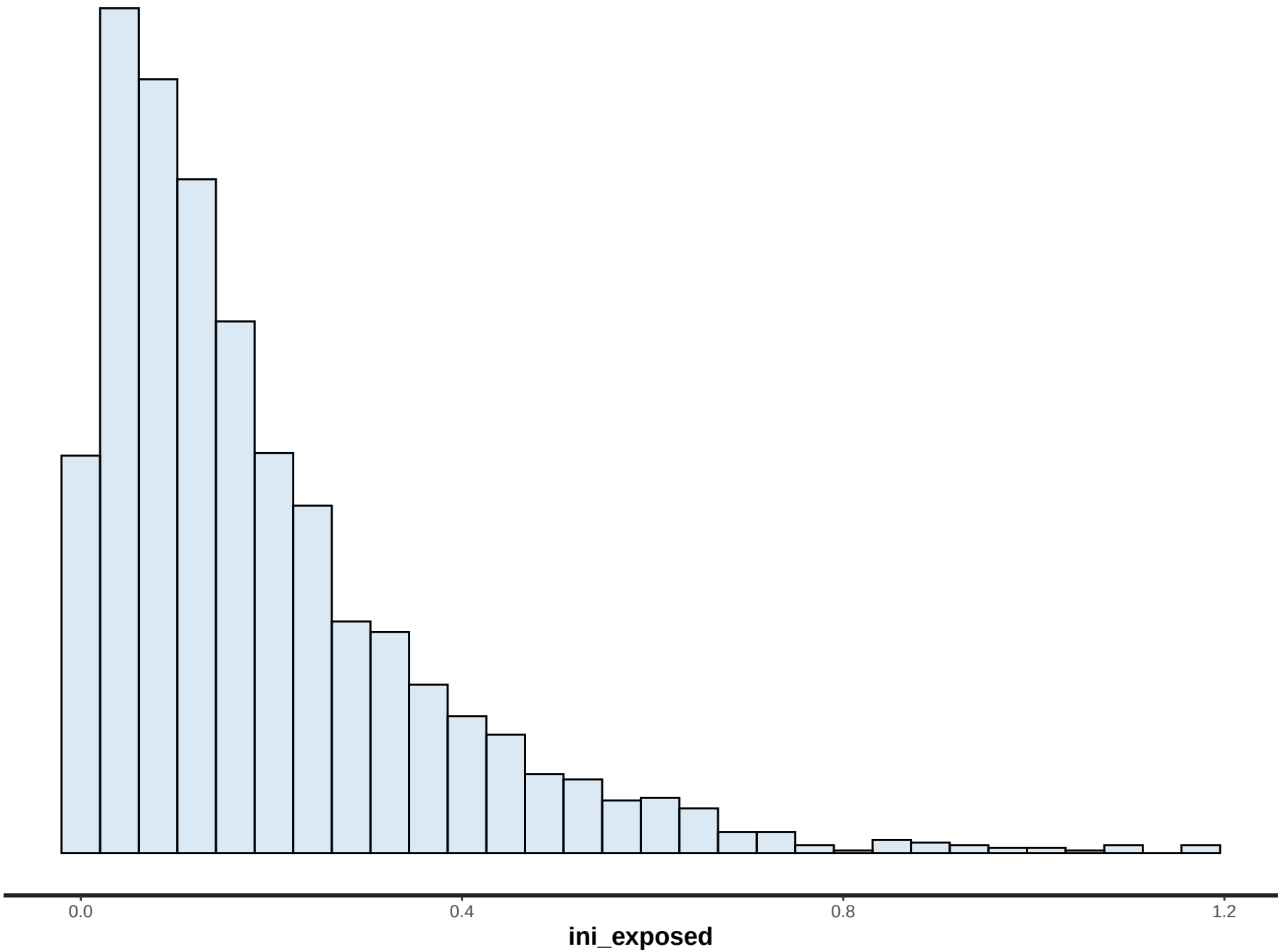

len_inter[1]
len_inter[2]
len_inter[3]
len_inter[4]
len_inter[5]
len_inter[6]
len_inter[7]
len_inter[8]
len_inter[9]
len_inter[10]
len_inter[11]
len_inter[12]
len_inter[13]
0
5
10

