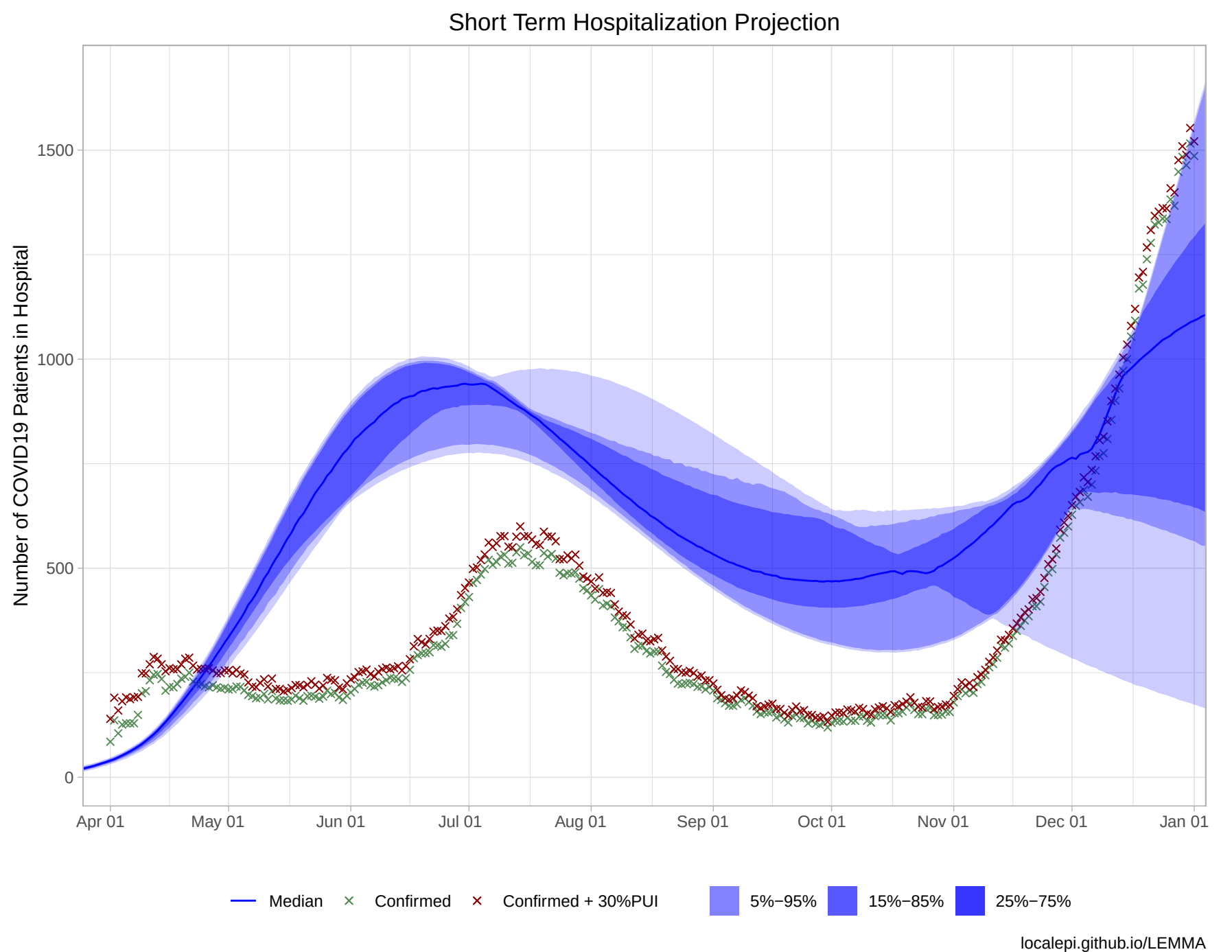
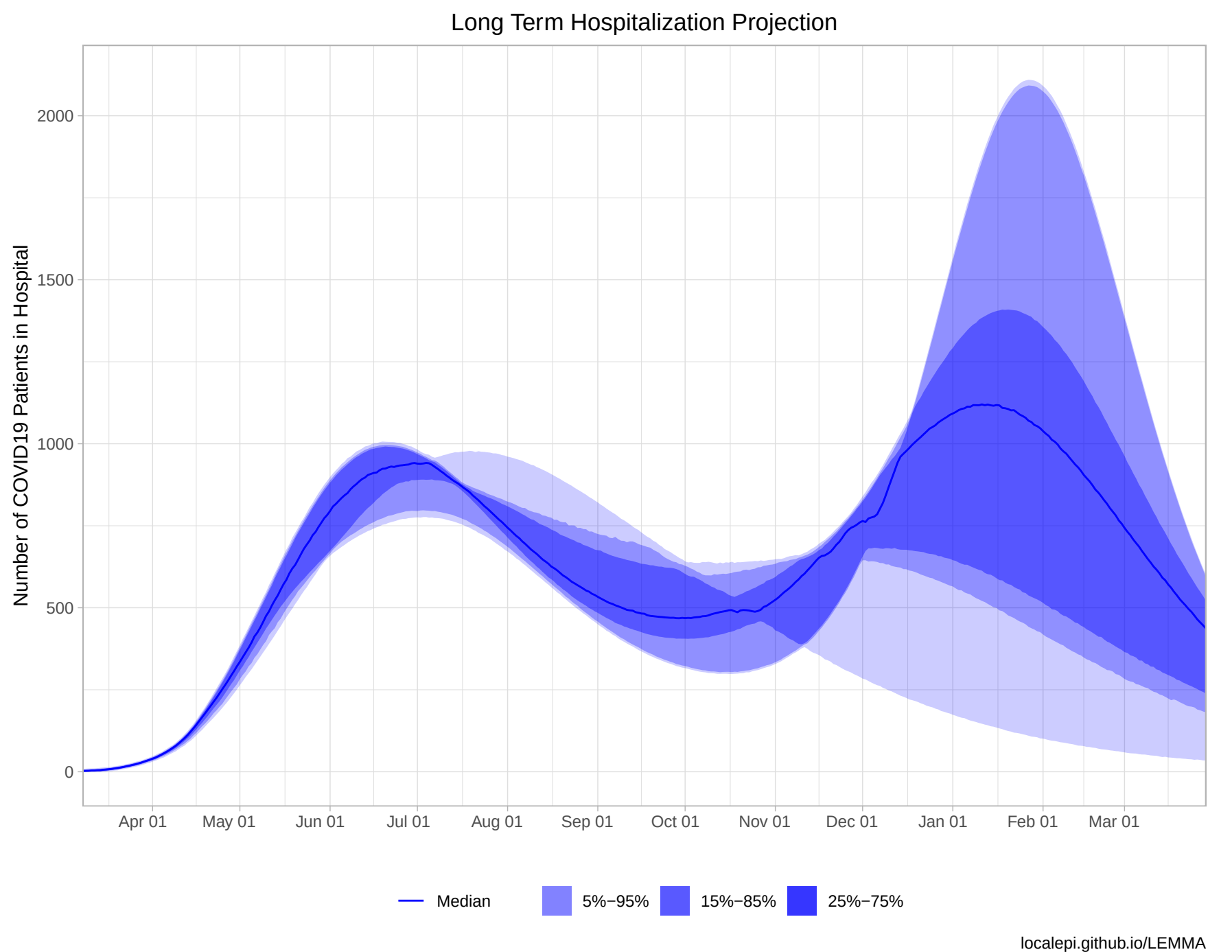
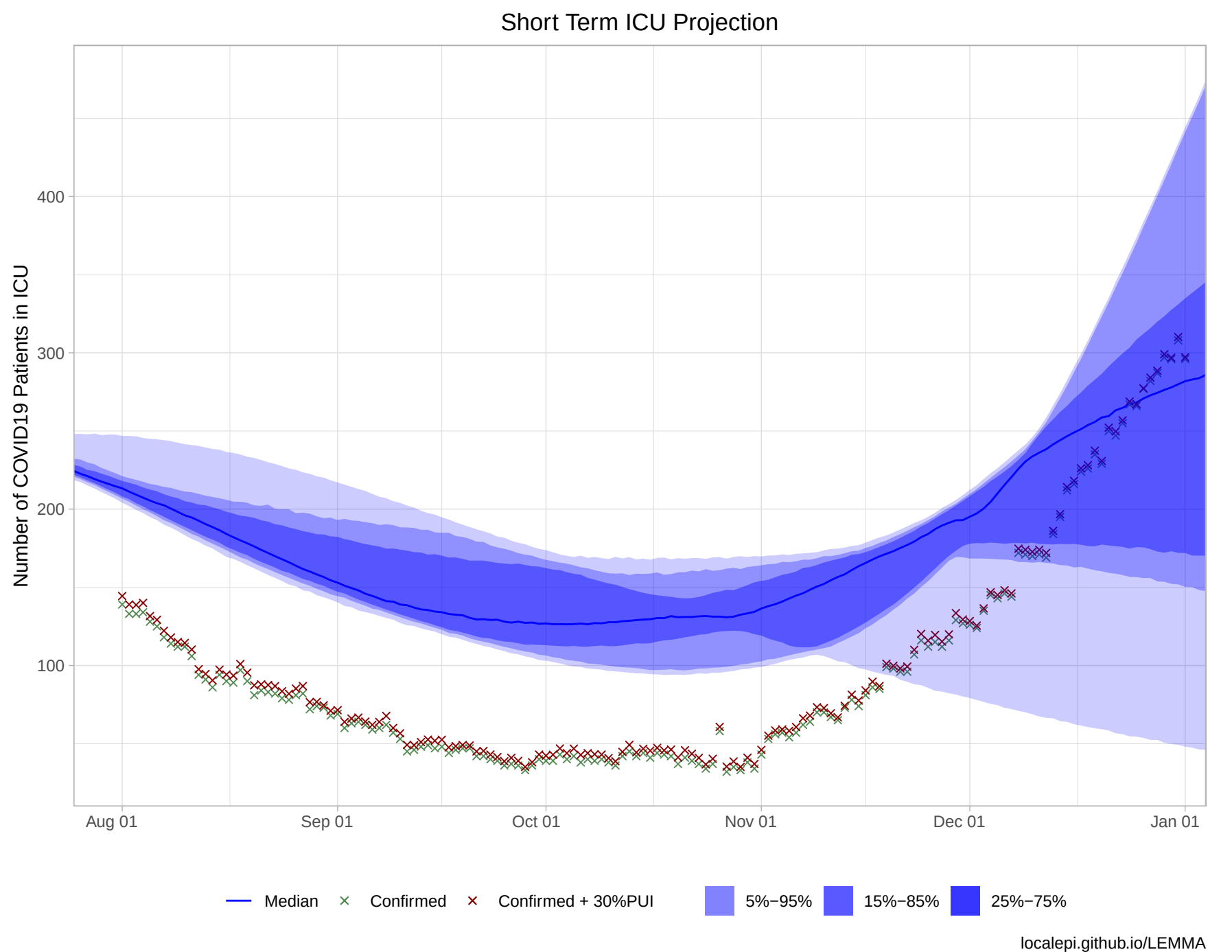
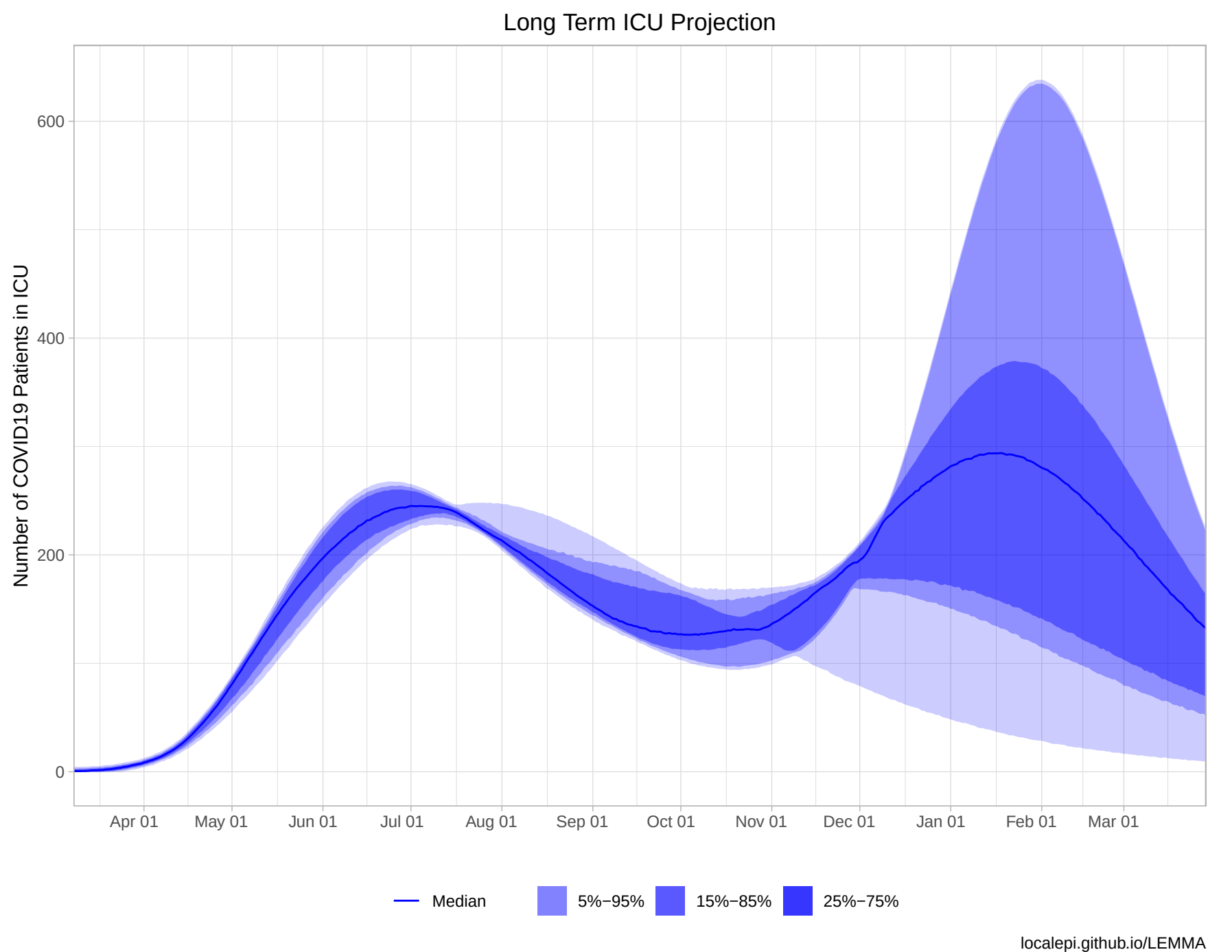
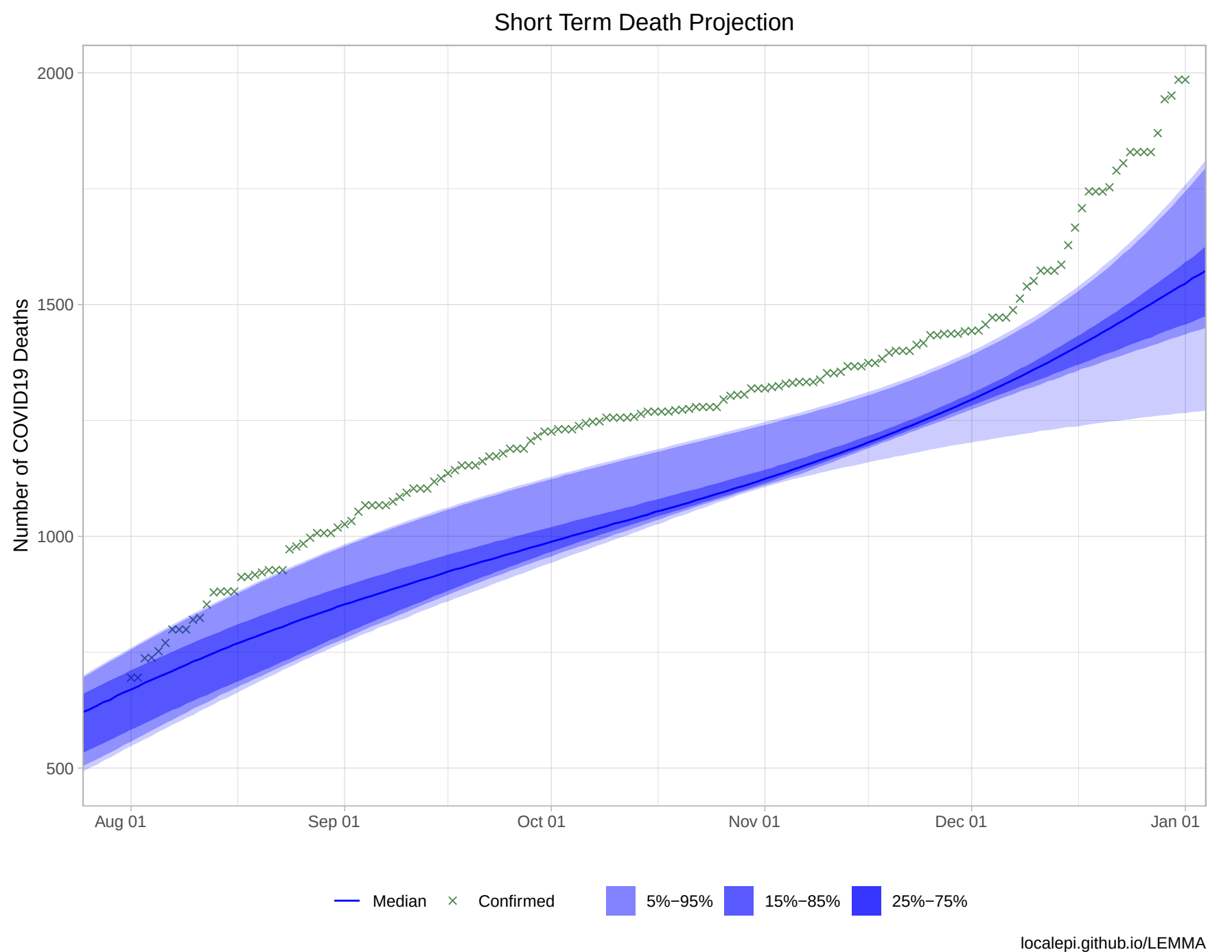
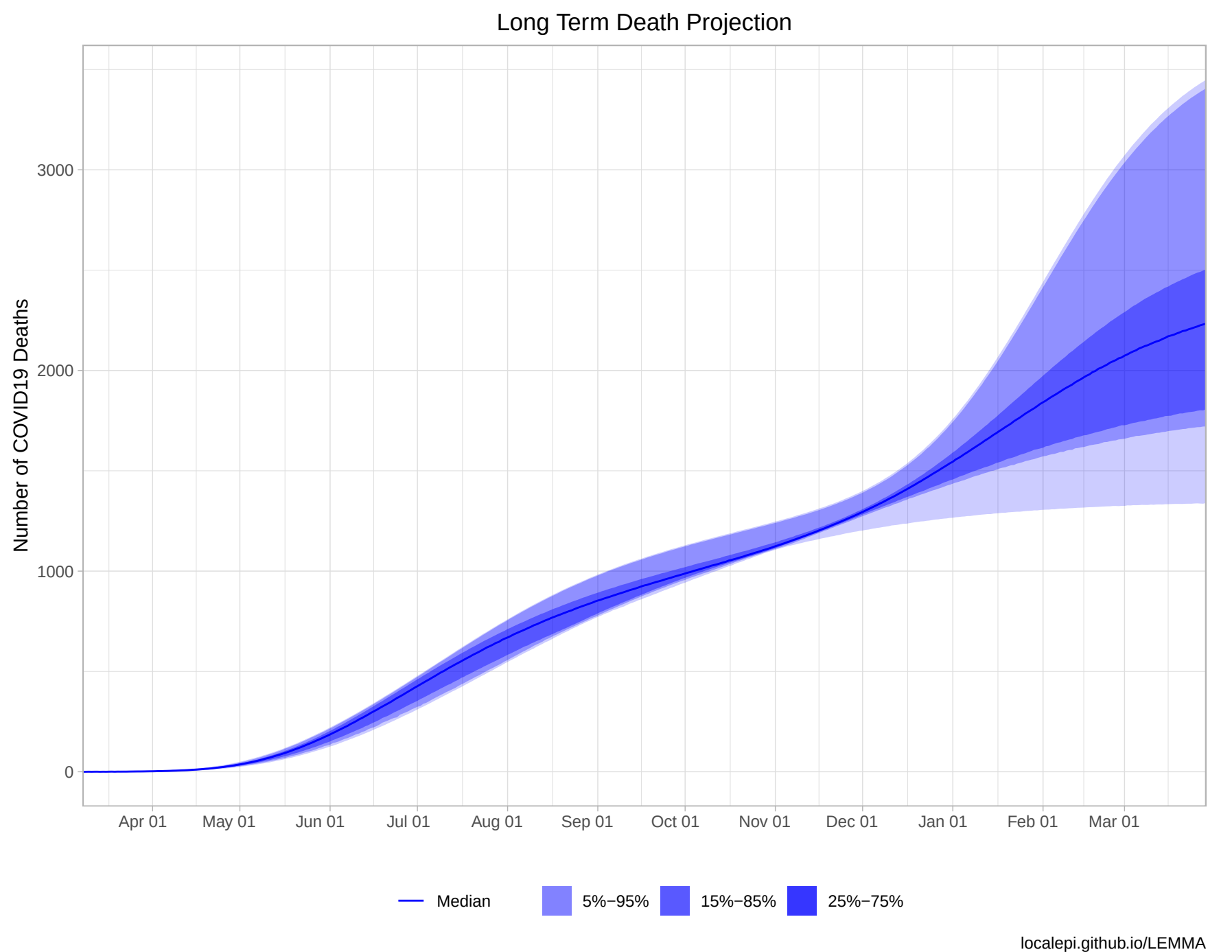

