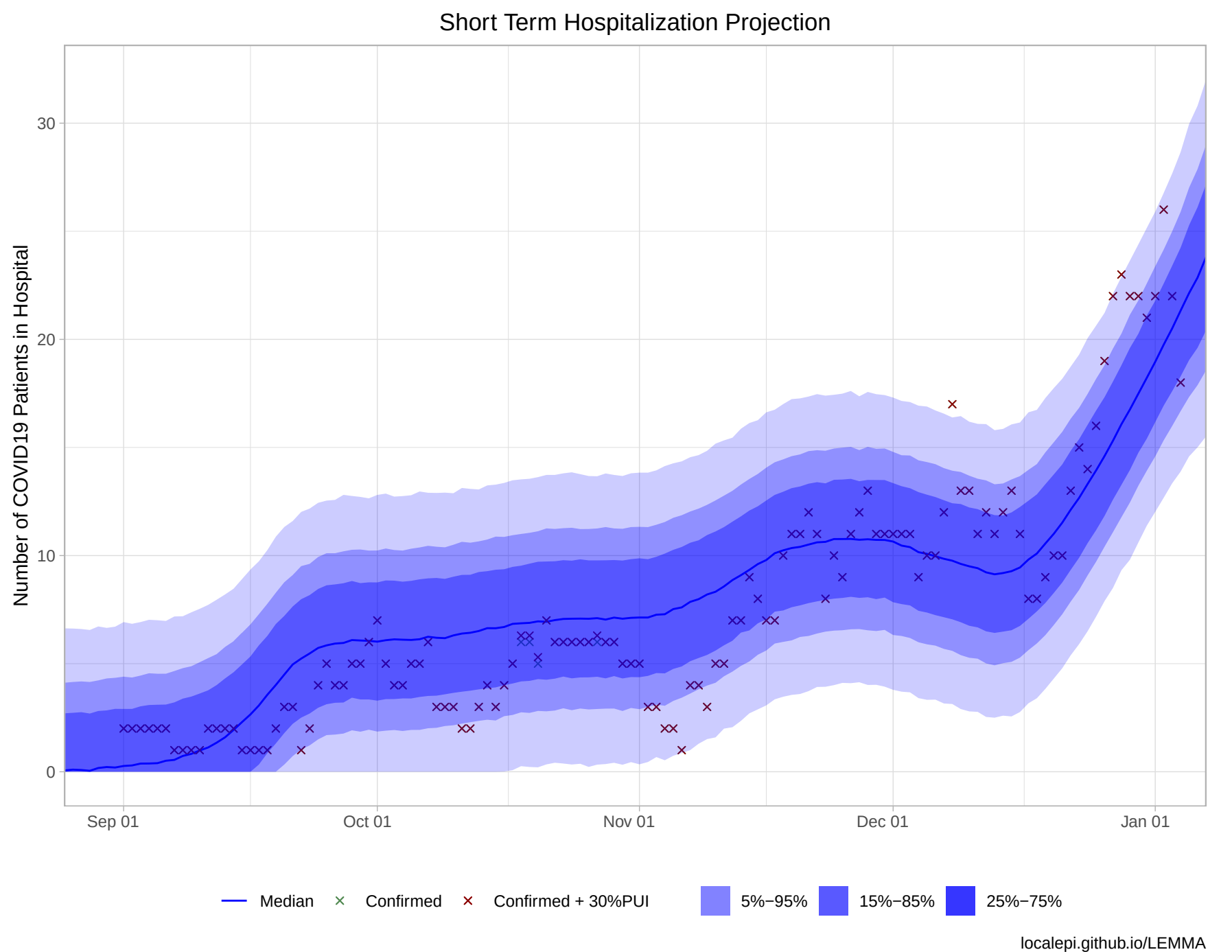
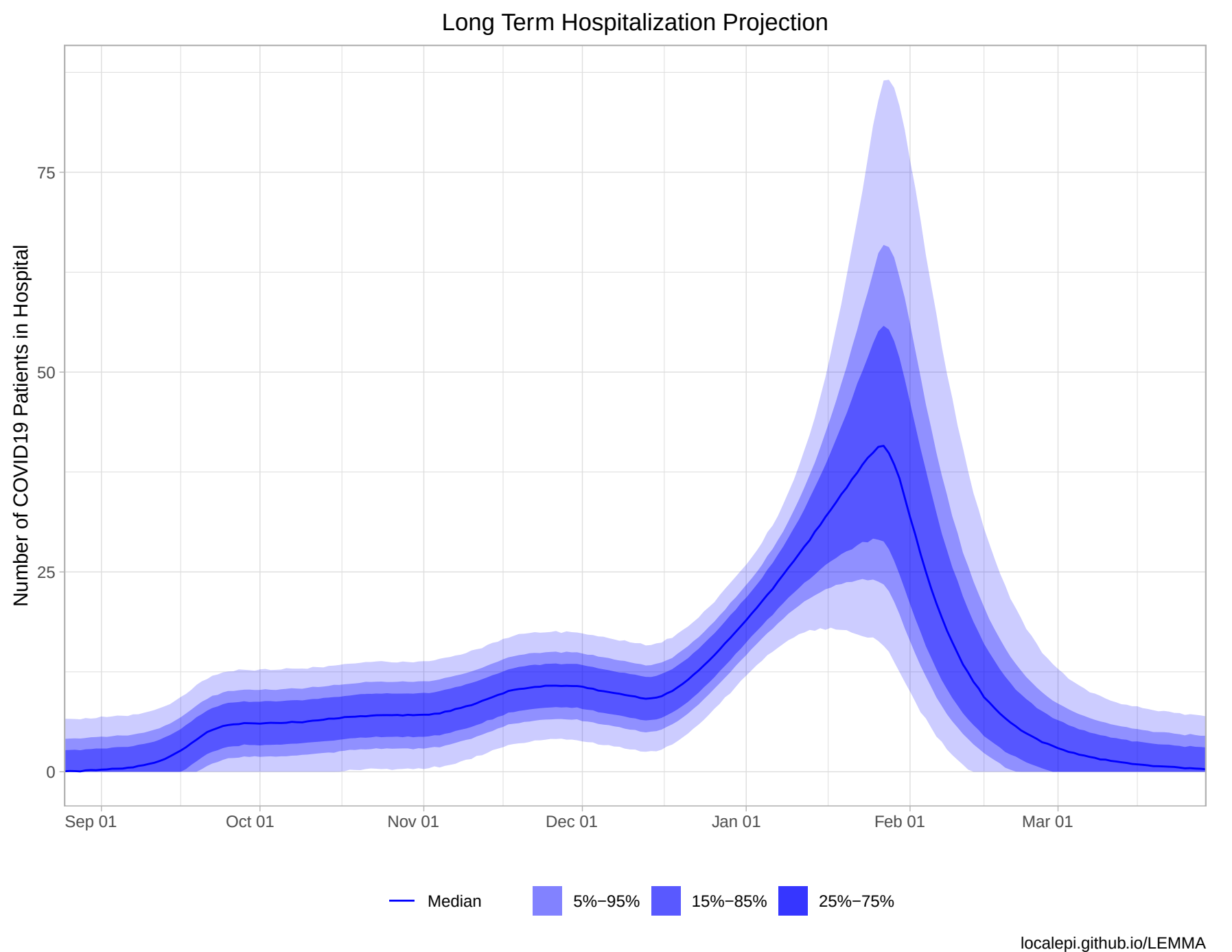
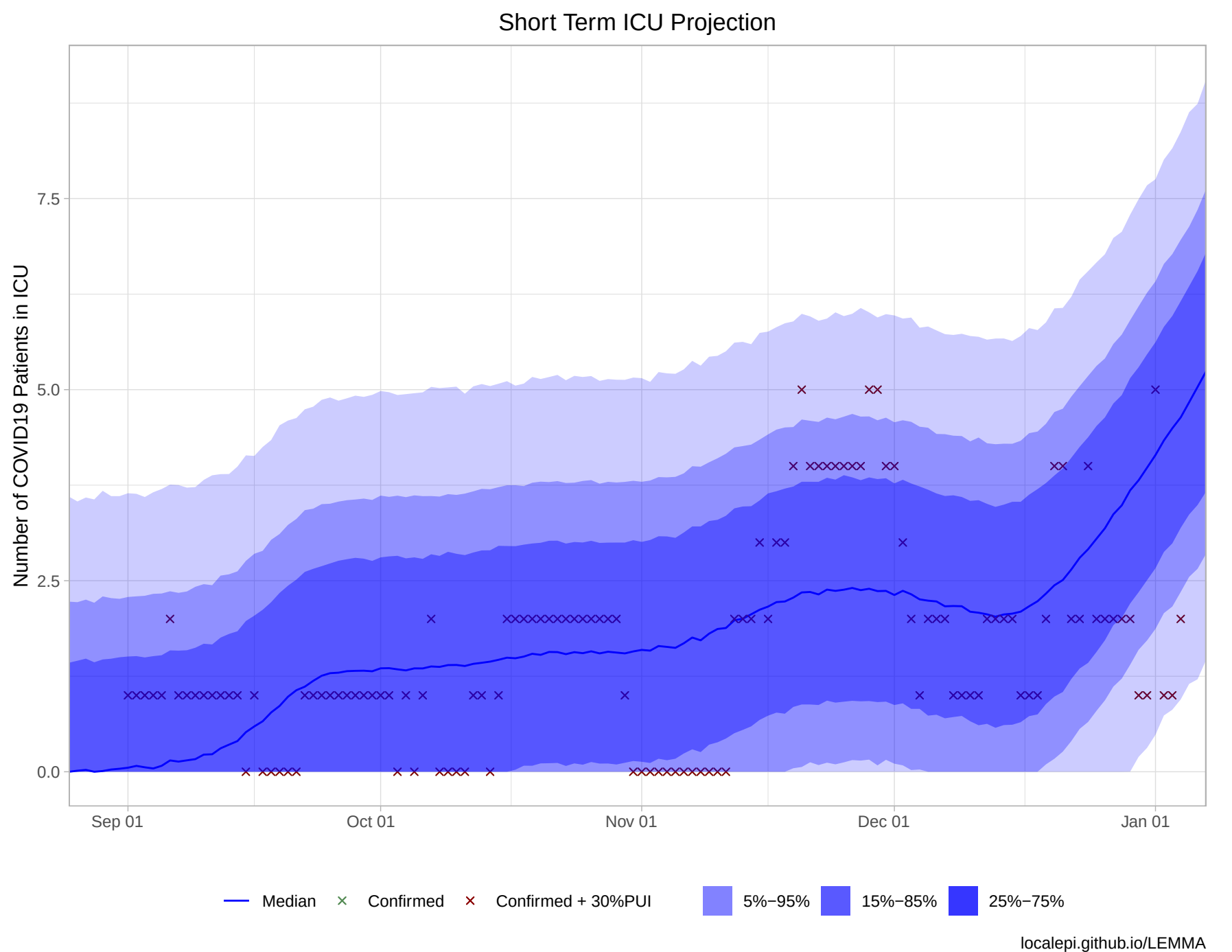
