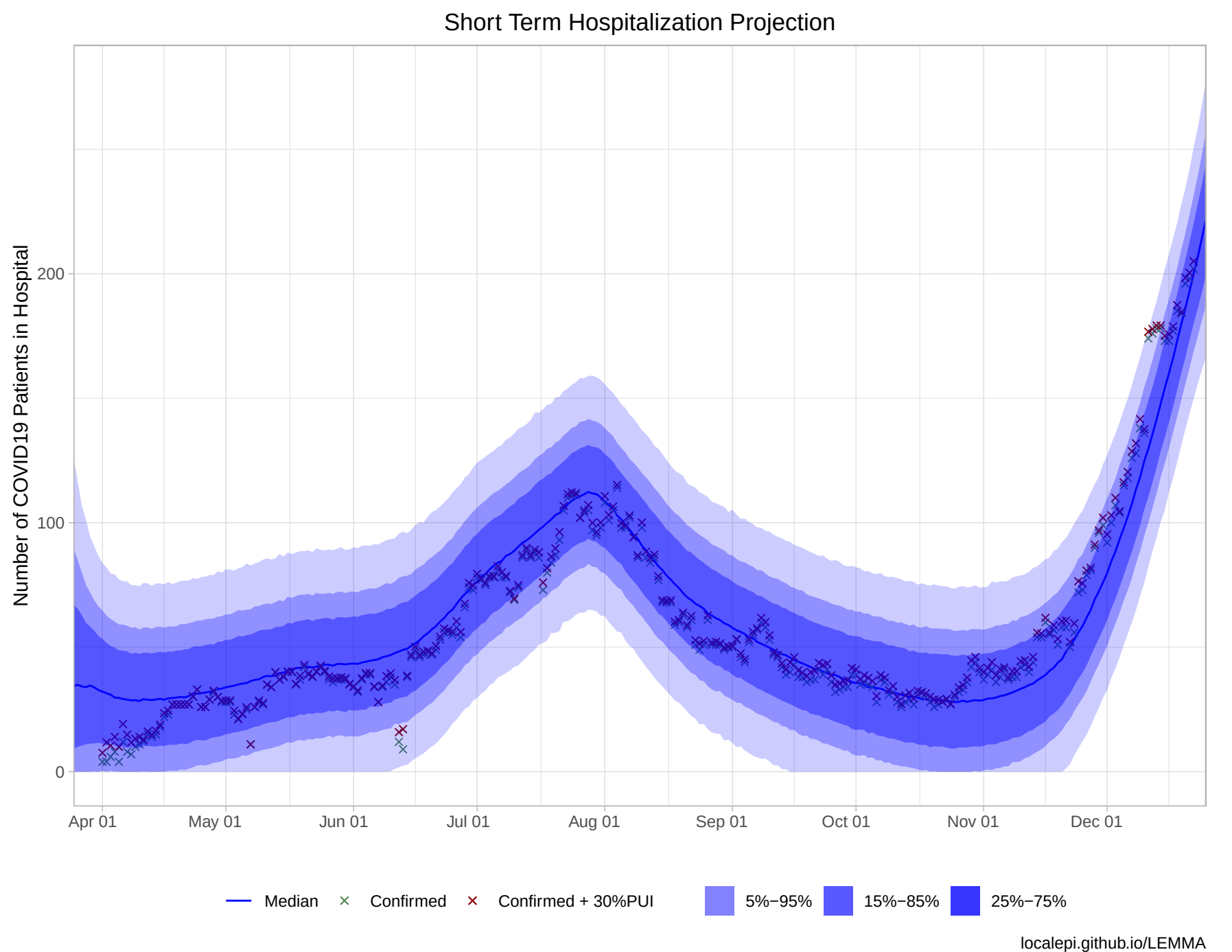
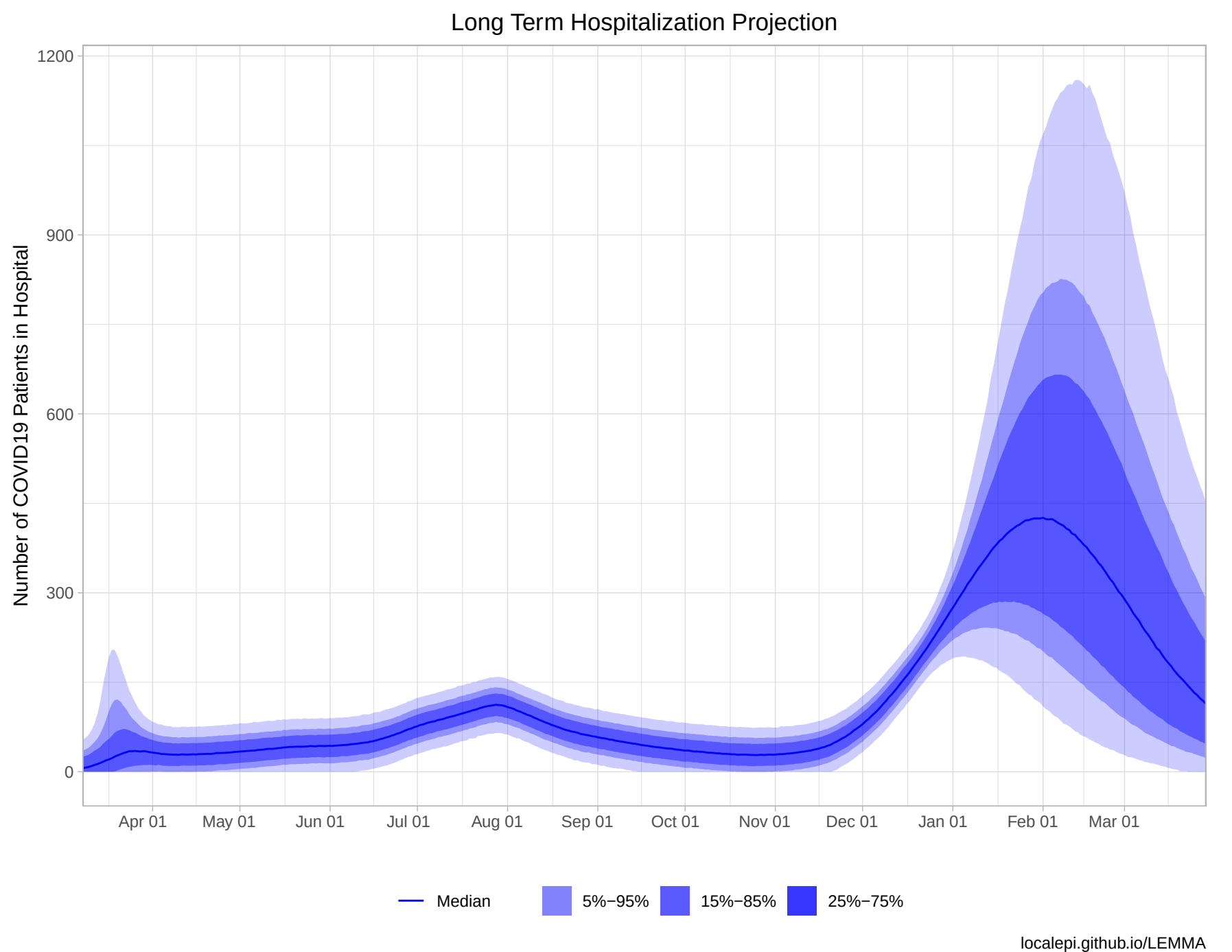
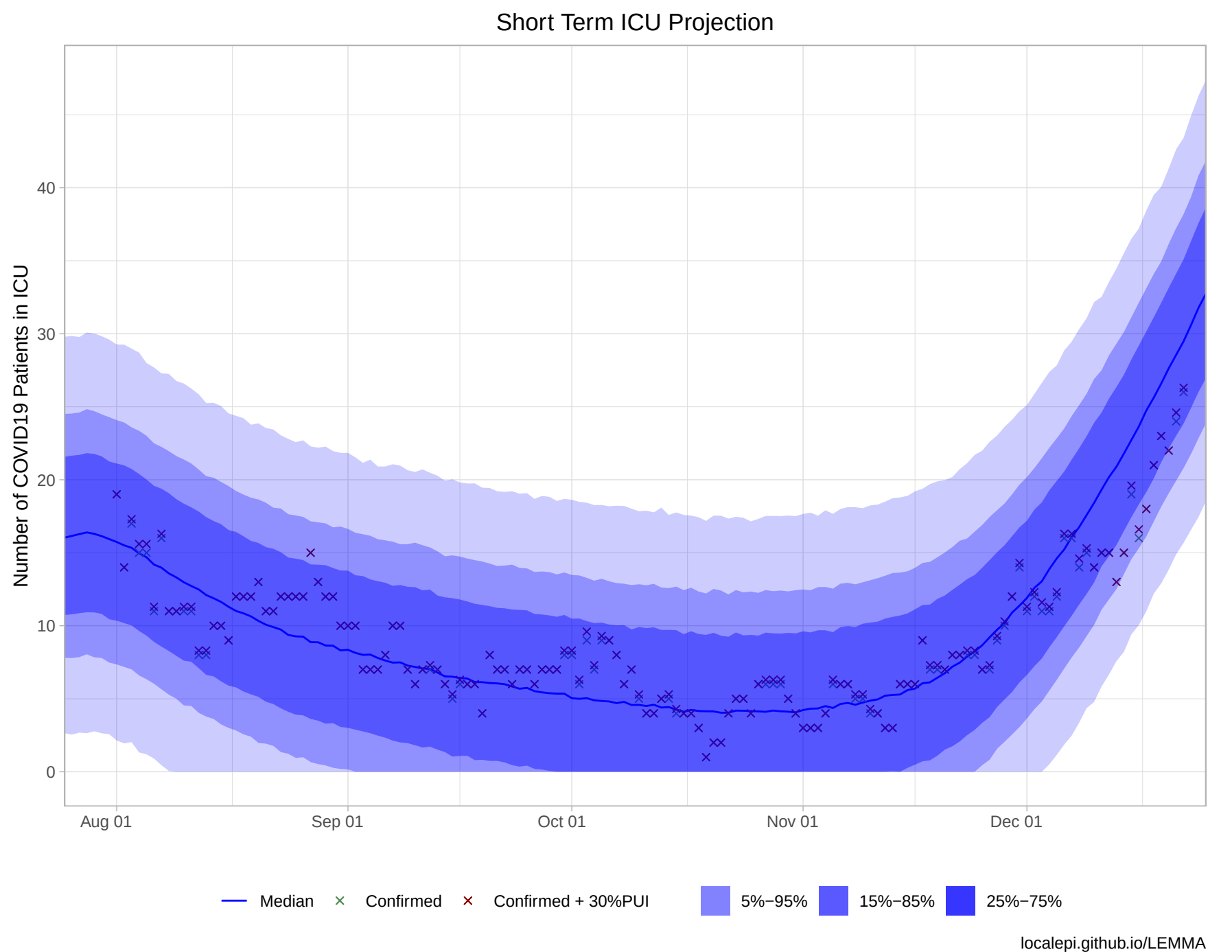
