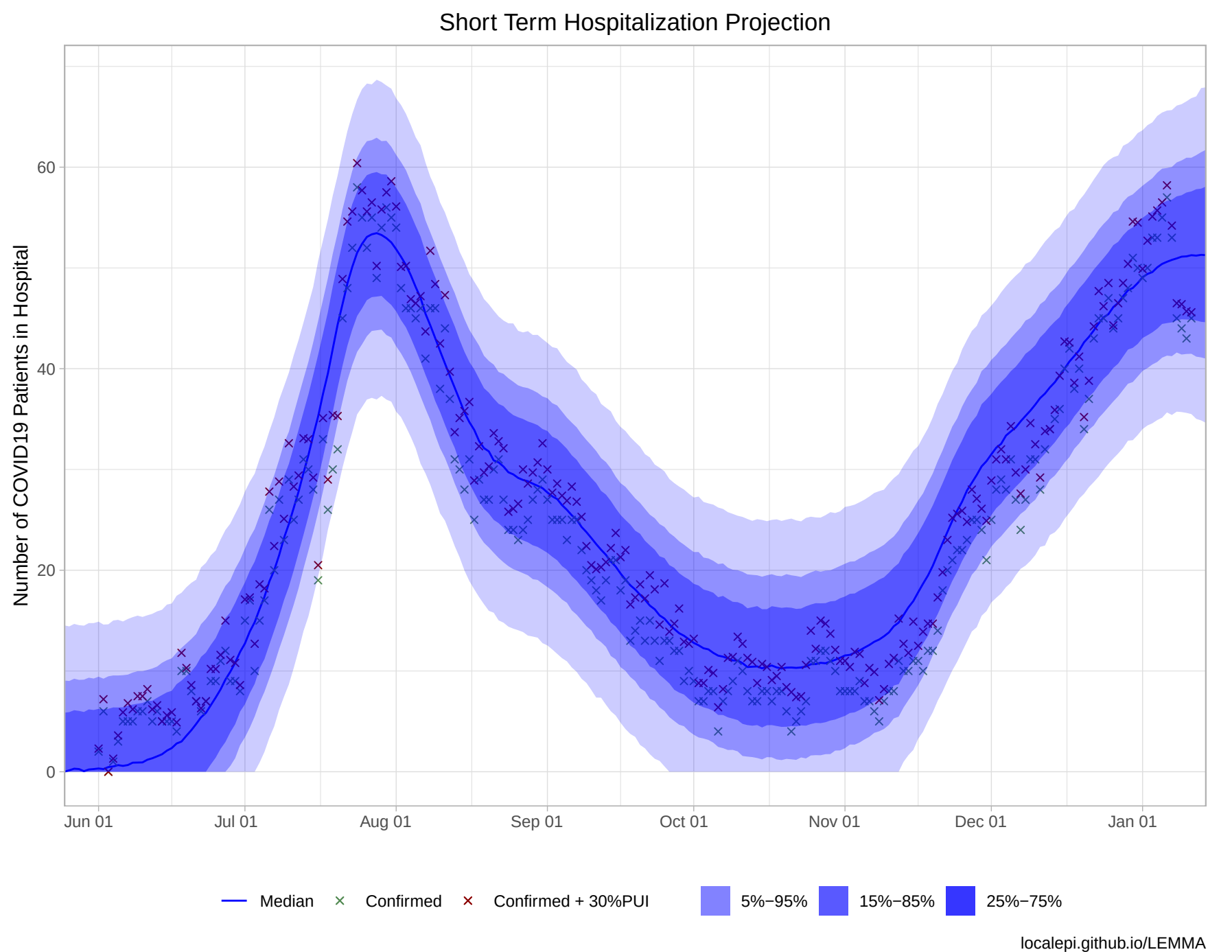
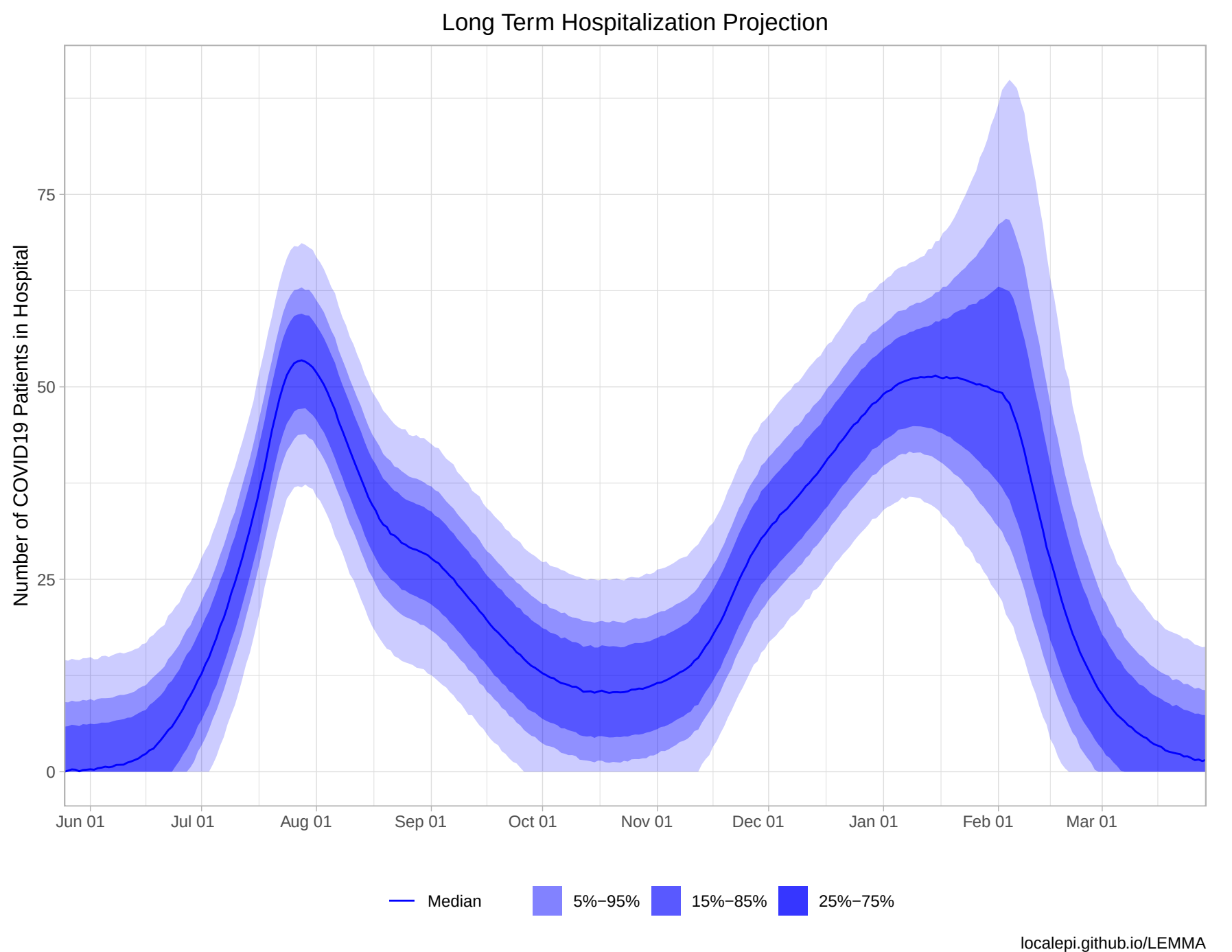
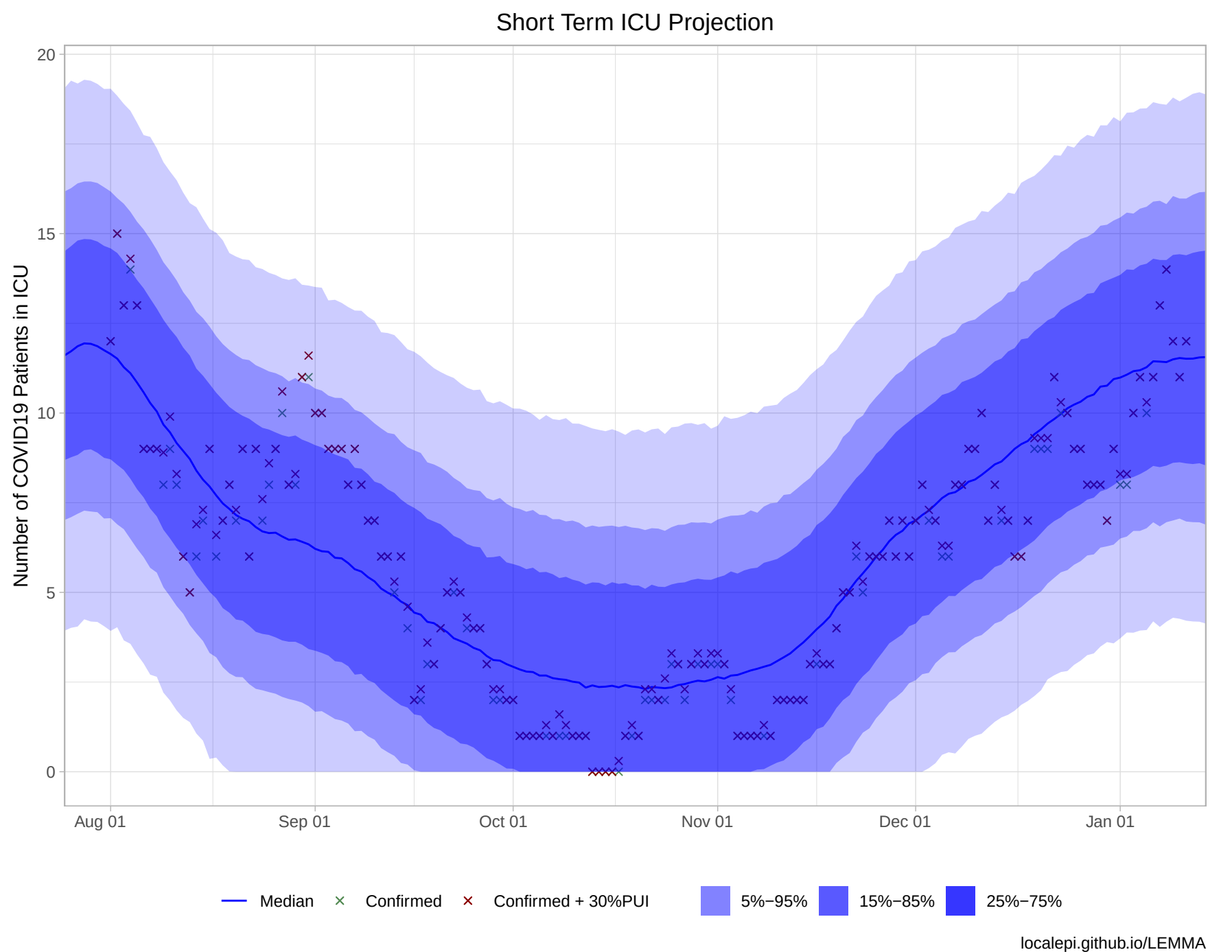
