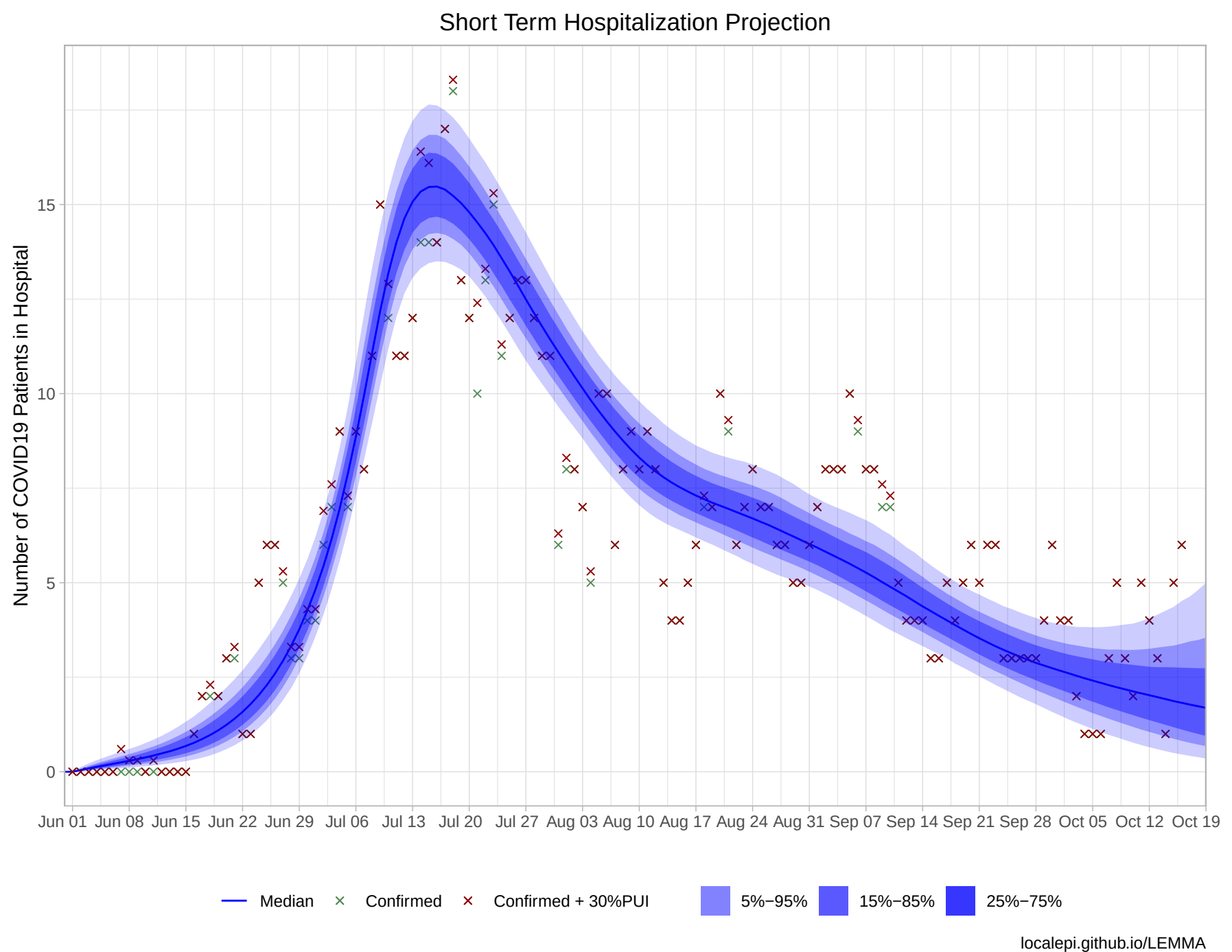
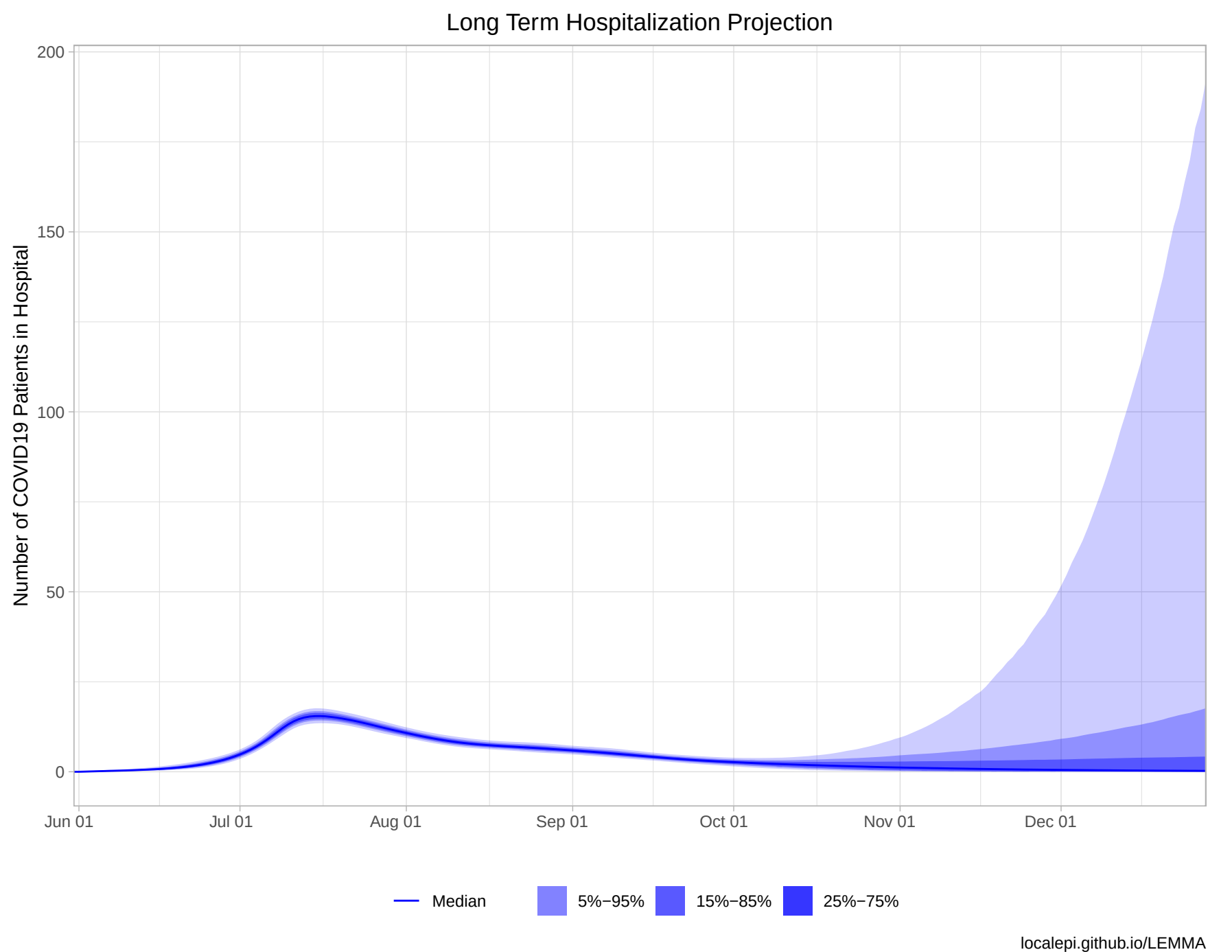
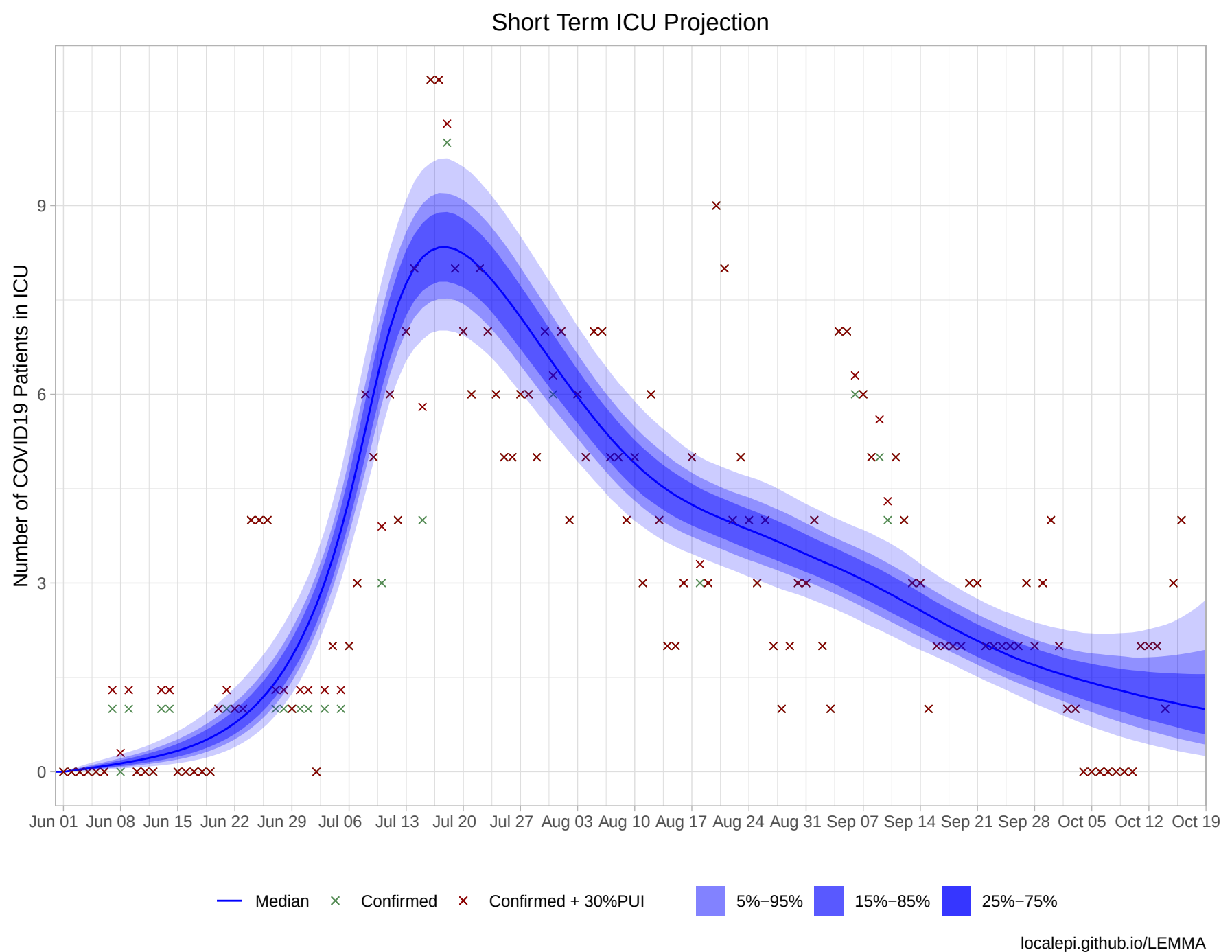
