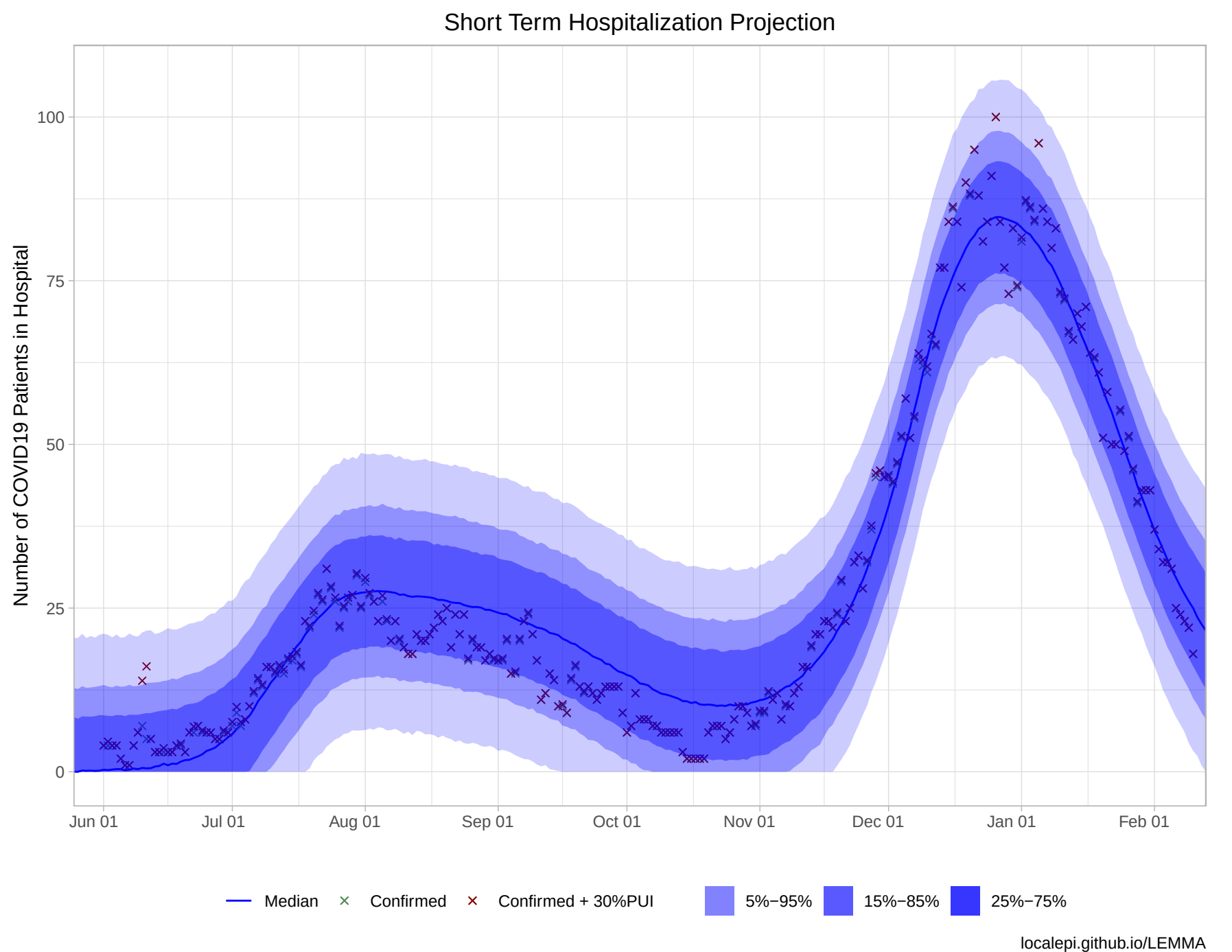
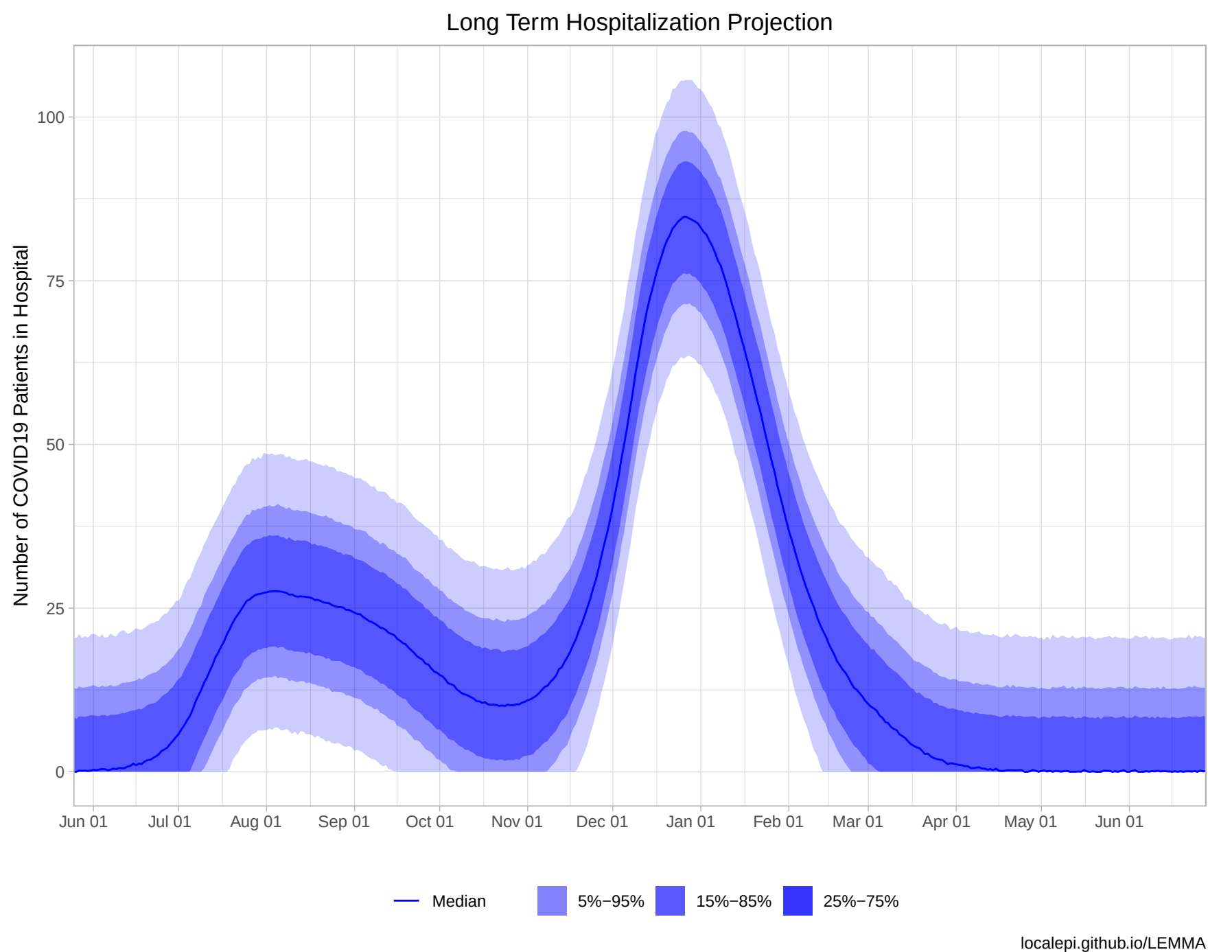
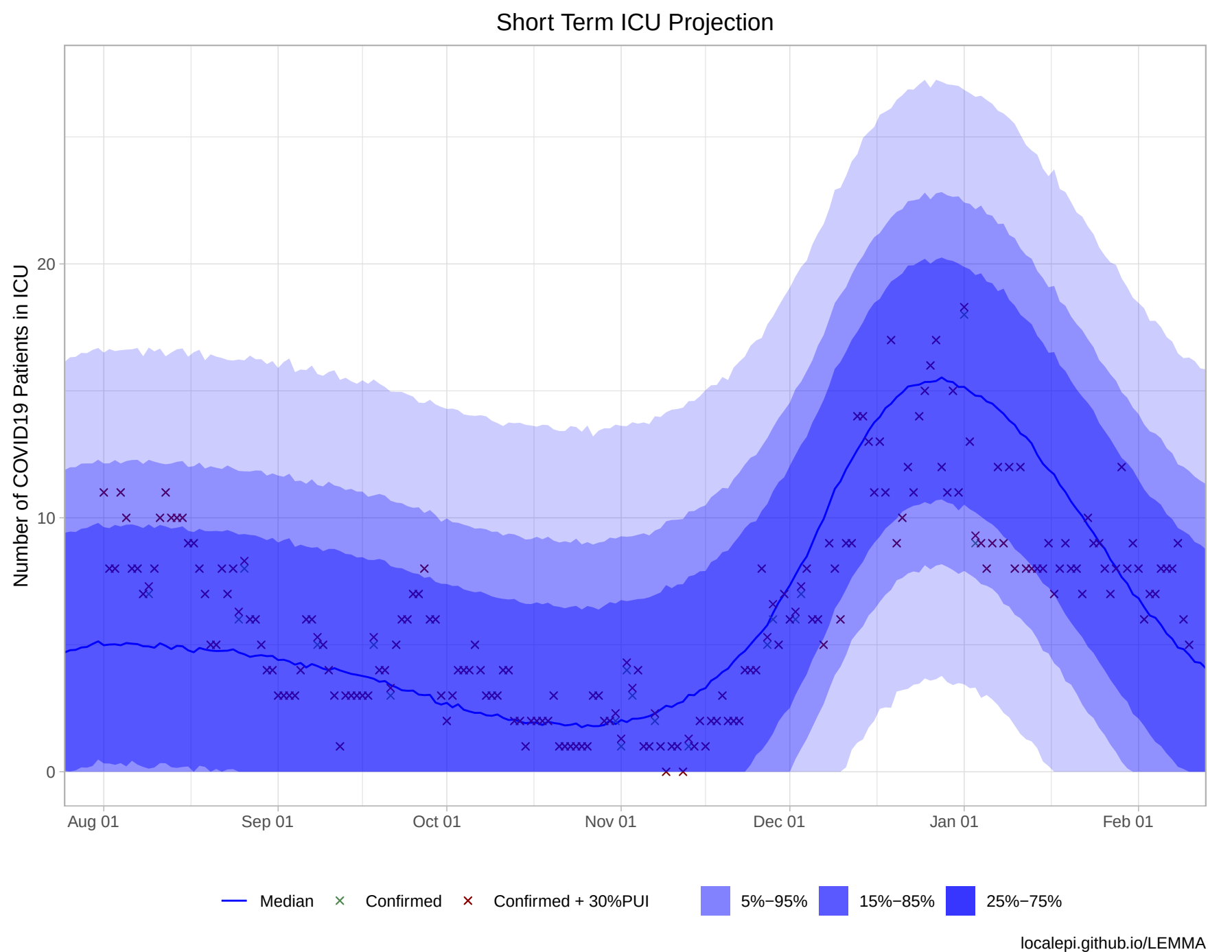
