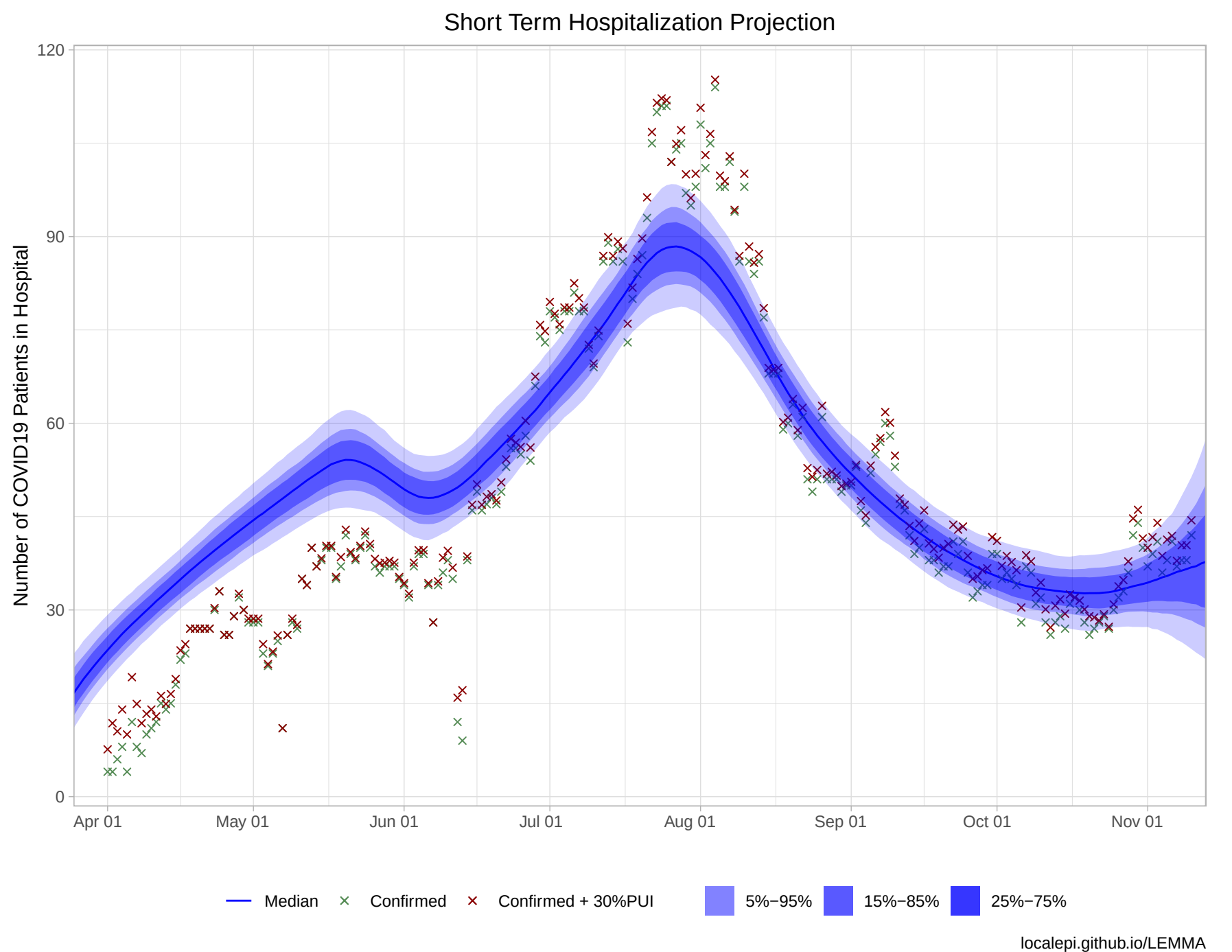
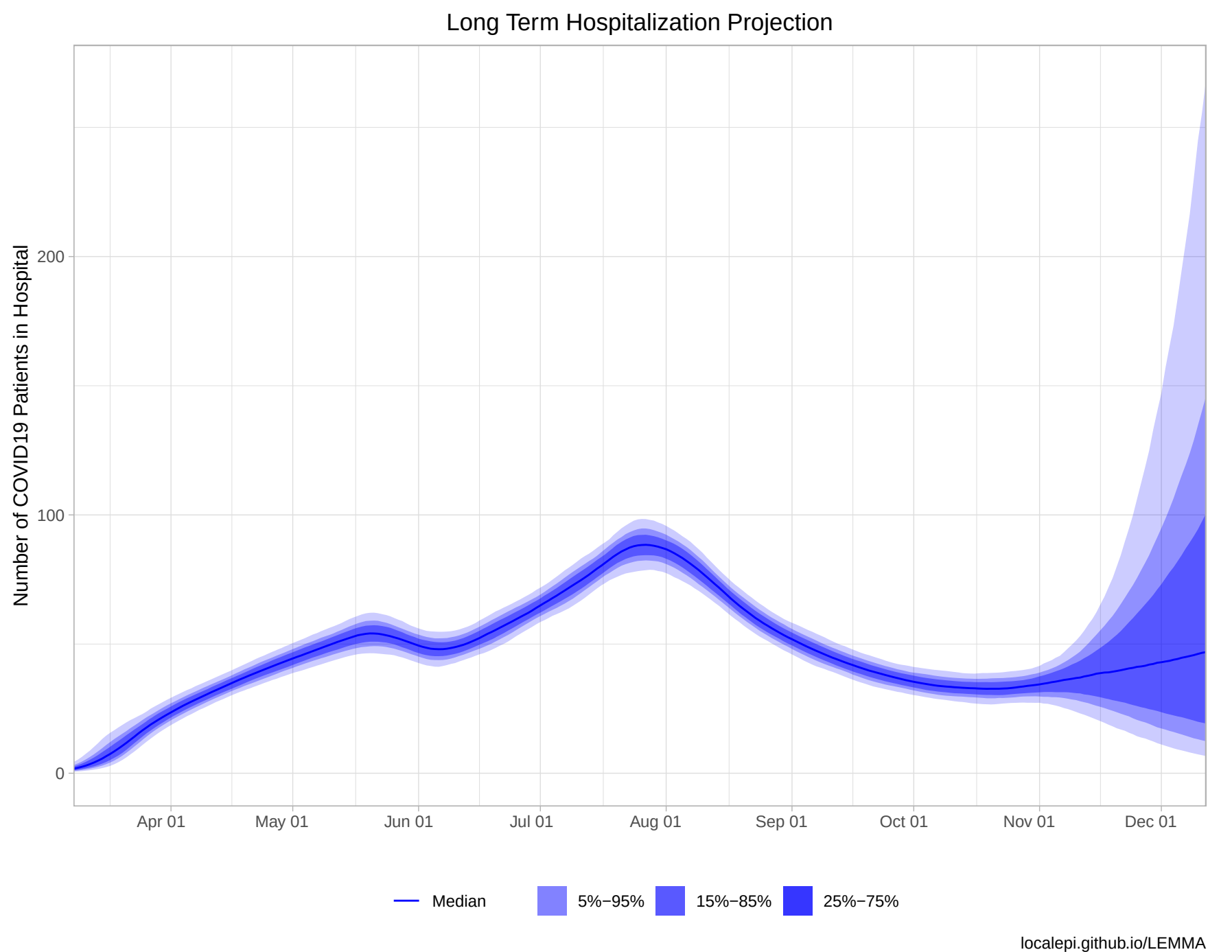
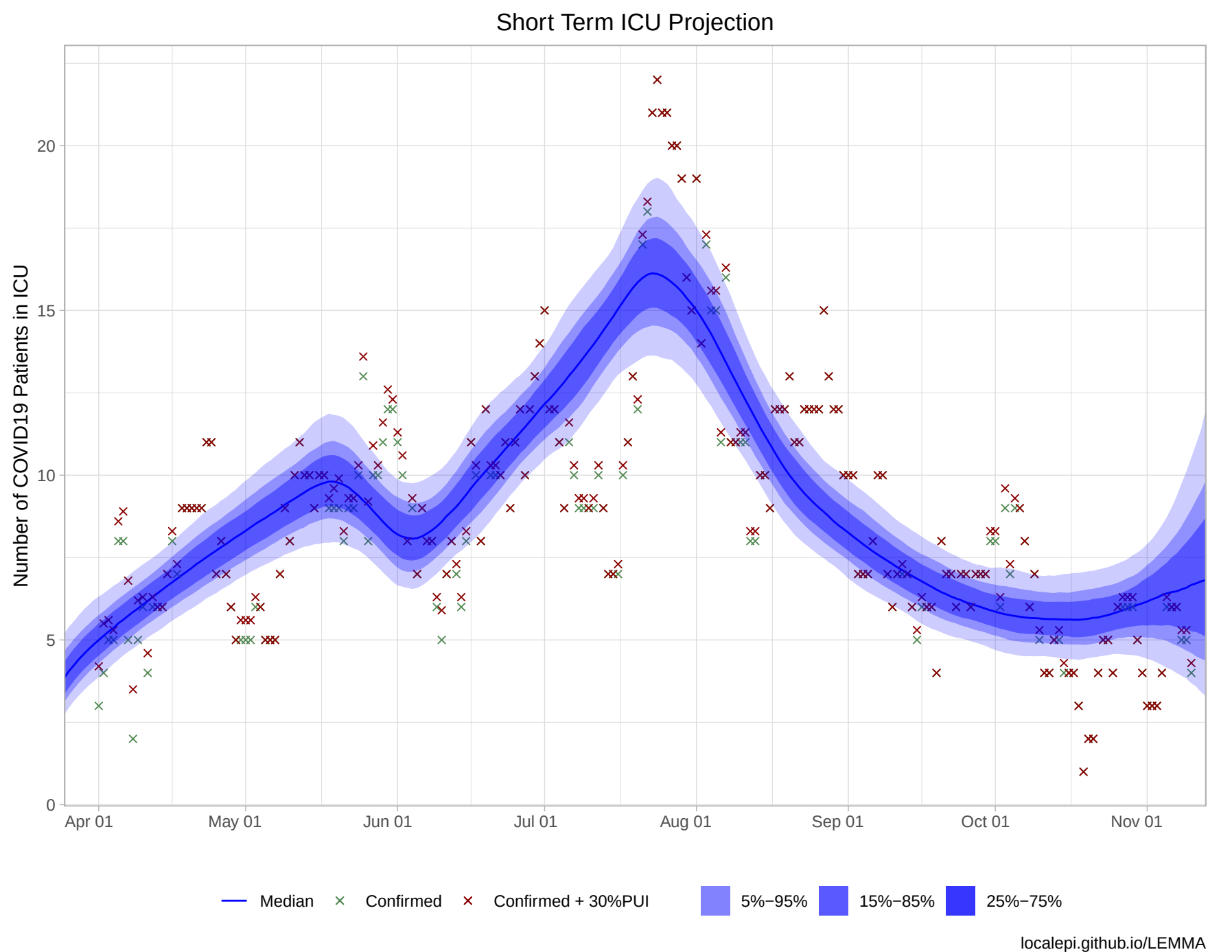