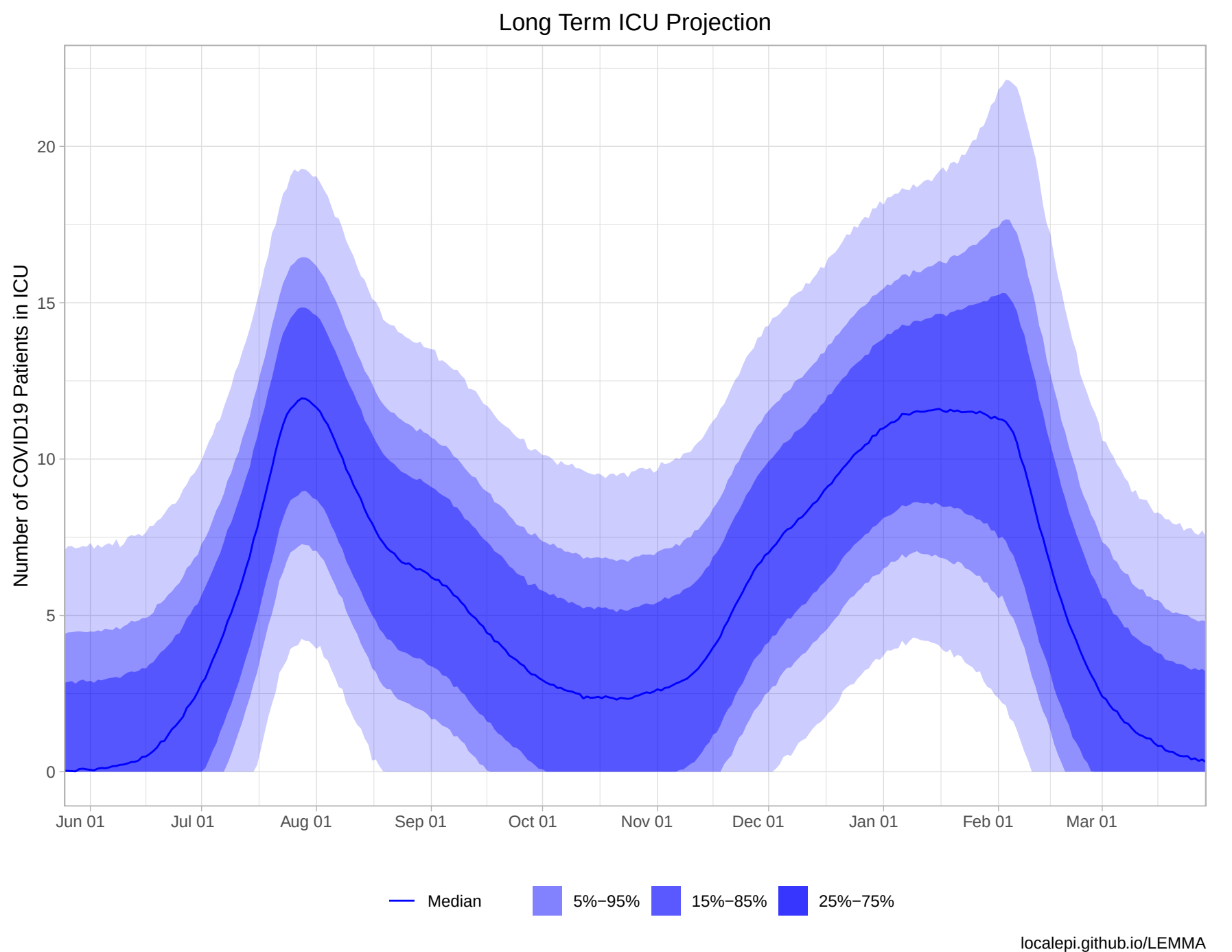
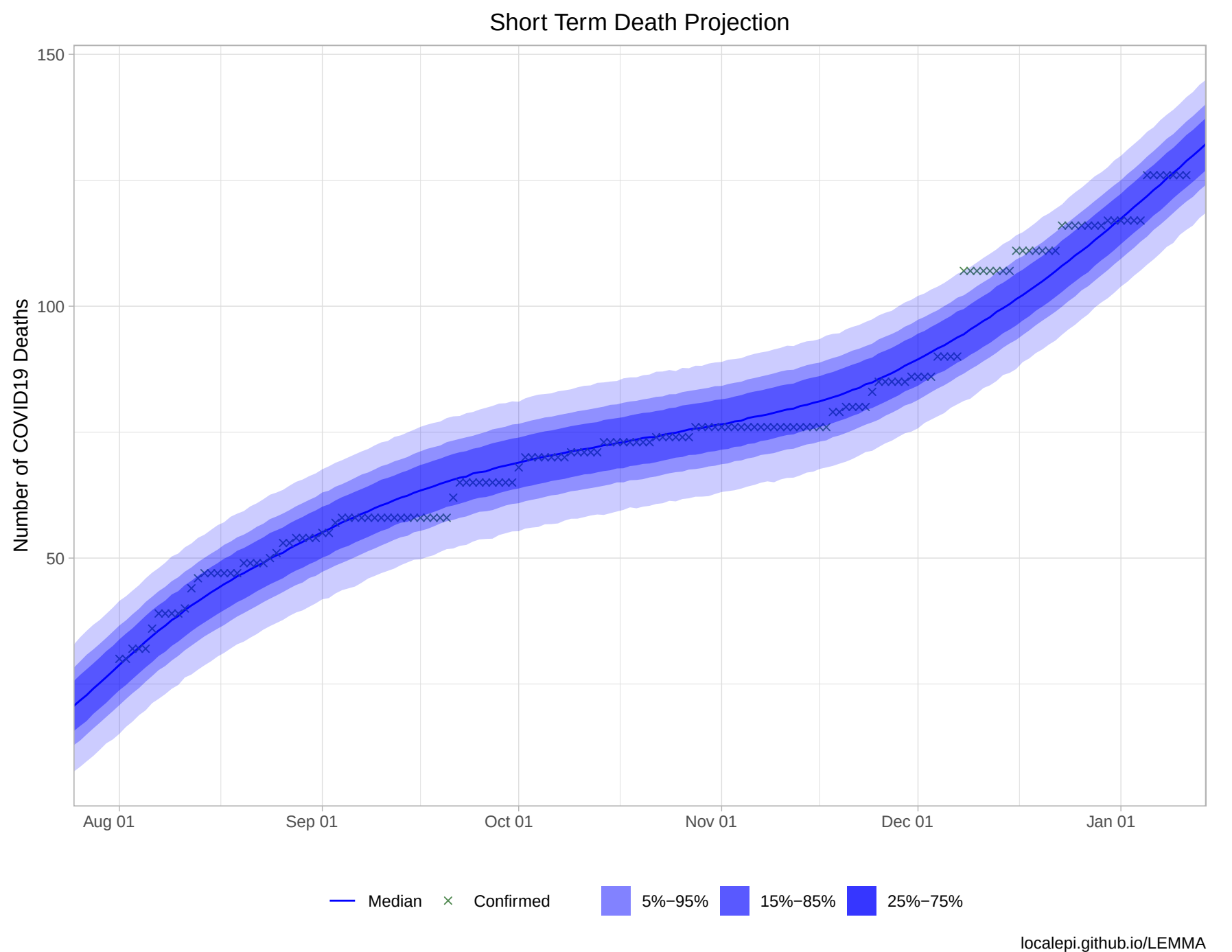
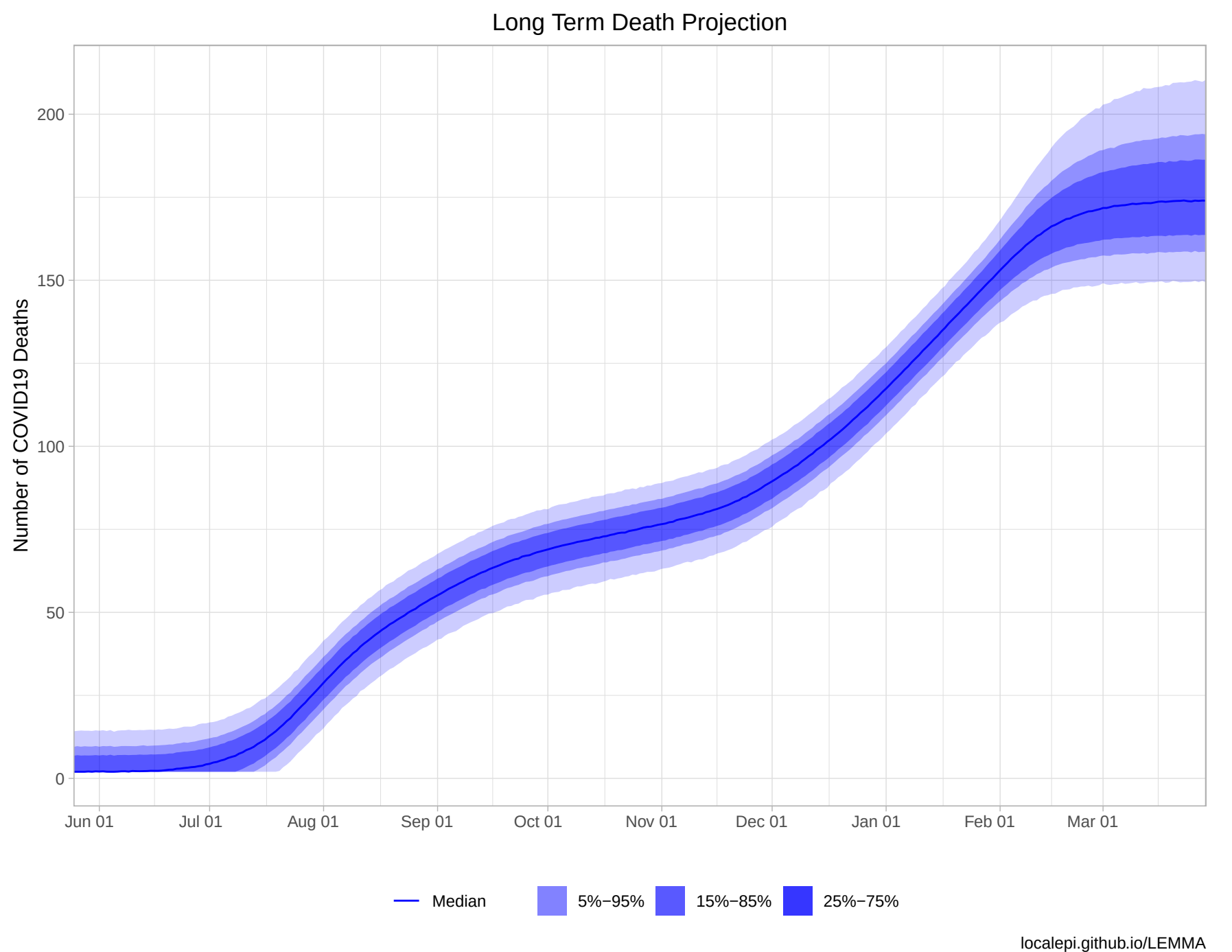

