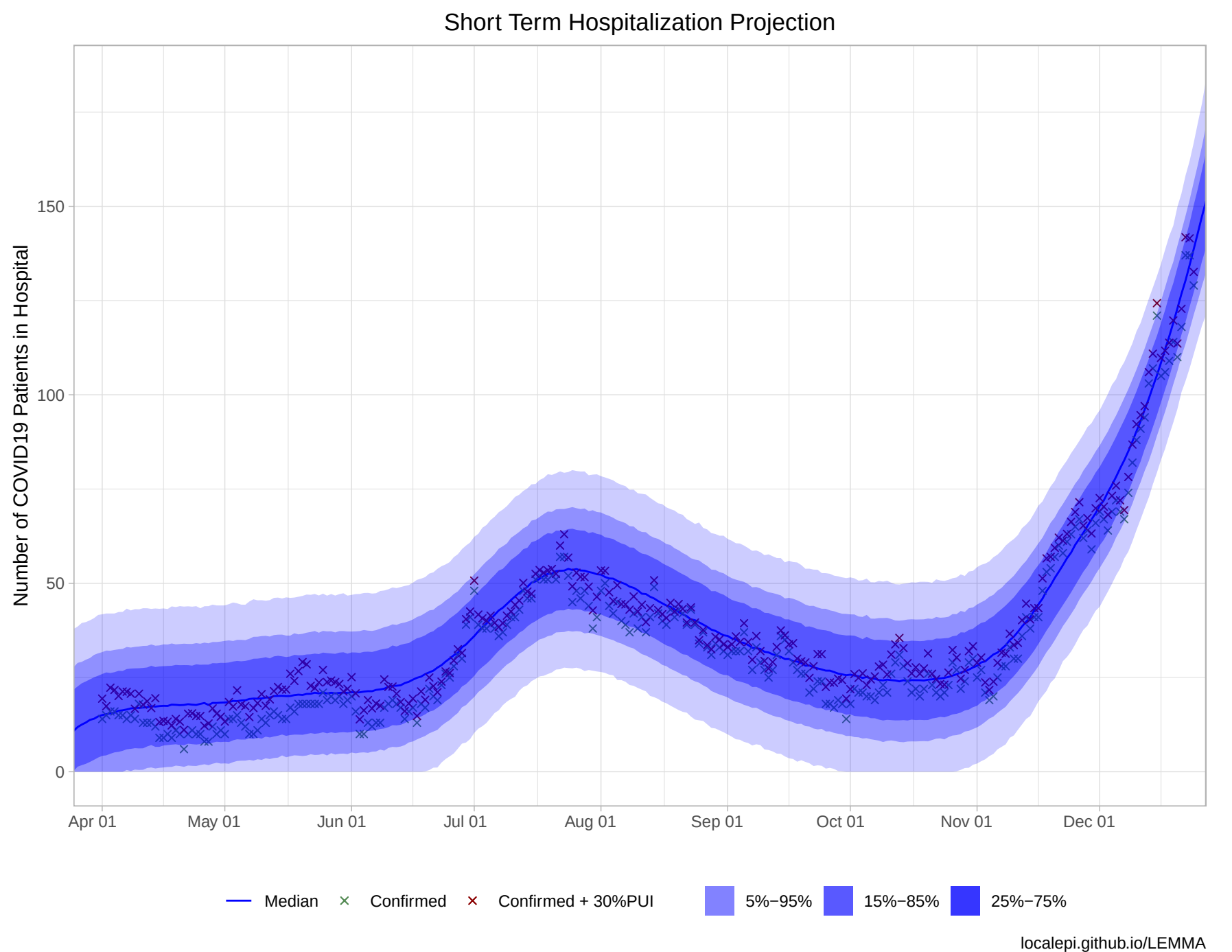
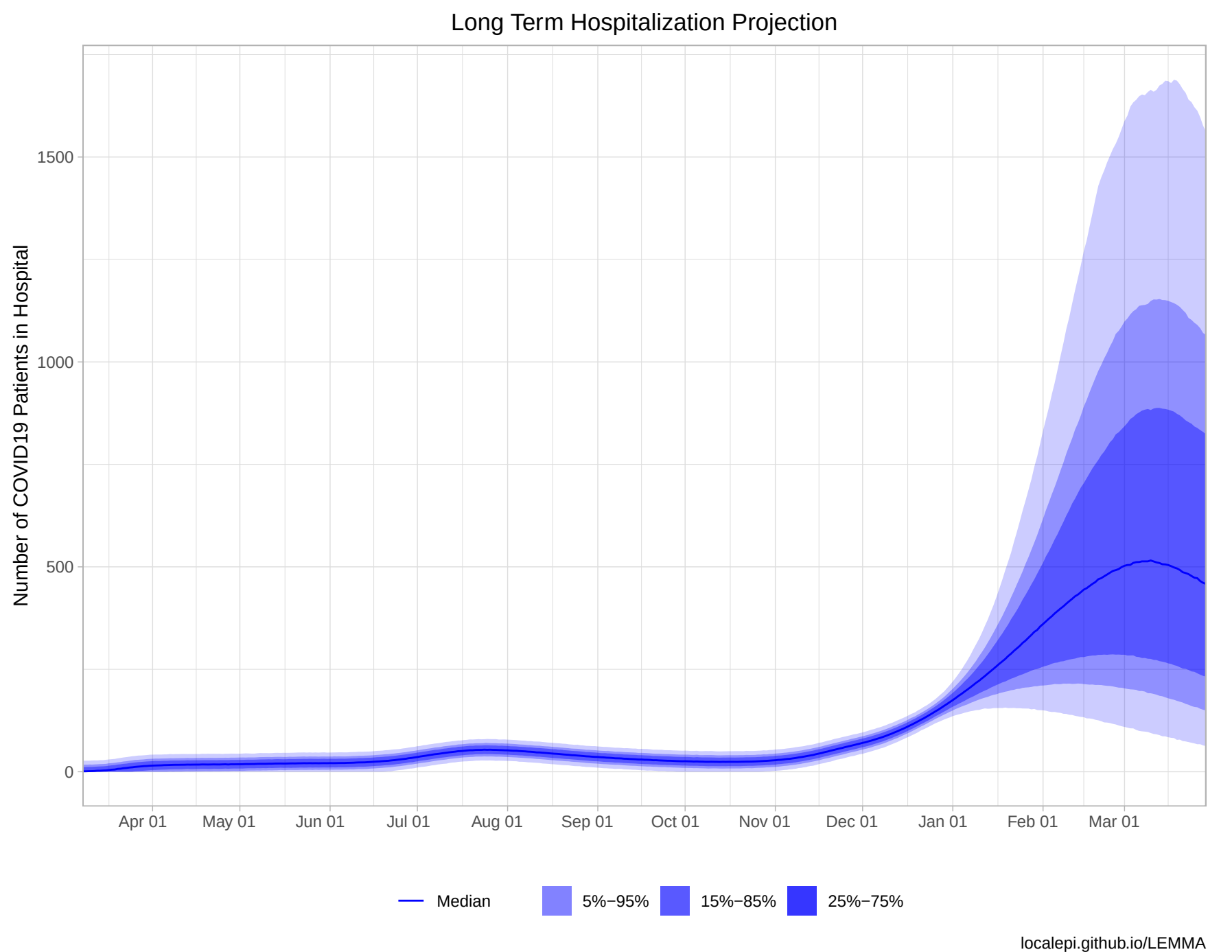
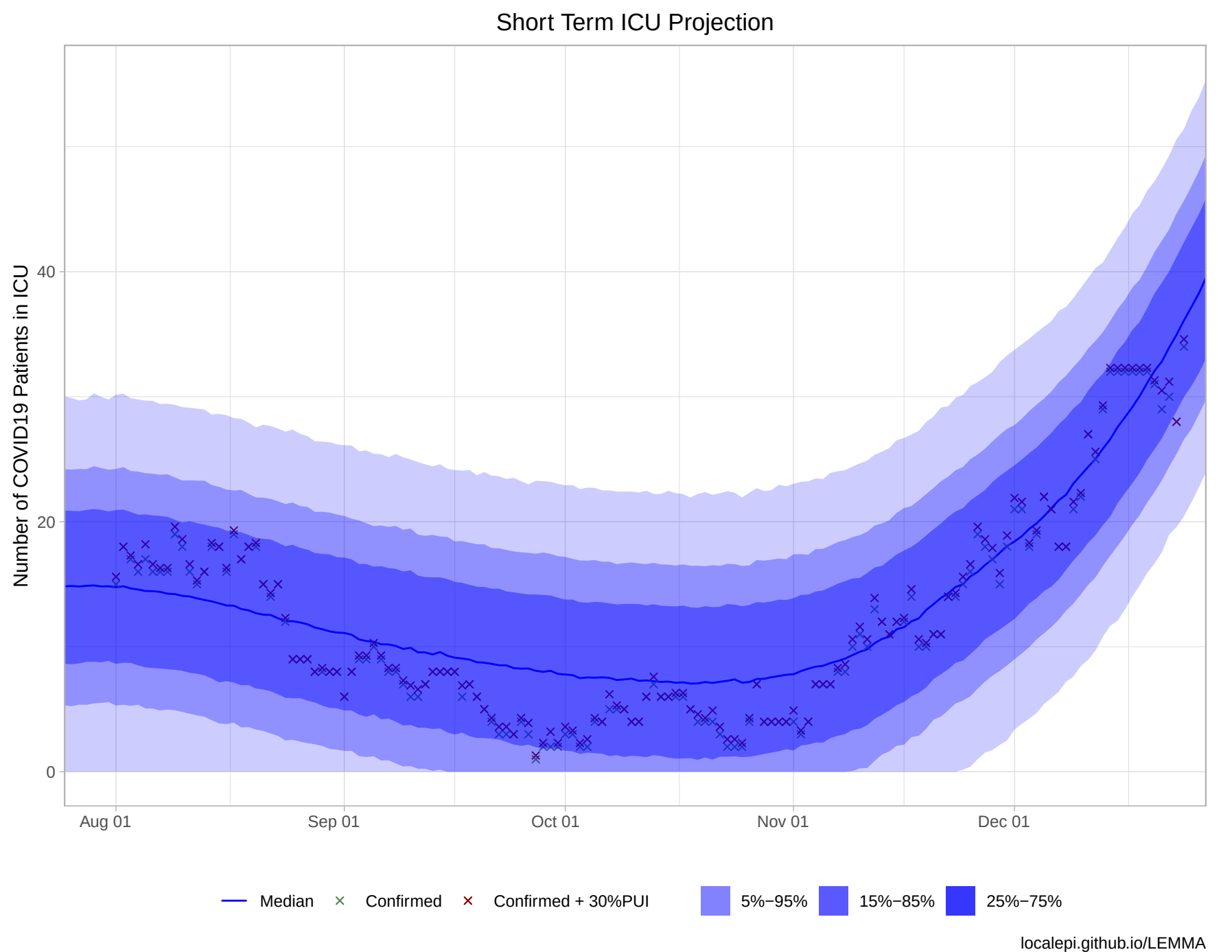
