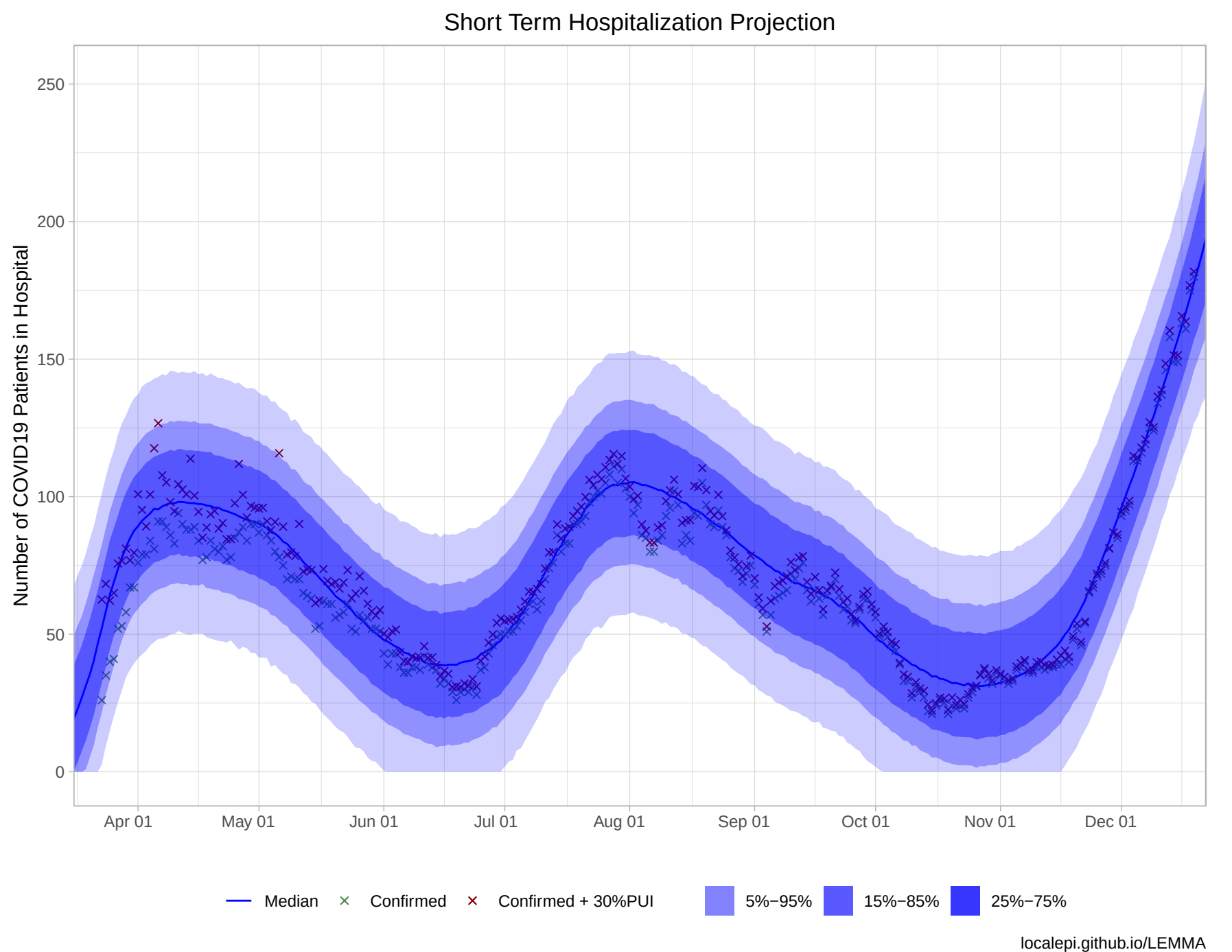
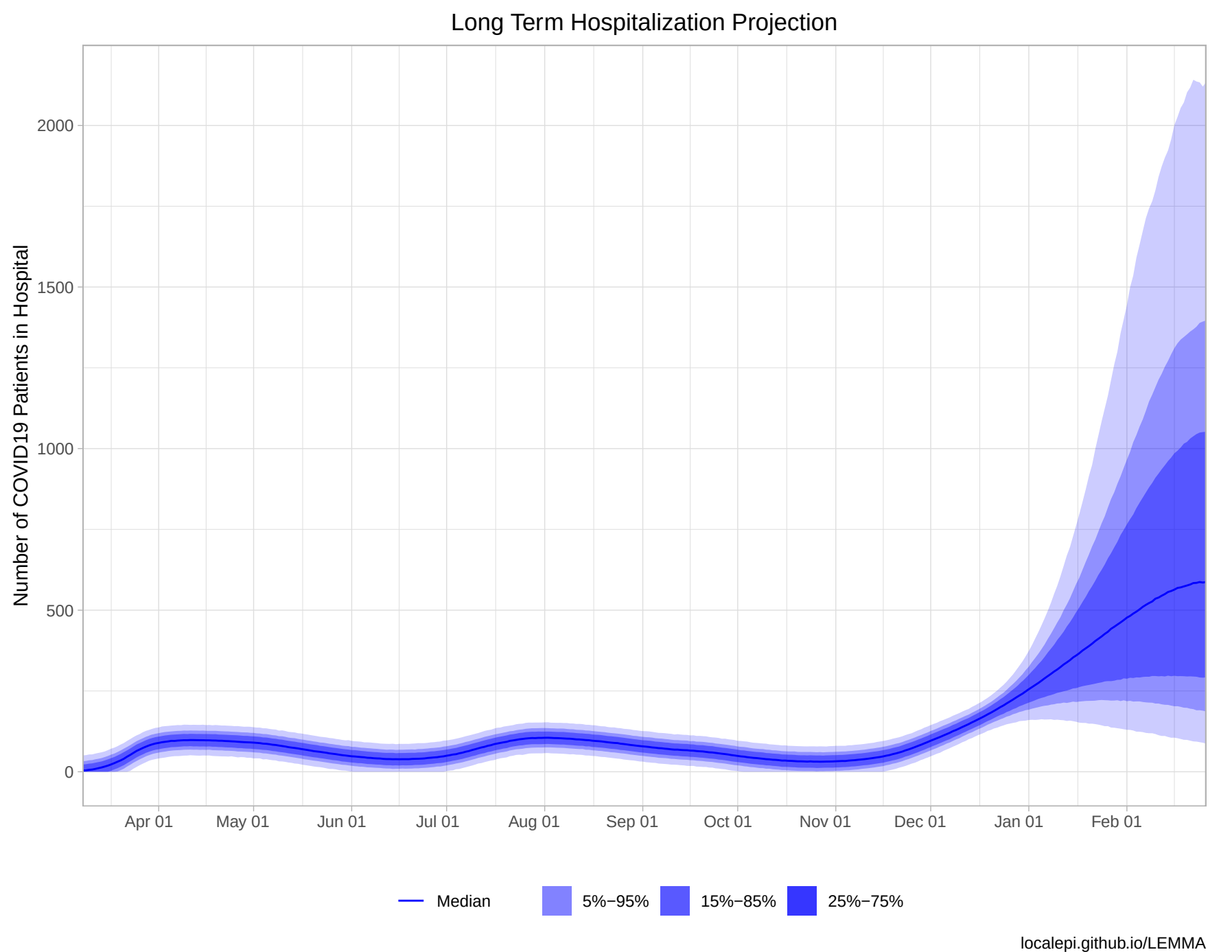
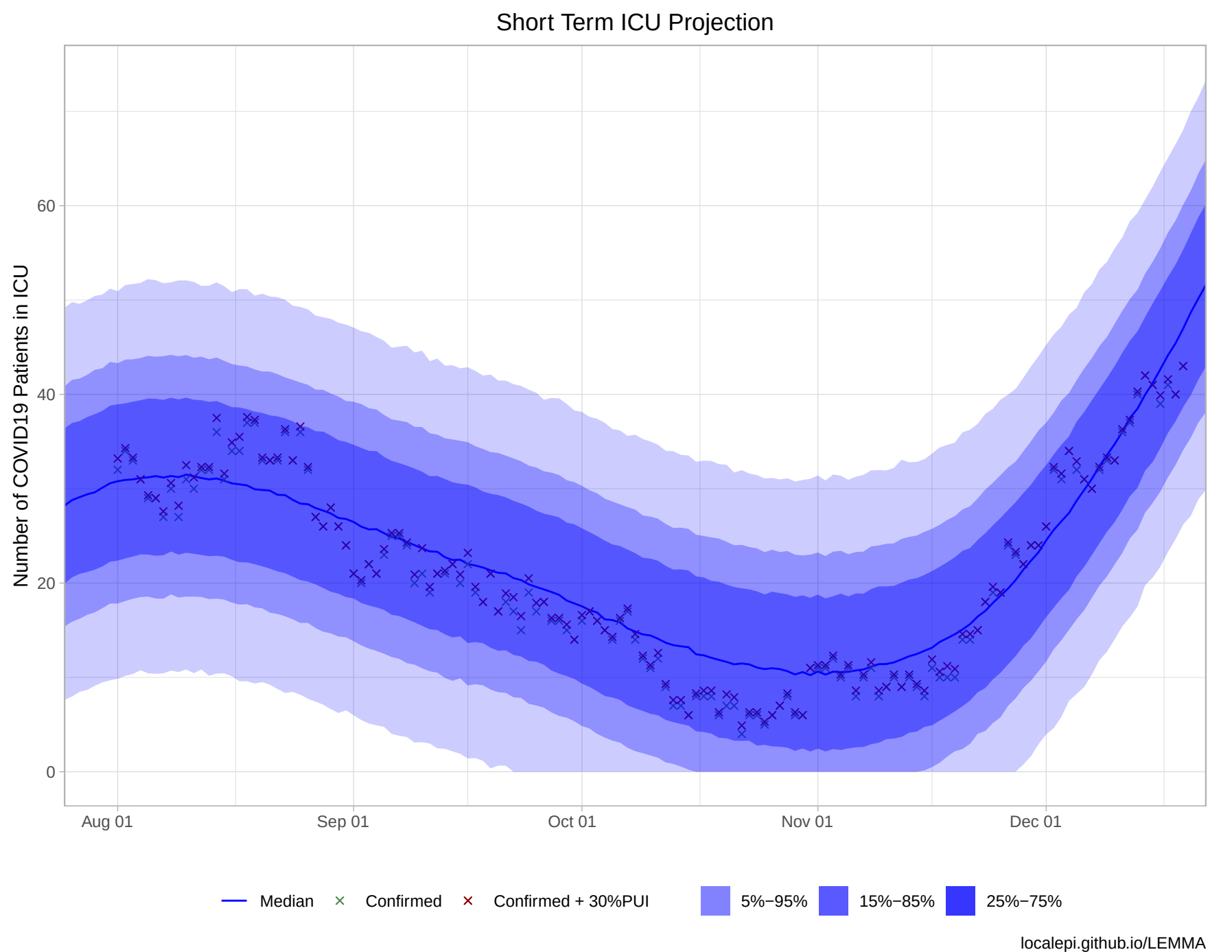