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
20
40
60
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

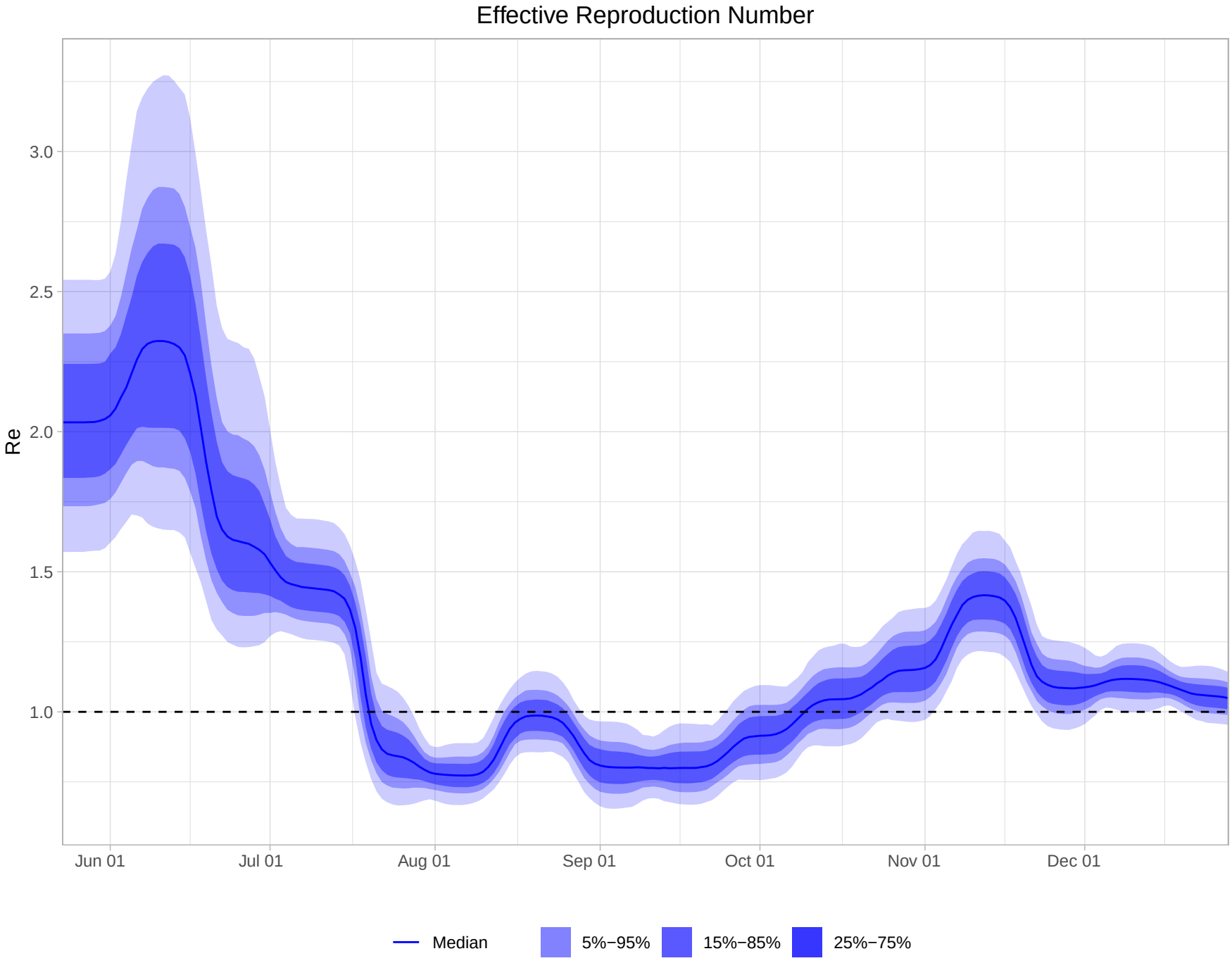

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
25
50
75
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
20
15
10
5
0
Aug 01
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
0
5
10
15
20
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

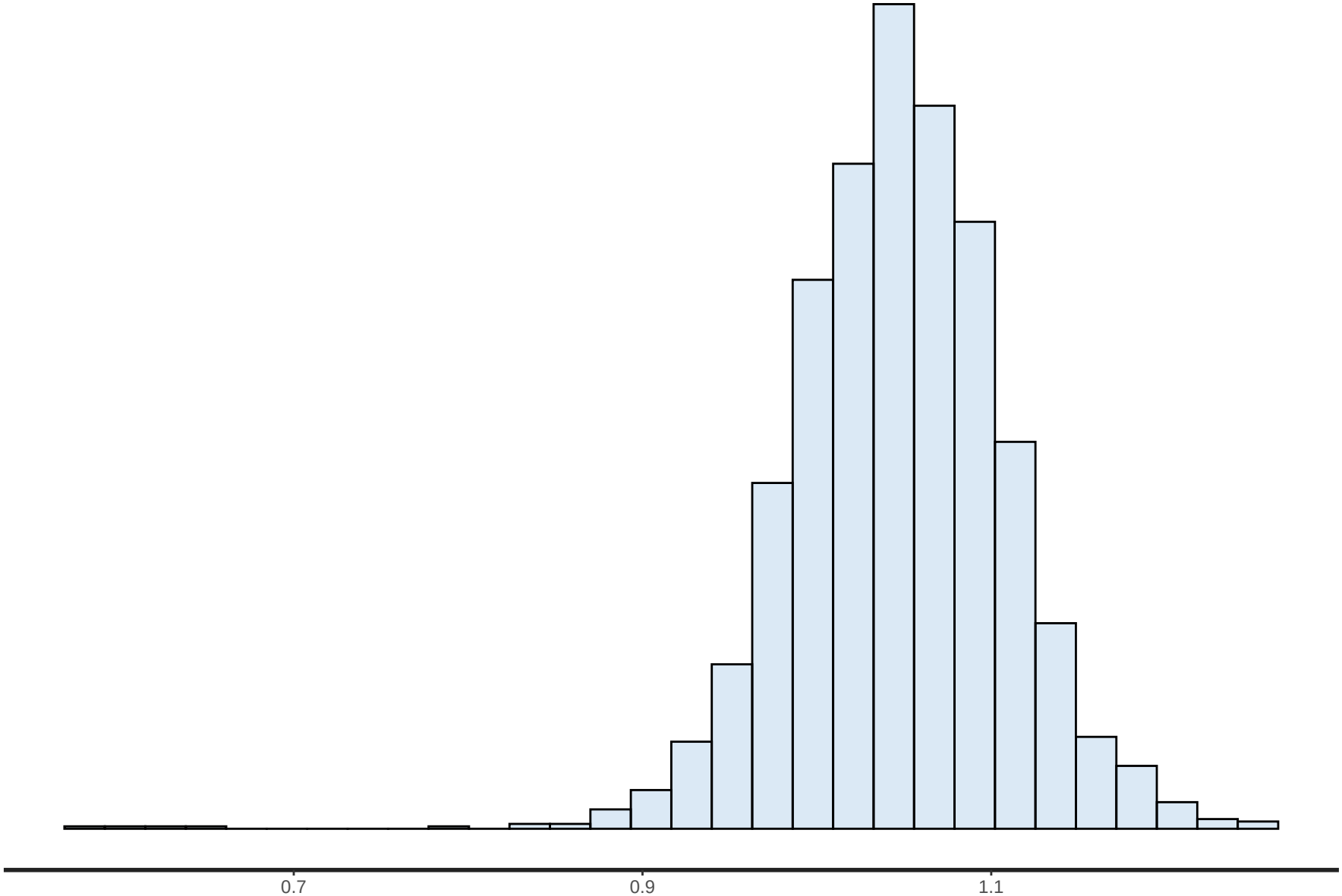

Short Term Death Projection
Number of COVID19 Deaths
150
100
50
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