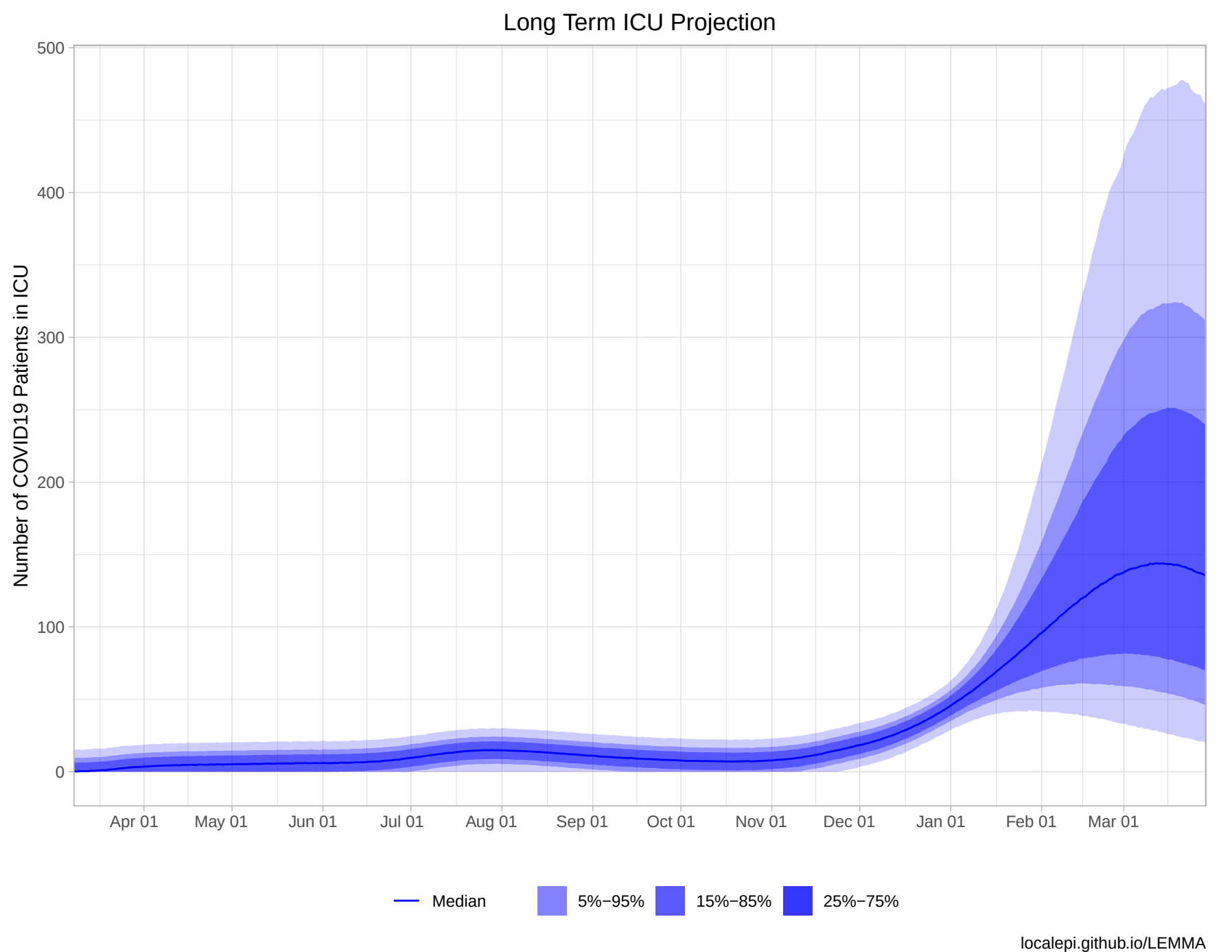
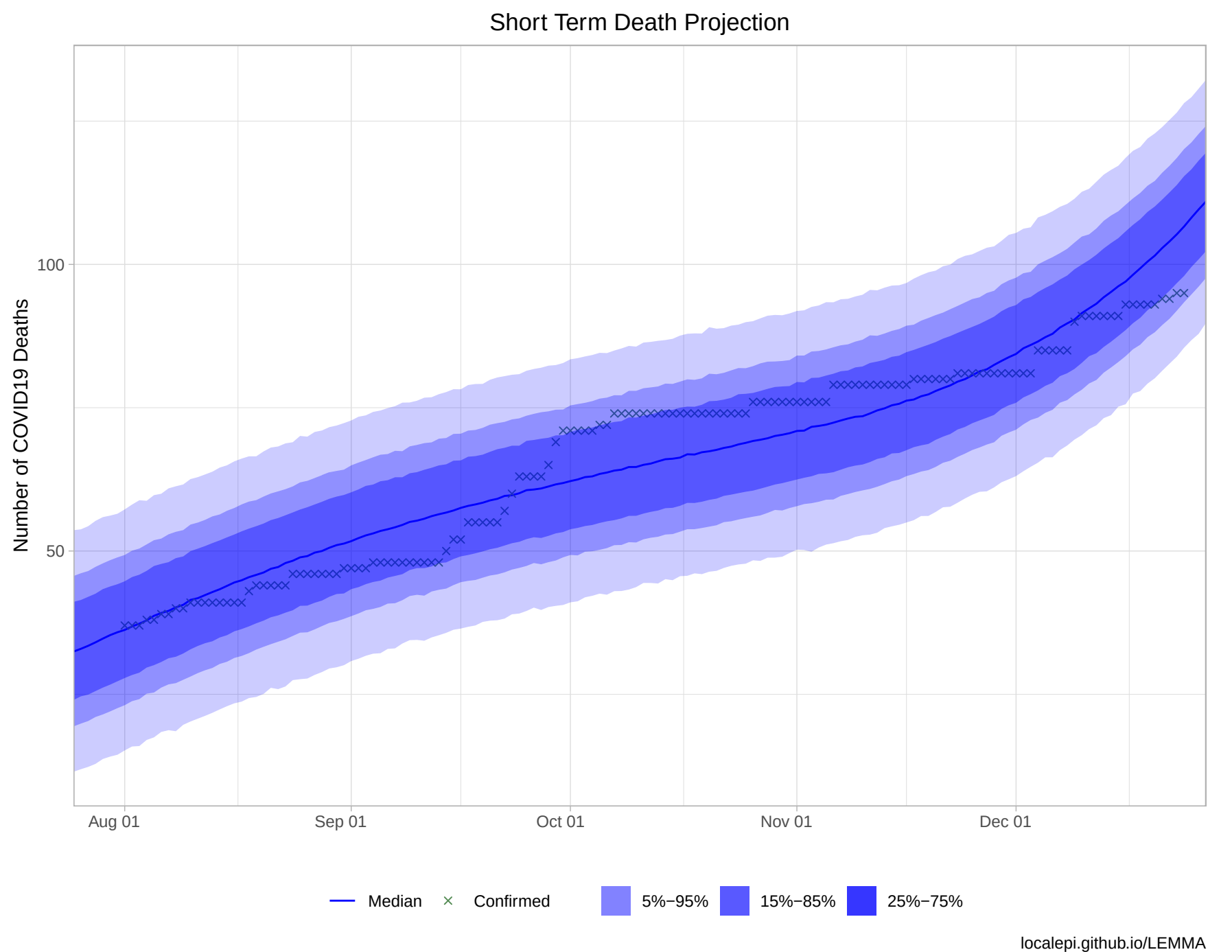
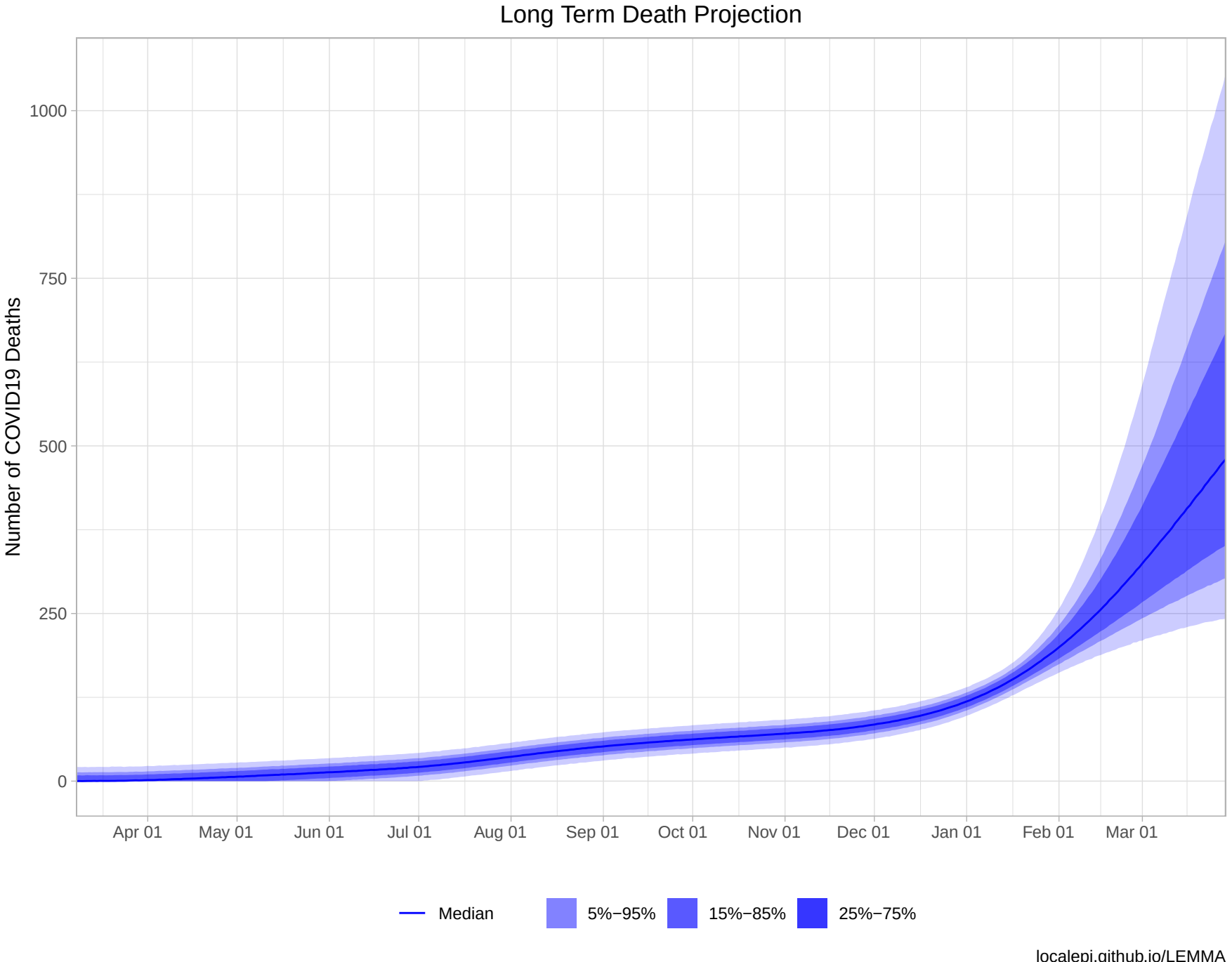