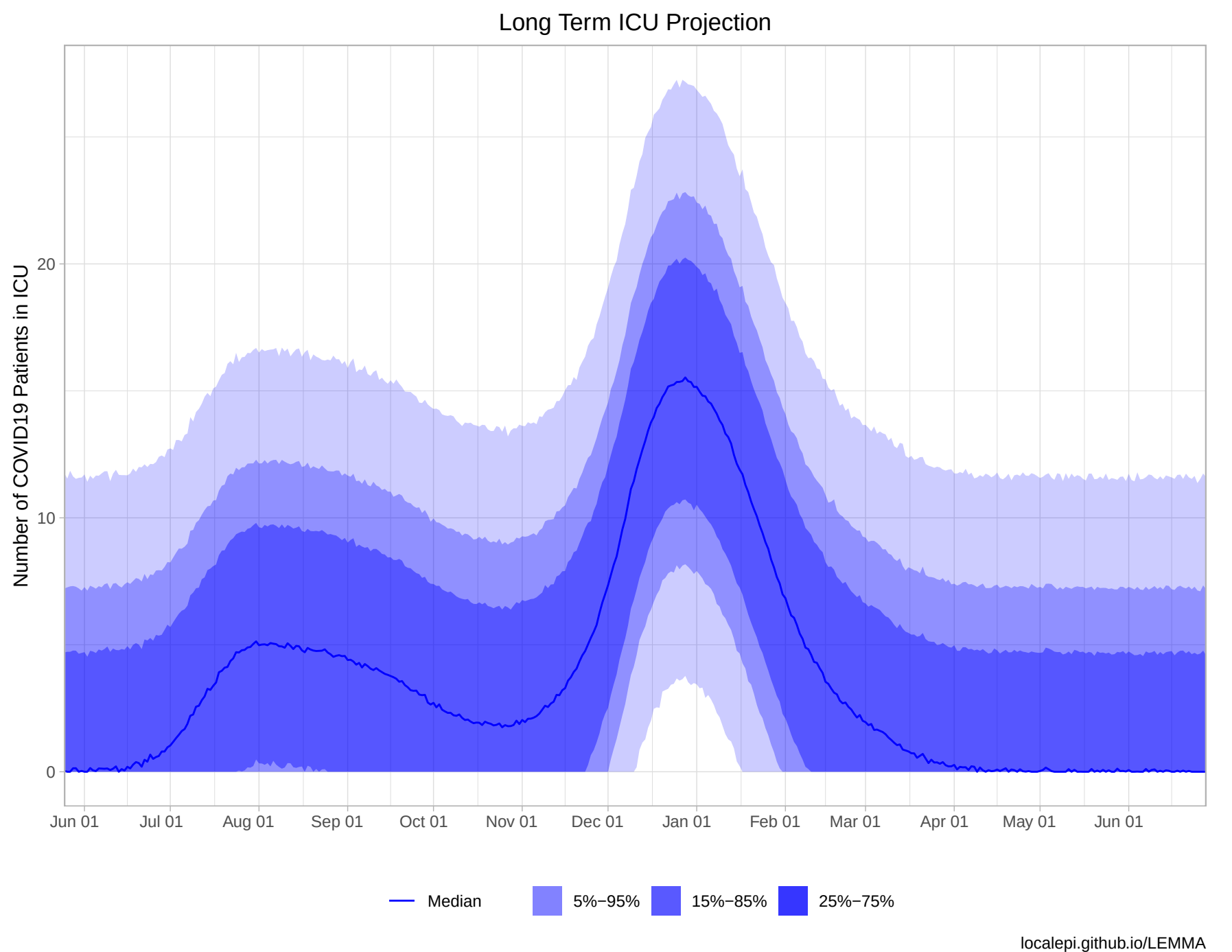
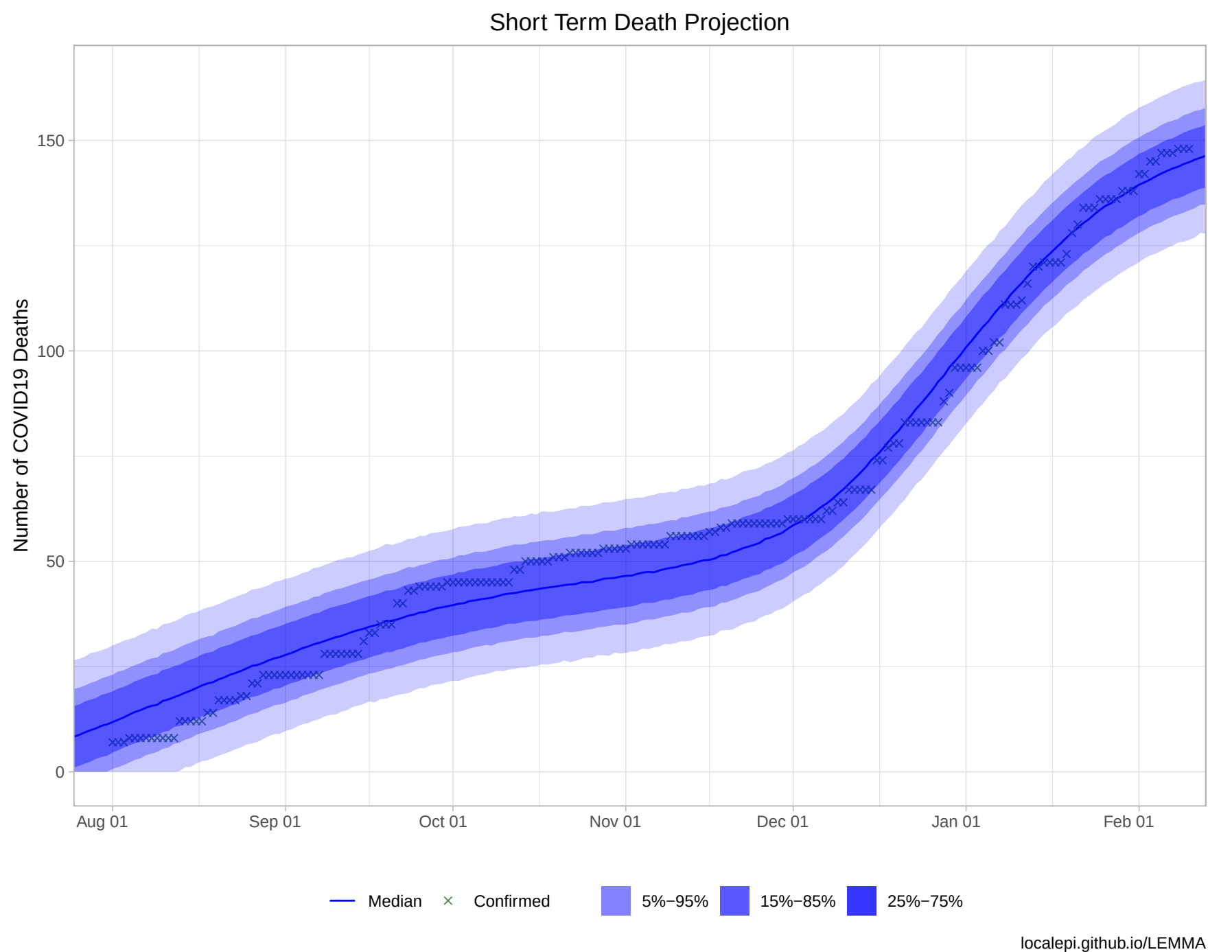
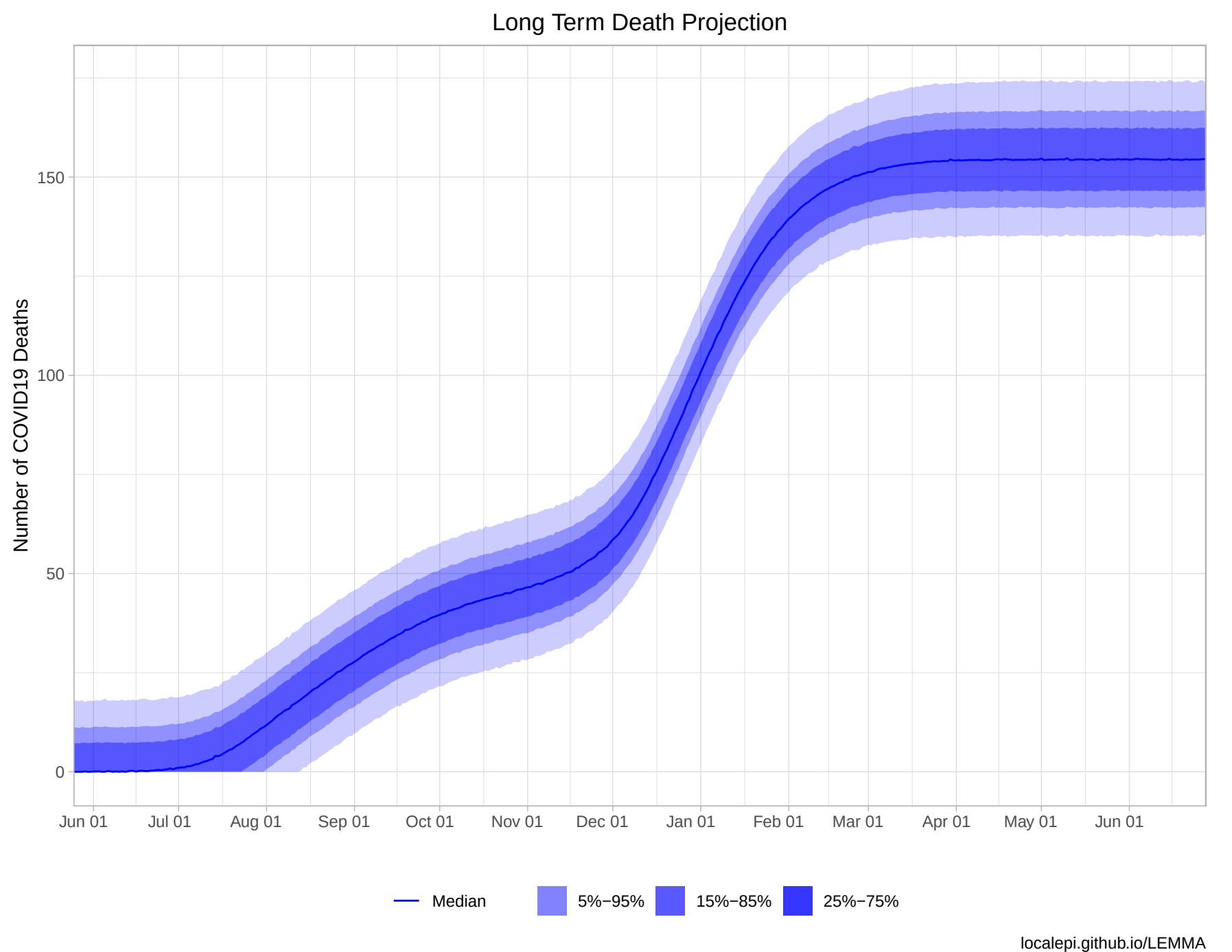