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
500
1000
1500
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

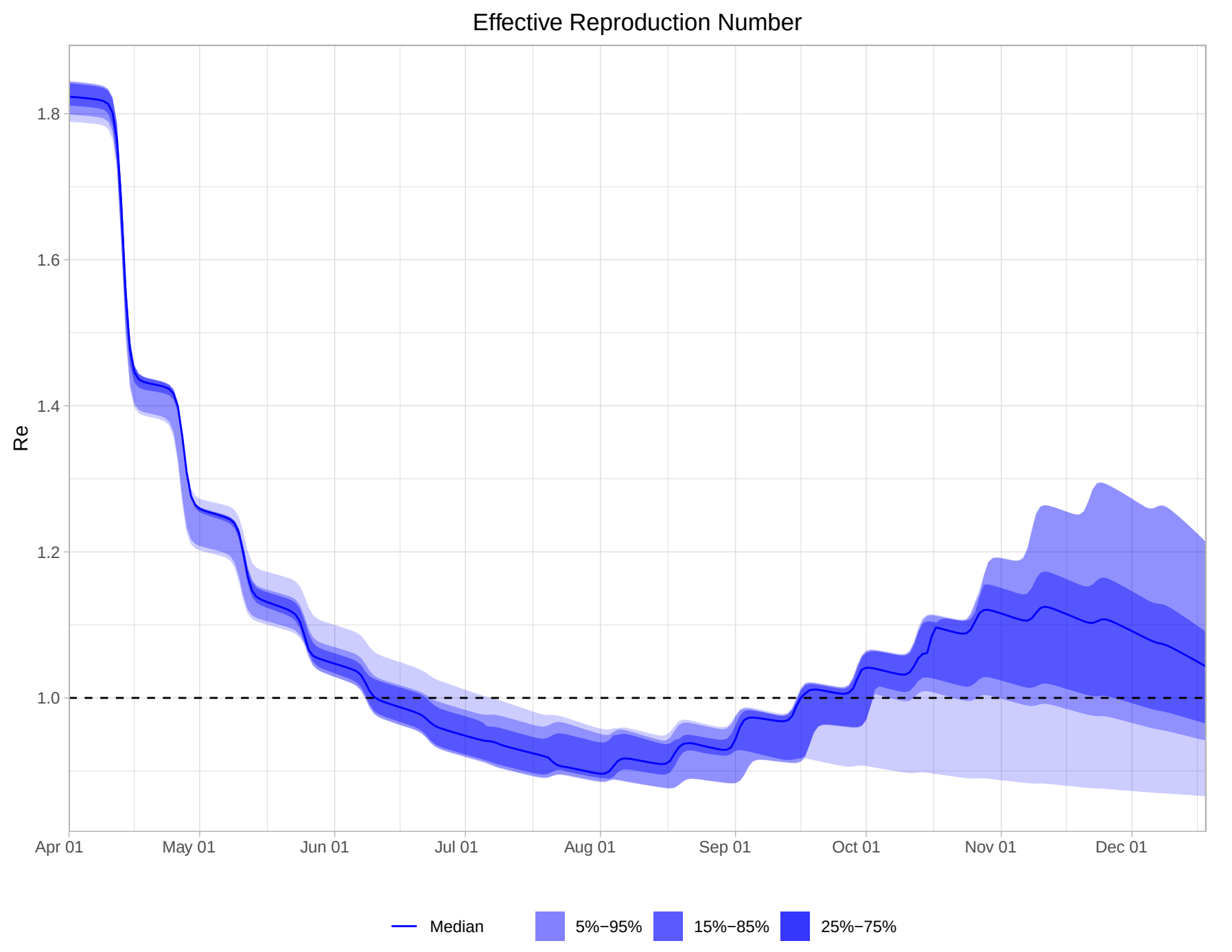

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
2000
1500
1000
500
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
400
300
200
100
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
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
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

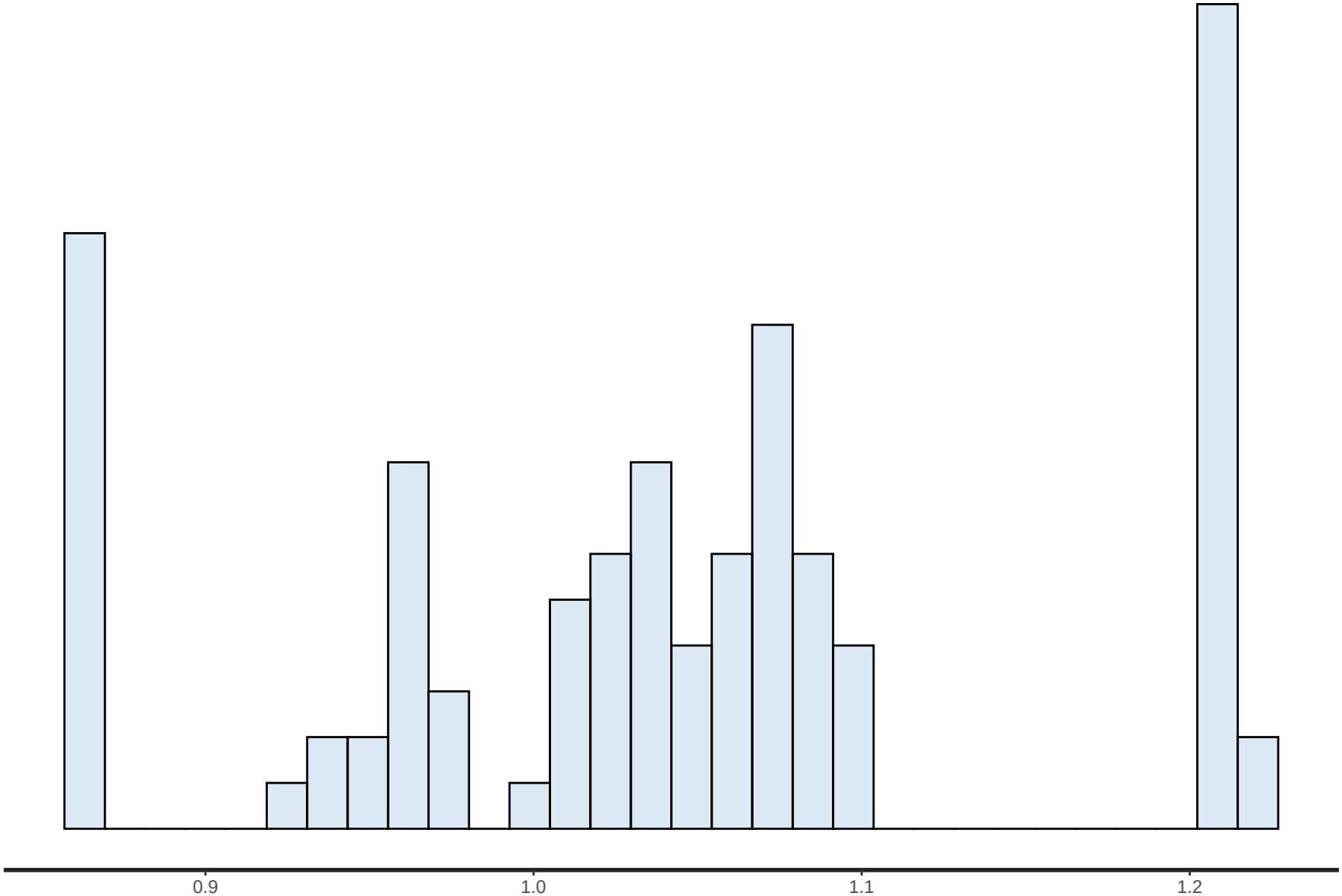

Short Term Death Projection
Number of COVID19 Deaths
2000
1500
1000
500
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

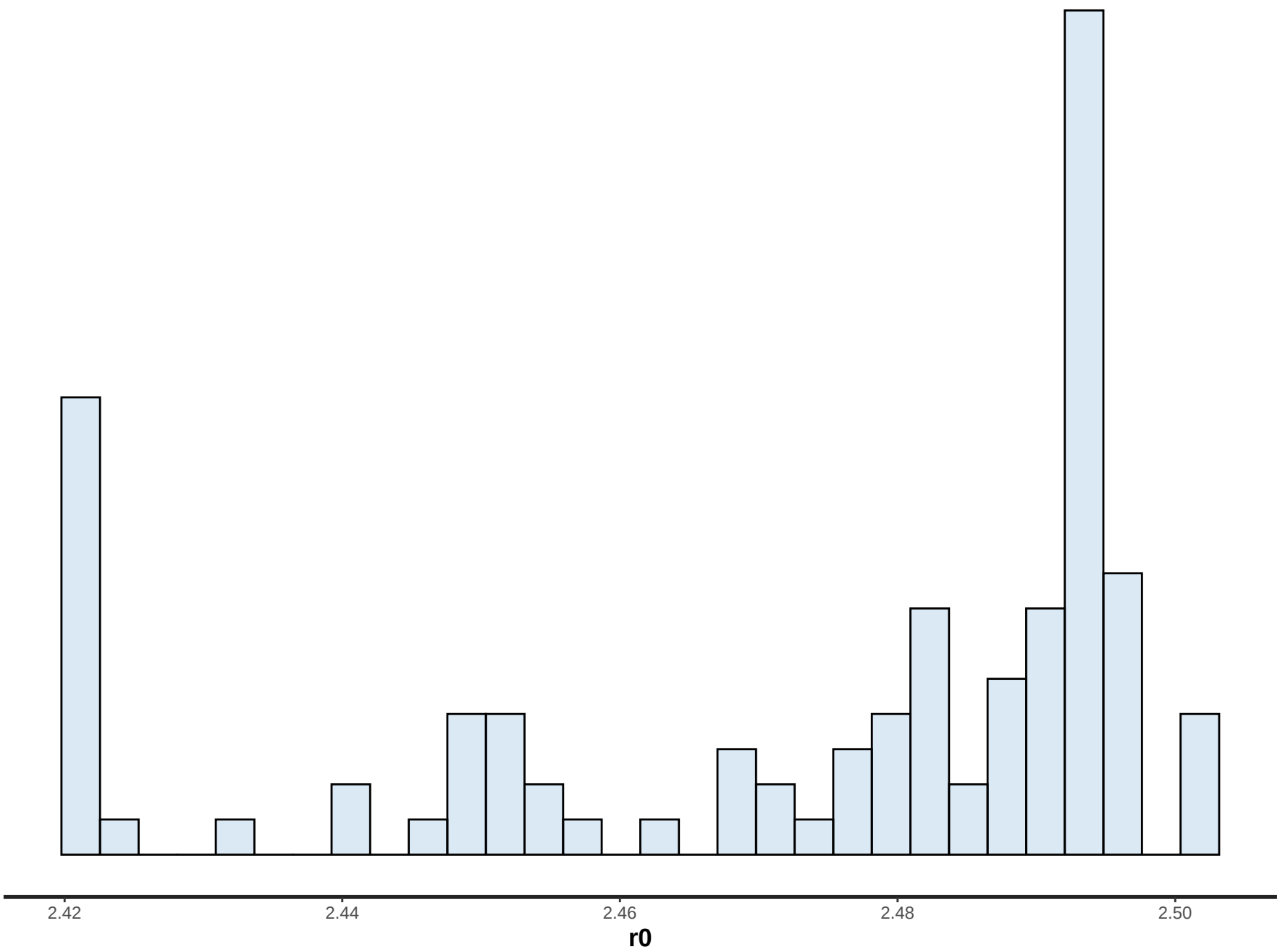

Long Term Death Projection
Number of COVID19 Deaths
0
1000
2000
3000
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