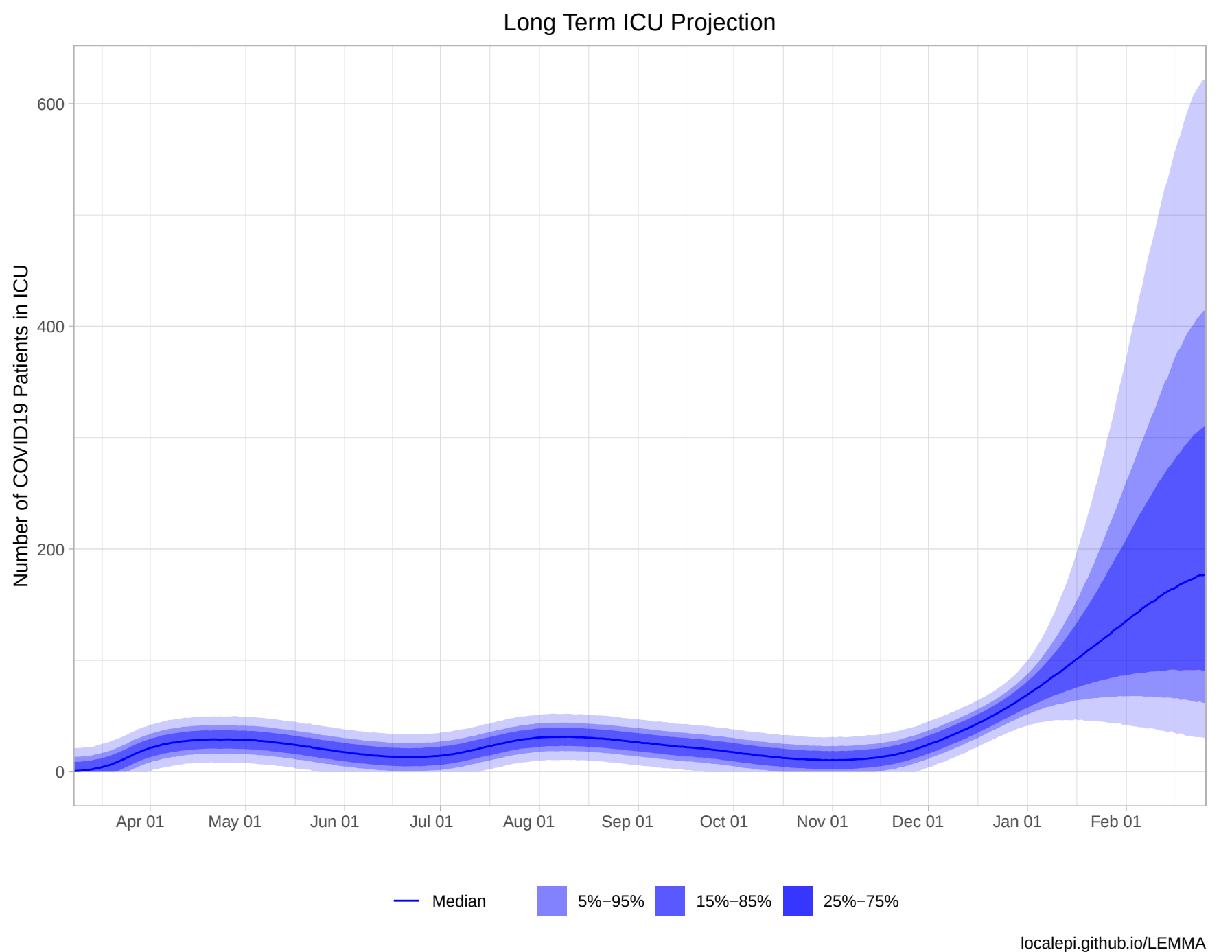
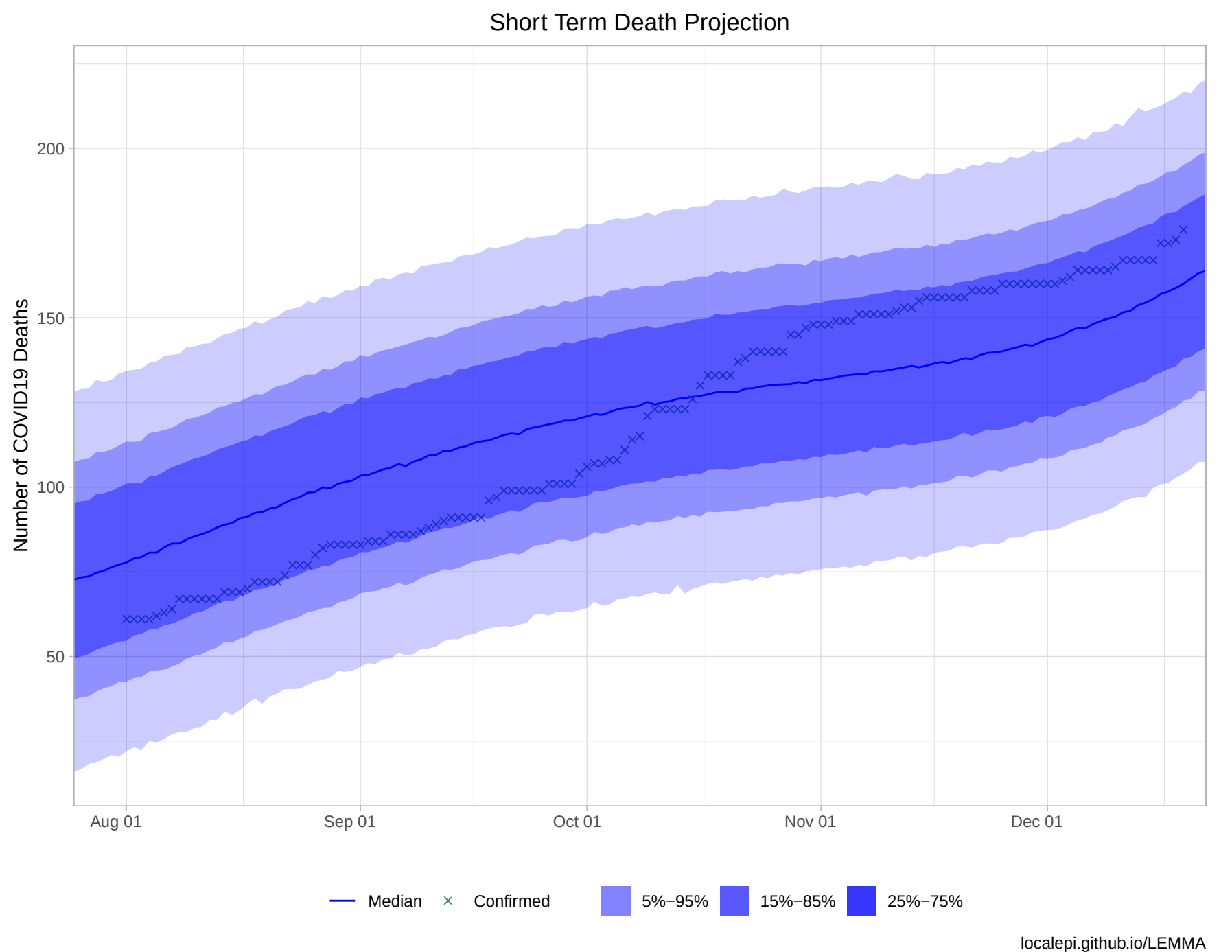
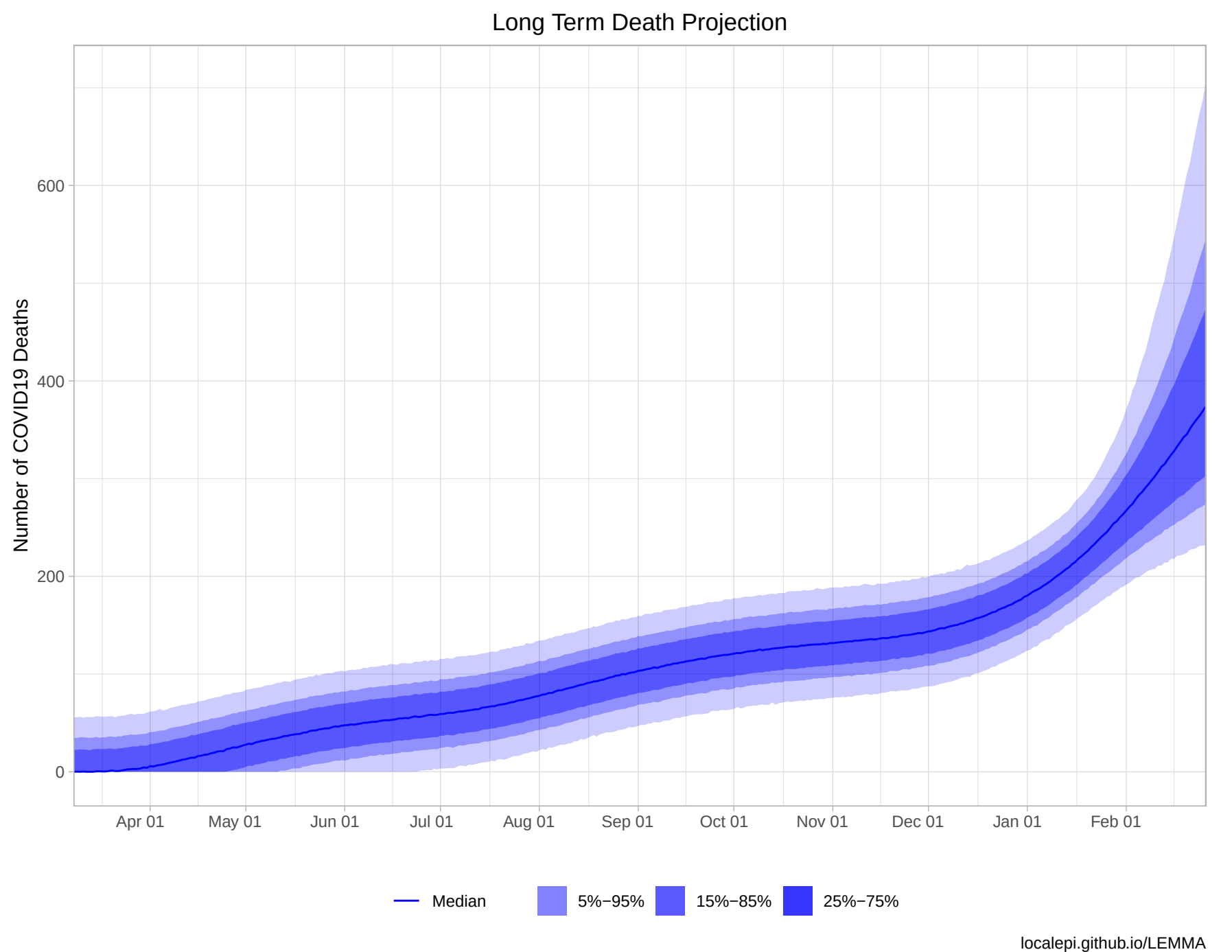