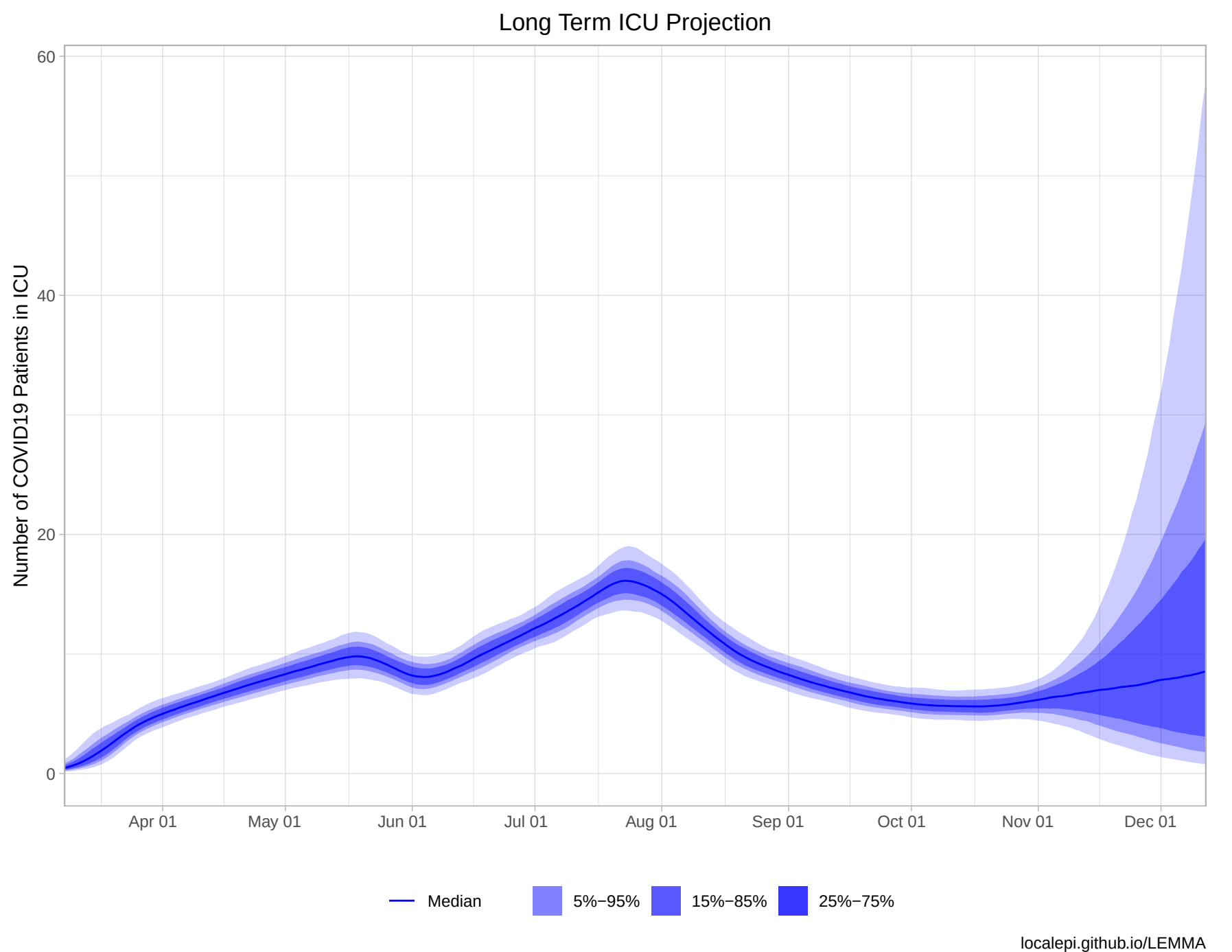
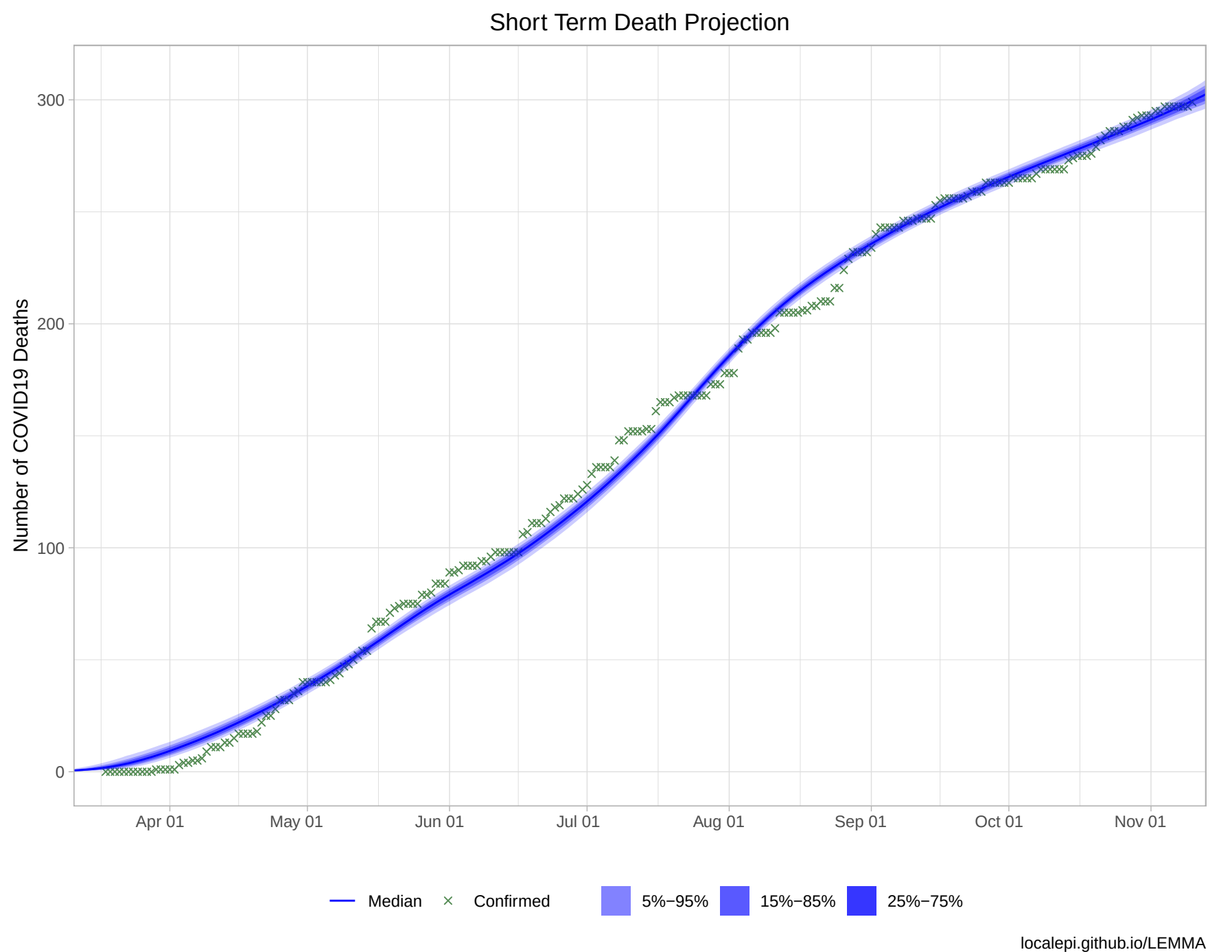
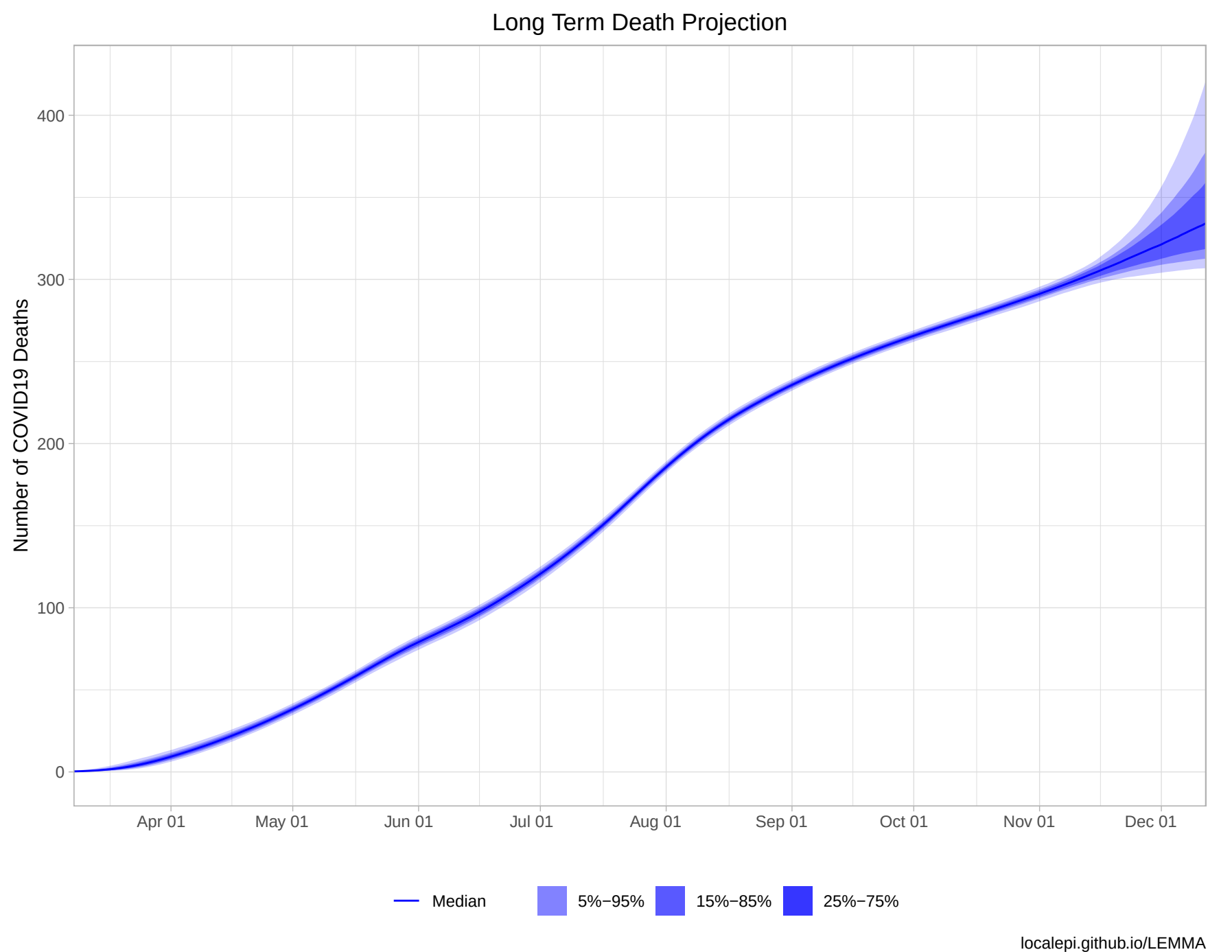