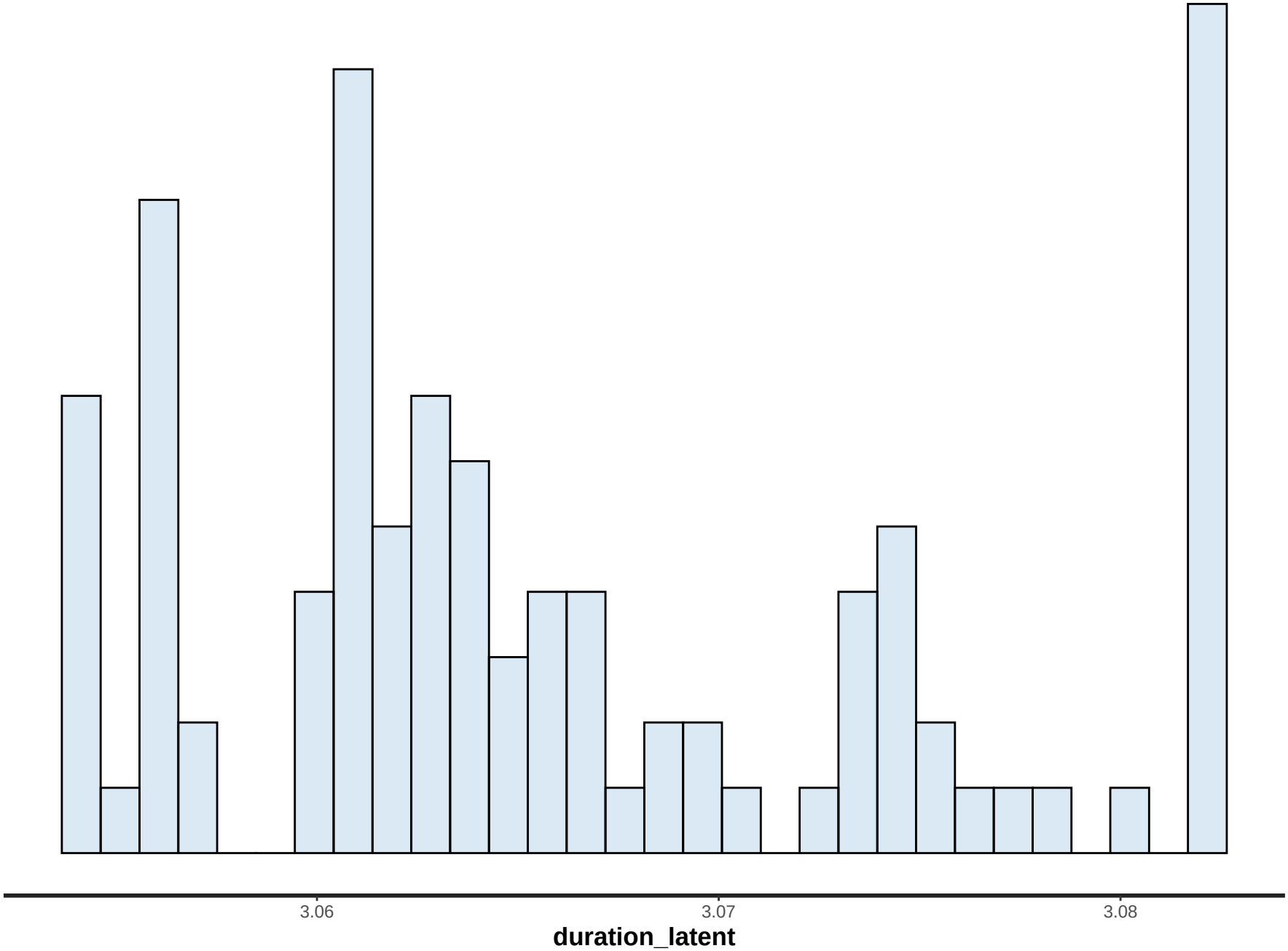

Effective Reproduction Number
Re
1.8
1.6
1.4
1.2
1.0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