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
250
200
150
100
50
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

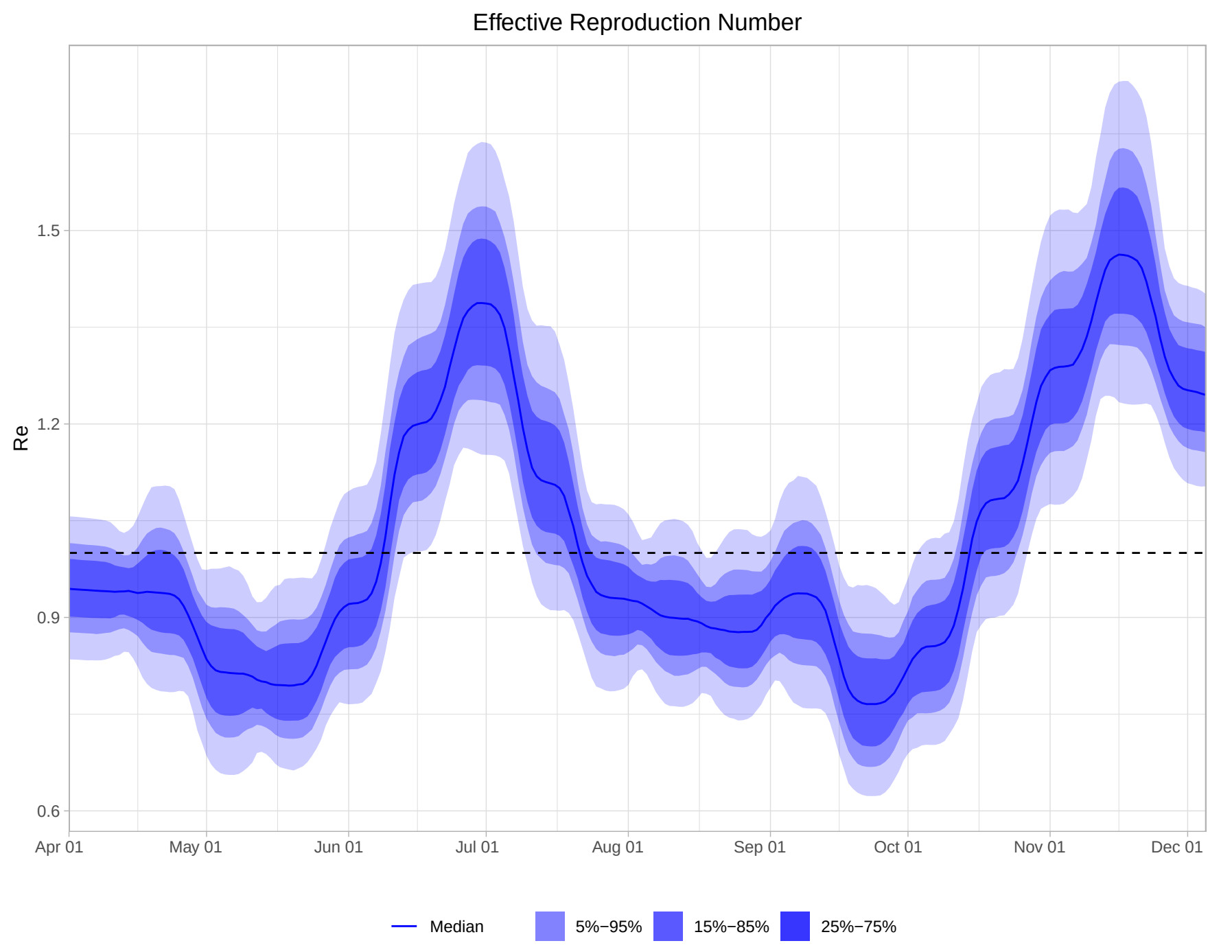

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
2000
1500
1000
500
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
20
40
60
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
600
400
200
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

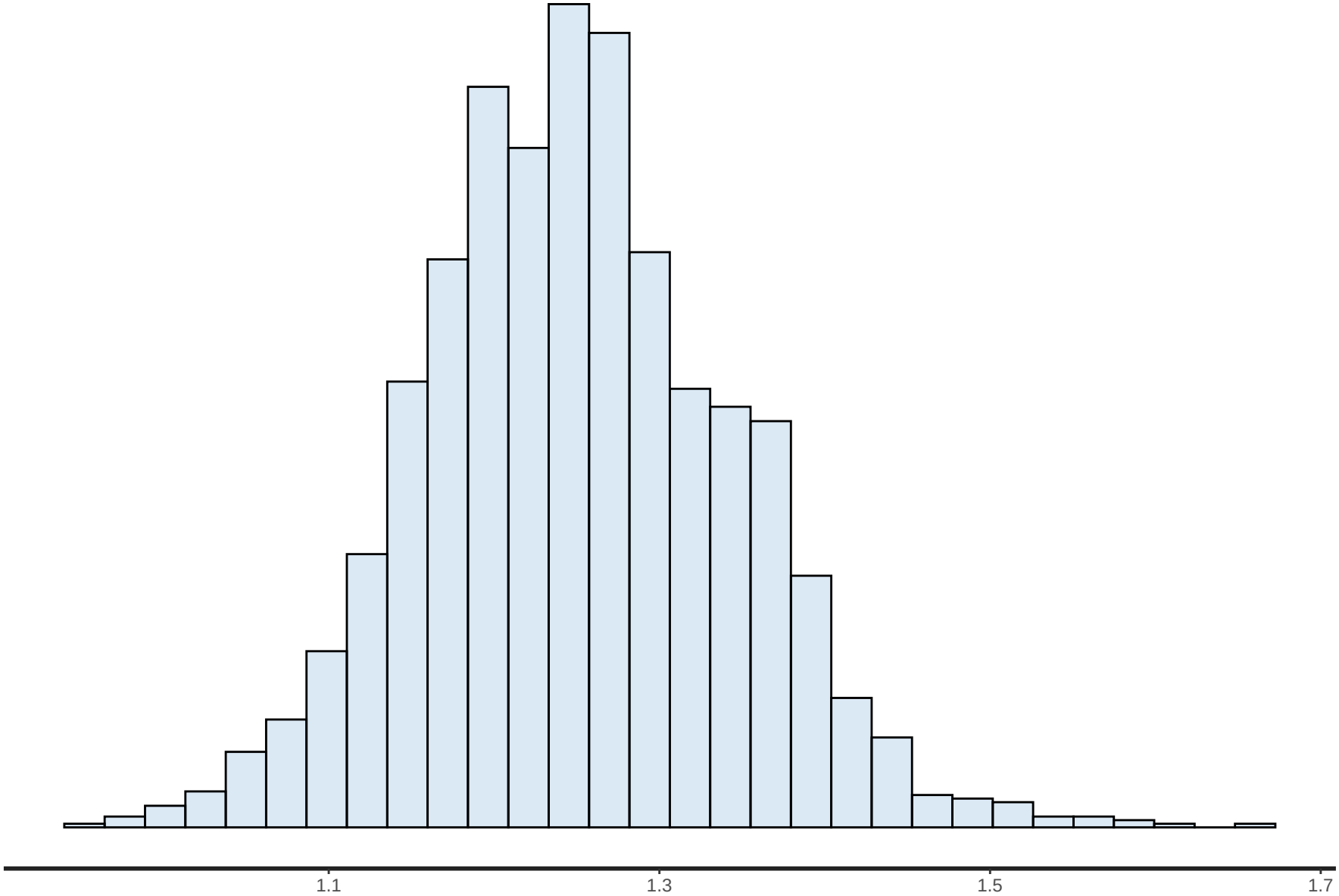

Short Term Death Projection
Number of COVID19 Deaths
200
150
100
50
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

