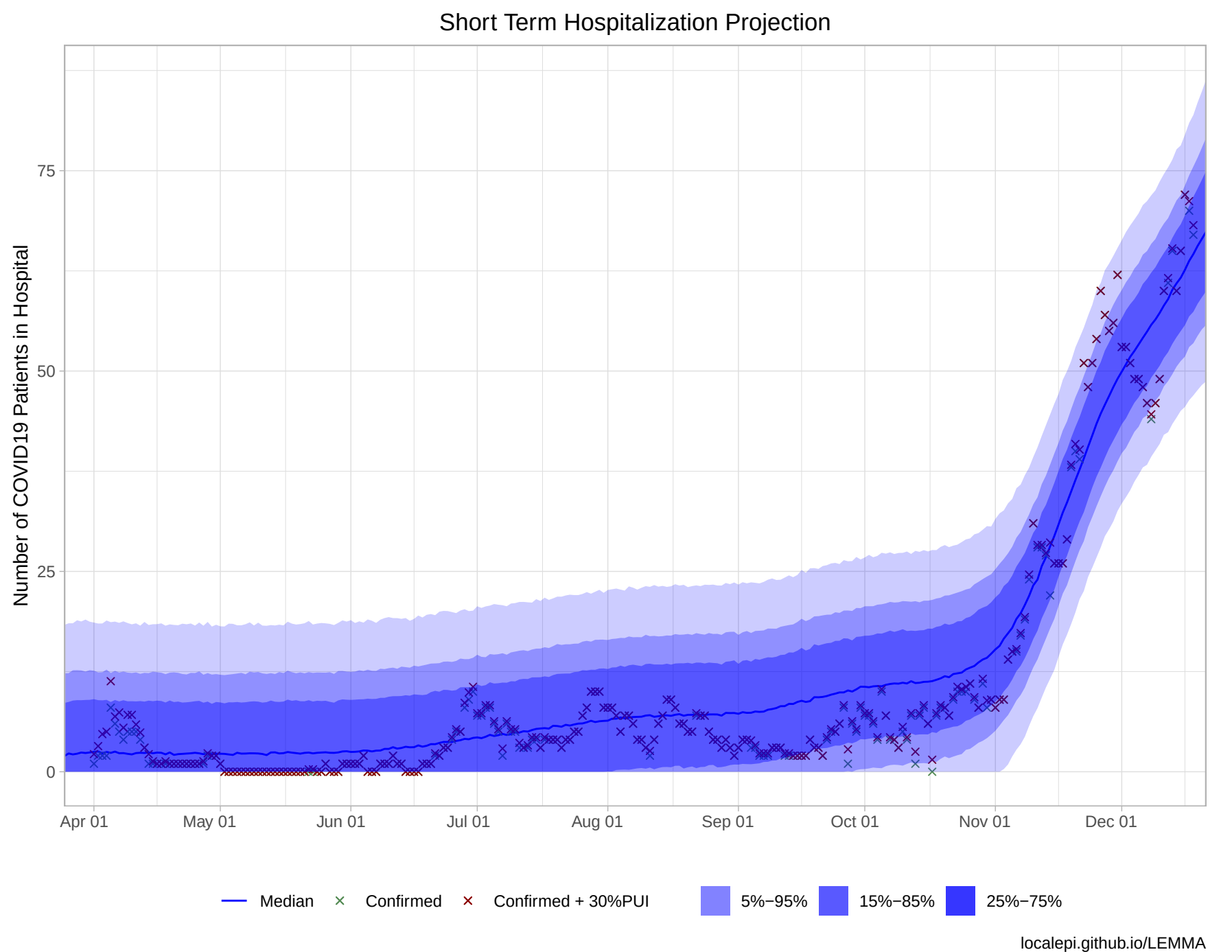
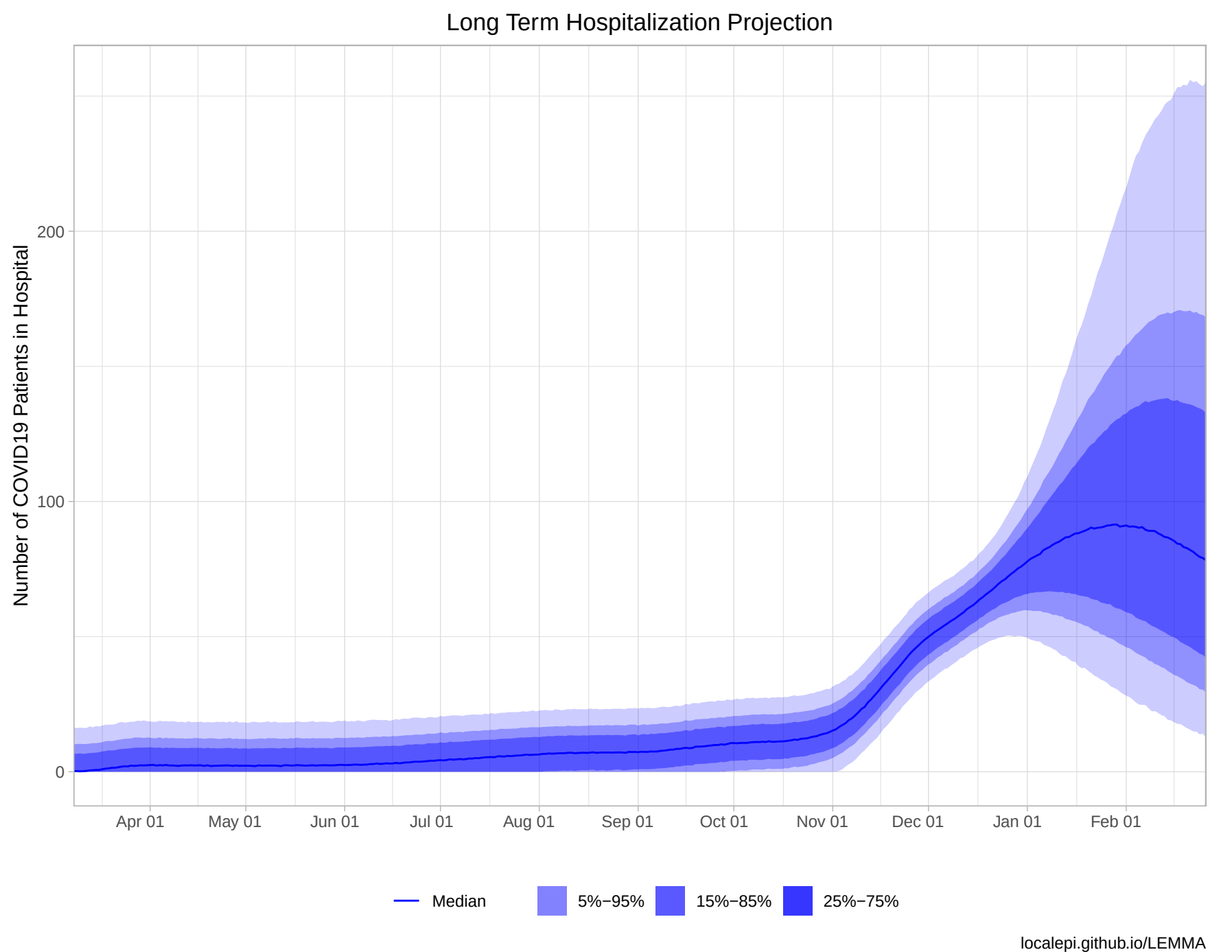
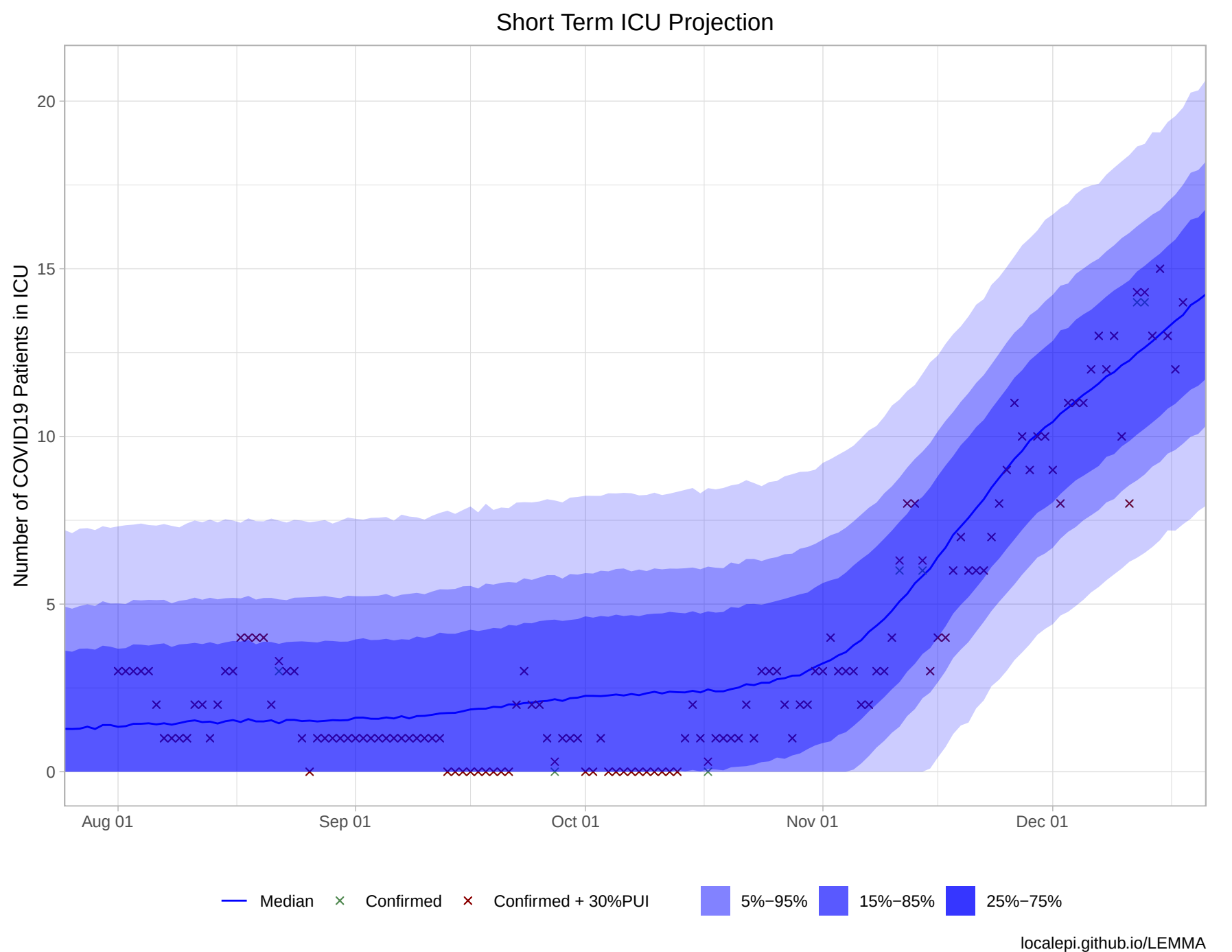