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
150
100
50
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

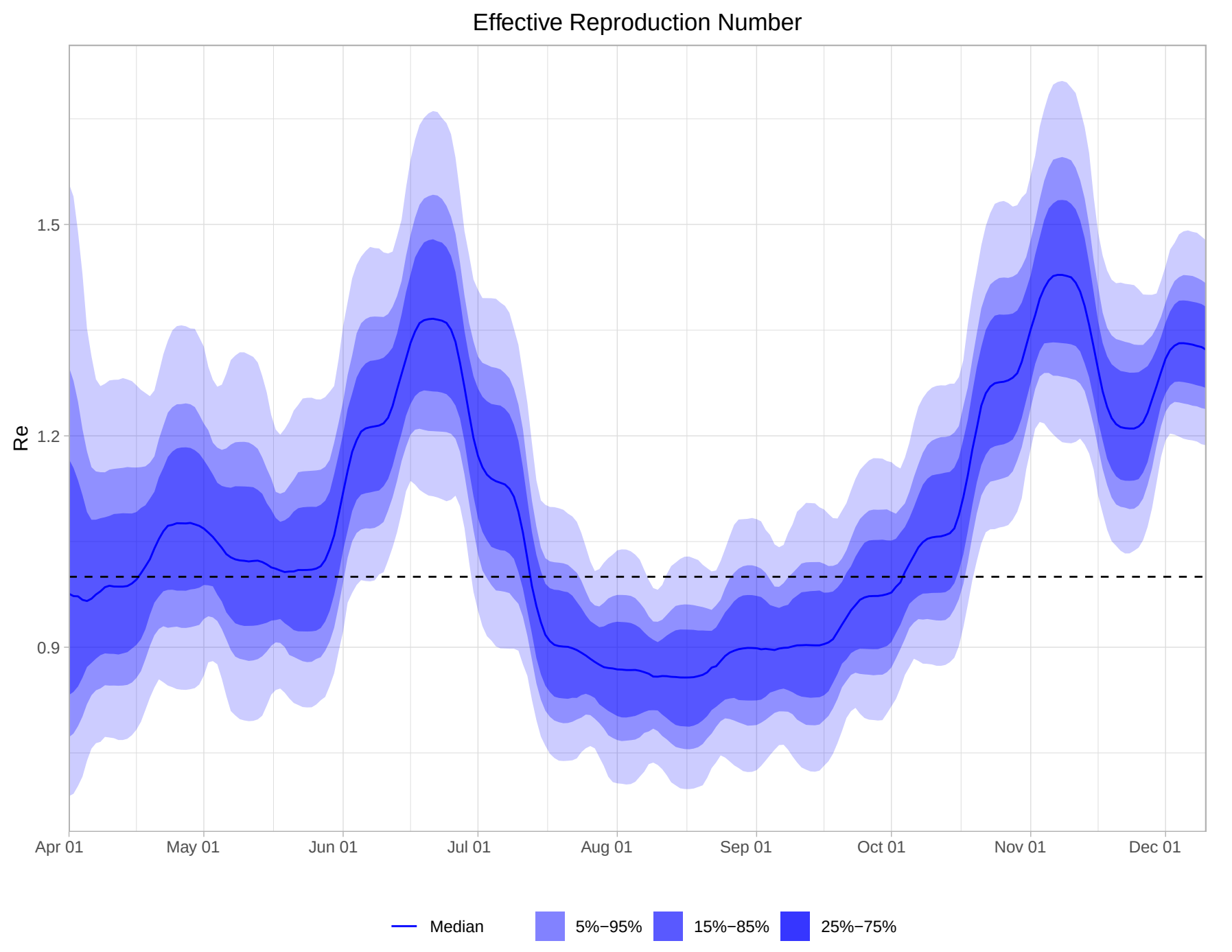

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
1500
1000
500
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
20
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
500
400
300
200
100
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

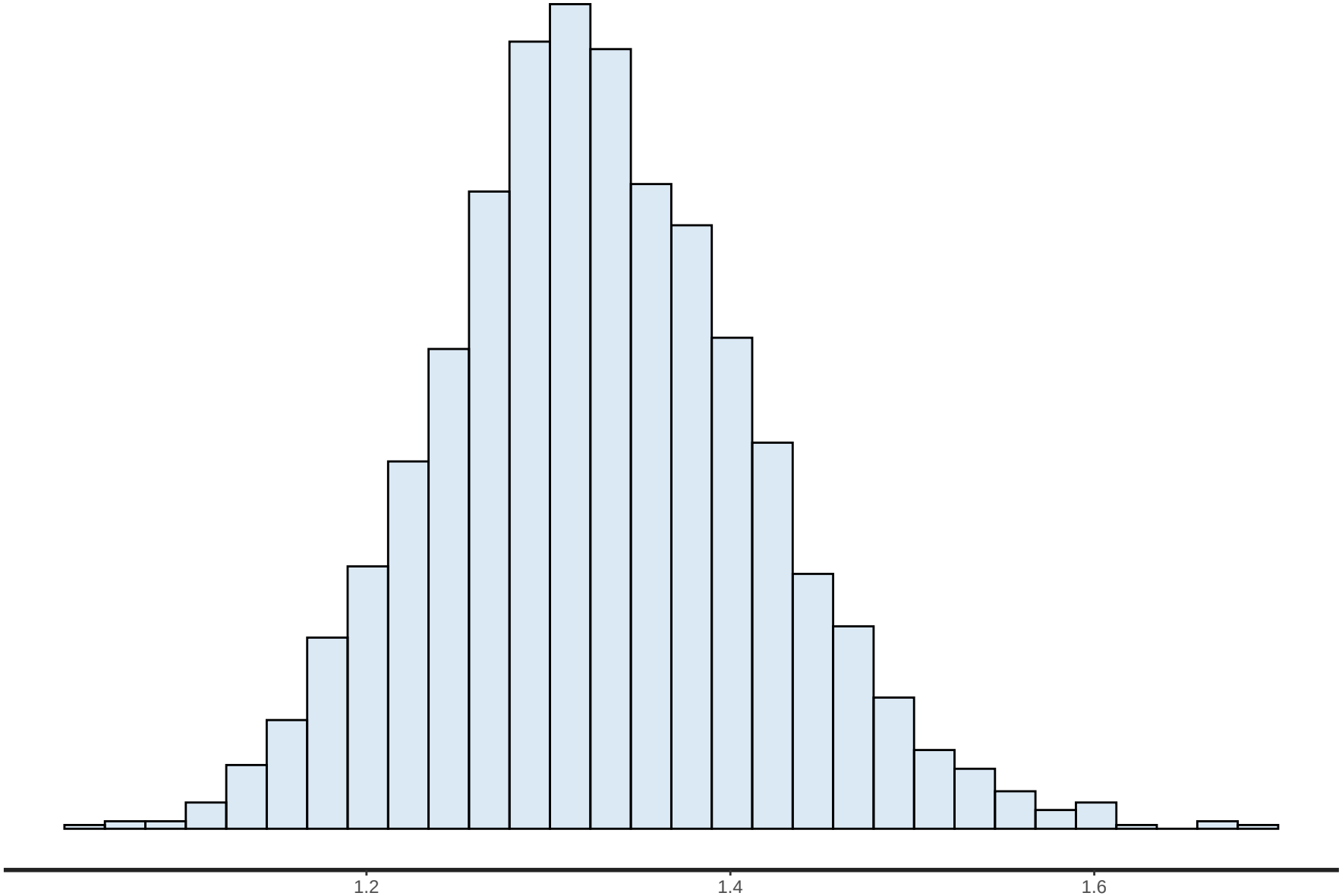

Short Term Death Projection
Number of COVID19 Deaths
100
50
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