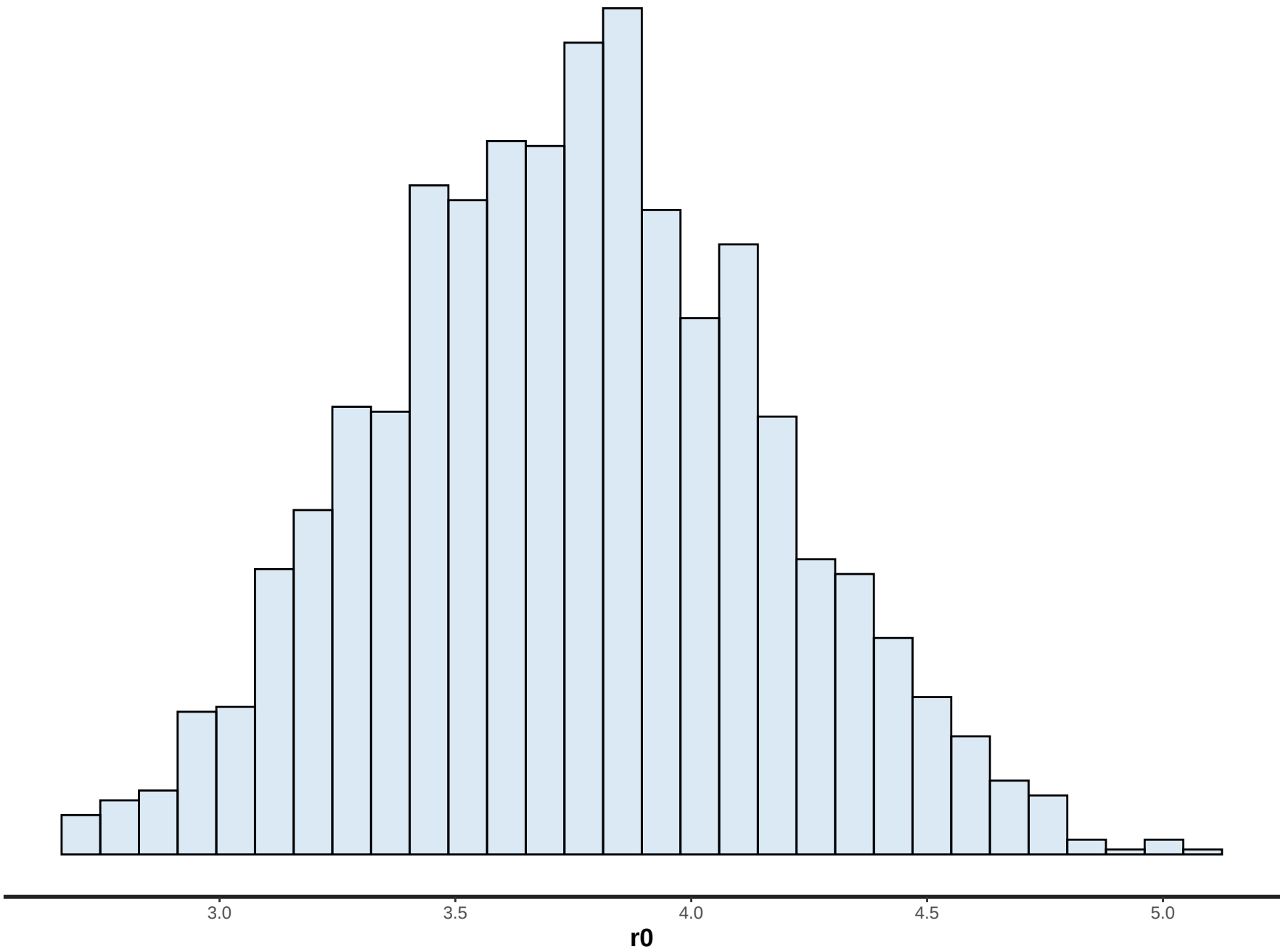

Long Term Death Projection
Number of COVID19 Deaths
600
400
200
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

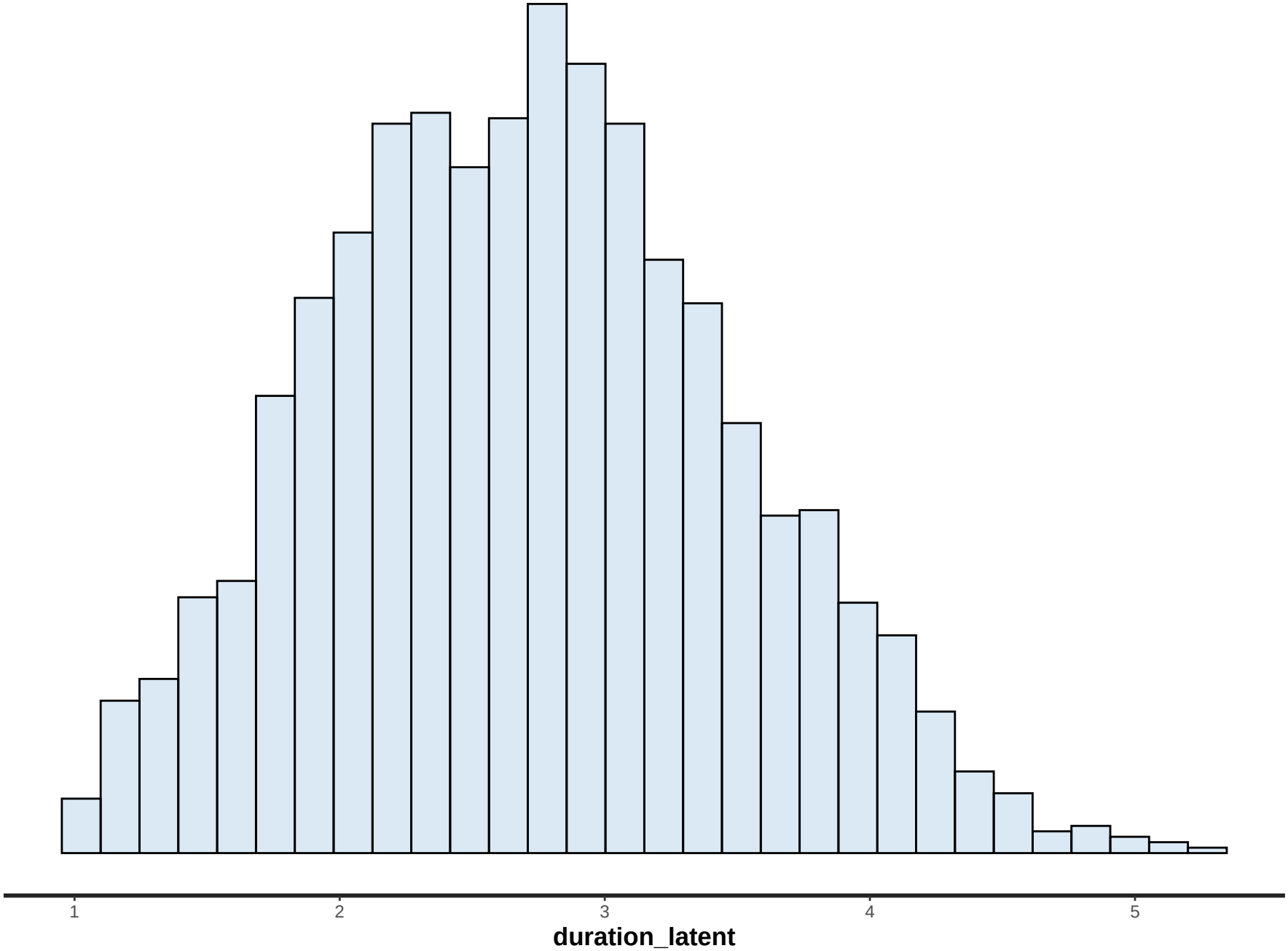

Effective Reproduction Number
Re
1.5
1.2
0.9
0.6
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