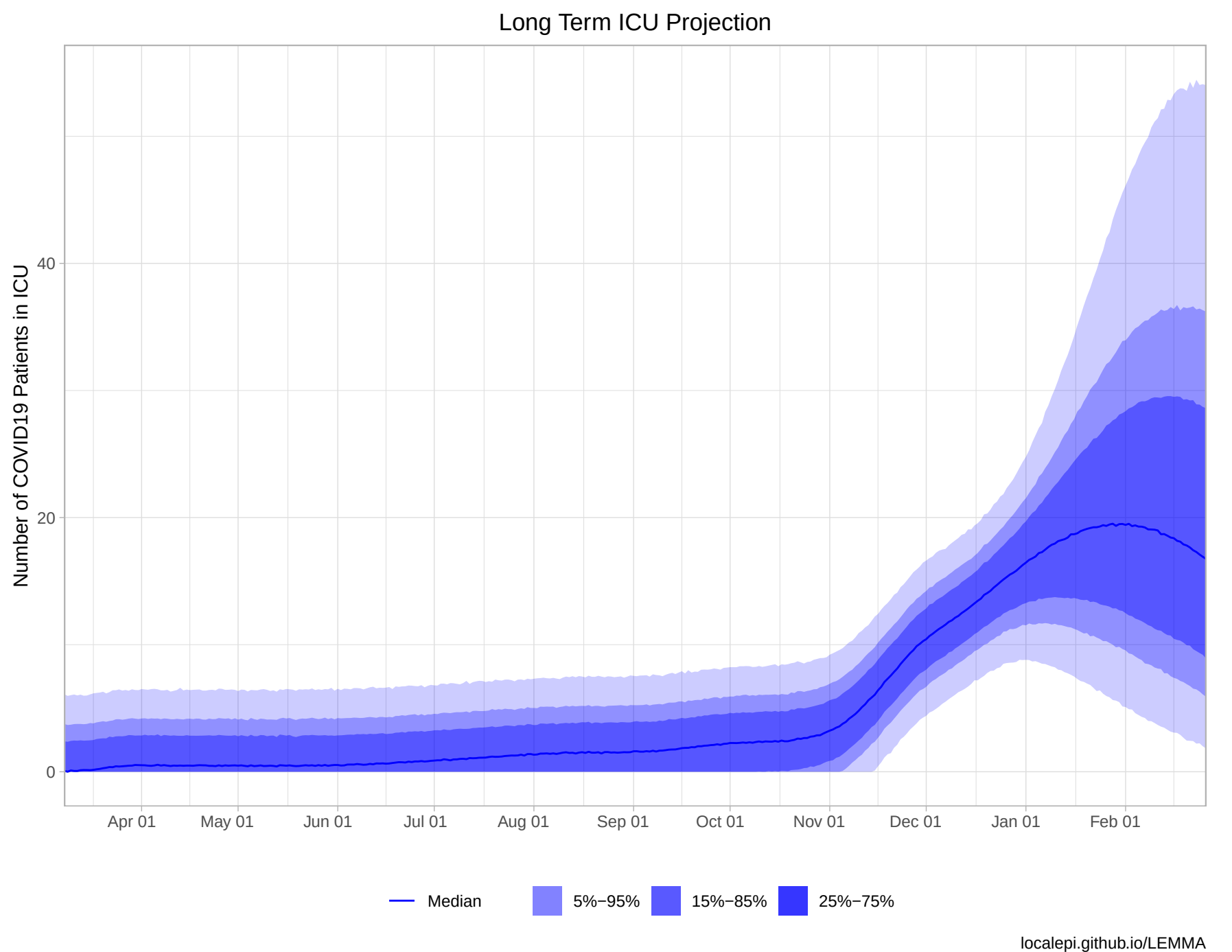
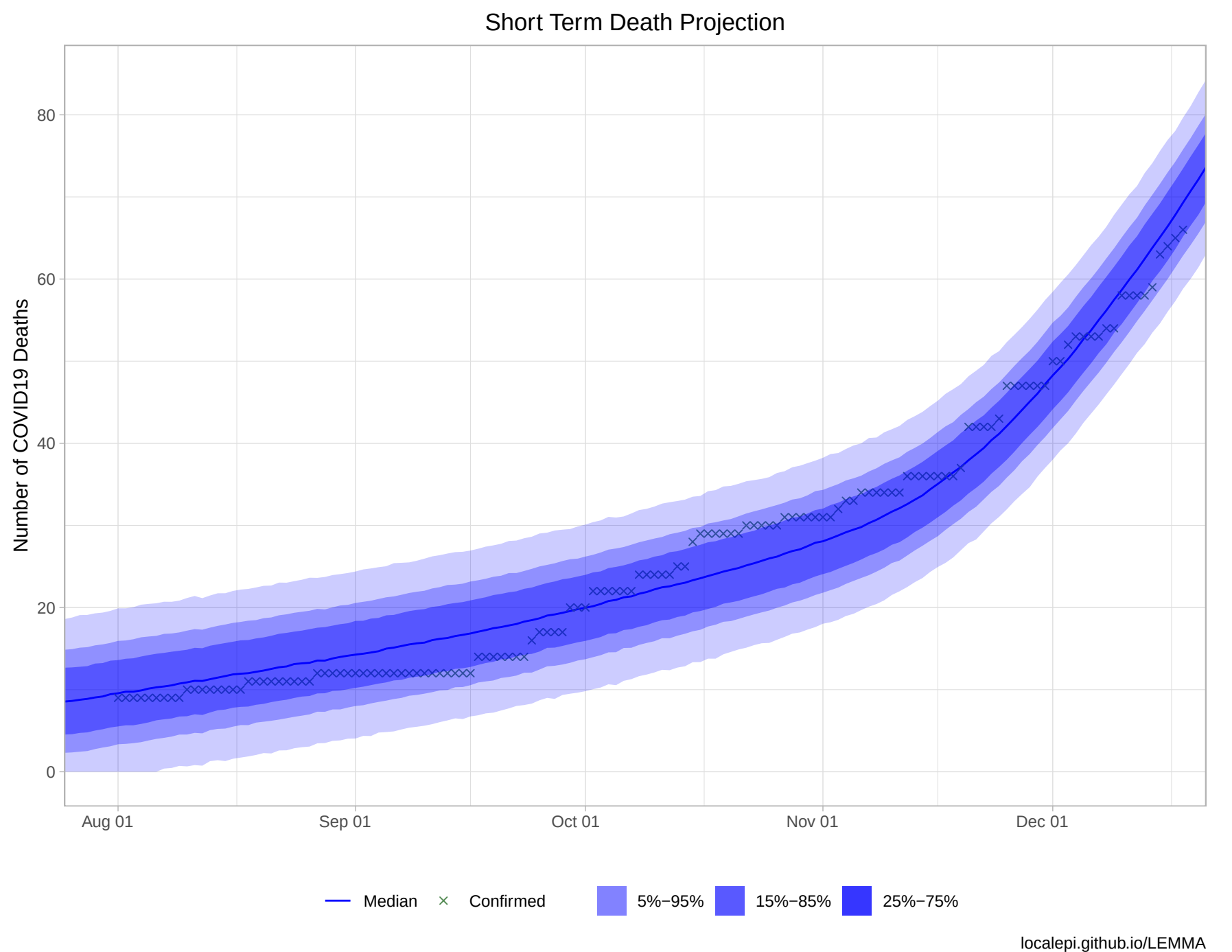
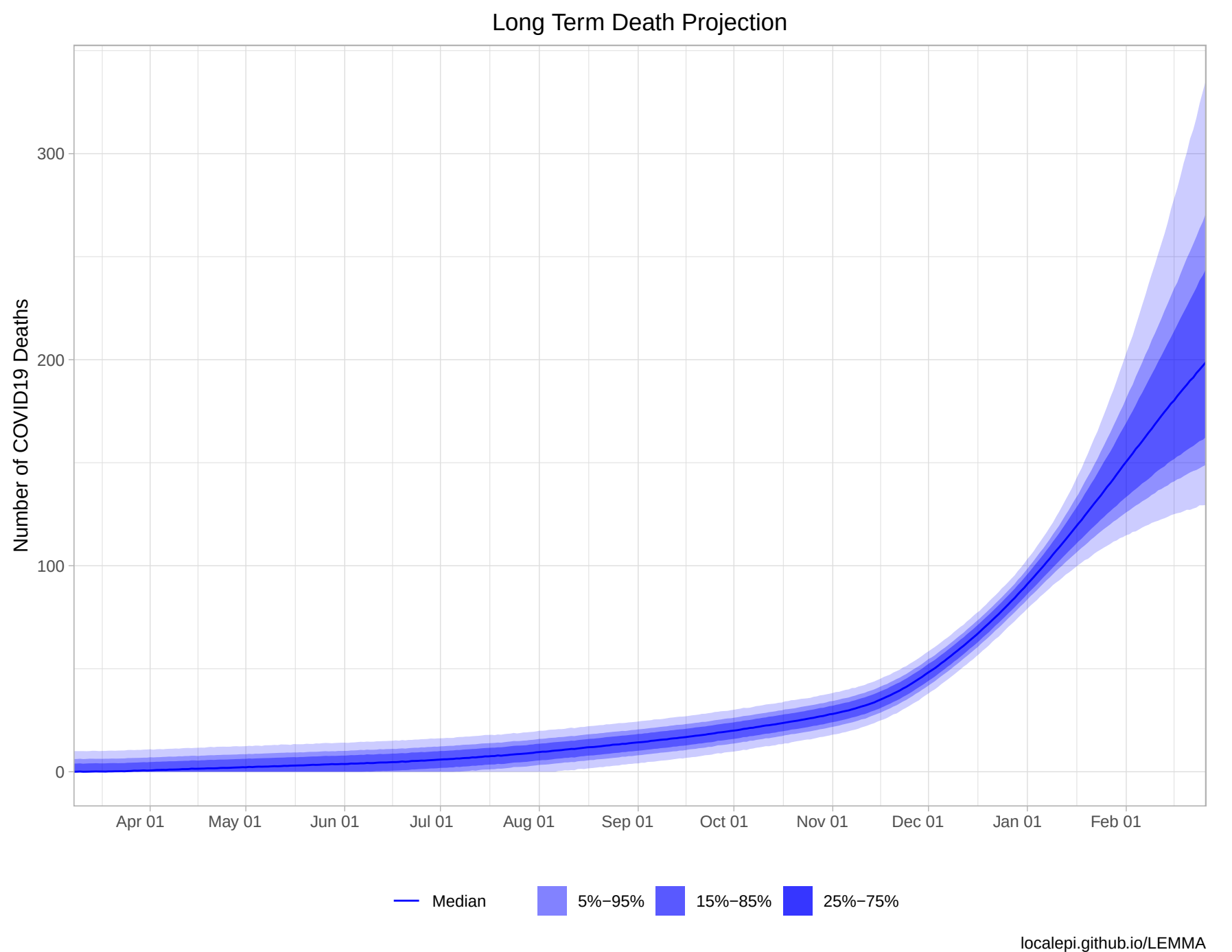