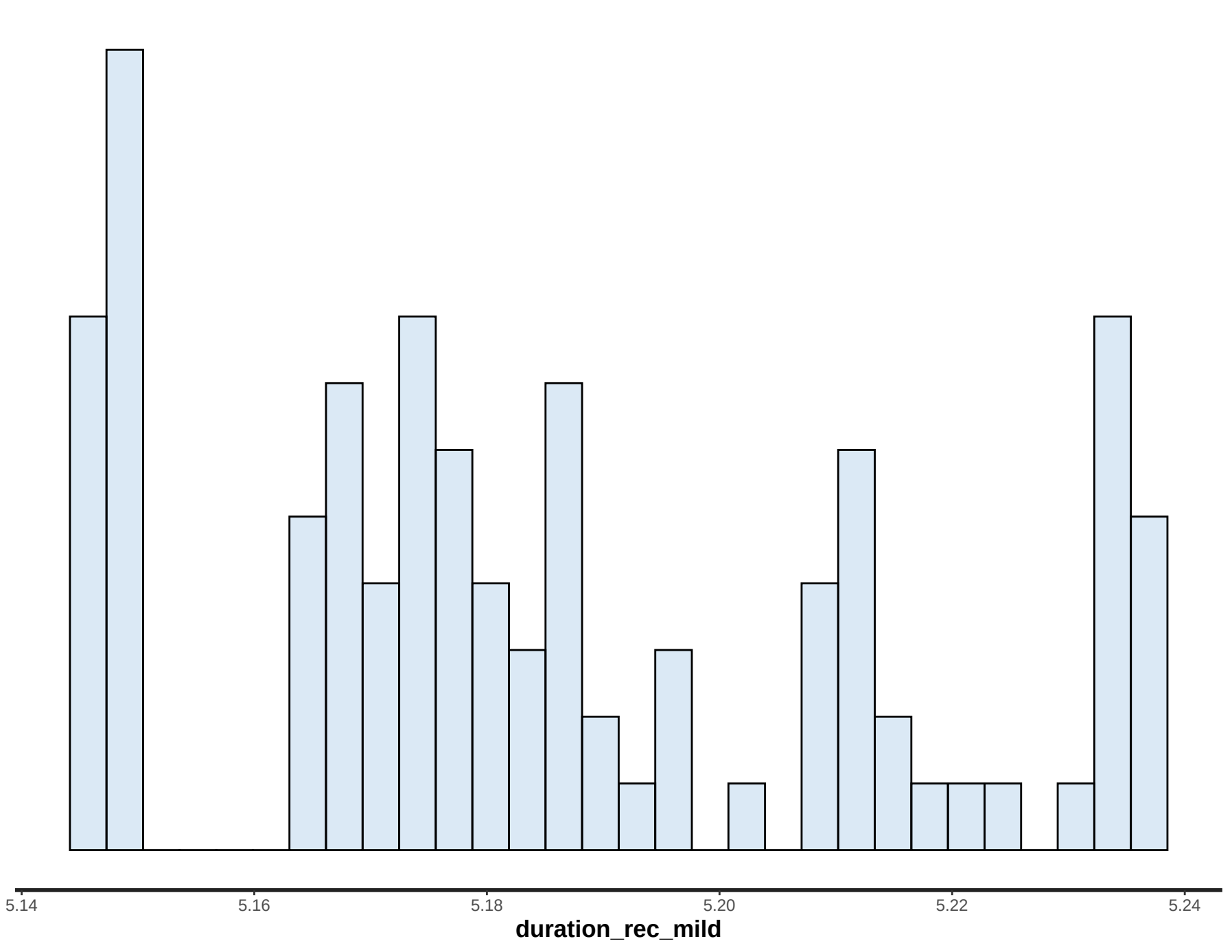
Rt as of 2020−12−18

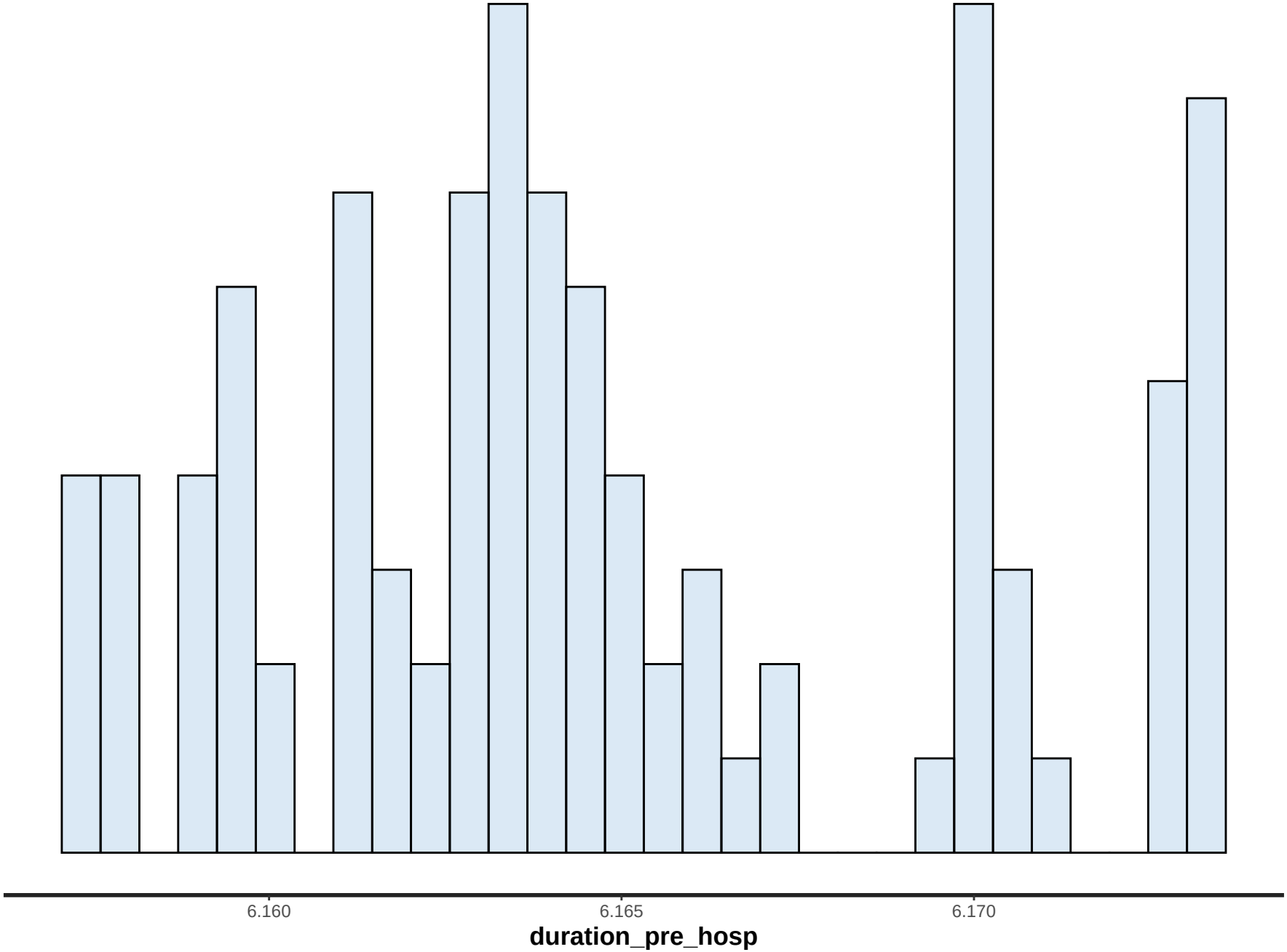
5%	10%	25%	50%	75%	90%	95%
0.87	0.87	0.96	1.04	1.09	1.21	1.21