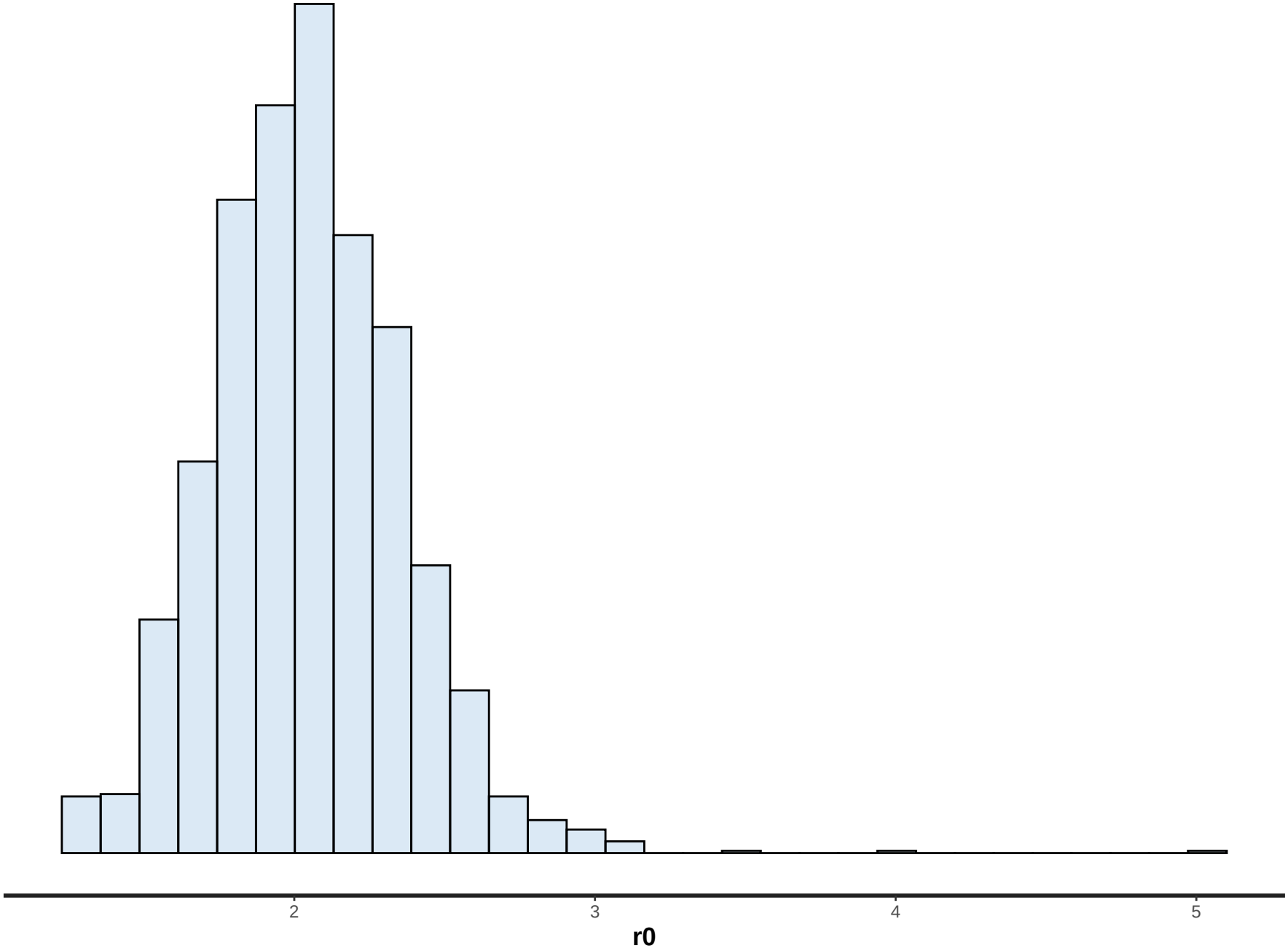

Long Term Death Projection
Number of COVID19 Deaths
200
150
100
50
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

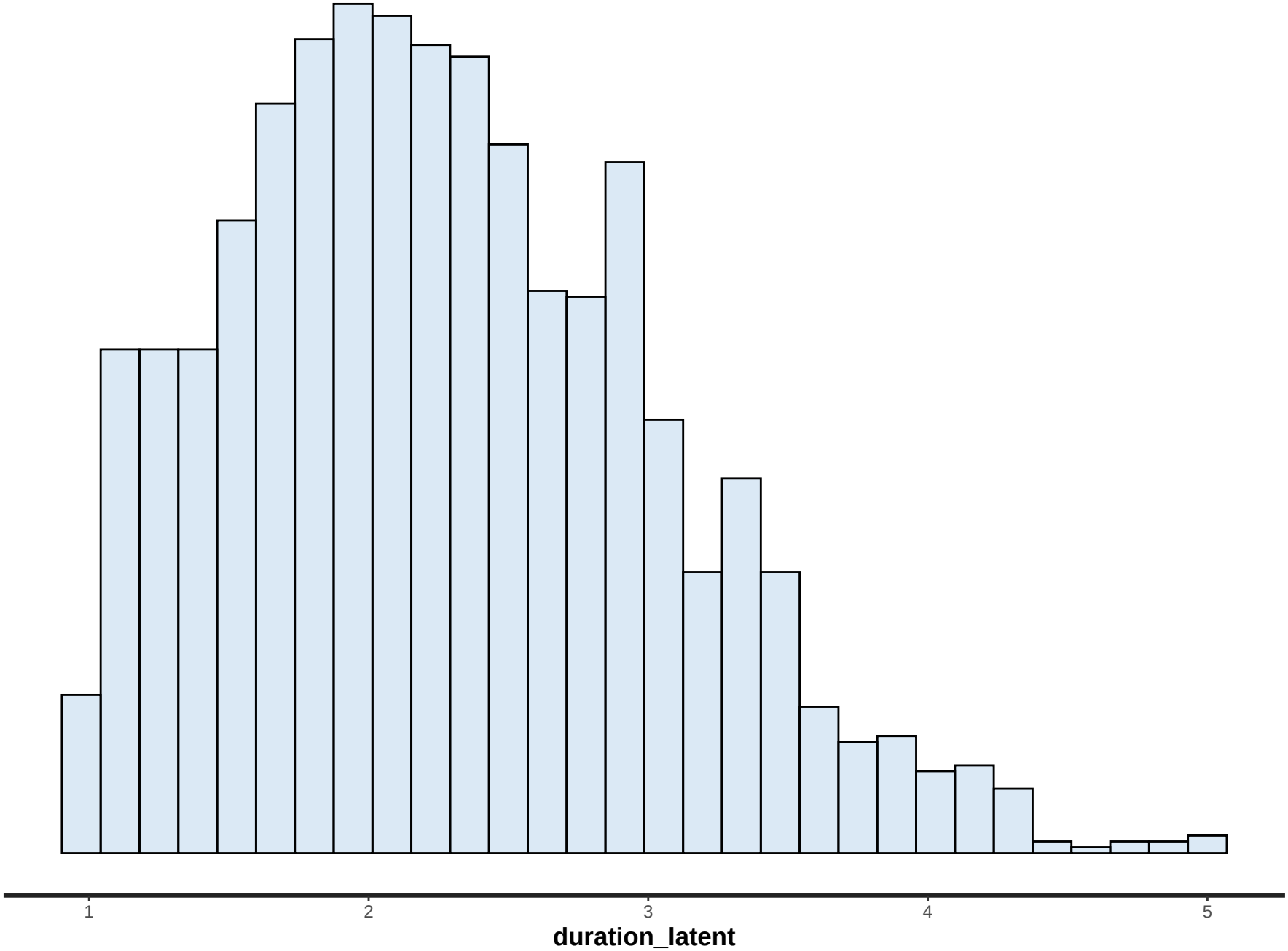

Effective Reproduction Number
Re
3.0
2.5
2.0
1.5
1.0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