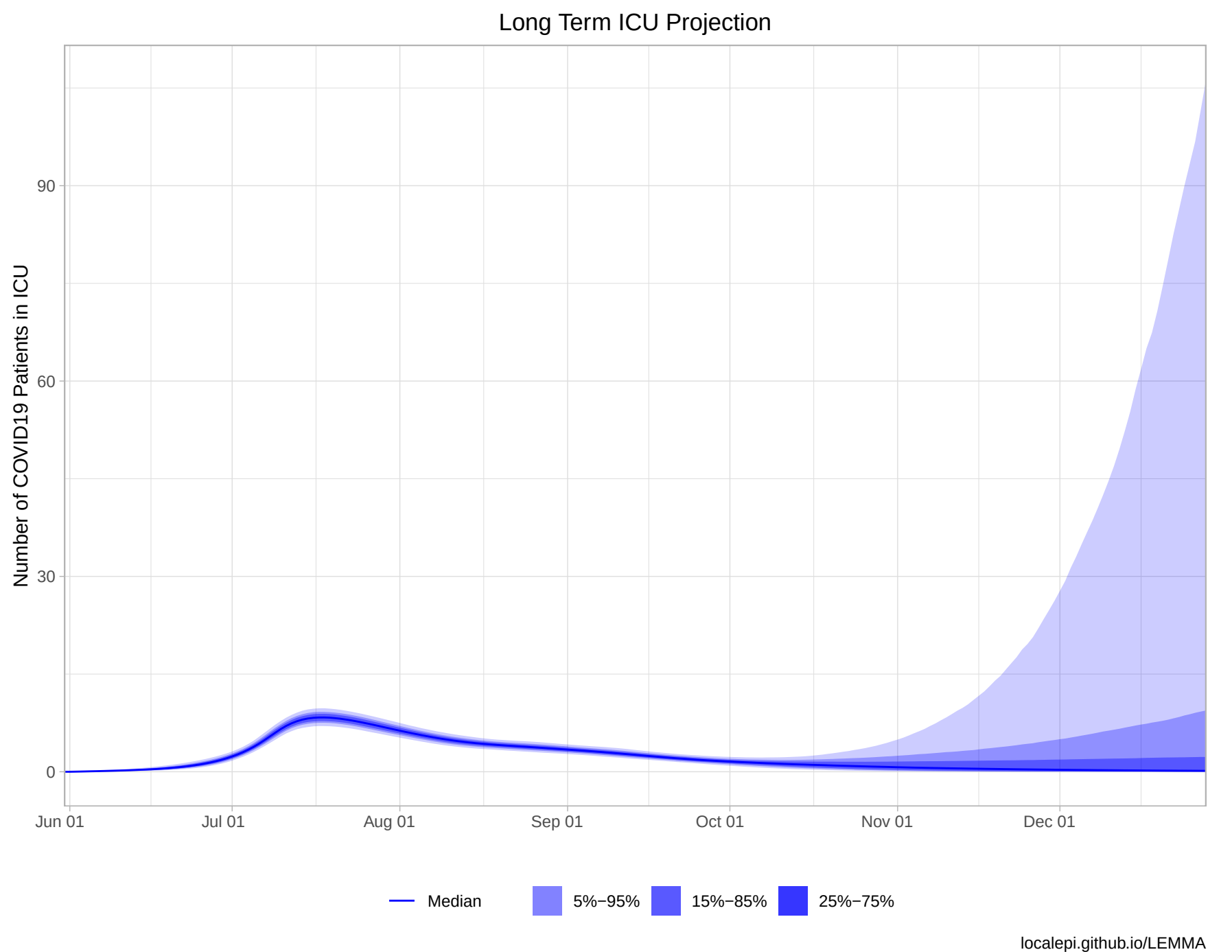
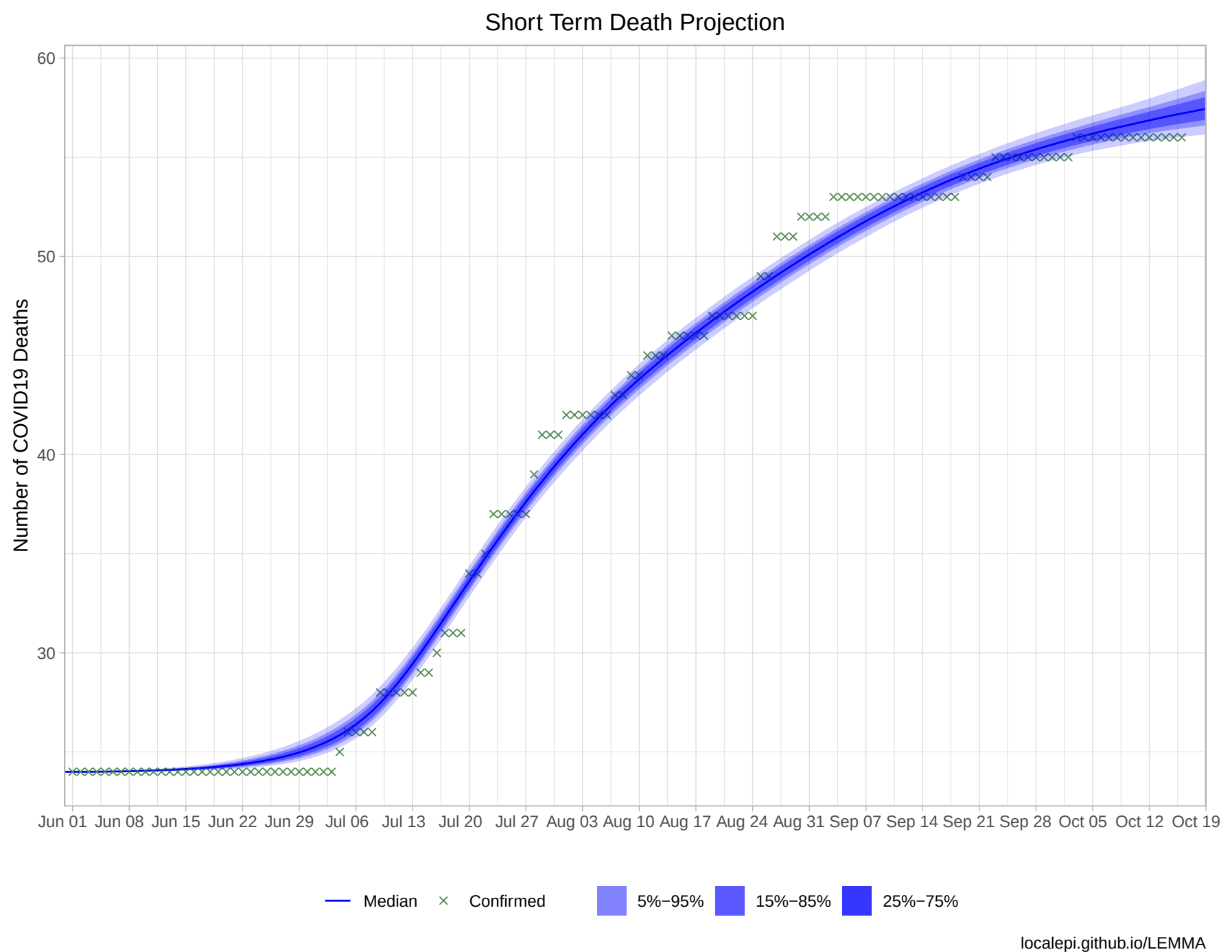
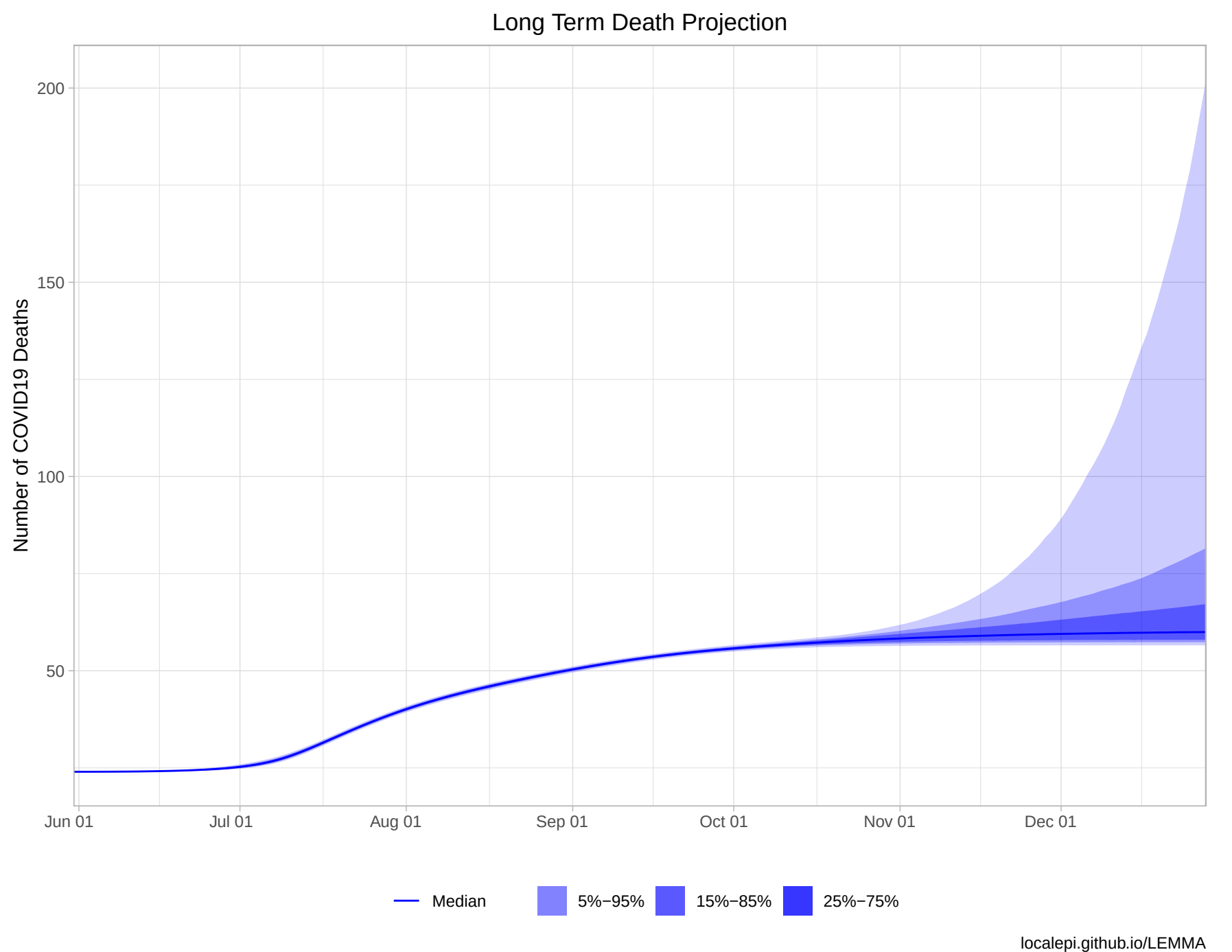