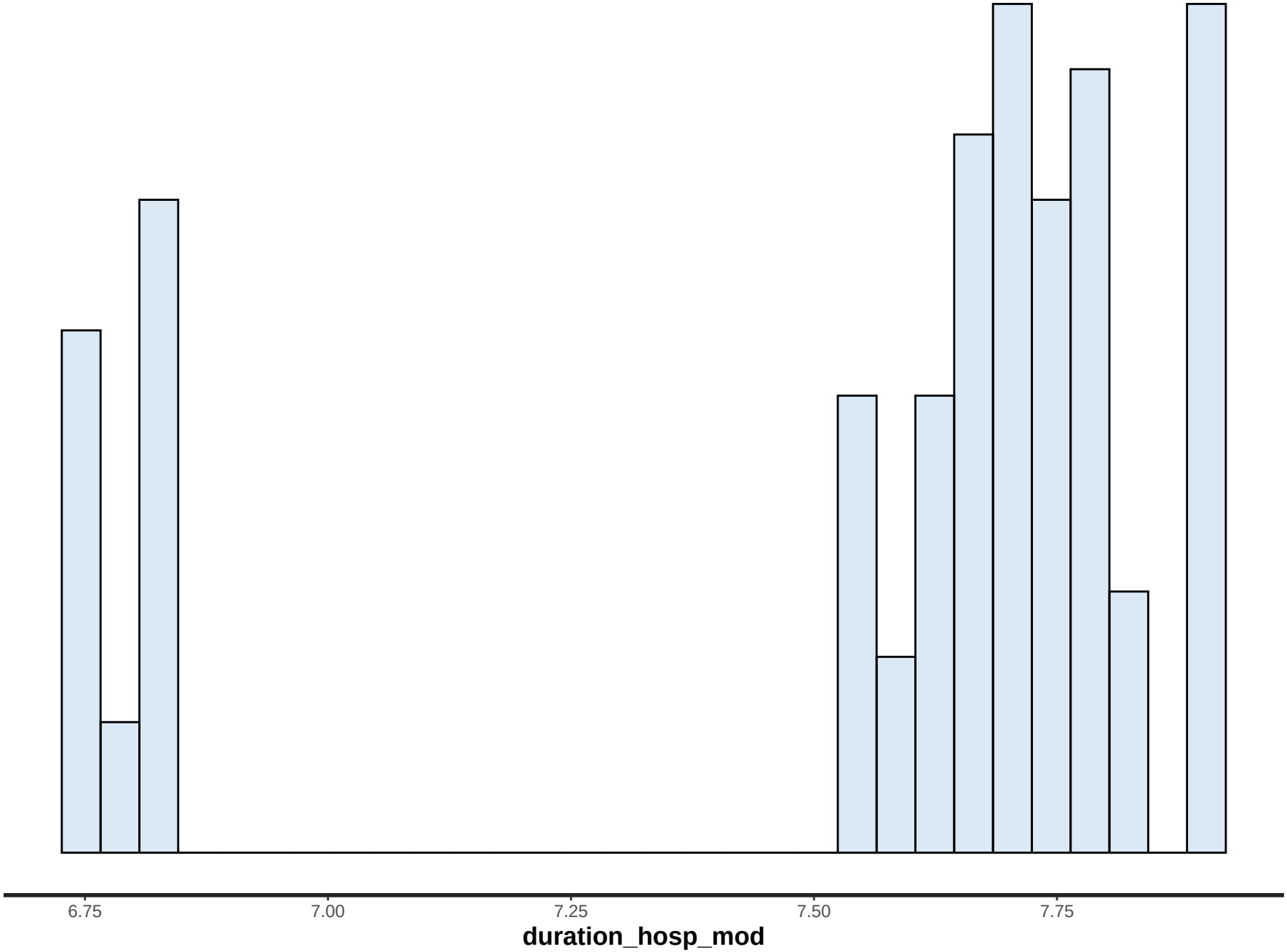


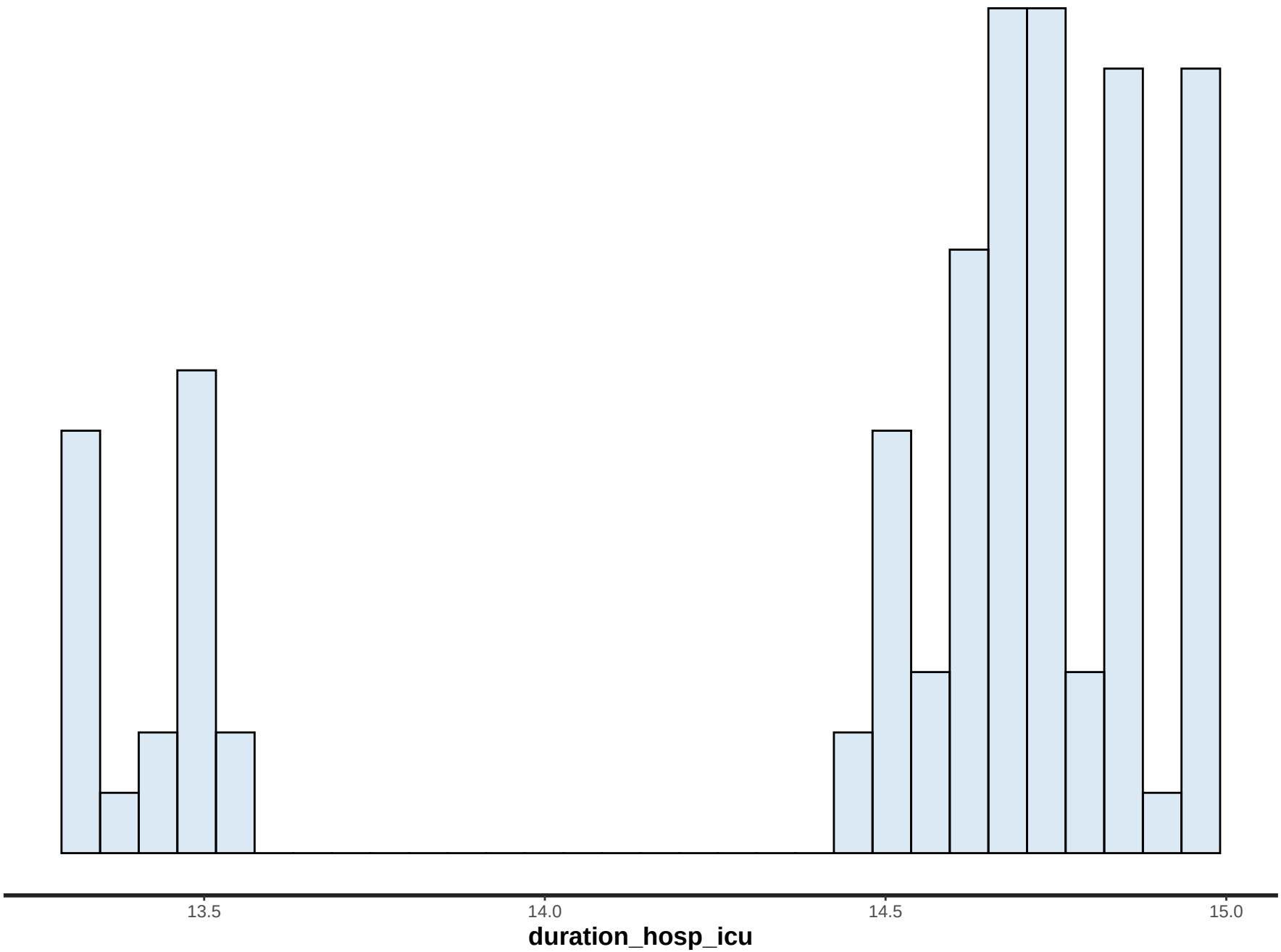

2.42
2.44
2.46
2.48
2.50
r0

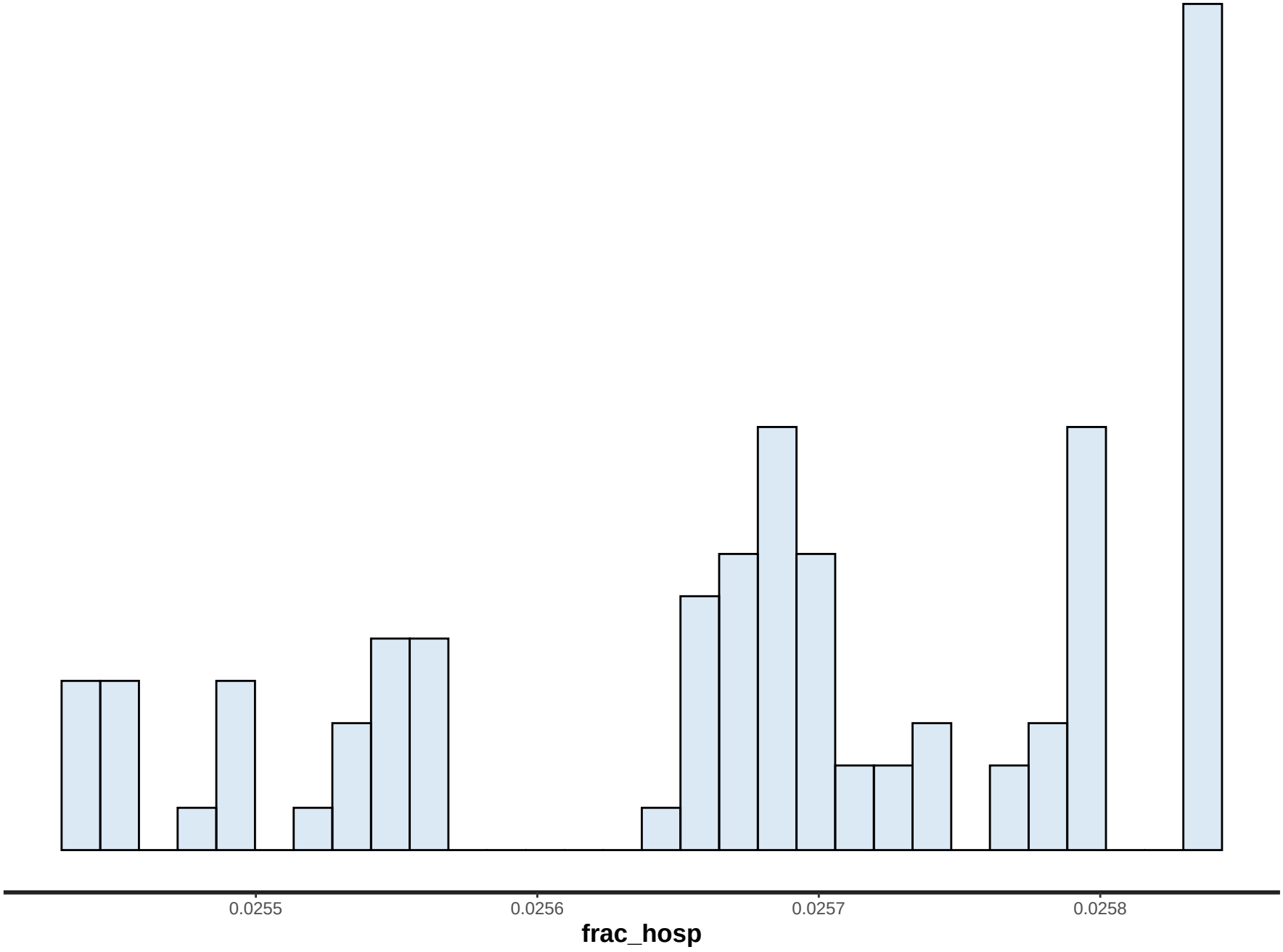

3.06
3.07
3.08
duration_latent

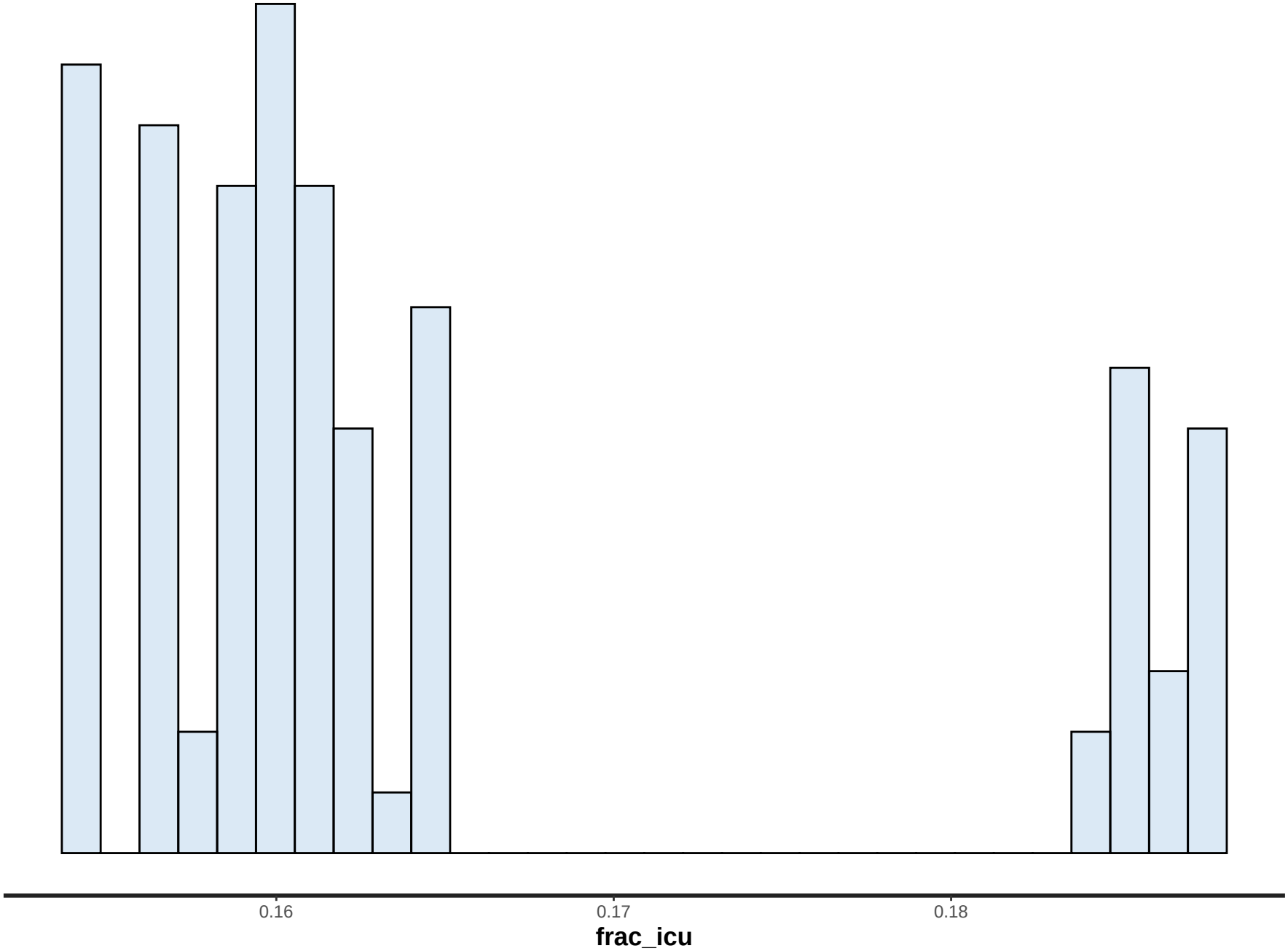

5.14
5.16
5.18
5.20
5.22
5.24
duration_rec_mild

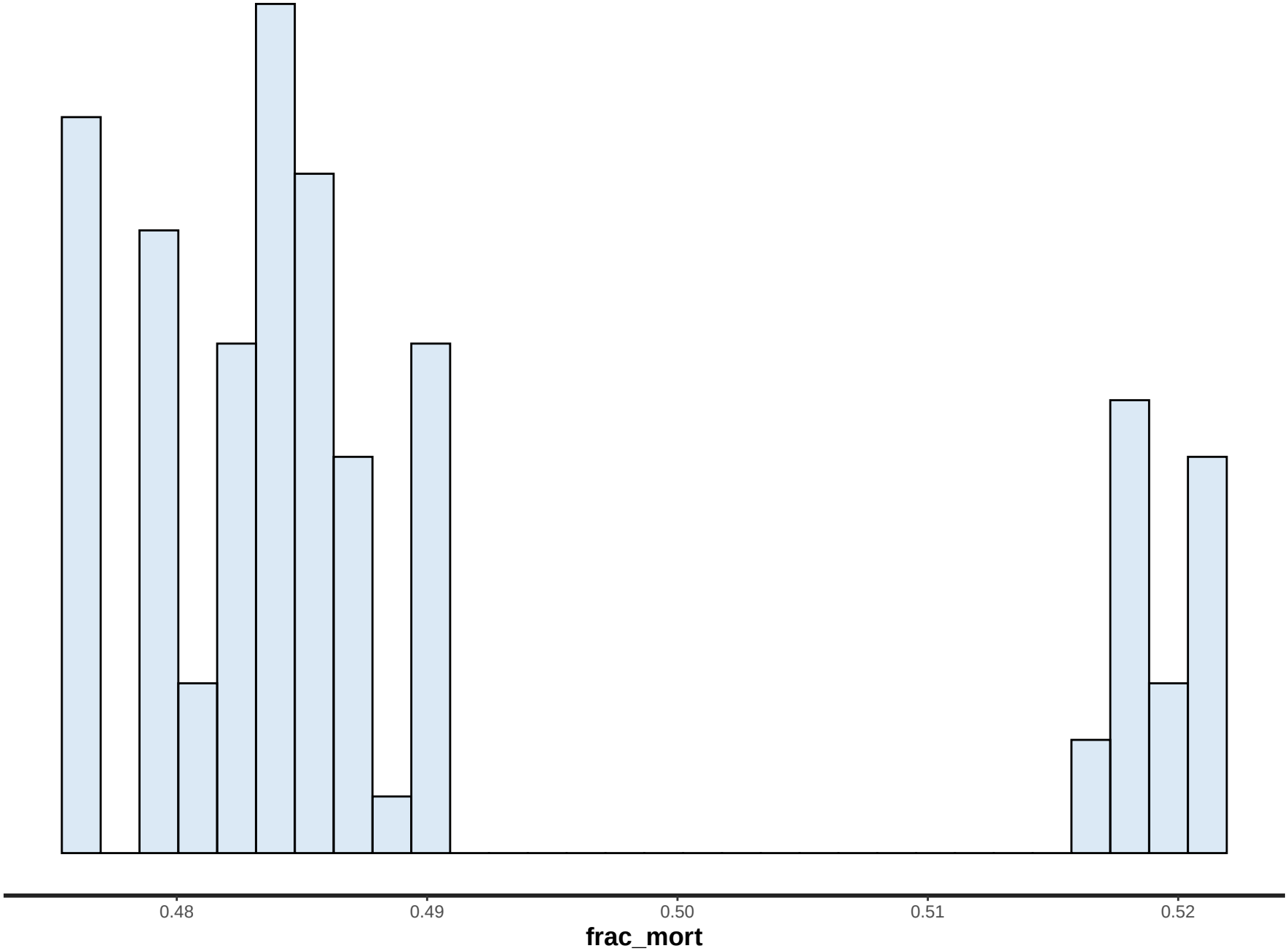

6.160
6.165
6.170
duration_pre_hosp

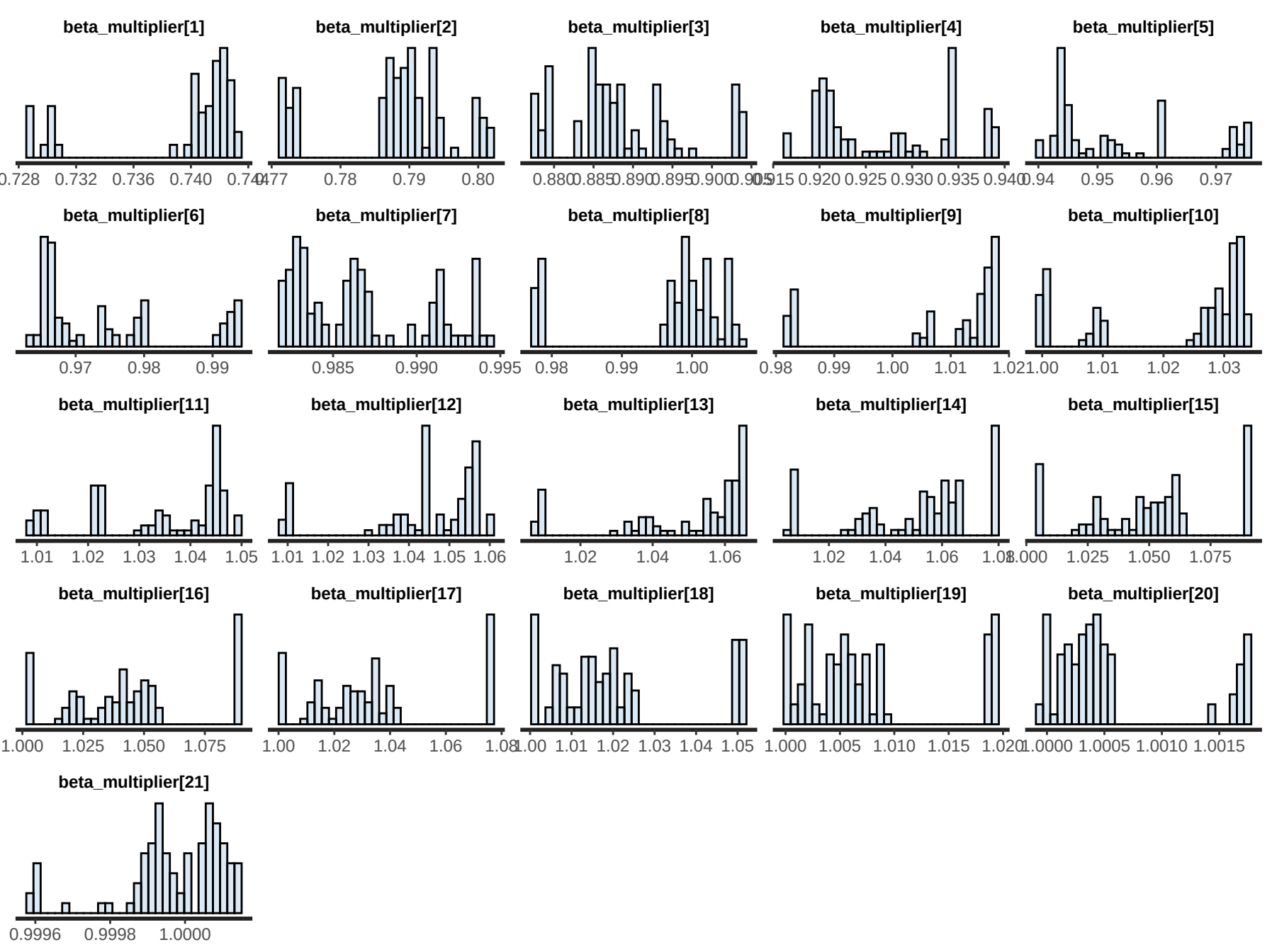

6.75
7.00
7.25
7.50
7.75
duration_hosp_mod


13.5
14.0
14.5
15.0
duration_hosp_icu


0.0255
0.0256
0.0257
0.0258
frac_hosp


0.16
0.17
0.18
frac_icu


0.48
0.49
0.50
0.51
0.52
frac_mort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beta_multiplier[2]
0.477 0.78 0.79 0.80
beta_multiplier[3]
0.880 0.885 0.890 0.895 0.900 0.905
beta_multiplier[4]
0.915 0.920 0.925 0.930 0.935 0.940
beta_multiplier[5]