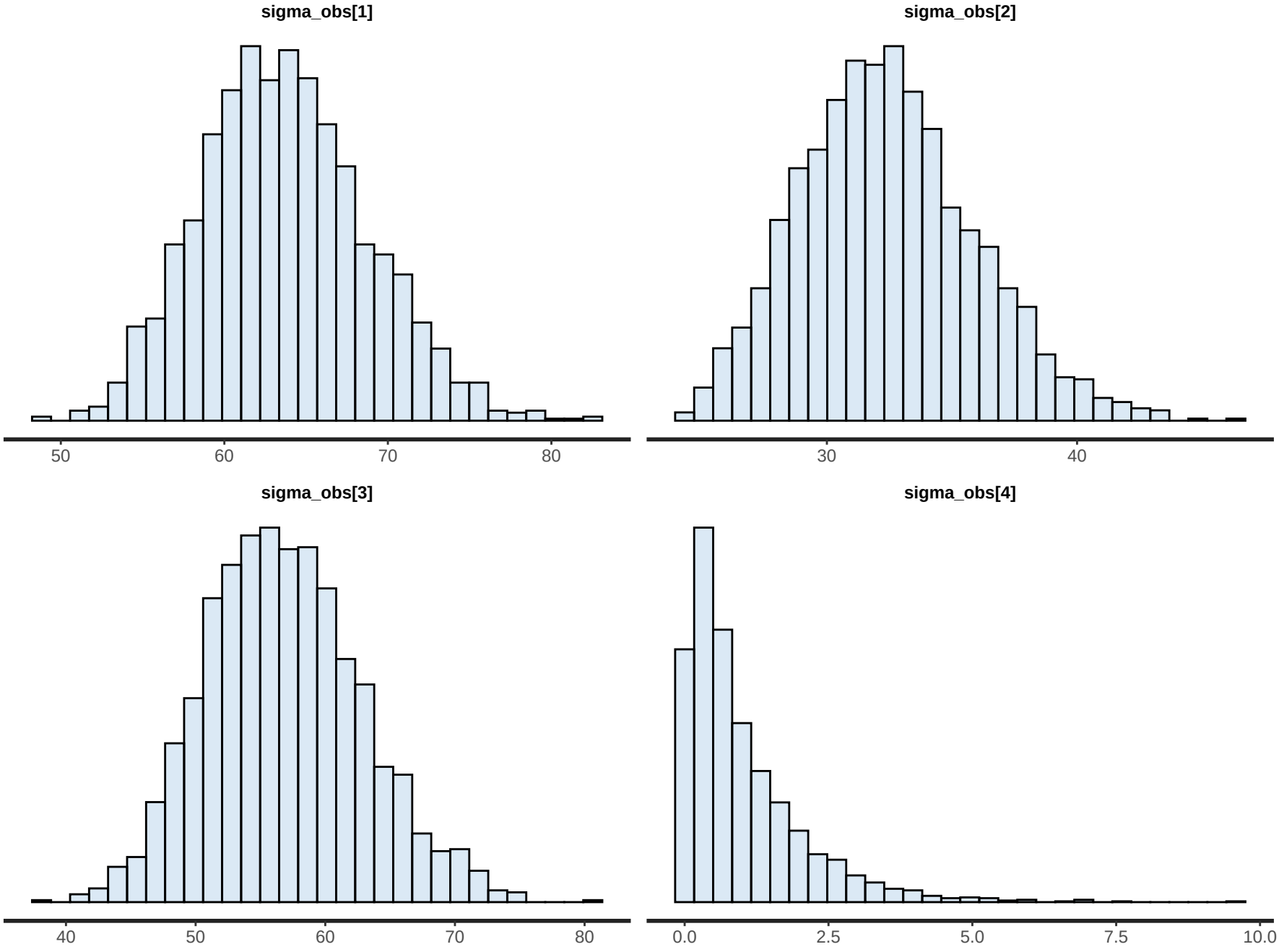

frac_PUI[1]
0.2
0.3
0.4


frac_PUI[2]
0.2
0.3
0.4


frac_PUI[3]
0.2
0.3
0.4
0.5


frac_PUI[4]
0.1
0.2
0.3
0.4
0.5


0.0
0.4
0.8
1.2
ini_exposed


sigma_obs[1]
50
60
70
80
sigma_obs[2]
30
40
sigma_obs[3]
40
50
60
70
80
sigma_obs[4]
0.0
2.5
5.0
7.5
10.0