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
5
10
15
Jun 01
Jun 08
Jun 15
Jun 22
Jun 29
Jul 06
Jul 13
Jul 20
Jul 27
Aug 03
Aug 10
Aug 17
Aug 24
Aug 31
Sep 07
Sep 14
Sep 21
Sep 28
Oct 05
Oct 12
Oct 19
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

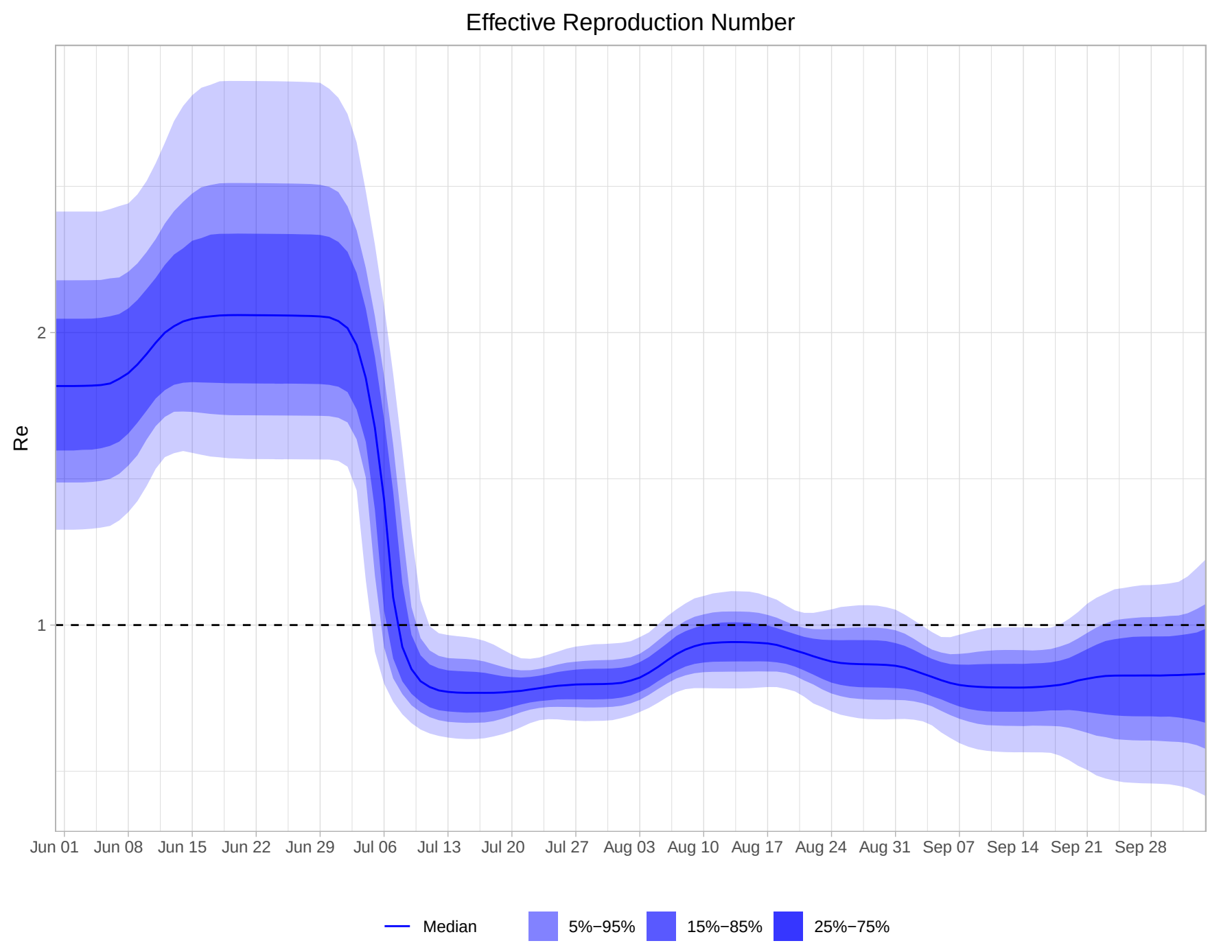

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
200
150
100
50
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
3
6
9
Jun 01
Jun 08
Jun 15
Jun 22
Jun 29
Jul 06
Jul 13
Jul 20
Jul 27
Aug 03
Aug 10
Aug 17
Aug 24
Aug 31
Sep 07
Sep 14
Sep 21
Sep 28
Oct 05
Oct 12
Oct 19
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
90
60
30
0
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

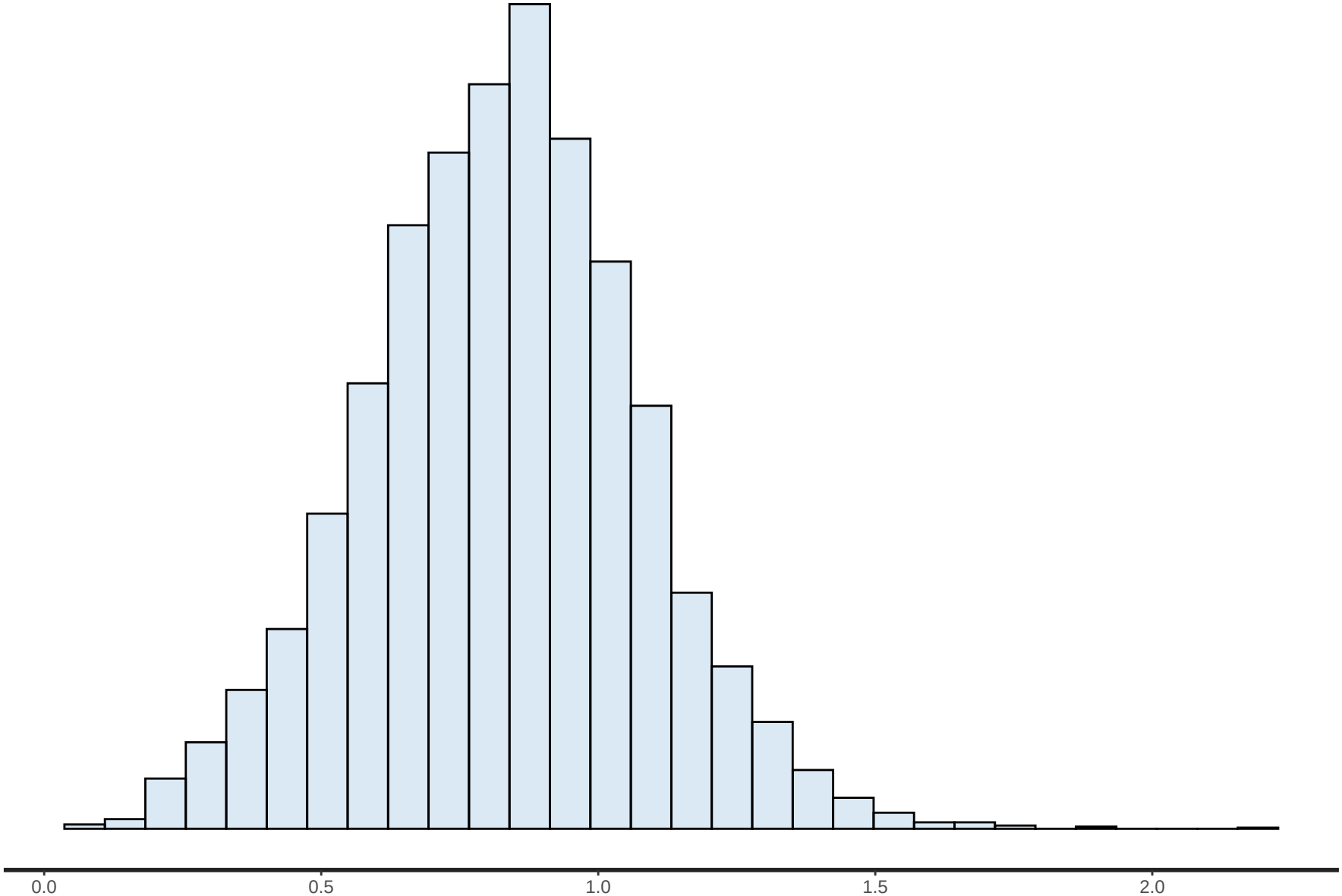

Short Term Death Projection
Number of COVID19 Deaths
60
50
40
30
Jun 01
Jun 08
Jun 15
Jun 22
Jun 29
Jul 06
Jul 13
Jul 20
Jul 27
Aug 03
Aug 10
Aug 17
Aug 24
Aug 31
Sep 07
Sep 14
Sep 21
Sep 28
Oct 05
Oct 12
Oct 19
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

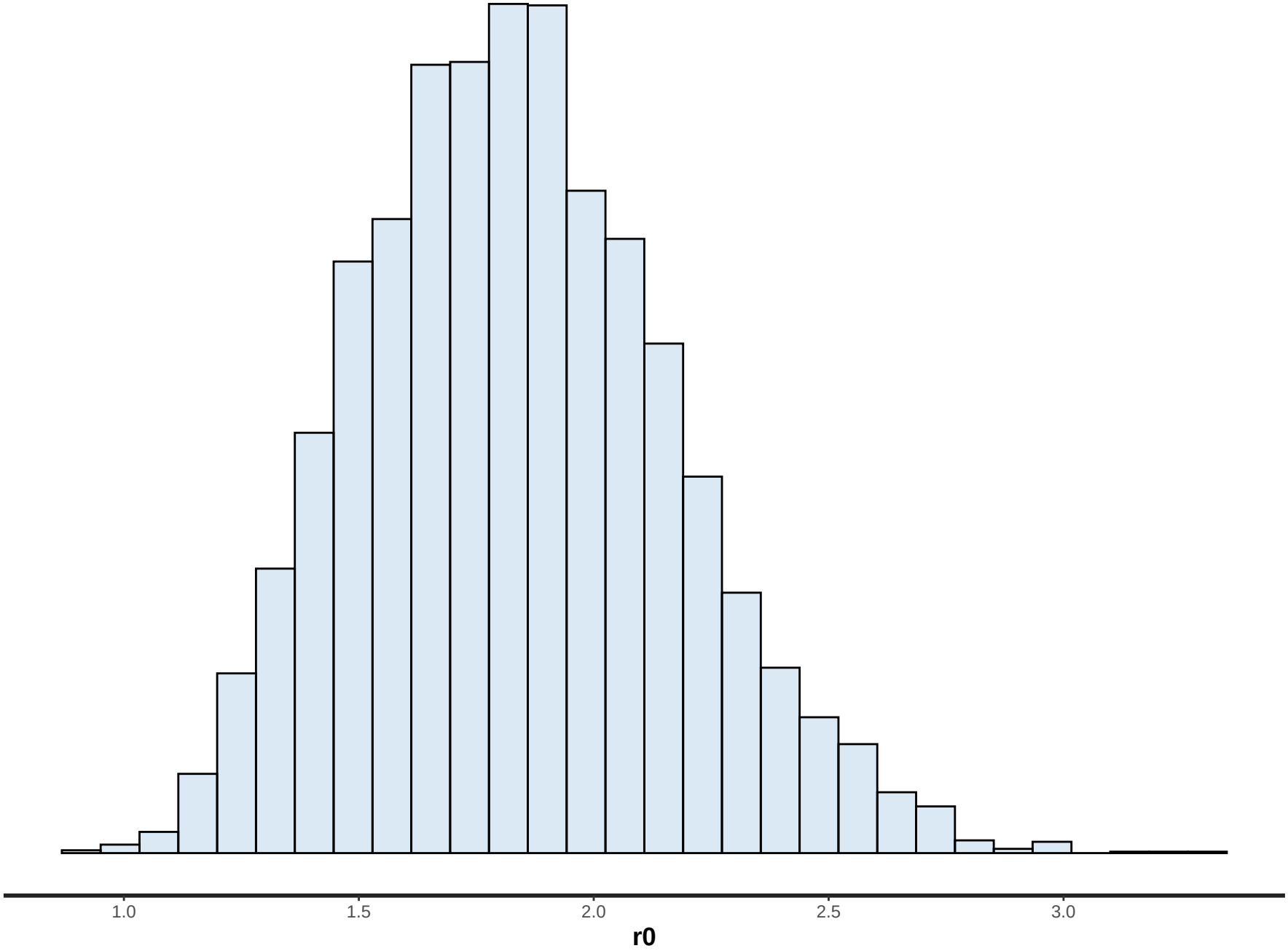

Long Term Death Projection
Number of COVID19 Deaths
200
150
100
50
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

