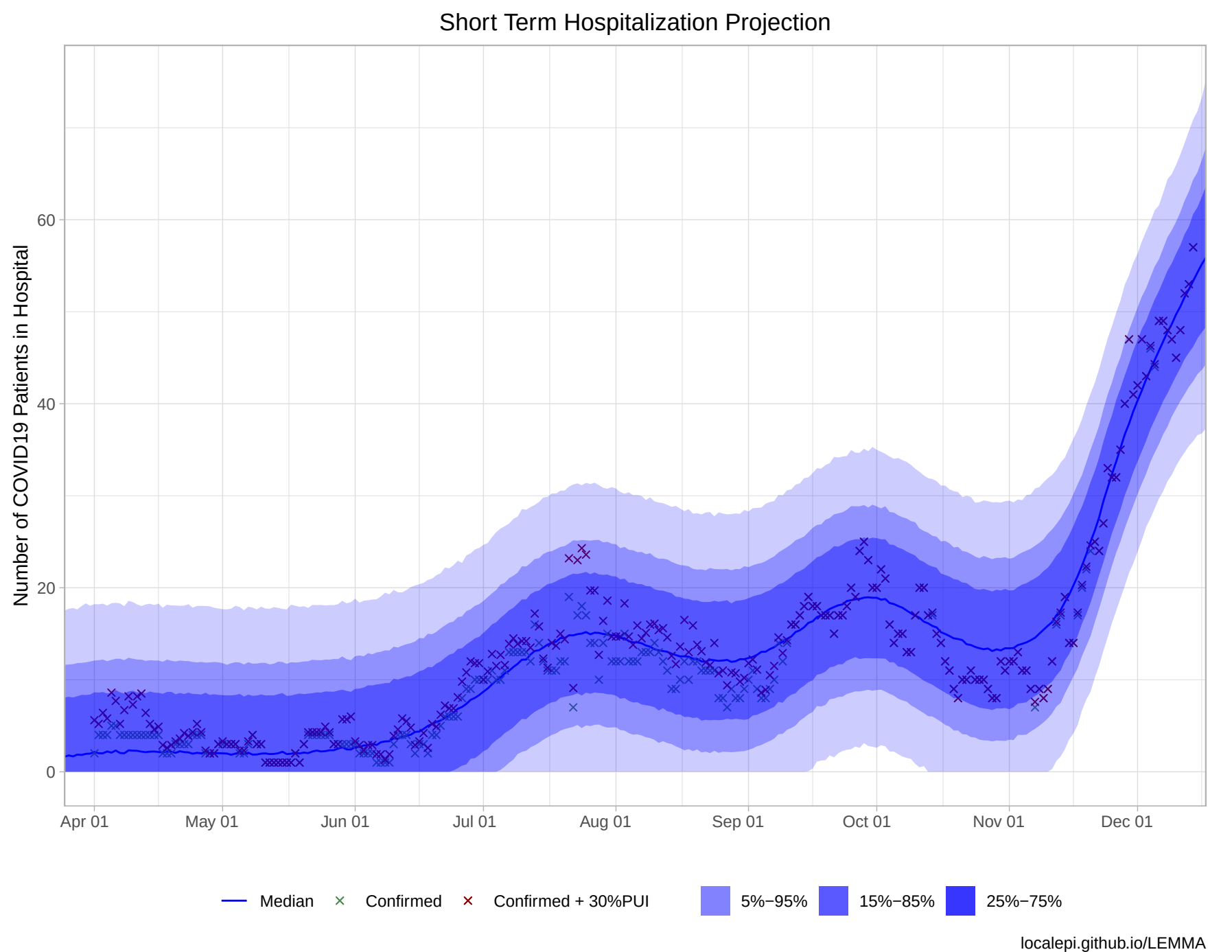
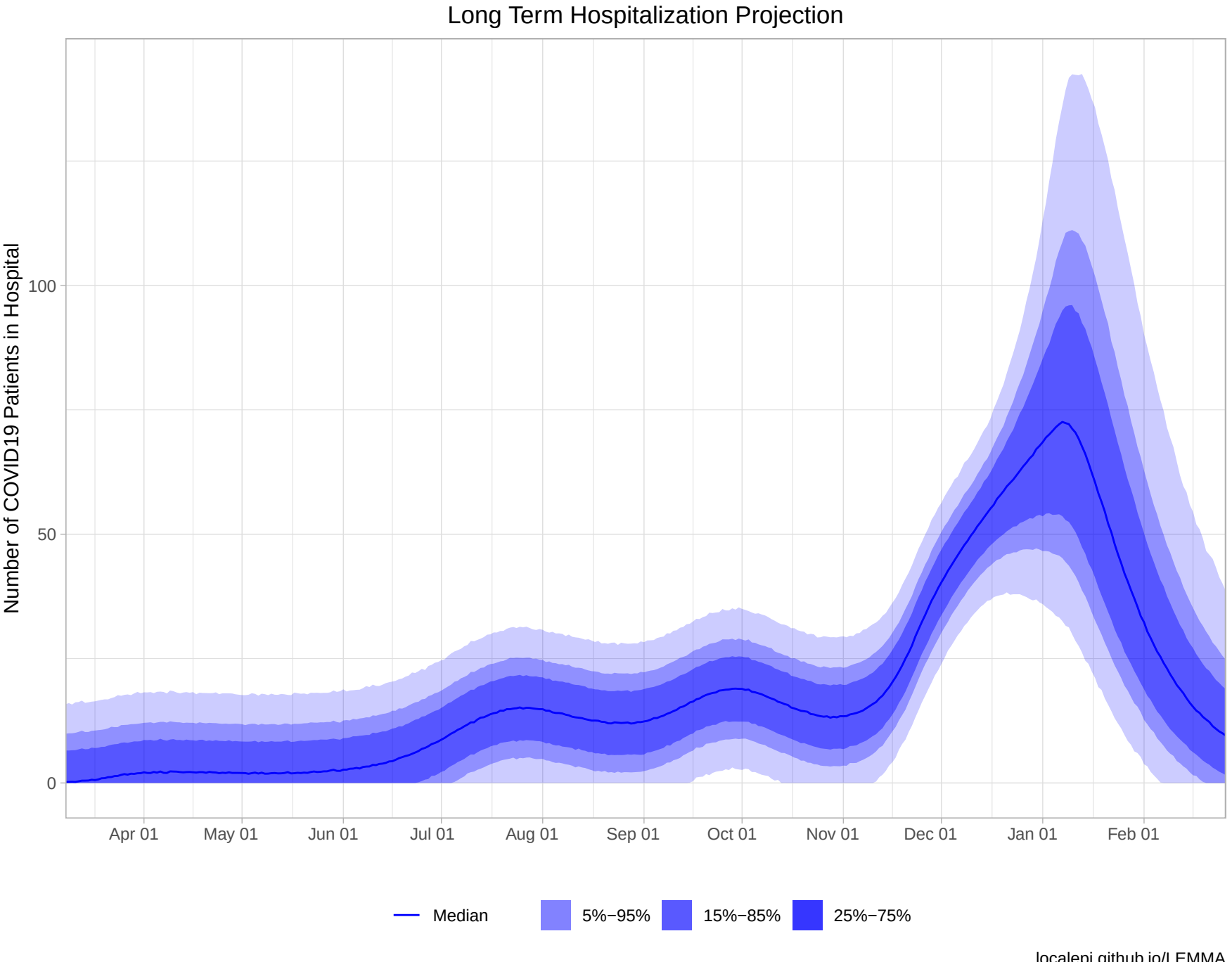
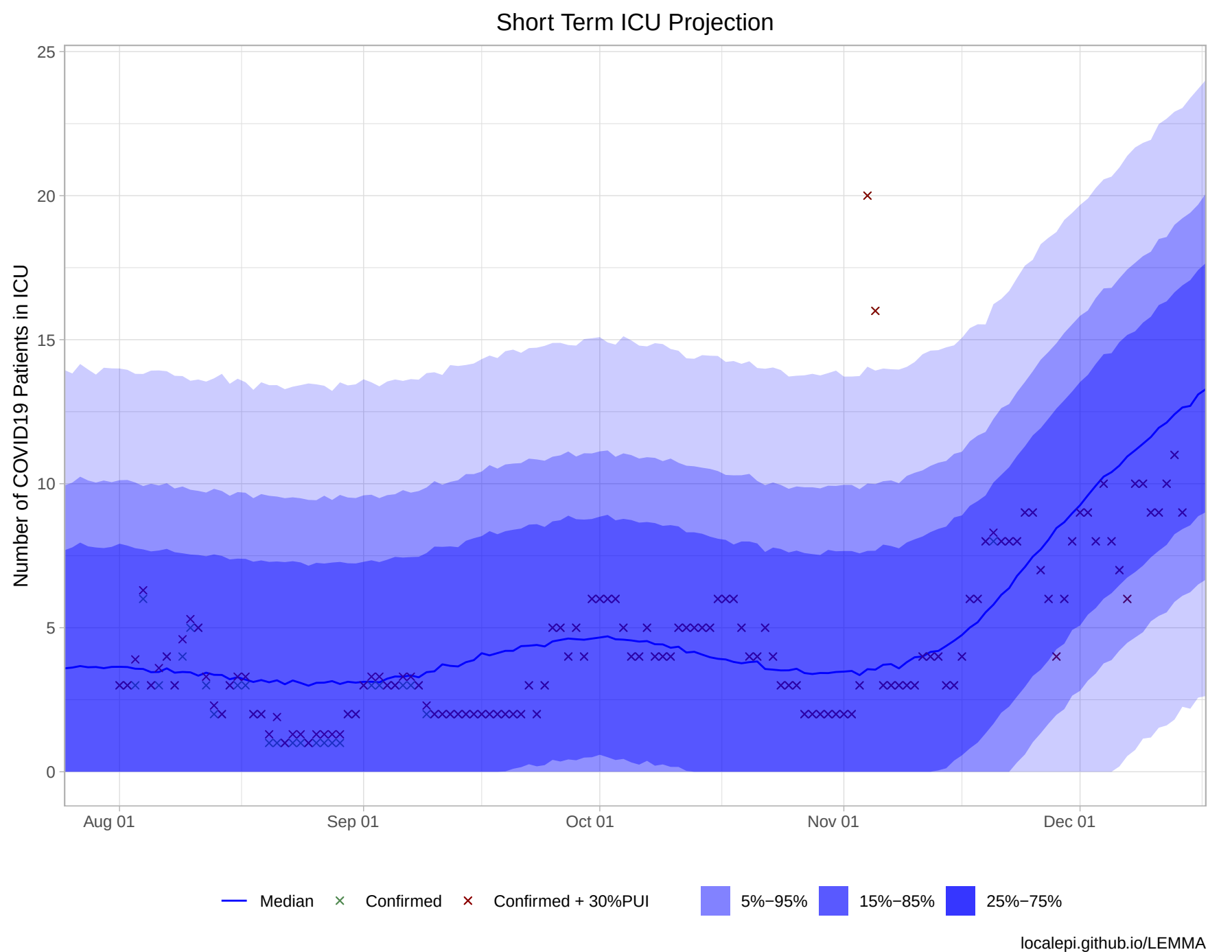