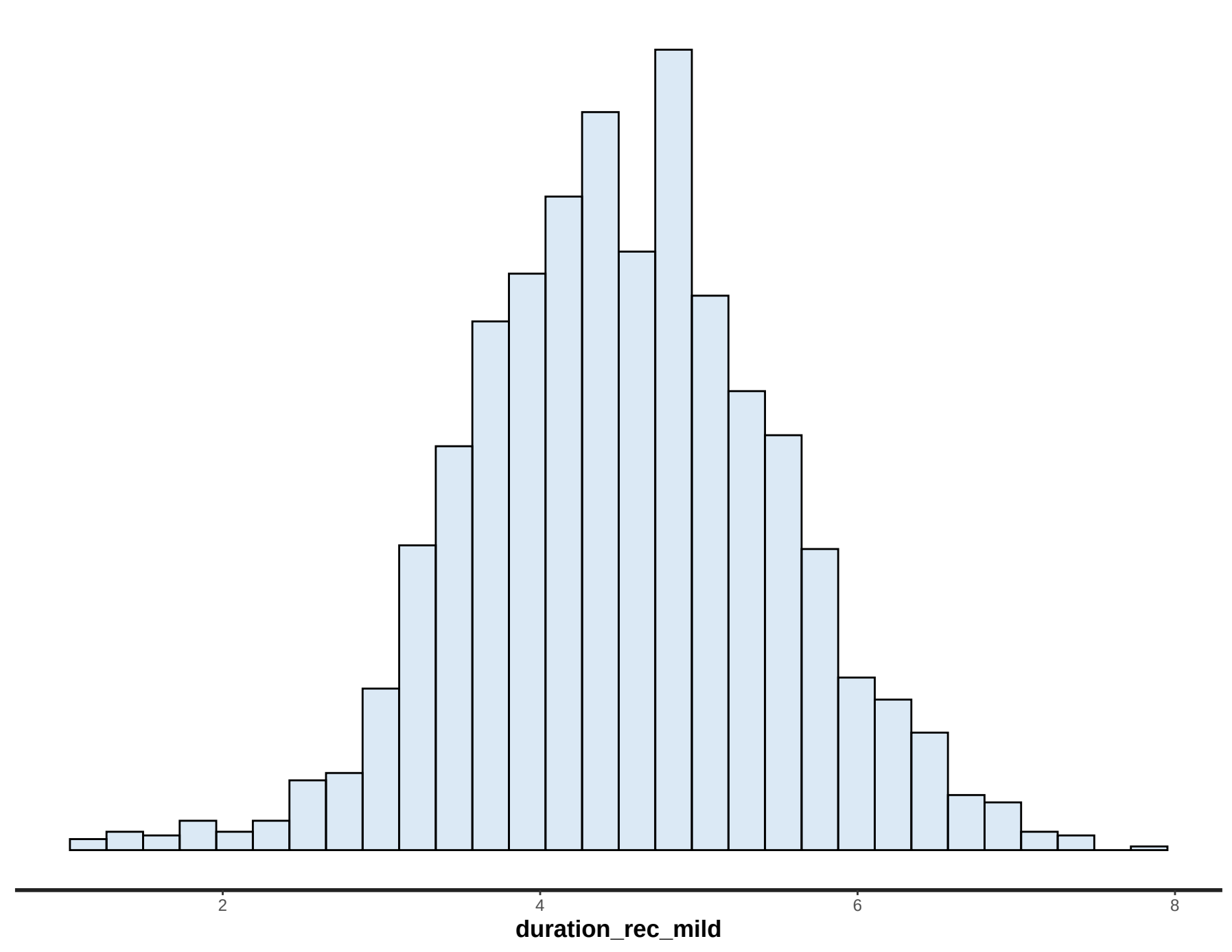
Rt as of 2020−12−28

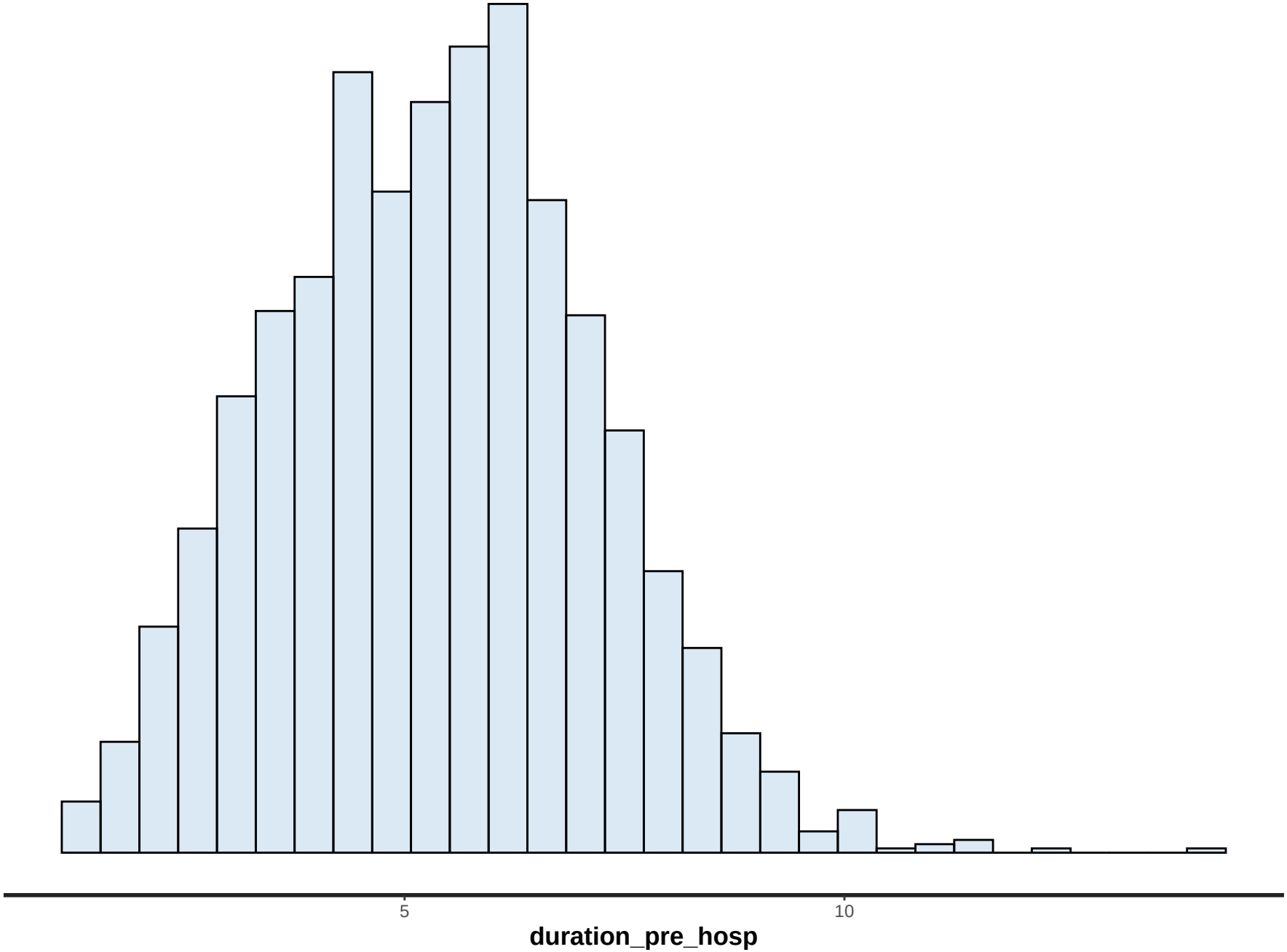
5%	10%	25%	50%	75%	90%	95%
0.95	0.98	1.01	1.05	1.09	1.12	1.14