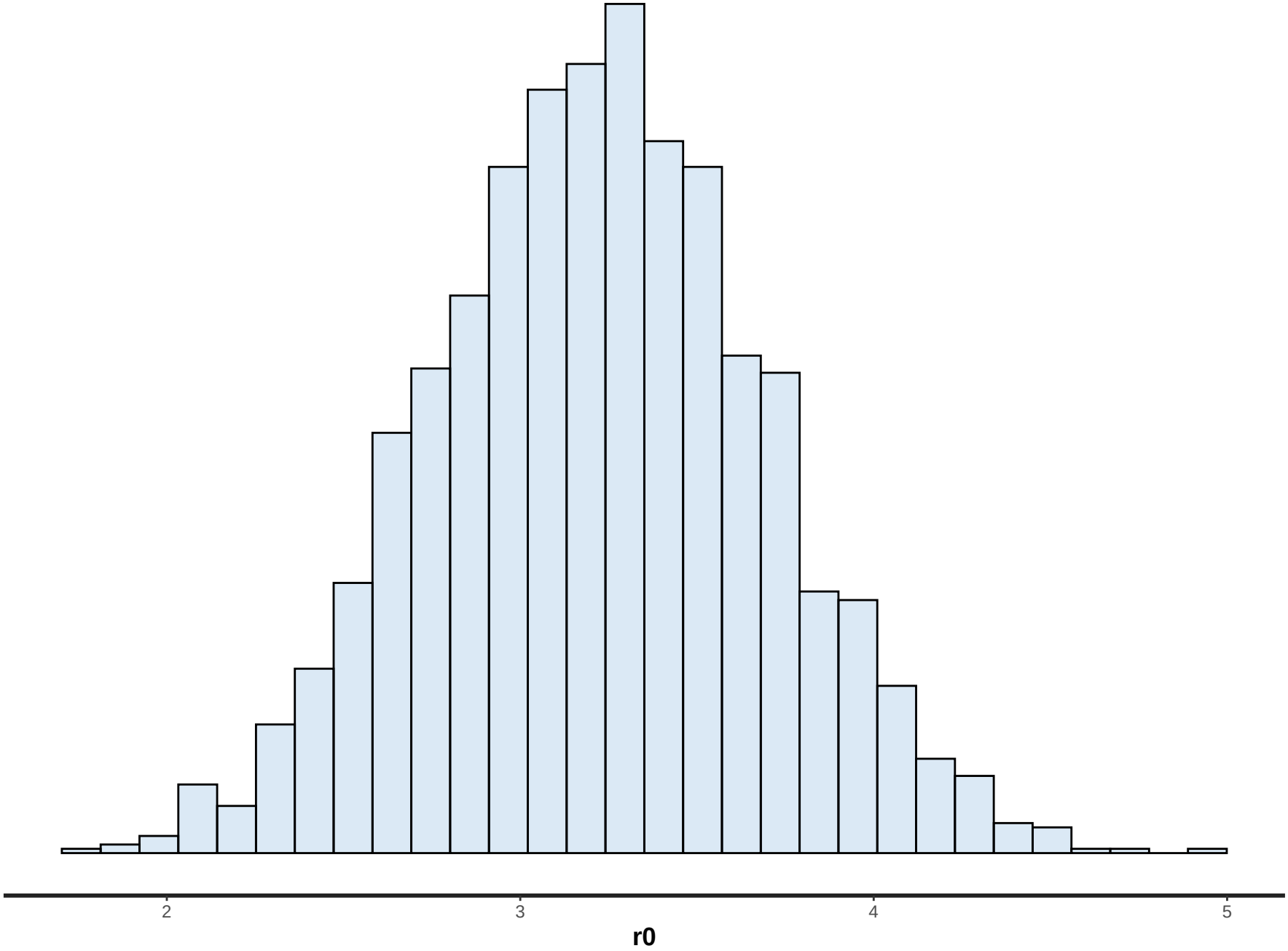

Long Term Death Projection
Number of COVID19 Deaths
1000
750
500
250
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

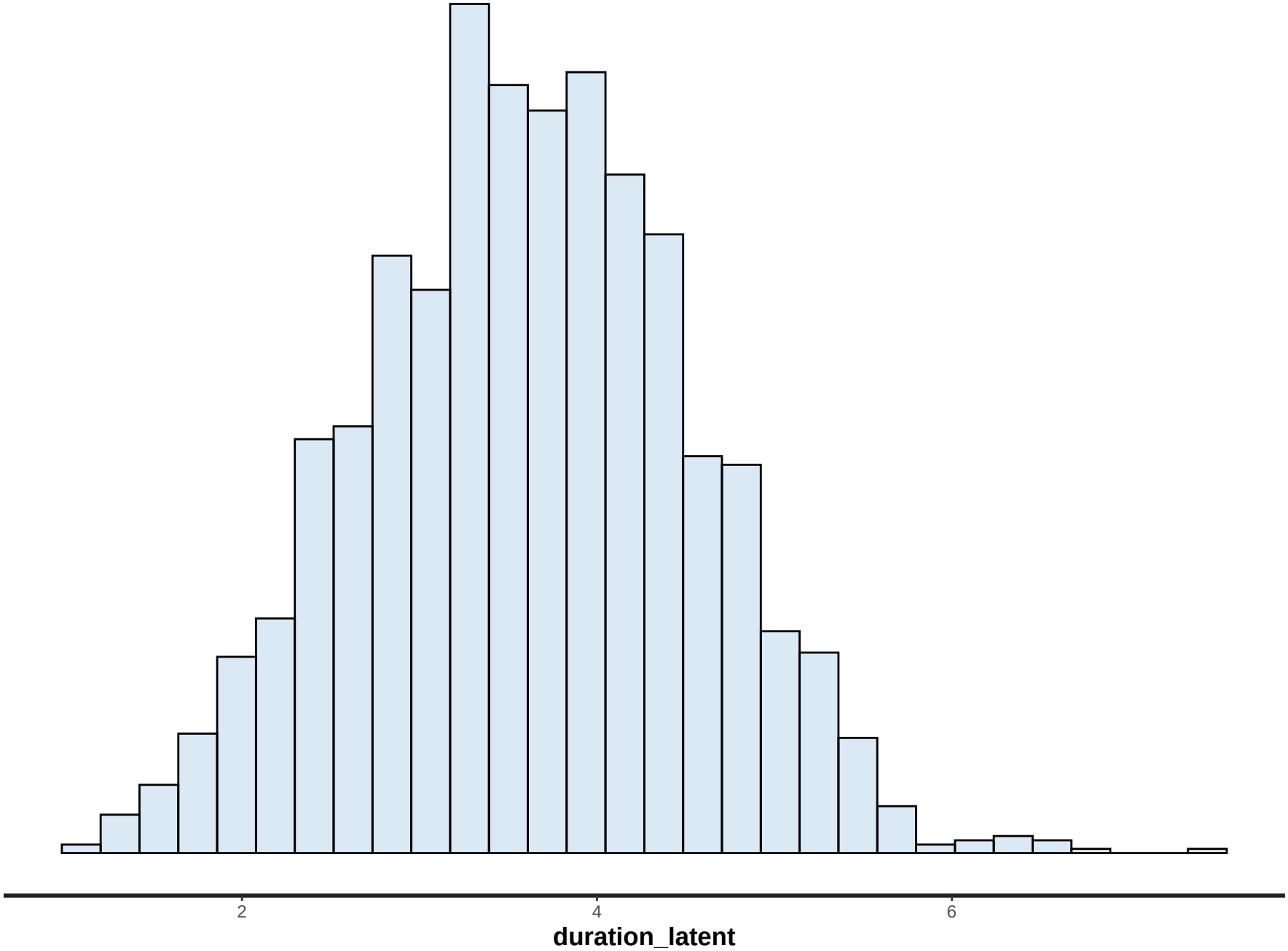

Effective Reproduction Number
Re
1.5
1.2
0.9
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