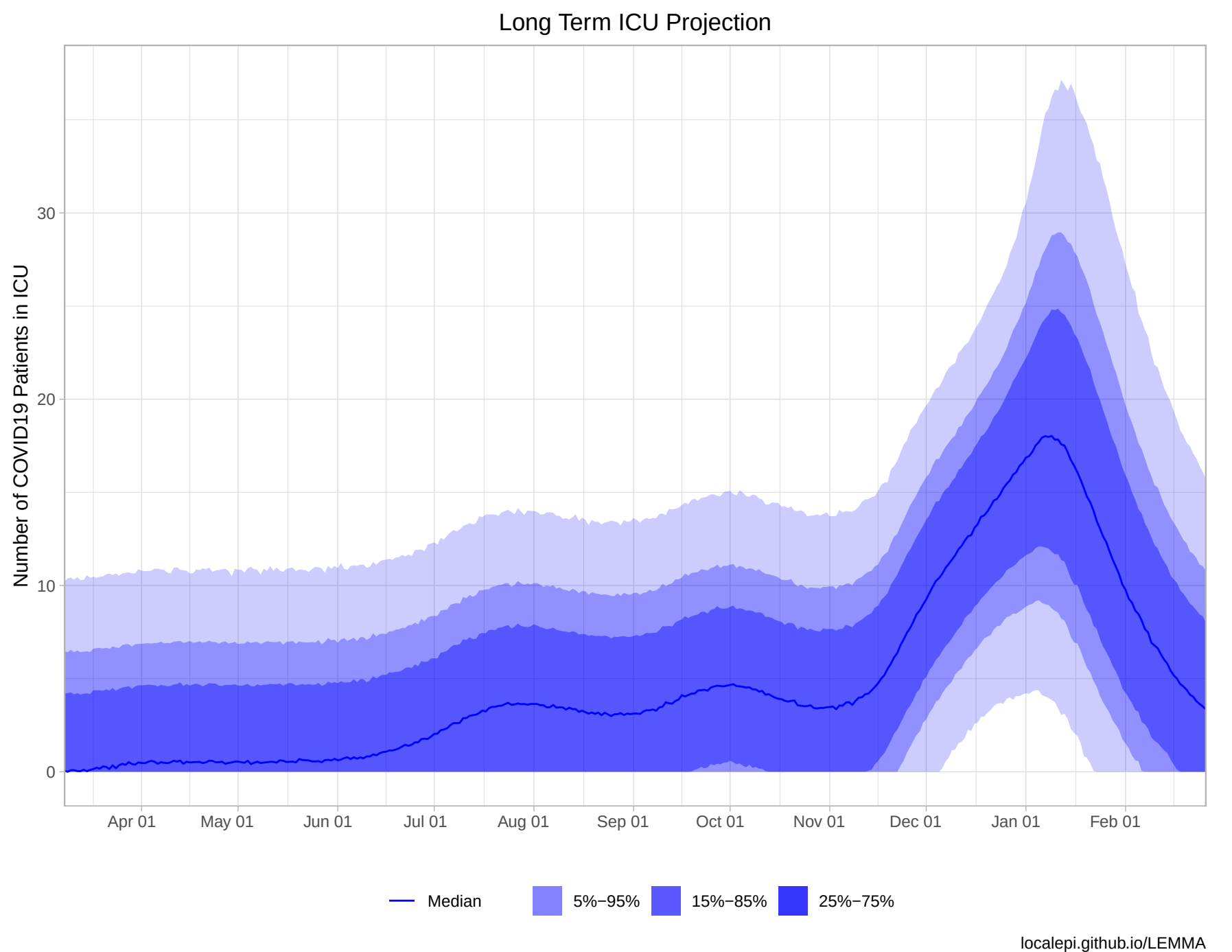
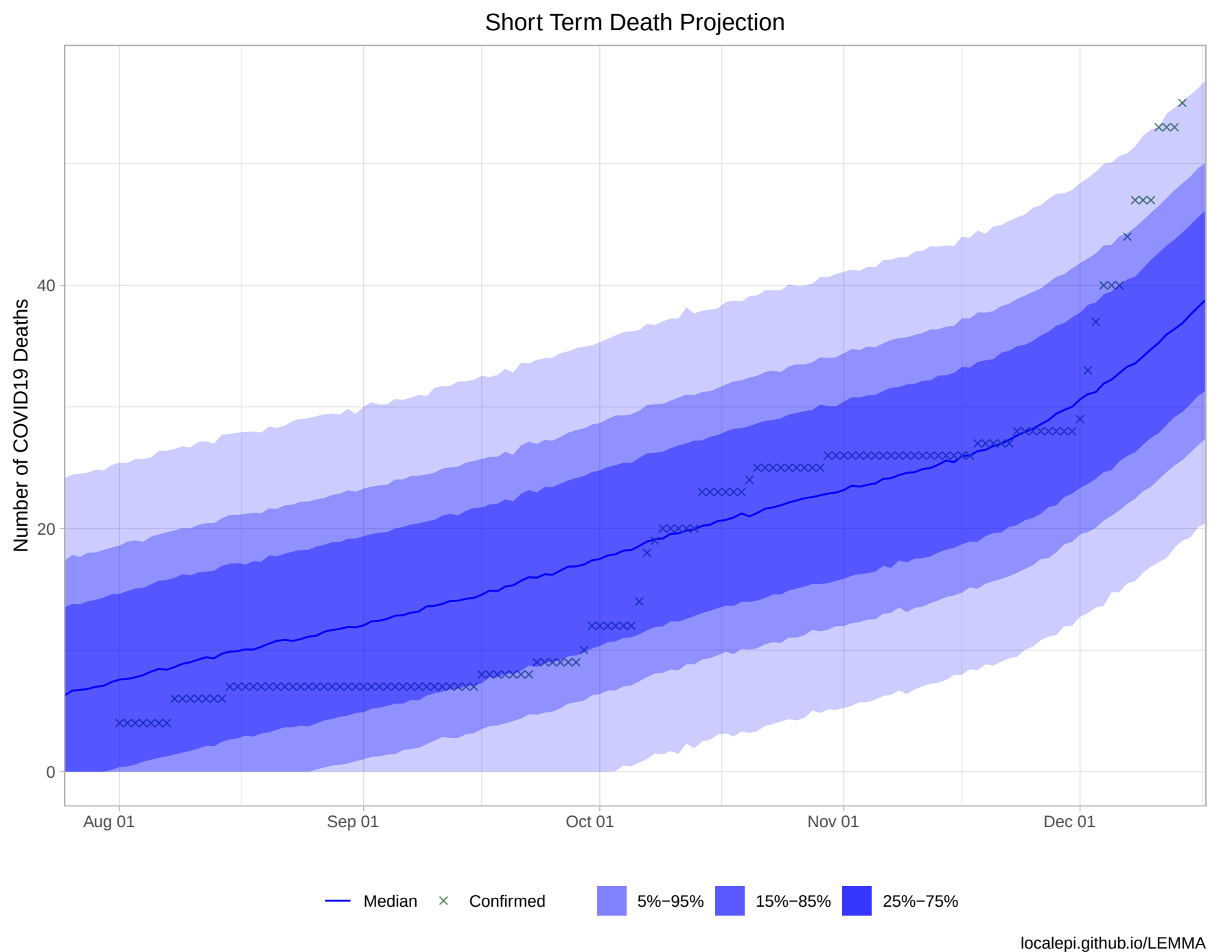
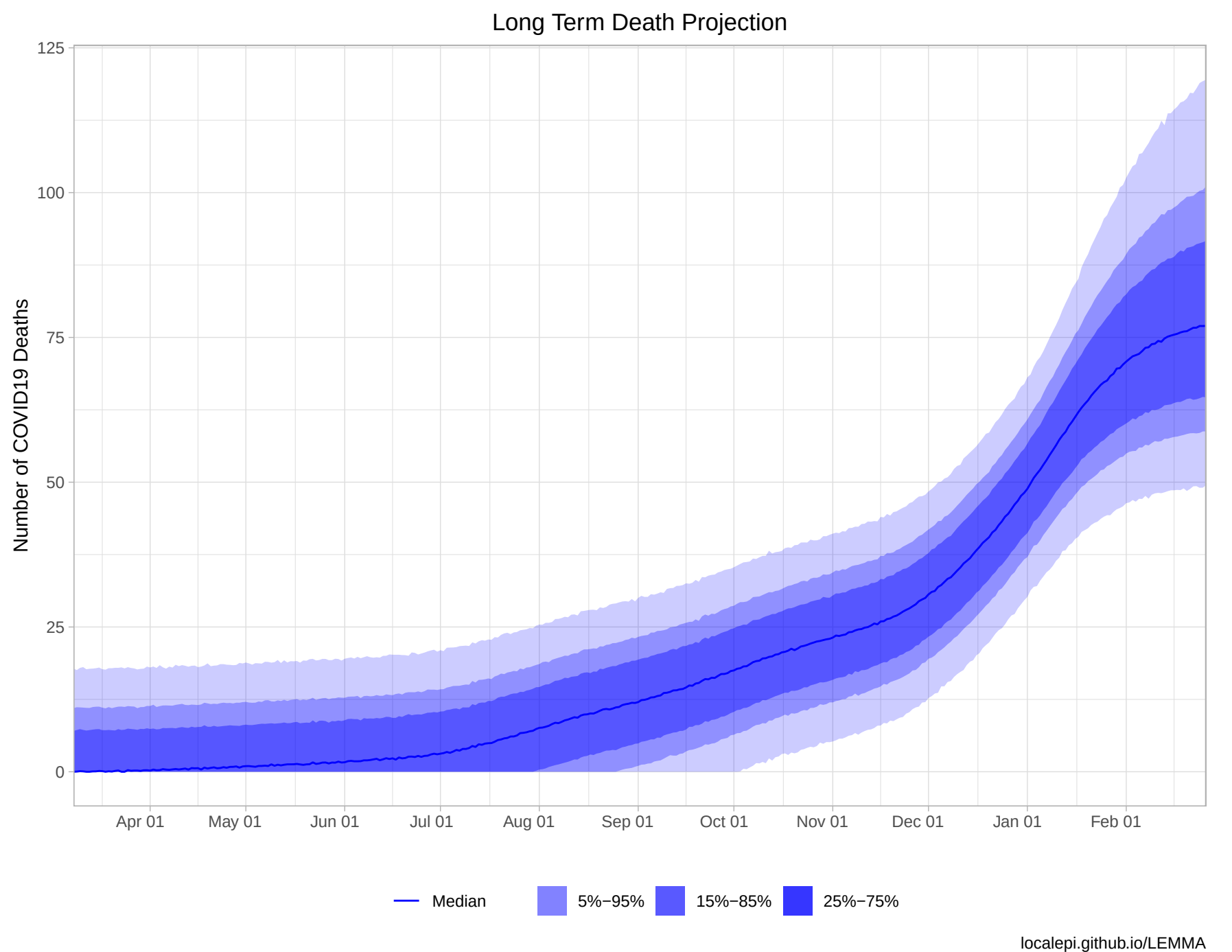