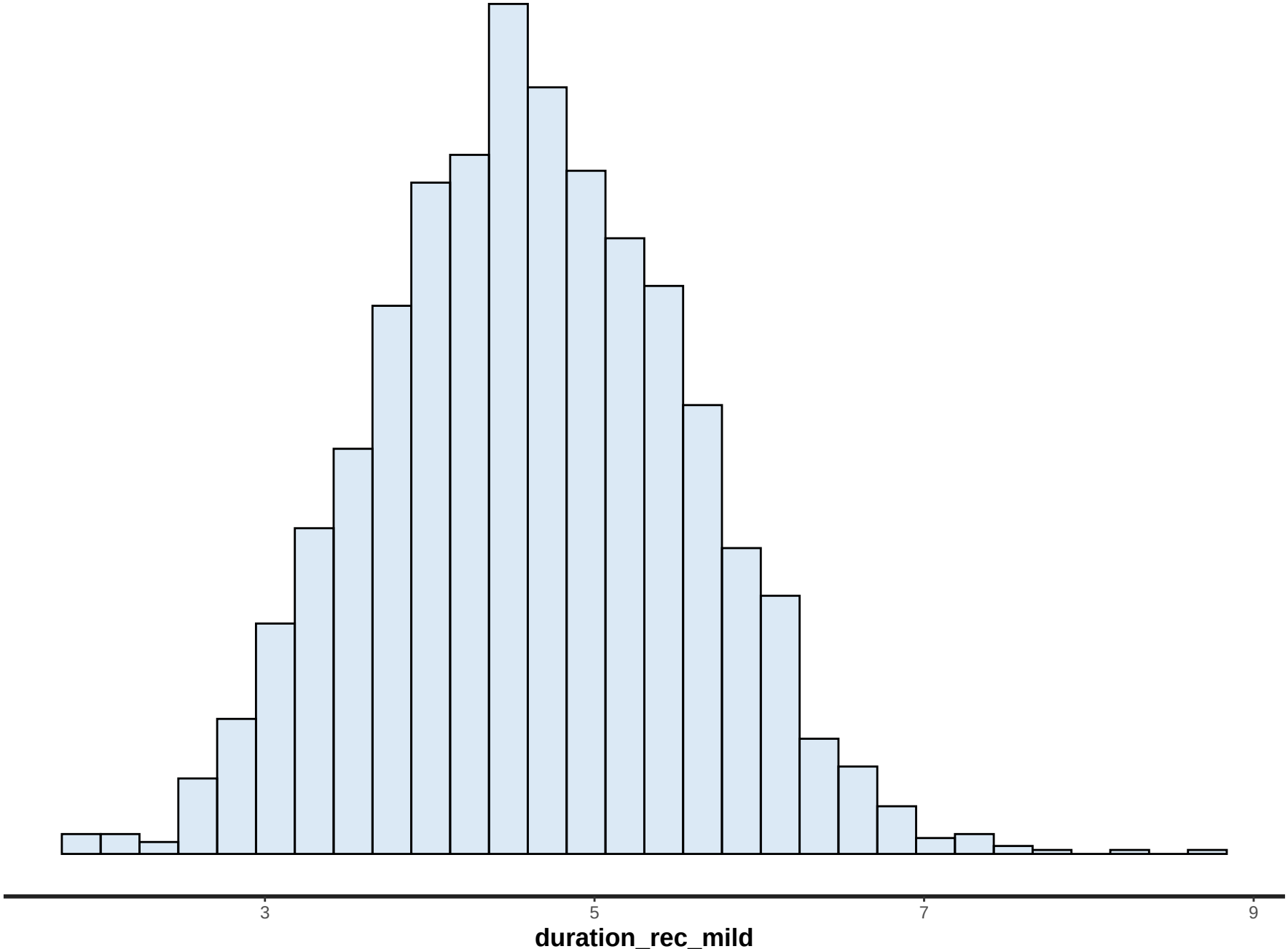
Rt as of 2020−12−05

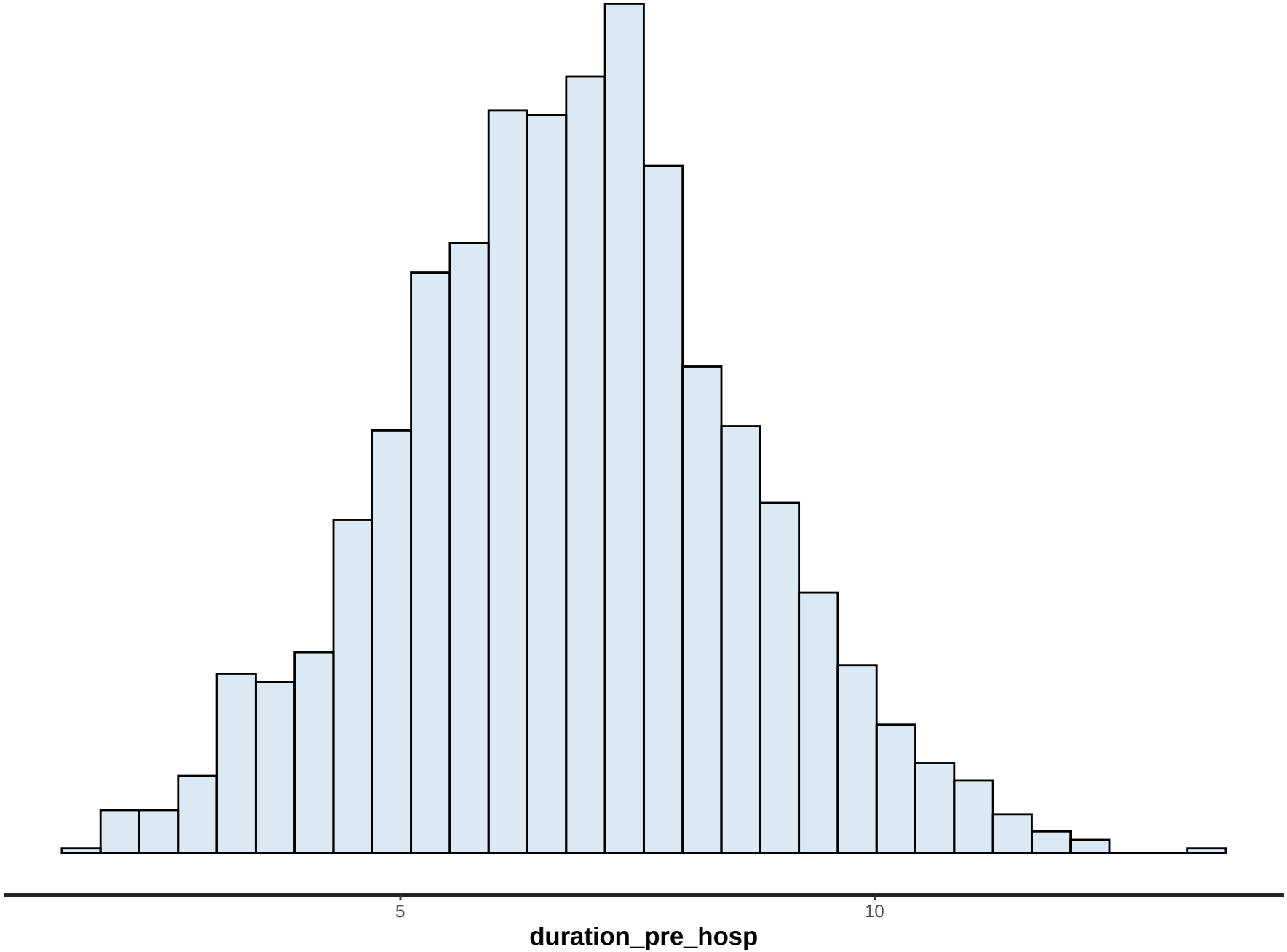
5%	10%	25%	50%	75%	90%	95%
1.10	1.14	1.19	1.24	1.31	1.37	1.40