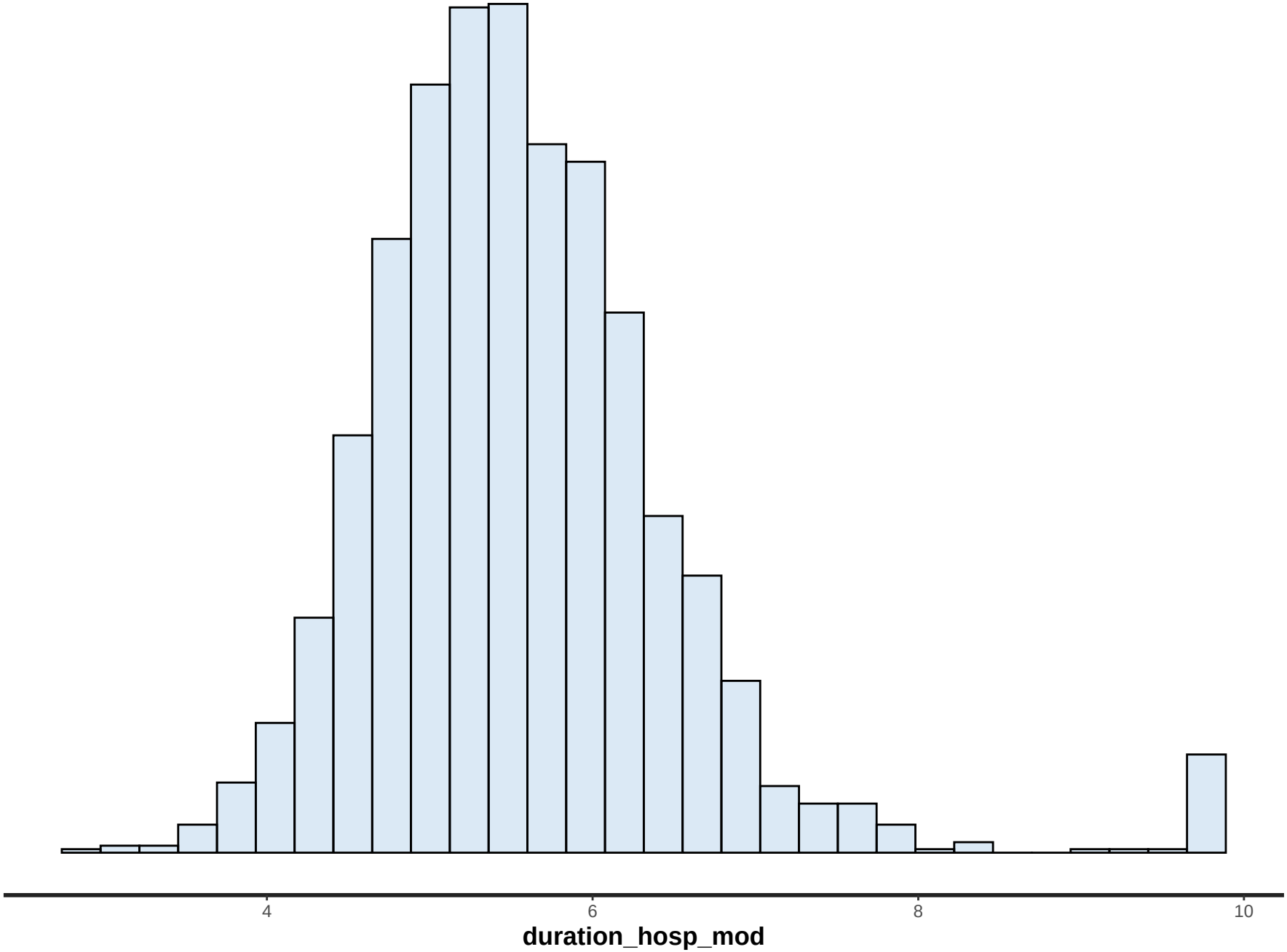


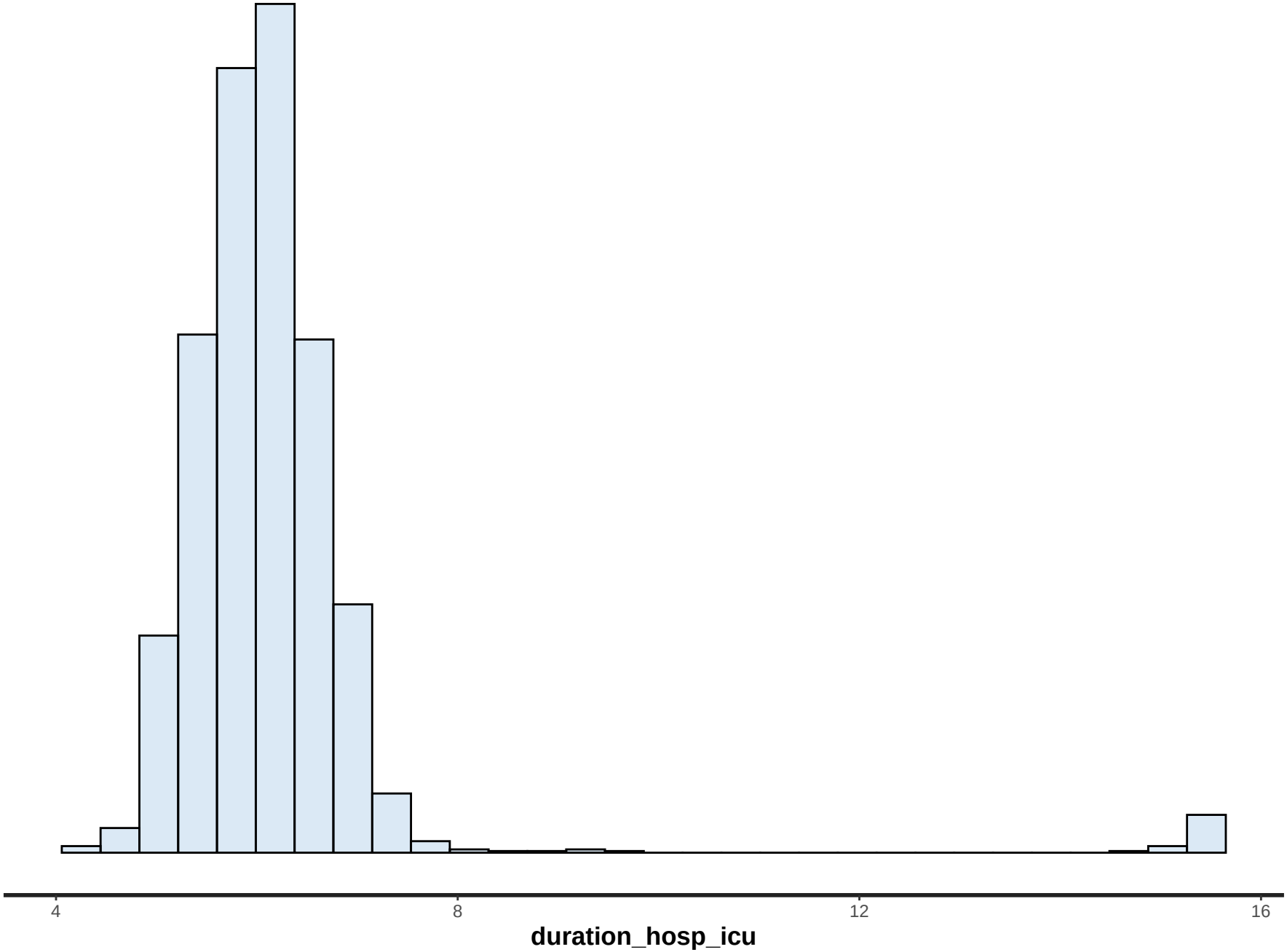

2
3
4
5
r0

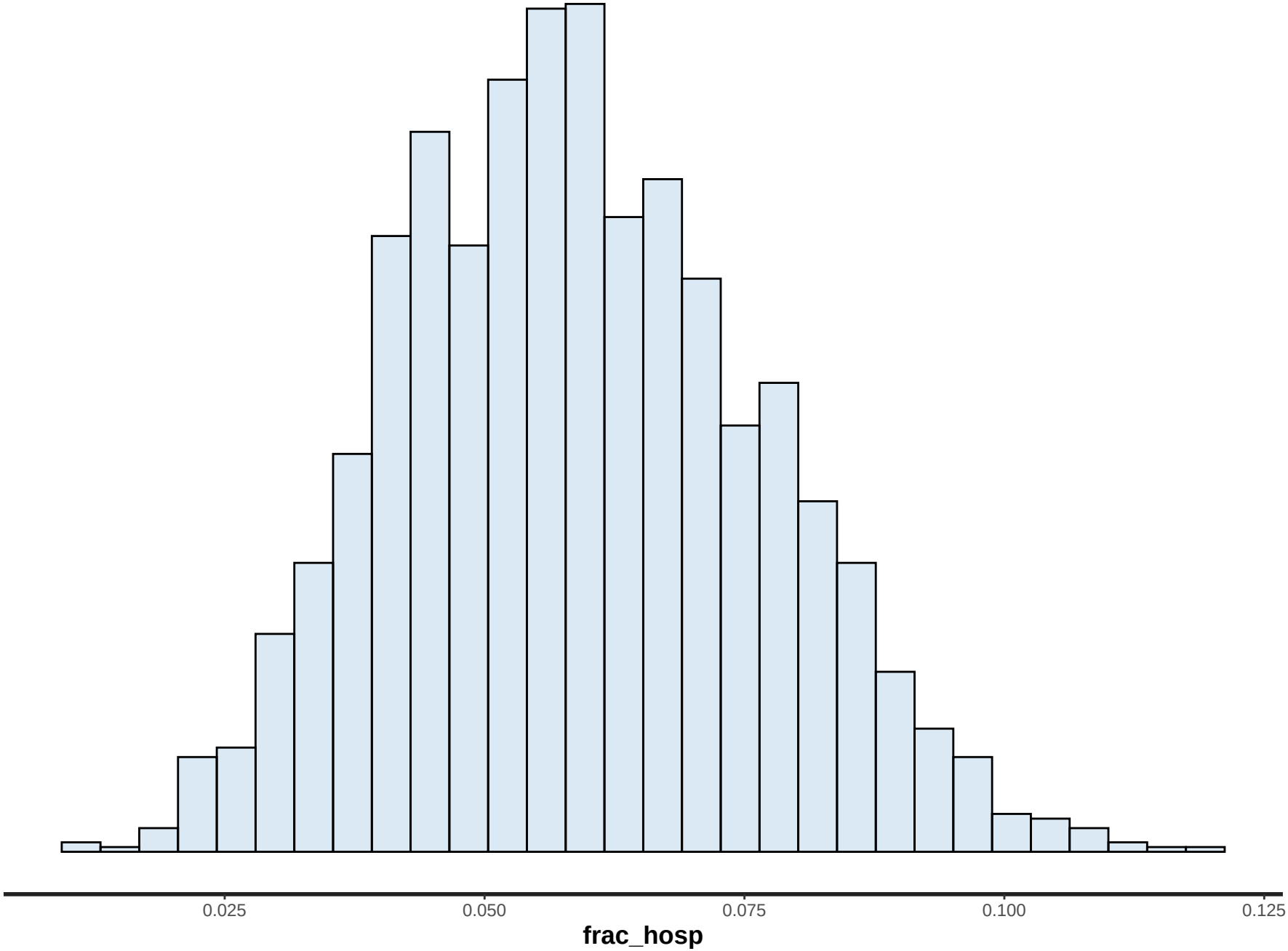

1
2
3
4
5
duration_latent

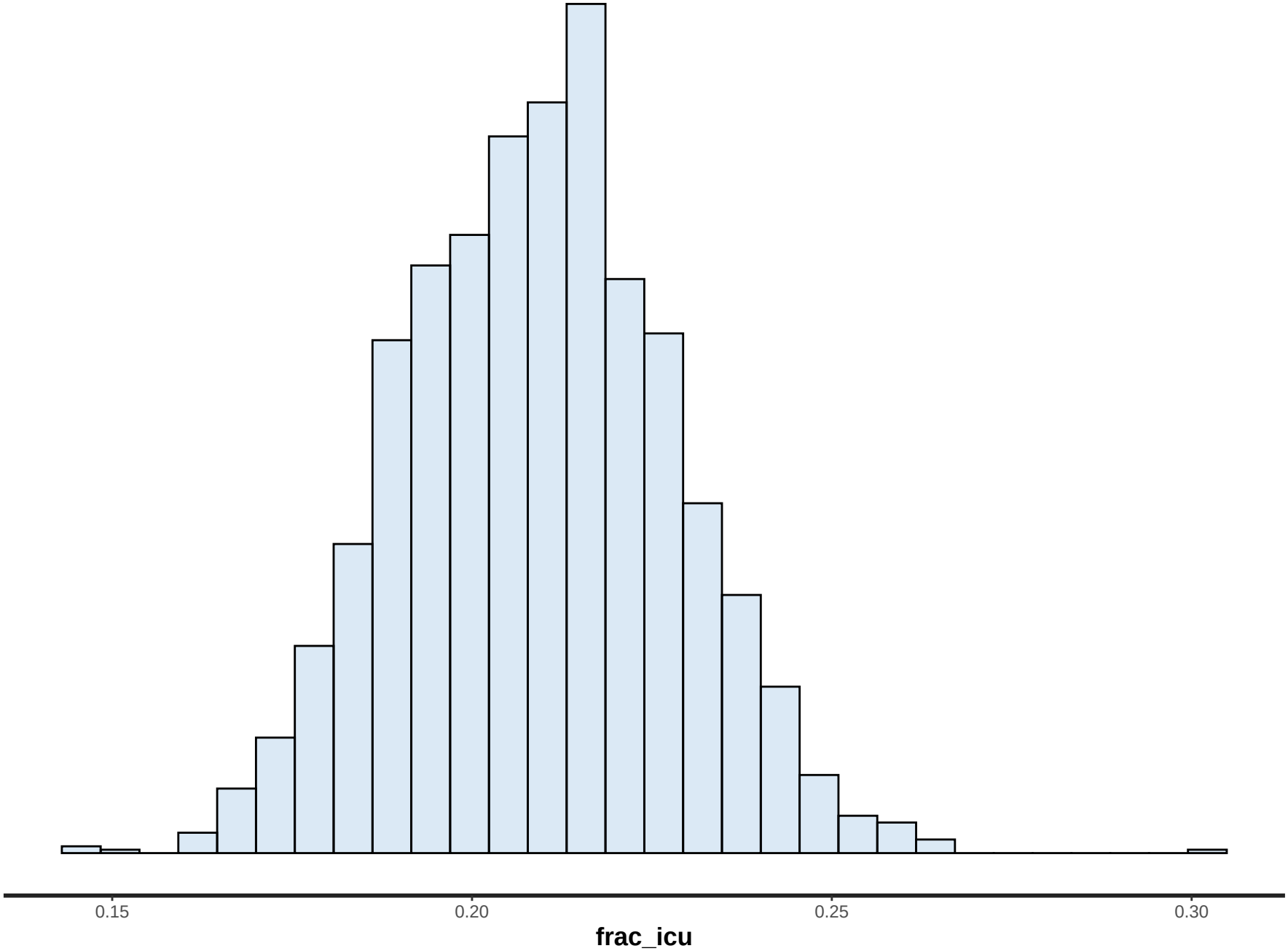

2
4
6
8
duration_rec_mild

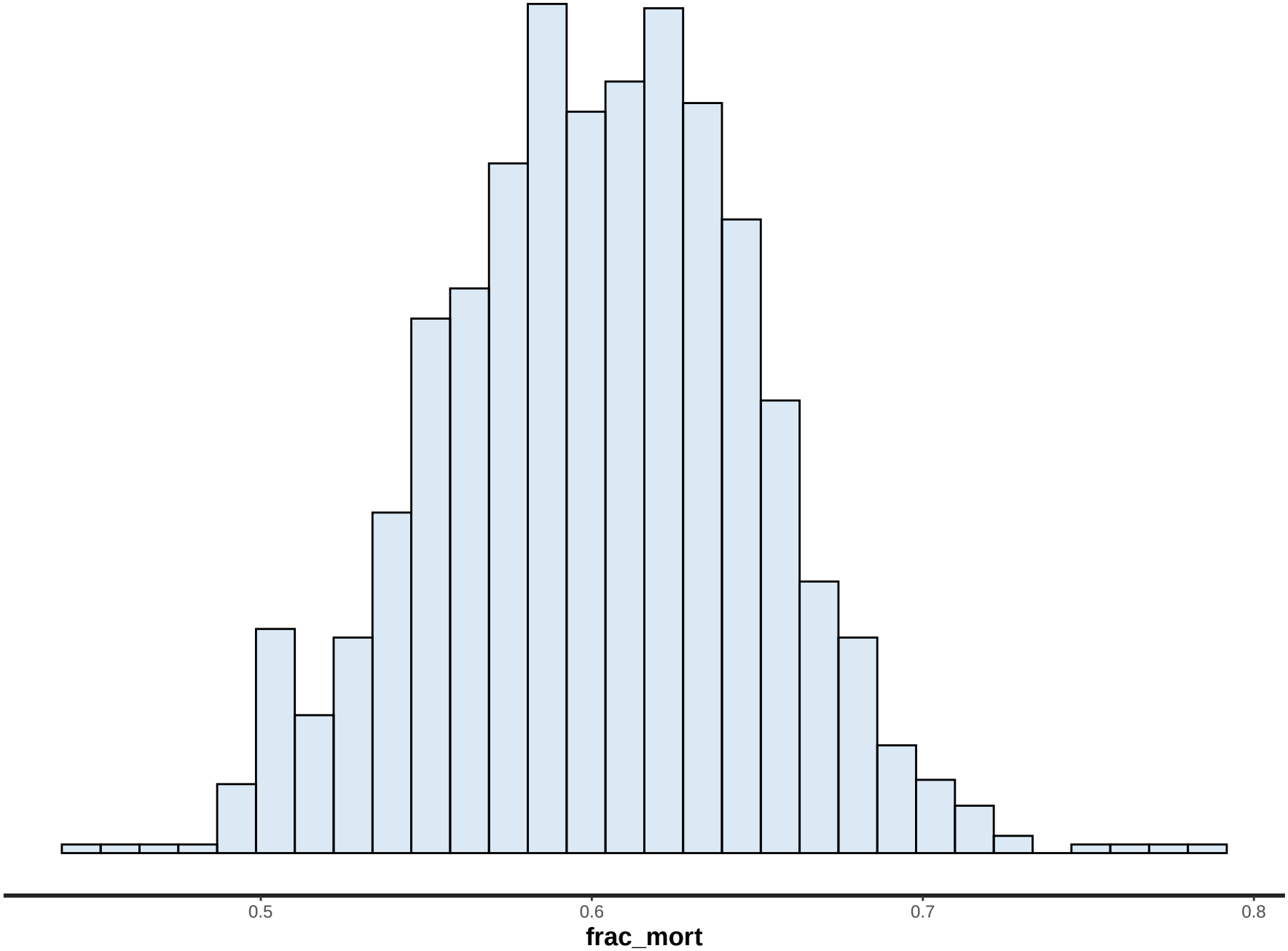

5
10
duration_pre_hosp

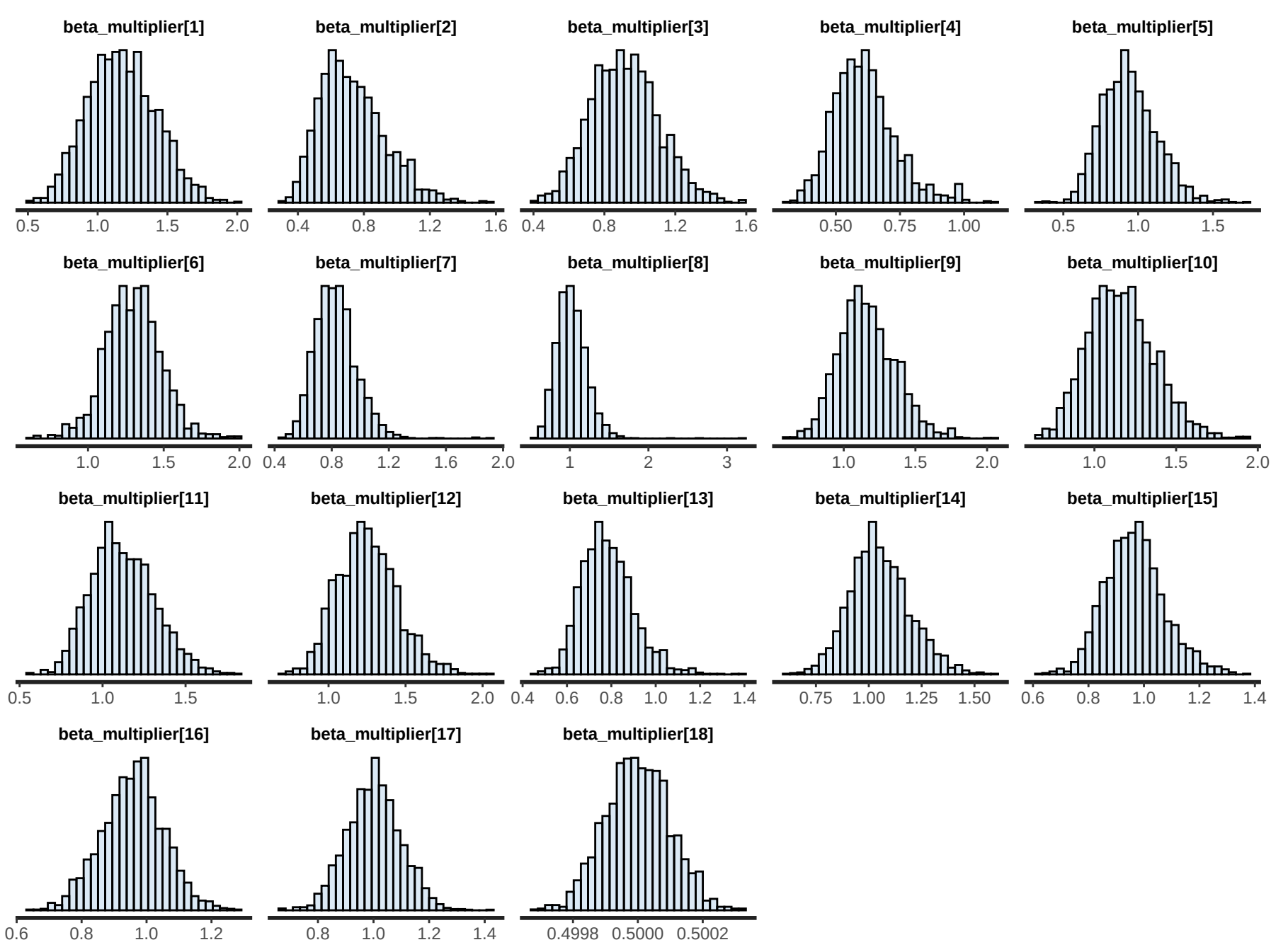

4
6
8
10
duration_hosp_mod


4
8
12
16
duration_hosp_icu


0.025
0.050
0.075
0.100
0.125
frac_hosp


0.15
0.20
0.25
0.30
frac_icu


0.5
0.6
0.7
0.8
frac_mort


beta_multiplier[1]
0.5 1.0 1.5 2.0
beta_multiplier[2]
0.4 0.8 1.2 1.6
beta_multiplier[3]
0.4 0.8 1.2 1.6
beta_multiplier[4]
0.50 0.75 1.00
beta_multiplier[5]
0.5 1.0 1.5
beta_multiplier[6]
1.0 1.5 2.0
beta_multiplier[7]