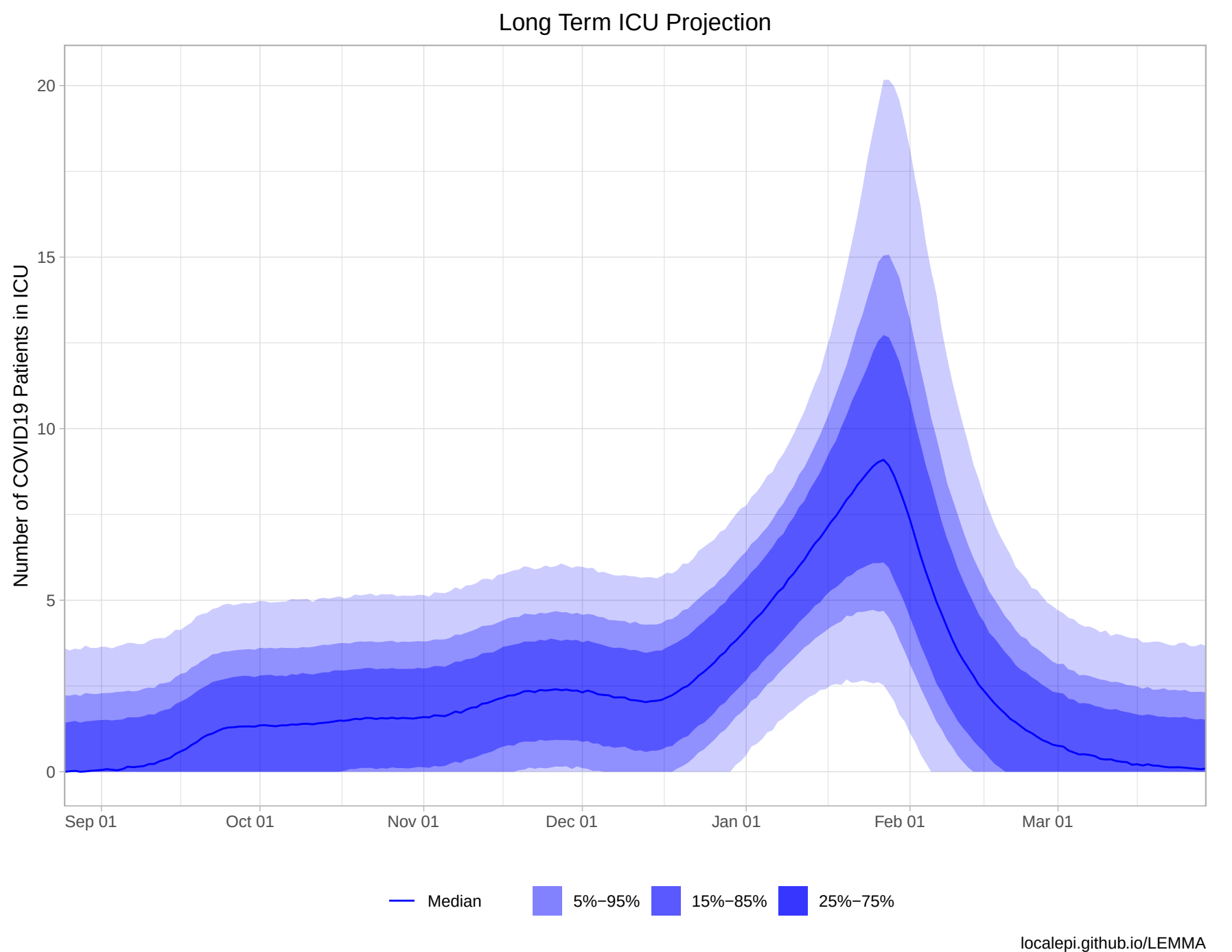
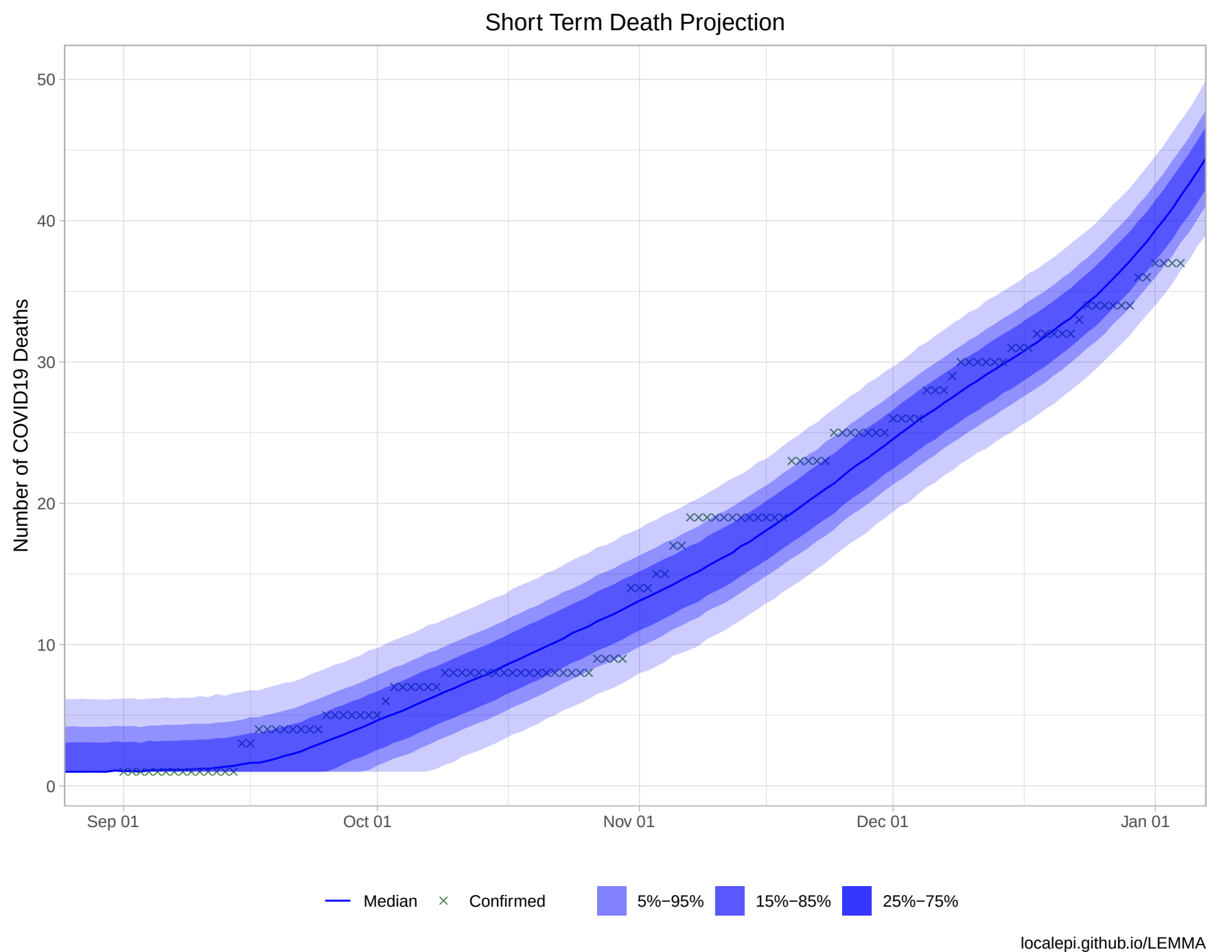
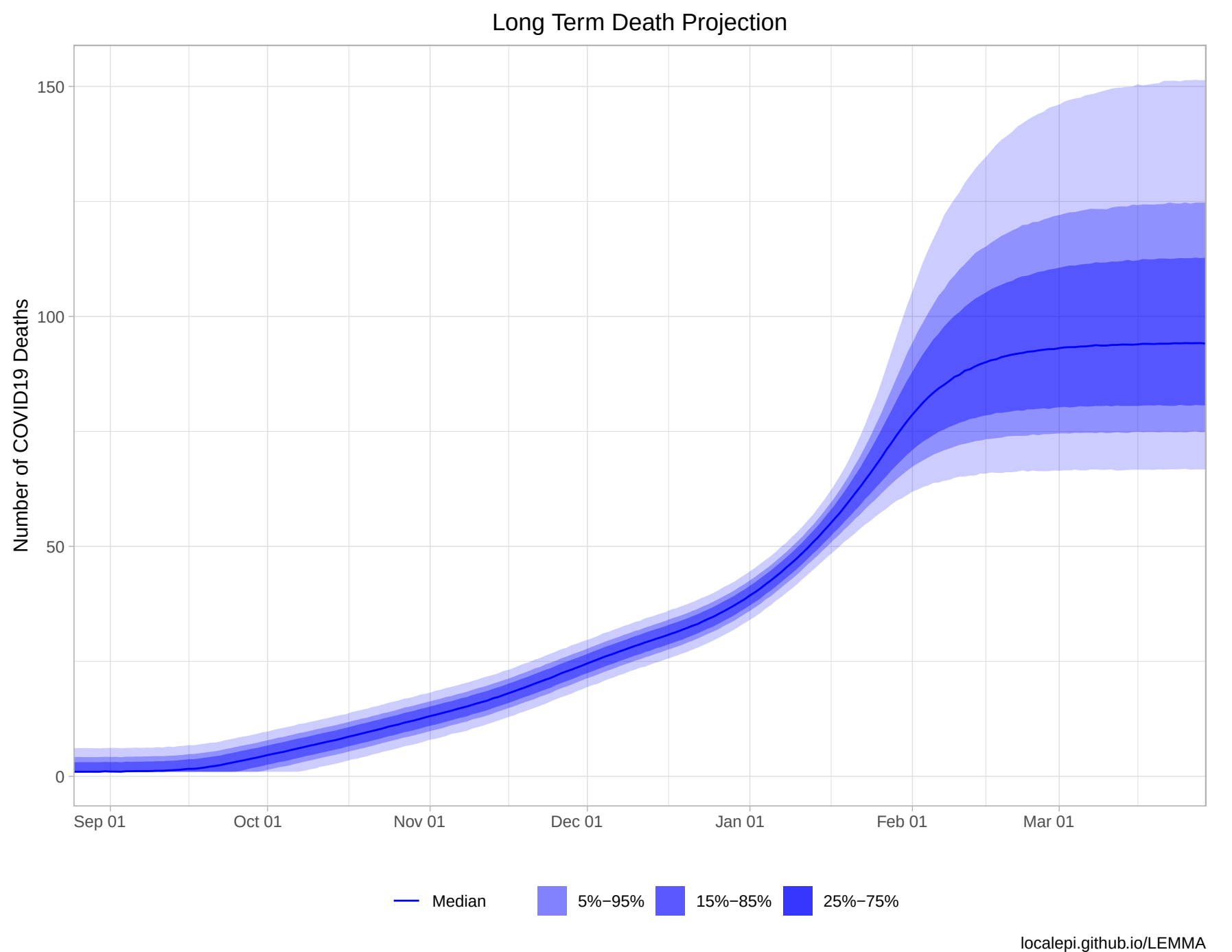