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
100
75
50
25
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

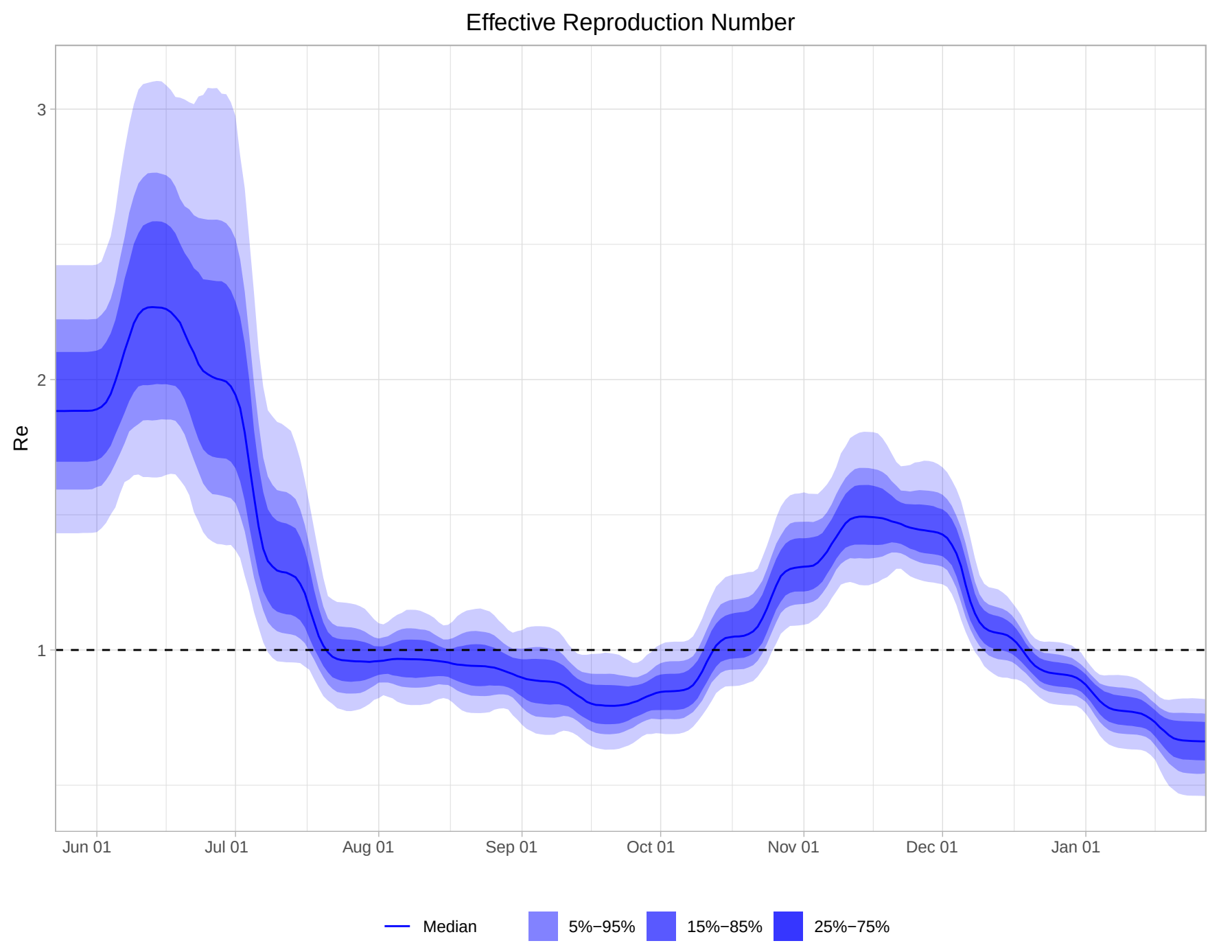

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
100
75
50
25
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Apr 01
May 01
Jun 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


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

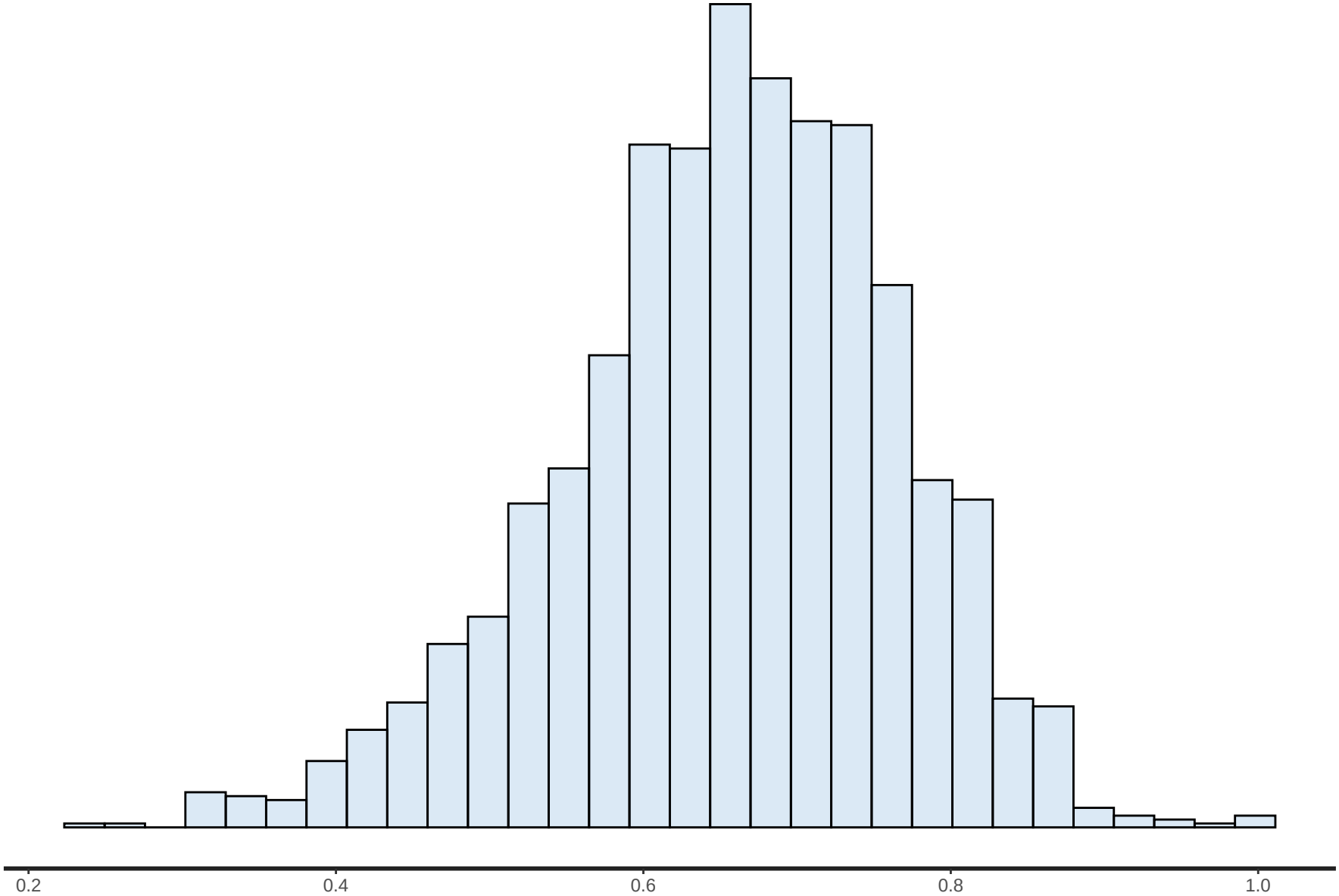

Short Term Death Projection
Number of COVID19 Deaths
150
100
50
0
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