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
120
90
60
30
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

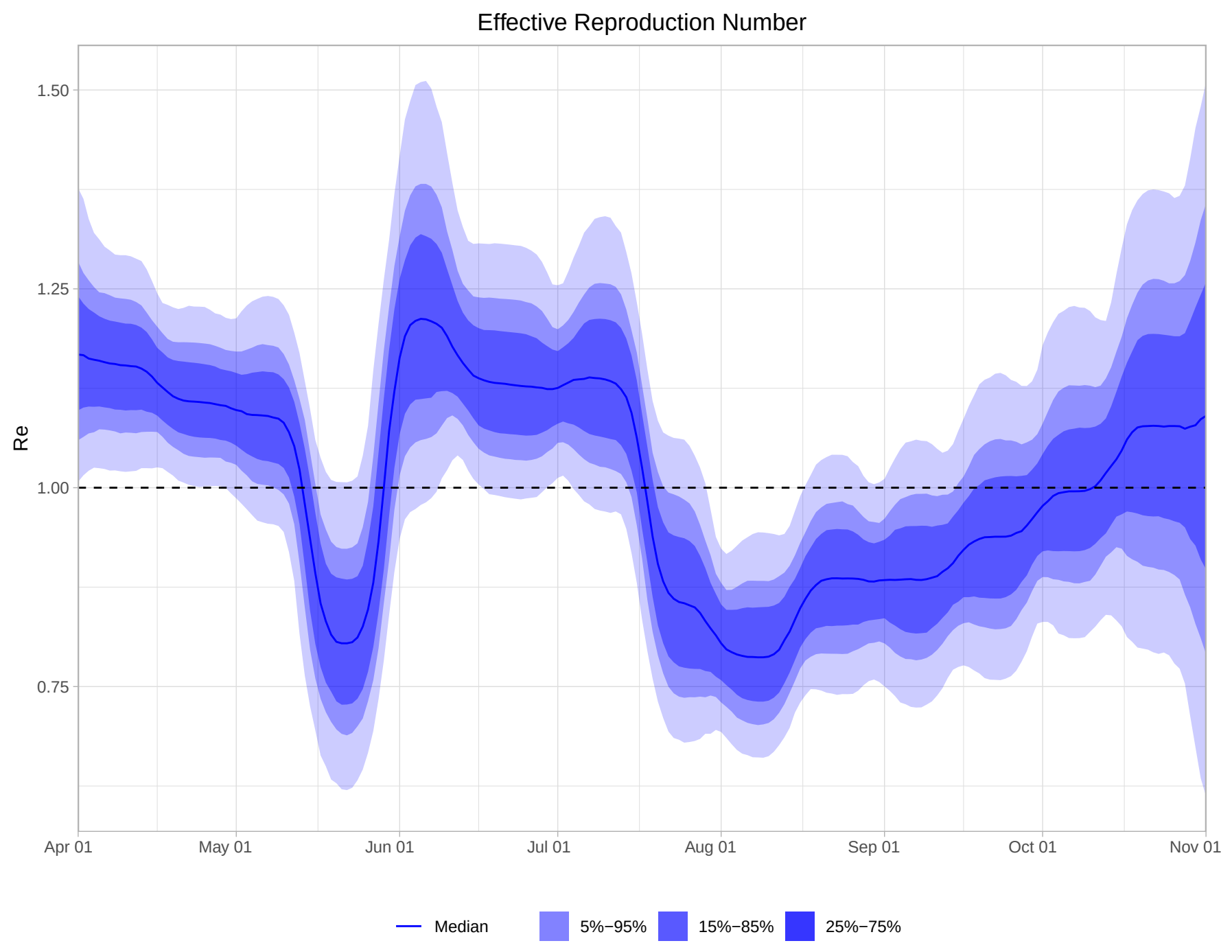

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
5
10
15
20
Apr 01
May 01
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
60
40
20
0
Apr 01
May 01
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

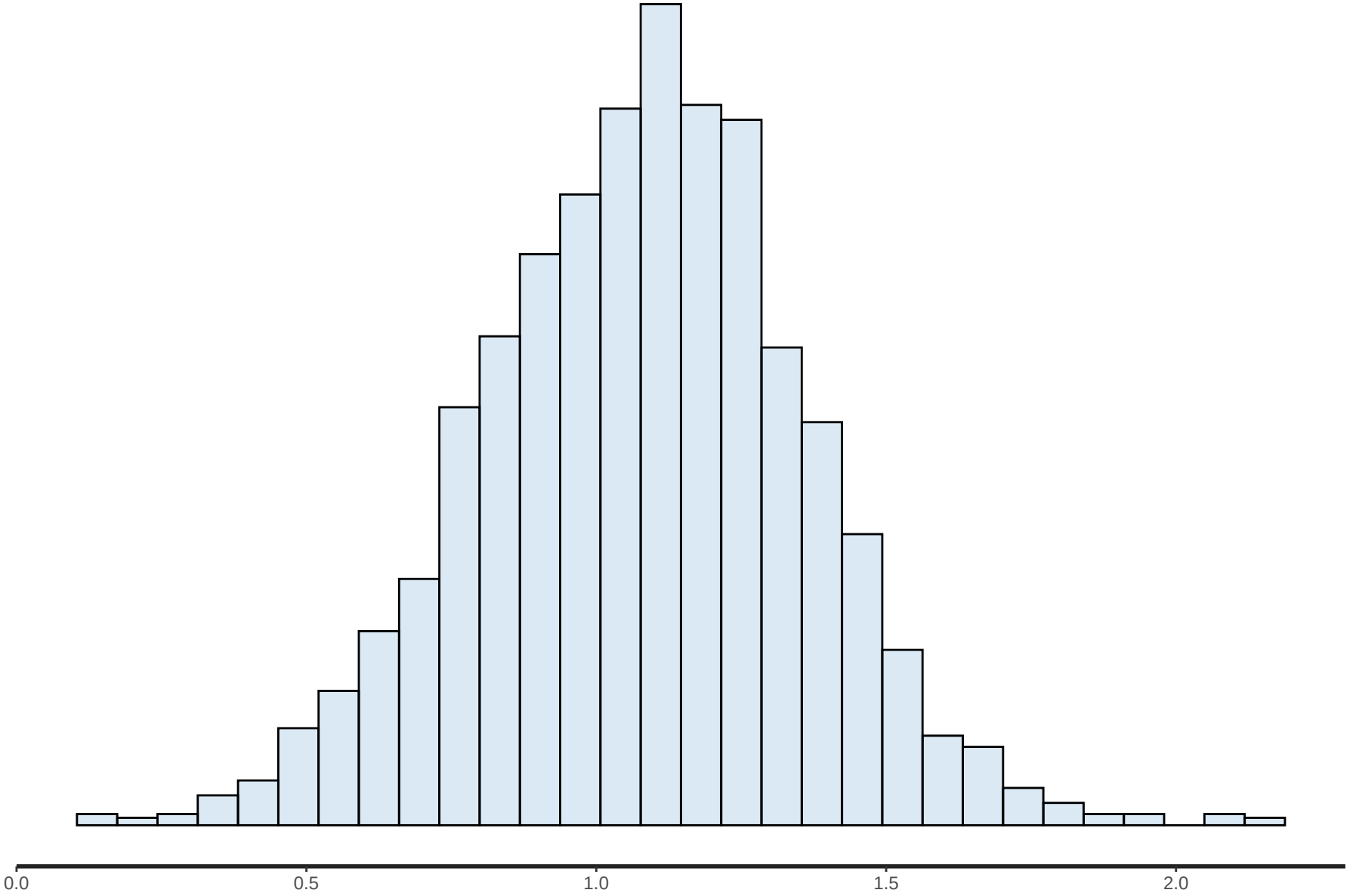

Short Term Death Projection
Number of COVID19 Deaths
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

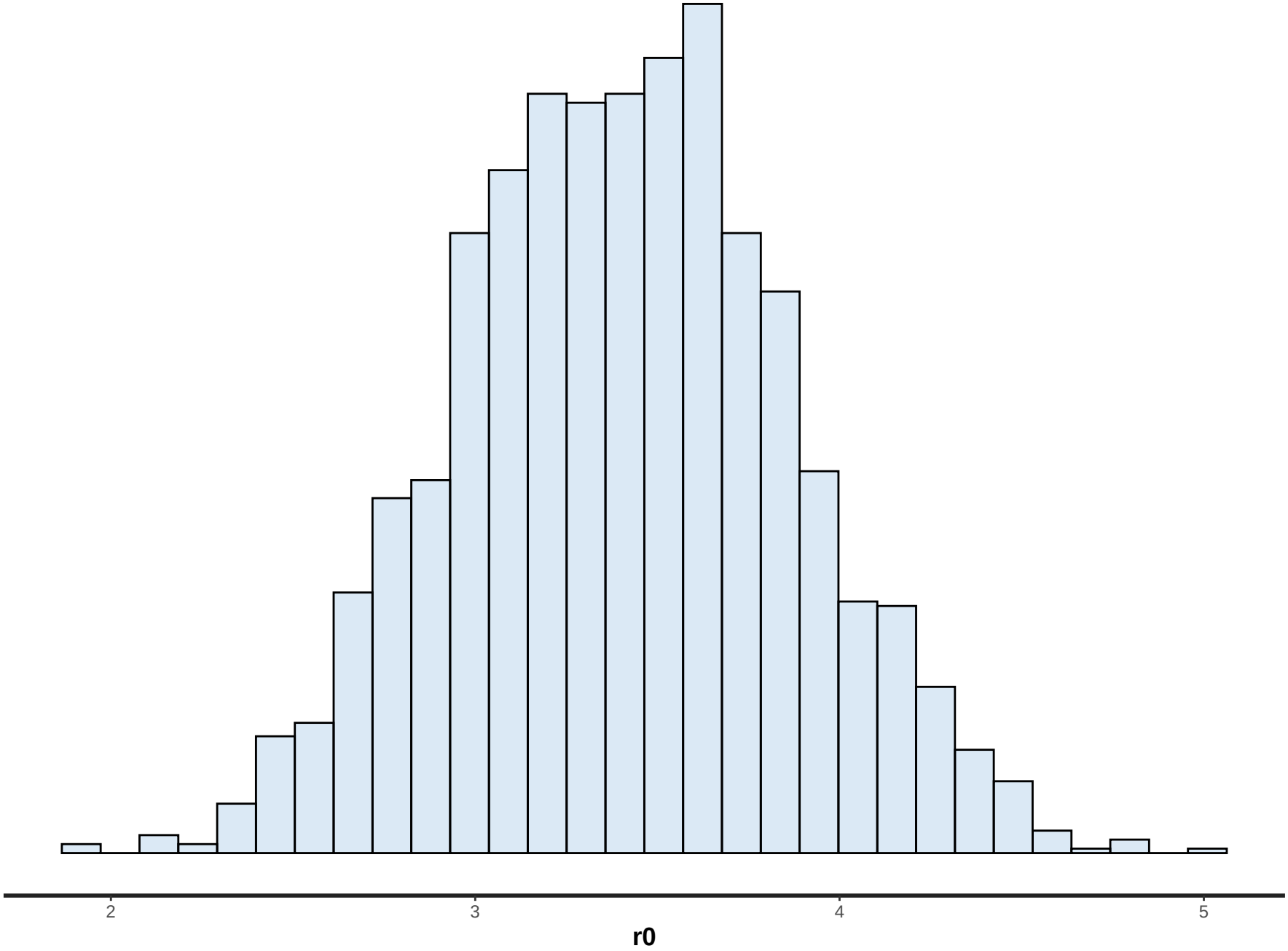

Long Term Death Projection
Number of COVID19 Deaths
400
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