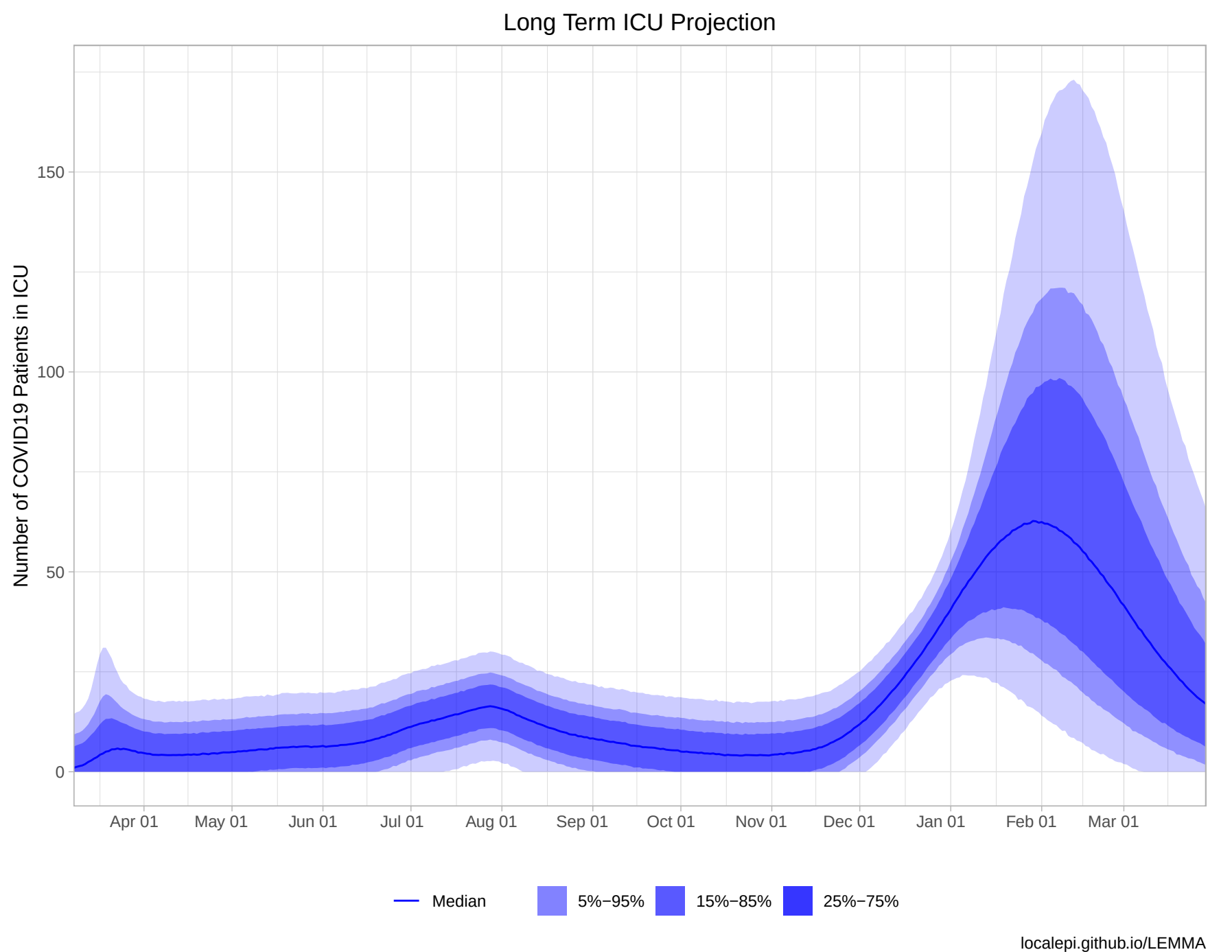
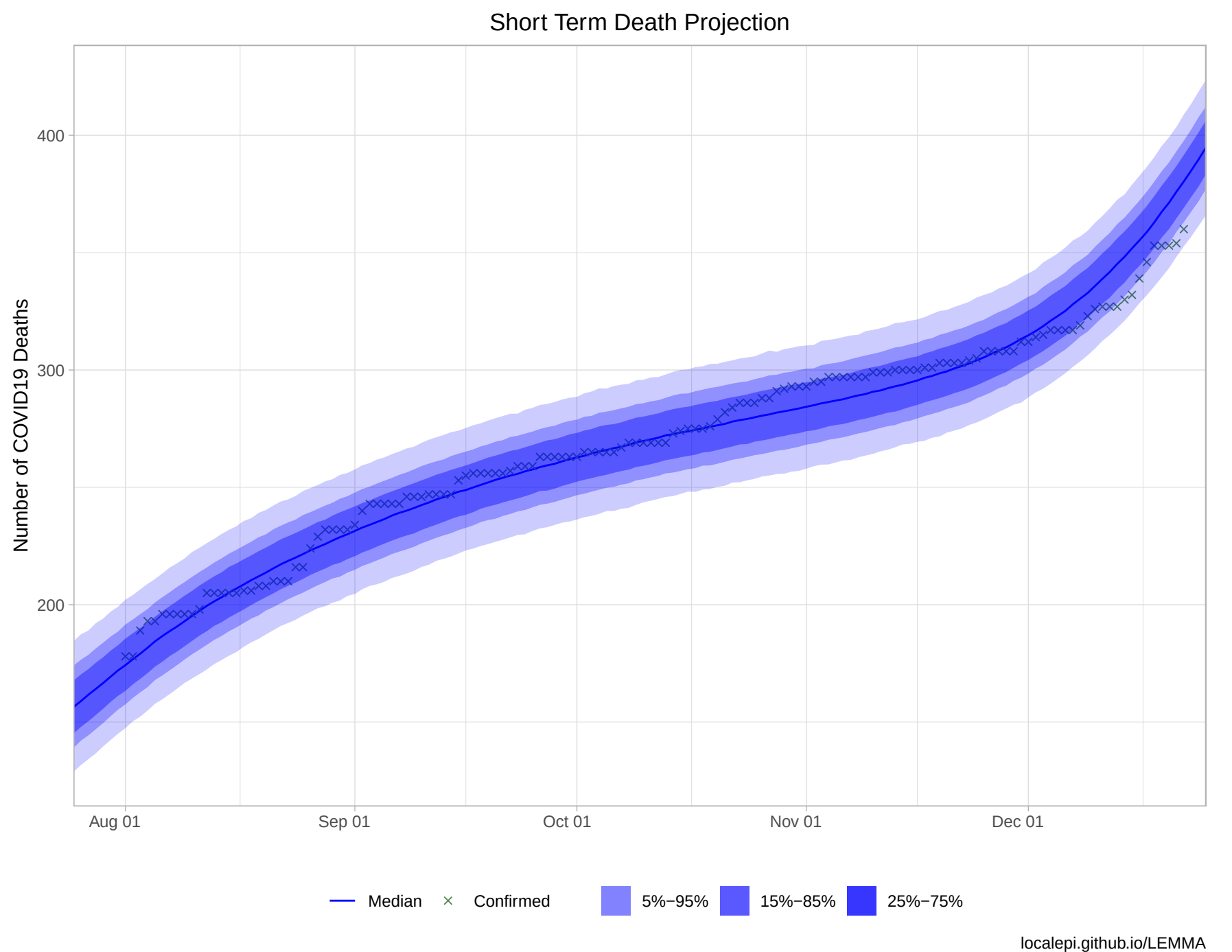
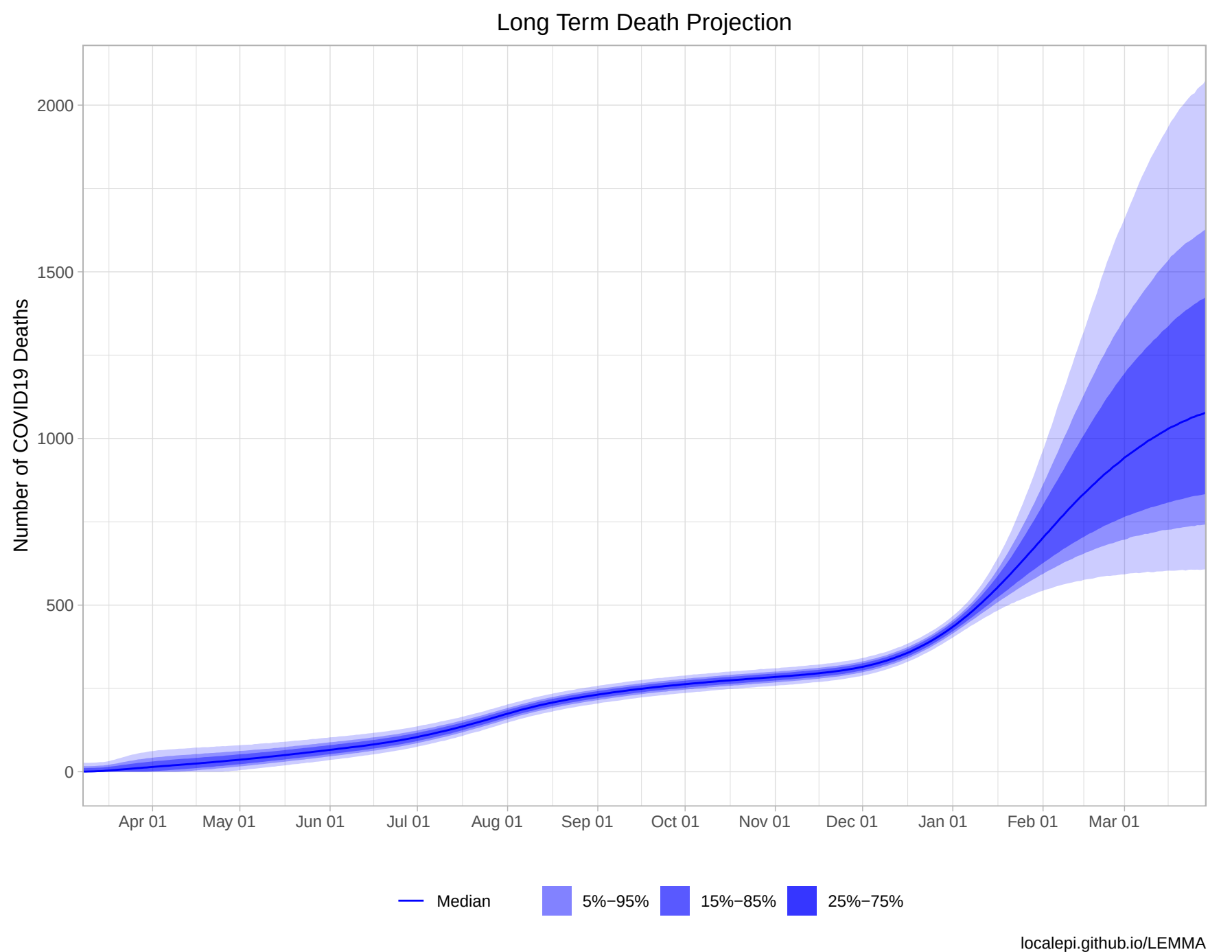