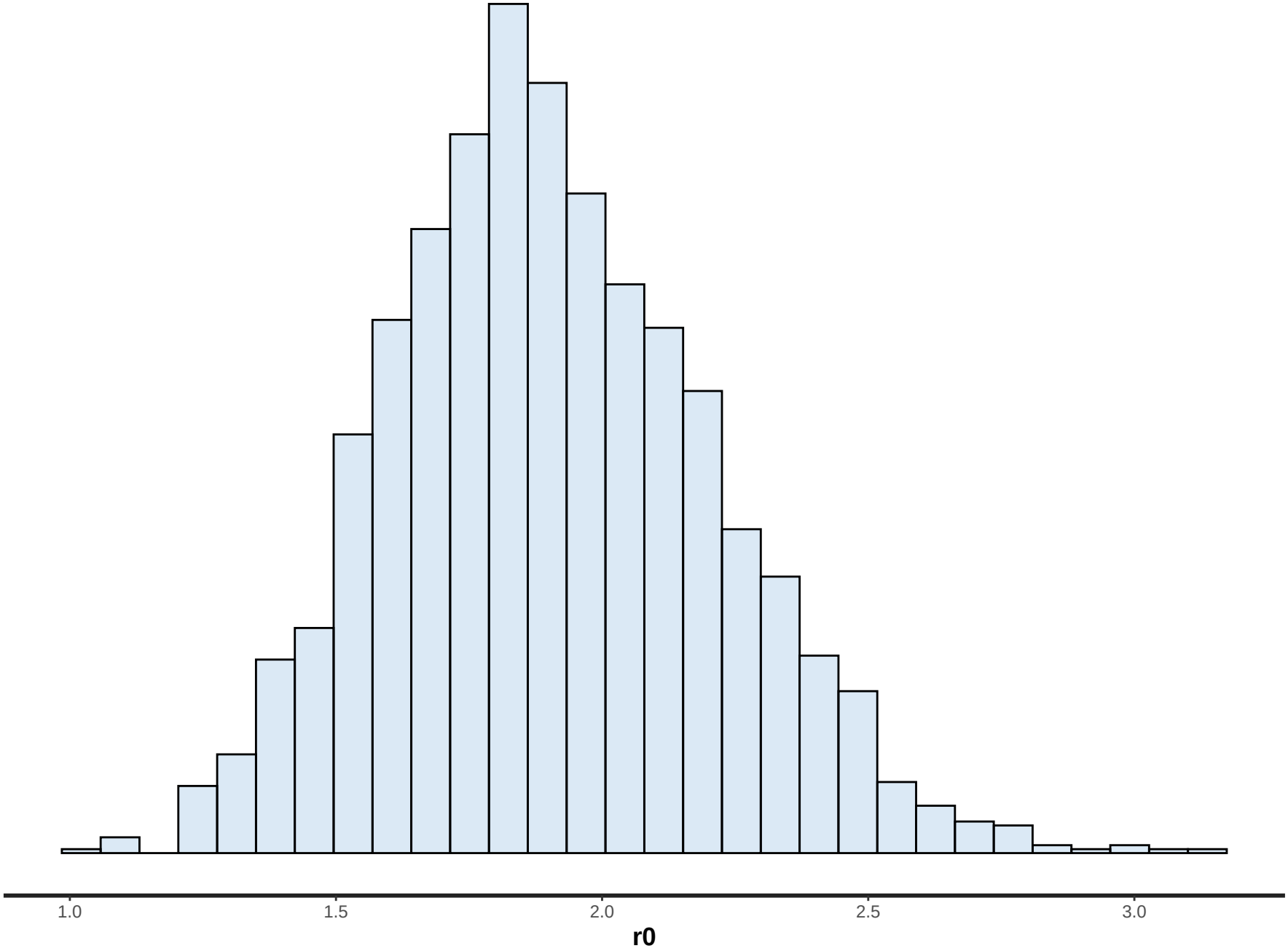

Long Term Death Projection
Number of COVID19 Deaths
150
100
50
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Apr 01
May 01
Jun 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

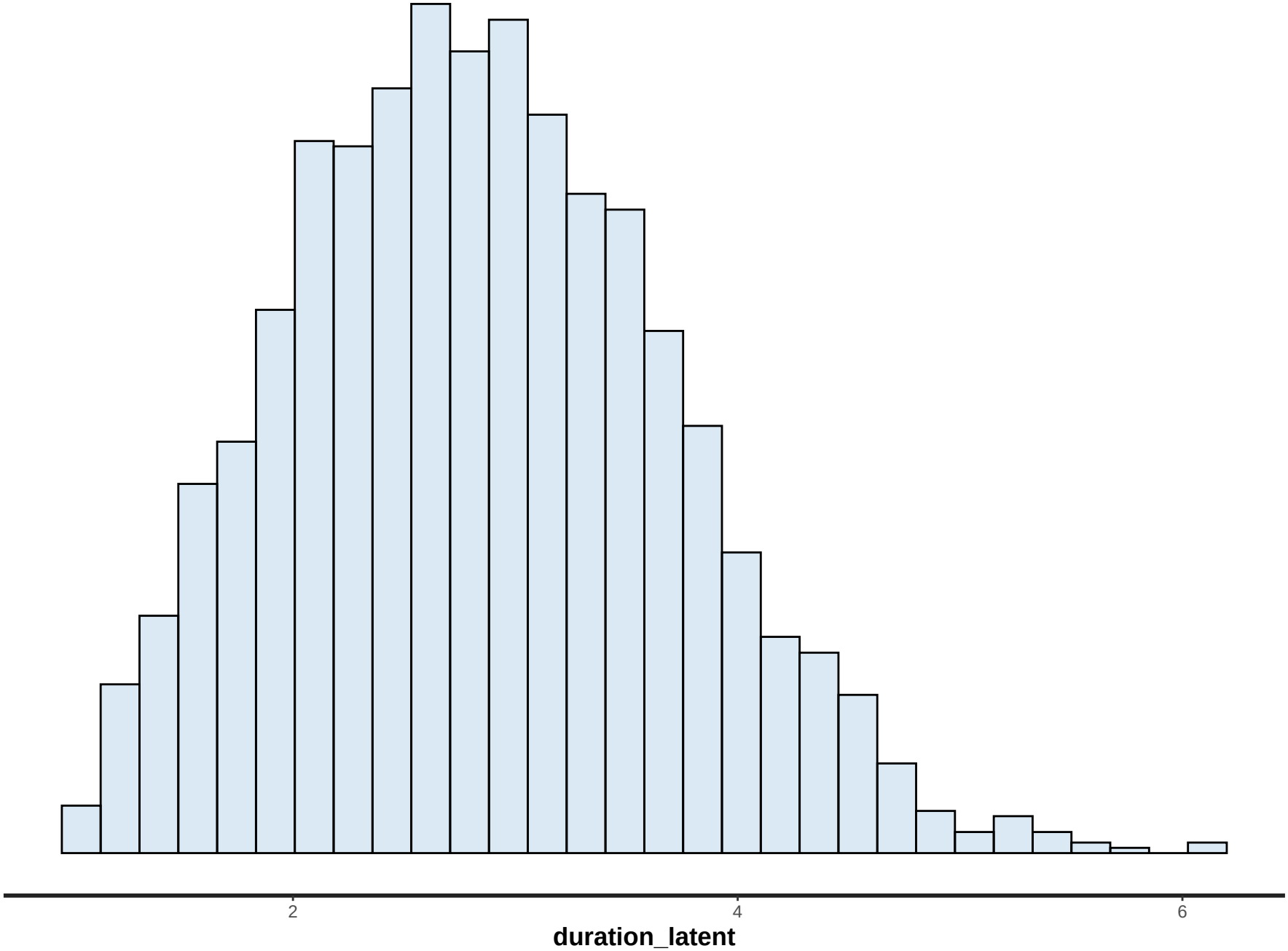

Effective Reproduction Number
Re
3
2
1
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
5%−95%
15%−85%
25%−75%