0.4 0.8 1.2 1.6 2.0
beta_multiplier[8]
1 2 3
beta_multiplier[9]
1.0 1.5 2.0
beta_multiplier[10]
1.0 1.5 2.0
beta_multiplier[11]
0.5 1.0 1.5
beta_multiplier[12]
1.0 1.5 2.0
beta_multiplier[13]
0.4 0.6 0.8 1.0 1.2 1.4
beta_multiplier[14]
0.75 1.00 1.25 1.50
beta_multiplier[15]
0.6 0.8 1.0 1.2 1.4
beta_multiplier[16]
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beta_multiplier[17]
0.8 1.0 1.2 1.4
beta_multiplier[18]
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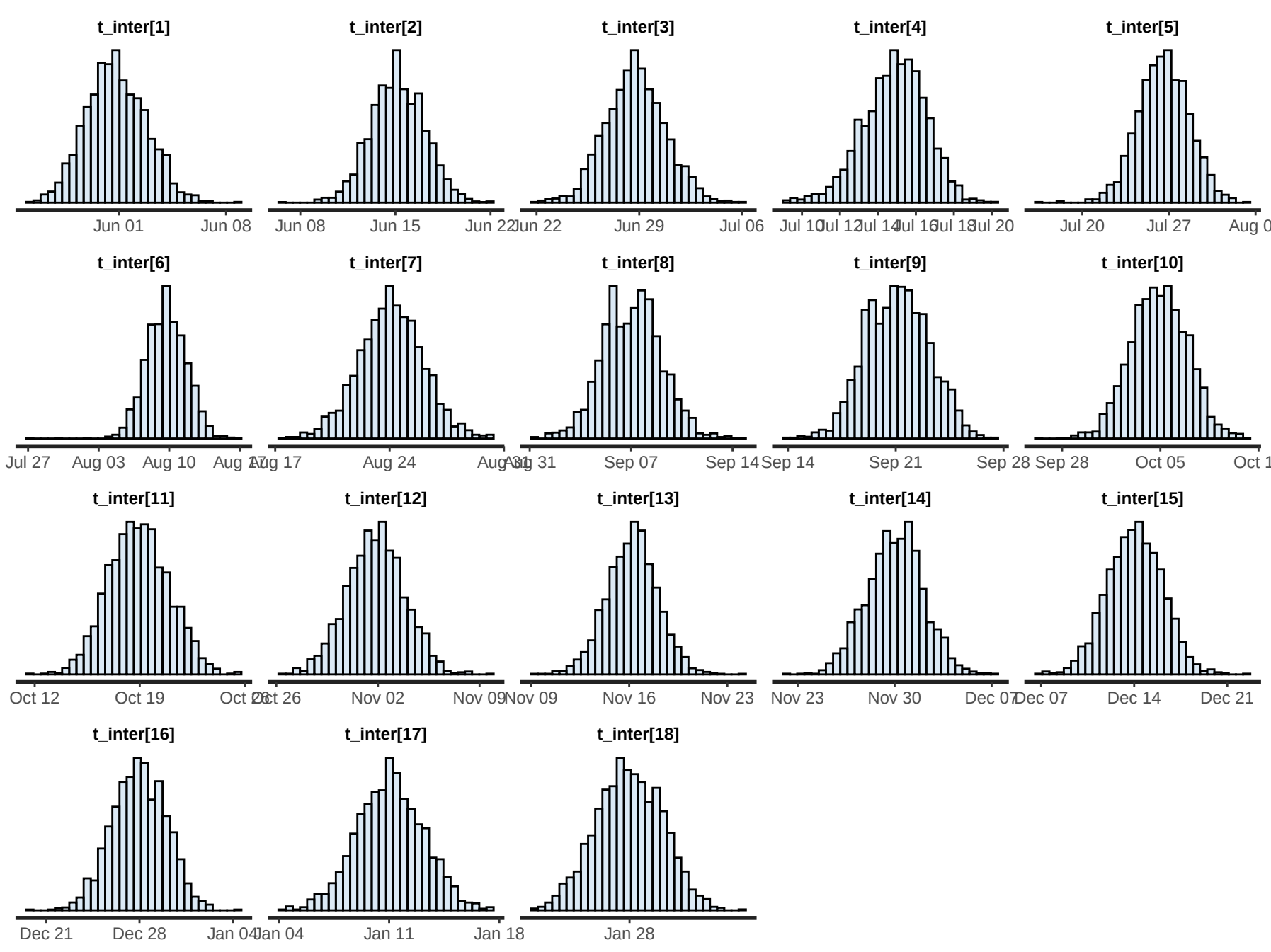
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Jun 01
Jun 08
t_inter[2]
Jun 08
Jun 15
Jun 22
t_inter[3]
Jun 22
Jun 29
Jul 06
t_inter[4]
Jul 10
Jul 12
Jul 14
Jul 16
Jul 18
Jul 20