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
100
200
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

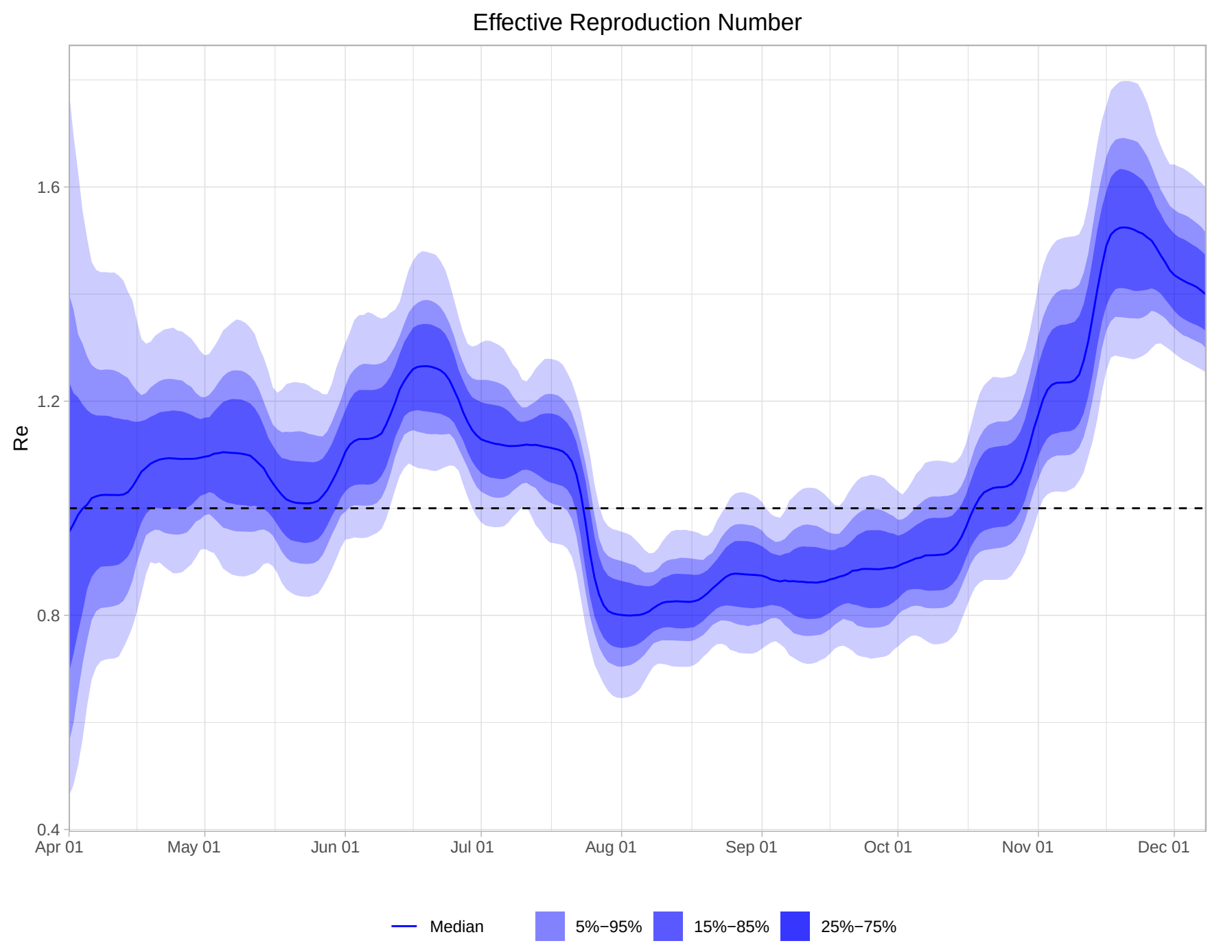

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
1200
900
600
300
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
10
20
30
40
Aug 01
Sep 01
Oct 01
Nov 01
Dec 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
150
100
50
0
Apr 01
May 01
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

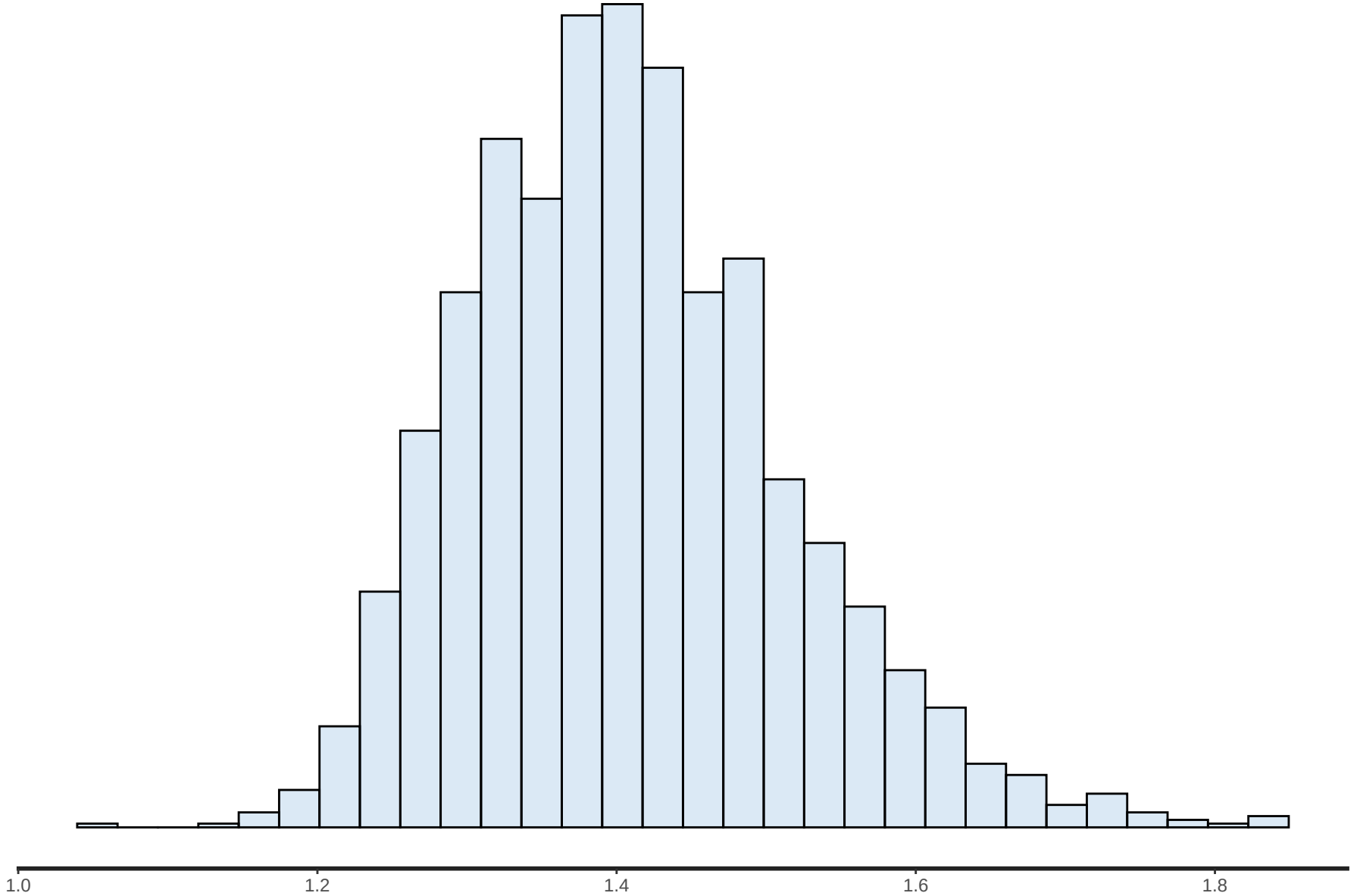

Short Term Death Projection
Number of COVID19 Deaths
400
300
200
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