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
25
50
75
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

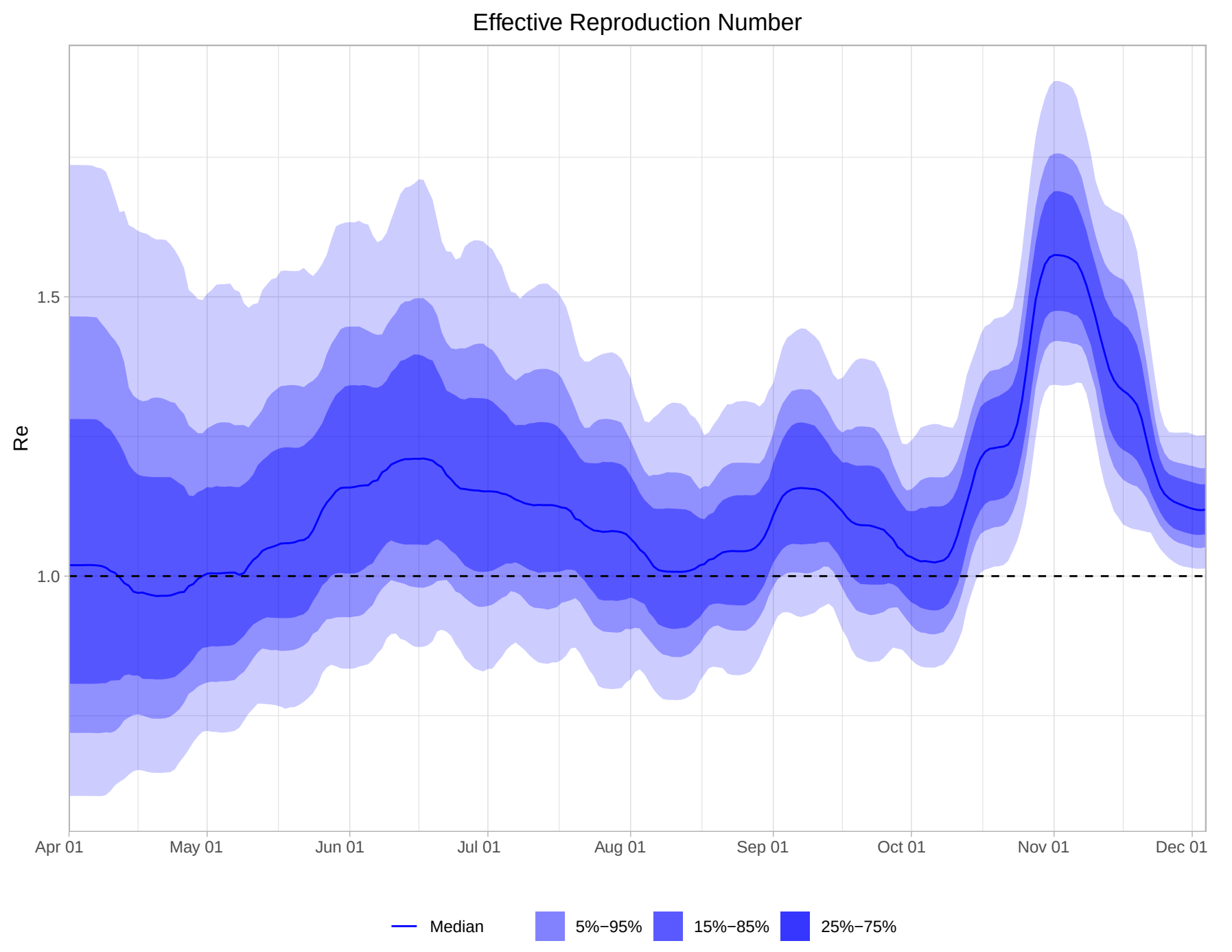

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
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
20
40
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