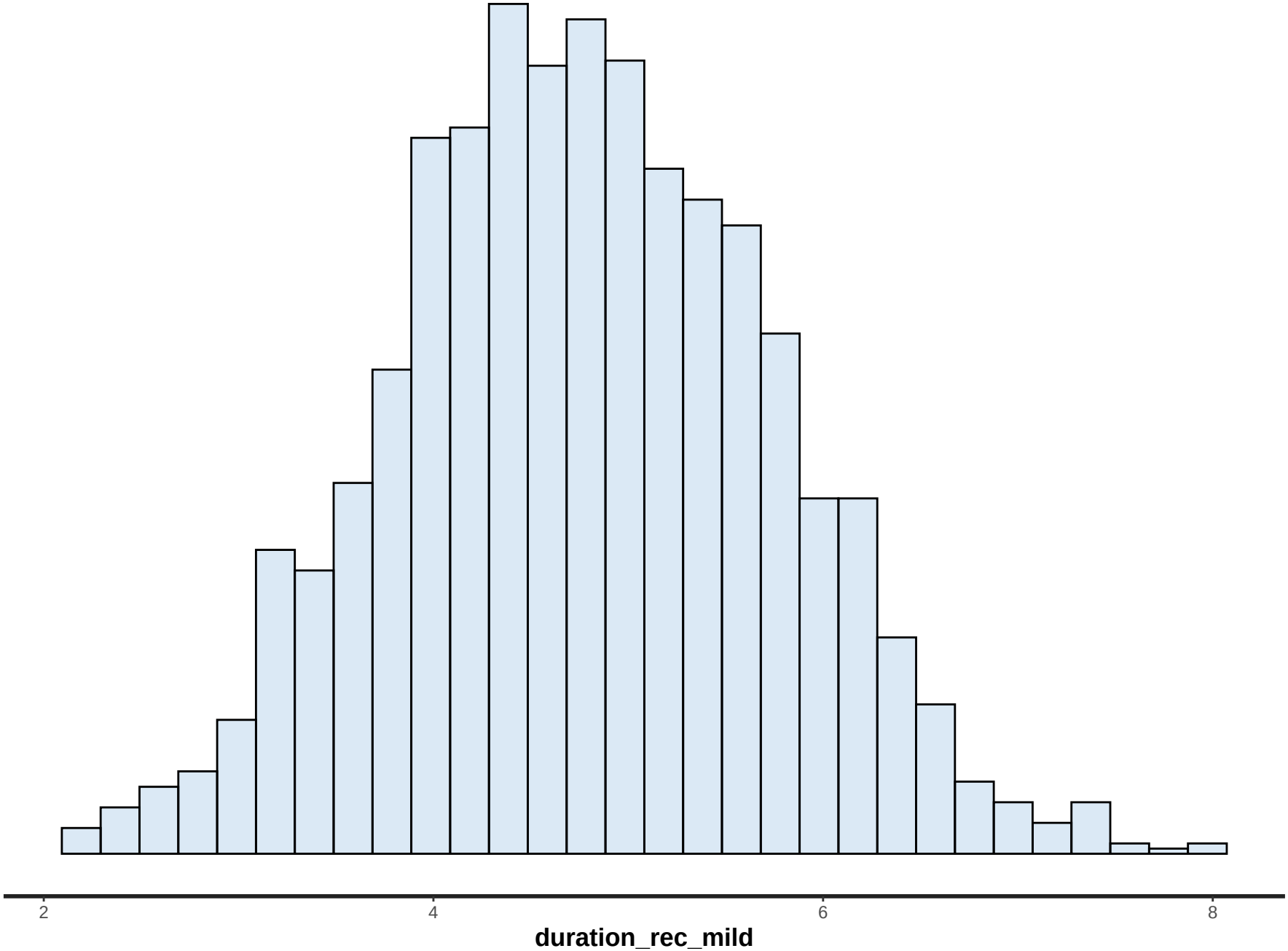
Rt as of 2021−01−27

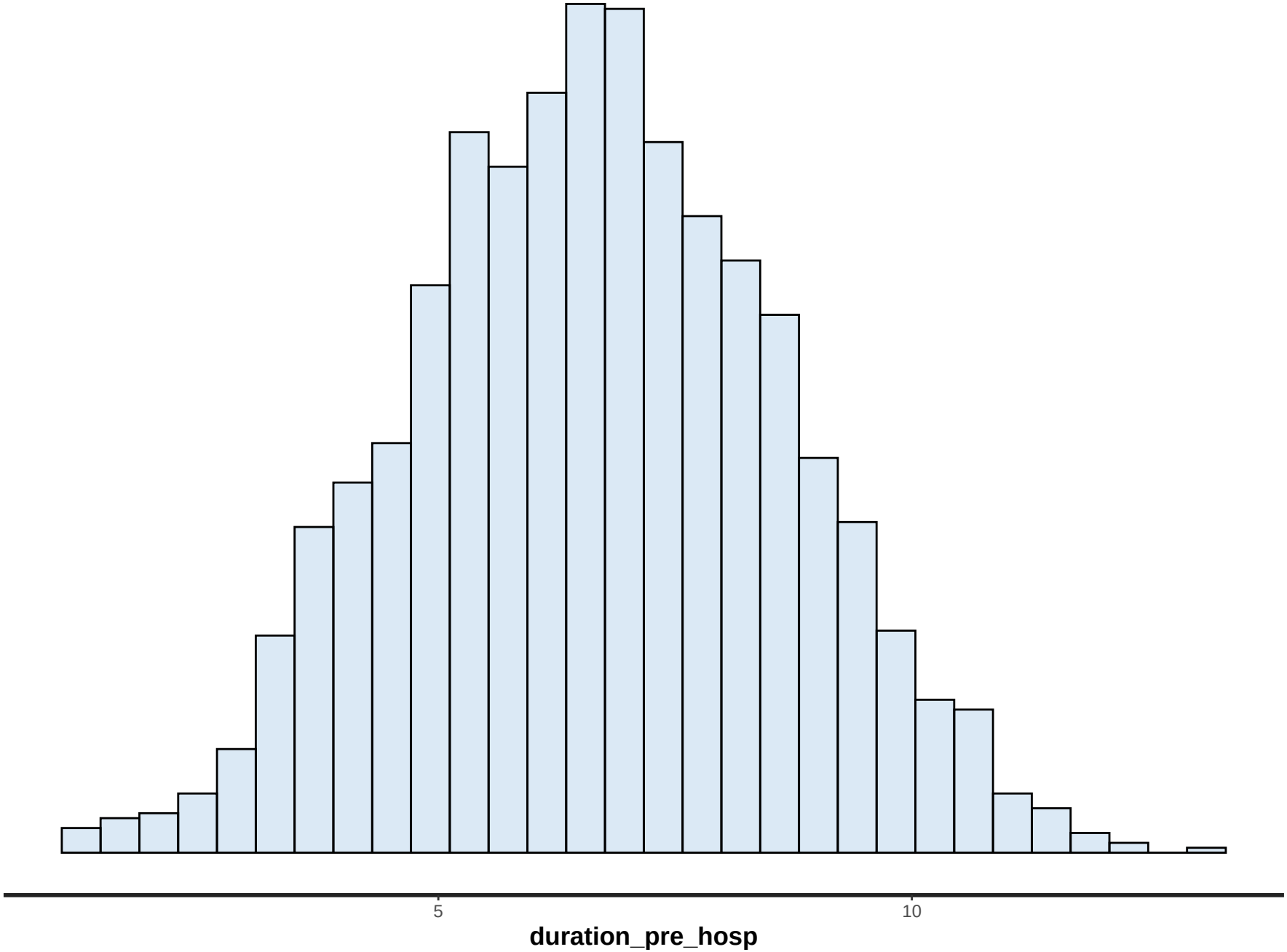
5%	10%	25%	50%	75%	90%	95%
0.46	0.51	0.59	0.66	0.73	0.79	0.82