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
10
20
30
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

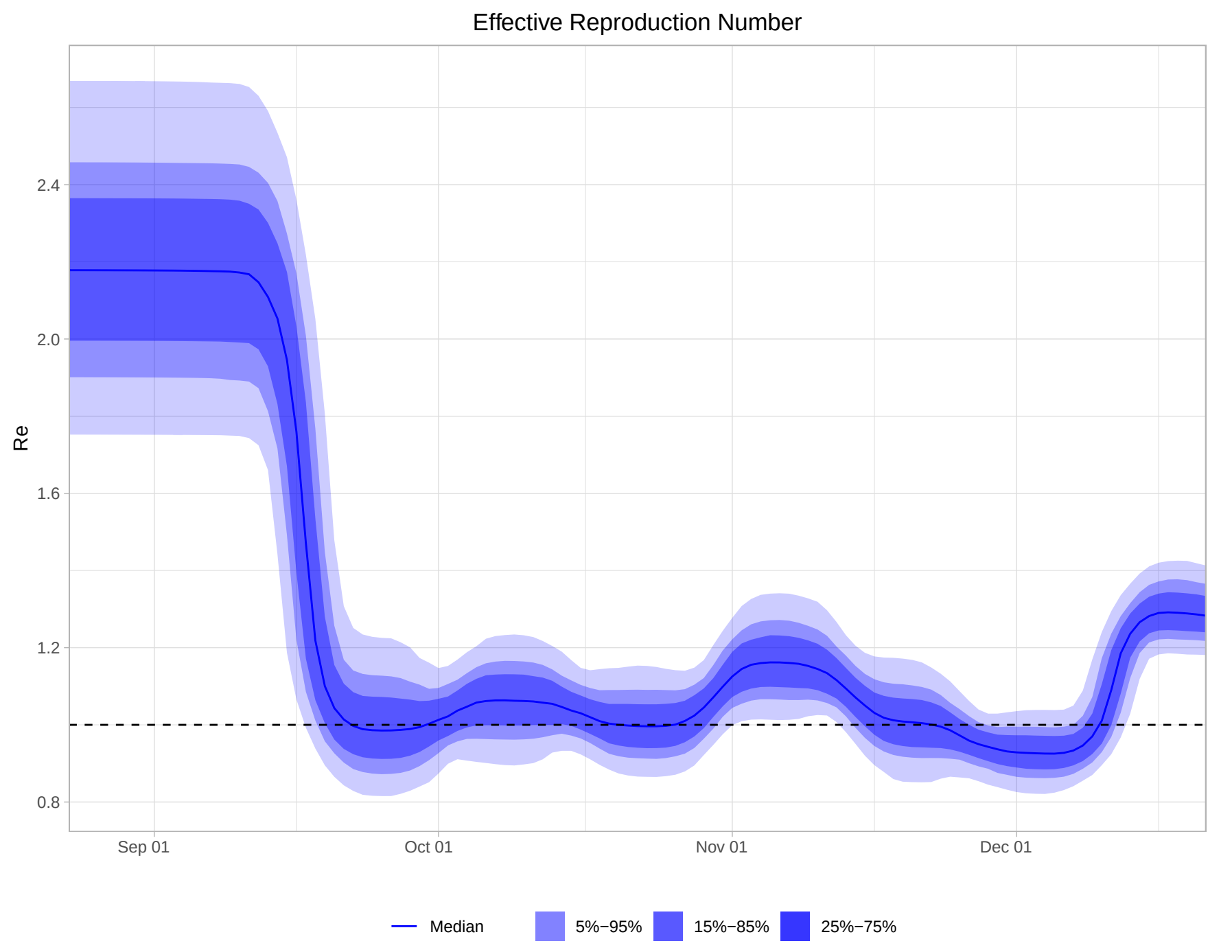

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
25
50
75
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
7.5
5.0
2.5
0.0
Sep 01
Oct 01
Nov 01
Dec 01
Jan 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
20
15
10
5
0
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

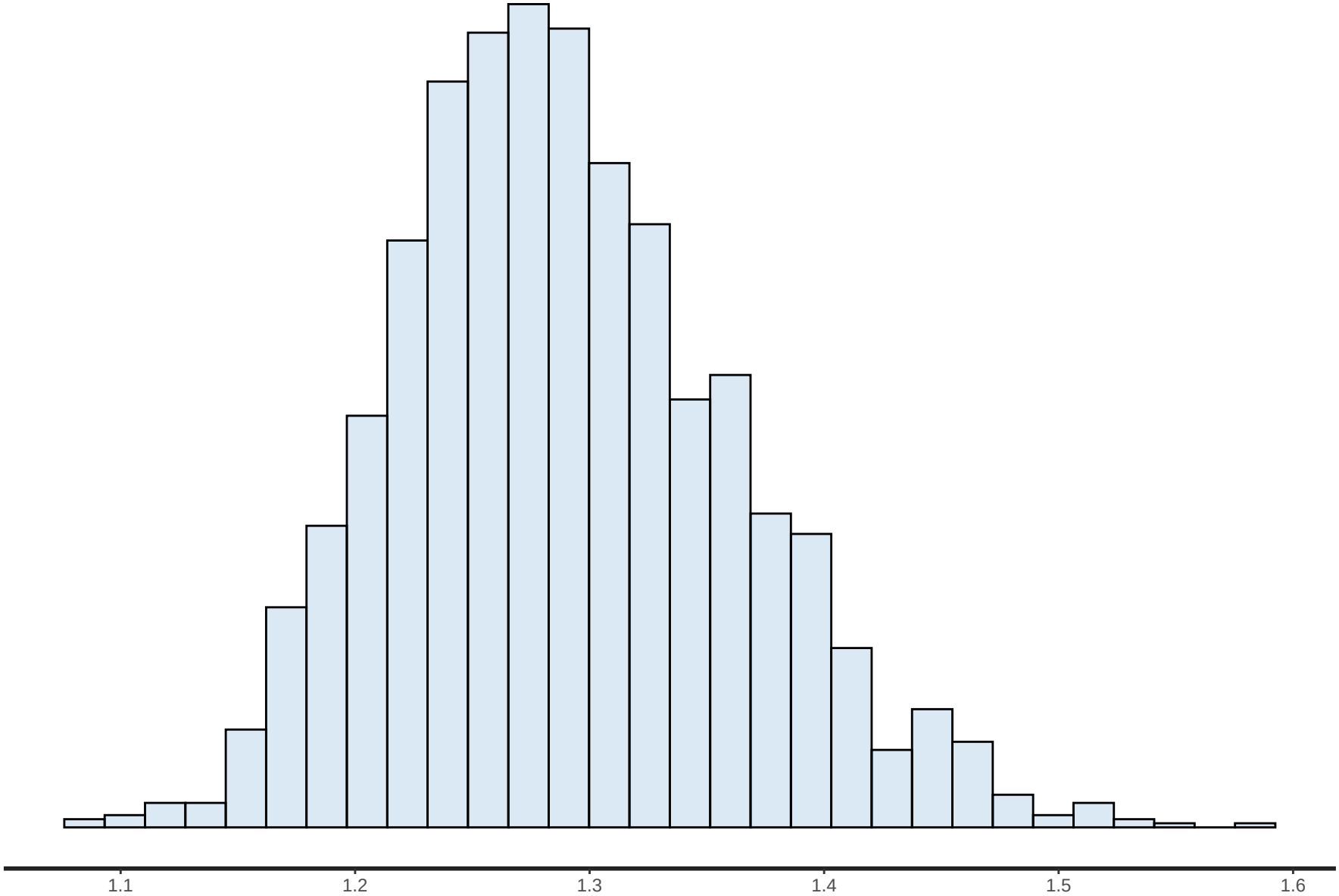

Short Term Death Projection
Number of COVID19 Deaths
0
10
20
30
40
50
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