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
20
40
60
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

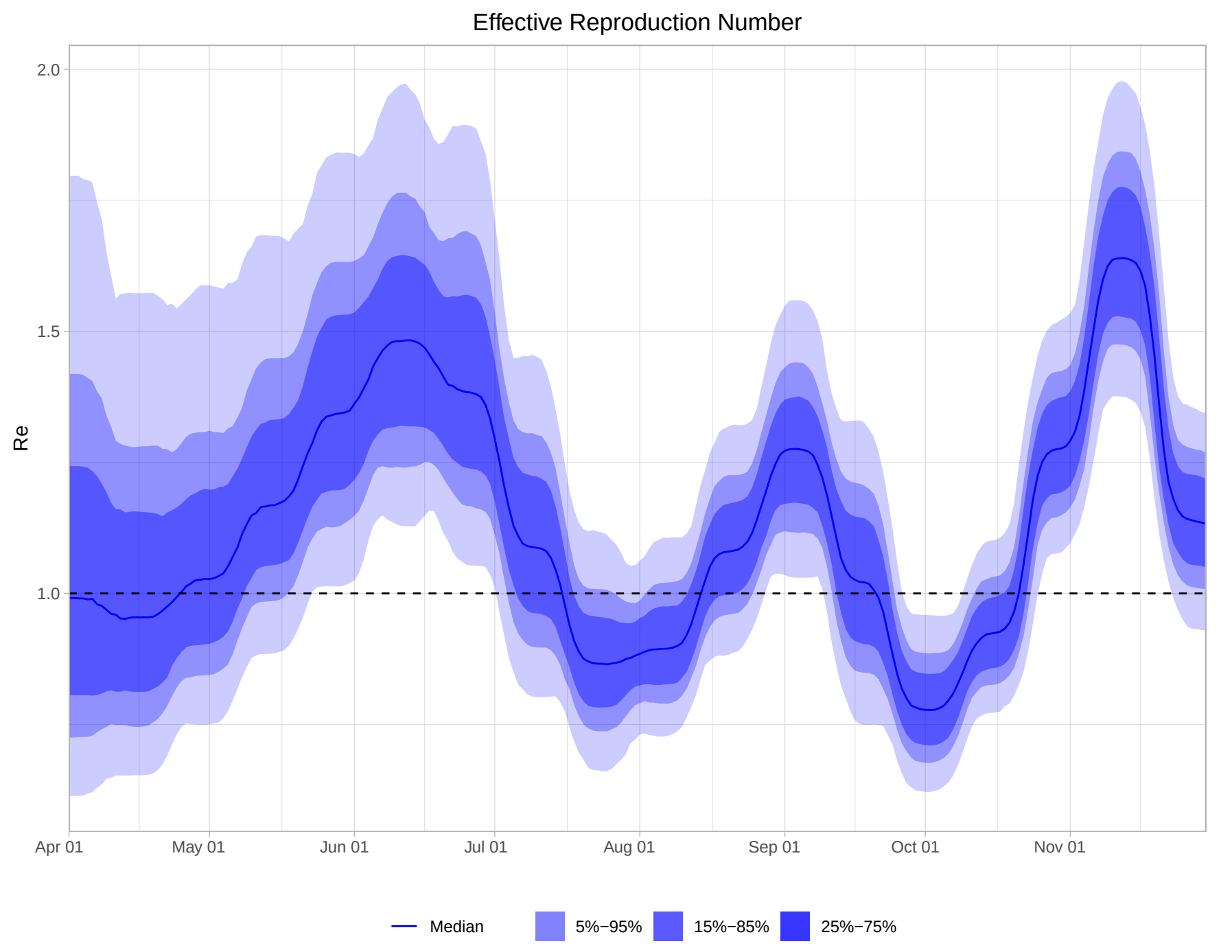

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
100
50
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
25
20
15
10
5
0
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
0
10
20
30
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

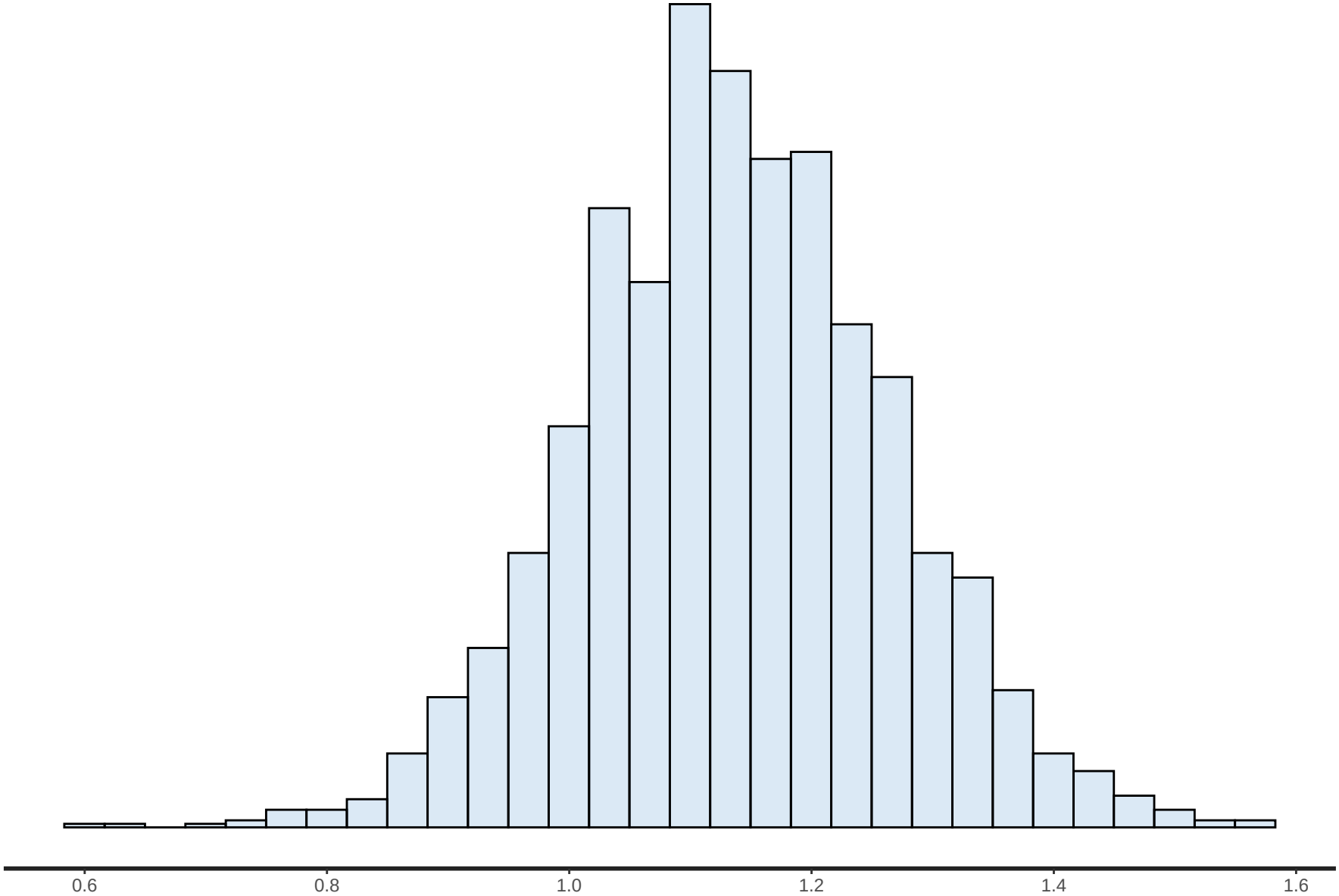

Short Term Death Projection
Number of COVID19 Deaths
0
20
40
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