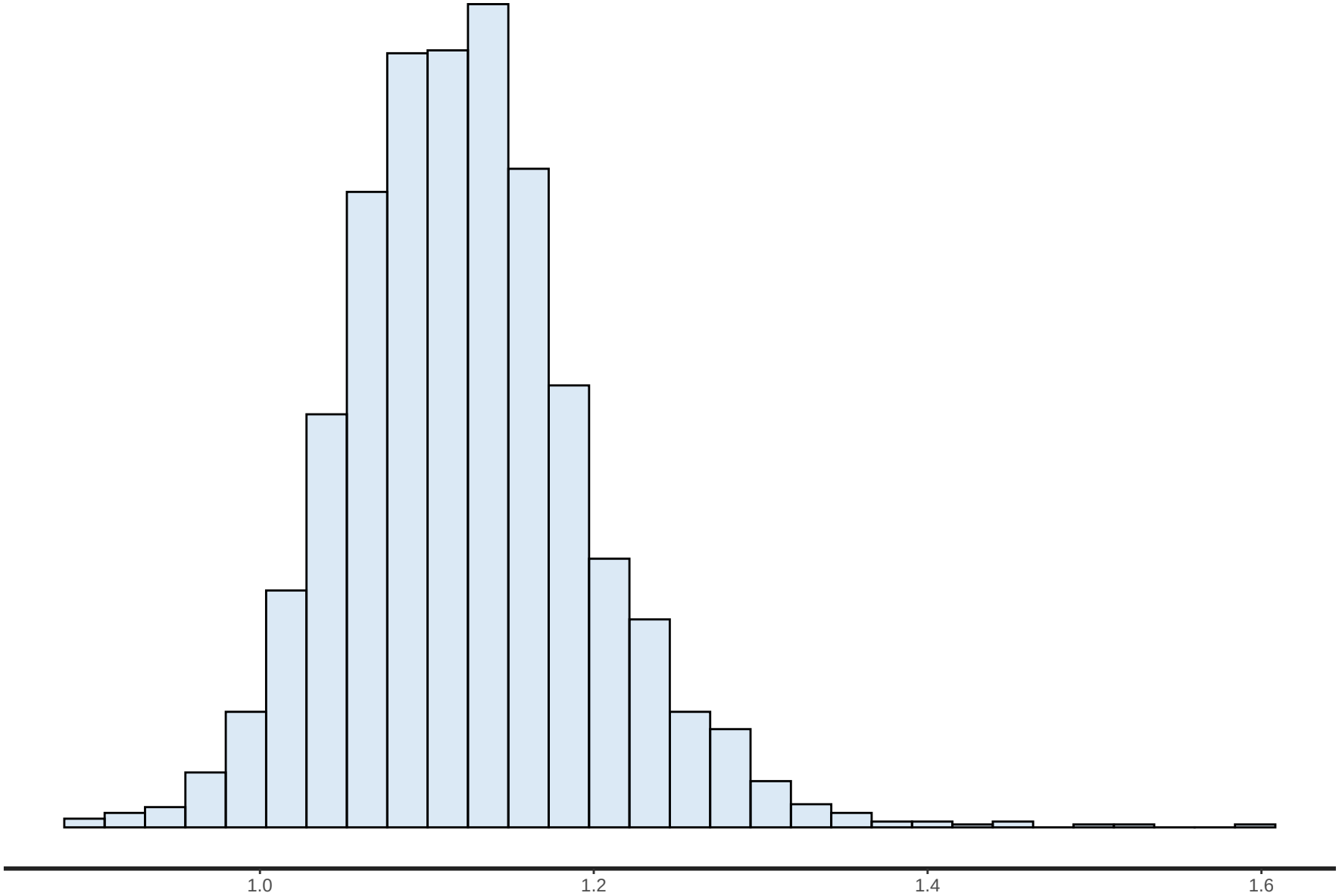

Short Term Death Projection
Number of COVID19 Deaths
0
20
40
60
80
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

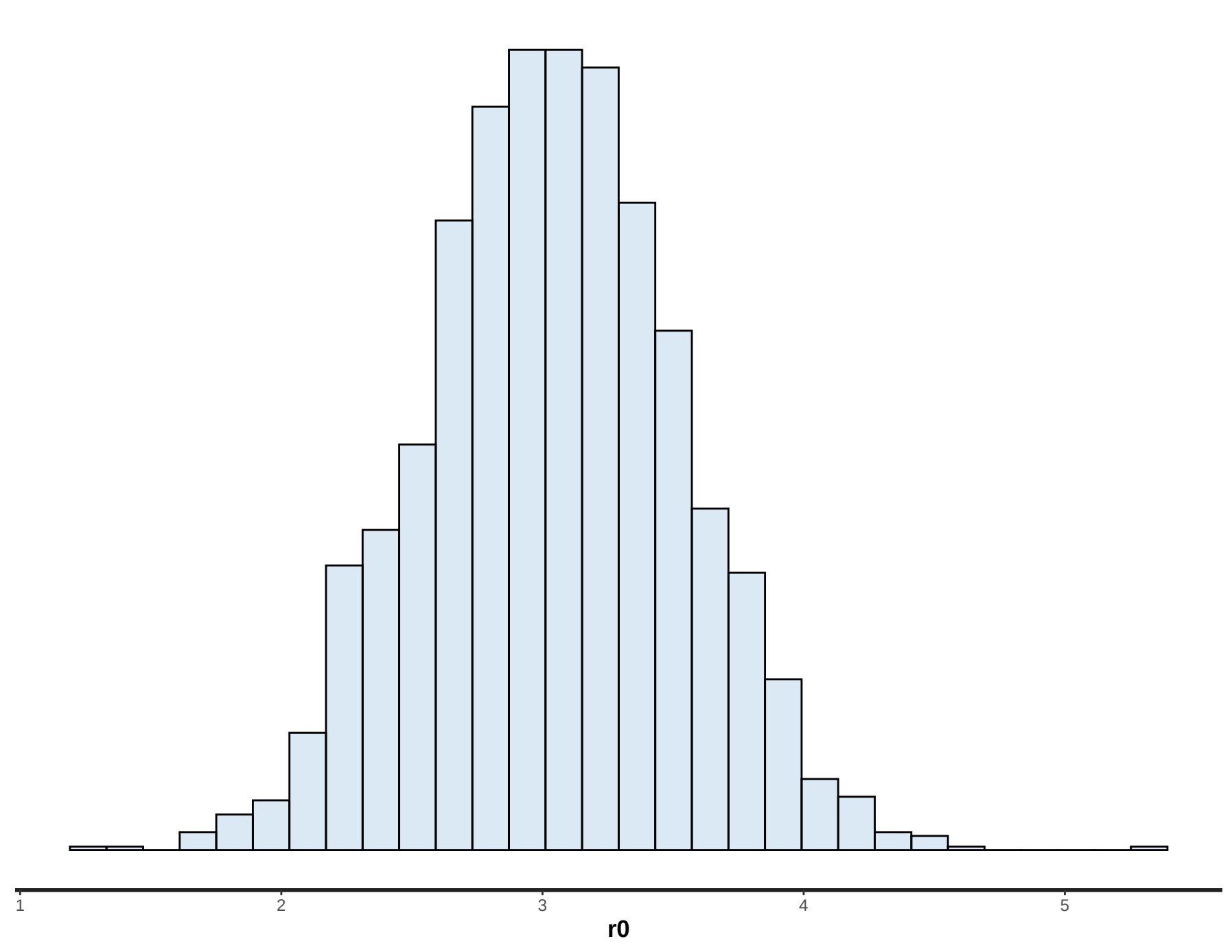

Long Term Death Projection
Number of COVID19 Deaths
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