t_inter[5]
Jul 20
Jul 27
Aug 0
t_inter[6]
Jul 27
Aug 03
Aug 10
Aug 17
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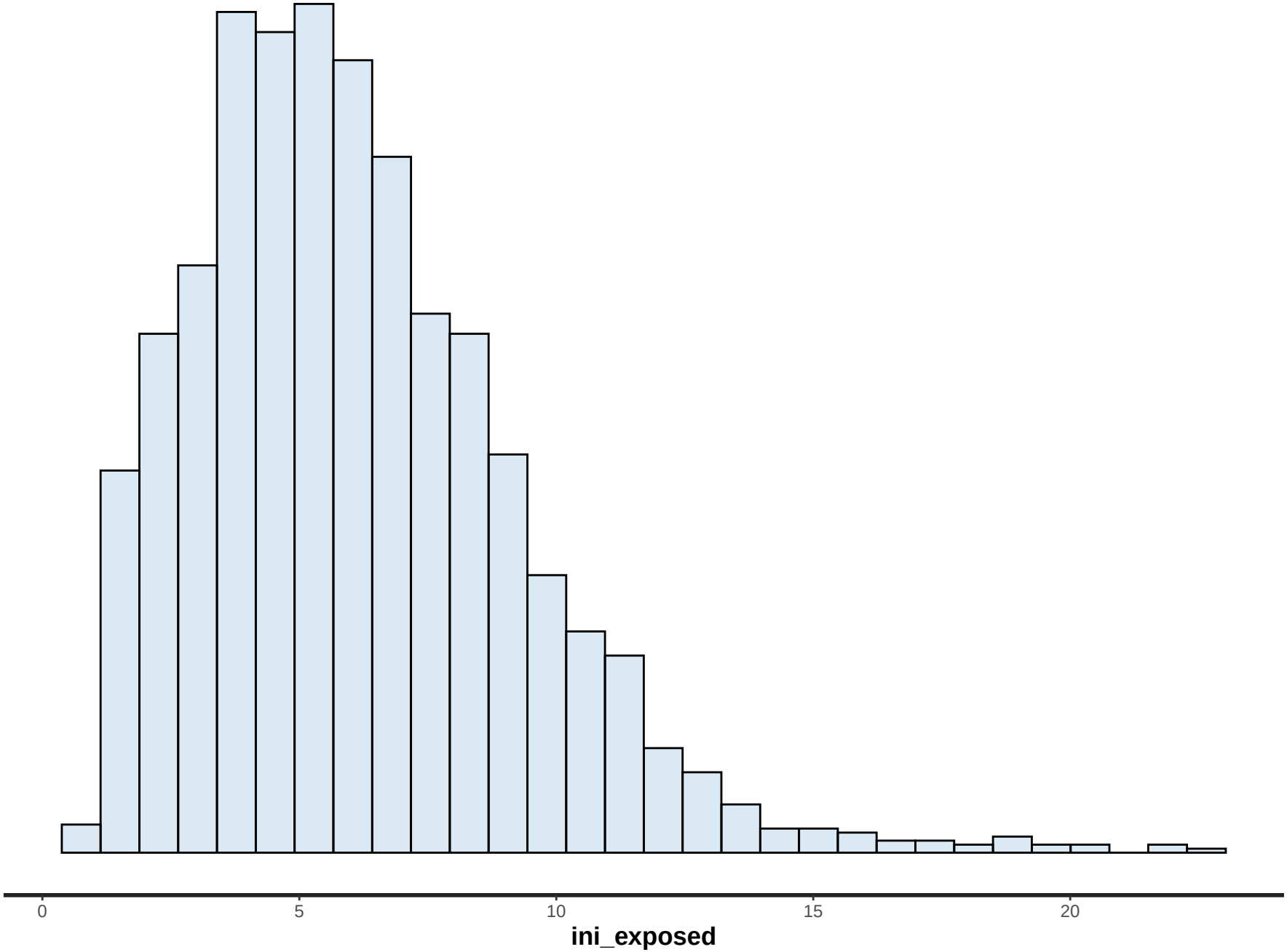
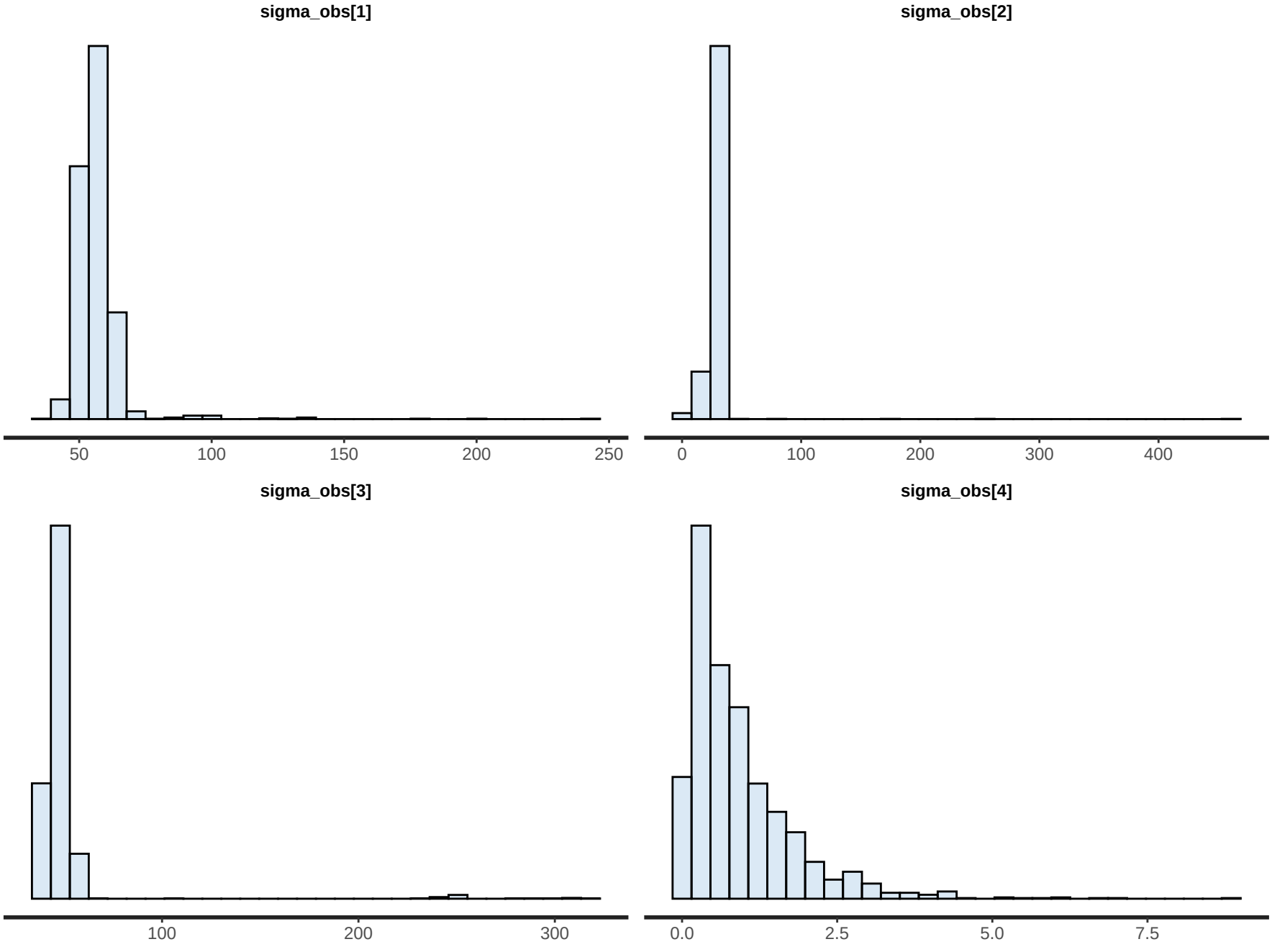
Aug 17
Aug 24
Aug 31
t_inter[8]
Aug 31
Sep 07
Sep 14
t_inter[9]
Sep 14
Sep 21
Sep 28
t_inter[10]
Sep 28
Oct 05
Oct 1
t_inter[11]
Oct 12
Oct 19
Oct 26
t_inter[12]
Oct 26
Nov 02
Nov 09
t_inter[13]
Nov 09
Nov 16
Nov 23
t_inter[14]
Nov 23
Nov 30
Dec 07
t_inter[15]
Dec 07
Dec 14
Dec 21
t_inter[16]
Dec 21
Dec 28
Jan 04
t_inter[17]
Jan 04
Jan 11
Jan 18
t_inter[18]
Jan 28


0
5
10
15
20
ini_exposed


sigma_obs[1]
50
100
150
200
250
sigma_obs[2]
0
100
200
300
400
sigma_obs[3]
100
200
300
sigma_obs[4]
0.0
2.5
5.0
7.5