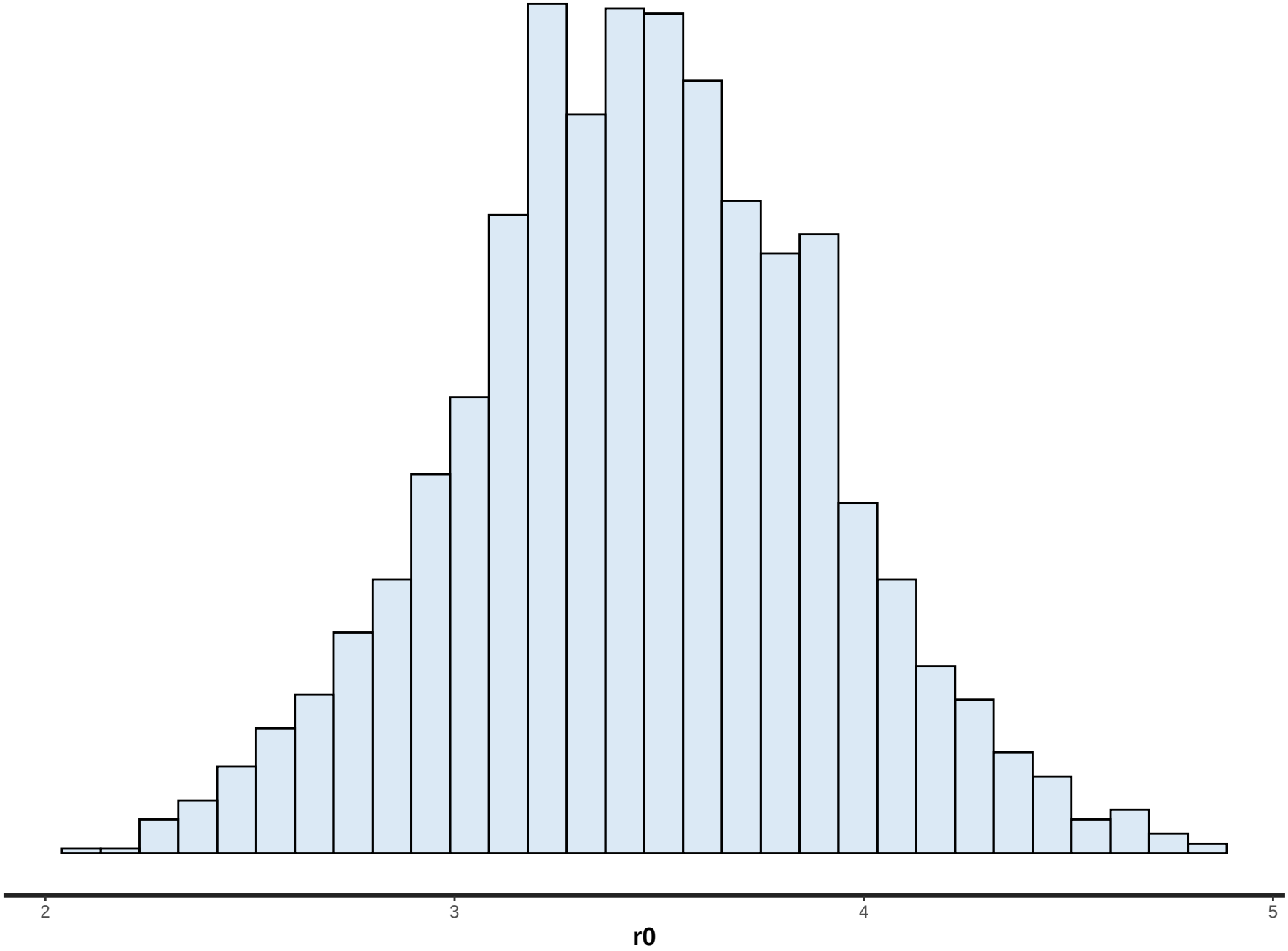

Long Term Death Projection
Number of COVID19 Deaths
2000
1500
1000
500
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

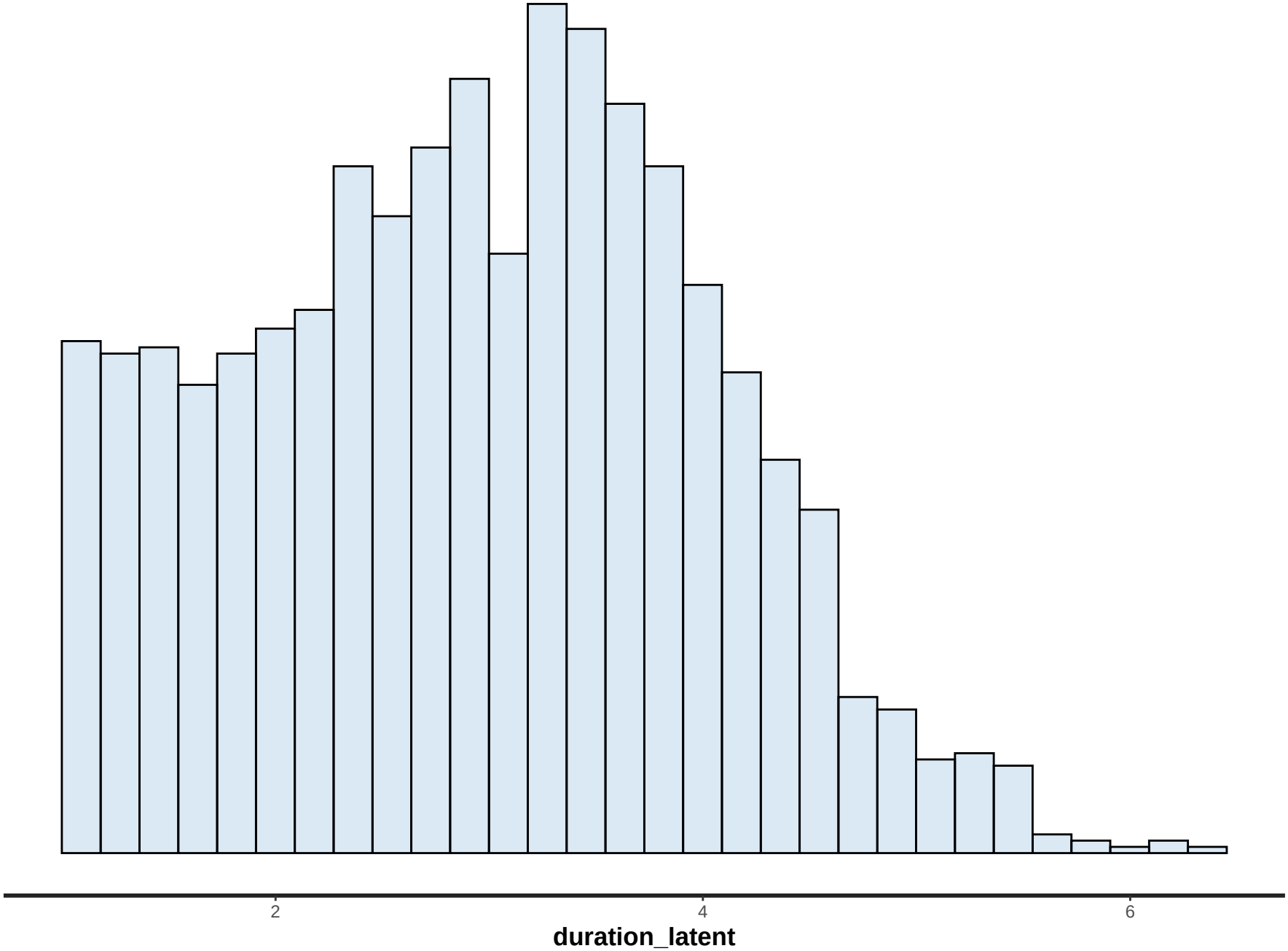

Effective Reproduction Number
Re
1.6
1.2
0.8
0.4
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