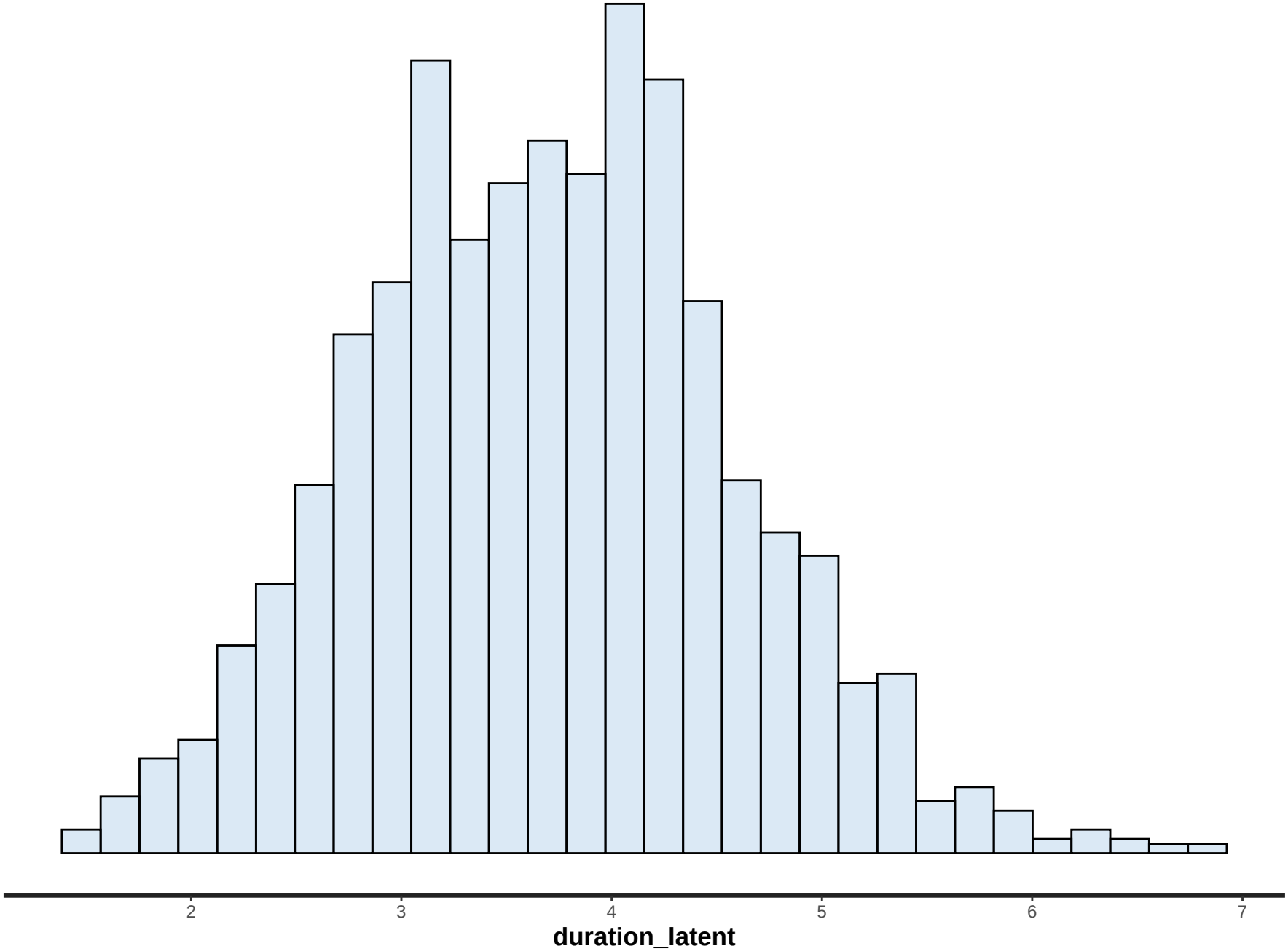

Effective Reproduction Number
Re
1.5
1.0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