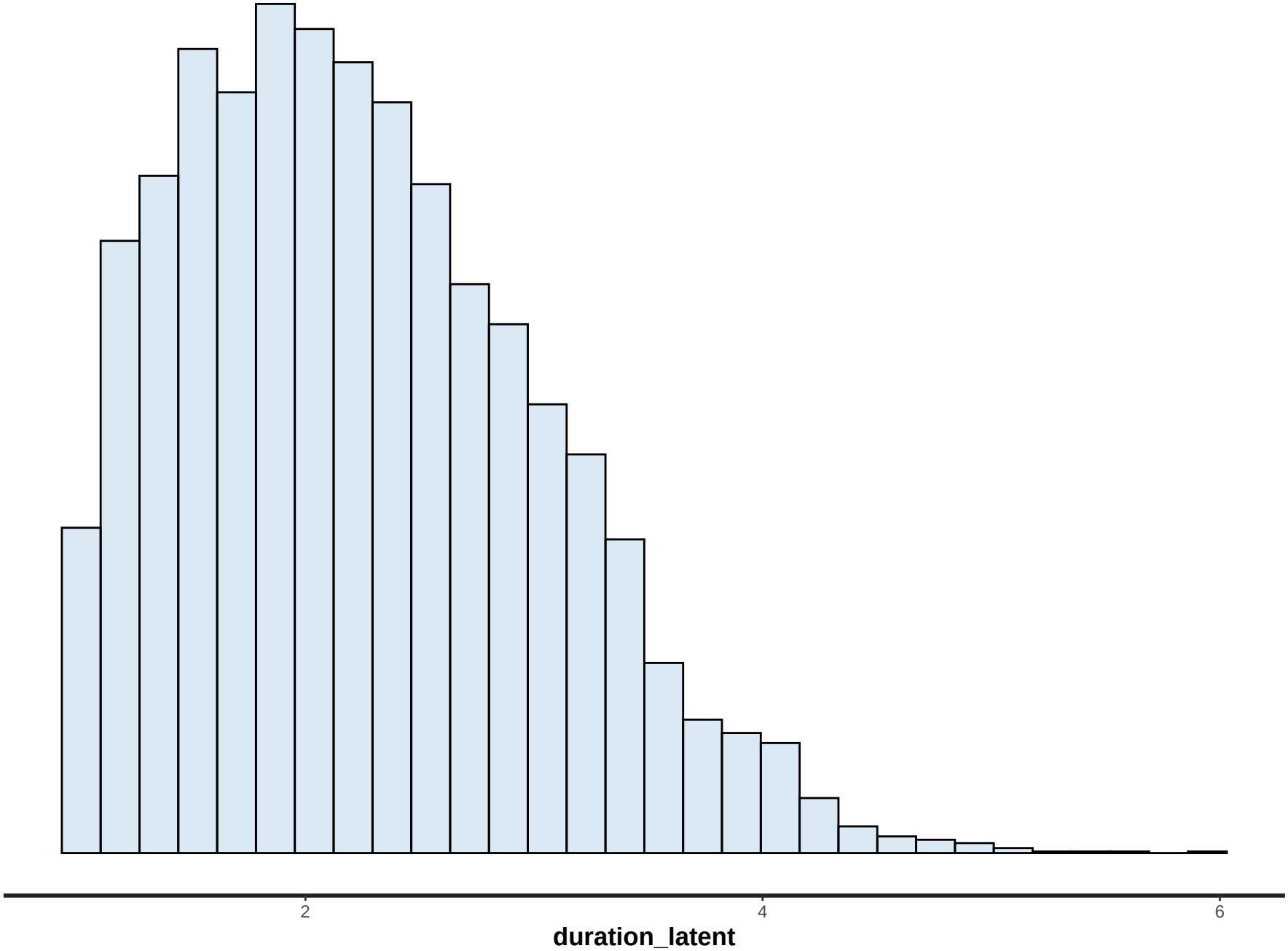

Effective Reproduction Number
Re
2
1
Jun 01
Jun 08
Jun 15
Jun 22
Jun 29
Jul 06
Jul 13
Jul 20
Jul 27
Aug 03
Aug 10
Aug 17
Aug 24
Aug 31
Sep 07
Sep 14
Sep 21
Sep 28
Median
5%−95%
15%−85%
25%−75%

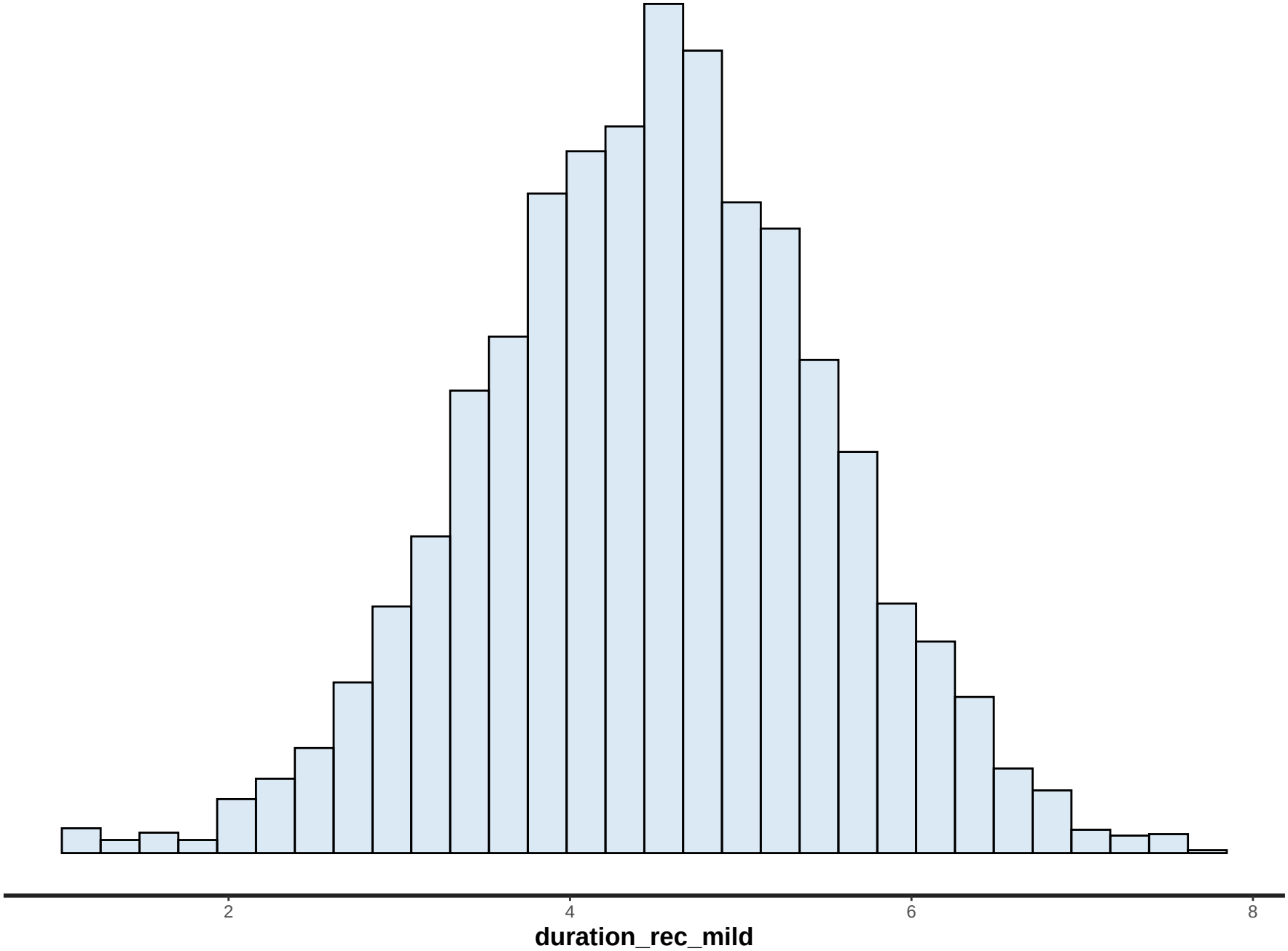
Rt as of 2020−10−04

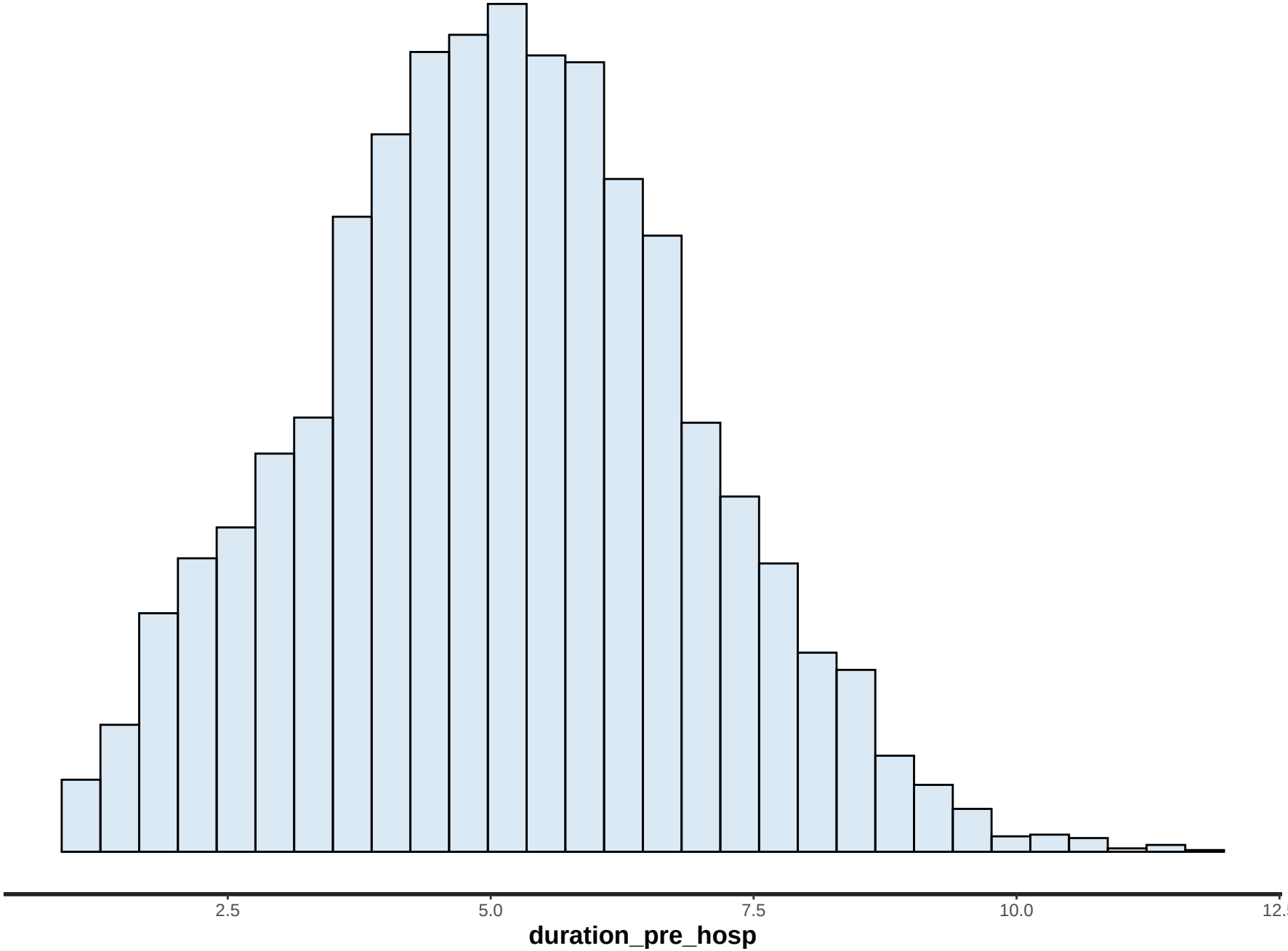
5%	10%	25%	50%	75%	90%	95%
0.42	0.51	0.67	0.83	0.99	1.13	1.23