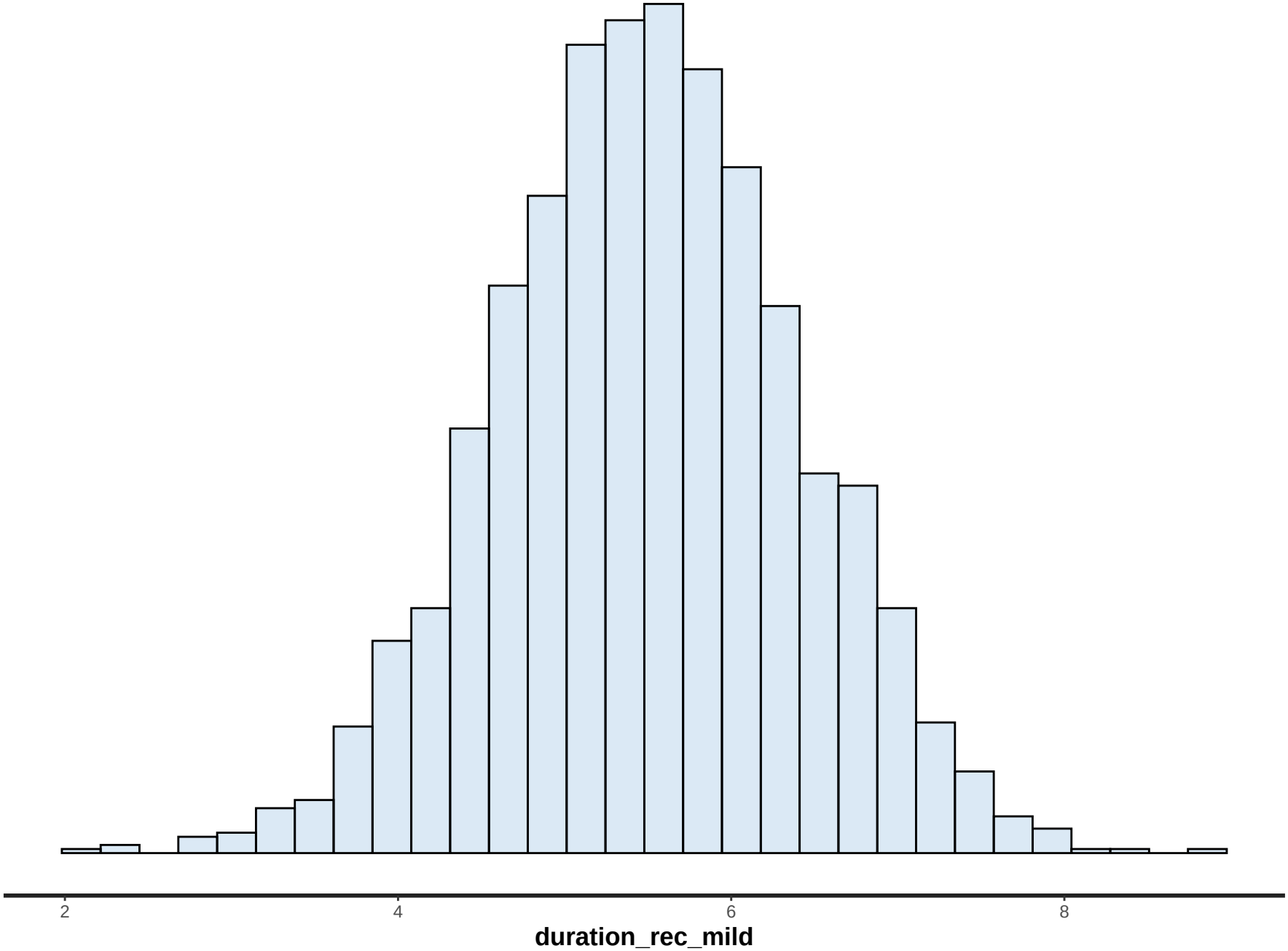
Rt as of 2020−12−08

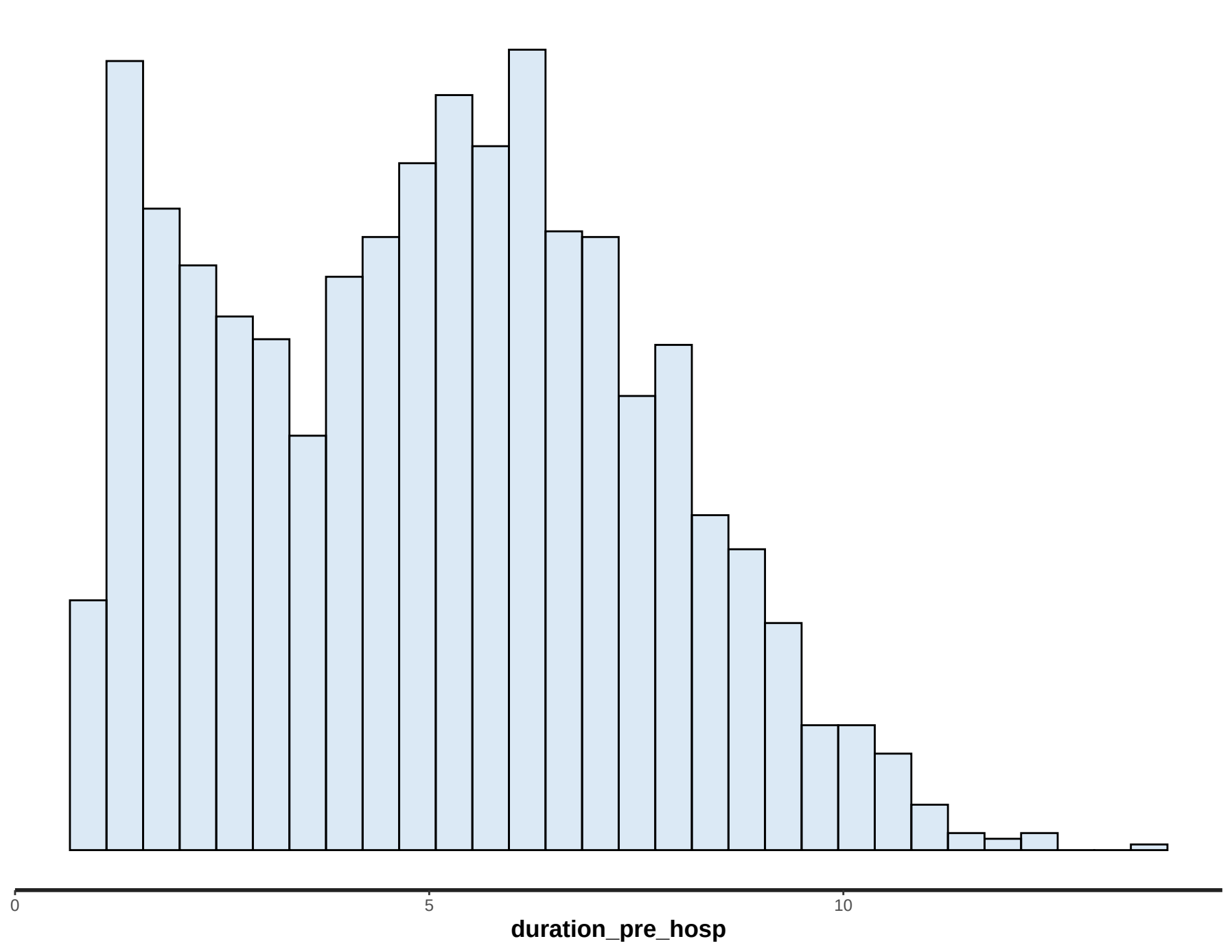
5%	10%	25%	50%	75%	90%	95%
1.25	1.28	1.33	1.40	1.47	1.55	1.60