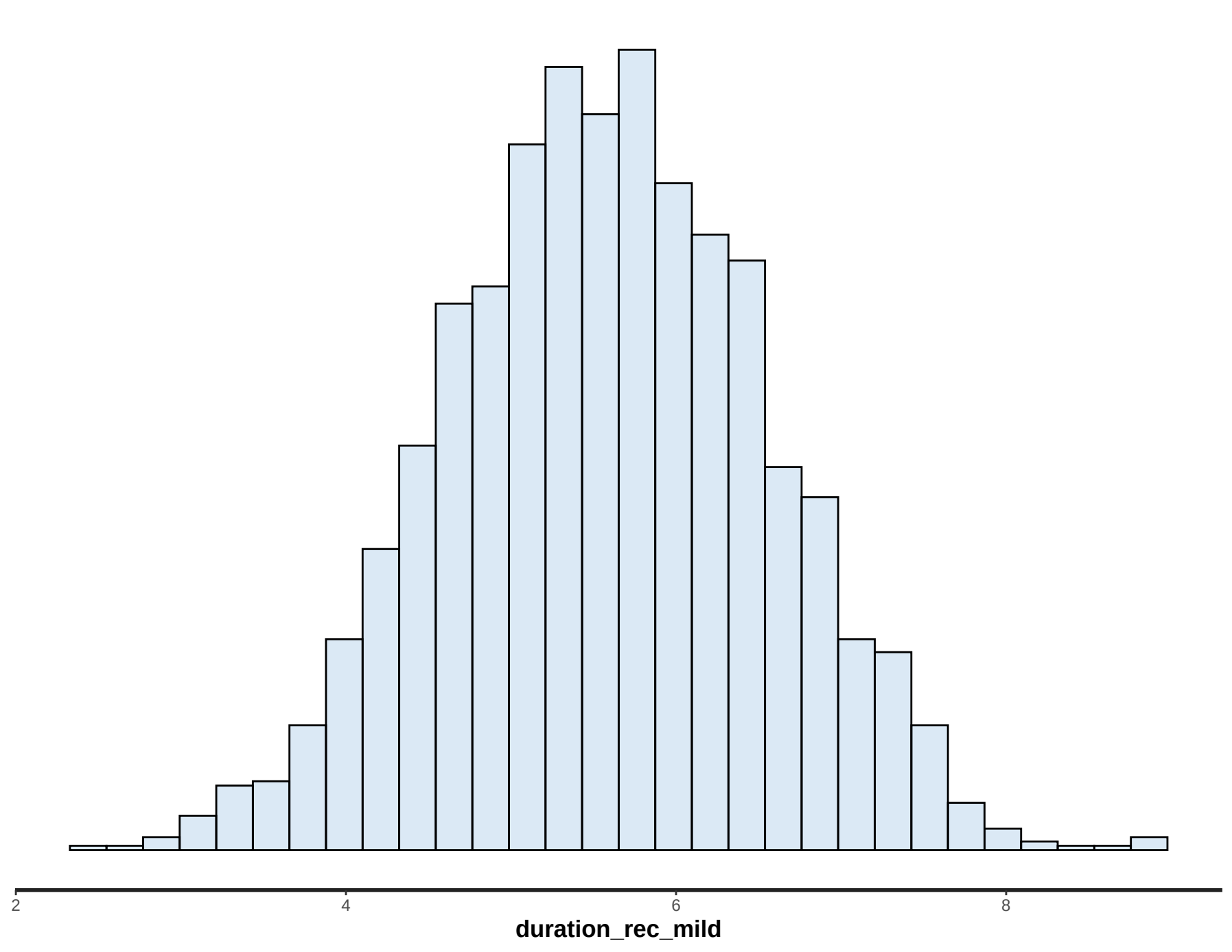
Rt as of 2020−12−10

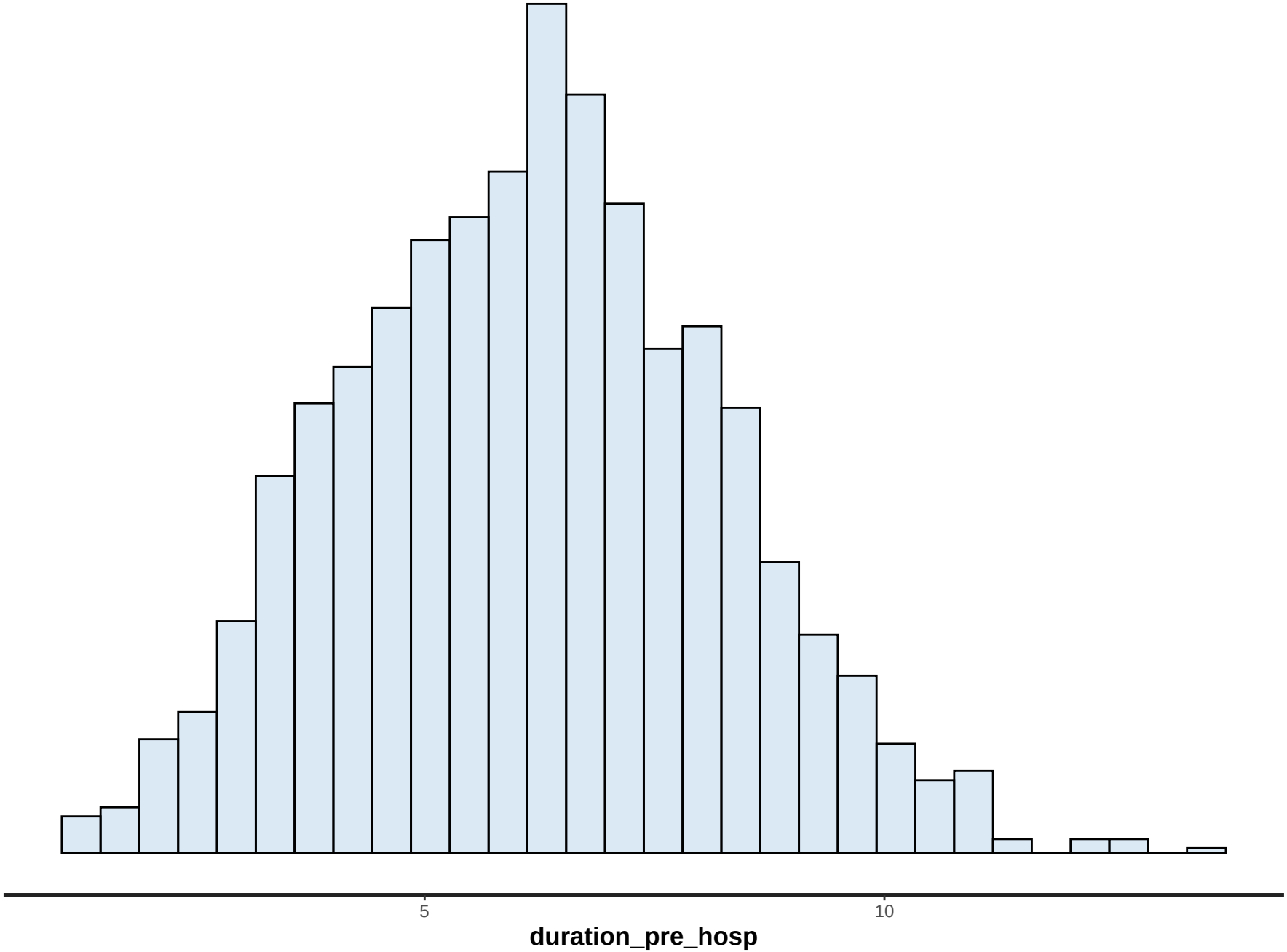
5%	10%	25%	50%	75%	90%	95%
1.19	1.22	1.27	1.32	1.38	1.44	1.48