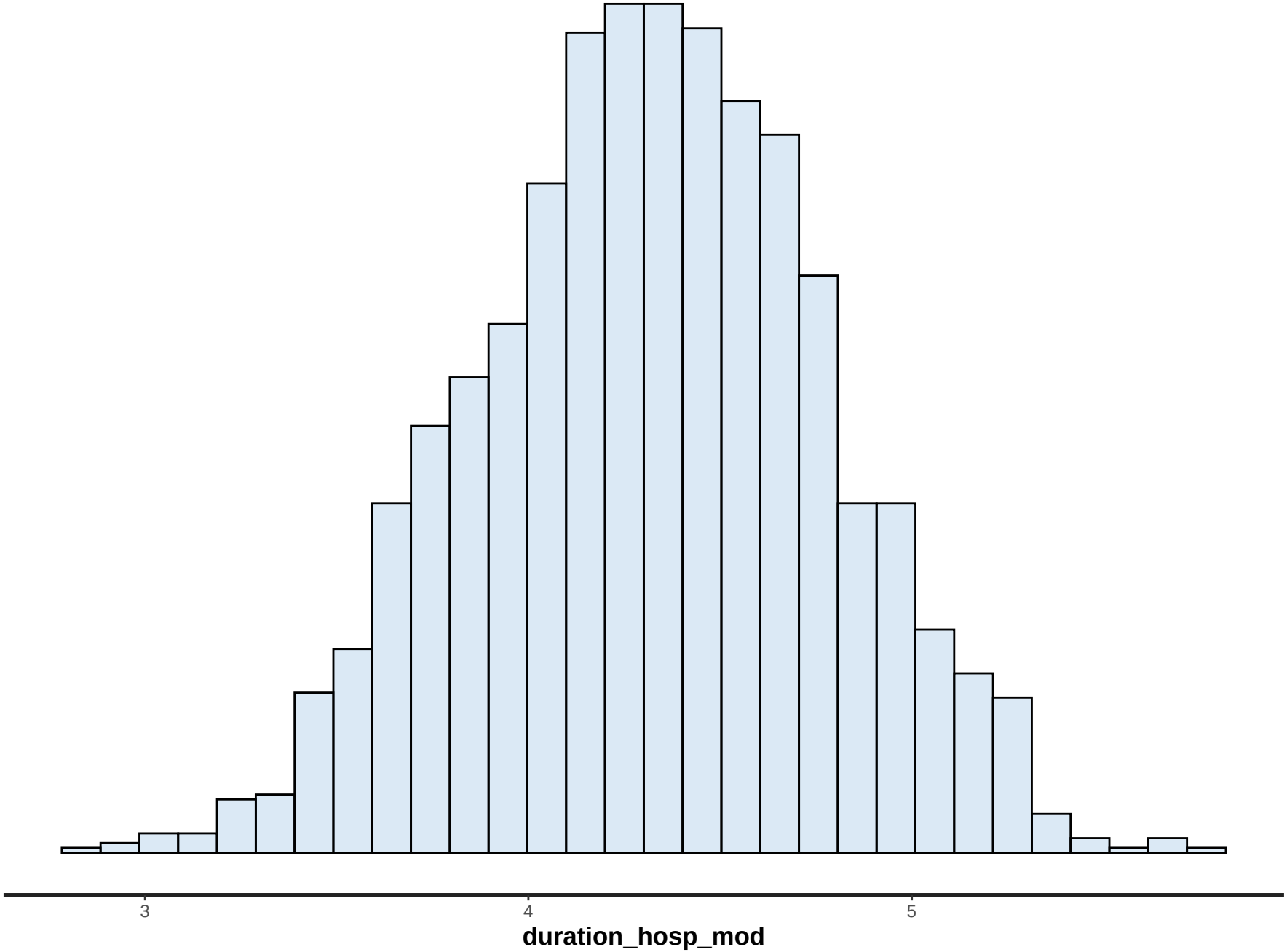


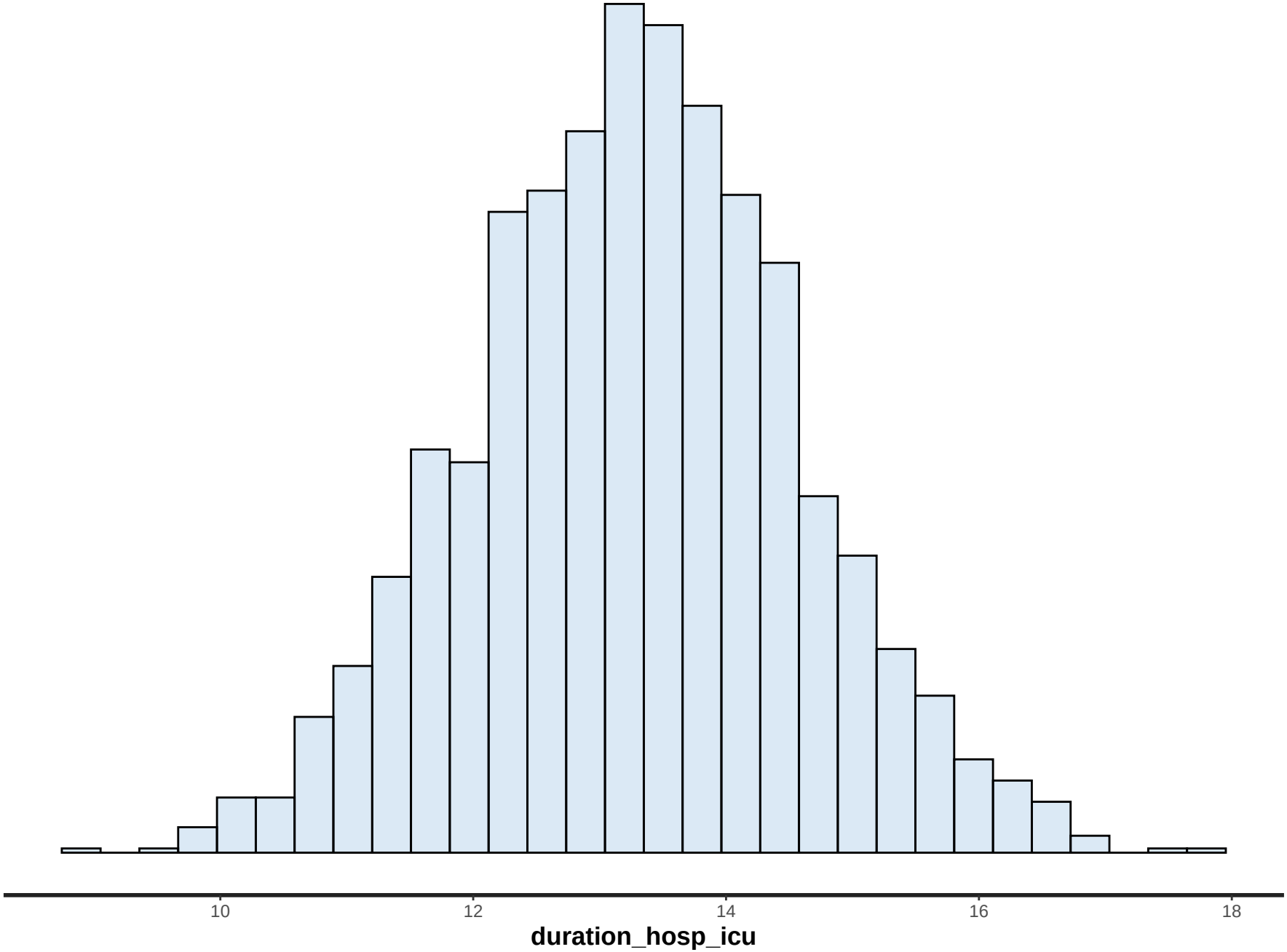

3.0
3.5
4.0
4.5
5.0
r0

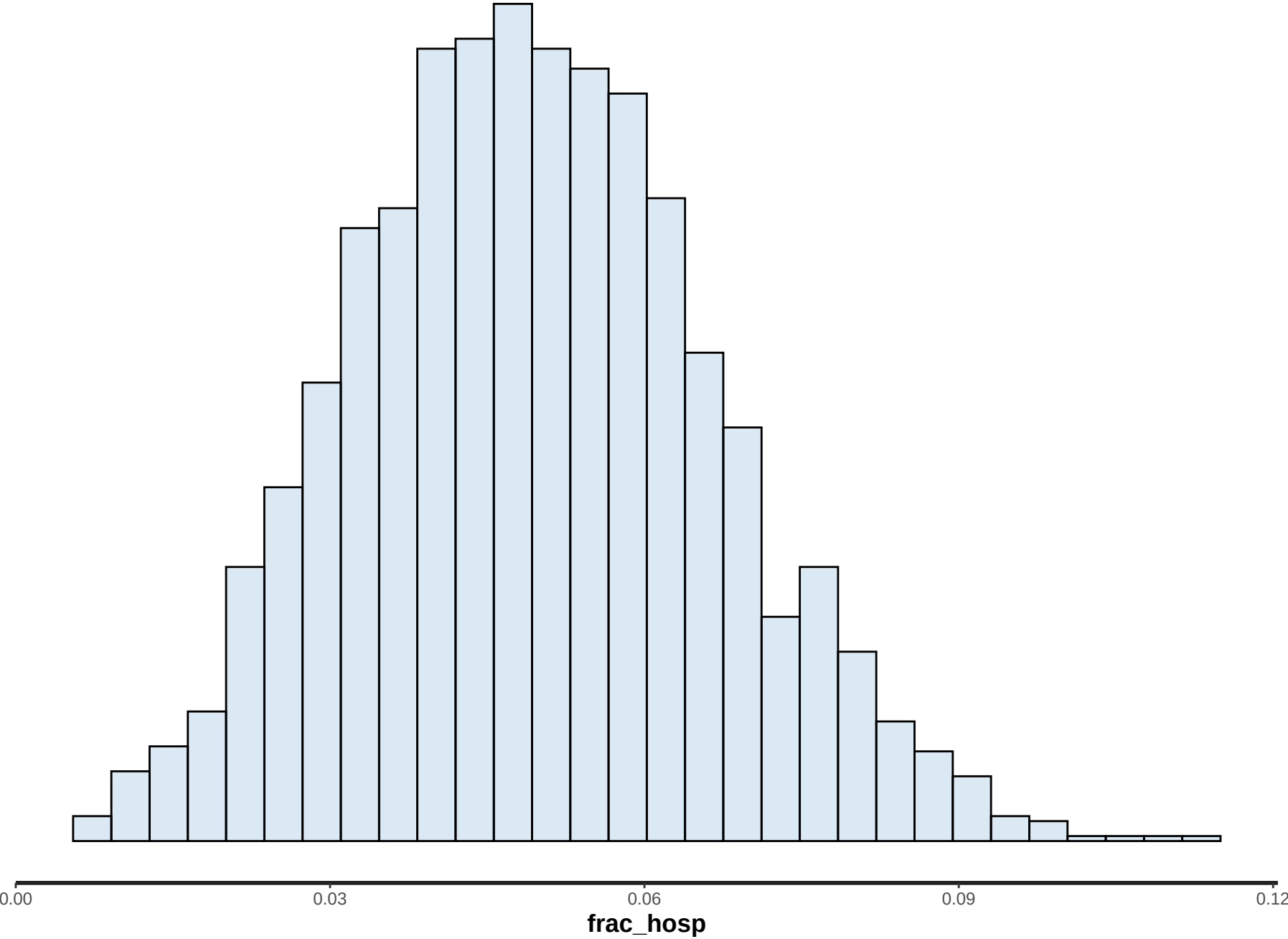

1
2
3
4
5
duration_latent

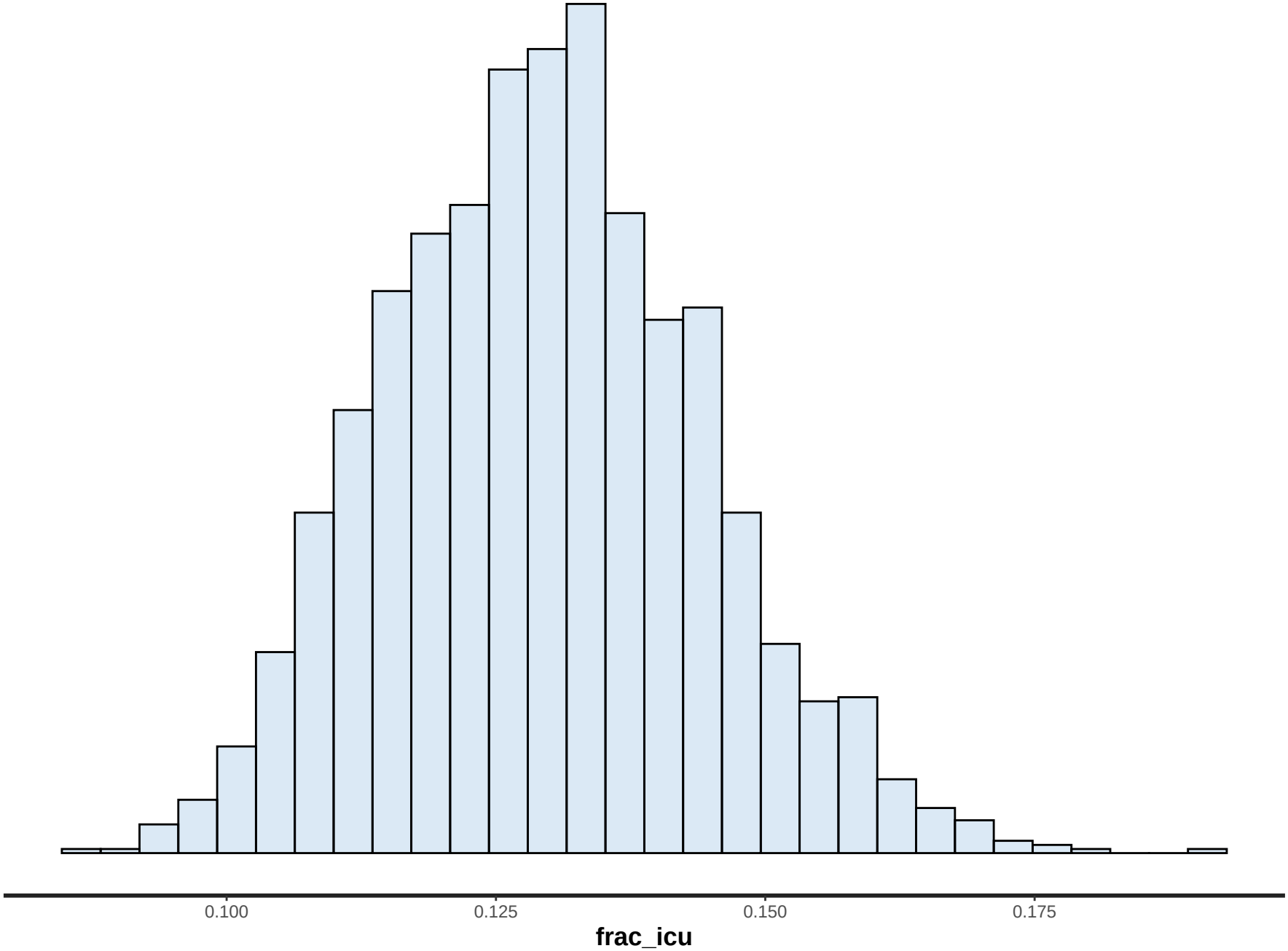

3
5
7
9
duration_rec_mild

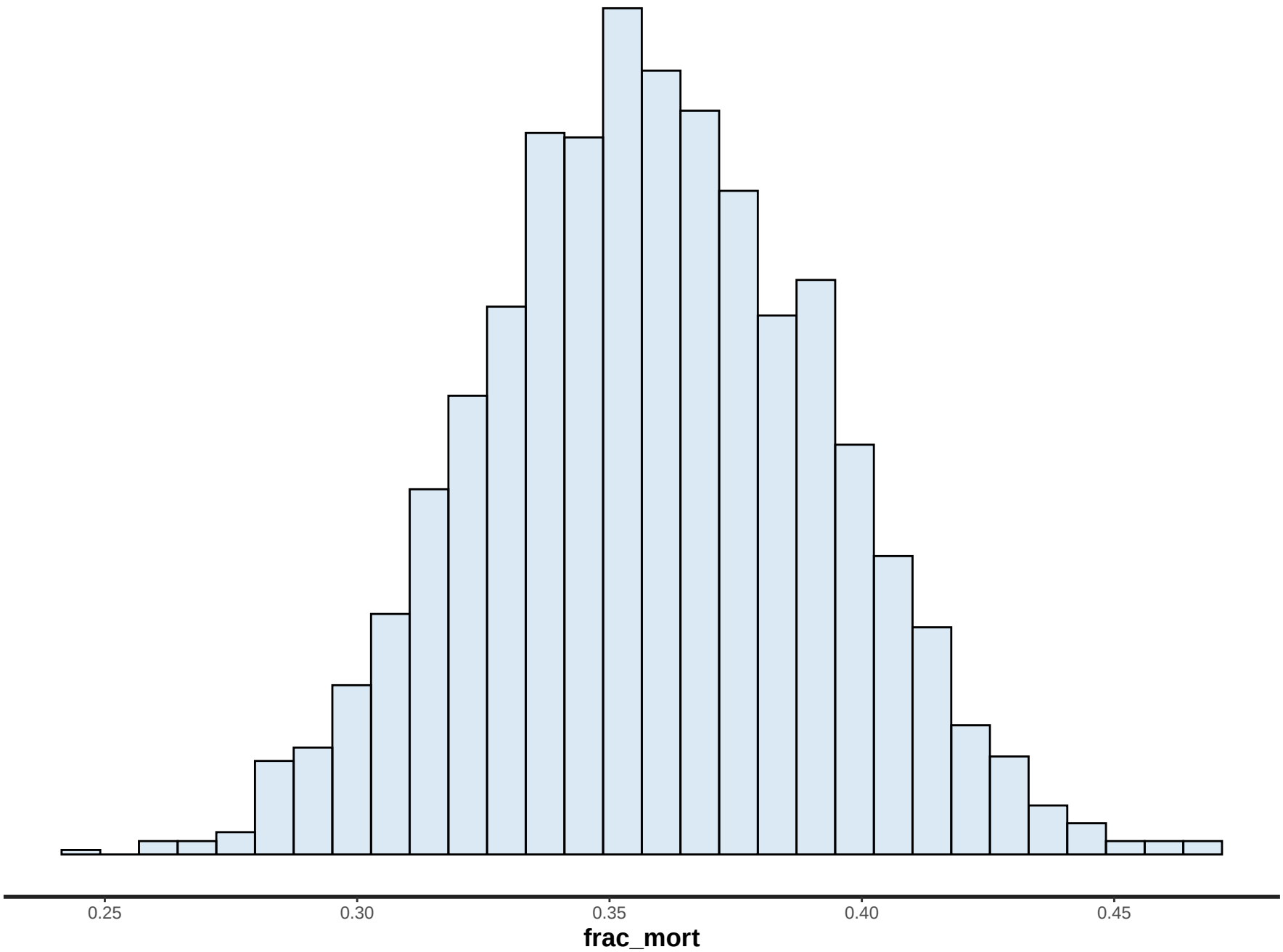

5
10
duration_pre_hosp

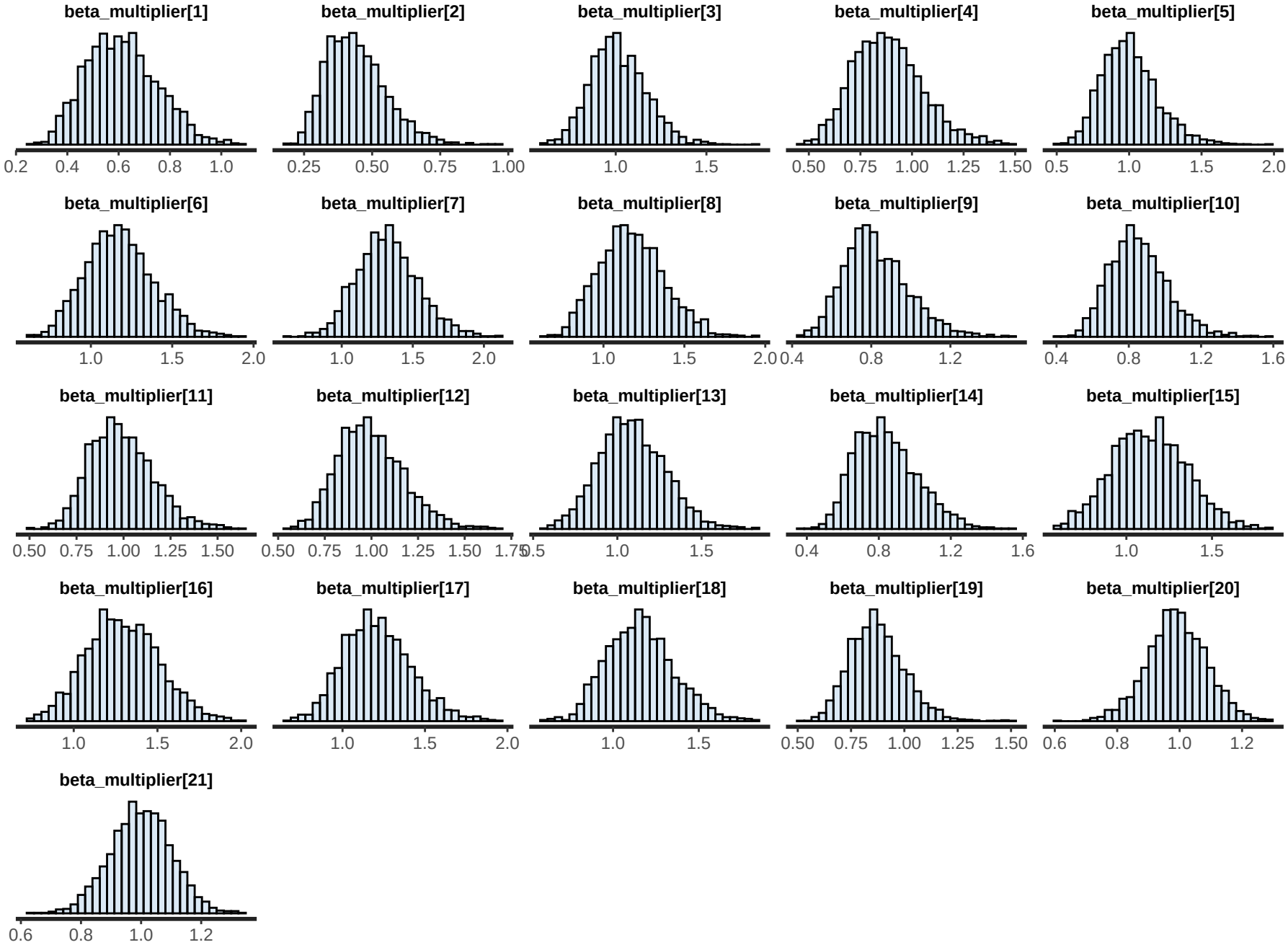

3
4
5
duration_hosp_mod


10
12
14
16
18
duration_hosp_icu


0.00
0.03
0.06
0.09
0.12
frac_hosp


0.100
0.125
0.150
0.175
frac_icu


0.25
0.30
0.35
0.40
0.45
frac_mort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beta_multiplier[2]
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beta_multiplier[3]
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beta_multiplier[4]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[5]
0.5 1.0 1.5 2.0
beta_multiplier[6]
1.0 1.5 2.0