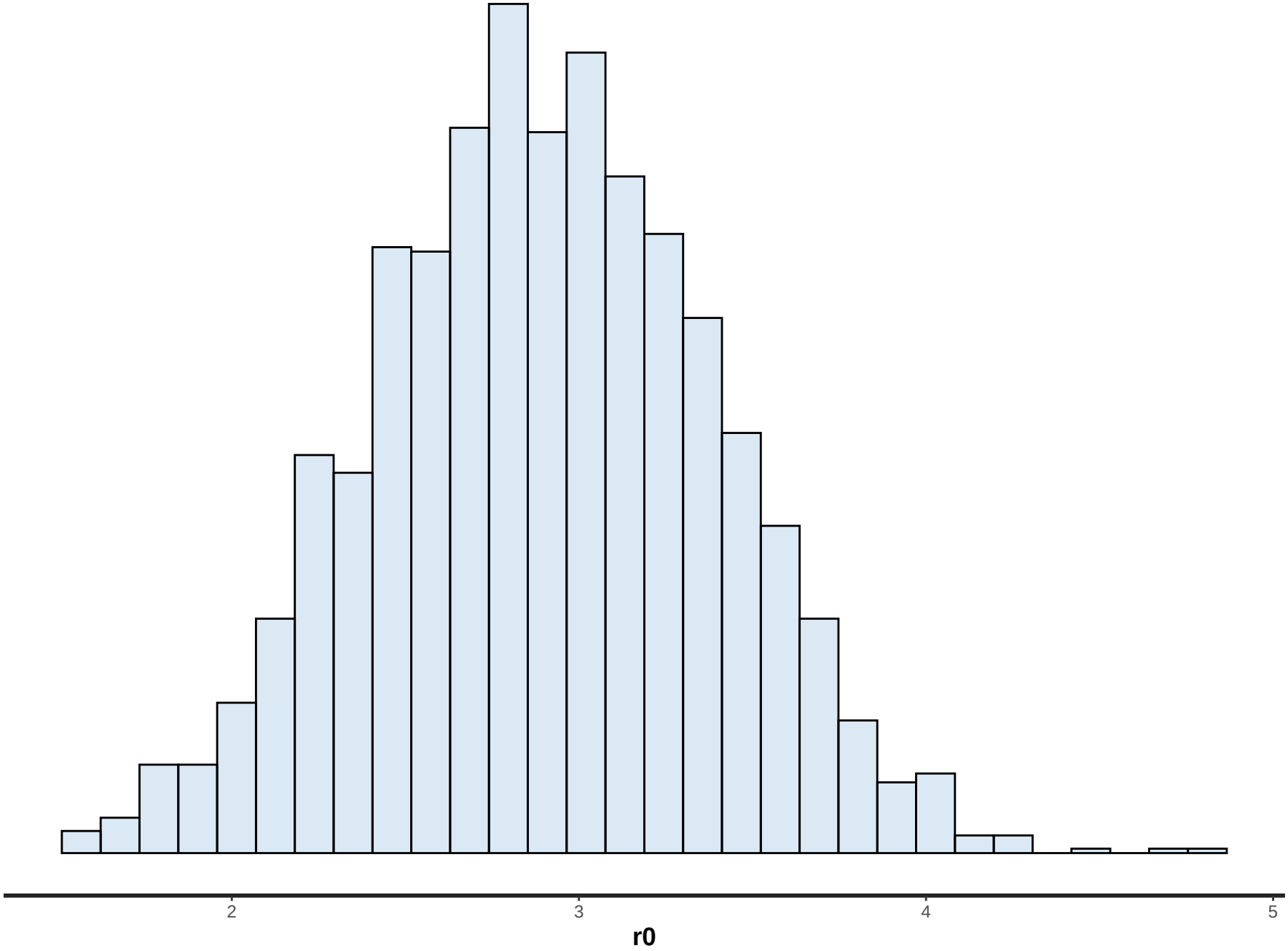

Long Term Death Projection
Number of COVID19 Deaths
125
100
75
50
25
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

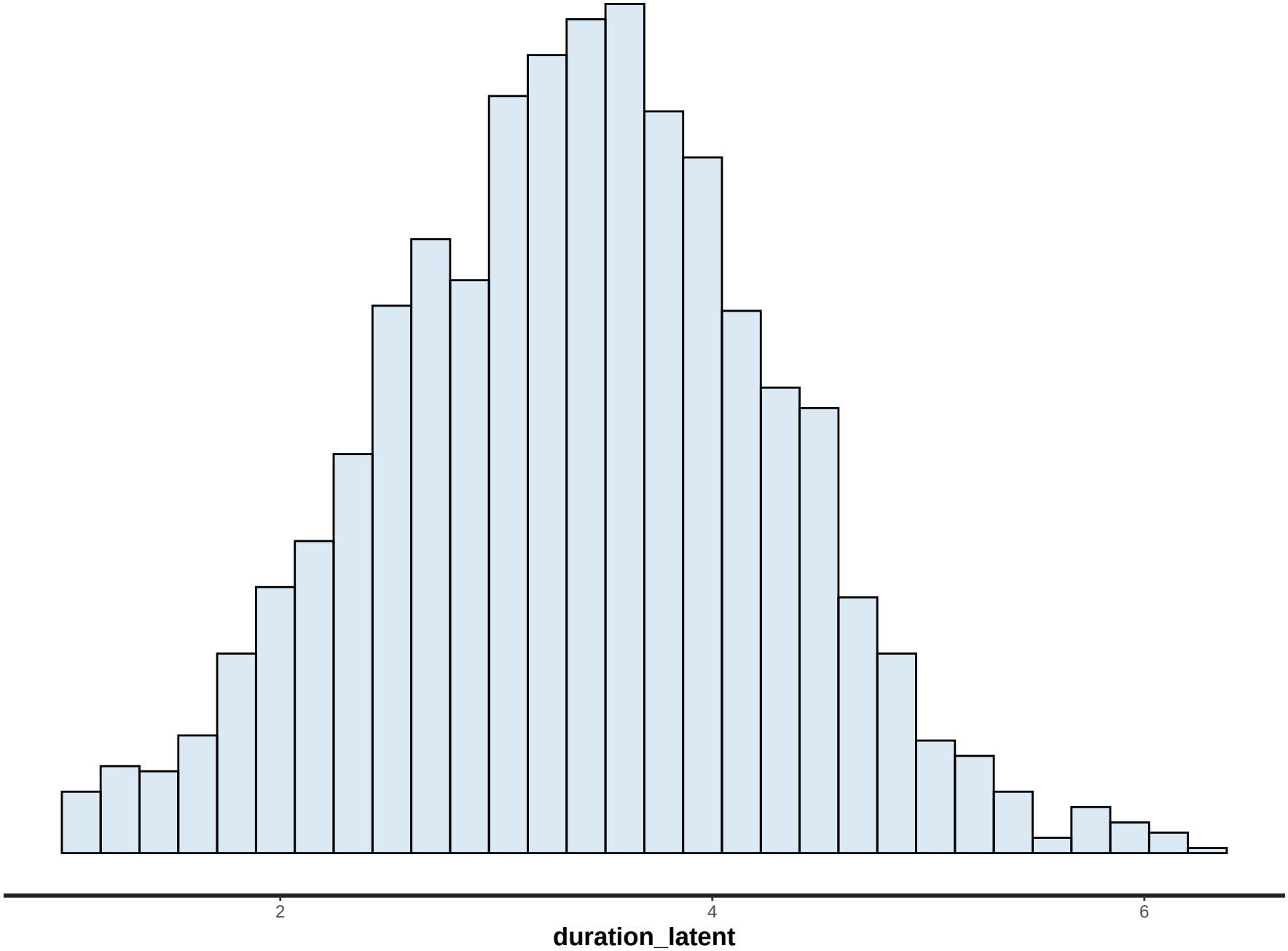

Effective Reproduction Number
Re
2.0
1.5
1.0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
5%−95%
15%−85%
25%−75%