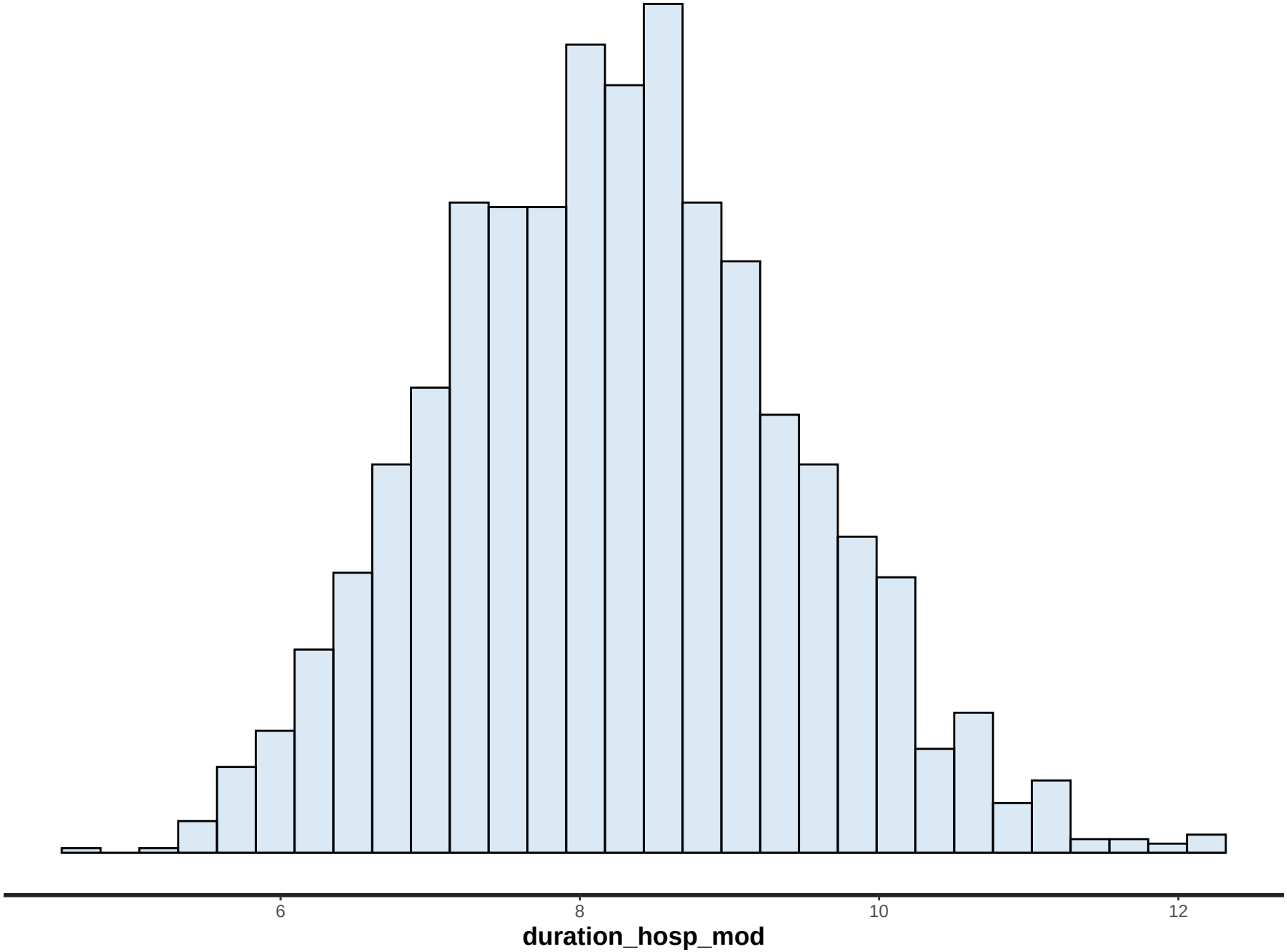


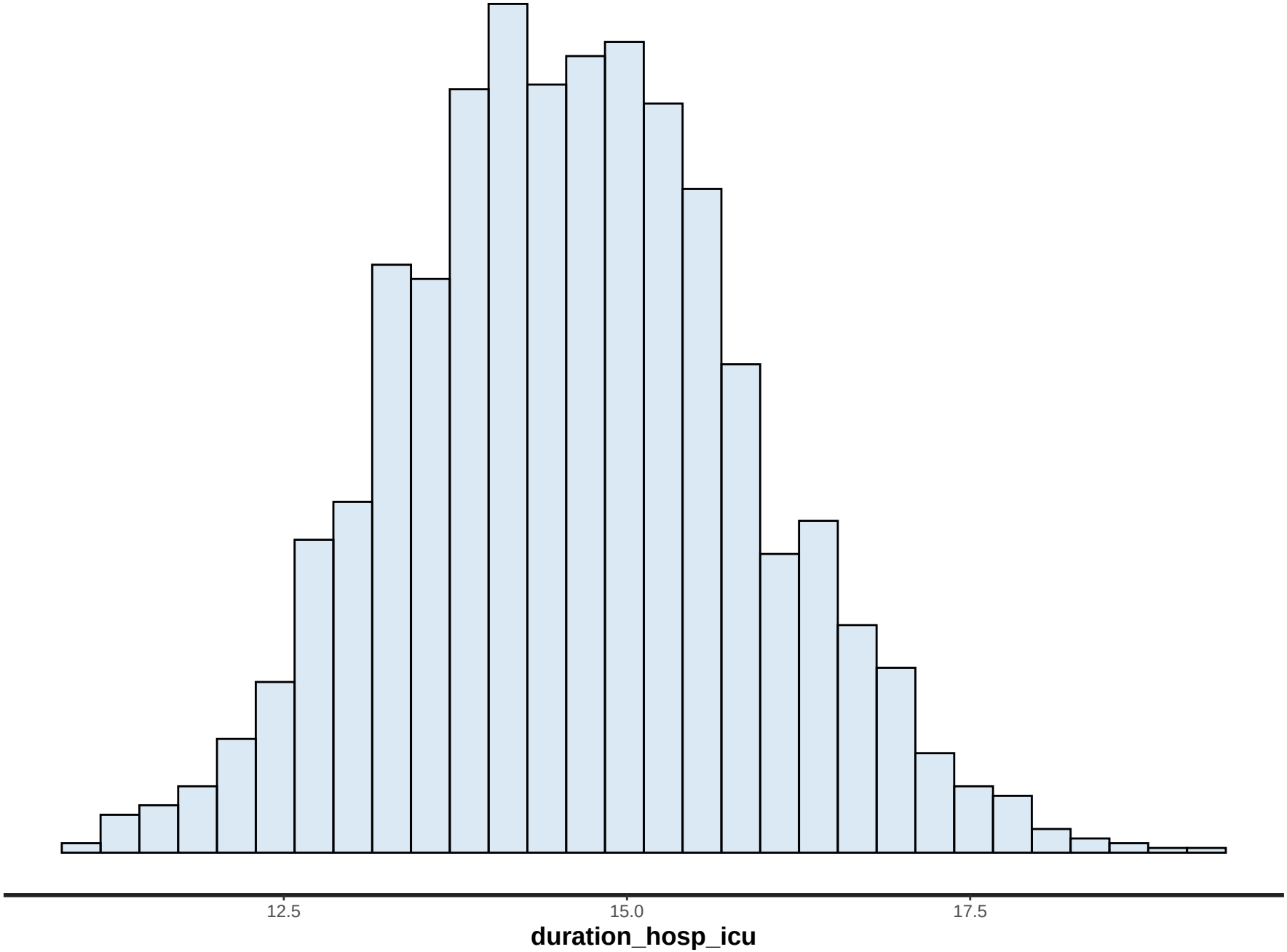

2
3
4
5
r0

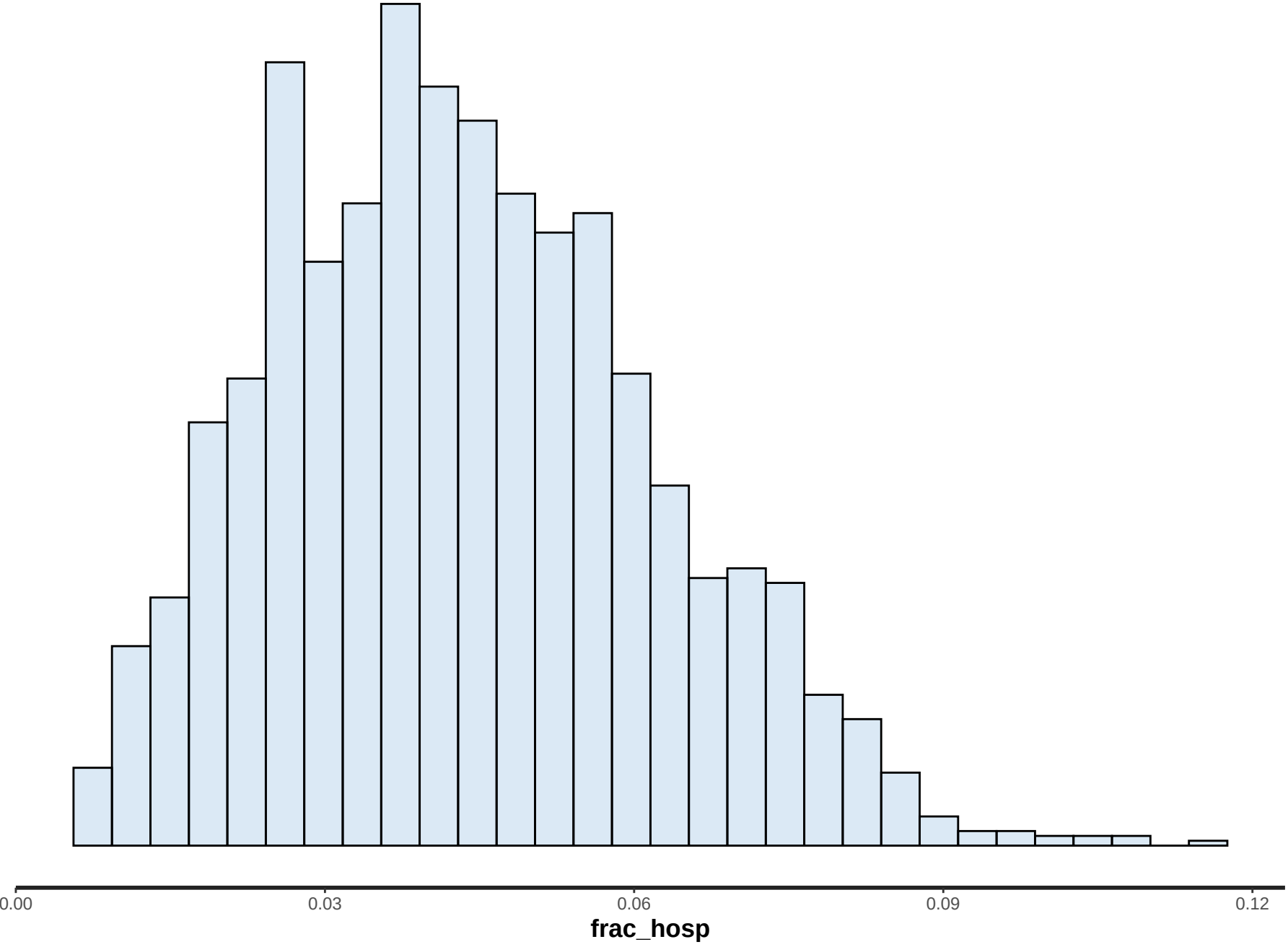

2
4
6
duration_latent

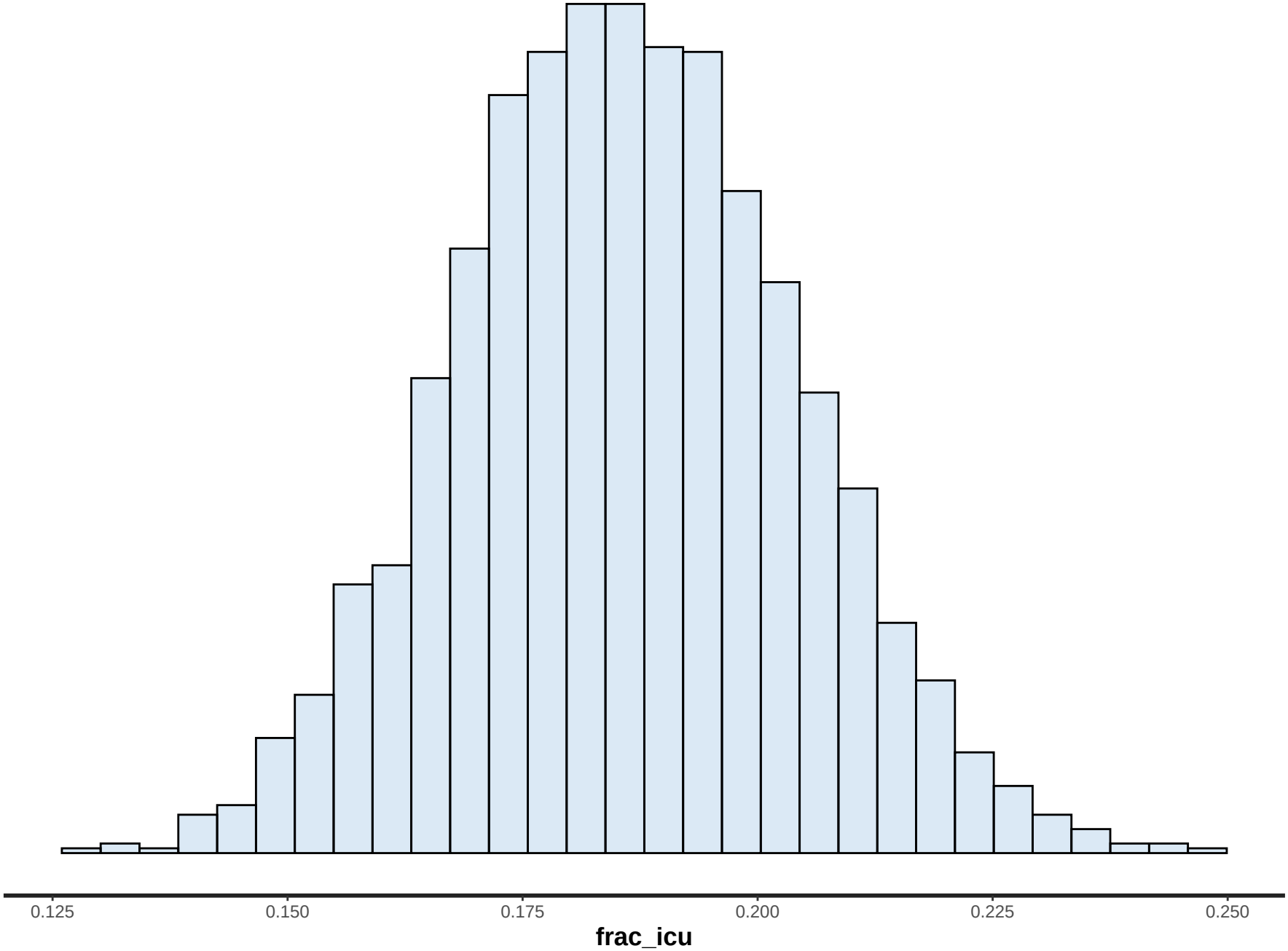

2
4
6
8
duration_rec_mild

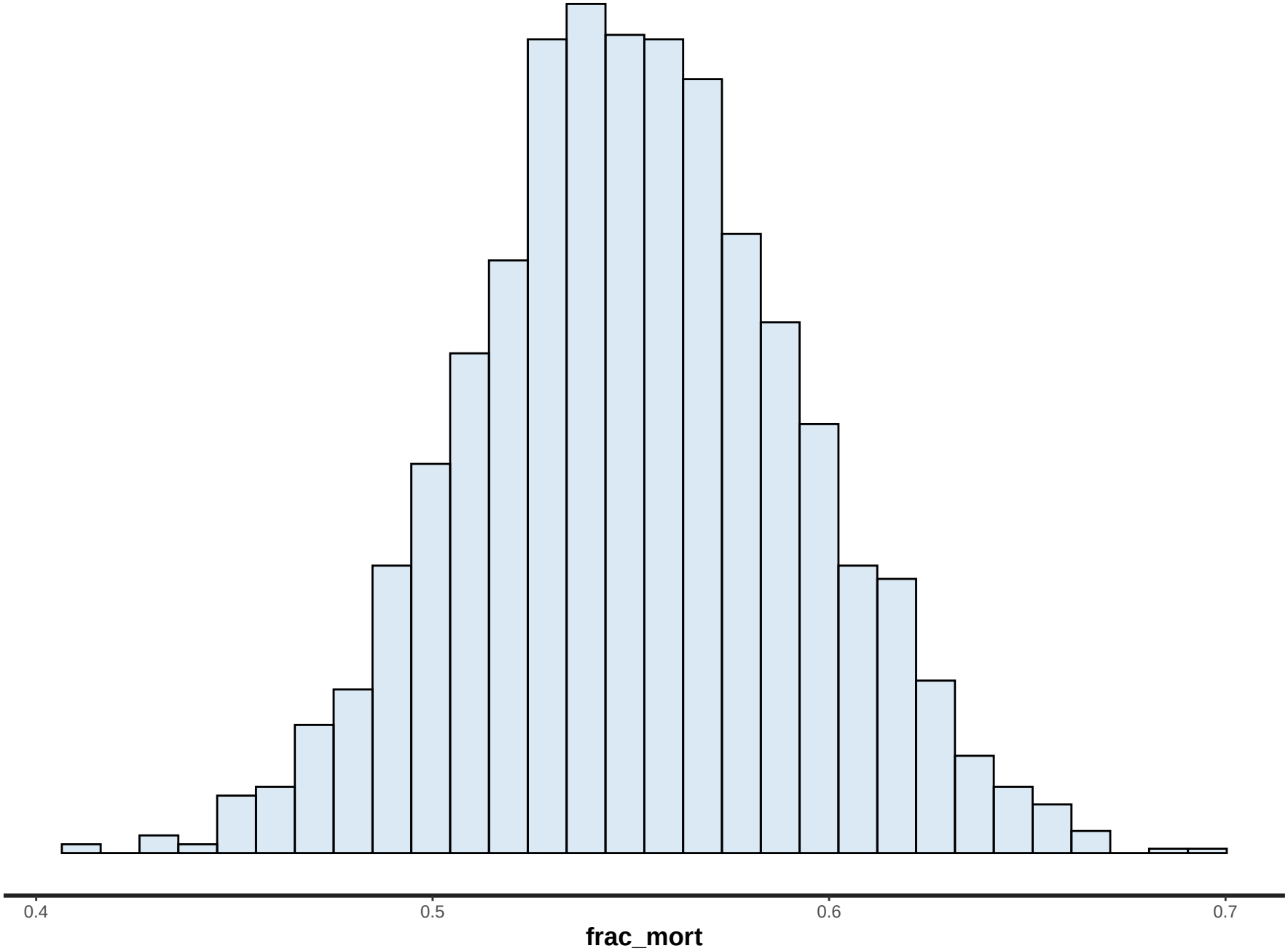

5
10
duration_pre_hosp

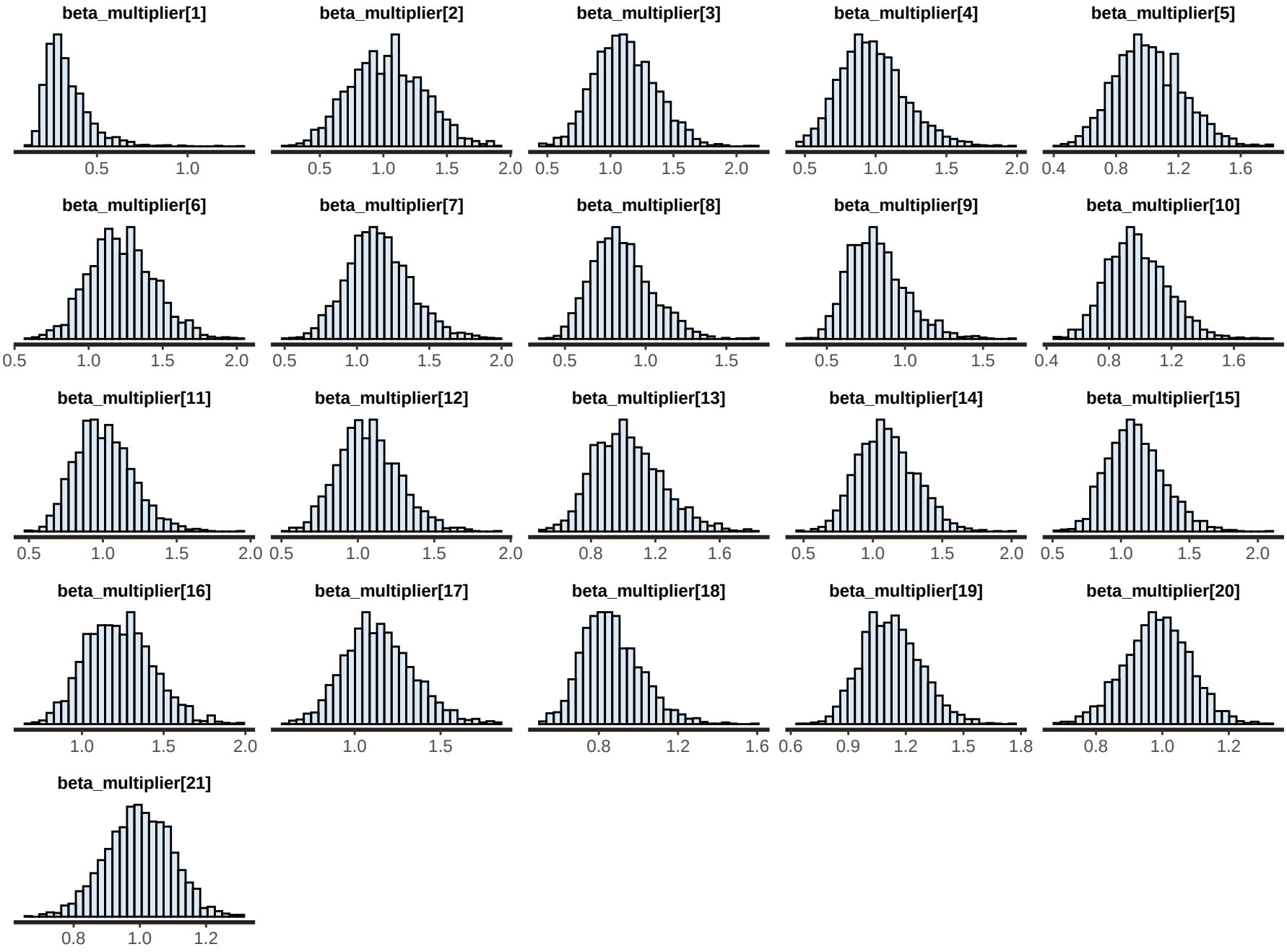

6
8
10
12
duration_hosp_mod


12.5
15.0
17.5
duration_hosp_icu


0.00
0.03
0.06
0.09
0.12
frac_hosp


0.125
0.150
0.175
0.200
0.225
0.250
frac_icu


0.4
0.5
0.6
0.7
frac_mort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beta_multiplier[2]
0.5 1.0 1.5 2.0
beta_multiplier[3]
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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]
0.5 1.0 1.5 2.0
beta_multiplier[8]
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beta_multiplier[9]