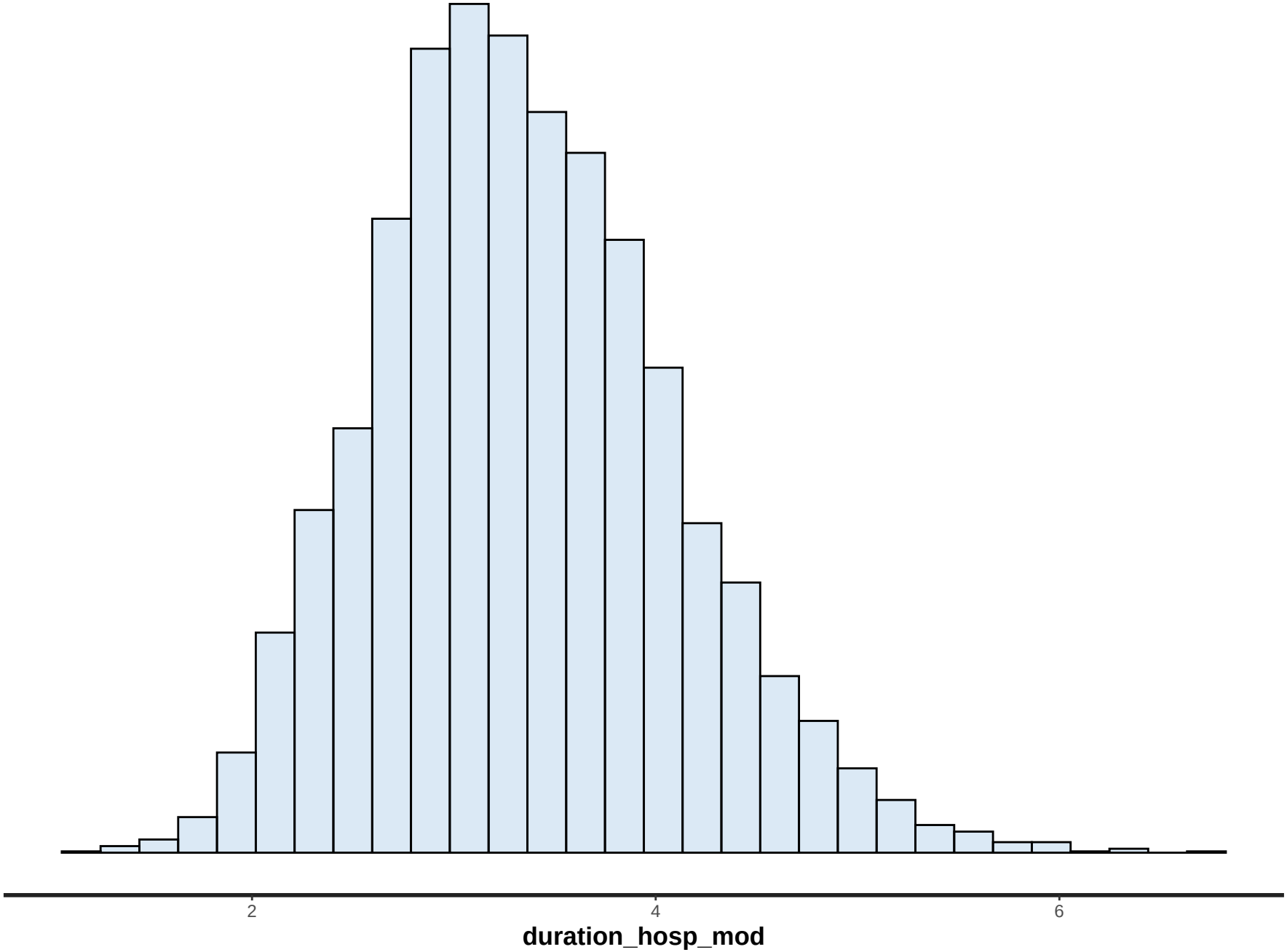


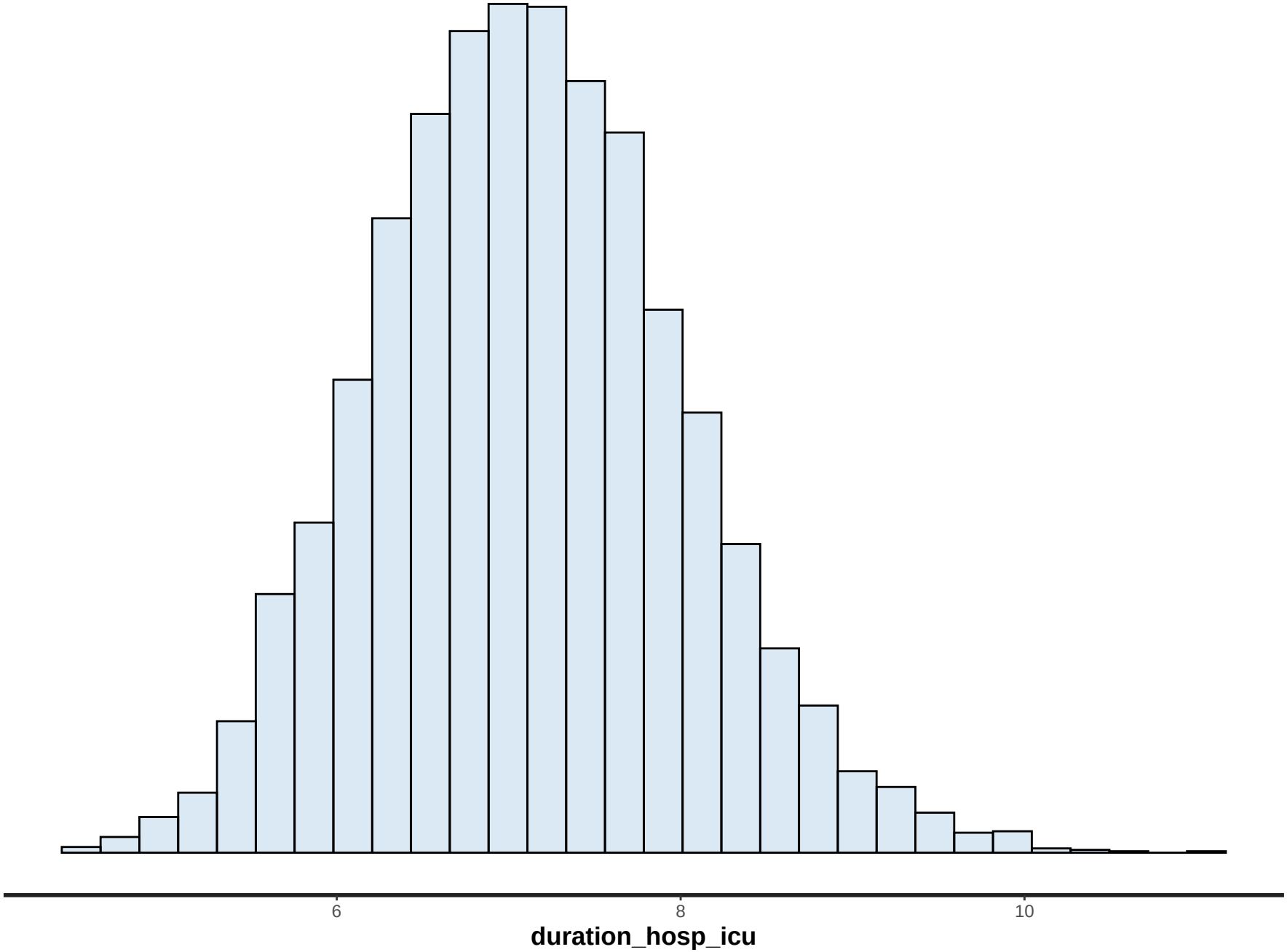

1.0
1.5
2.0
2.5
3.0
r0

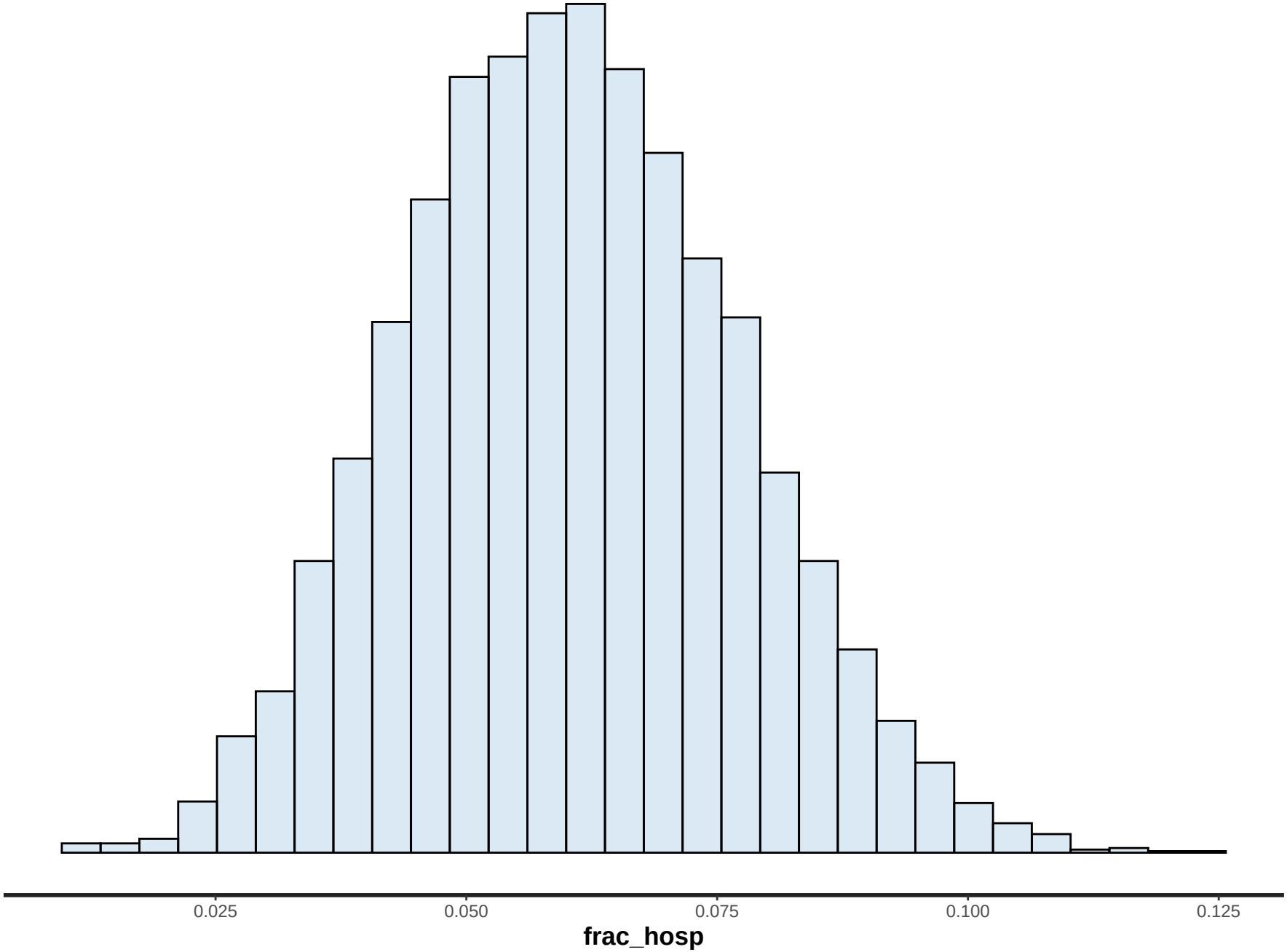

2
4
6
duration_latent

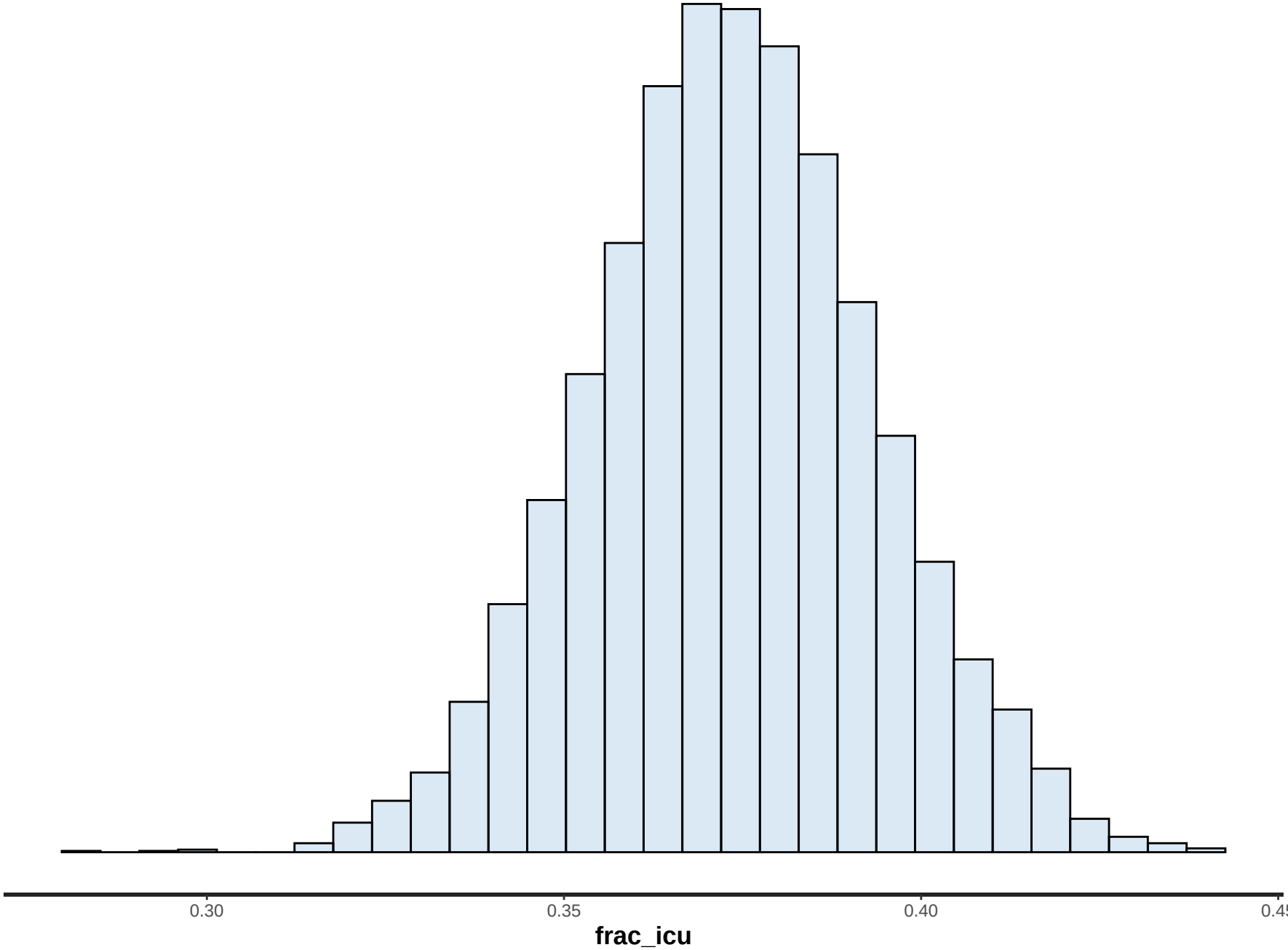

2
4
6
8
duration_rec_mild

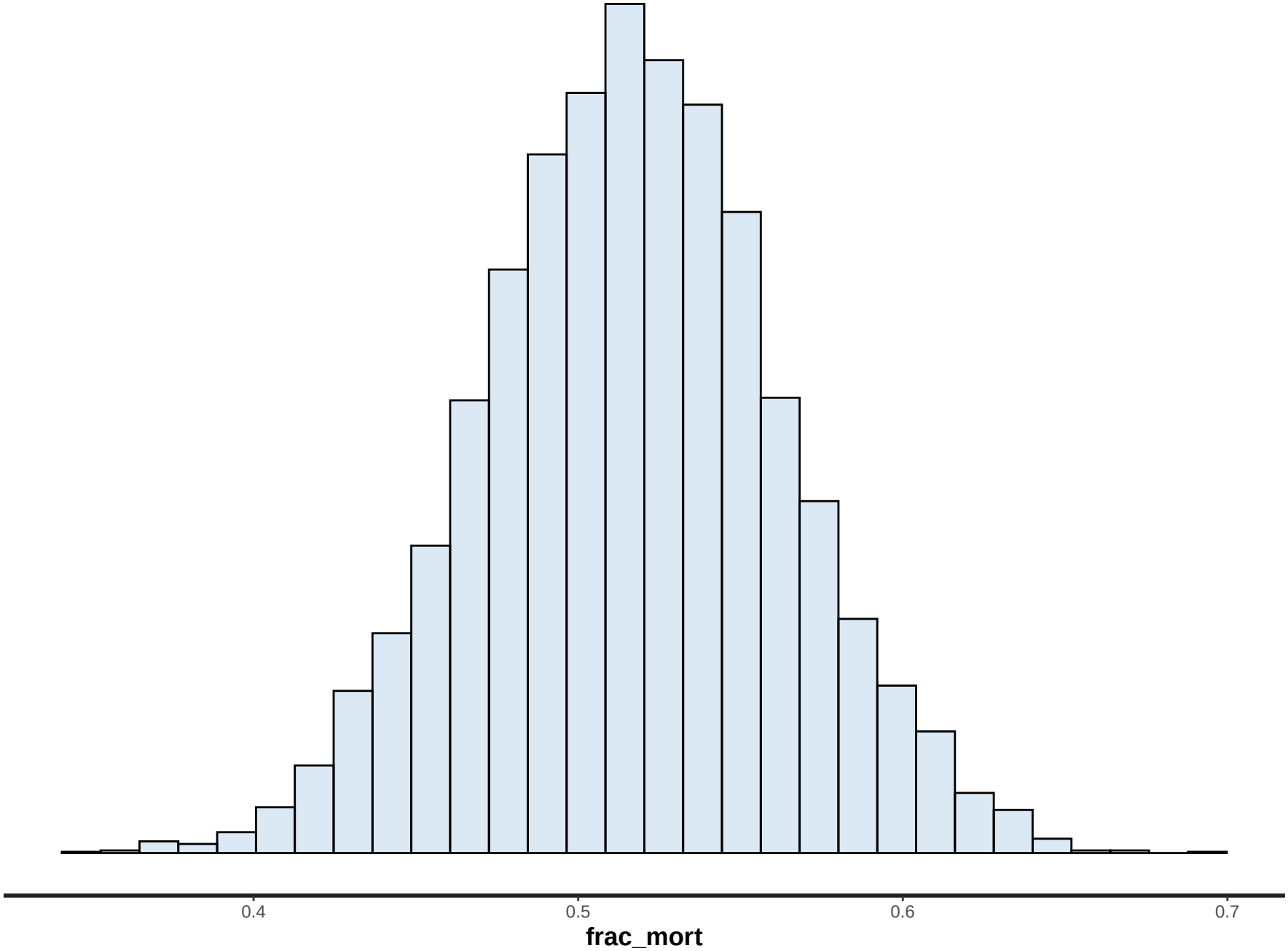

2.5
5.0
7.5
10.0
12.5
duration_pre_hosp

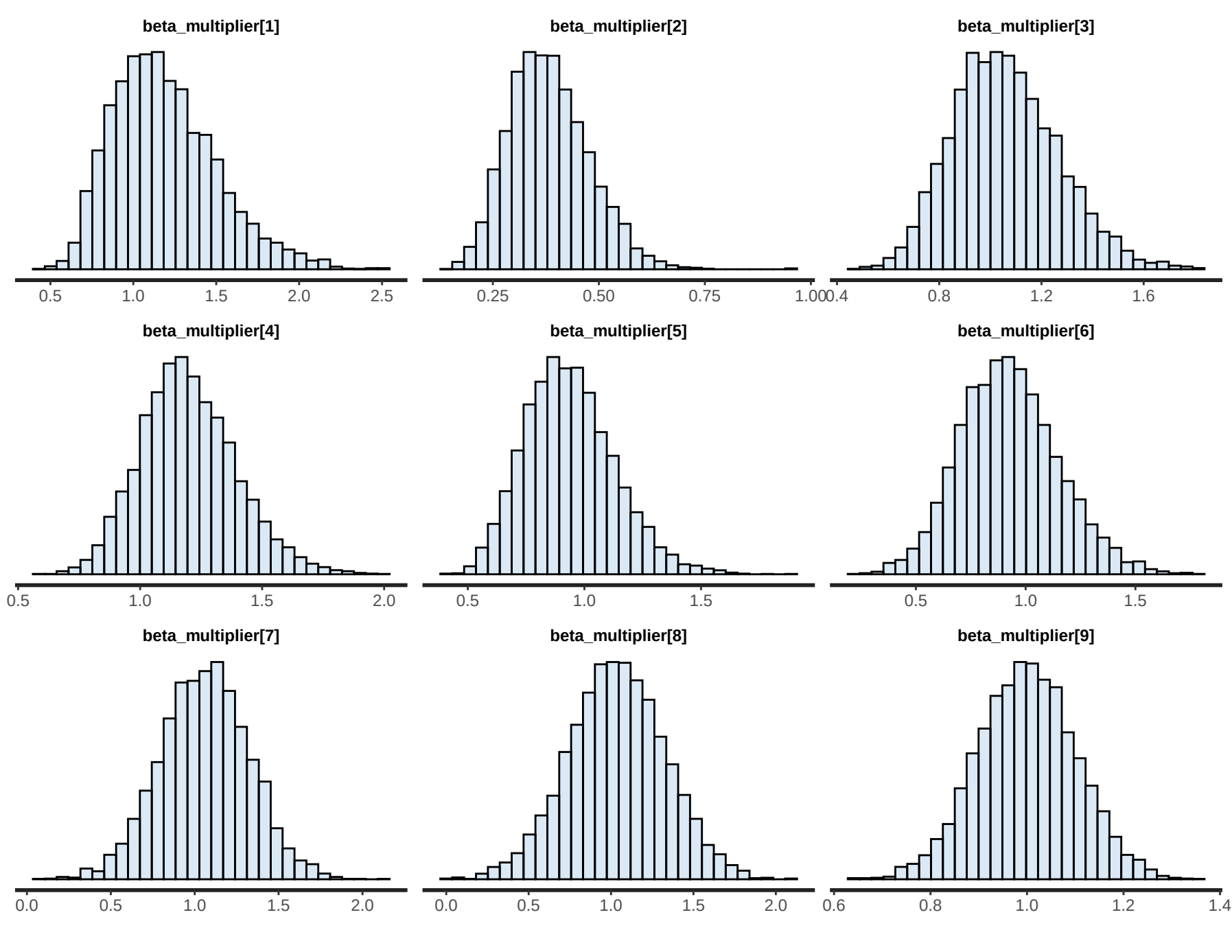

2
4
6
duration_hosp_mod

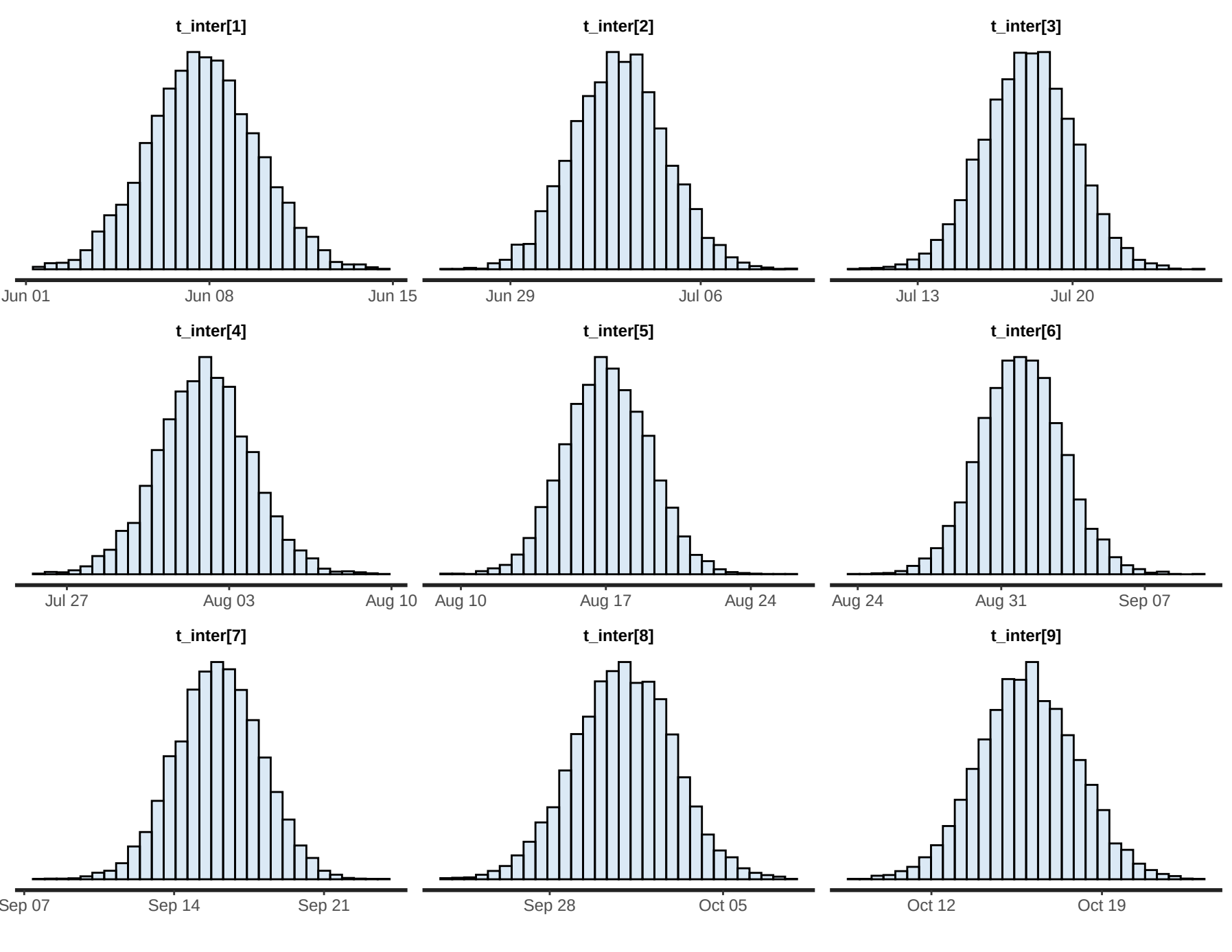