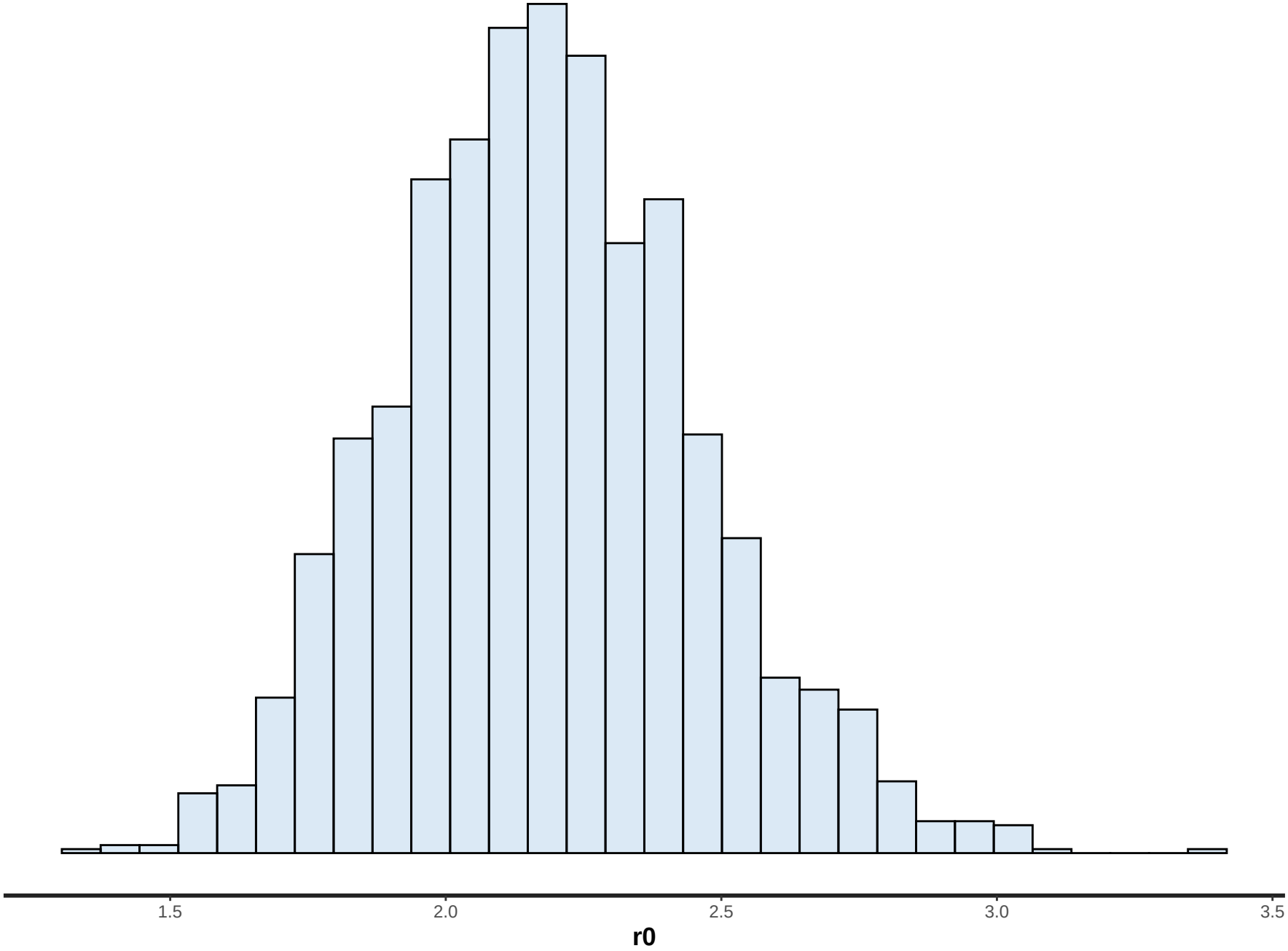

Long Term Death Projection
Number of COVID19 Deaths
150
100
50
0
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

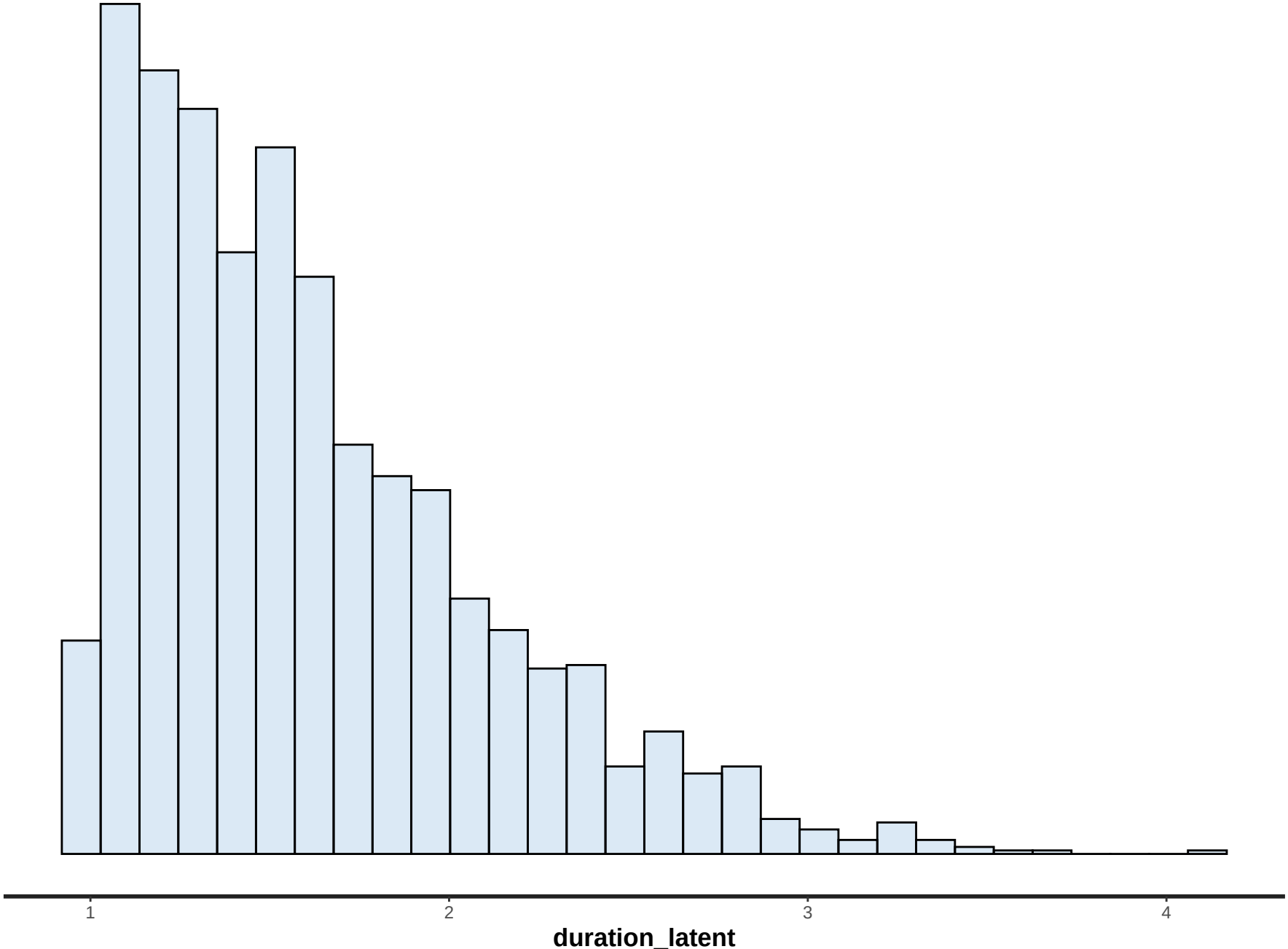

Effective Reproduction Number
Re
2.4
2.0
1.6
1.2
0.8
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