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beta_multiplier[10]
0.4 0.8 1.2 1.6
beta_multiplier[11]
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beta_multiplier[13]
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beta_multiplier[14]
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beta_multiplier[15]
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beta_multiplier[16]
1.0 1.5 2.0
beta_multiplier[17]
1.0 1.5
beta_multiplier[18]
0.8 1.2 1.6
beta_multiplier[19]
0.6 0.9 1.2 1.5 1.8
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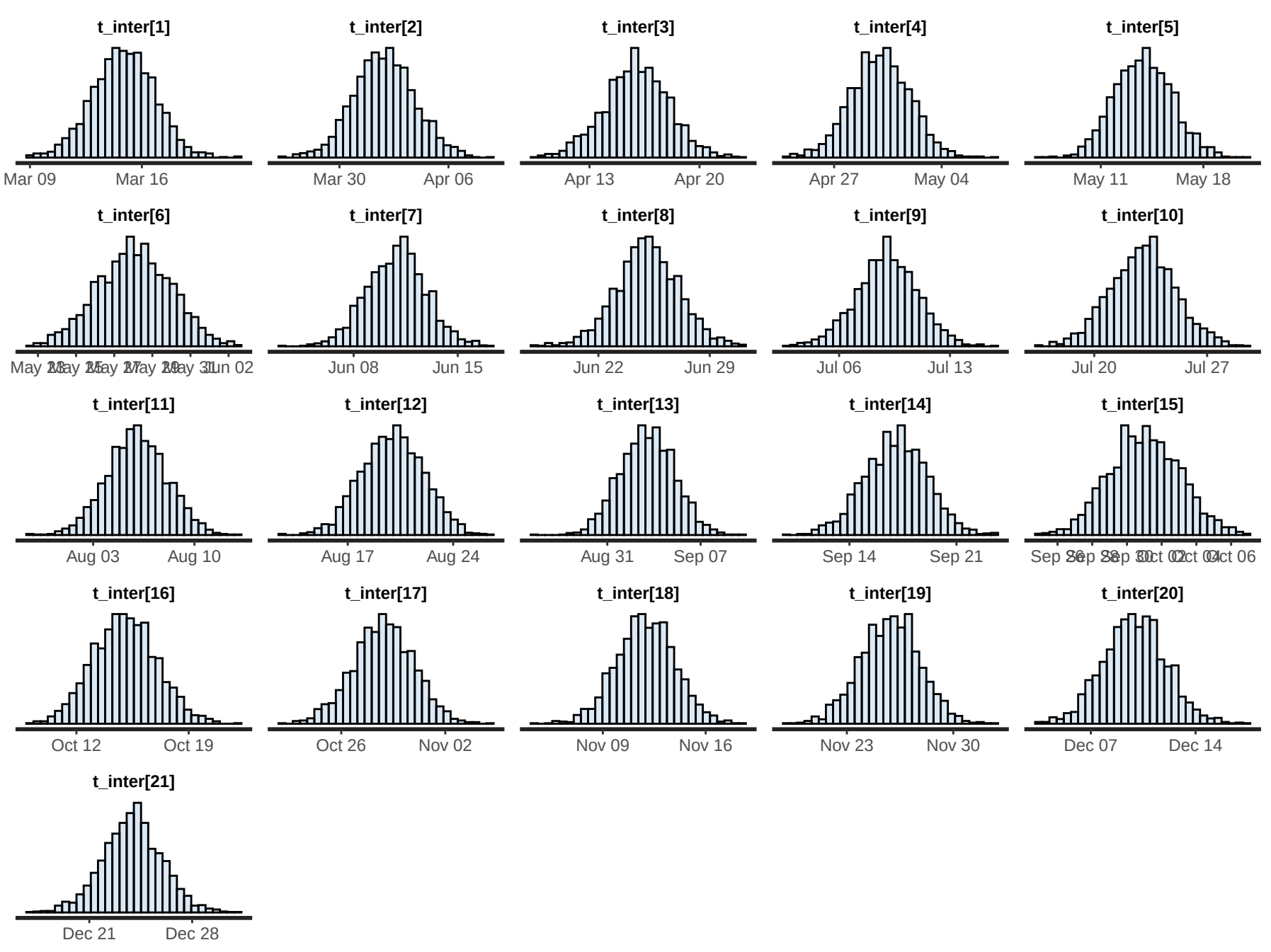
beta_multiplier[21]
0.8 1.0 1.2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May 11
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May 31
Jun 02
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Jun 08