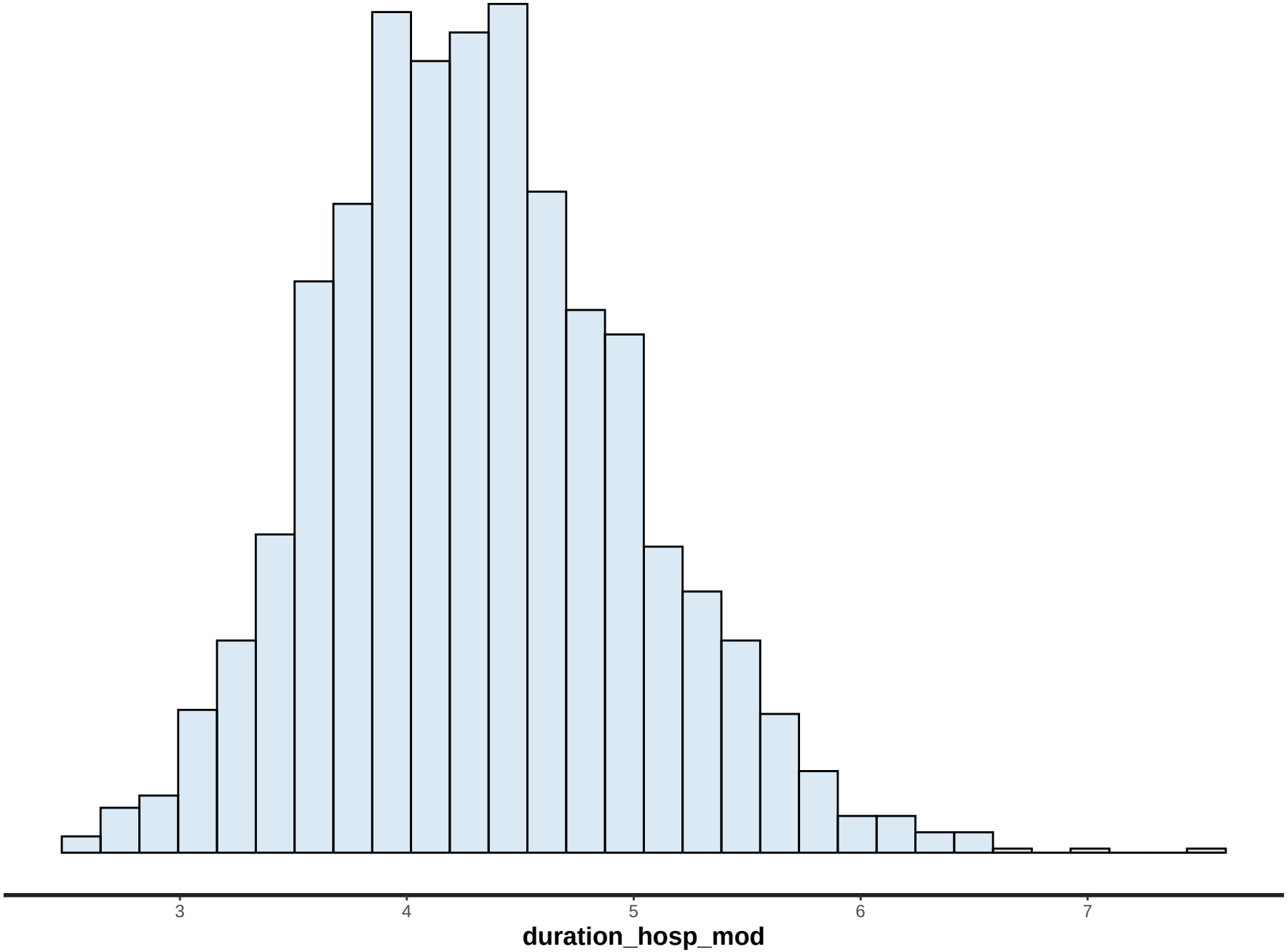


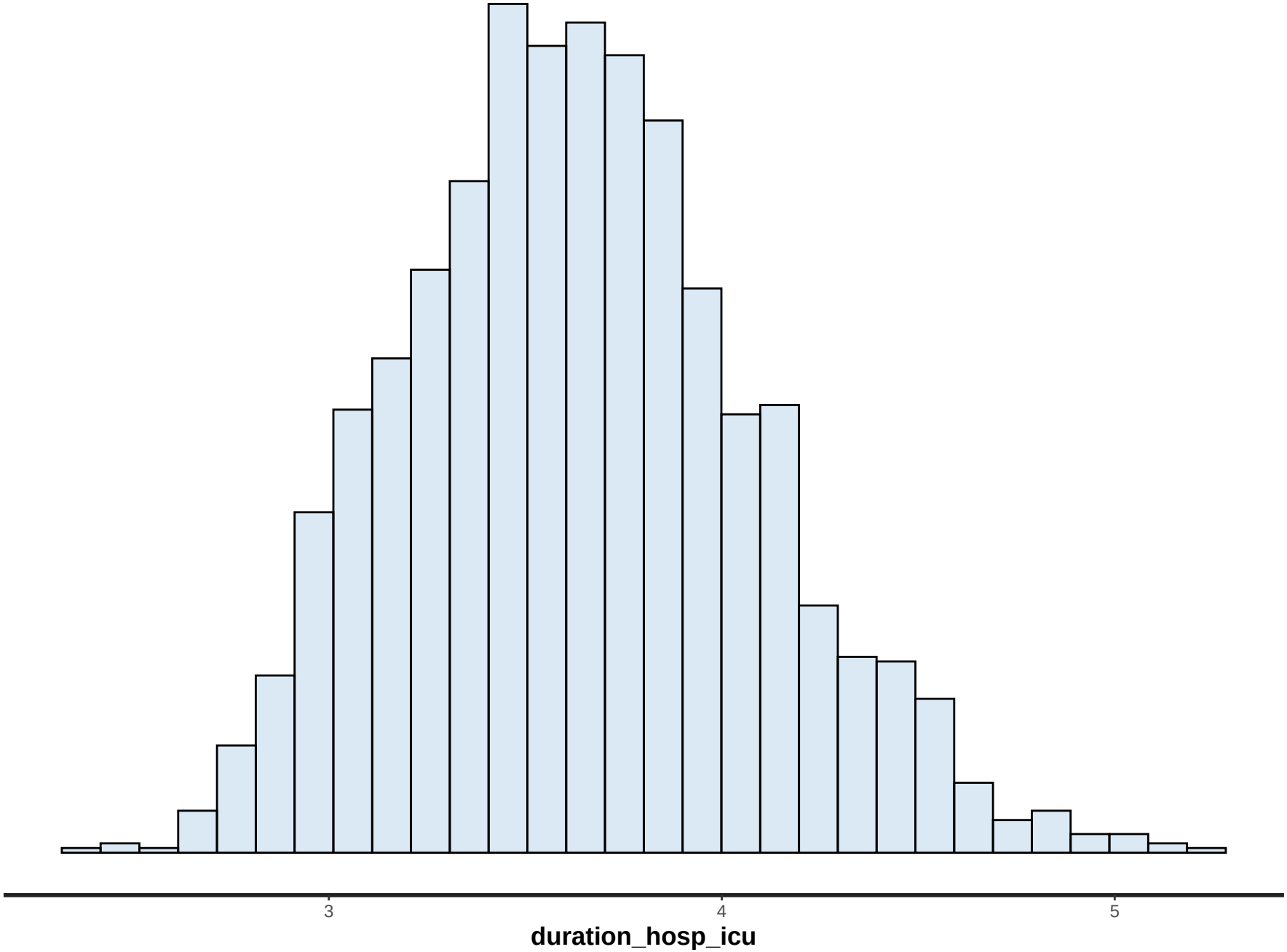

2
3
4
5
r0

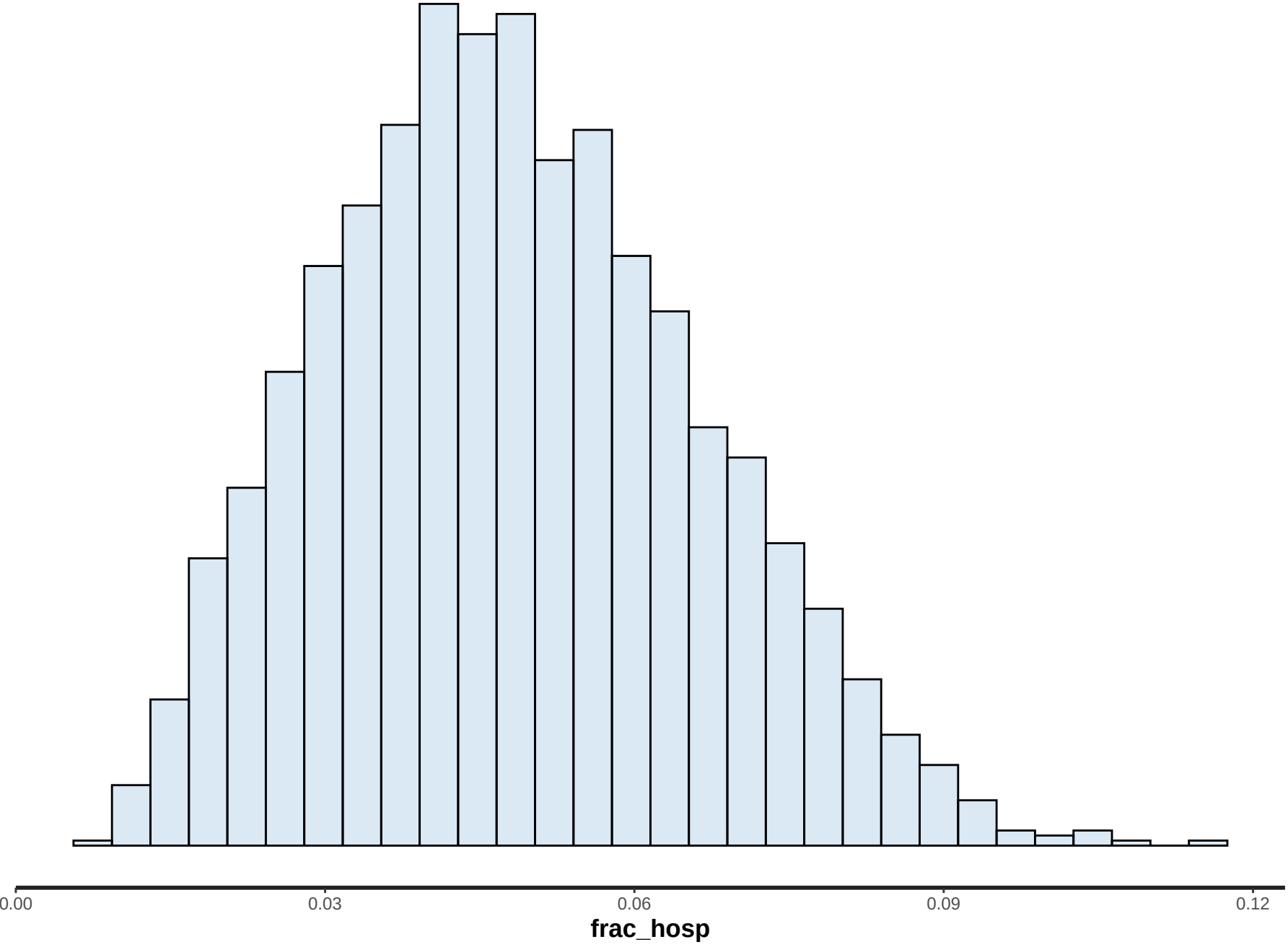

2
4
6
duration_latent

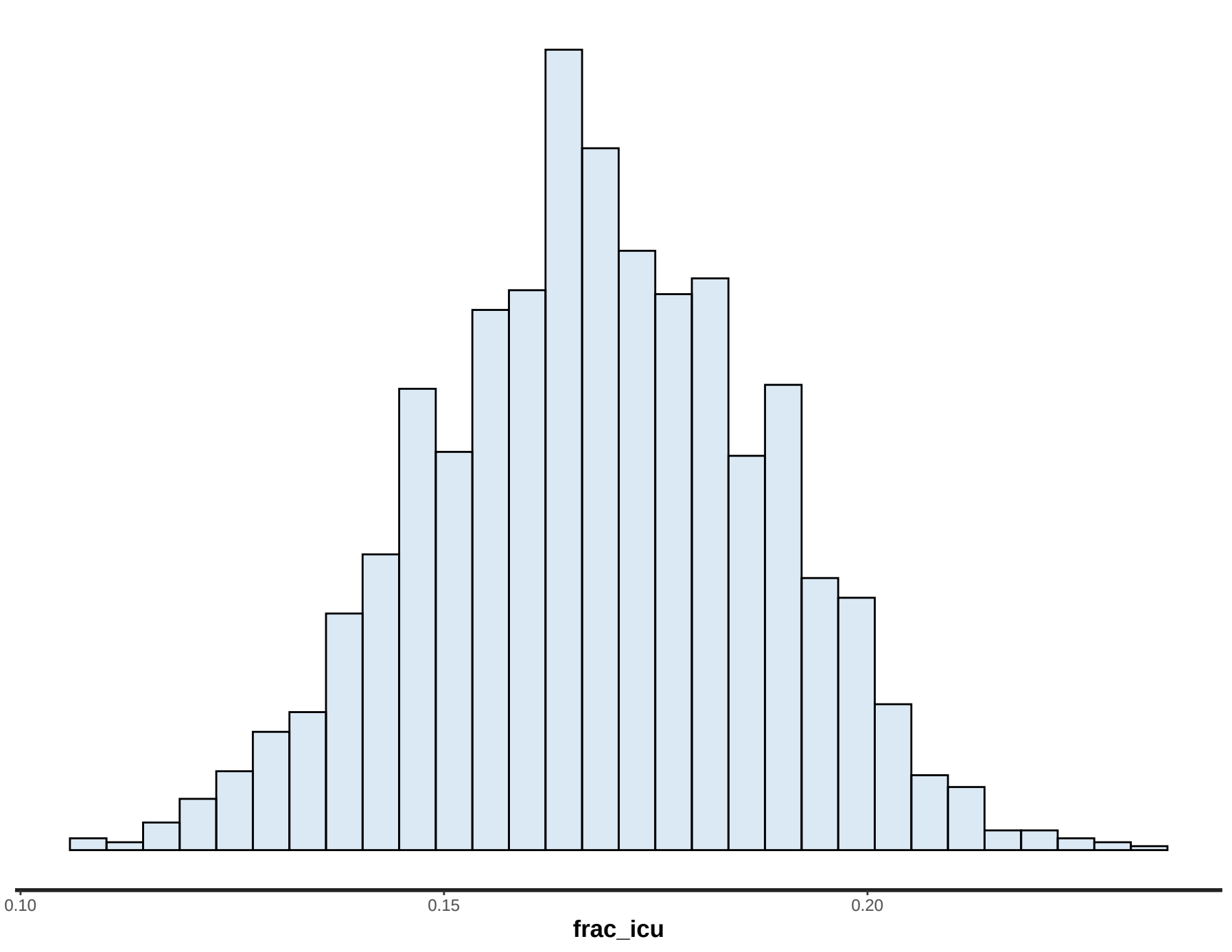

2
4
6
8
duration_rec_mild

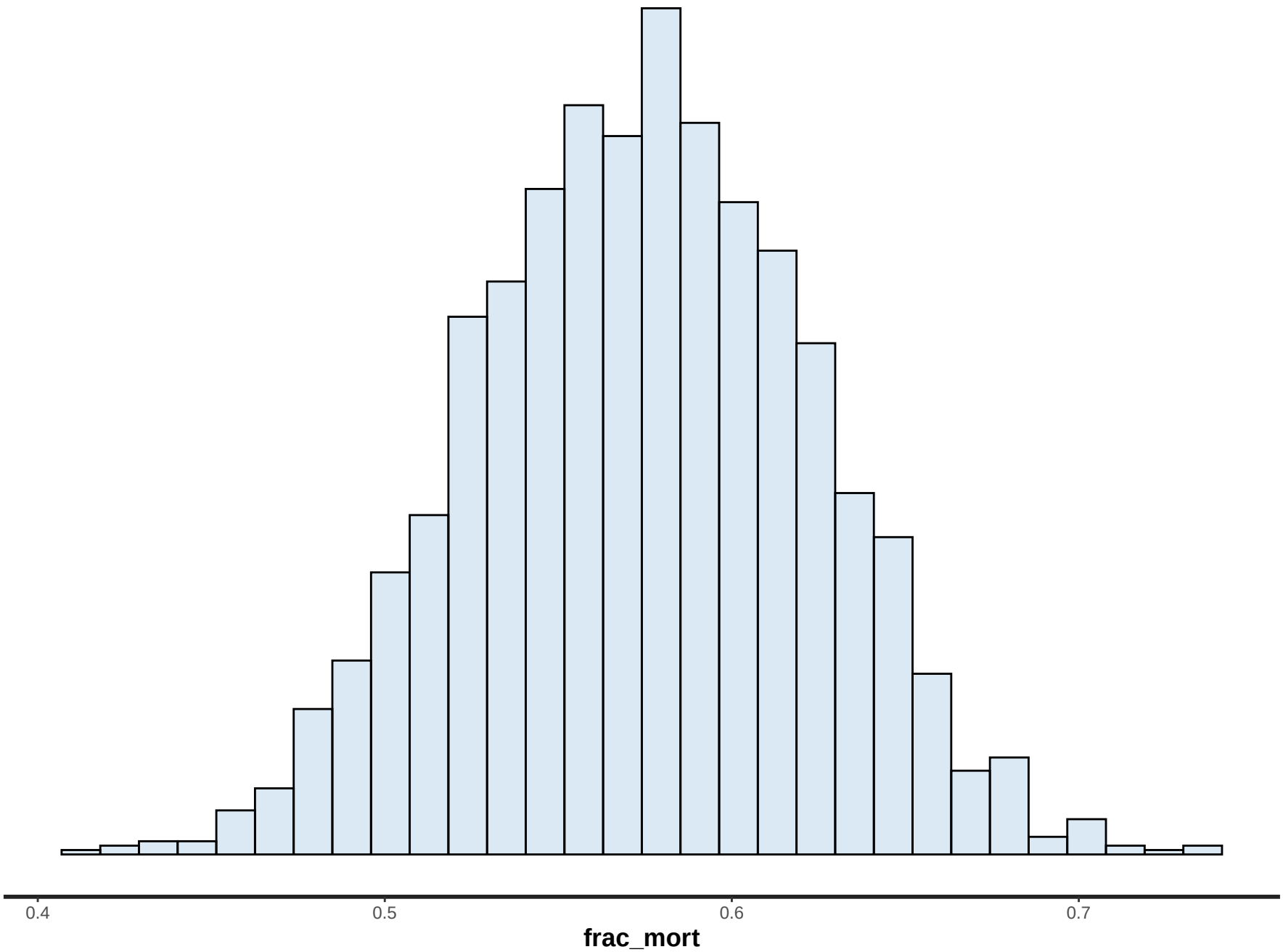

0
5
10
duration_pre_hosp

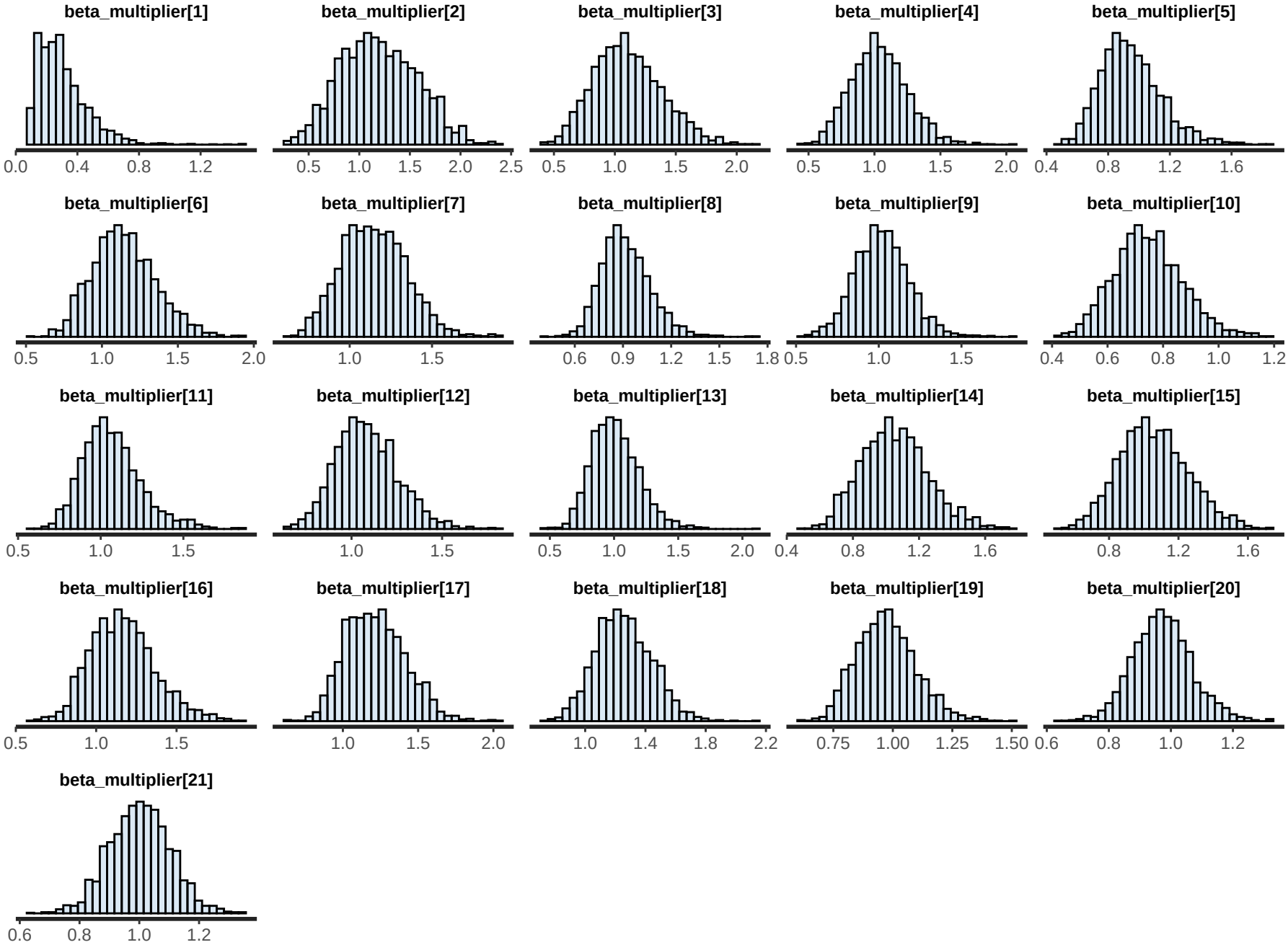

3
4
5
6
7
duration_hosp_mod


3
4
5
duration_hosp_icu


0.00
0.03
0.06
0.09
0.12
frac_hosp


0.10
0.15
0.20
frac_icu


0.4
0.5
0.6
0.7
frac_mort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0.0 0.4 0.8 1.2
beta_multiplier[2]
0.5 1.0 1.5 2.0 2.5
beta_multiplier[3]
0.5 1.0 1.5 2.0
beta_multiplier[4]
0.5 1.0 1.5 2.0
beta_multiplier[5]
0.4 0.8 1.2 1.6
beta_multiplier[6]
0.5 1.0 1.5 2.0
beta_multiplier[7]
1.0 1.5