6
8
10
duration_hosp_icu

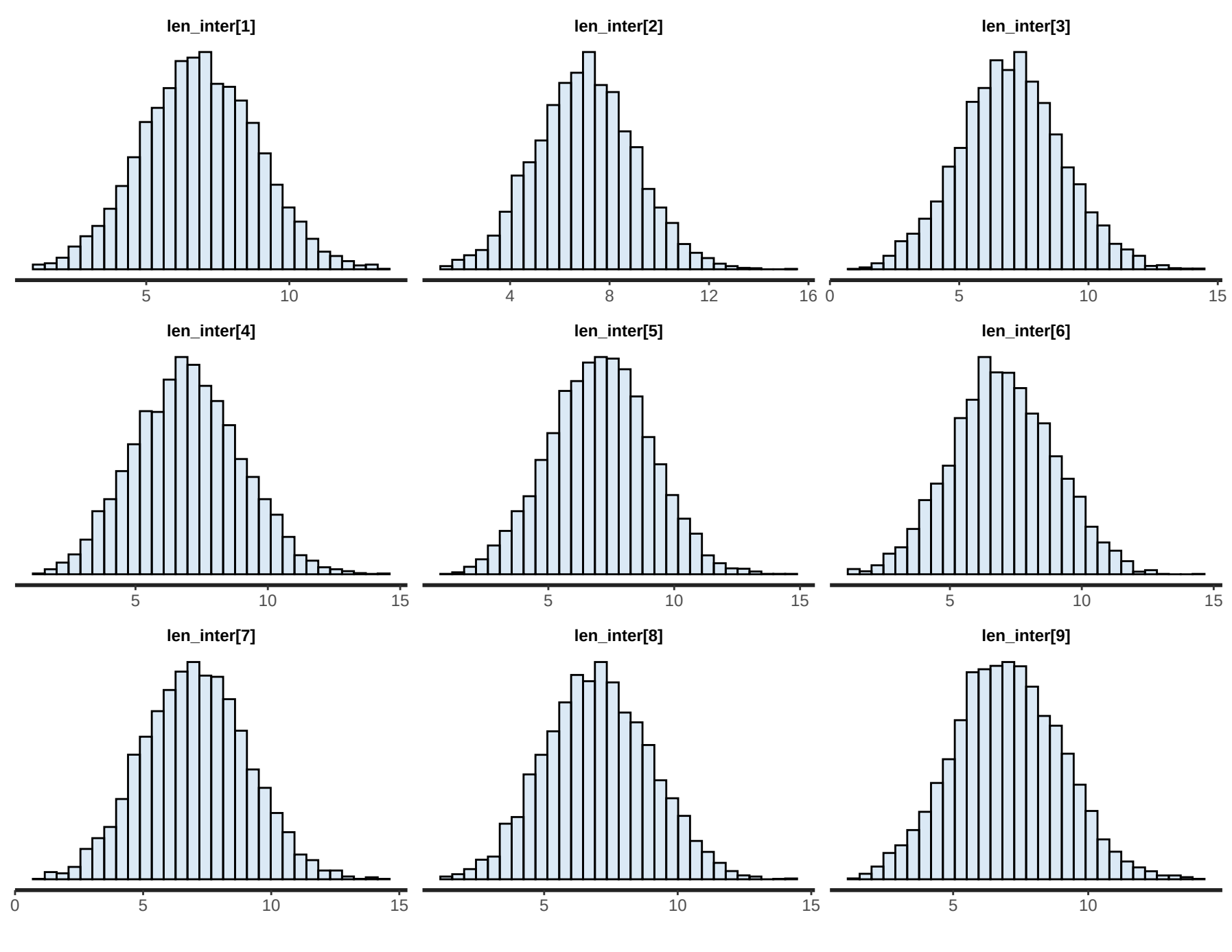

0.025
0.050
0.075
0.100
0.125
frac_hosp

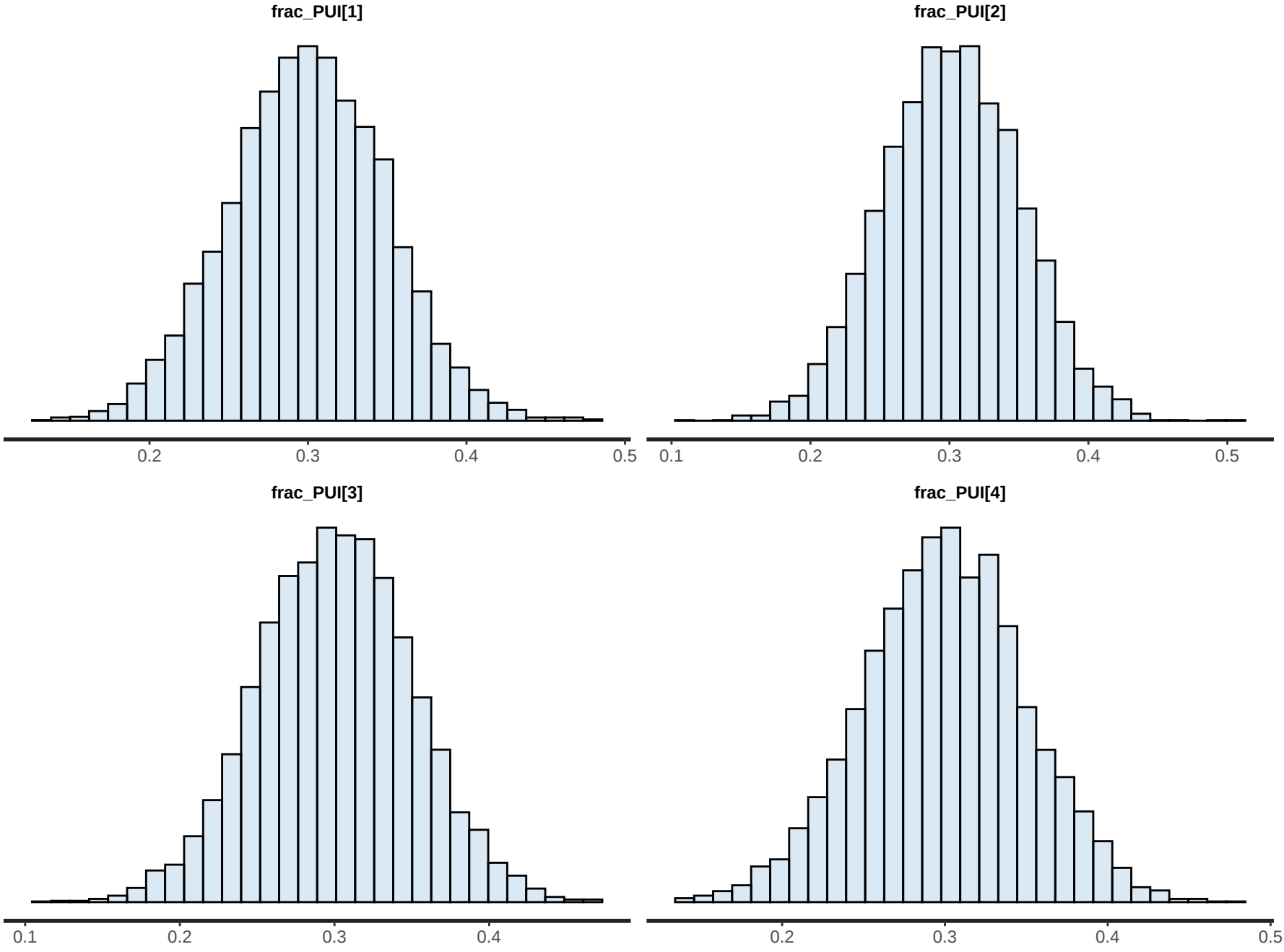

0.30
0.35
0.40
0.45
frac_icu

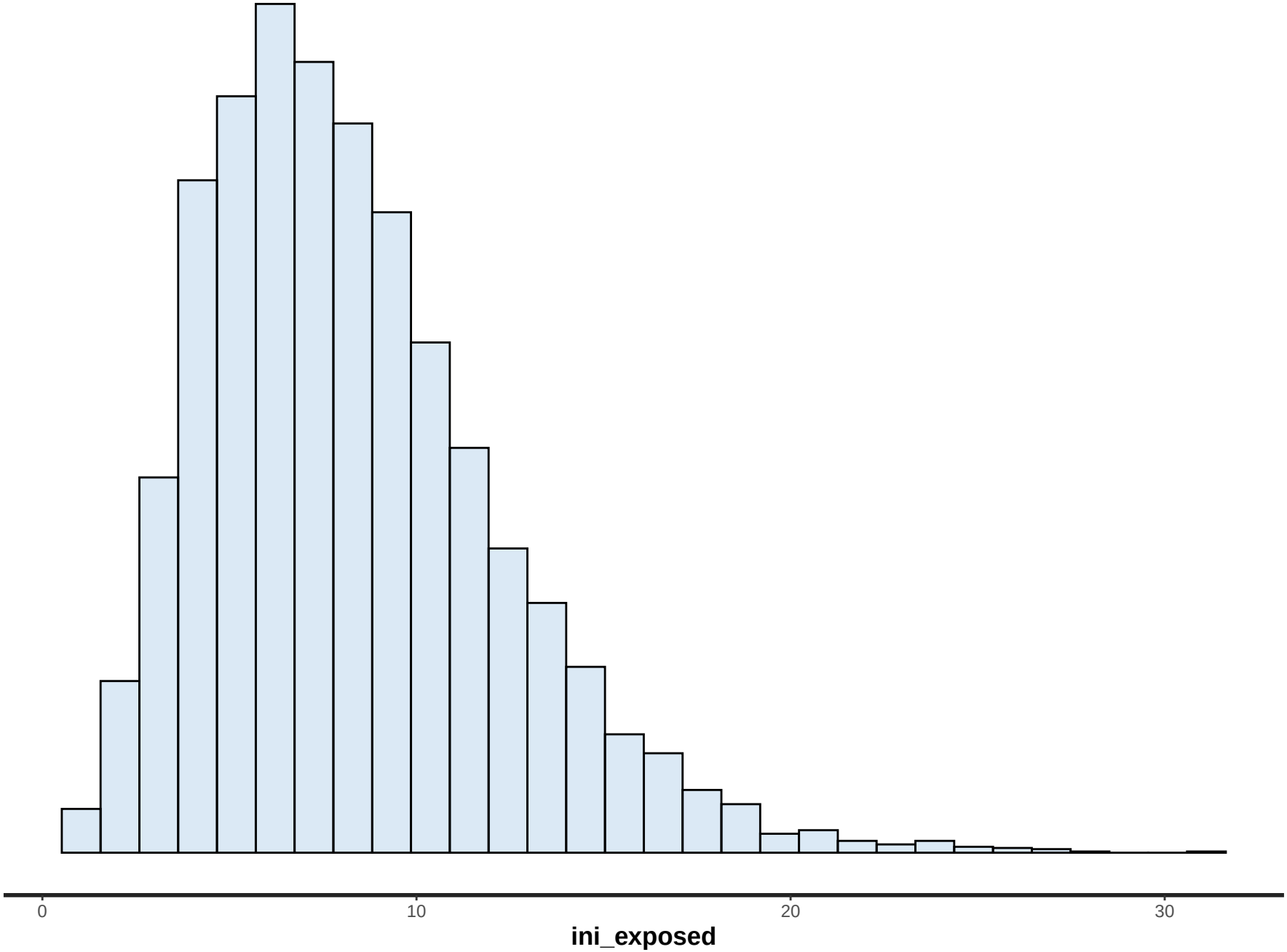

0.4
0.5
0.6
0.7
frac_mort

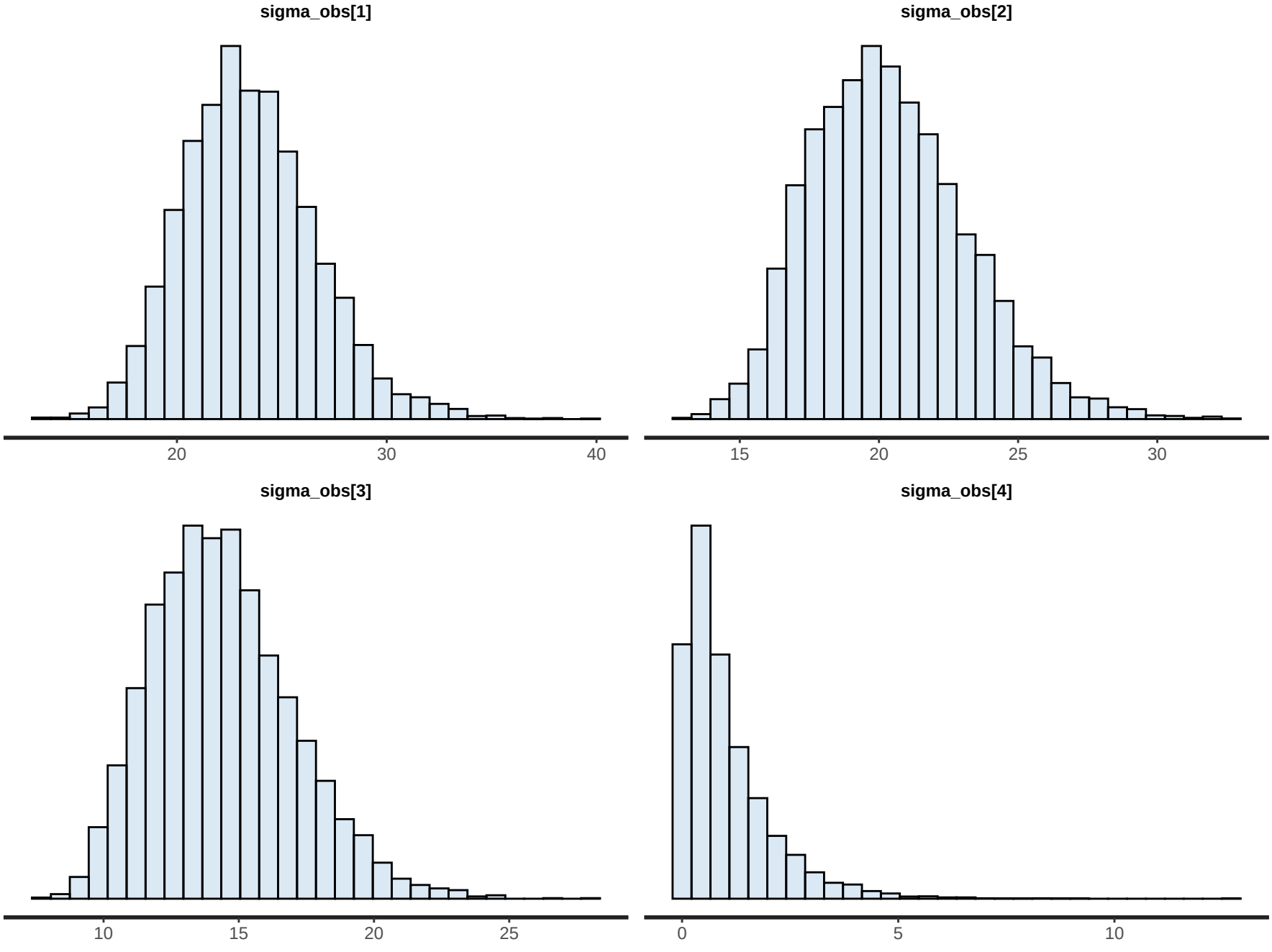

beta_multiplier[1]
0.5
1.0
1.5
2.0
2.5
beta_multiplier[2]
0.25
0.50
0.75
1.00
beta_multiplier[3]
0.4
0.8
1.2
1.6