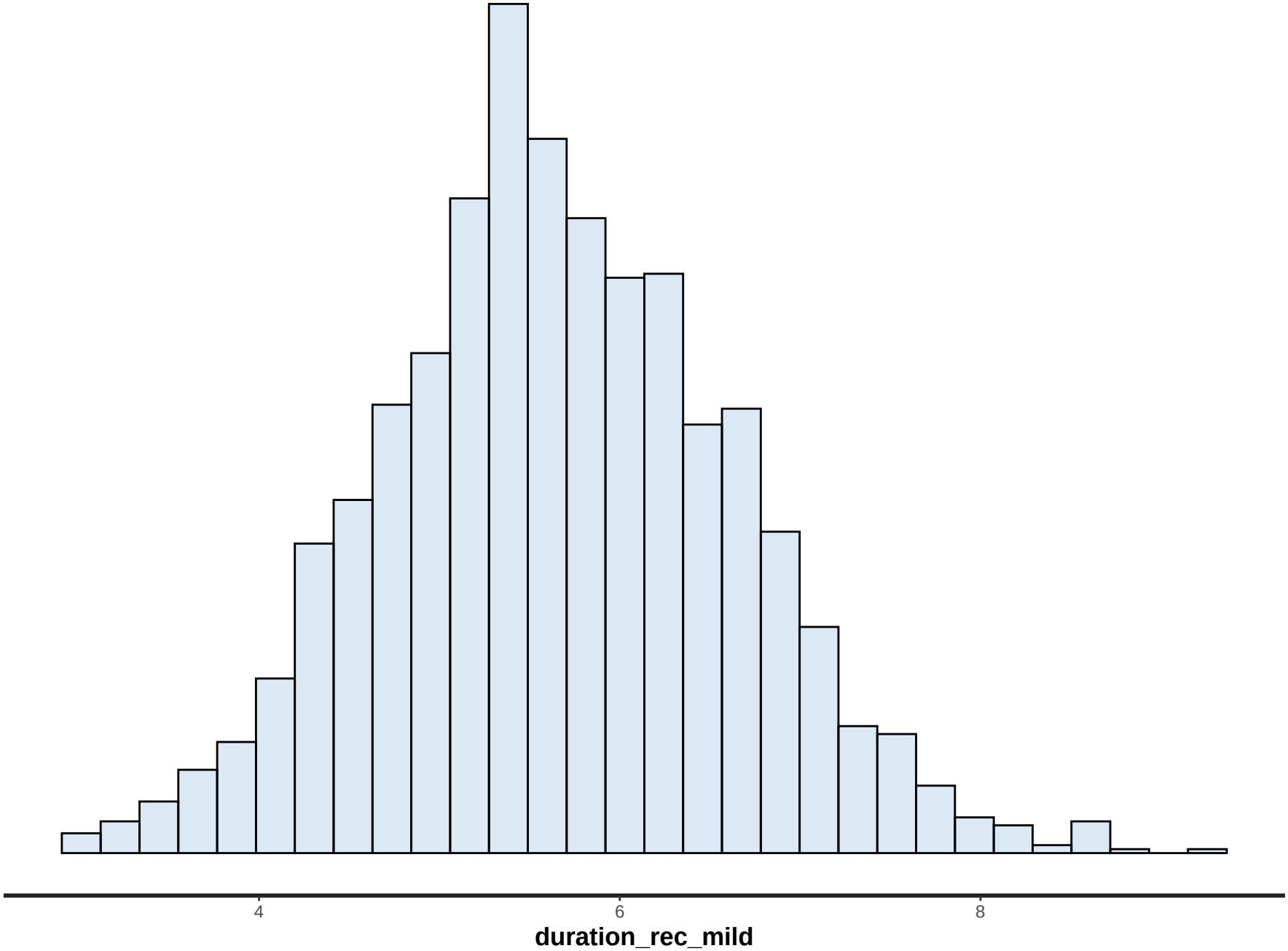
Rt as of 2020−12−04

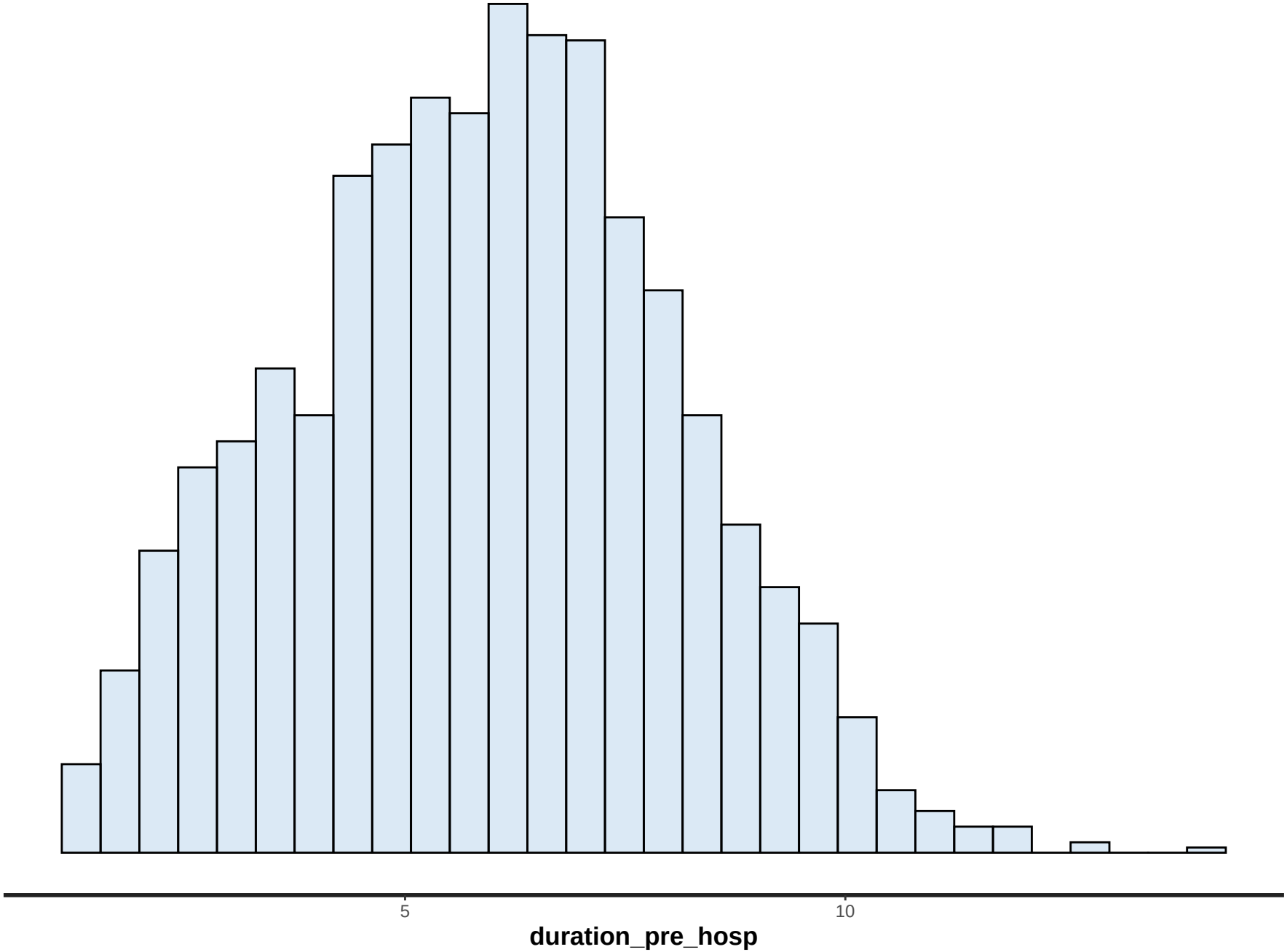
5%	10%	25%	50%	75%	90%	95%
1.01	1.04	1.07	1.12	1.16	1.22	1.25