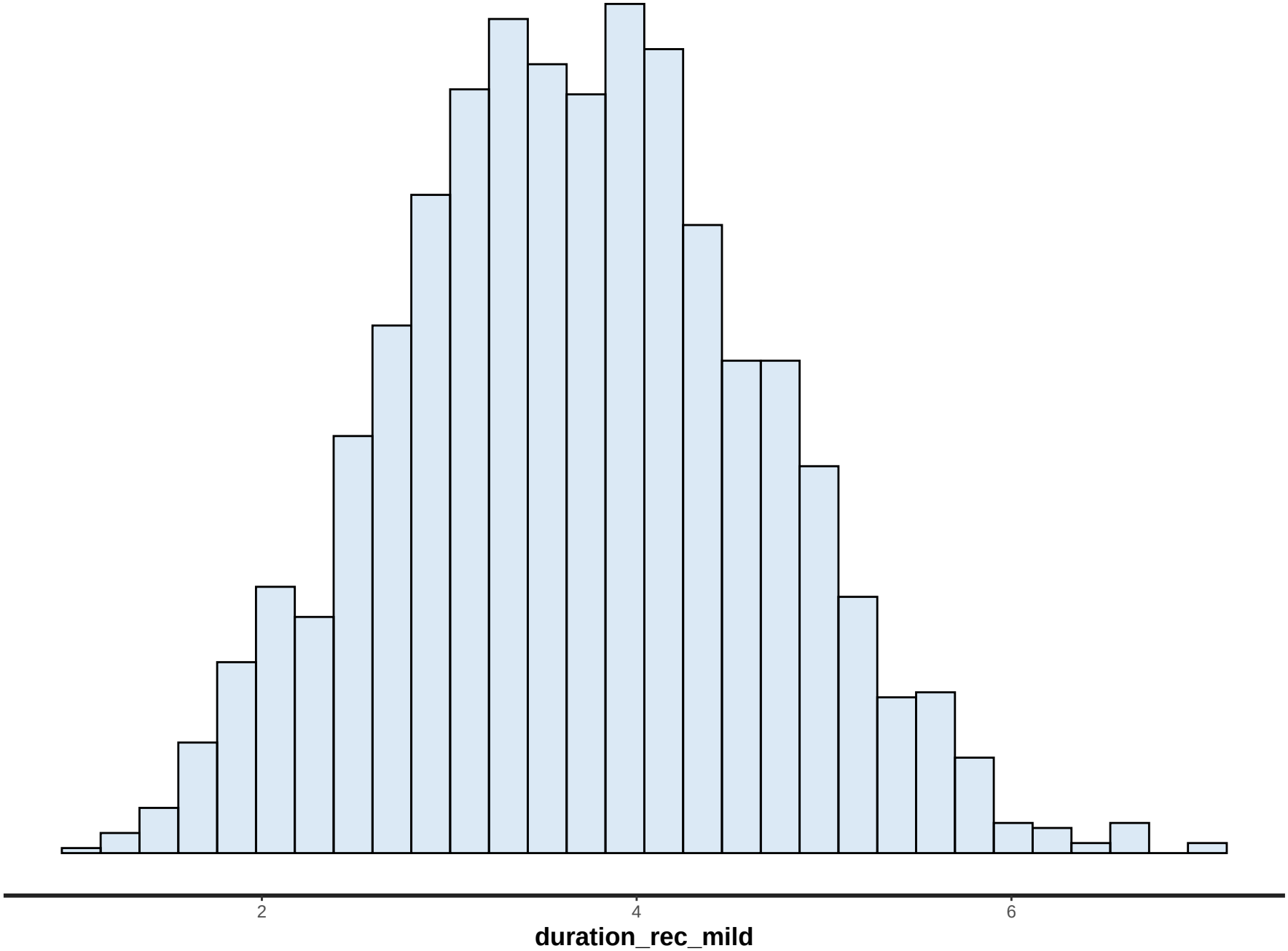
Rt as of 2020−12−21

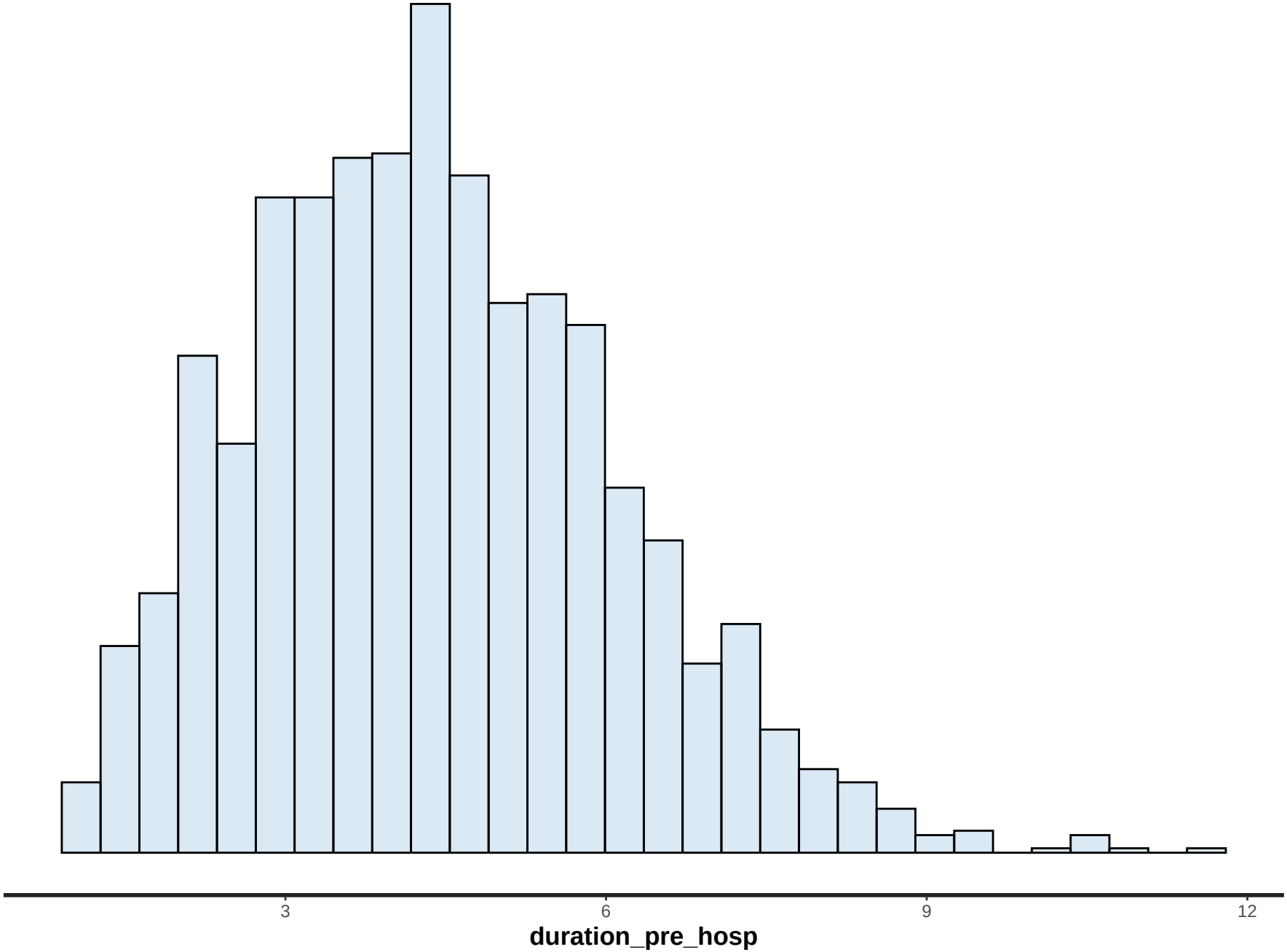
5%	10%	25%	50%	75%	90%	95%
1.18	1.20	1.24	1.28	1.33	1.39	1.41