beta_multiplier[4]
0.5
1.0
1.5
2.0
beta_multiplier[5]
0.5
1.0
1.5
beta_multiplier[6]
0.5
1.0
1.5
beta_multiplier[7]
0.0
0.5
1.0
1.5
2.0
beta_multiplier[8]
0.0
0.5
1.0
1.5
2.0
beta_multiplier[9]
0.6
0.8
1.0
1.2
1.4


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
Aug 10
t_inter[5]
Aug 10
Aug 17
Aug 24
t_inter[6]
Aug 24
Aug 31
Sep 07
t_inter[7]
Sep 07
Sep 14
Sep 21
t_inter[8]
Sep 28
Oct 05
t_inter[9]
Oct 12
Oct 19


len_inter[1]
5
10
len_inter[2]
4
8
12
16
len_inter[3]
0
5
10
15
len_inter[4]
5
10
15
len_inter[5]
5
10
15
len_inter[6]
5
10
15
len_inter[7]
0
5
10
15
len_inter[8]
5
10
15
len_inter[9]
5
10


frac_PUI[1]
0.2
0.3
0.4
0.5
frac_PUI[2]
0.1
0.2
0.3
0.4
0.5
frac_PUI[3]
0.1
0.2
0.3
0.4
frac_PUI[4]
0.2
0.3
0.4
0.5


0
10
20
30
ini_exposed


sigma_obs[1]
20
30
40
sigma_obs[2]
15
20
25
30
sigma_obs[3]
10
15
20
25
sigma_obs[4]
0
5
10