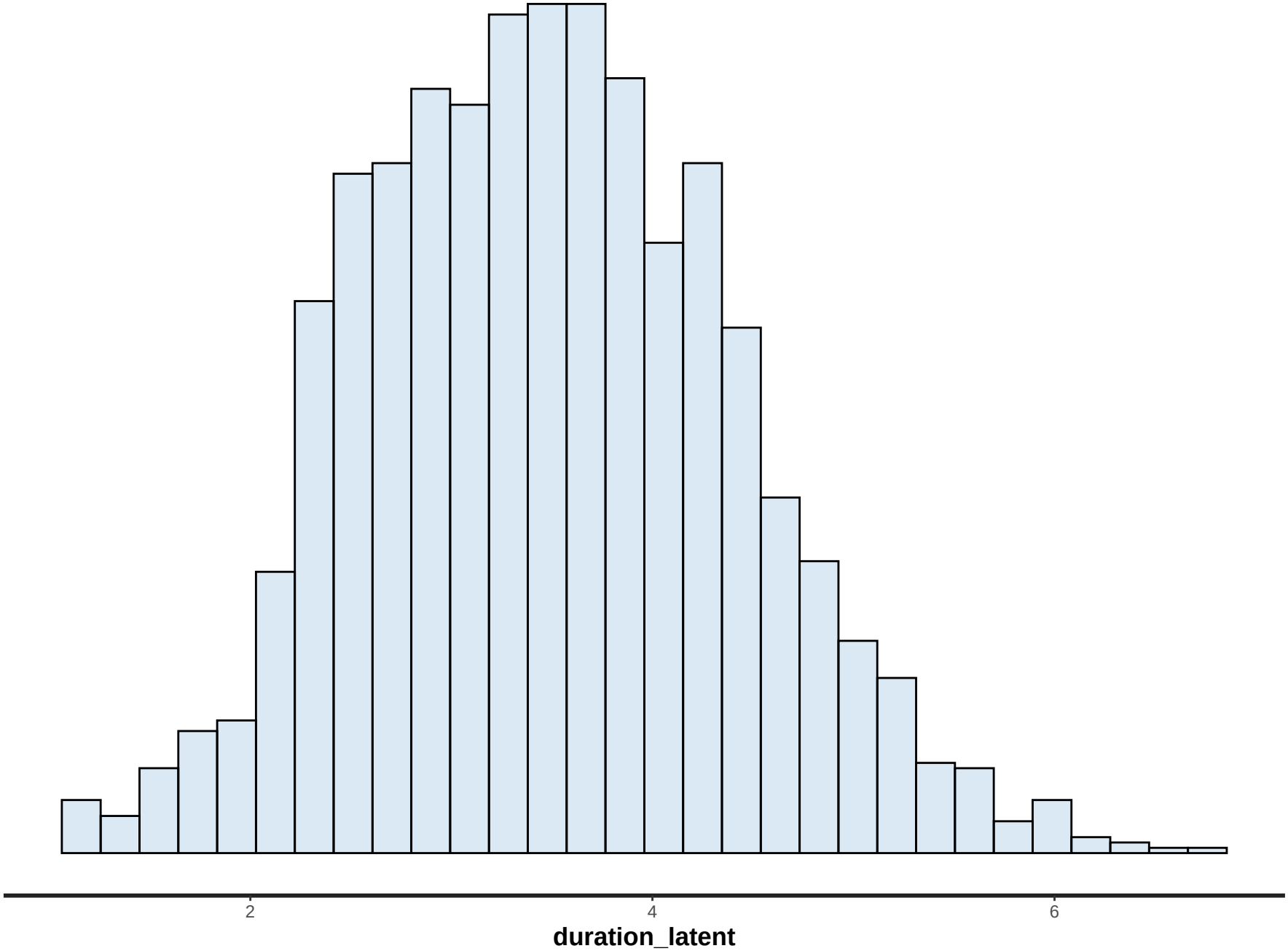

Effective Reproduction Number
Re
1.50
1.25
1.00
0.75
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
5%−95%
15%−85%
25%−75%

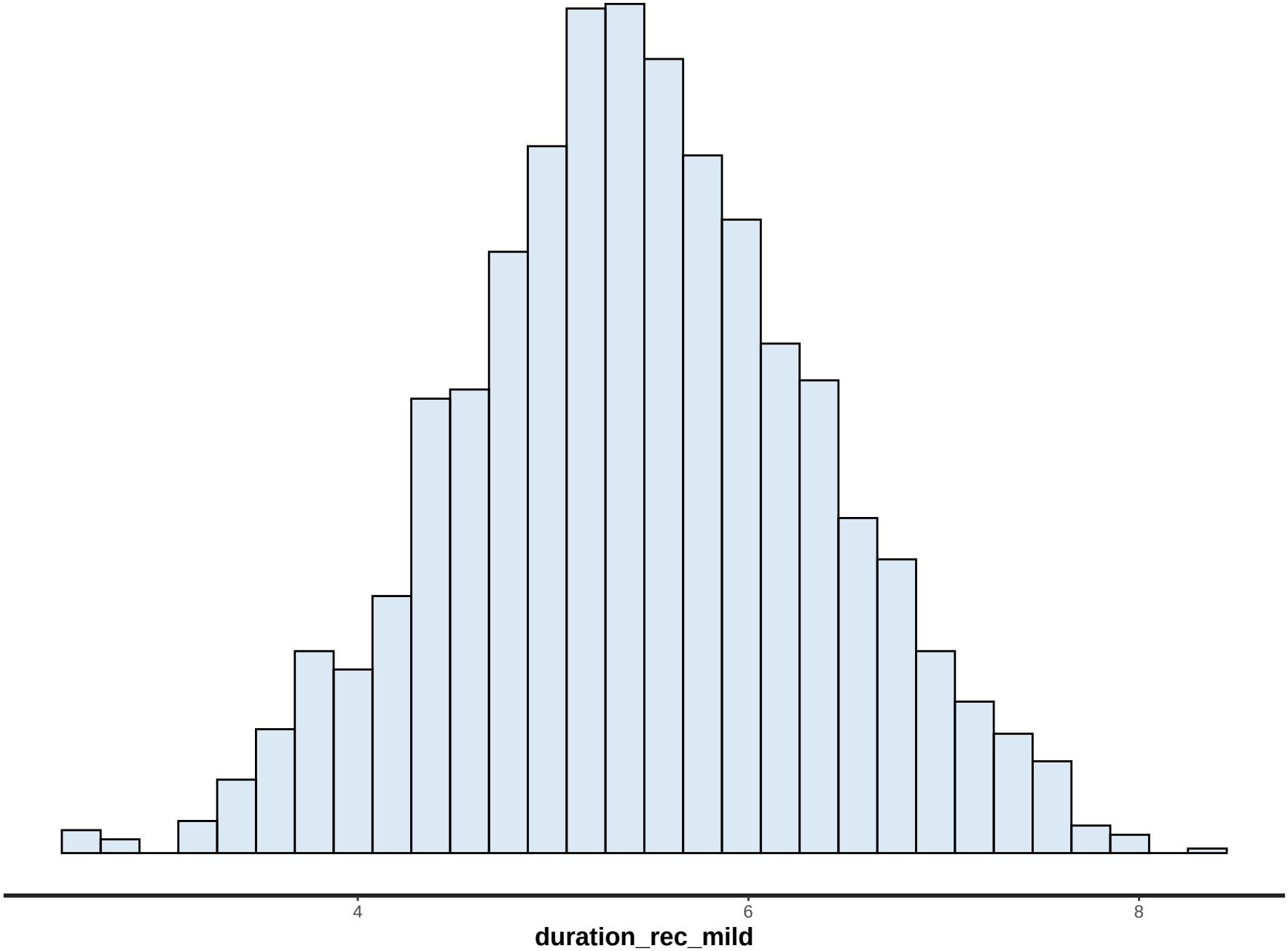
Rt as of 2020−11−01

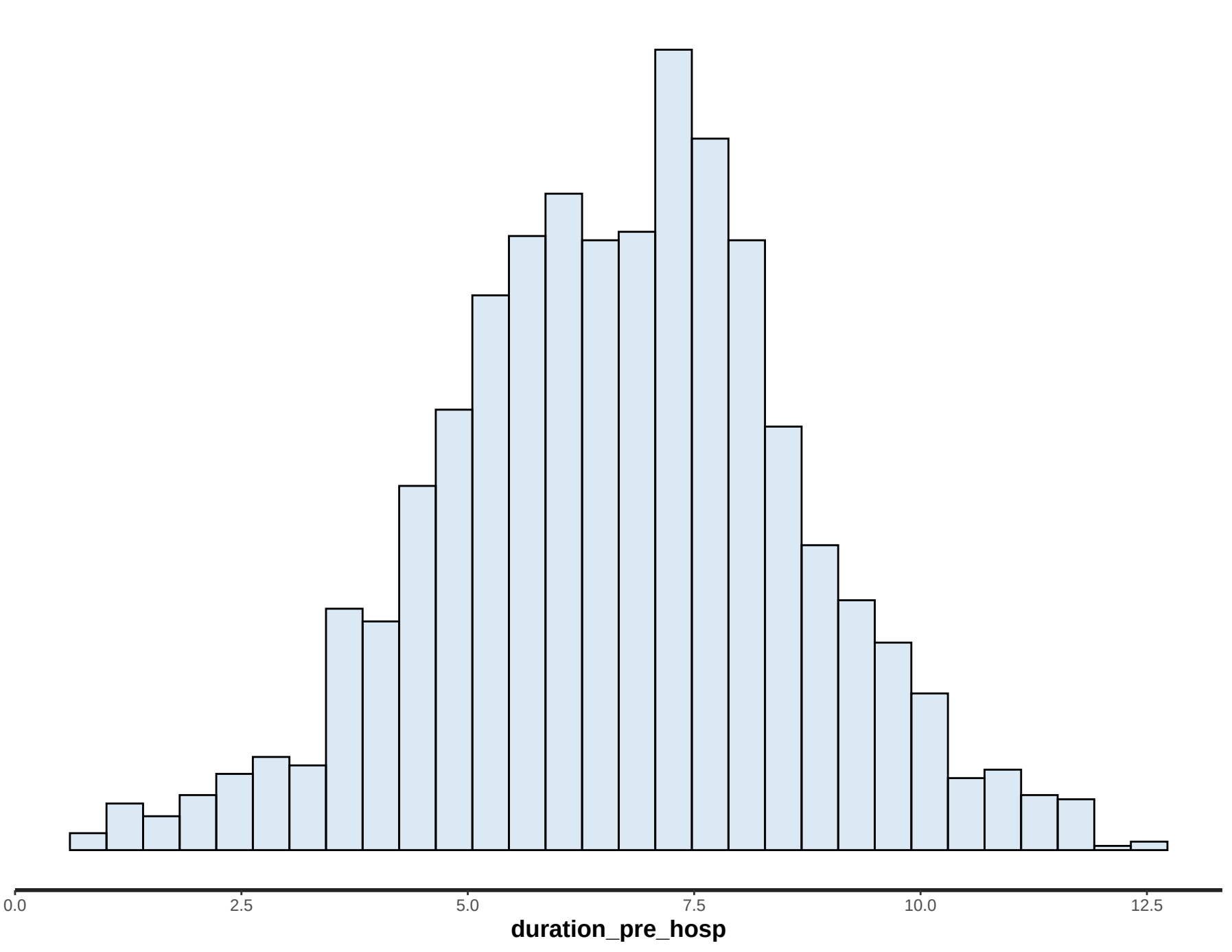
5%	10%	25%	50%	75%	90%	95%
0.61	0.71	0.90	1.09	1.26	1.42	1.51