0.94 0.95 0.96 0.97
beta_multiplier[6]
0.97 0.98 0.99
beta_multiplier[7]
0.985 0.990 0.995
beta_multiplier[8]
0.98 0.99 1.00
beta_multiplier[9]
0.98 0.99 1.00 1.01 1.02
beta_multiplier[10]
1.00 1.01 1.02 1.03
beta_multiplier[11]
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beta_multiplier[12]
1.01 1.02 1.03 1.04 1.05 1.06
beta_multiplier[13]
1.02 1.04 1.06
beta_multiplier[14]
1.02 1.04 1.06 1.08
beta_multiplier[15]
1.000 1.025 1.050 1.075
beta_multiplier[16]
1.000 1.025 1.050 1.075
beta_multiplier[17]
1.00 1.02 1.04 1.06 1.08
beta_multiplier[18]
1.00 1.01 1.02 1.03 1.04 1.05
beta_multiplier[19]
1.000 1.005 1.010 1.015 1.020
beta_multiplier[20]
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beta_multiplier[21]
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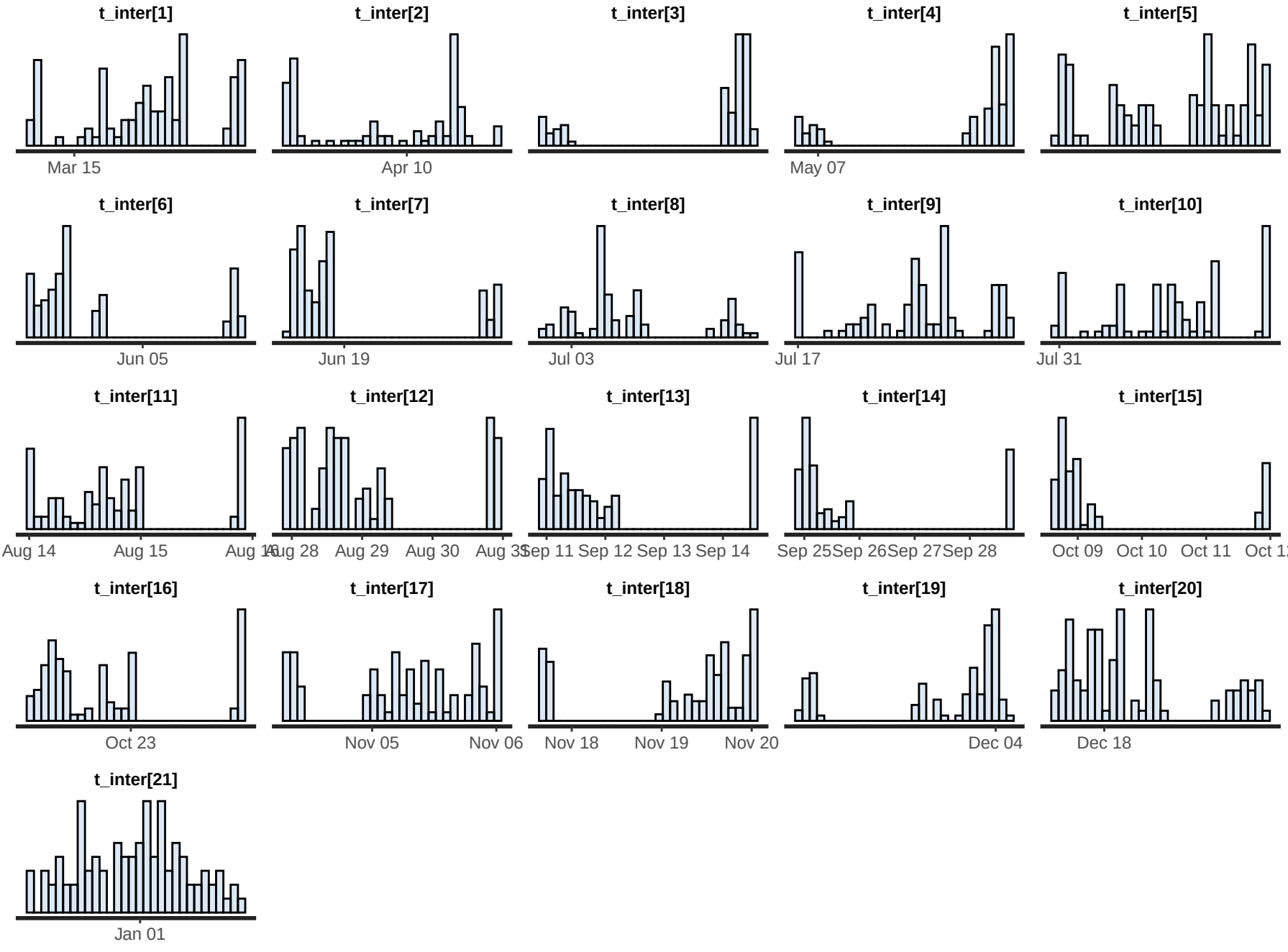