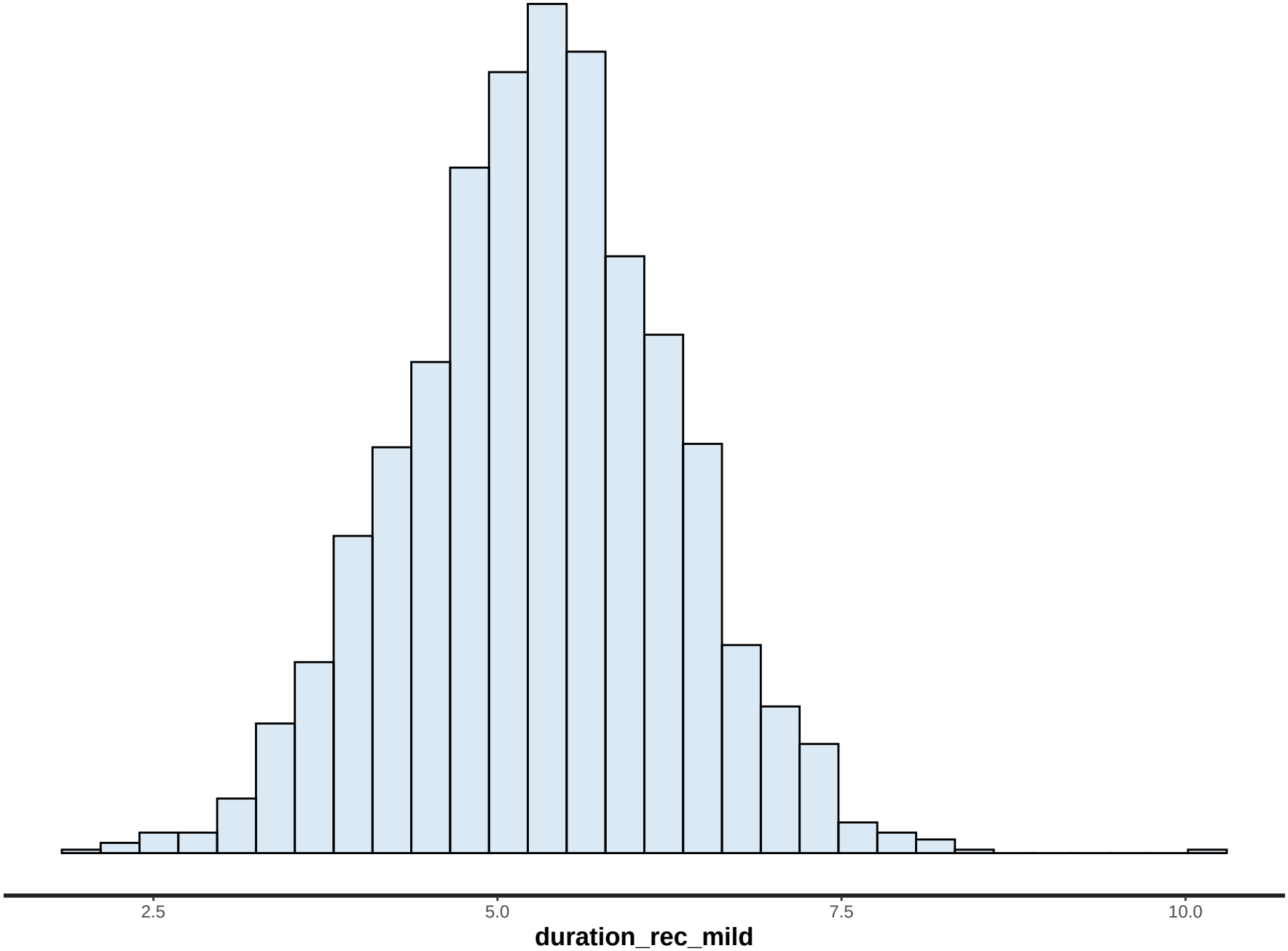
Rt as of 2020−11−30

5%	10%	25%	50%	75%	90%	95%
0.93	0.98	1.05	1.13	1.22	1.30	1.34




2
3
4
5
r0


2
4
6
duration_latent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