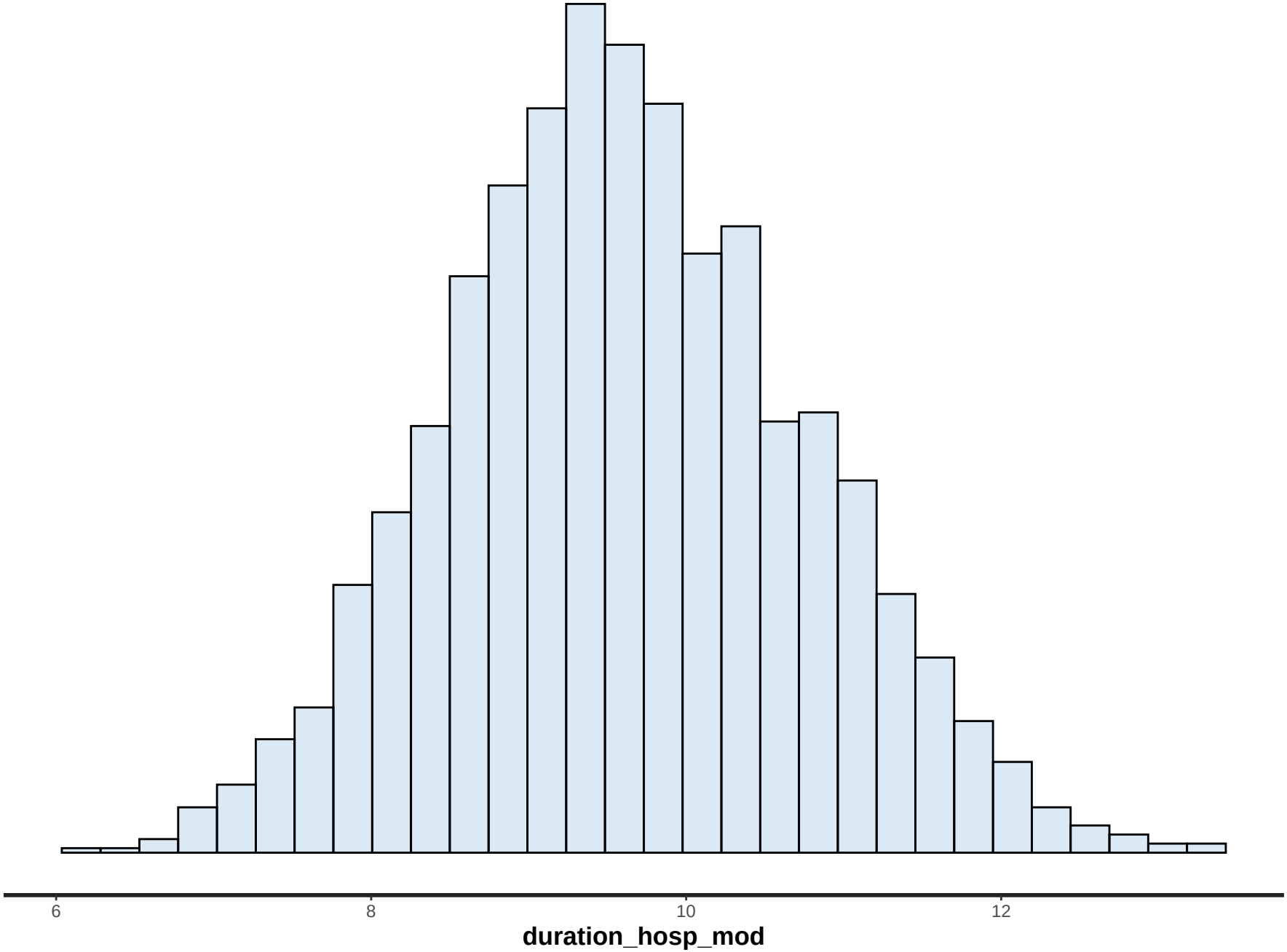


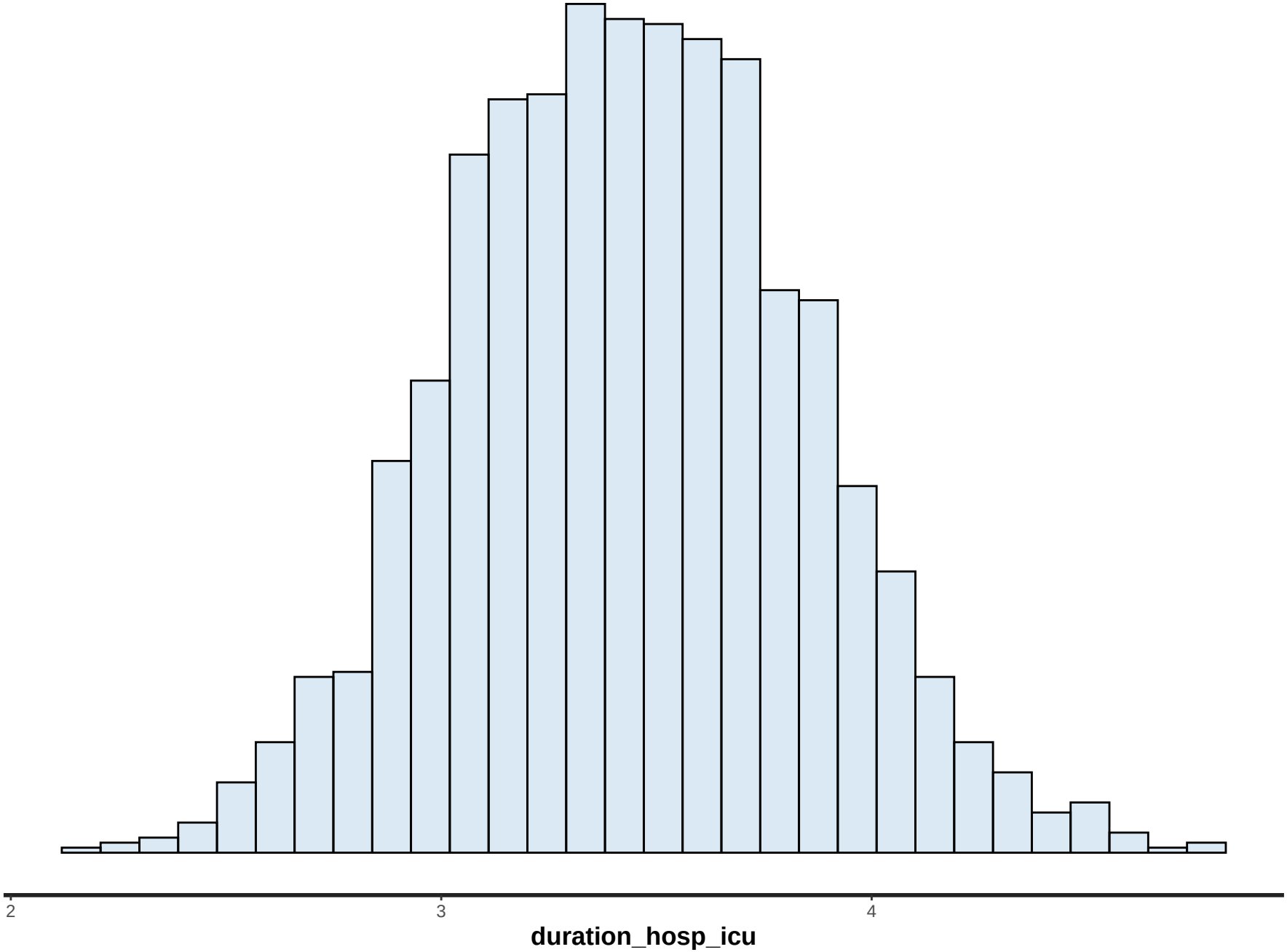

2
3
4
5
r0

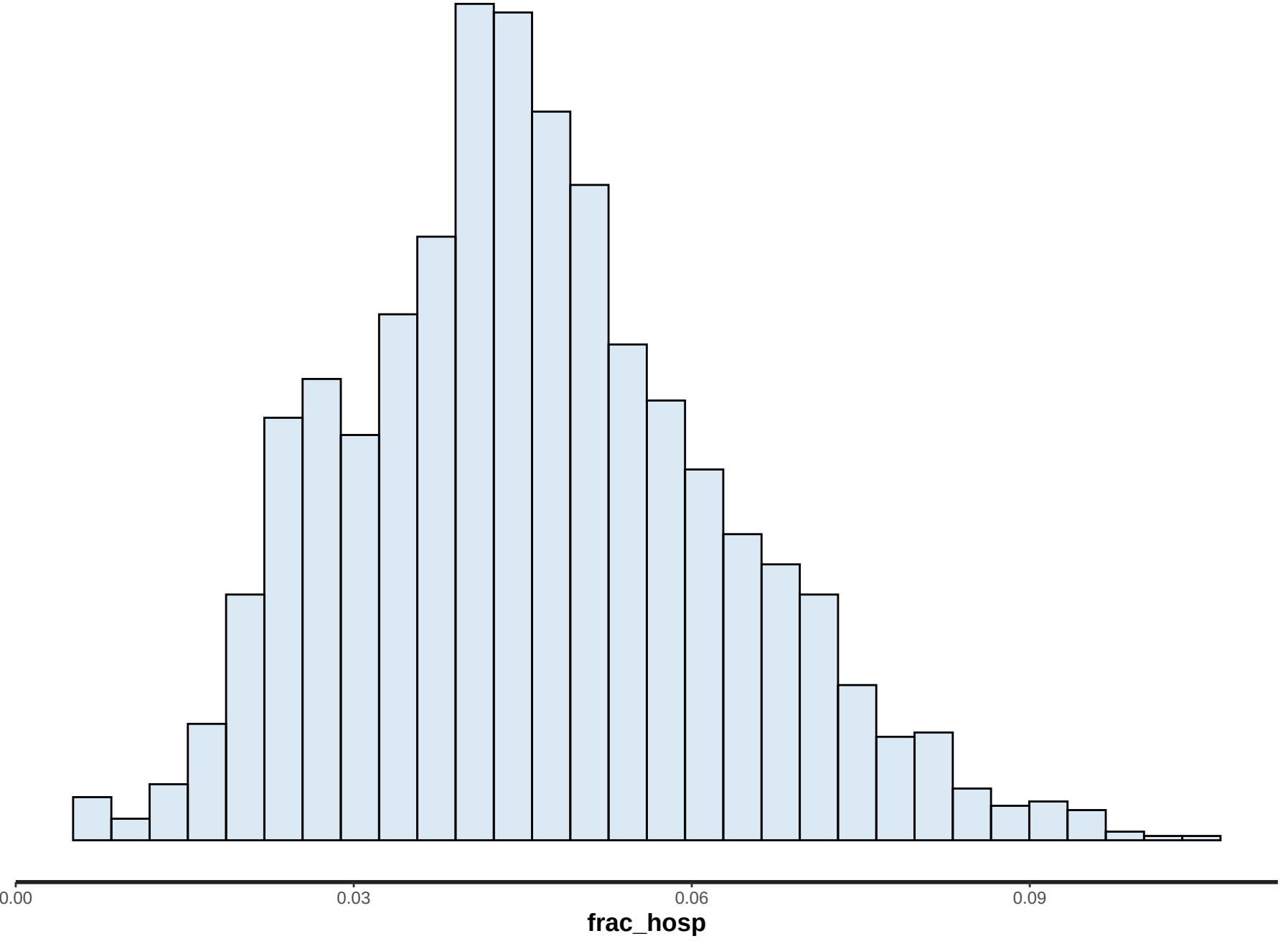

2
4
6
duration_latent

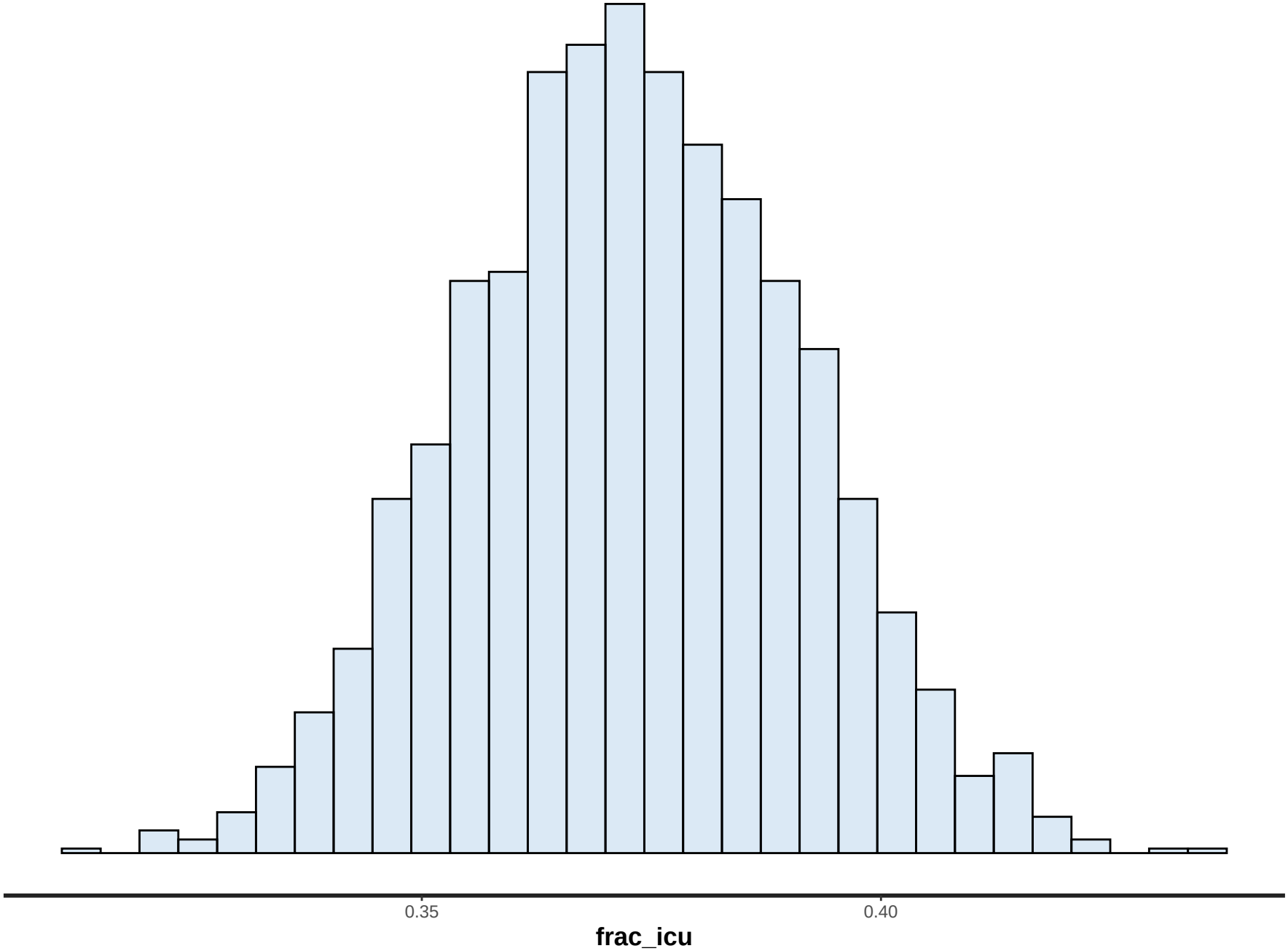

4
6
8
duration_rec_mild

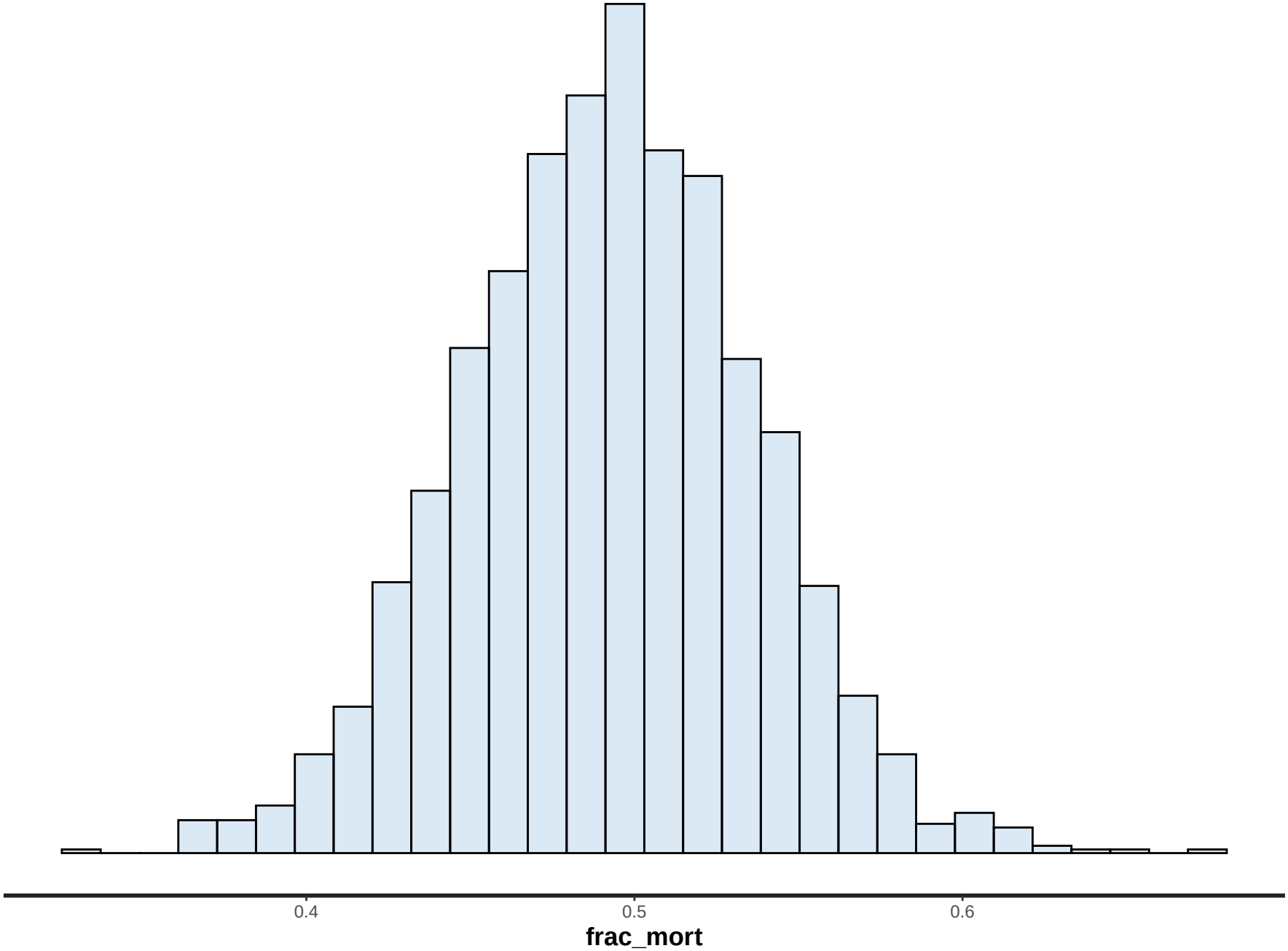

0.0
2.5
5.0
7.5
10.0
12.5
duration_pre_hosp

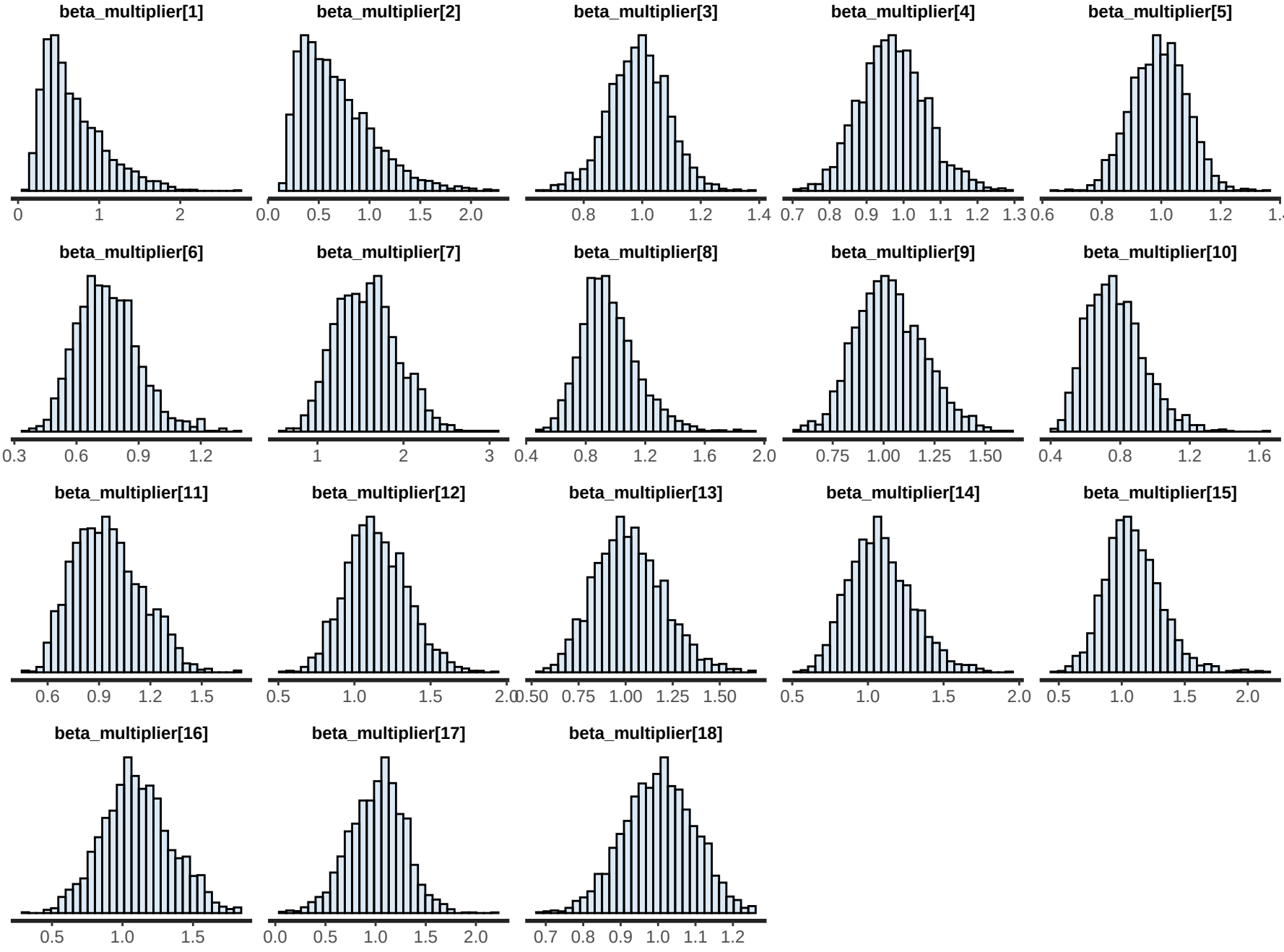