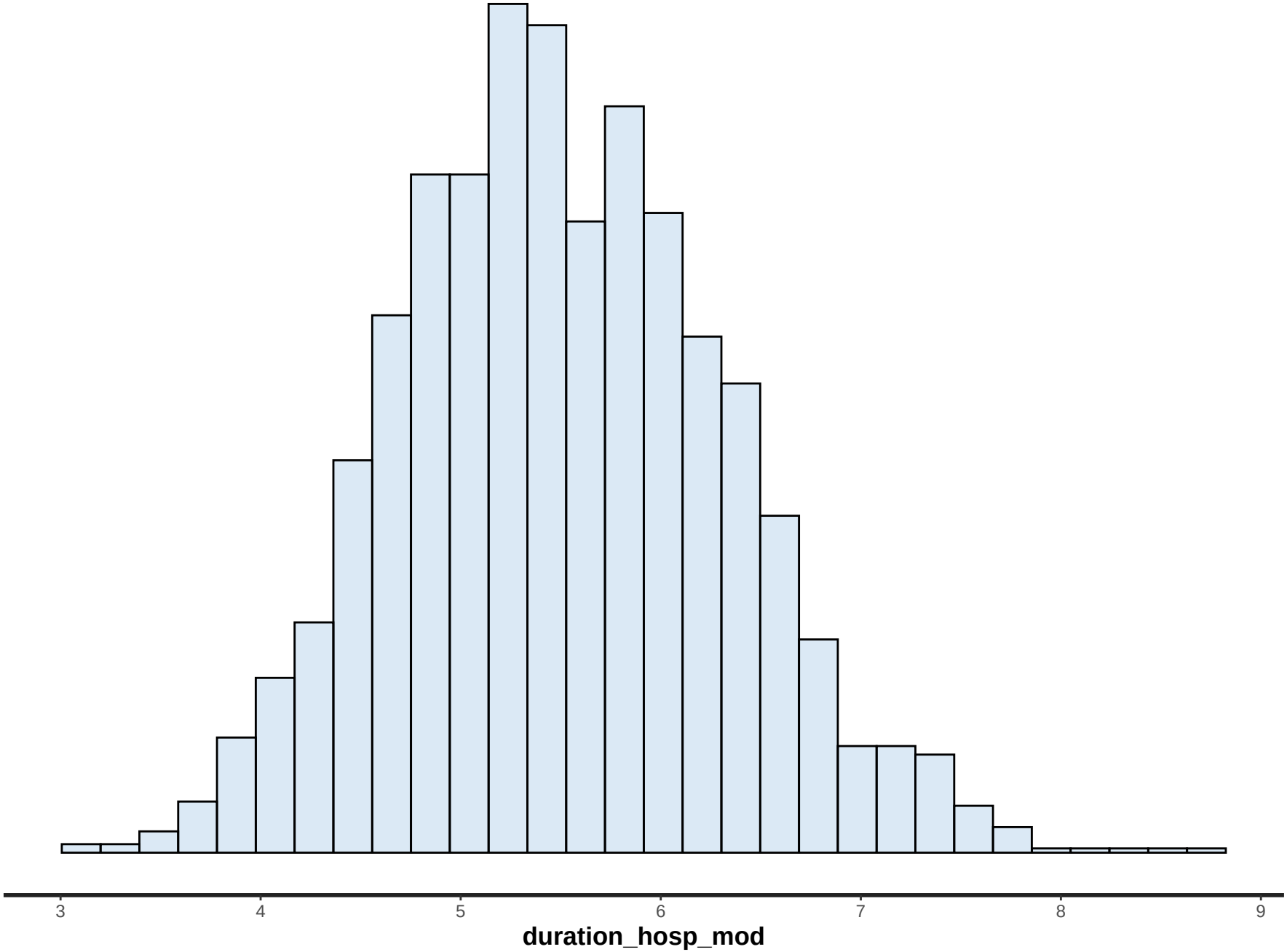


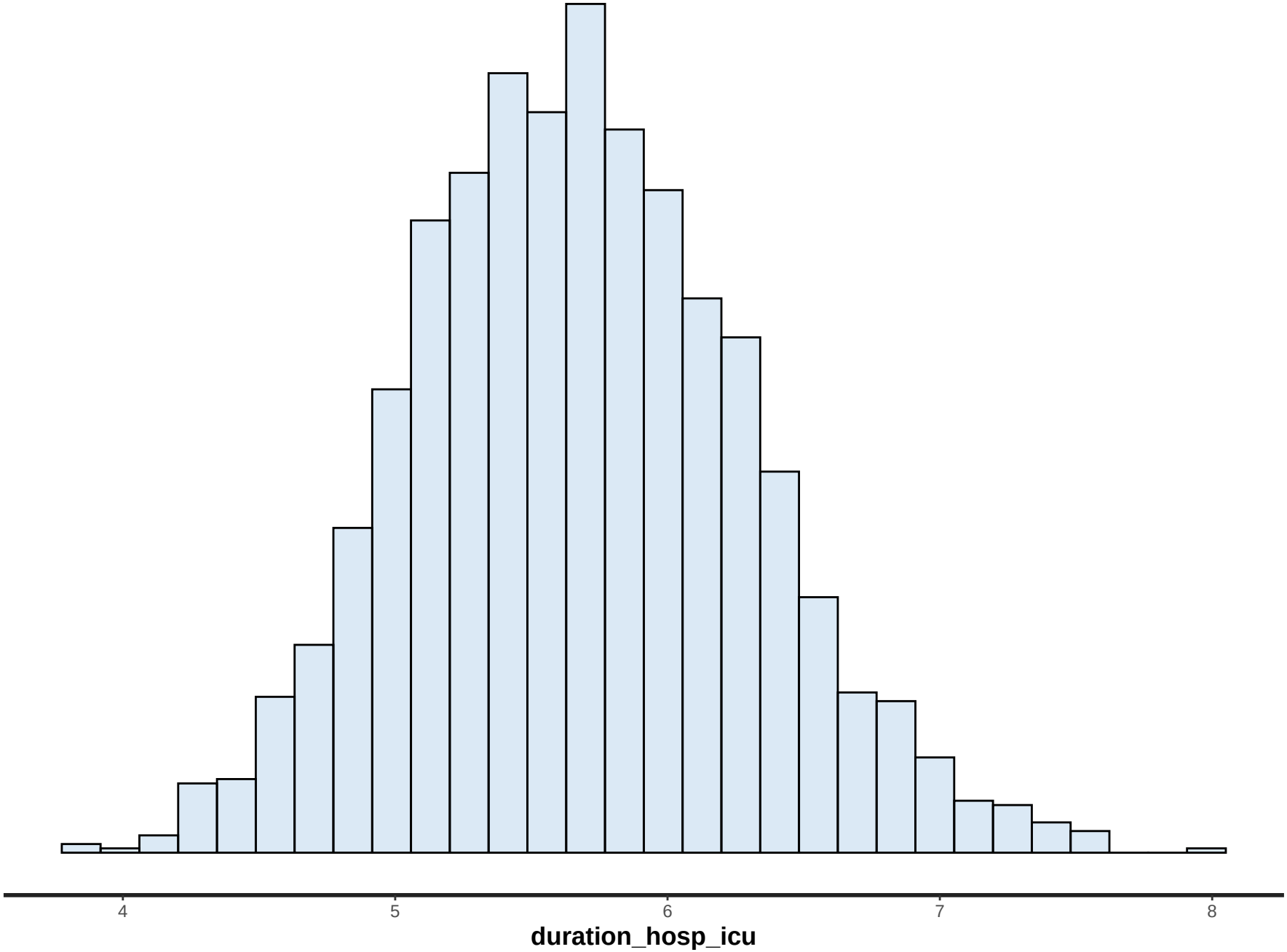

1.0
1.5
2.0
2.5
3.0
r0

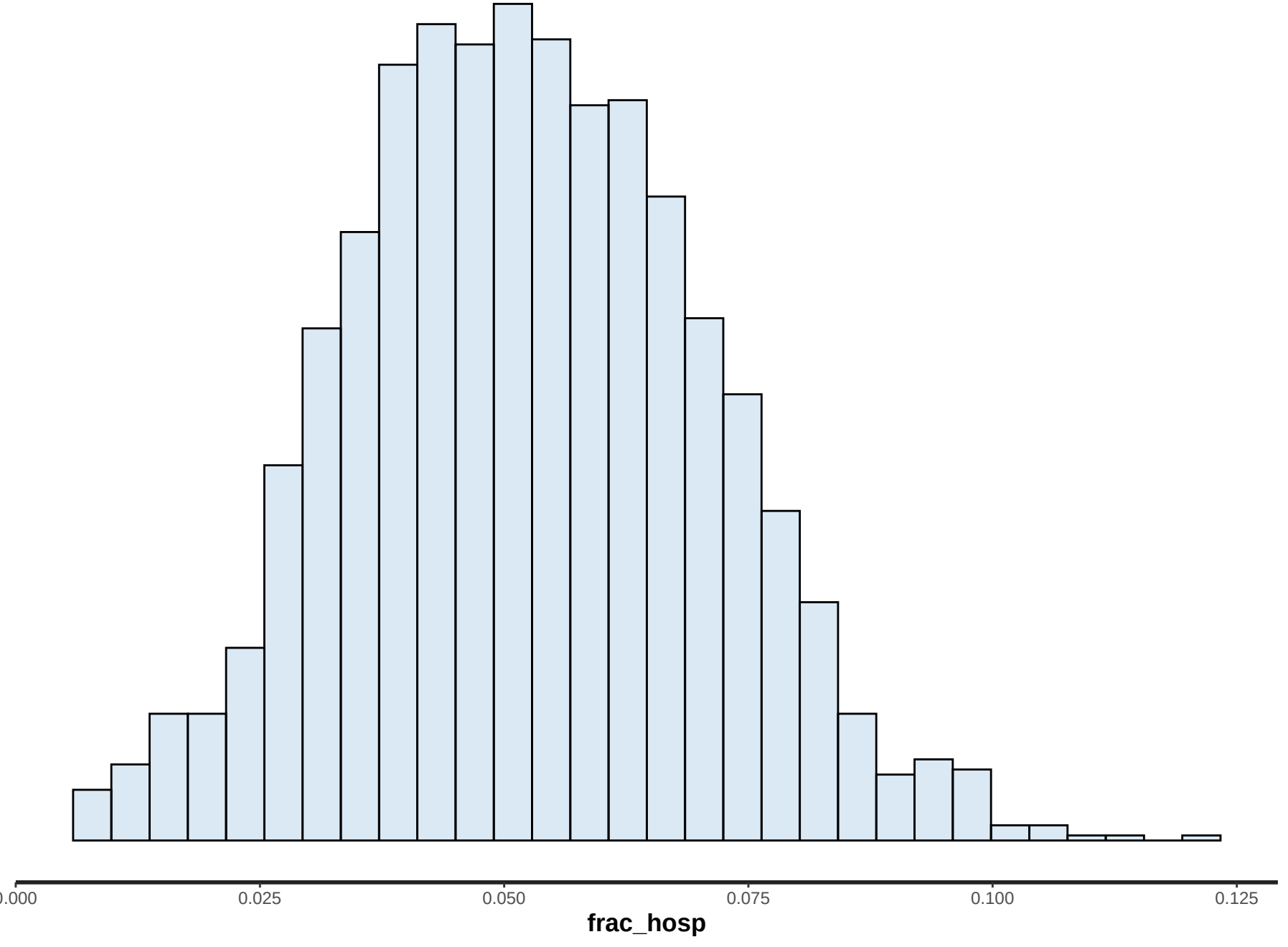

2
4
6
duration_latent

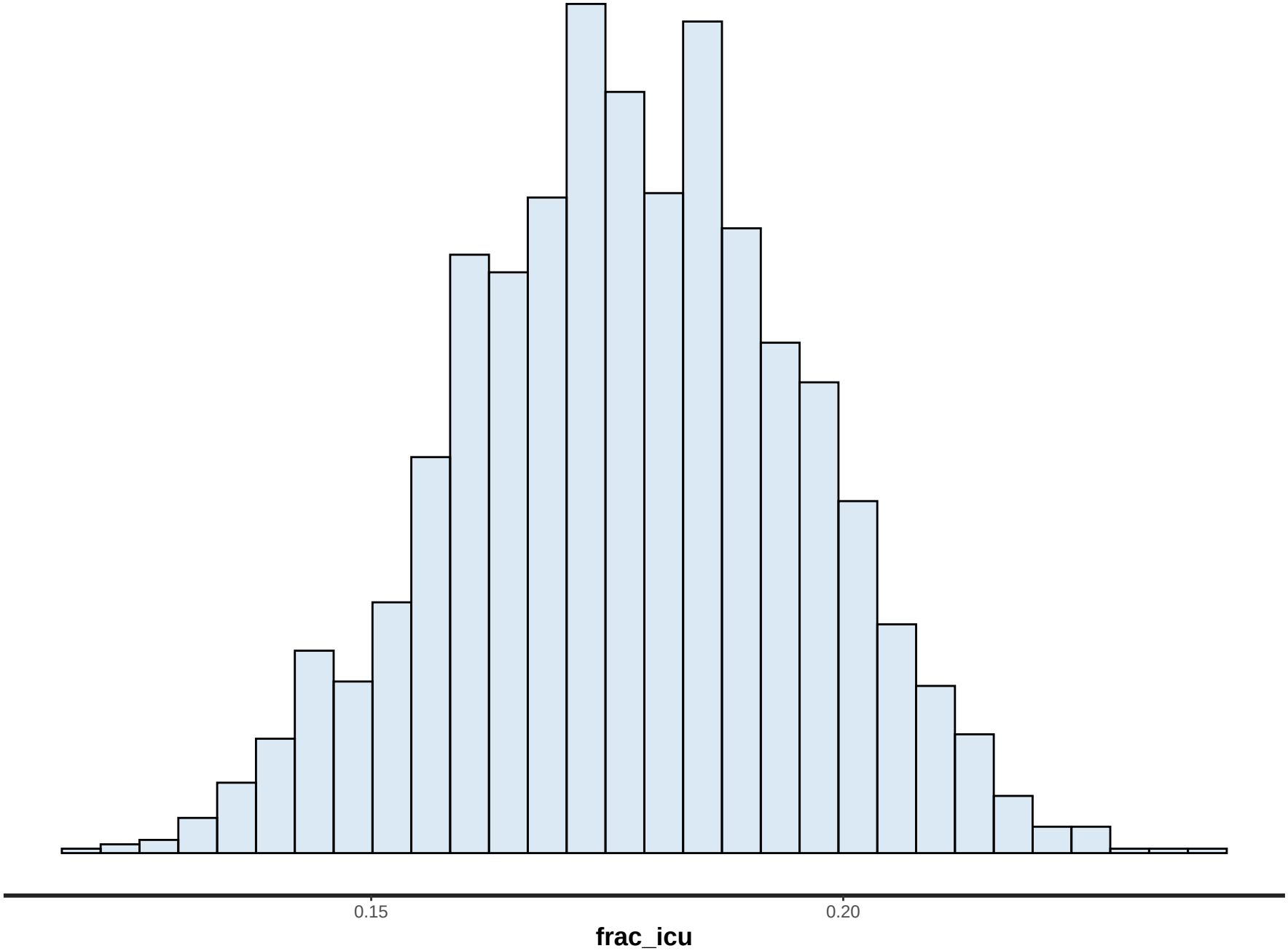

2
4
6
8
duration_rec_mild

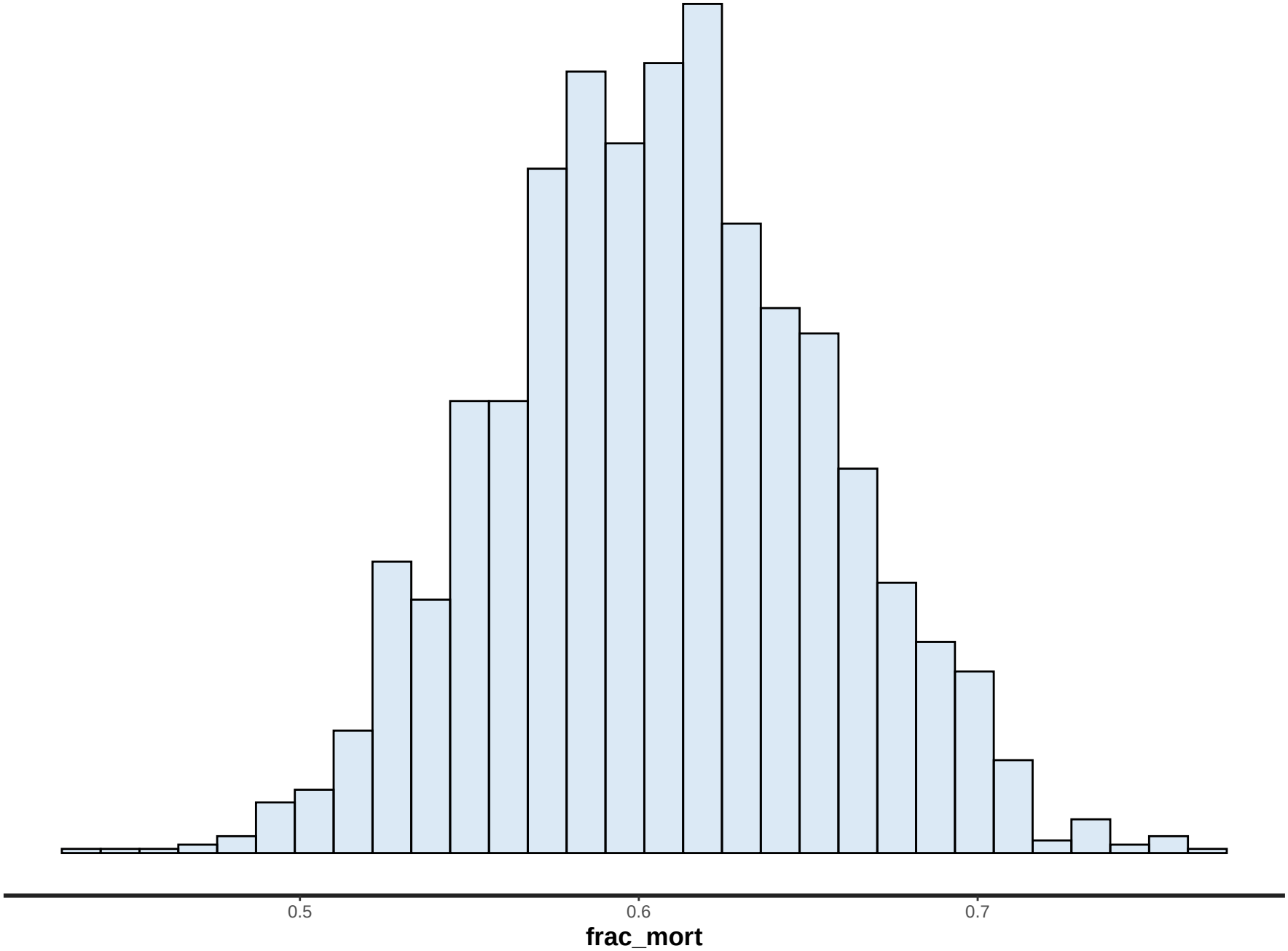

5
10
duration_pre_hosp

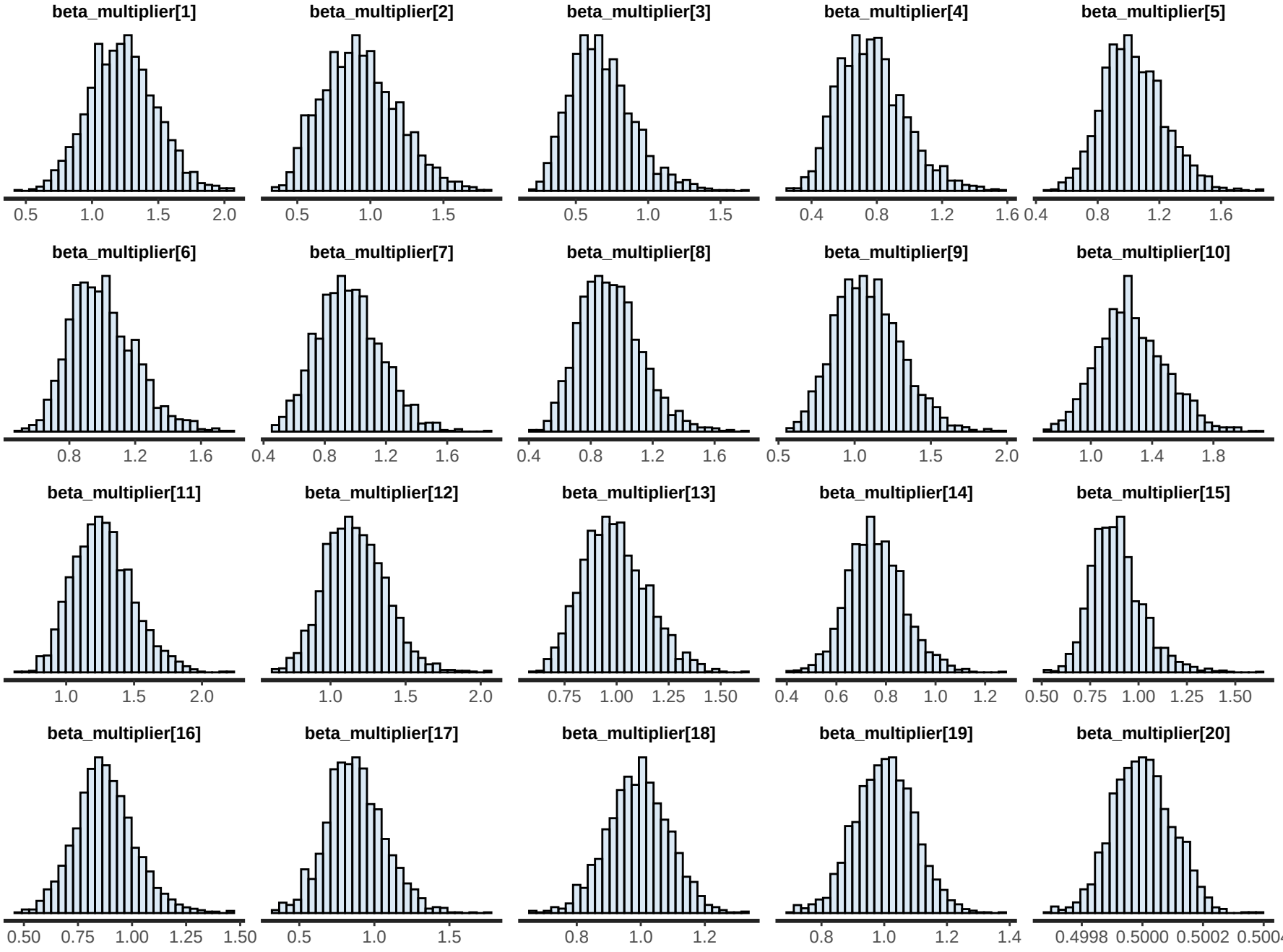

3
4
5
6
7
8
9
duration_hosp_mod


4
5
6
7
8
duration_hosp_icu


0.000
0.025
0.050
0.075
0.100
0.125
frac_hosp


0.15
0.20
frac_icu


0.5
0.6
0.7
frac_mort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beta_multiplier[2]
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beta_multiplier[3]
0.5 1.0 1.5
beta_multiplier[4]
0.4 0.8 1.2 1.6
beta_multiplier[5]
0.4 0.8 1.2 1.6
beta_multiplier[6]
0.8 1.2 1.6
beta_multiplier[7]
0.4 0.8 1.2 1.6
beta_multiplier[8]