beta_multiplier[8]
0.6 0.9 1.2 1.5 1.8
beta_multiplier[9]
0.5 1.0 1.5
beta_multiplier[10]
0.4 0.6 0.8 1.0 1.2
beta_multiplier[11]
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beta_multiplier[12]
1.0 1.5
beta_multiplier[13]
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beta_multiplier[14]
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beta_multiplier[15]
0.8 1.2 1.6
beta_multiplier[16]
0.5 1.0 1.5
beta_multiplier[17]
1.0 1.5 2.0
beta_multiplier[18]
1.0 1.4 1.8 2.2
beta_multiplier[19]
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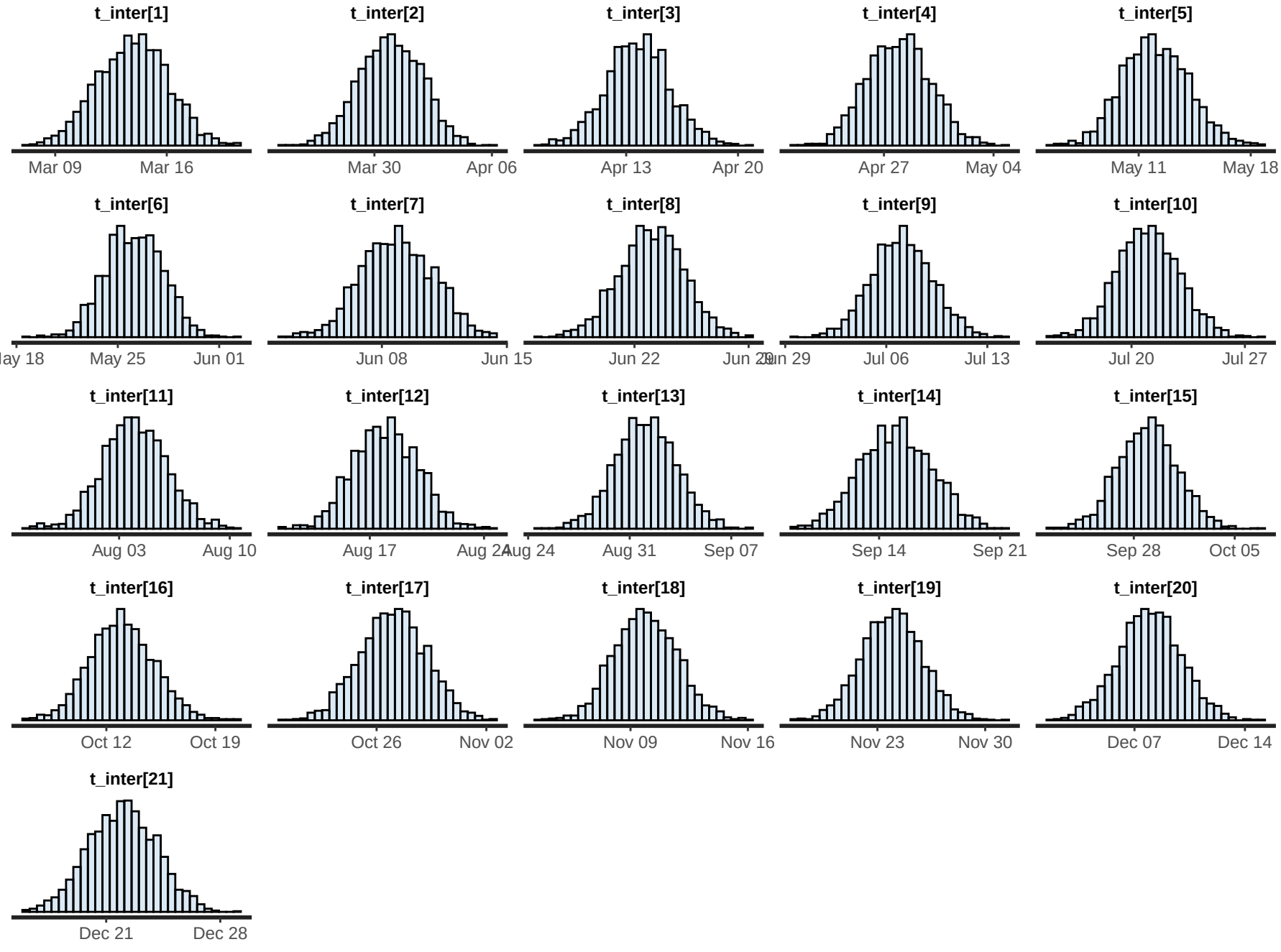
beta_multiplier[21]
0.6 0.8 1.0 1.2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Mar 09
Mar 16
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Apr 27