6
8
10
12
duration_hosp_mod

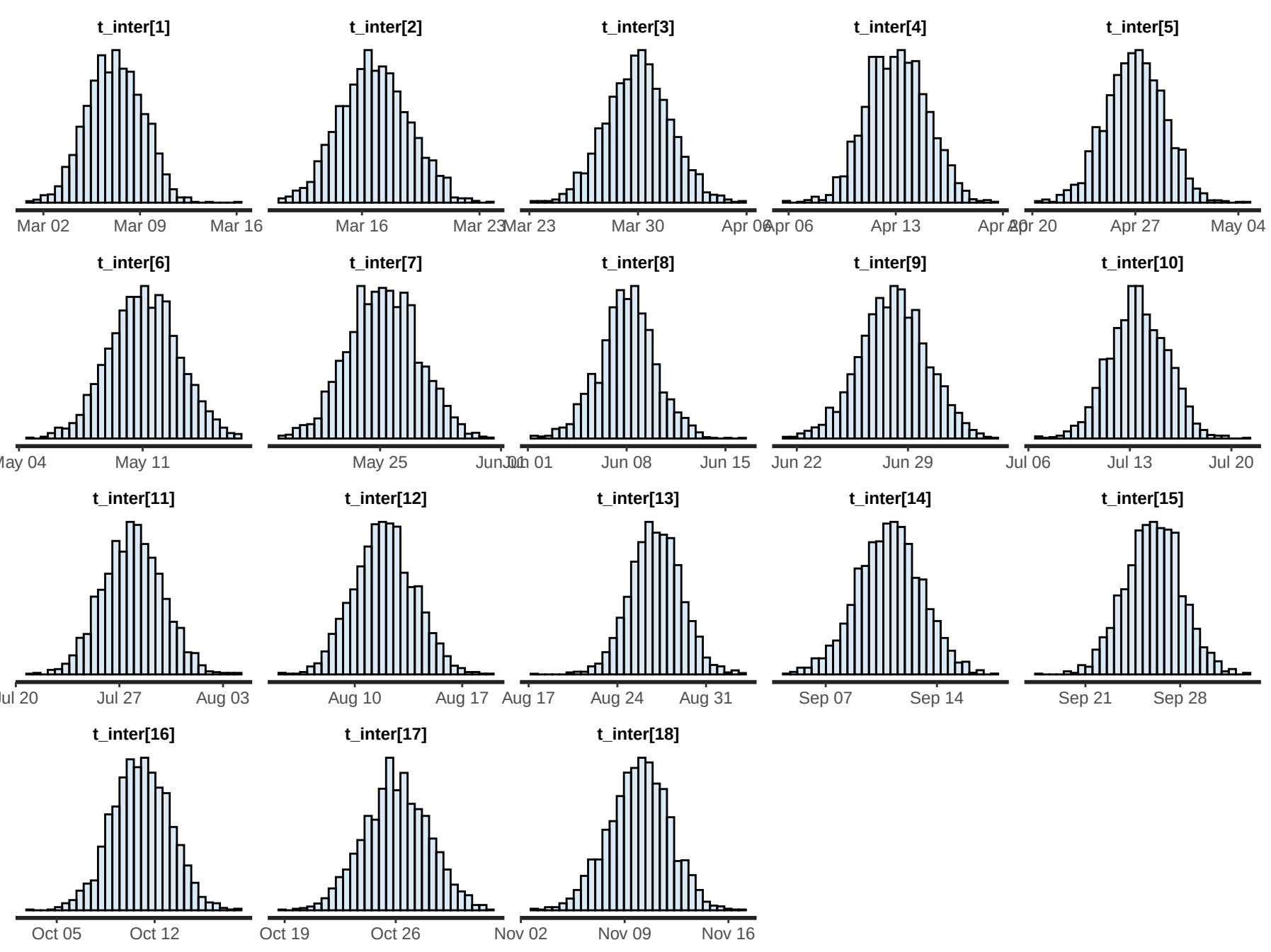

2
3
4
duration_hosp_icu

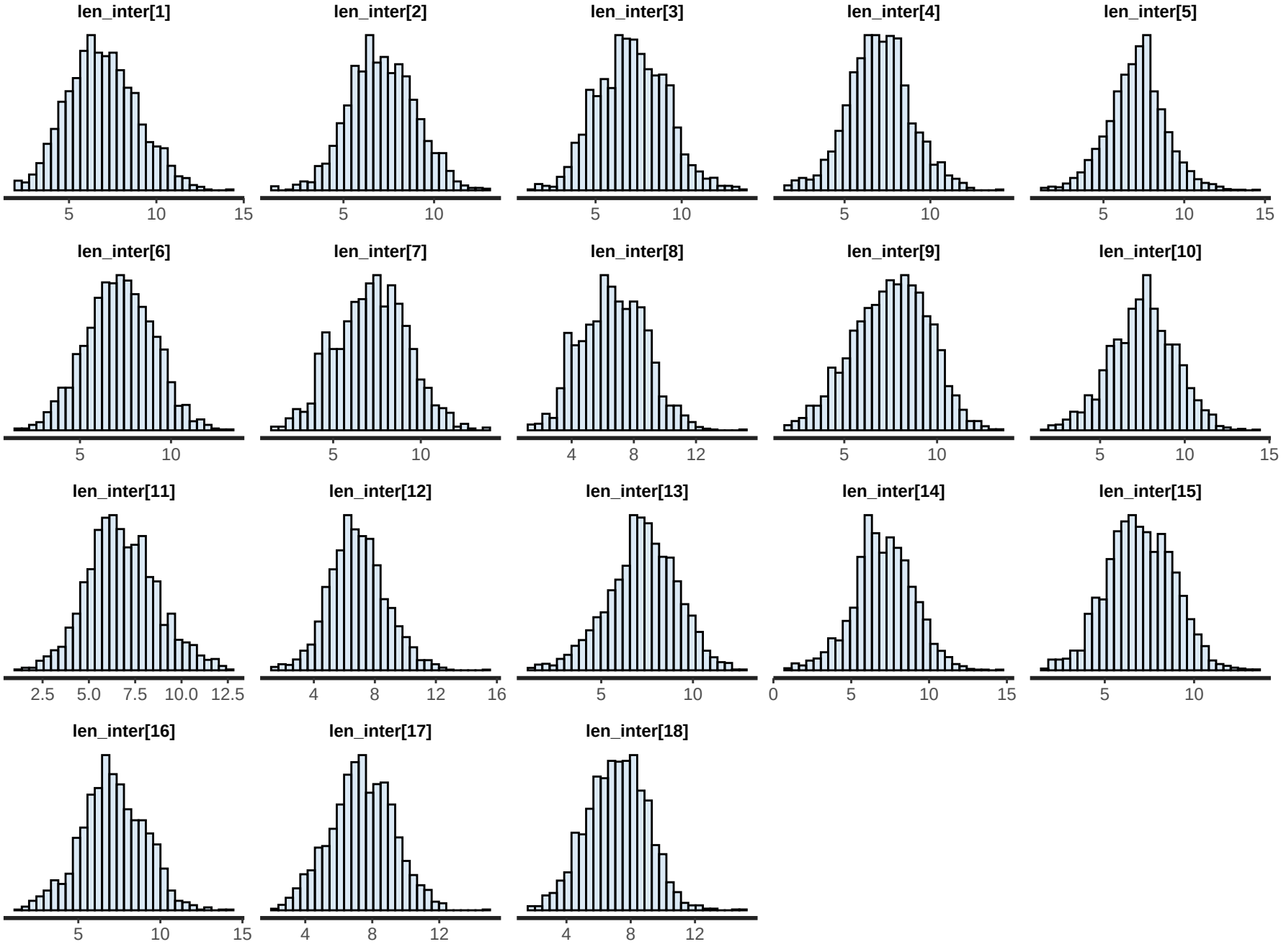

0.00
0.03
0.06
0.09
frac_hosp

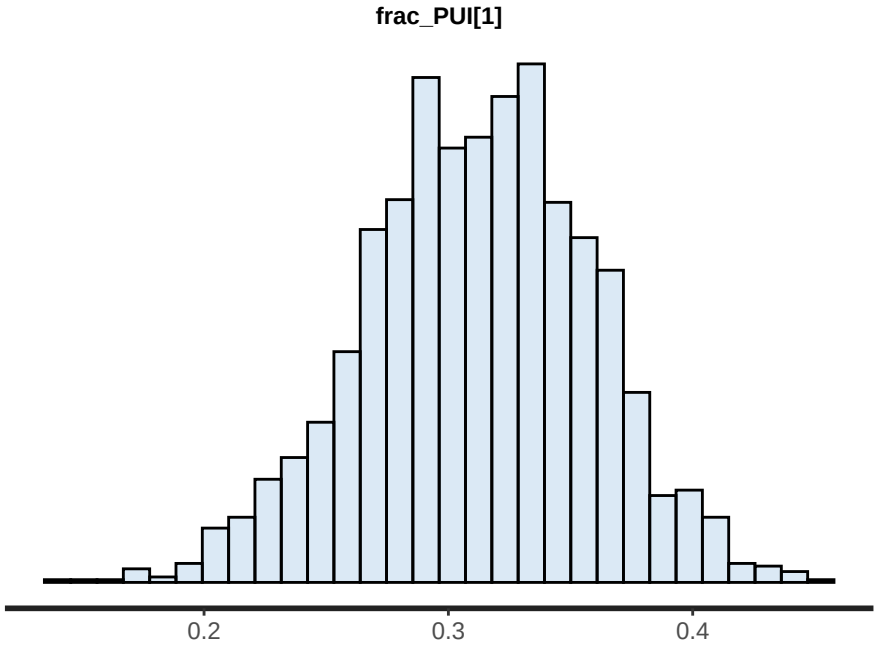

0.35
0.40
frac_icu

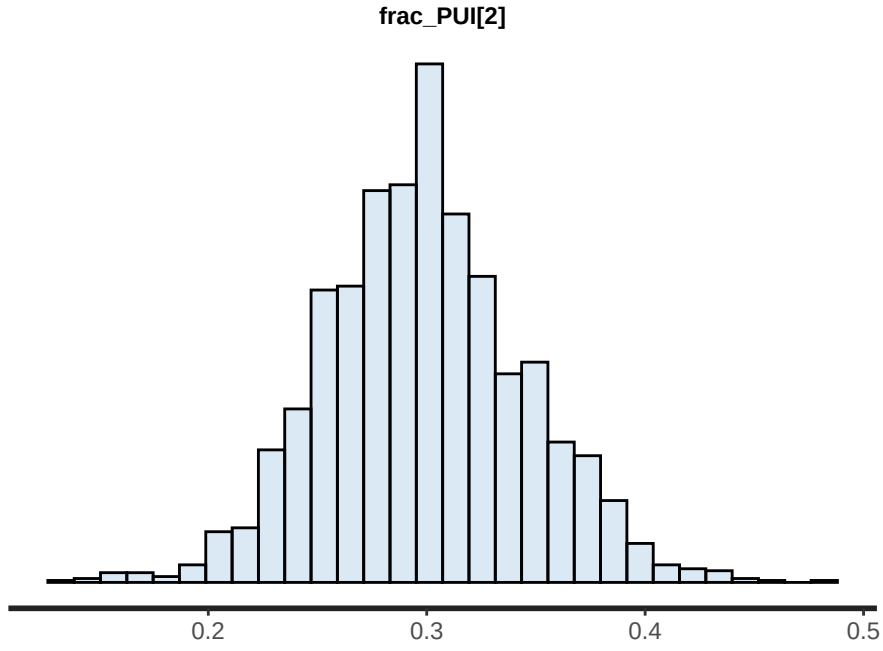

0.4
0.5
0.6
frac_mort

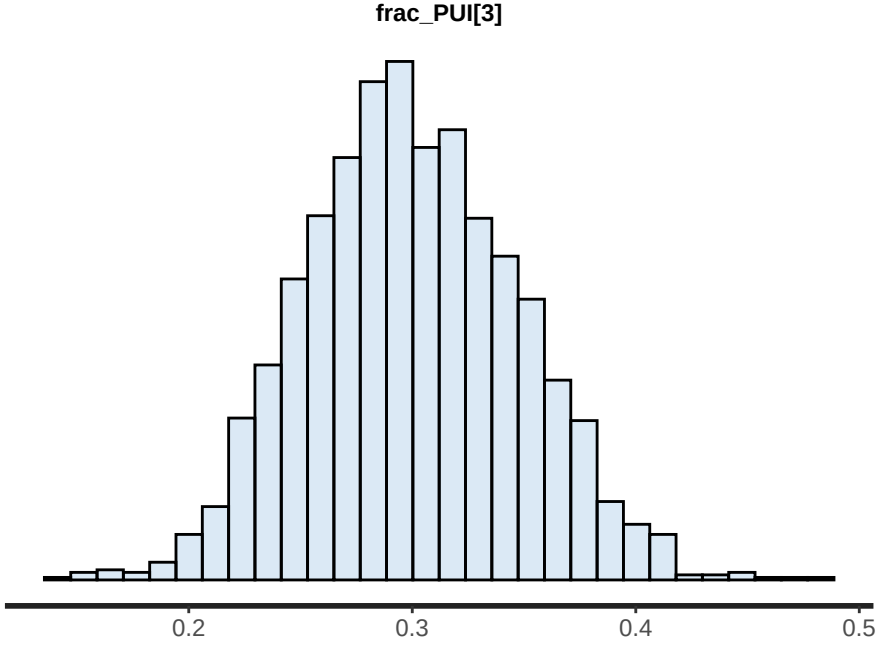

beta_multiplier[1]
beta_multiplier[2]
beta_multiplier[3]
beta_multiplier[4]
beta_multiplier[5]
beta_multiplier[6]
beta_multiplier[7]
beta_multiplier[8]
beta_multiplier[9]
beta_multiplier[10]
beta_multiplier[11]
beta_multiplier[12]
beta_multiplier[13]
beta_multiplier[14]
beta_multiplier[15]
beta_multiplier[16]
beta_multiplier[17]
beta_multiplier[18]