Jun 15
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Jul 13
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Aug 31
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Sep 14
Sep 21
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Oct 12
Oct 19
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Oct 26
Nov 02
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Nov 16
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Nov 23
Nov 30
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Dec 07
Dec 14
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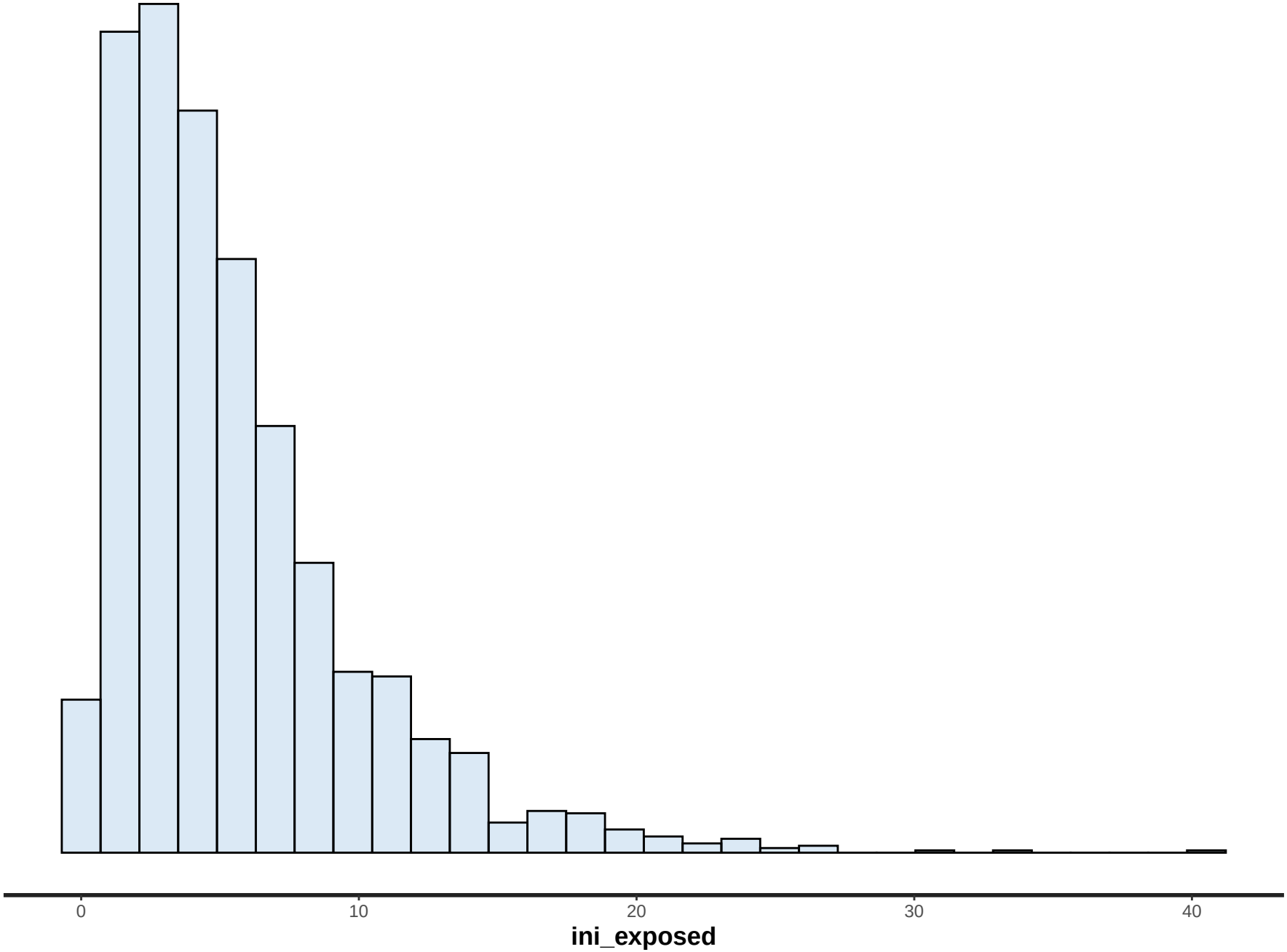
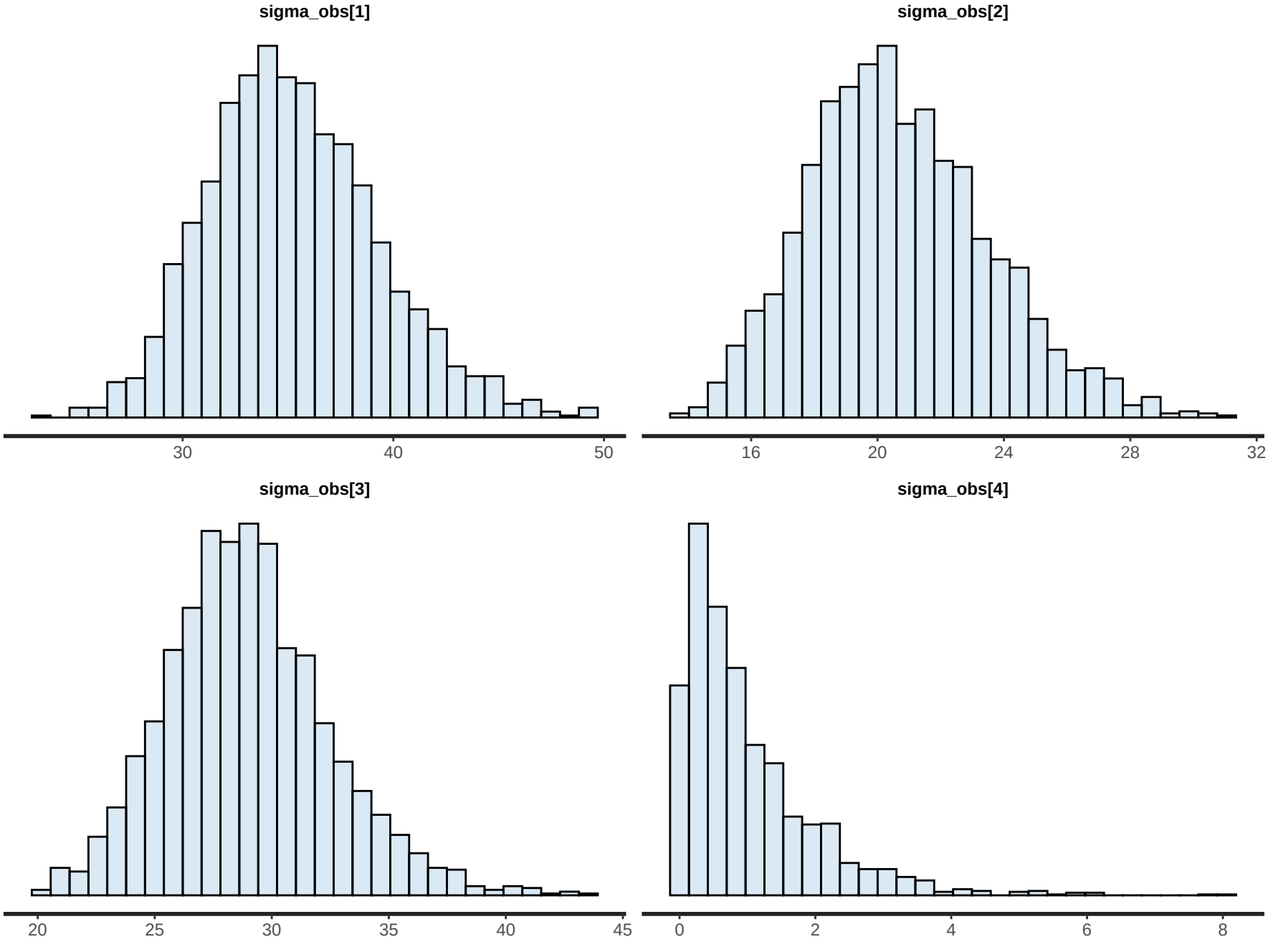
Dec 21
Dec 28


0
10
20
30
40
ini_exposed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30
35
40
45
sigma_obs[4]
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4
6
8