0.4 0.8 1.2 1.6
beta_multiplier[9]
0.5 1.0 1.5 2.0
beta_multiplier[10]
1.0 1.4 1.8
beta_multiplier[11]
1.0 1.5 2.0
beta_multiplier[12]
1.0 1.5 2.0
beta_multiplier[13]
0.75 1.00 1.25 1.50
beta_multiplier[14]
0.4 0.6 0.8 1.0 1.2
beta_multiplier[15]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[16]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[17]
0.5 1.0 1.5
beta_multiplier[18]
0.8 1.0 1.2
beta_multiplier[19]
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beta_multiplier[20]
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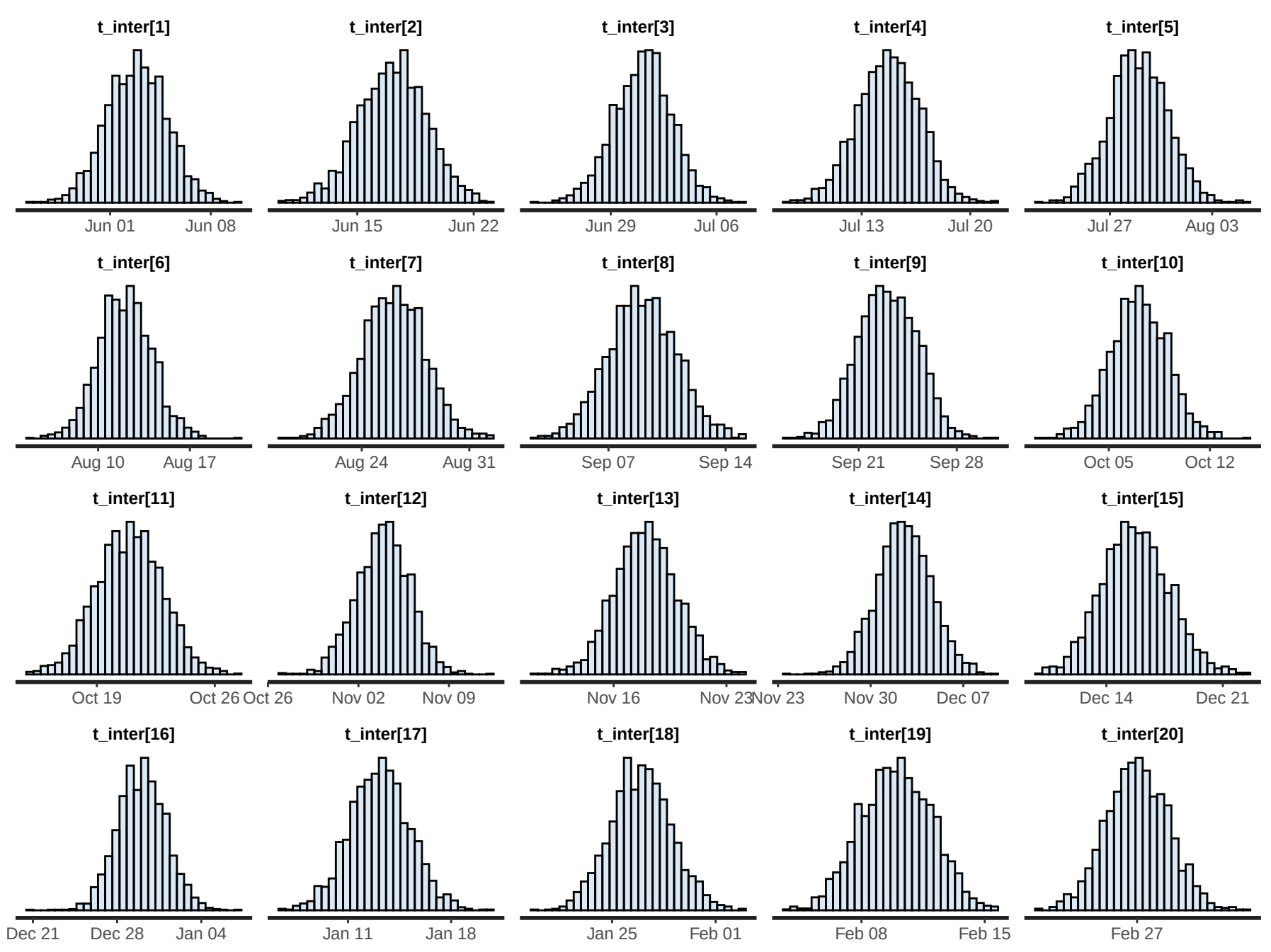
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Jun 01
Jun 08
t_inter[2]
Jun 15
Jun 22
t_inter[3]
Jun 29
Jul 06
t_inter[4]
Jul 13
Jul 20
t_inter[5]
Jul 27
Aug 03
t_inter[6]
Aug 10
Aug 17
t_inter[7]
Aug 24