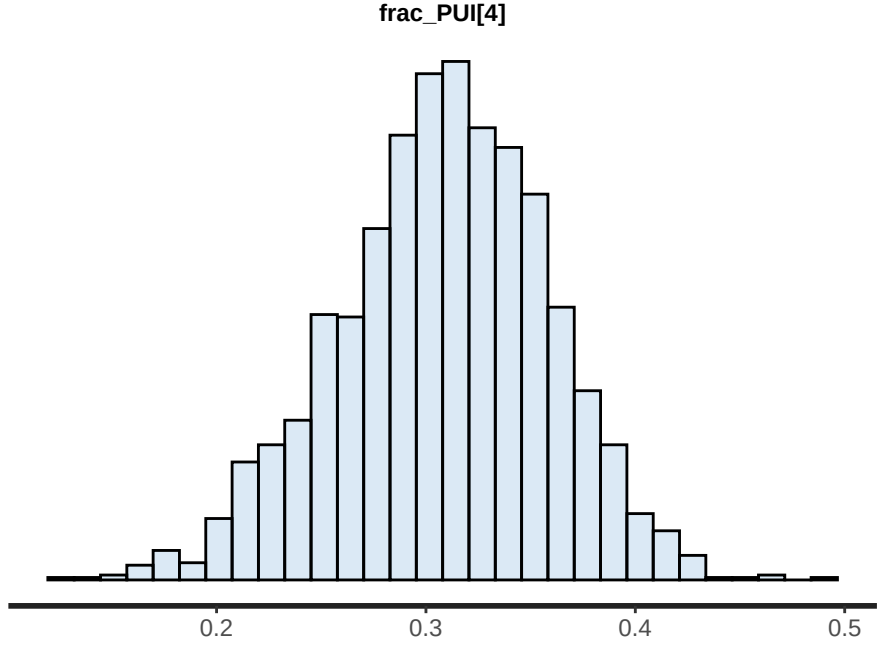

t_inter[1]
Mar 02
Mar 09
Mar 16
t_inter[2]
Mar 16
Mar 23
t_inter[3]
Mar 23
Mar 30
Apr 06
t_inter[4]
Apr 06
Apr 13
Apr 20
t_inter[5]
Apr 20
Apr 27
May 04
t_inter[6]
May 04
May 11
t_inter[7]
May 25
Jun 01
t_inter[8]
Jun 01
Jun 08
Jun 15
t_inter[9]
Jun 22
Jun 29
t_inter[10]
Jul 06
Jul 13
Jul 20
t_inter[11]
Jul 20
Jul 27
Aug 03
t_inter[12]
Aug 10
Aug 17
t_inter[13]
Aug 17
Aug 24
Aug 31
t_inter[14]
Sep 07
Sep 14
t_inter[15]
Sep 21
Sep 28
t_inter[16]
Oct 05
Oct 12
t_inter[17]
Oct 19
Oct 26
Nov 02
t_inter[18]
Nov 09
Nov 16

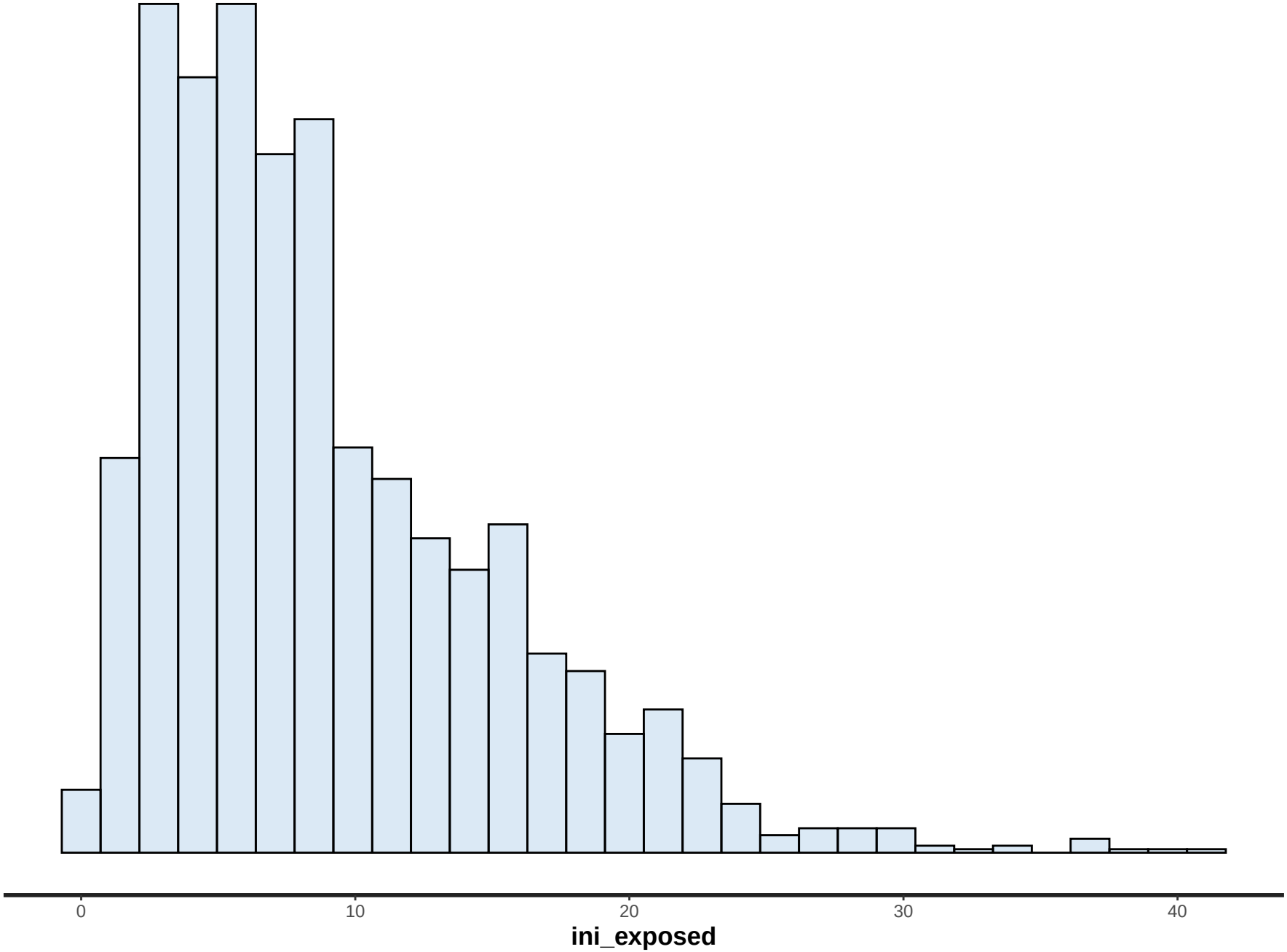

len_inter[1]
len_inter[2]
len_inter[3]
len_inter[4]
len_inter[5]
len_inter[6]
len_inter[7]
len_inter[8]
len_inter[9]
len_inter[10]
len_inter[11]
len_inter[12]
len_inter[13]
len_inter[14]
len_inter[15]
len_inter[16]
len_inter[17]
len_inter[18]

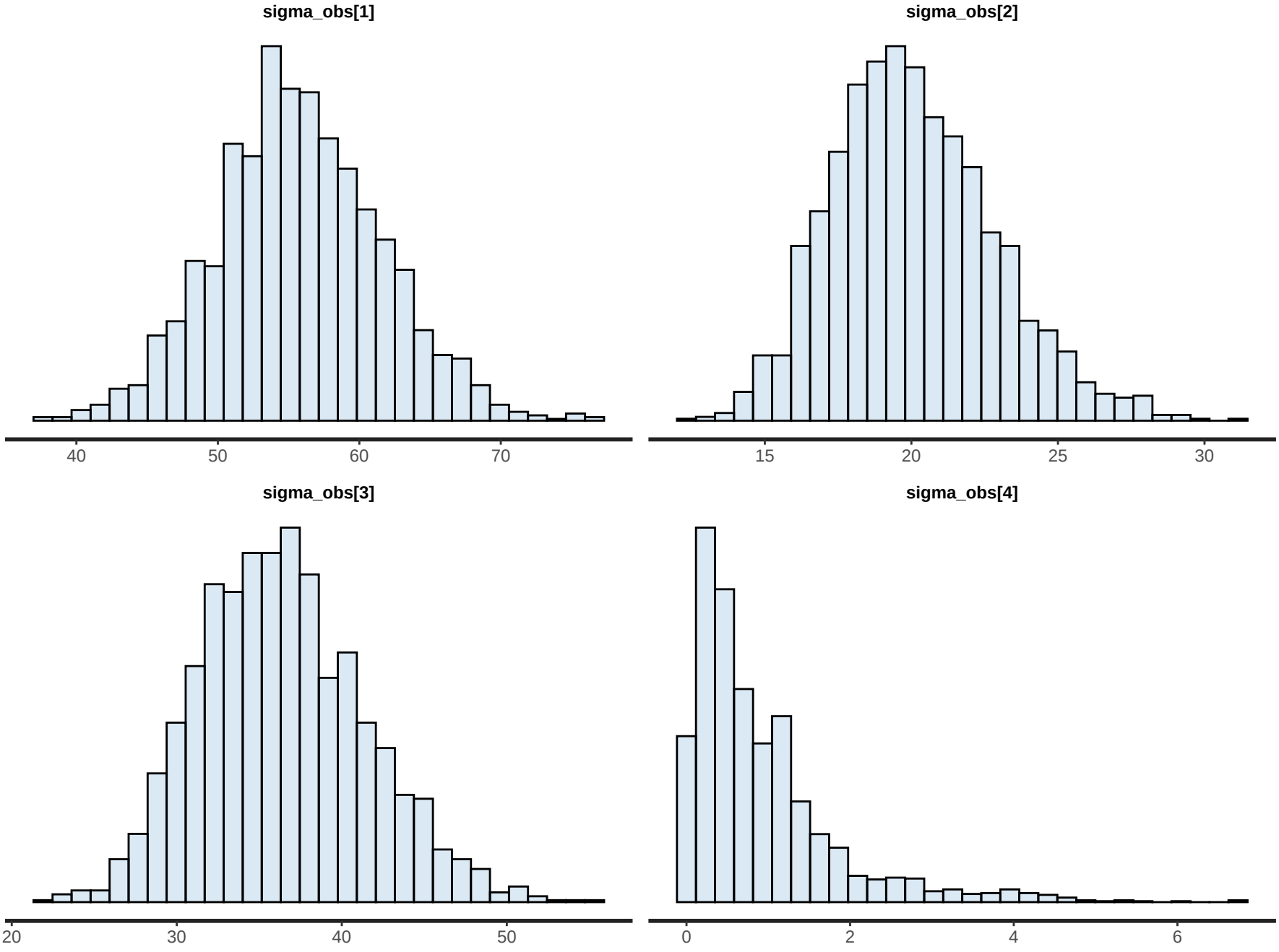

frac_PUI[1]
0.2
0.3
0.4


frac_PUI[2]
0.2
0.3
0.4
0.5


frac_PUI[3]
0.2
0.3
0.4
0.5


frac_PUI[4]
0.2
0.3
0.4
0.5


0
10
20
30
40
ini_exposed


sigma_obs[1]
40
50
60
70
sigma_obs[2]
15
20
25
30
sigma_obs[3]
20
30
40
50
sigma_obs[4]
0
2
4
6