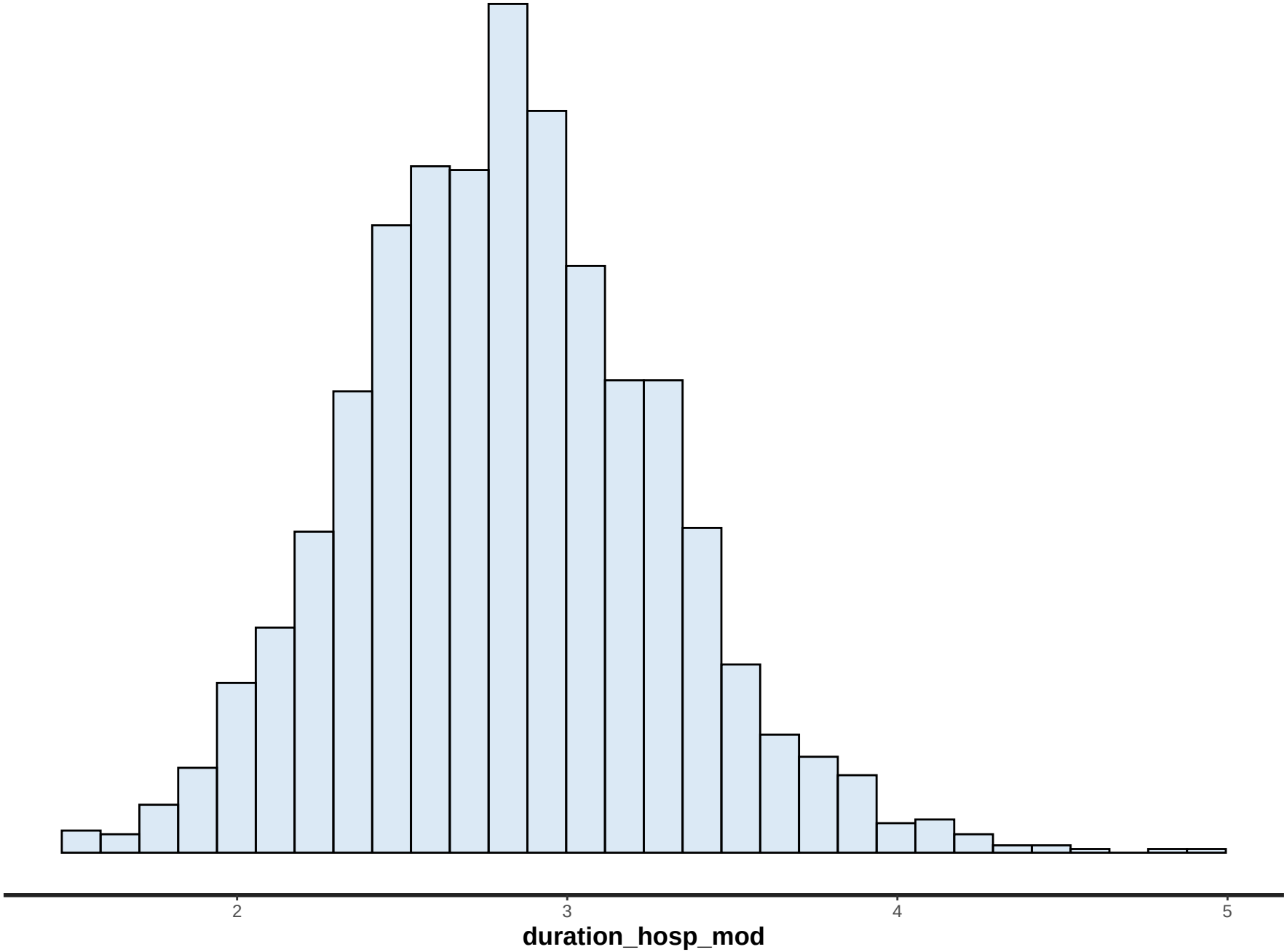


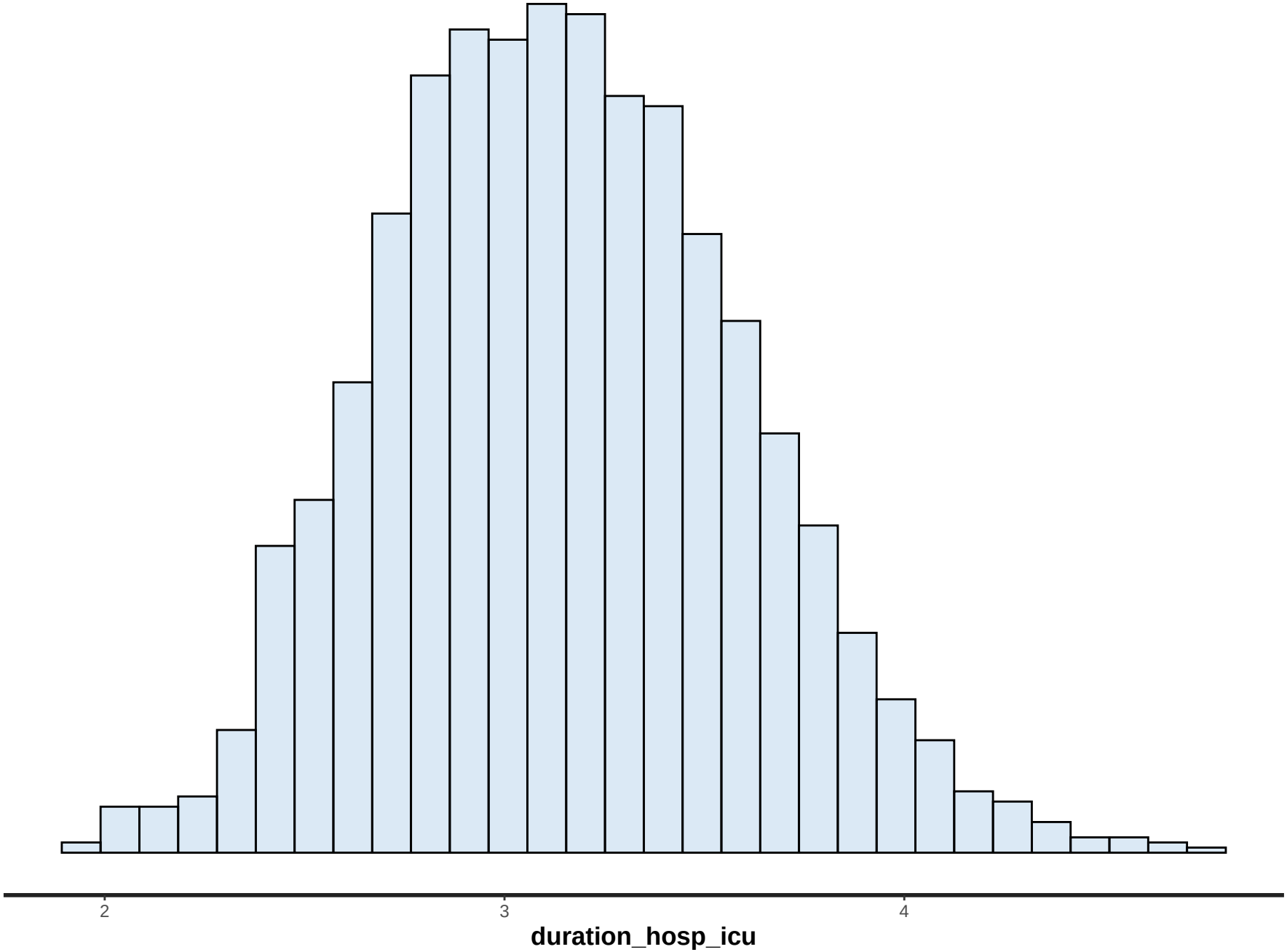

1.5
2.0
2.5
3.0
3.5
r0

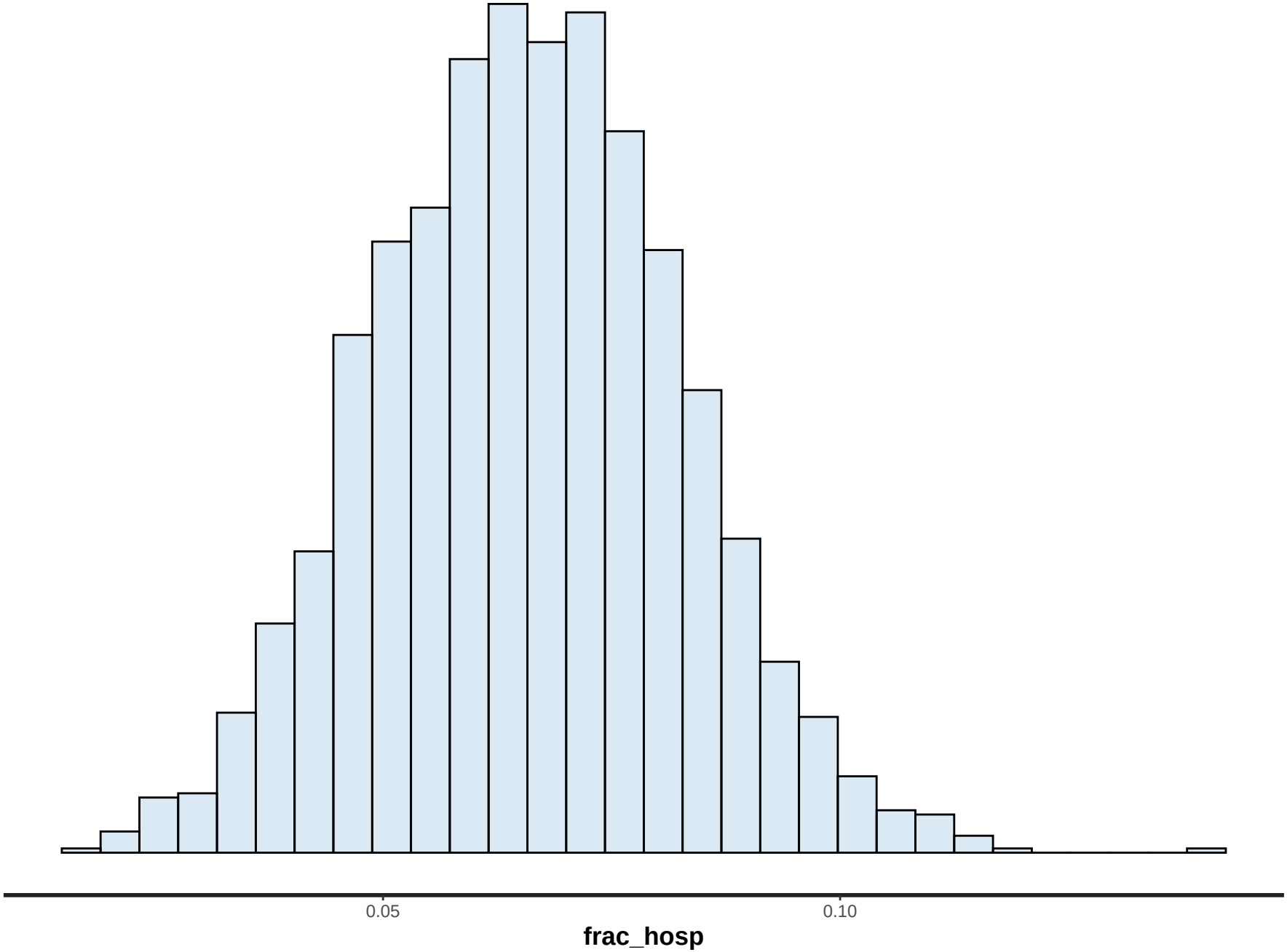

1
2
3
4
duration_latent

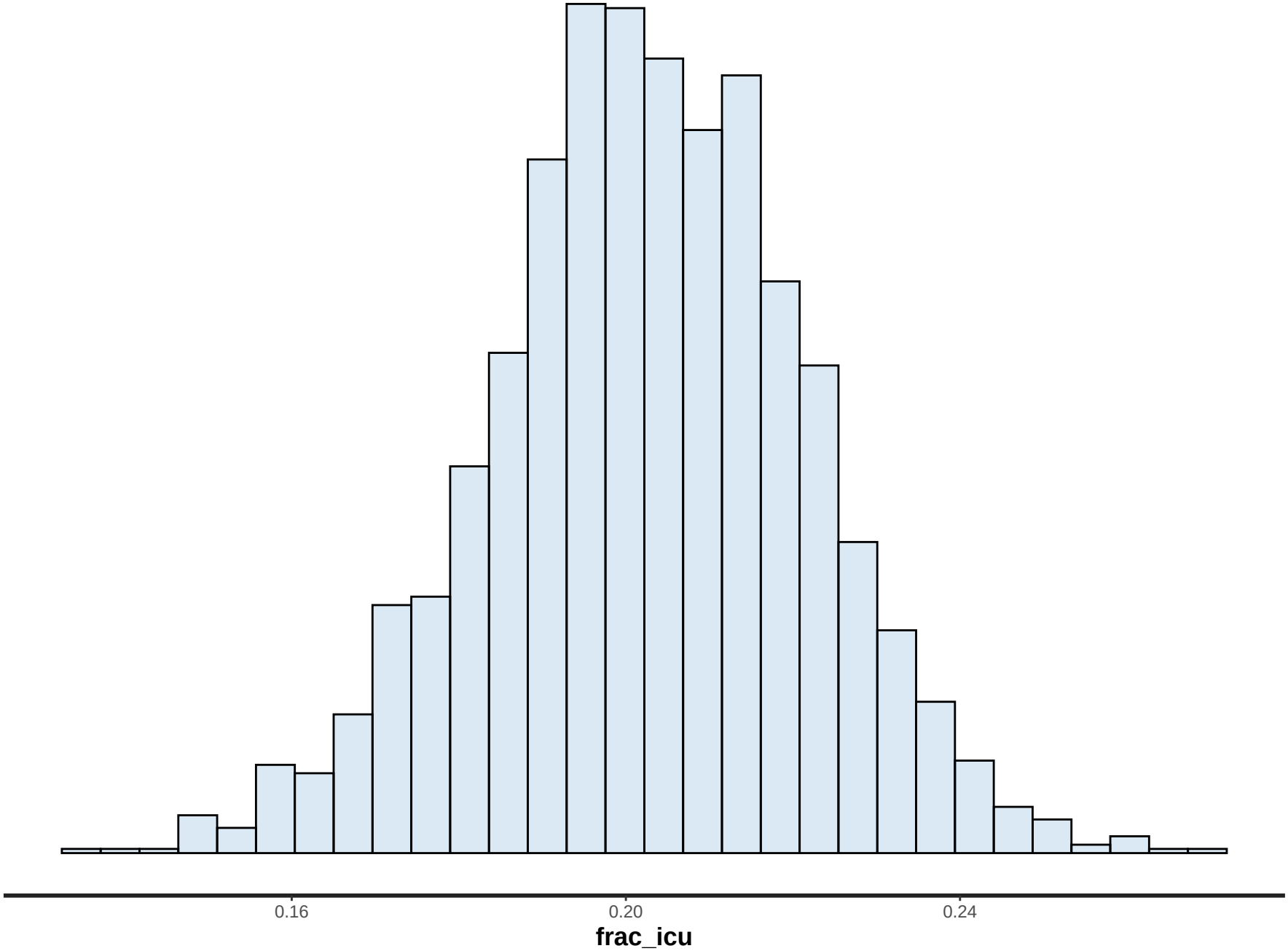

2
4
6
duration_rec_mild

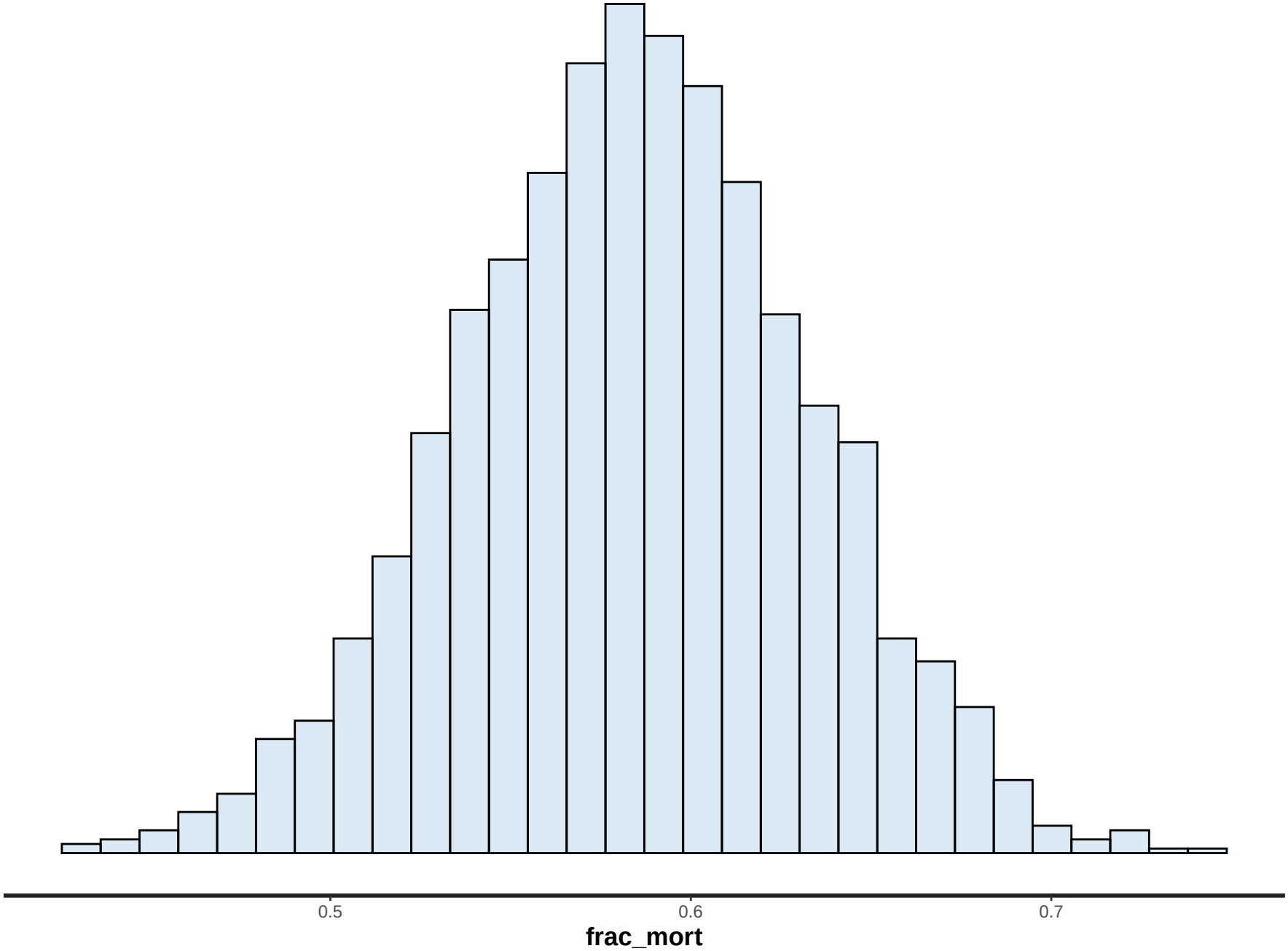

3
6
9
12
duration_pre_hosp

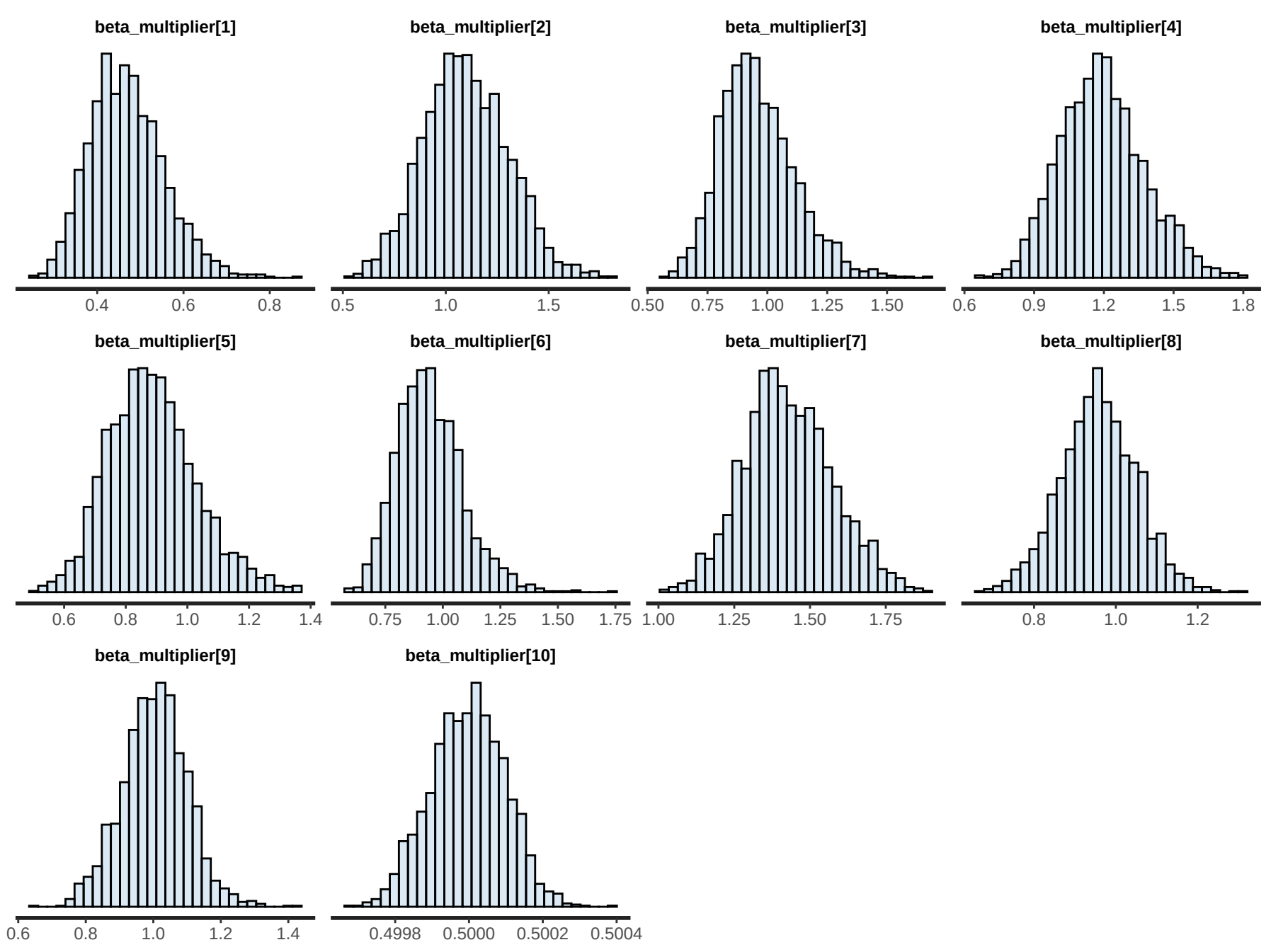

2
3
4
5
duration_hosp_mod

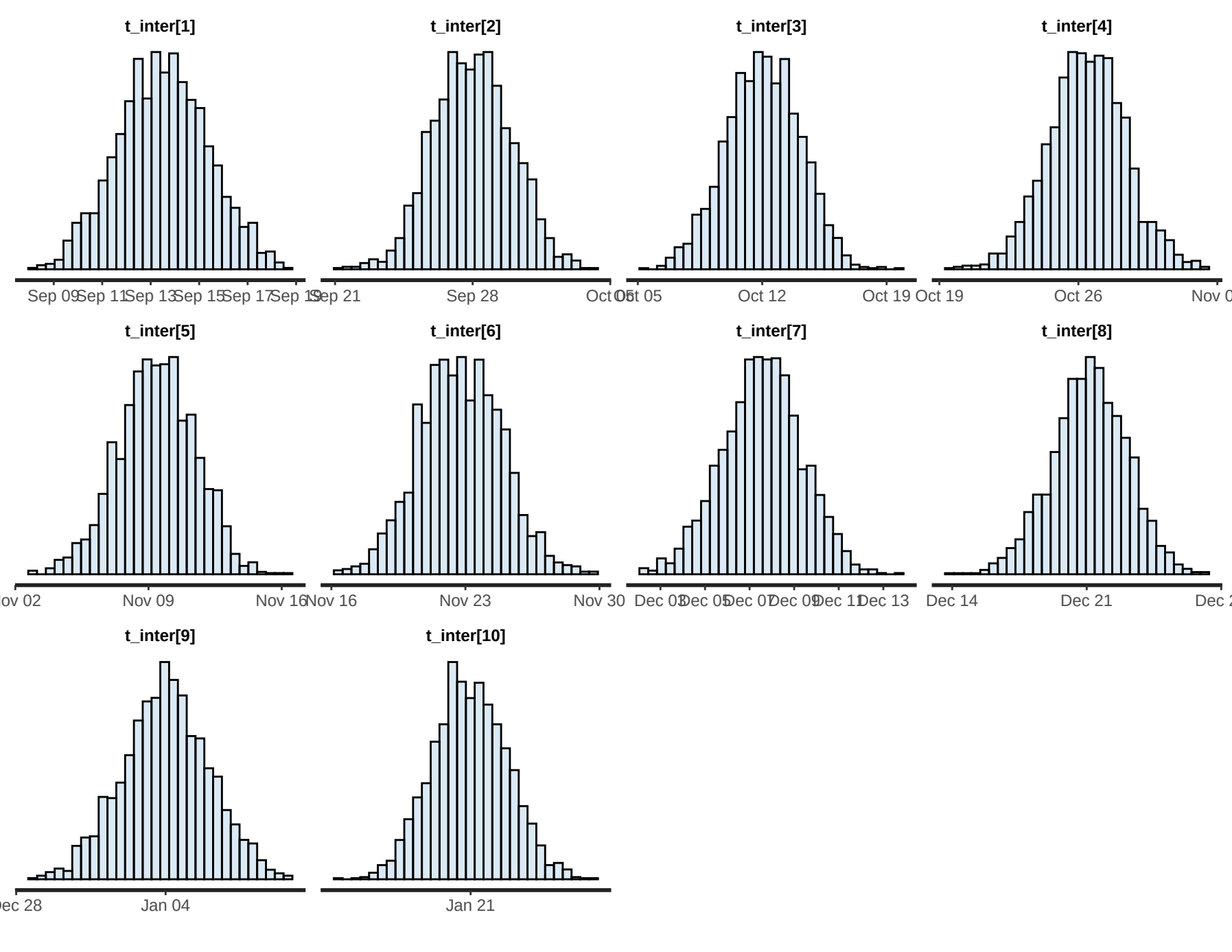

2
3
4
duration_hosp_icu

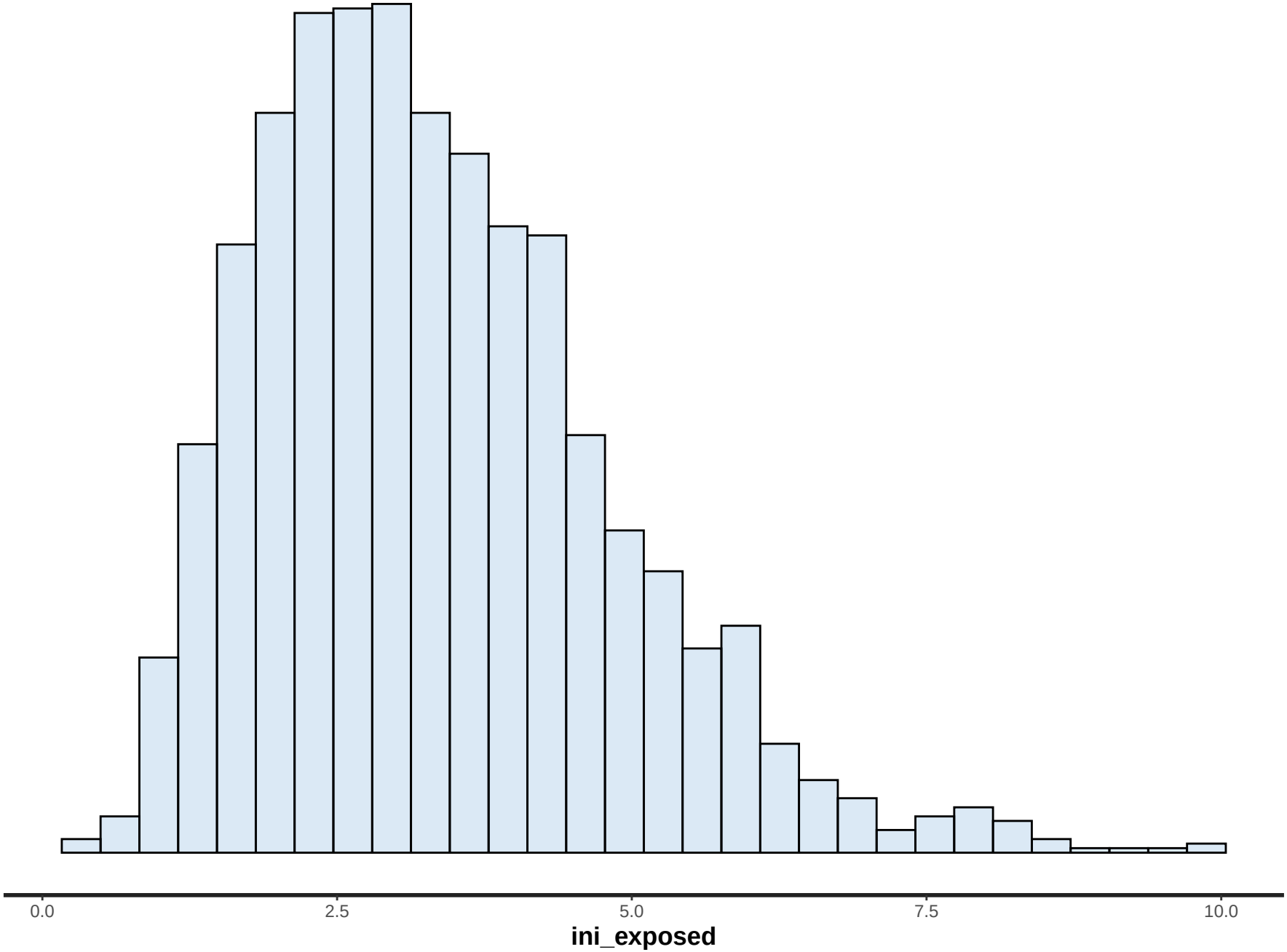