beta_multiplier[7]
1.0 1.5 2.0
beta_multiplier[8]
1.0 1.5 2.0
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[12]
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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 2.0
beta_multiplier[18]
1.0 1.5
beta_multiplier[19]
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beta_multiplier[21]
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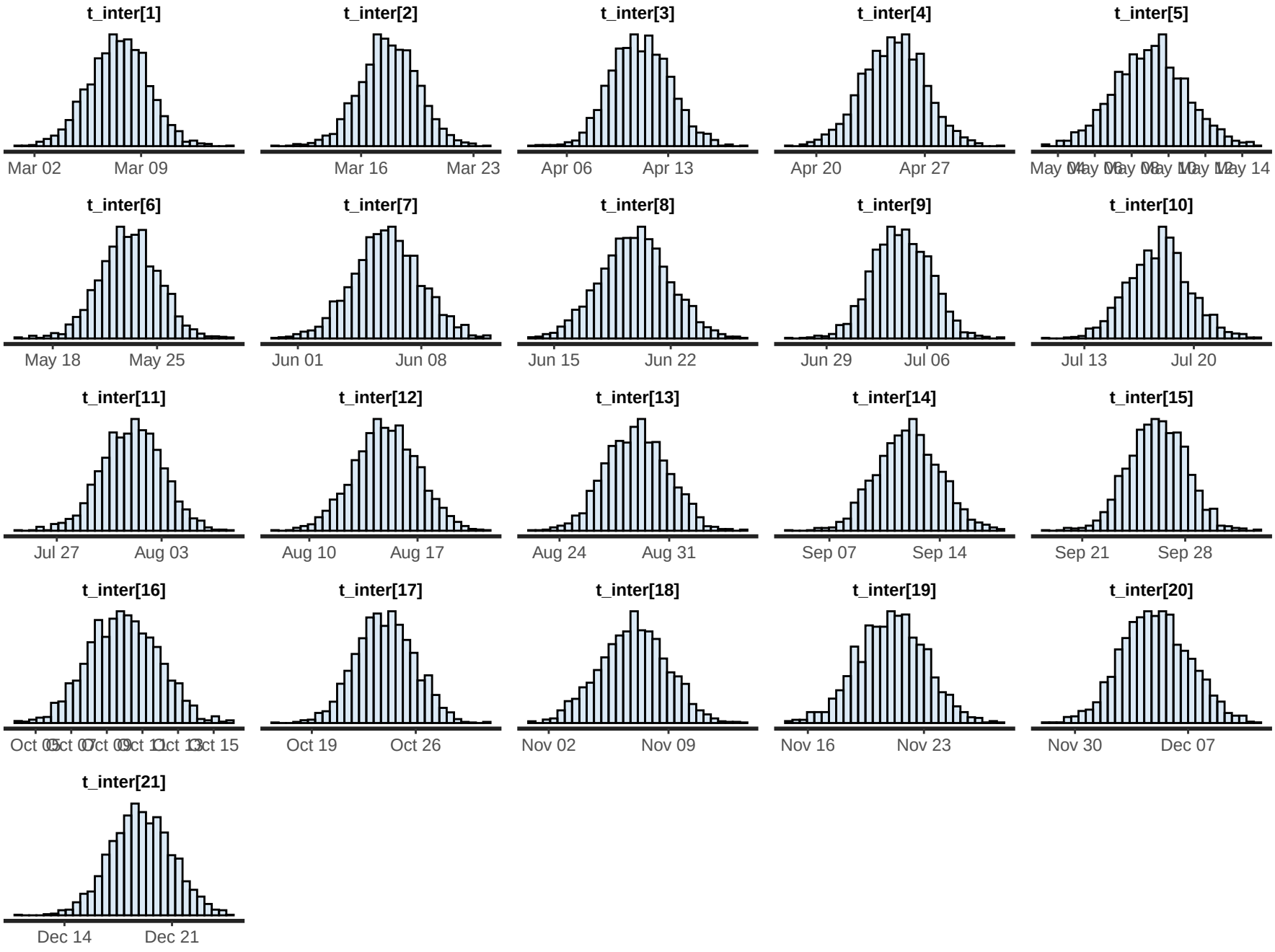
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Apr 06
Apr 13
t_inter[4]
Apr 20
Apr 27
t_inter[5]
May 14
t_inter[6]
May 18
May 25
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Jun 08
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Jun 15
Jun 22
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Jun 29
Jul 06
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Aug 10