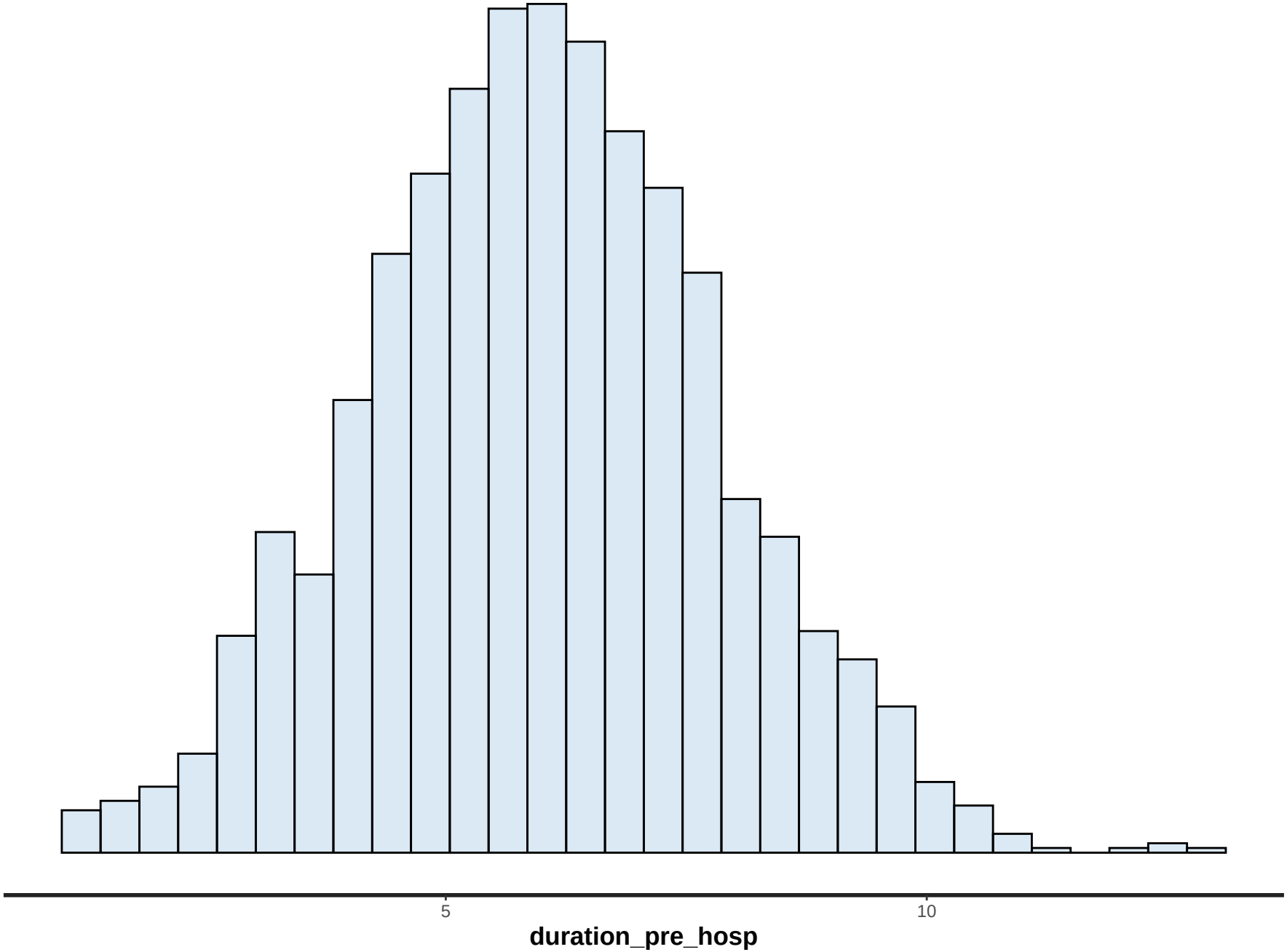
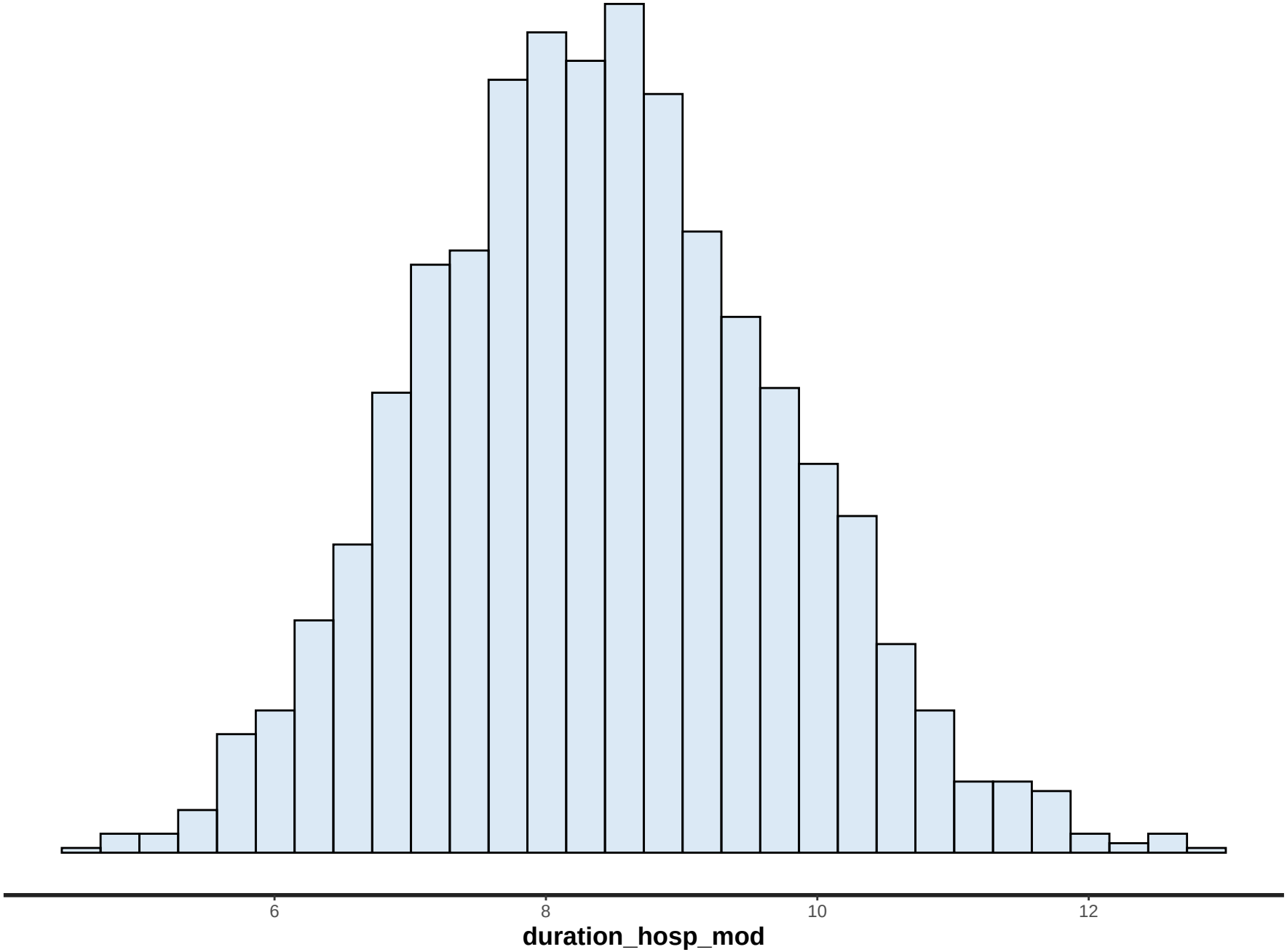
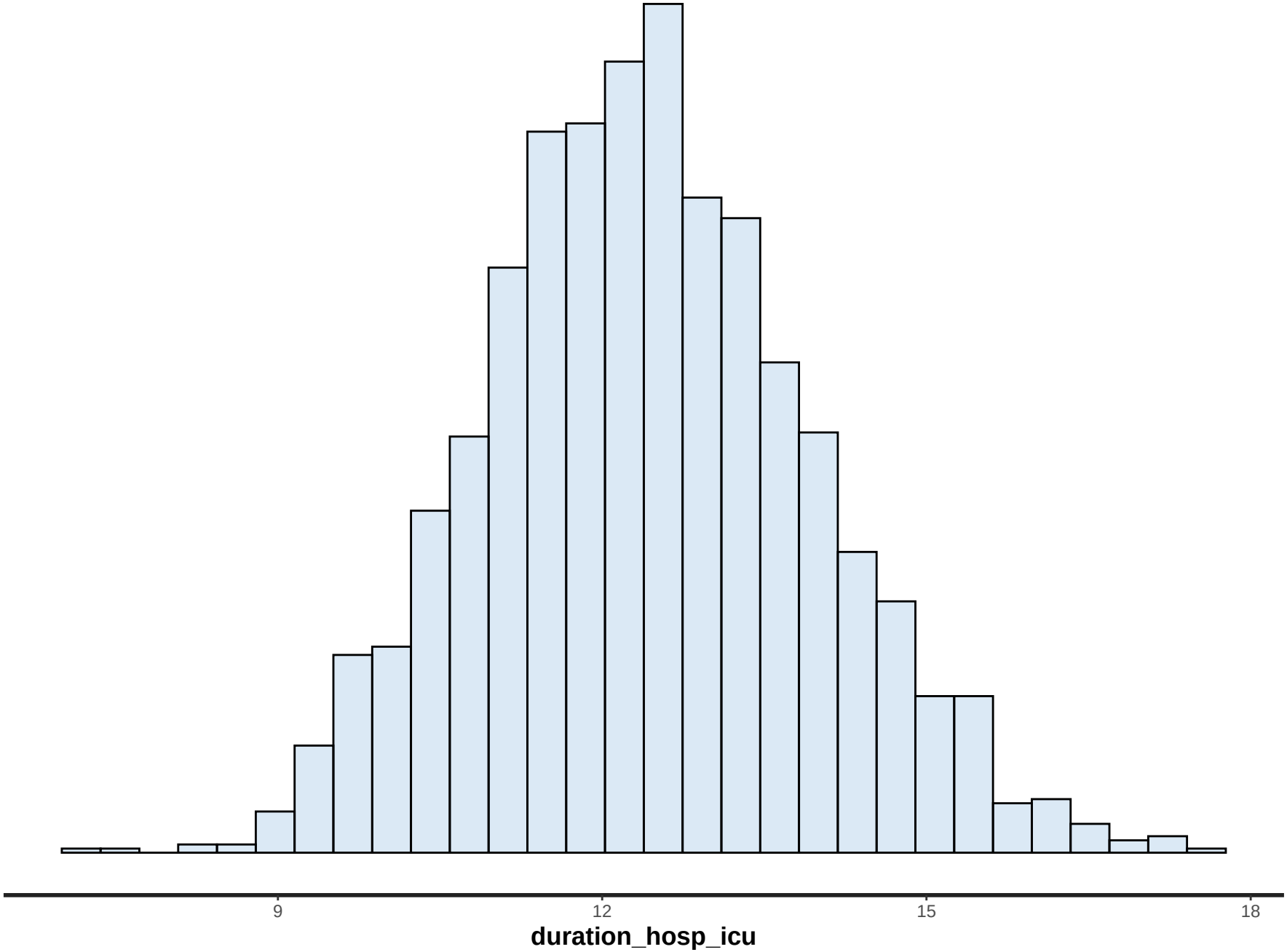
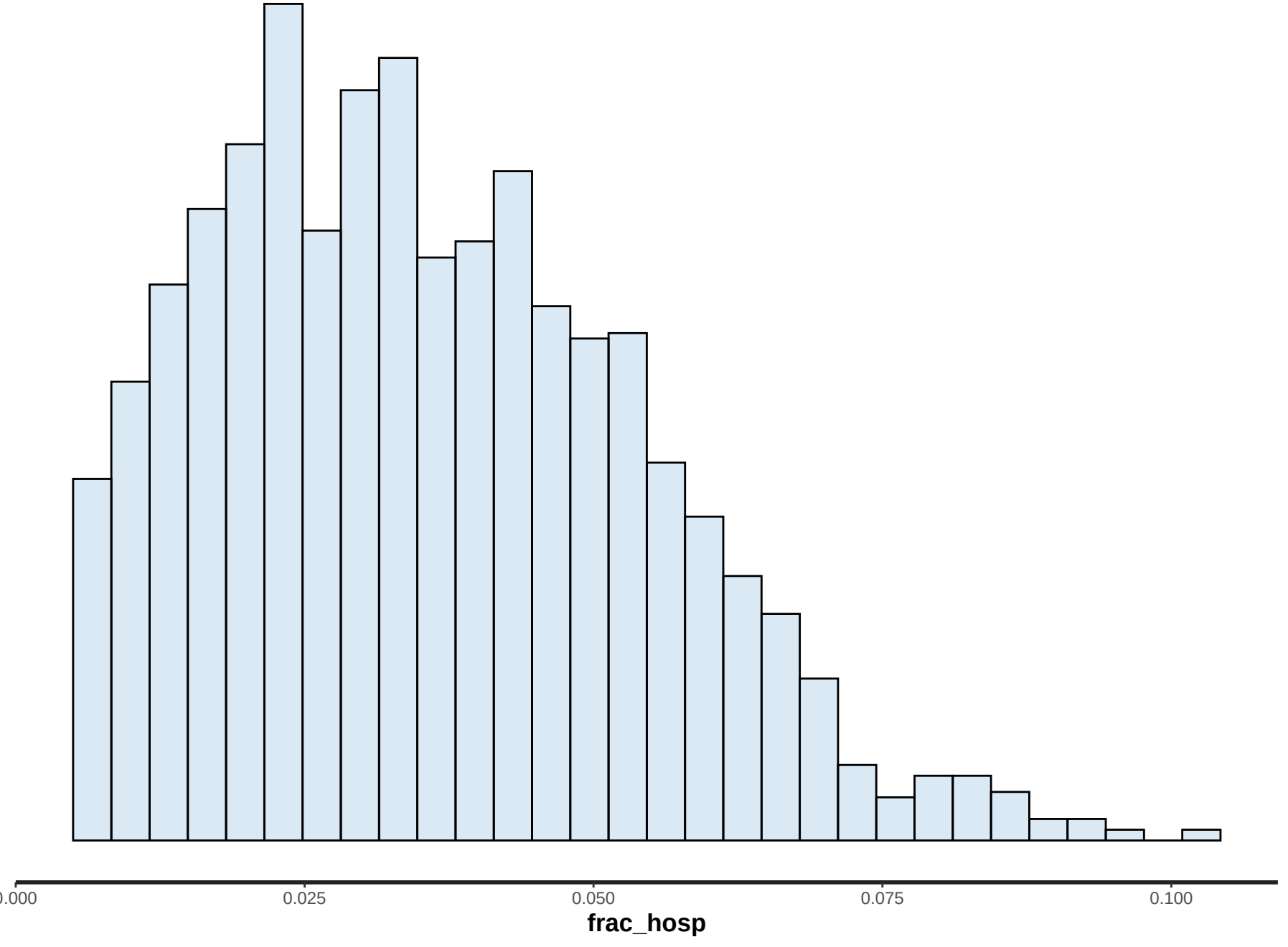
5.0
7.5
10.0
duration_rec_mild