0.05
0.10
frac_hosp

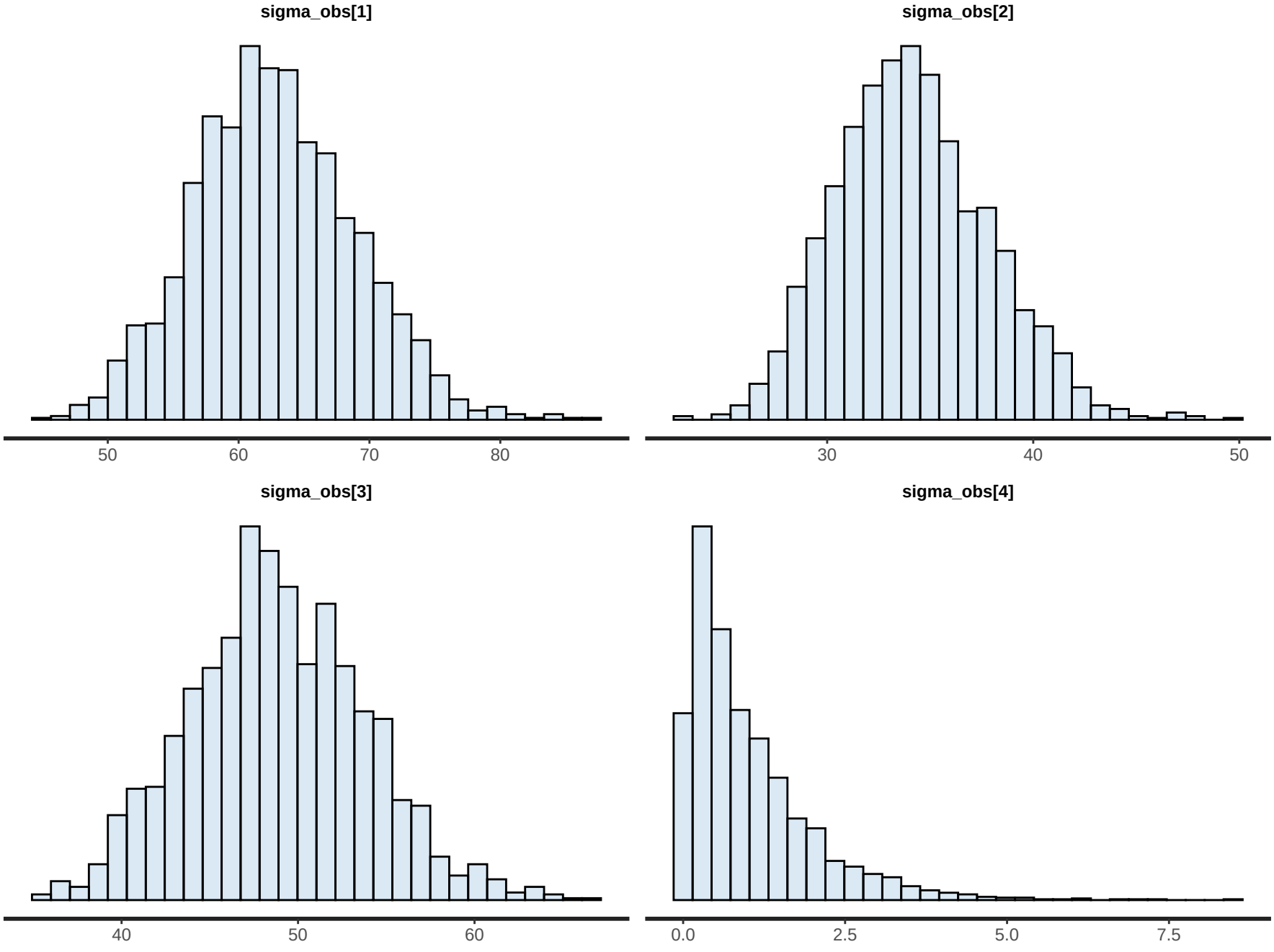

0.16
0.20
0.24
frac_icu


0.5
0.6
0.7
frac_mort


beta_multiplier[1]
0.4
0.6
0.8
beta_multiplier[2]
0.5
1.0
1.5
beta_multiplier[3]
0.50
0.75
1.00
1.25
1.50
beta_multiplier[4]
0.6
0.9
1.2
1.5
1.8
beta_multiplier[5]
0.6
0.8
1.0
1.2
1.4
beta_multiplier[6]
0.75
1.00
1.25
1.50
1.75
beta_multiplier[7]
1.00
1.25
1.50
1.75
beta_multiplier[8]
0.8
1.0
1.2
beta_multiplier[9]
0.6
0.8
1.0
1.2
1.4
beta_multiplier[10]
0.4998
0.5000
0.5002
0.5004


t_inter[1]
Sep 09
Sep 11
Sep 13
Sep 15
Sep 17
Sep 19
t_inter[2]
Sep 21
Sep 28
Oct 05
t_inter[3]
Oct 05
Oct 12
Oct 19
t_inter[4]
Oct 19
Oct 26
Nov 0
t_inter[5]
ov 02
Nov 09
Nov 16
t_inter[6]
Nov 16
Nov 23
Nov 30
t_inter[7]
Dec 03
Dec 05
Dec 07
Dec 09
Dec 11
Dec 13
t_inter[8]
Dec 14
Dec 21
Dec 2
t_inter[9]
ec 28
Jan 04
t_inter[10]
Jan 21


0.0
2.5
5.0
7.5
10.0
ini_exposed


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