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Aug 24
Aug 31
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Sep 14
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Sep 21
Sep 28
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Oct 26
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Nov 02
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Nov 23
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Nov 30
Dec 07
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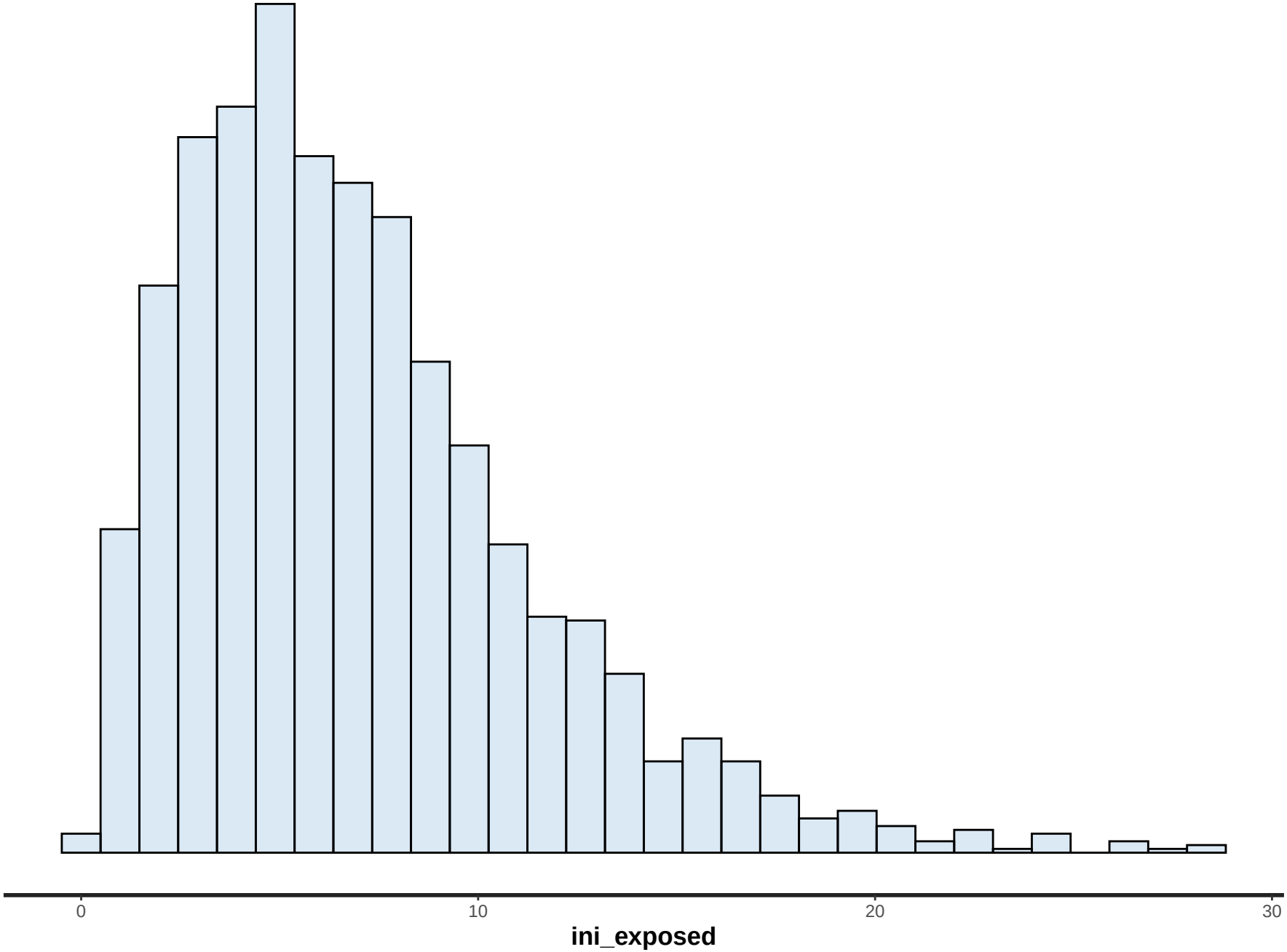
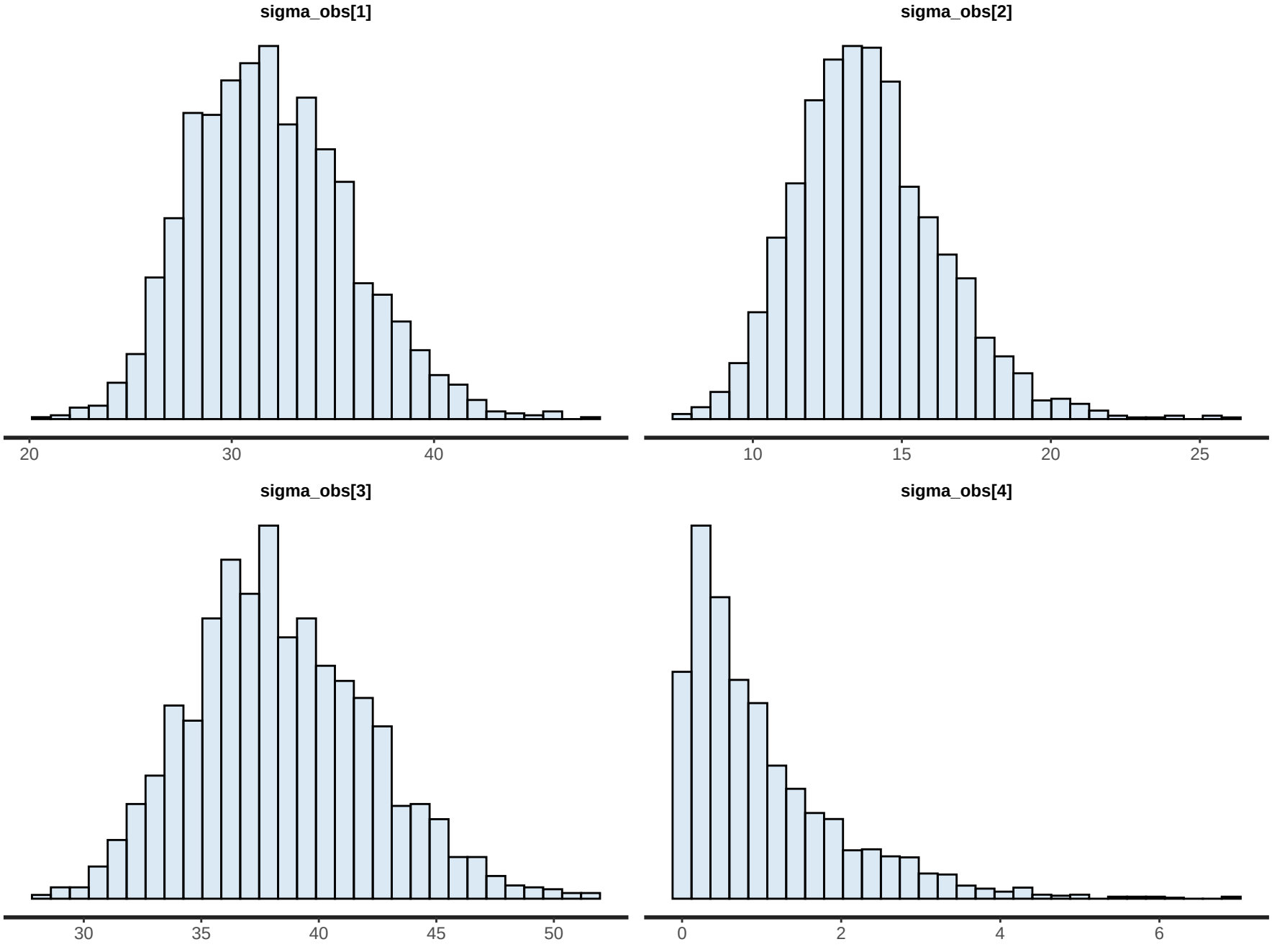
Dec 14
Dec 21


0
10
20
30
ini_exposed


sigma_obs[1]
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30
40
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35
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sigma_obs[4]
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2
4
6