t_inter[1]
Mar 15
t_inter[2]
Apr 10
t_inter[3]
t_inter[4]
May 07
t_inter[5]
t_inter[6]
Jun 05
t_inter[7]
Jun 19
t_inter[8]
Jul 03
t_inter[9]
Jul 17
t_inter[10]
Jul 31
t_inter[11]
Aug 14
Aug 15
t_inter[12]
Aug 28
Aug 29
Aug 30
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Sep 11
Sep 12
Sep 13
Sep 14
t_inter[14]
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Sep 27
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Oct 10
Oct 11
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Oct 23
t_inter[17]
Nov 05
Nov 06
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Nov 18
Nov 19
Nov 20
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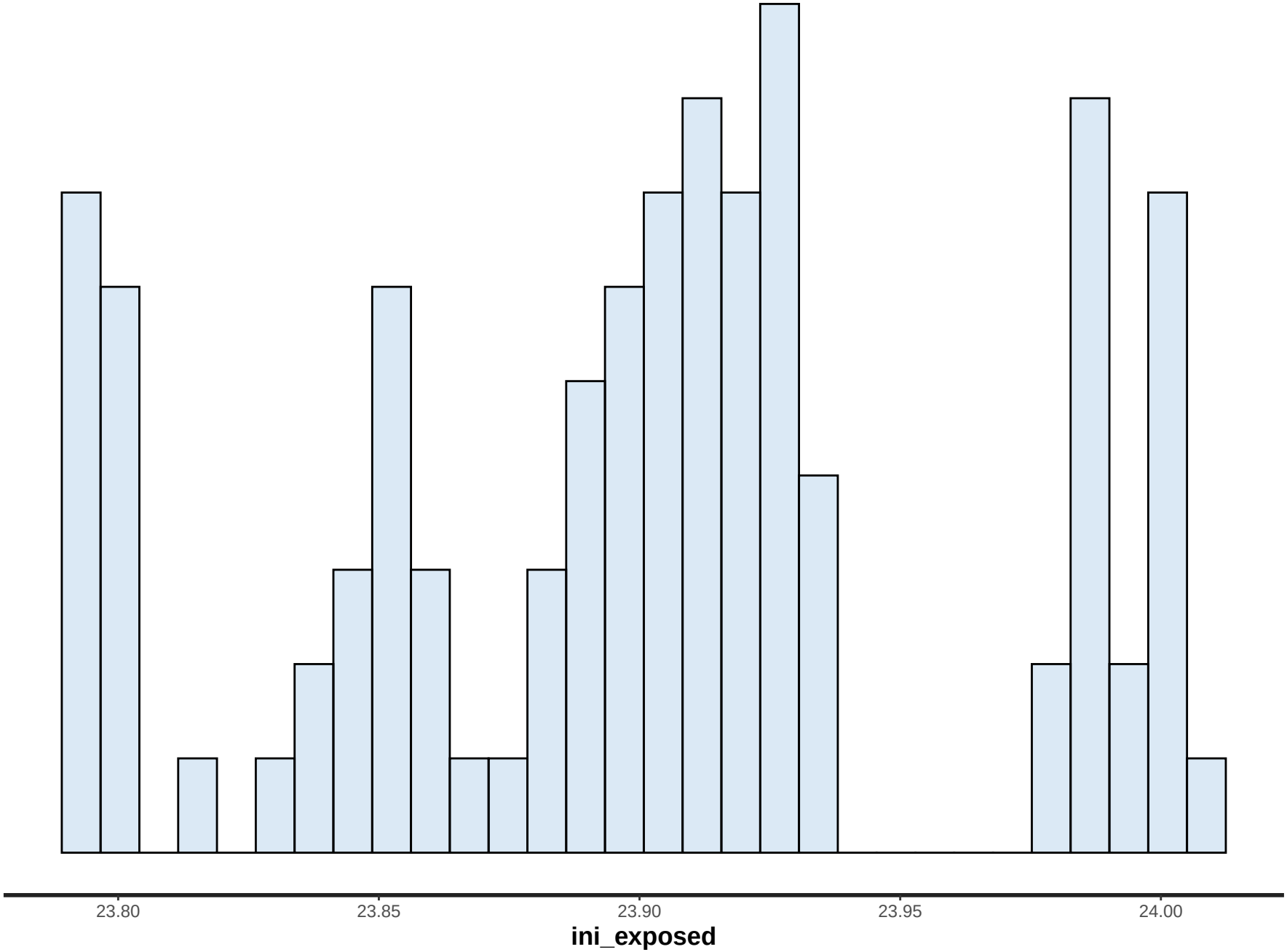
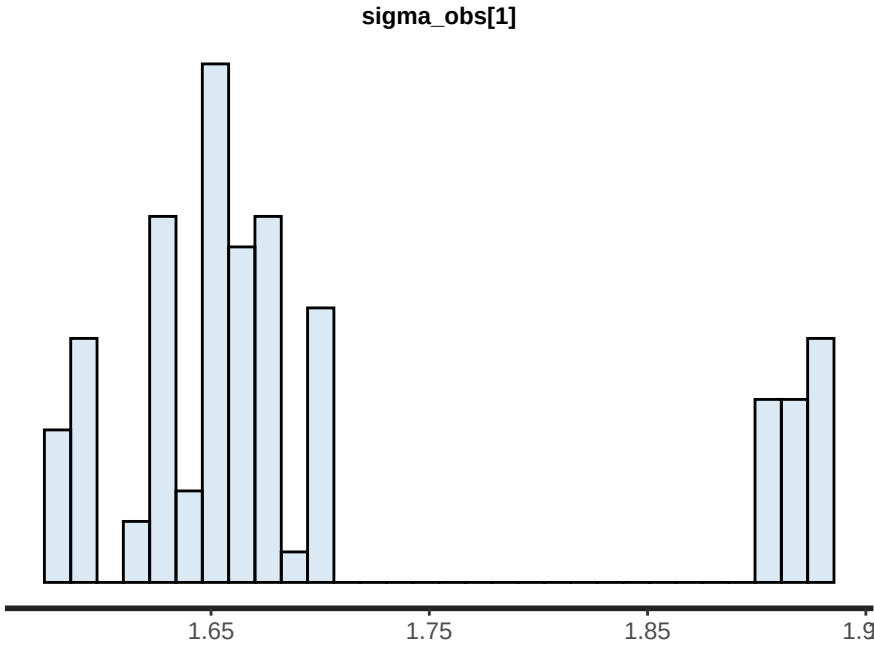
Dec 04
t_inter[20]
Dec 18
t_inter[21]
Jan 01