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t_inter[5]
May 11
May 18
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May 18
May 25
Jun 01
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Jun 08
Jun 15
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Jun 22
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Dec 07
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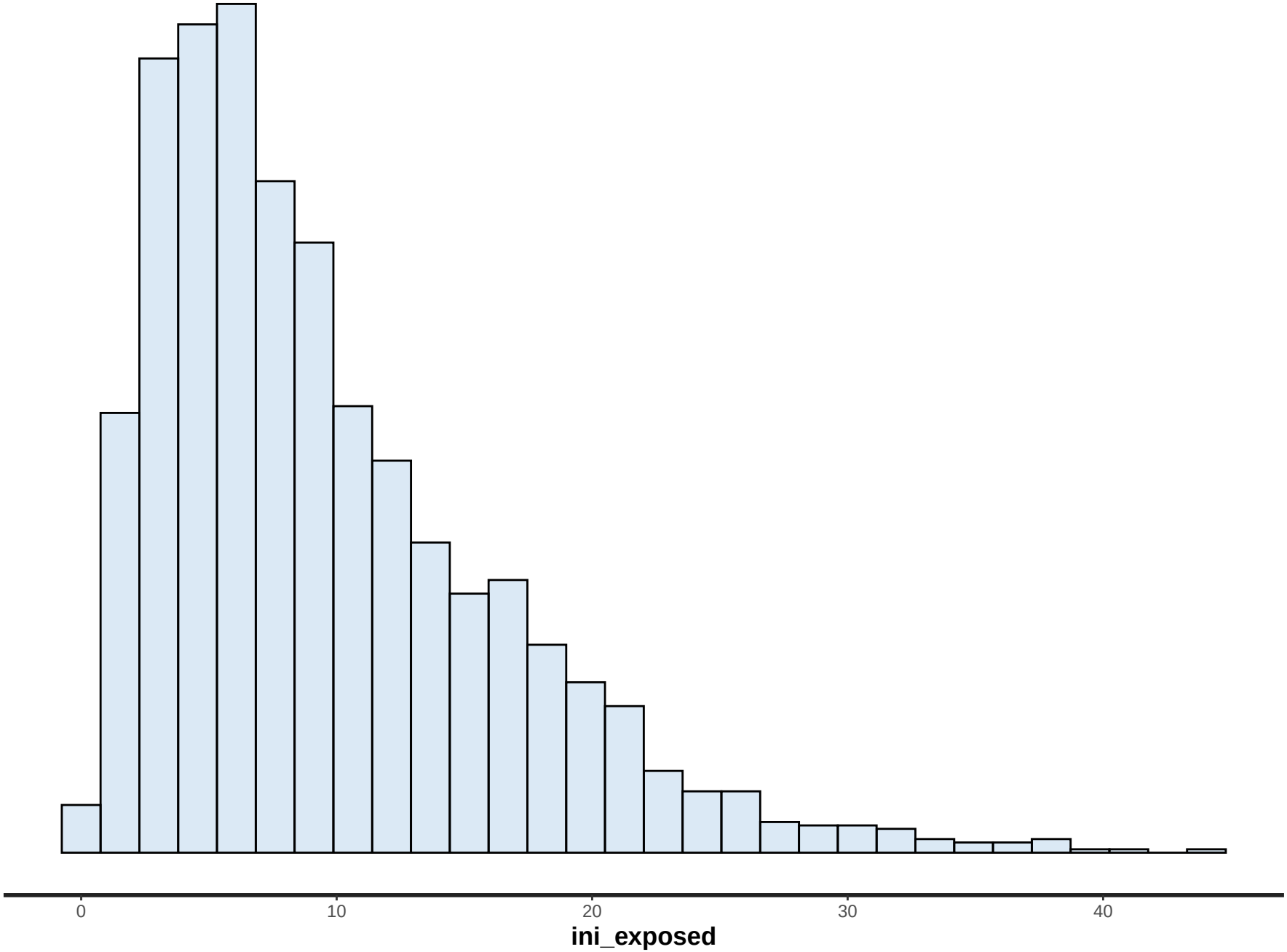
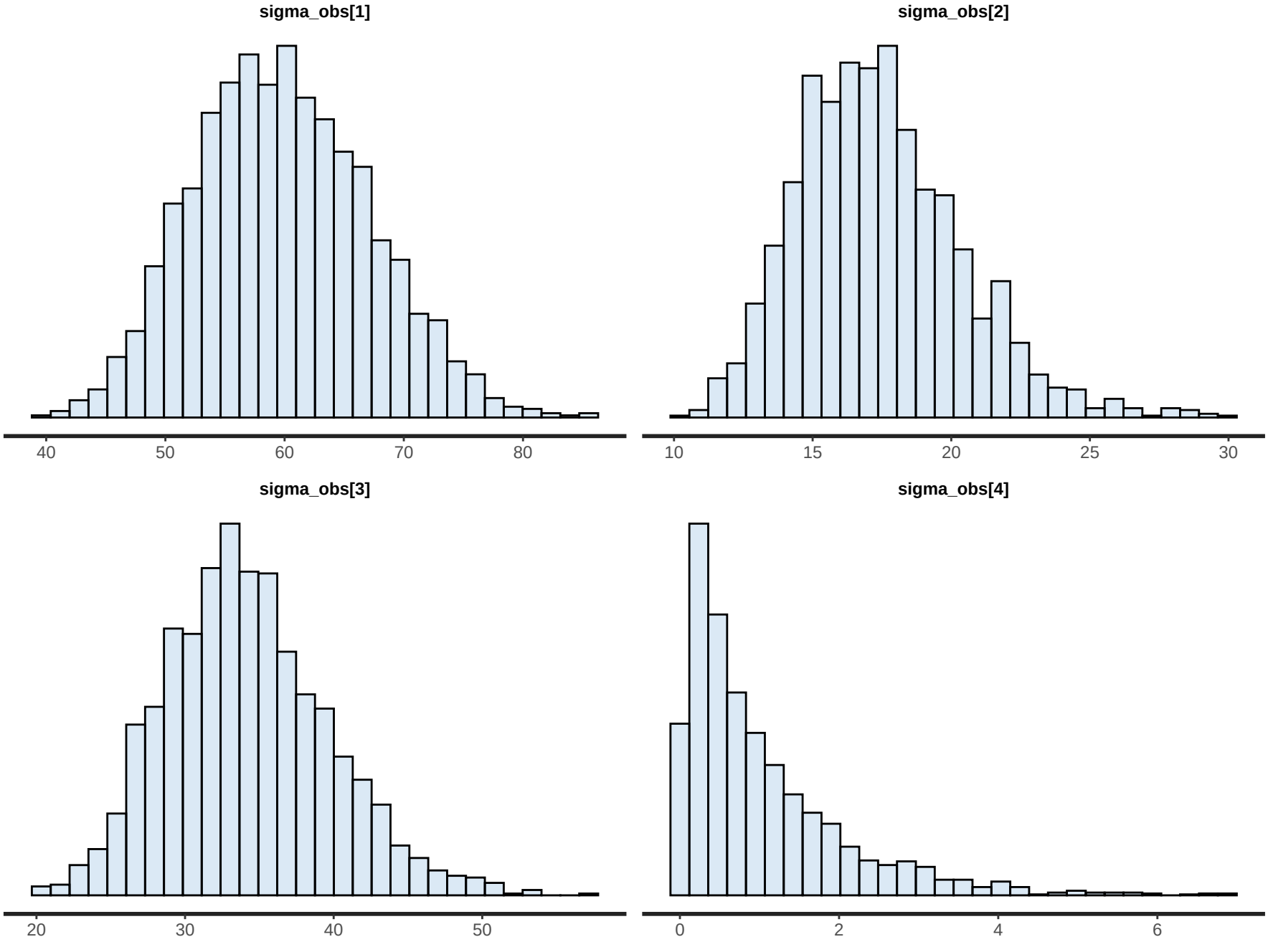
Dec 21
Dec 28


0
10
20
30
40
ini_exposed


sigma_obs[1]
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50
60
70
80
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30
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40
50
sigma_obs[4]
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2
4
6