5
10
duration_pre_hosp


6
8
10
12
duration_hosp_mod


9
12
15
18
duration_hosp_icu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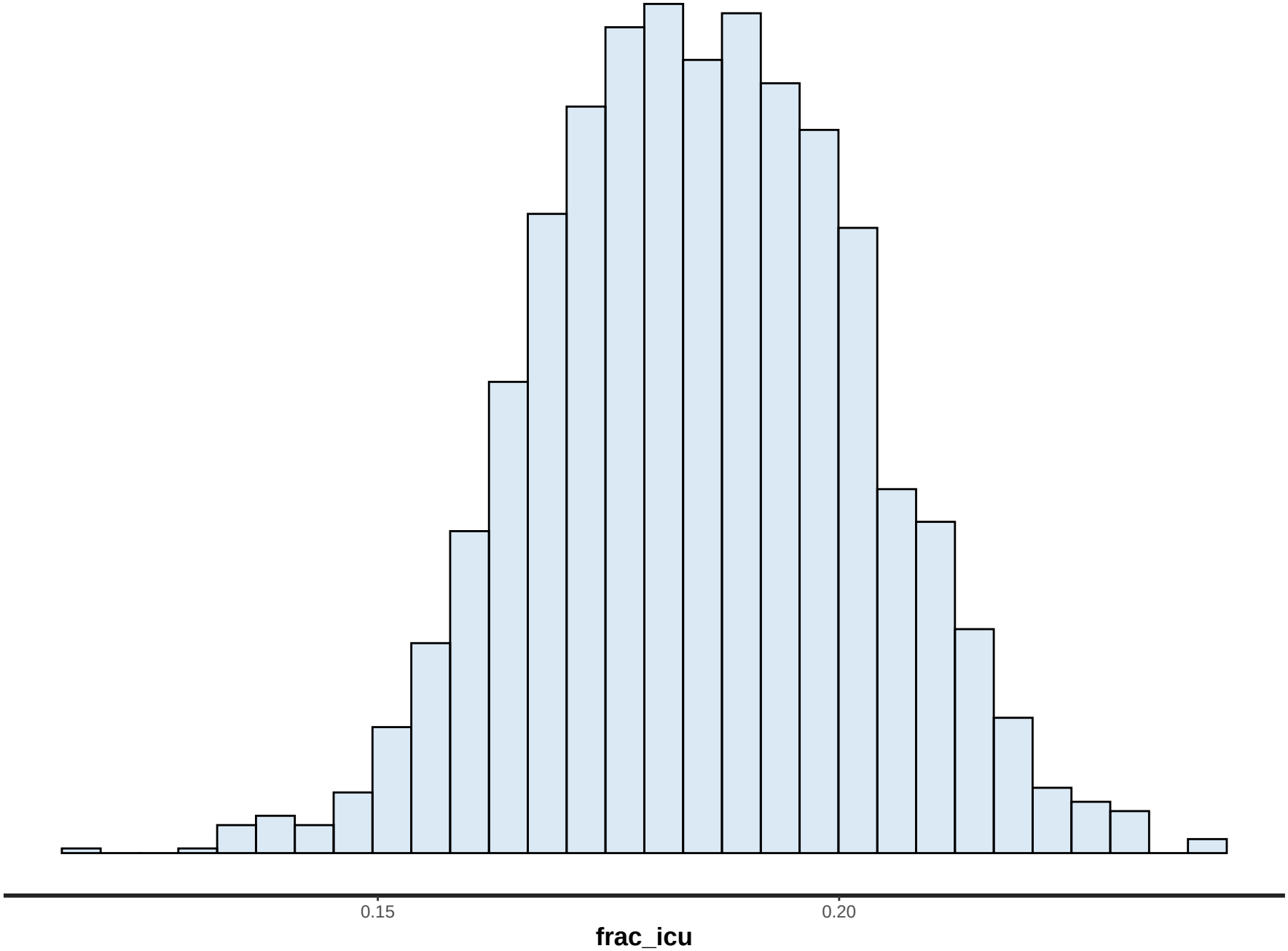
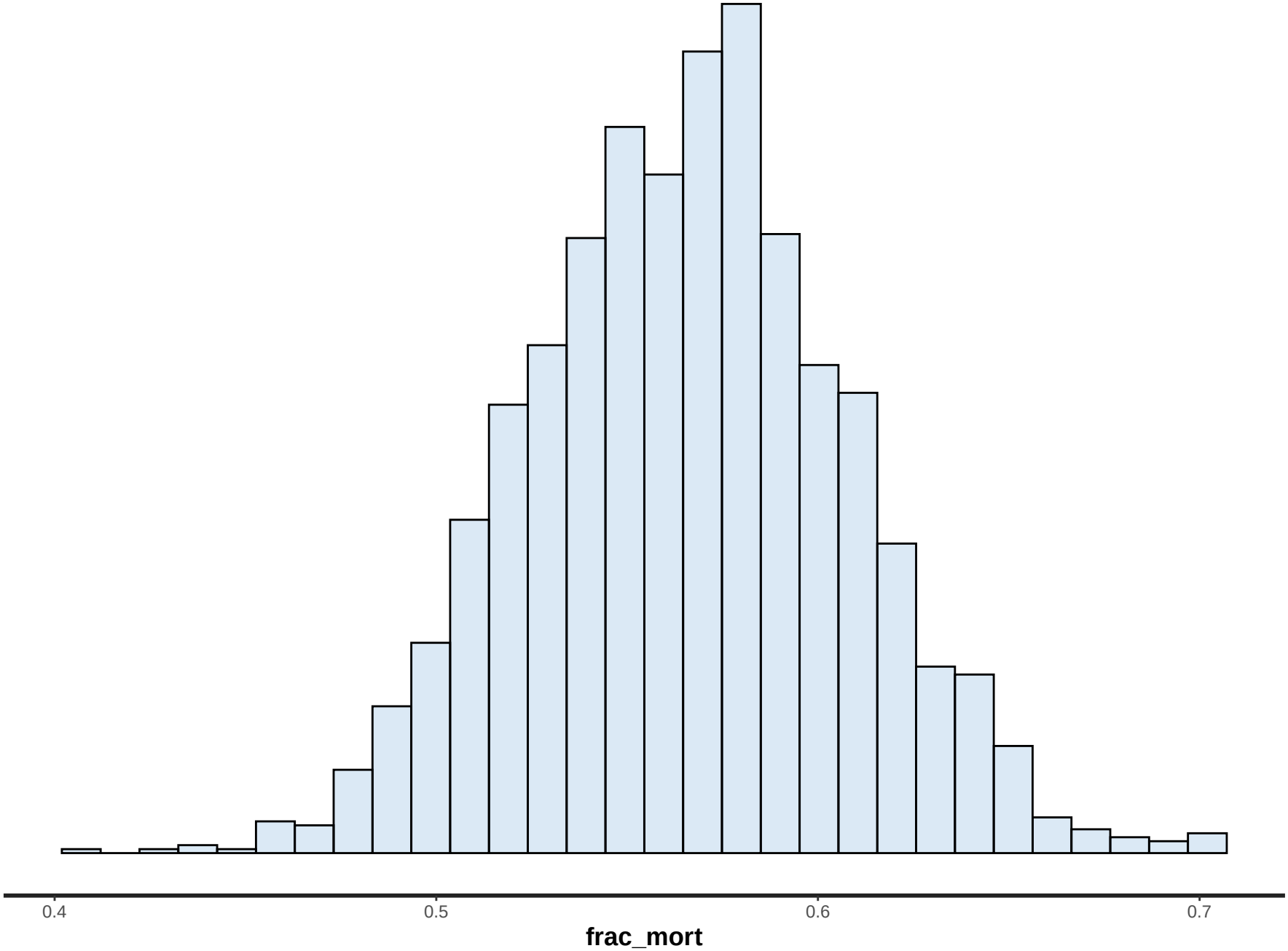
0.025
0.050
0.075
0.100
frac_hosp