23.80
23.85
23.90
23.95
24.00
ini_exposed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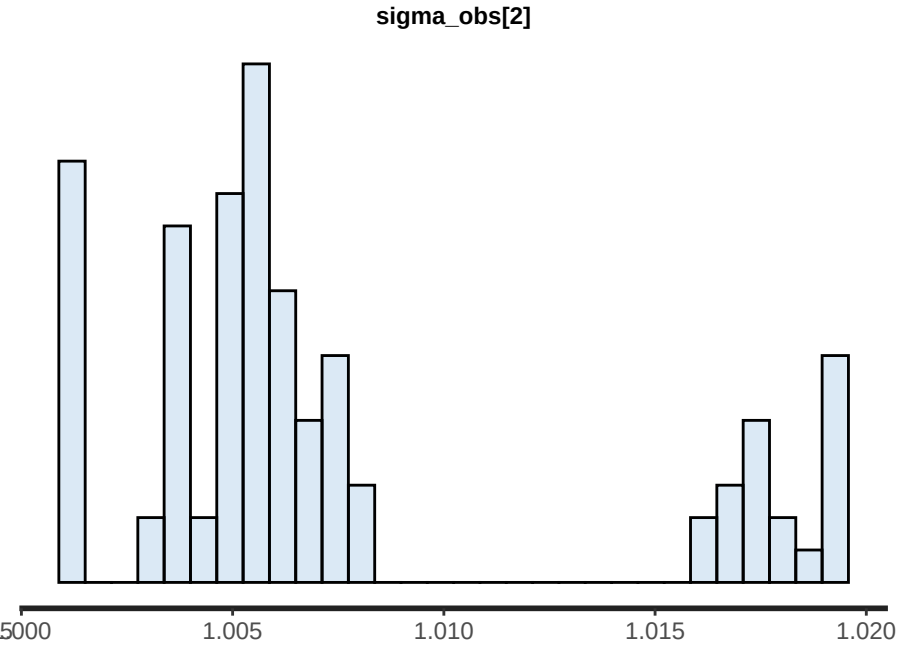
1.75
1.85
1.95


sigma_obs[2]
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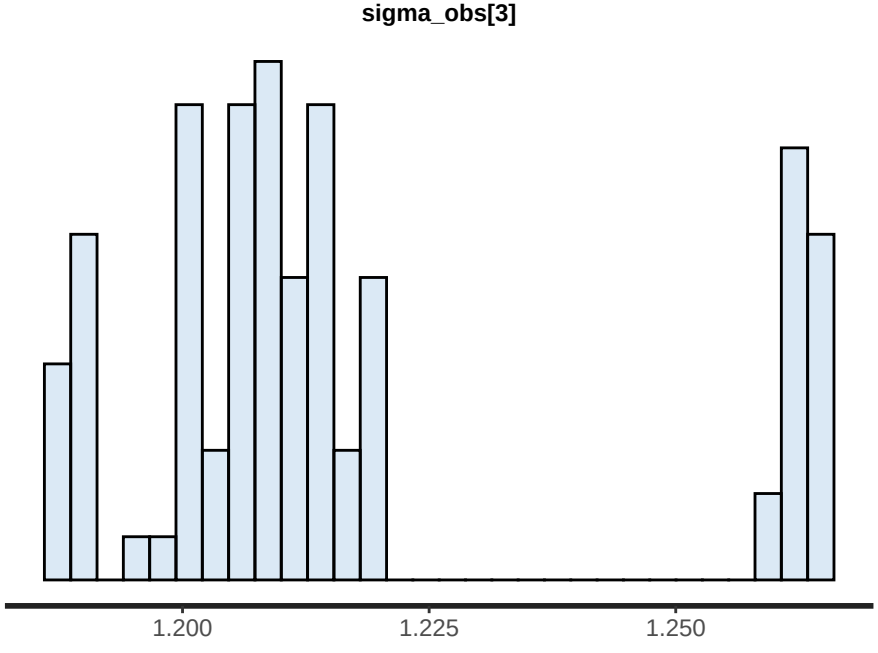
1.005
1.010
1.015
1.020


sigma_obs[3]
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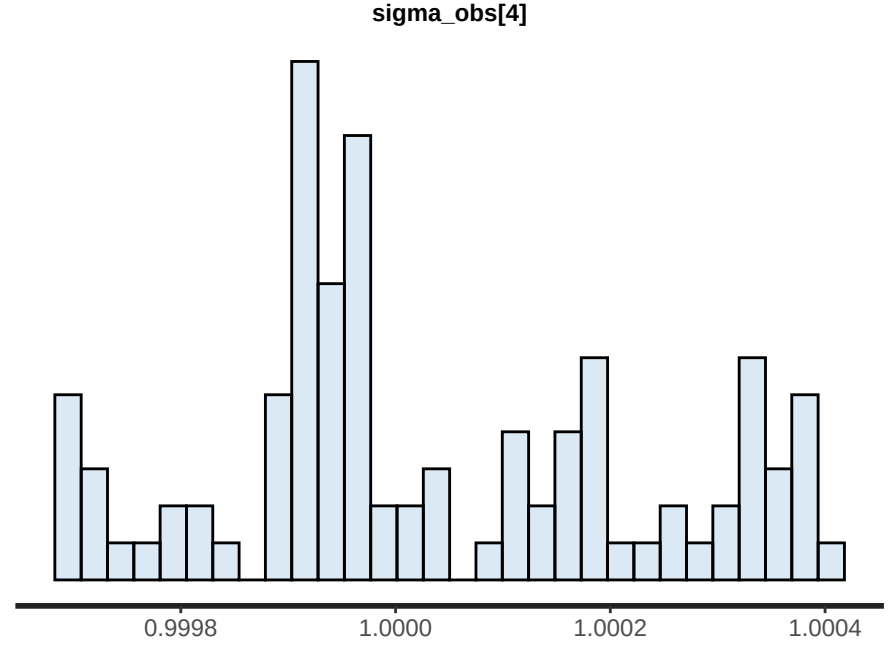
1.225
1.250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1.0002
1.0004