Aug 31
t_inter[8]
Sep 07
Sep 14
t_inter[9]
Sep 21
Sep 28
t_inter[10]
Oct 05
Oct 12
t_inter[11]
Oct 19
Oct 26
t_inter[12]
Oct 26
Nov 02
Nov 09
t_inter[13]
Nov 16
Nov 23
t_inter[14]
Nov 23
Nov 30
Dec 07
t_inter[15]
Dec 14
Dec 21
t_inter[16]
Dec 21
Dec 28
Jan 04
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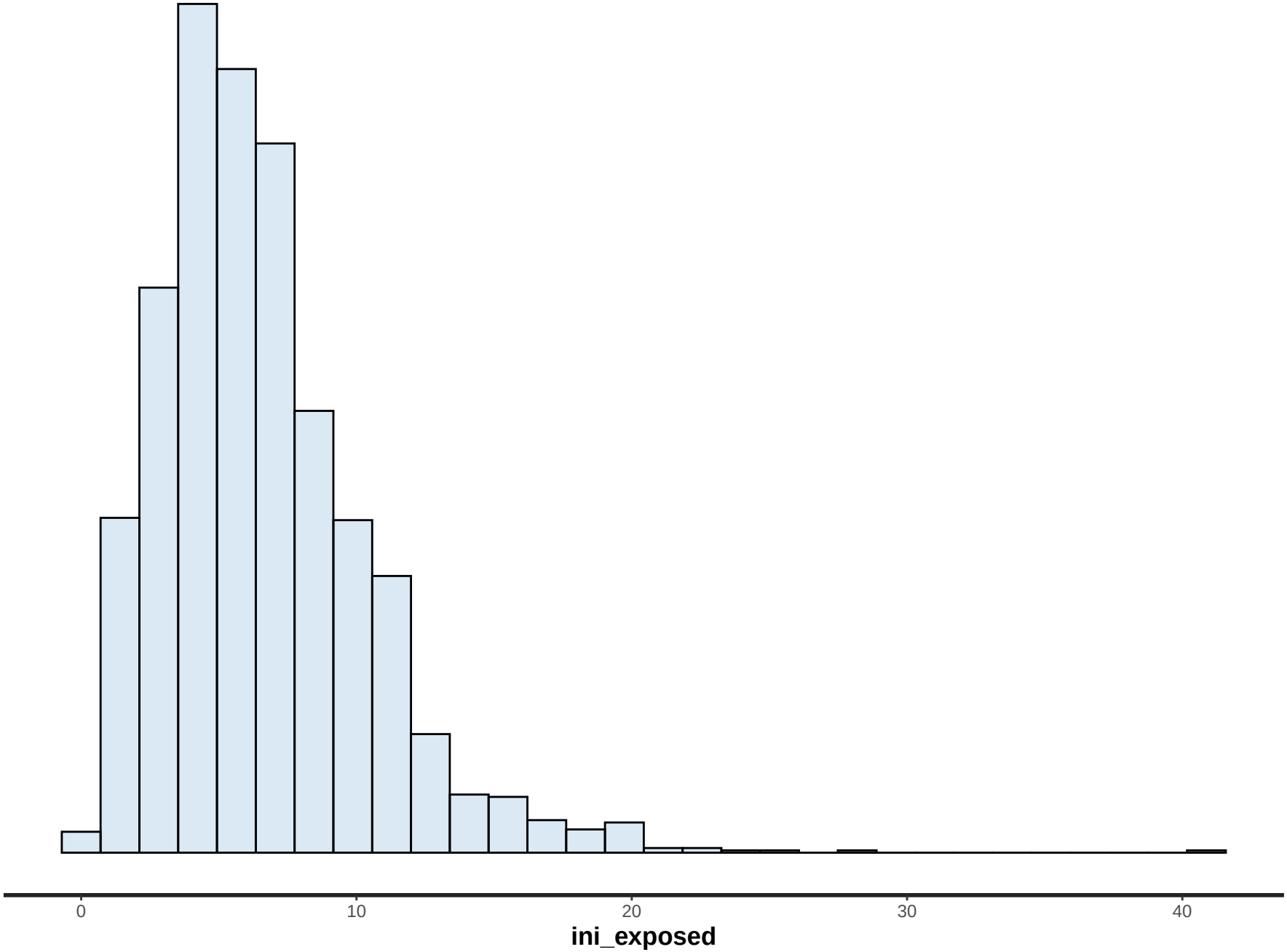
Jan 11
Jan 18
t_inter[18]
Jan 25
Feb 01
t_inter[19]
Feb 08
Feb 15
t_inter[20]
Feb 27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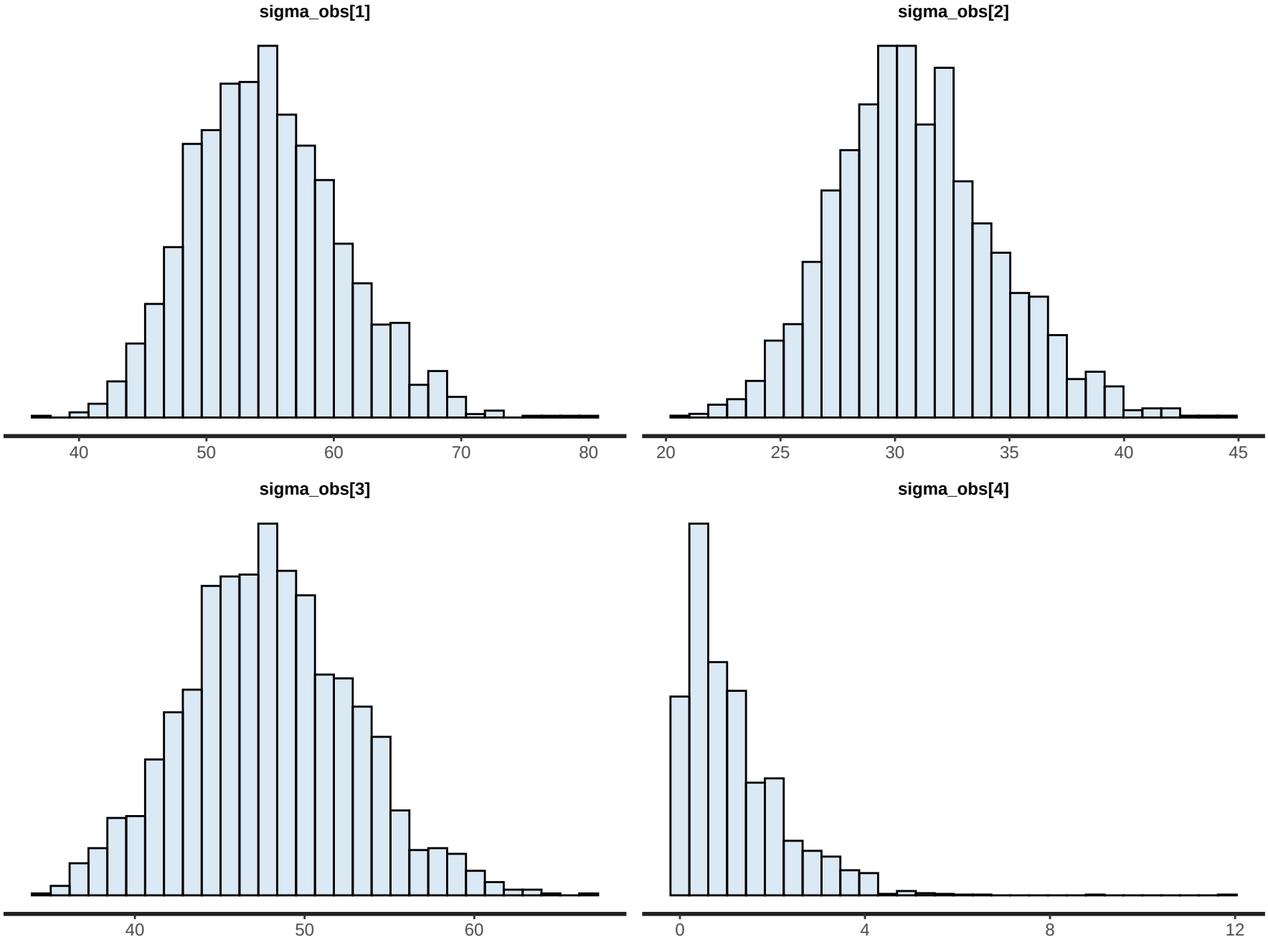
10
20
30
40
ini_exposed


sigma_obs[1]
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50
60
70
80
sigma_obs[2]
20
25
30
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sigma_obs[3]
40
50
60
sigma_obs[4]
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4
8
12