0.15
0.20
frac_icu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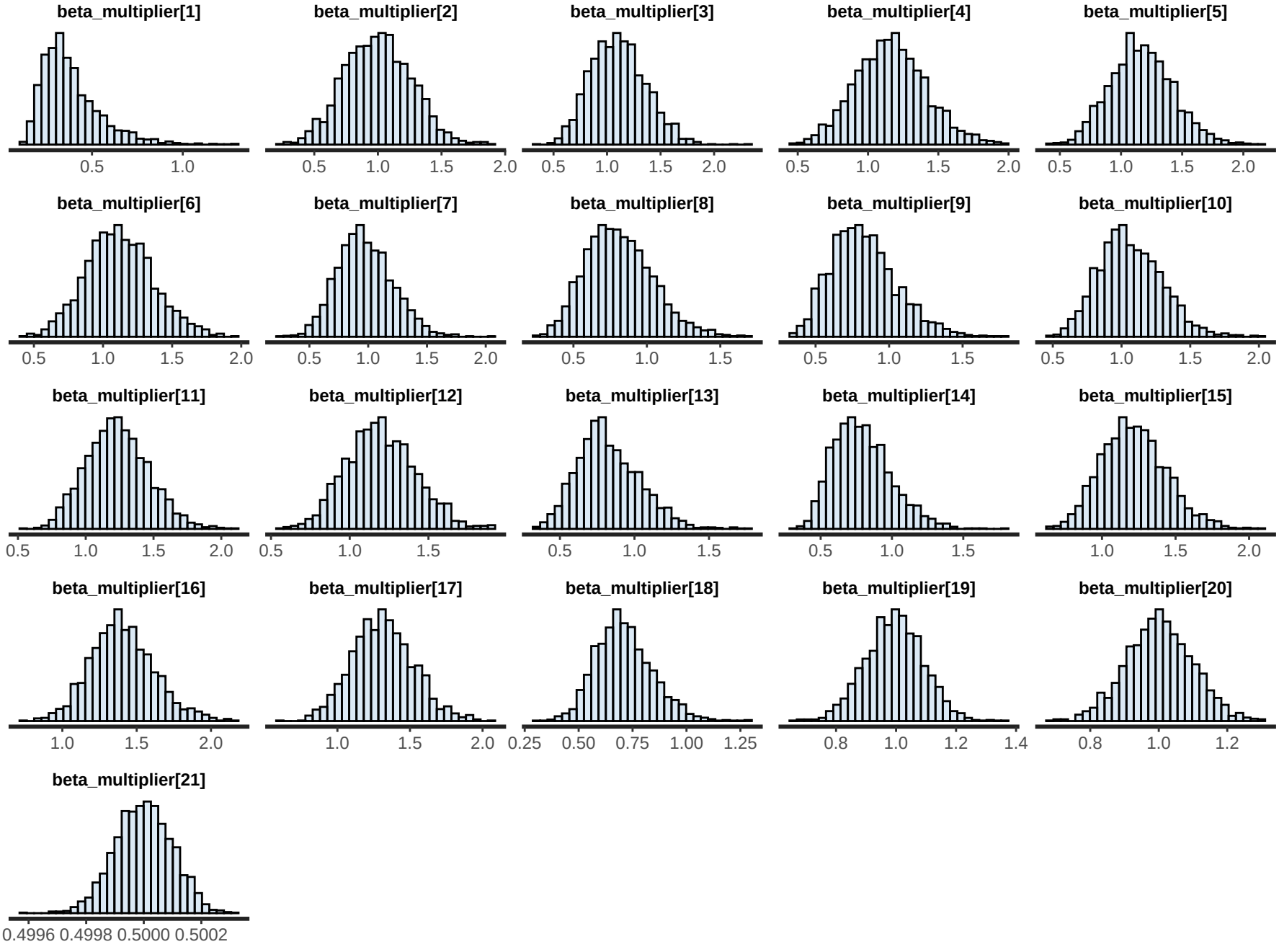
0.5
0.6
0.7
frac_mort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1.5
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beta_multiplier[3]
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1.5
2.0
beta_multiplier[4]
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1.0
1.5
2.0
beta_multiplier[5]
0.5
1.0
1.5
2.0
beta_multiplier[6]
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1.0
1.5
2.0
beta_multiplier[7]
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1.0
1.5
2.0
beta_multiplier[8]
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1.0
1.5
beta_multiplier[9]
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1.0
1.5
beta_multiplier[10]
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1.0
1.5
2.0
beta_multiplier[11]
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1.0
1.5
2.0
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1.0
1.5
beta_multiplier[13]
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1.0
1.5
beta_multiplier[14]
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1.0
1.5
beta_multiplier[15]
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1.5
2.0
beta_multiplier[16]
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1.5
2.0
beta_multiplier[17]
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1.5
2.0
beta_multiplier[18]
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0.50
0.75
1.00
1.25
beta_multiplier[19]
0.8
1.0
1.2
1.4
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0.8
1.0
1.2
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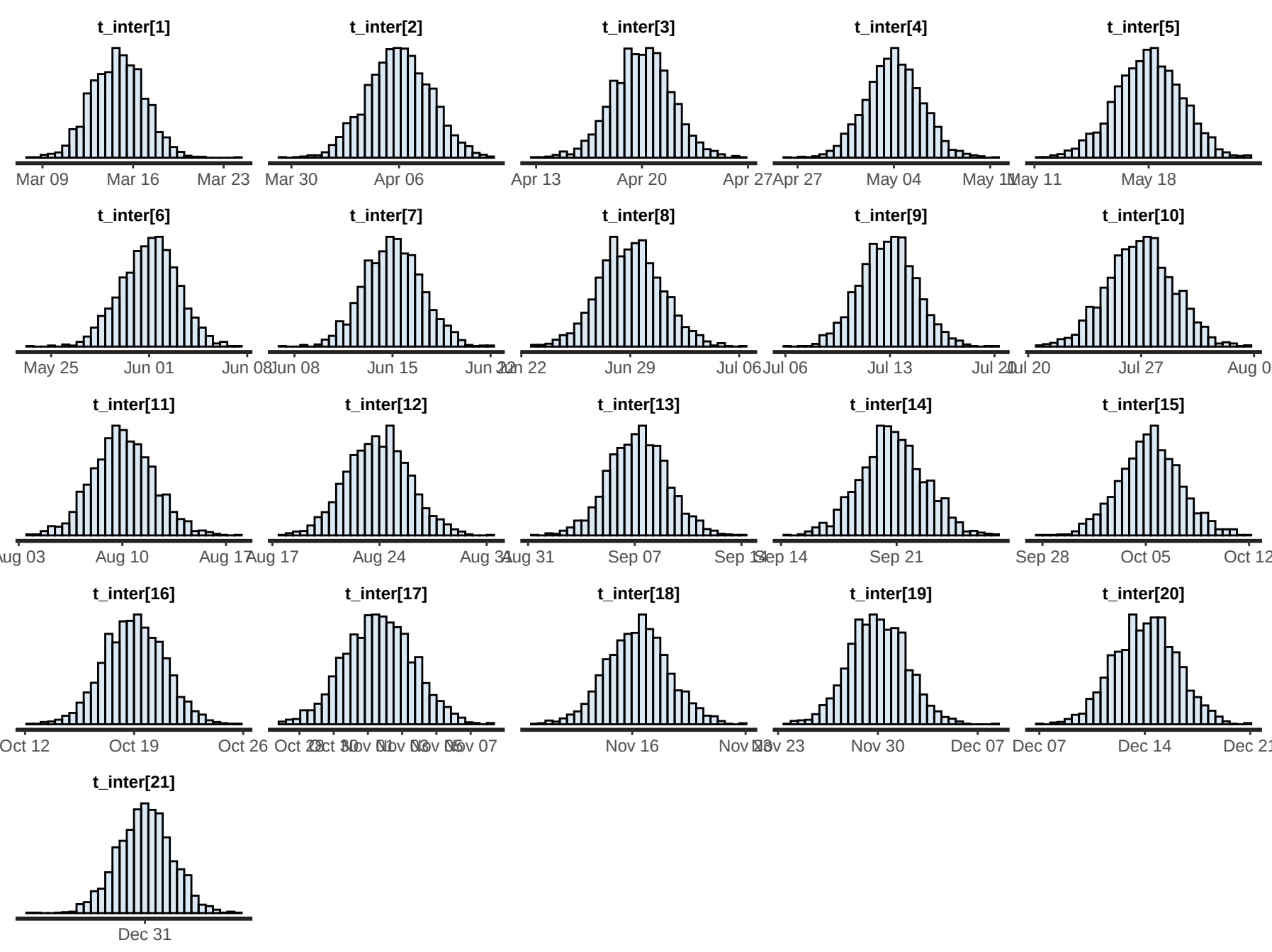
0.5002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Mar 09
Mar 16
Mar 23
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Mar 30
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Apr 13
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Apr 27
May 04
t_inter[5]
May 11
May 18
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May 25
Jun 01
Jun 08
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Jun 08
Jun 15
Jun 22
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Jun 22
Jun 29
Jul 06
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Jul 06
Jul 13
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Jul 27
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Aug 10
Aug 17
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Oct 12
Oct 19
Oct 26
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Nov 07
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Nov 16
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Nov 23
Nov 30
Dec 07
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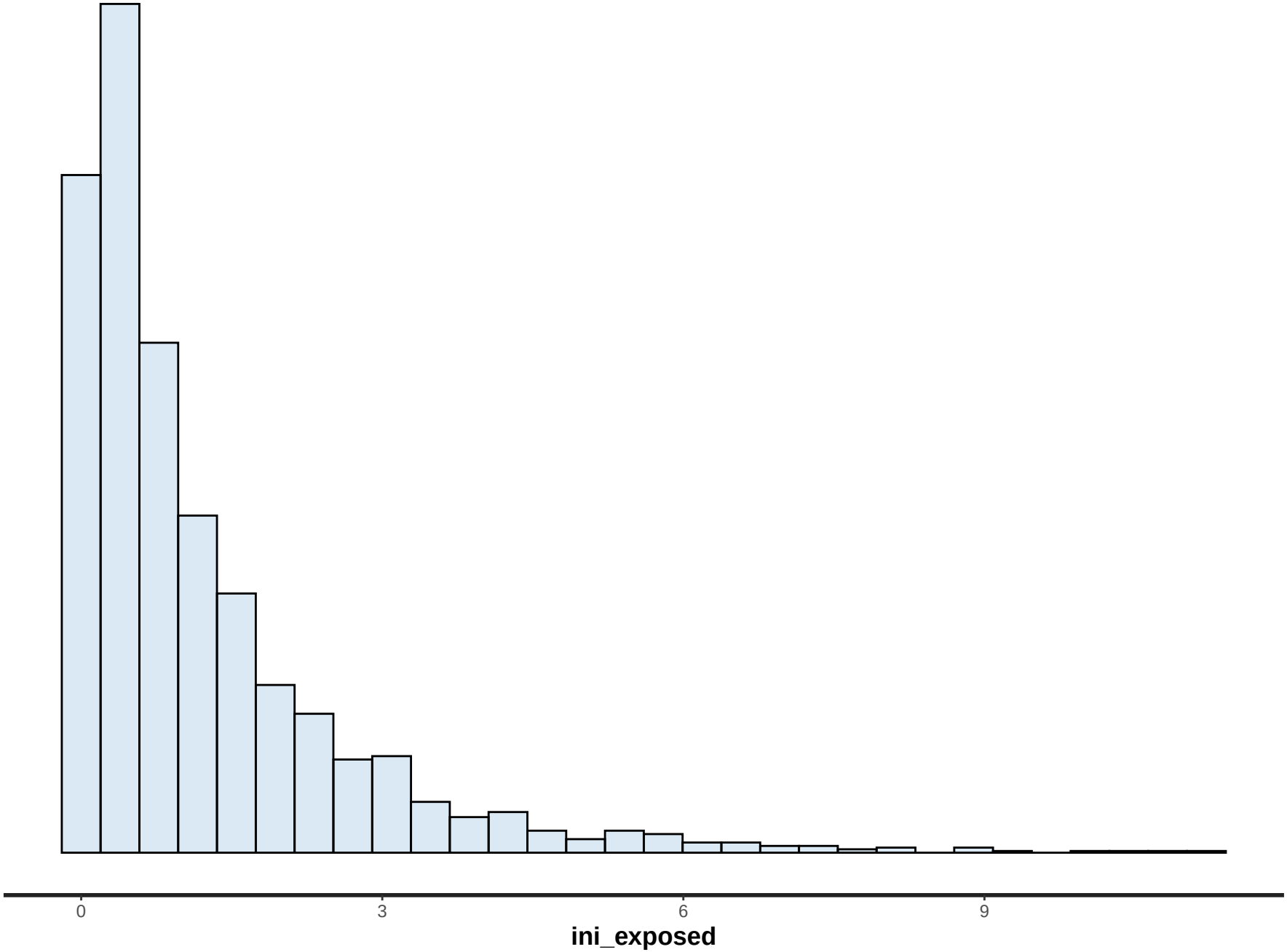
Dec 07
Dec 14
t_inter[21]
Dec 31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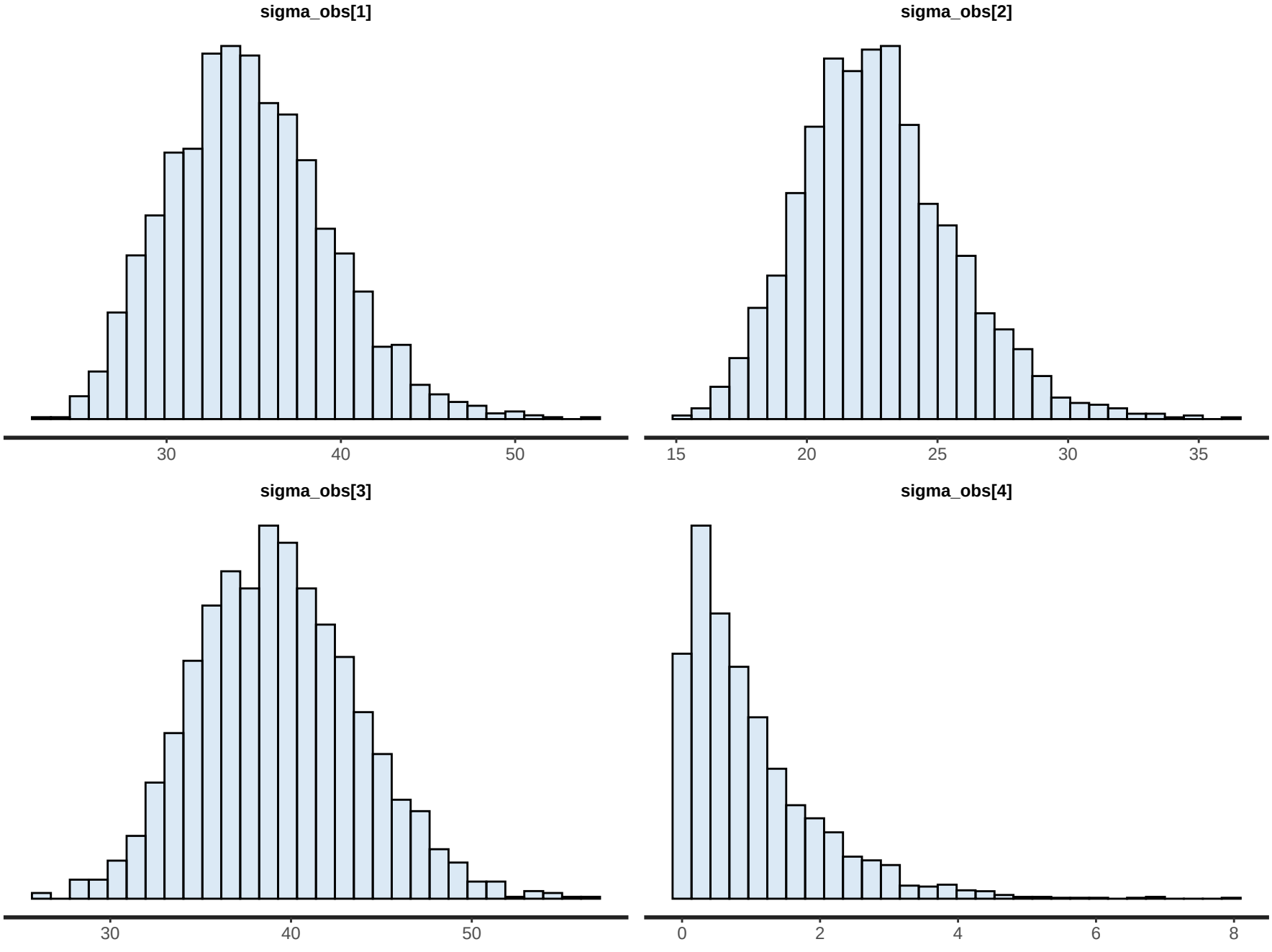
3
6
9
ini_exposed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40
50
sigma_obs[4]
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4
6
8