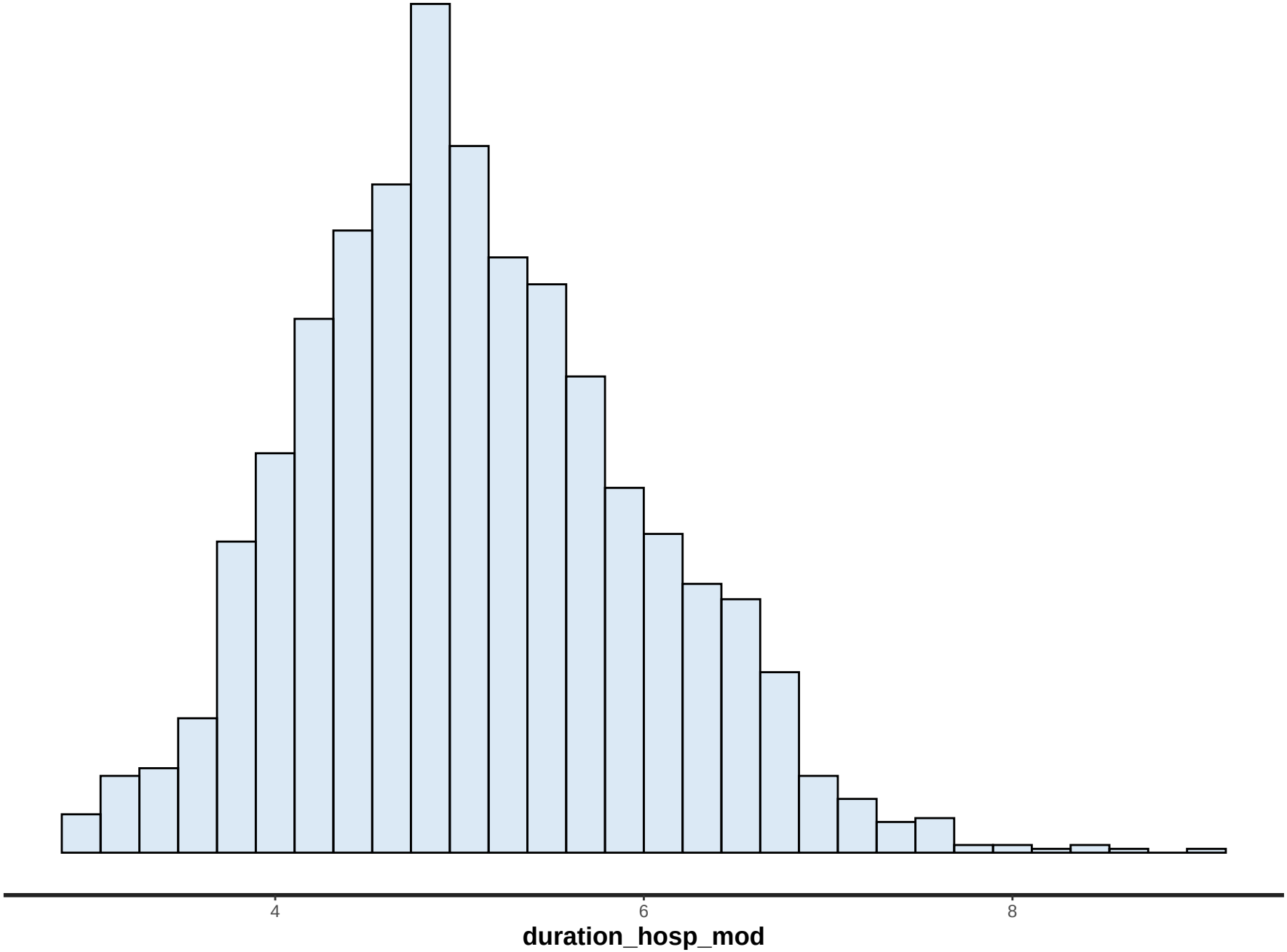


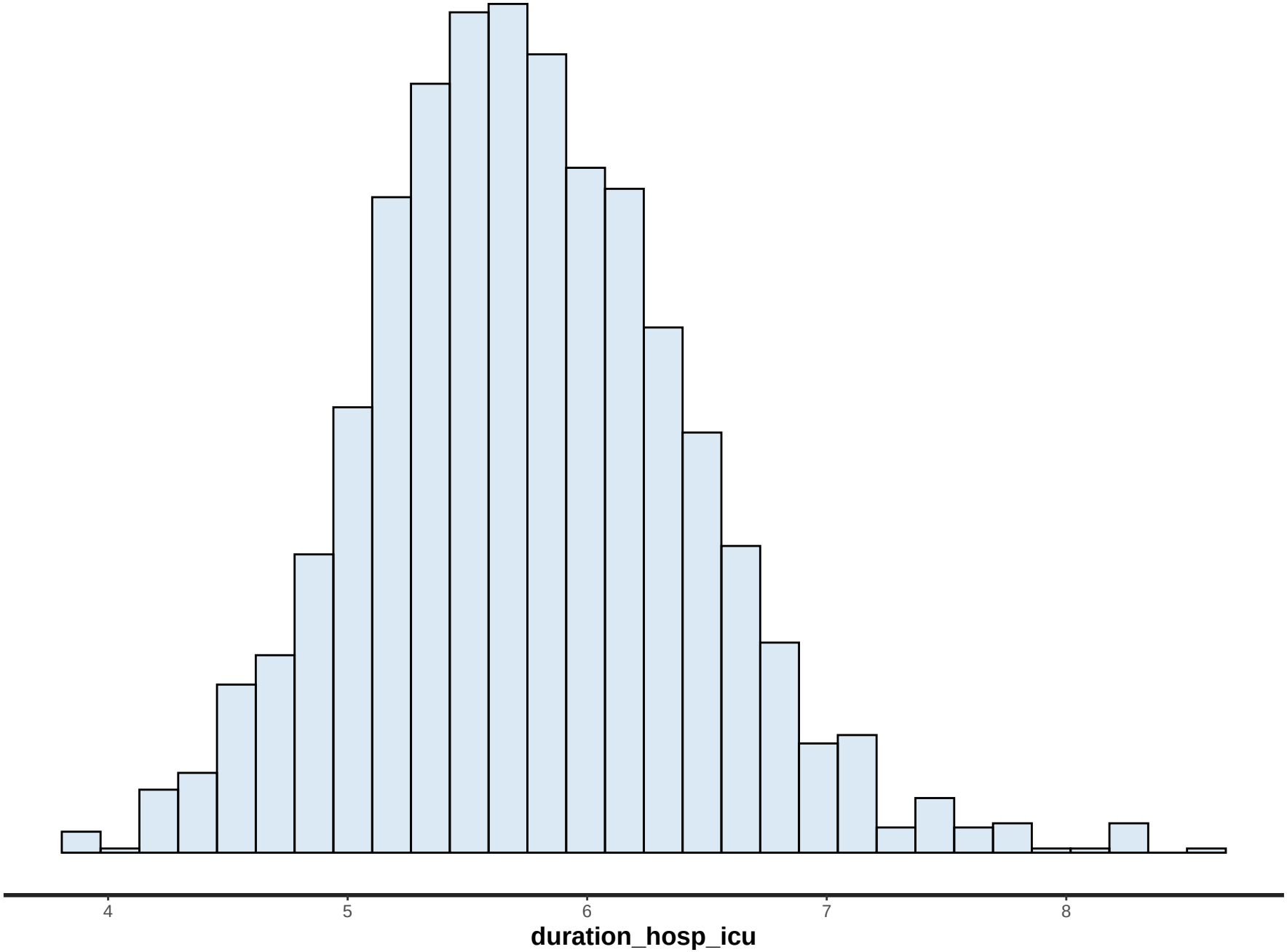

1
2
3
4
5
r0

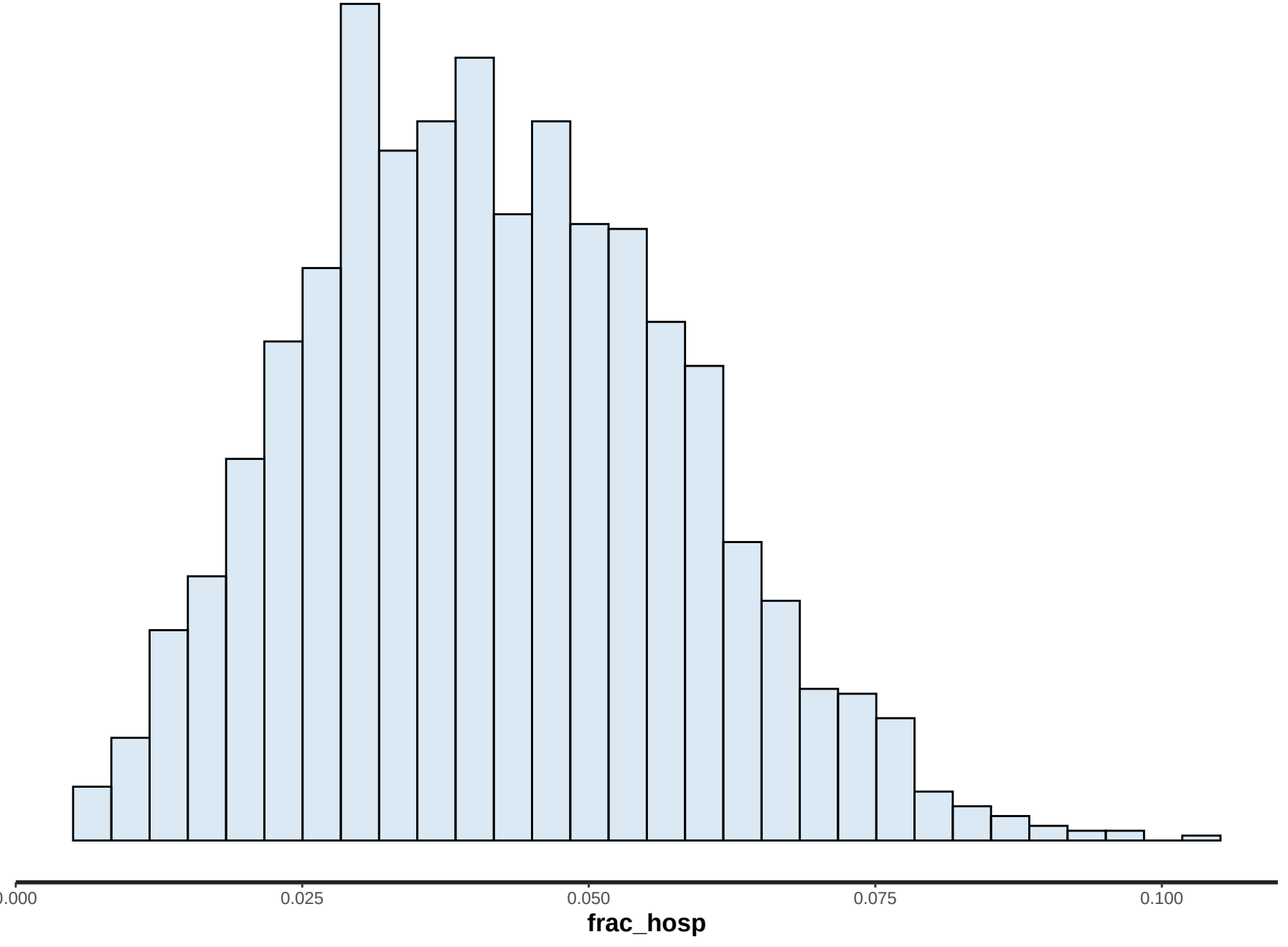

2
3
4
5
6
7
duration_latent

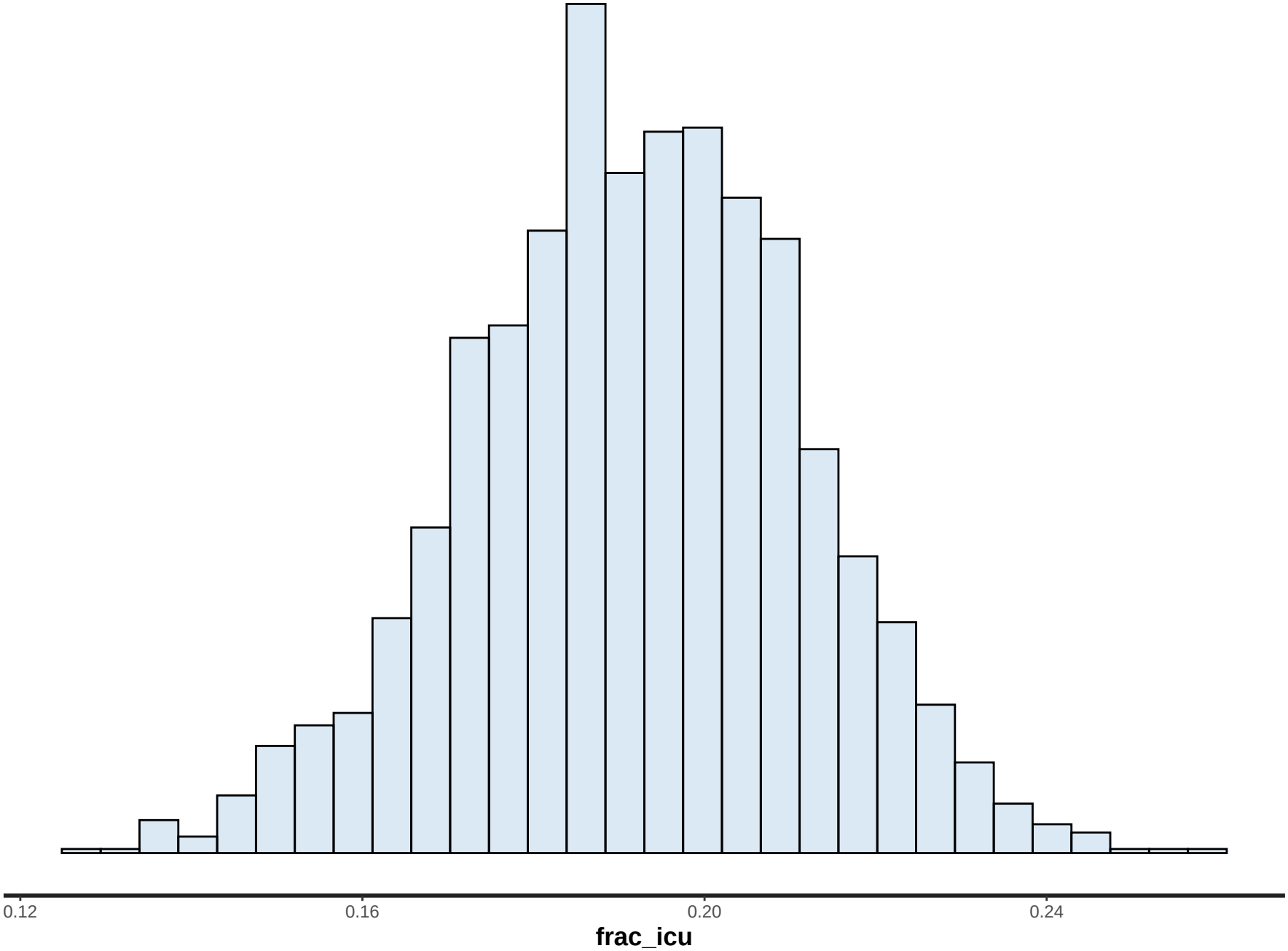

4
6
8
duration_rec_mild

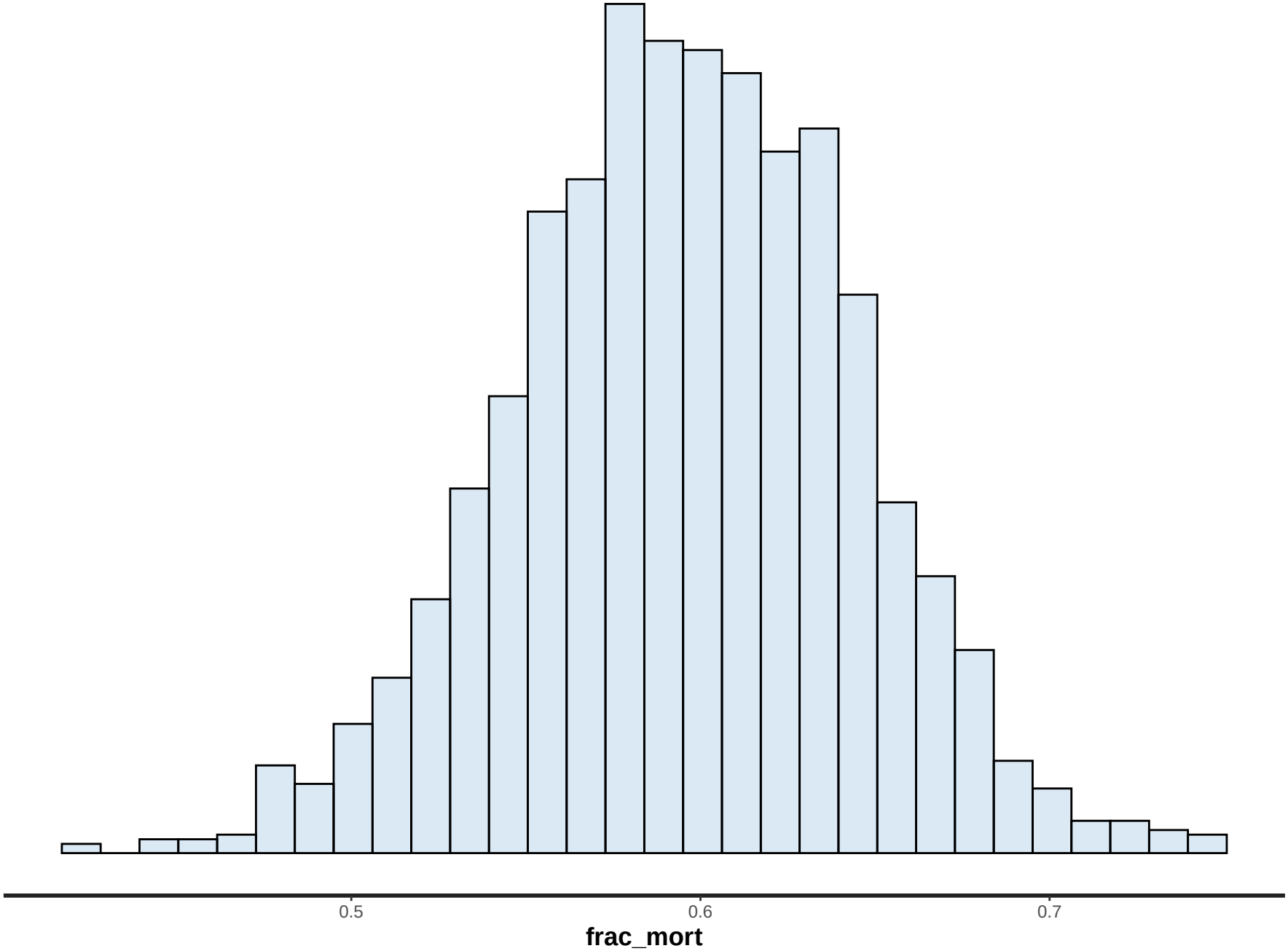

5
10
duration_pre_hosp

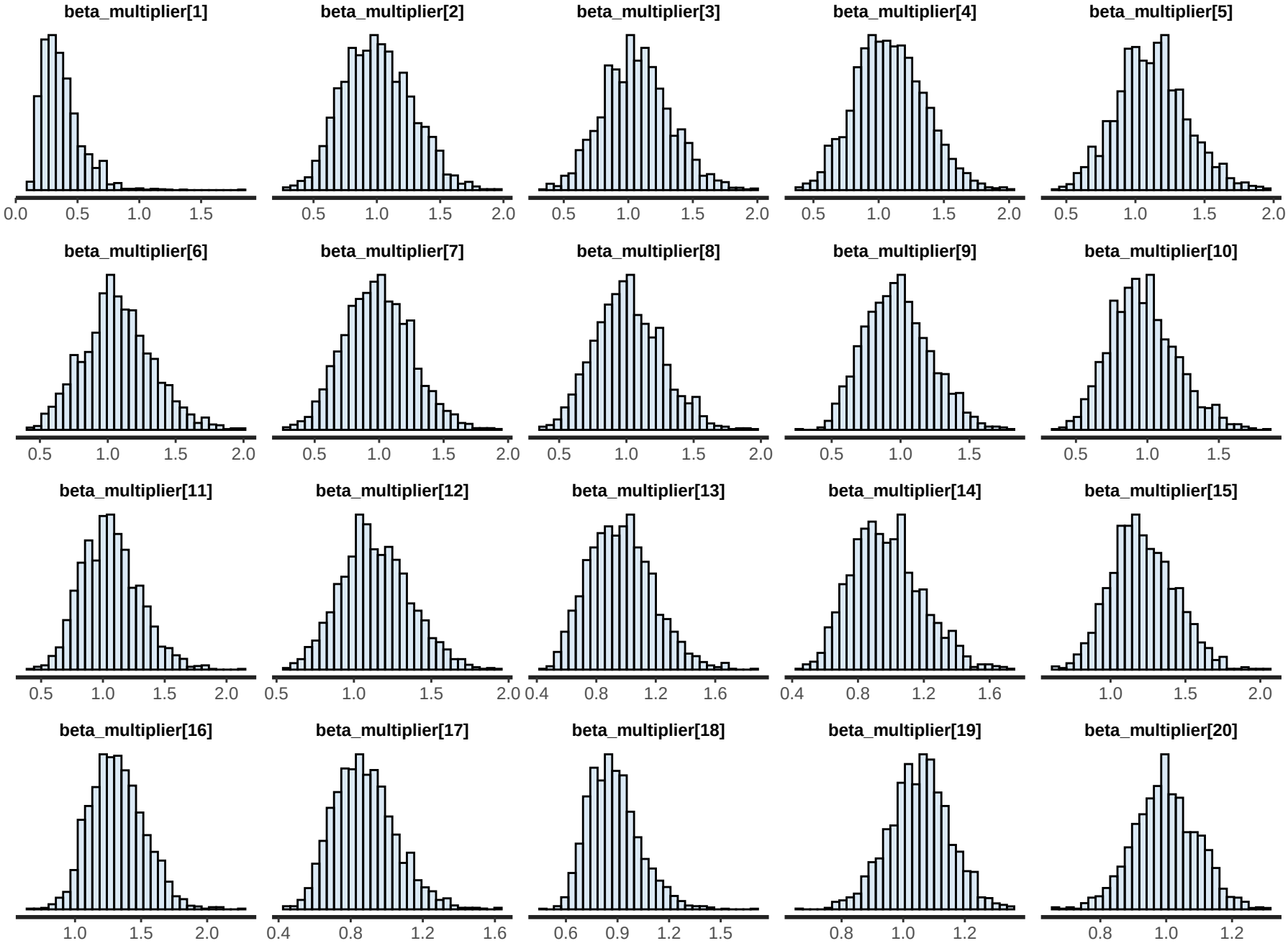

4
6
8
duration_hosp_mod


4
5
6
7
8
duration_hosp_icu


0.000
0.025
0.050
0.075
0.100
frac_hosp


0.12
0.16
0.20
0.24
frac_icu


0.5
0.6
0.7
frac_mort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beta_multiplier[2]
beta_multiplier[3]
beta_multiplier[4]
beta_multiplier[5]
beta_multiplier[6]
beta_multiplier[7]
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beta_multiplier[9]
beta_multiplier[10]
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beta_multiplier[12]
beta_multiplier[13]
beta_multiplier[14]
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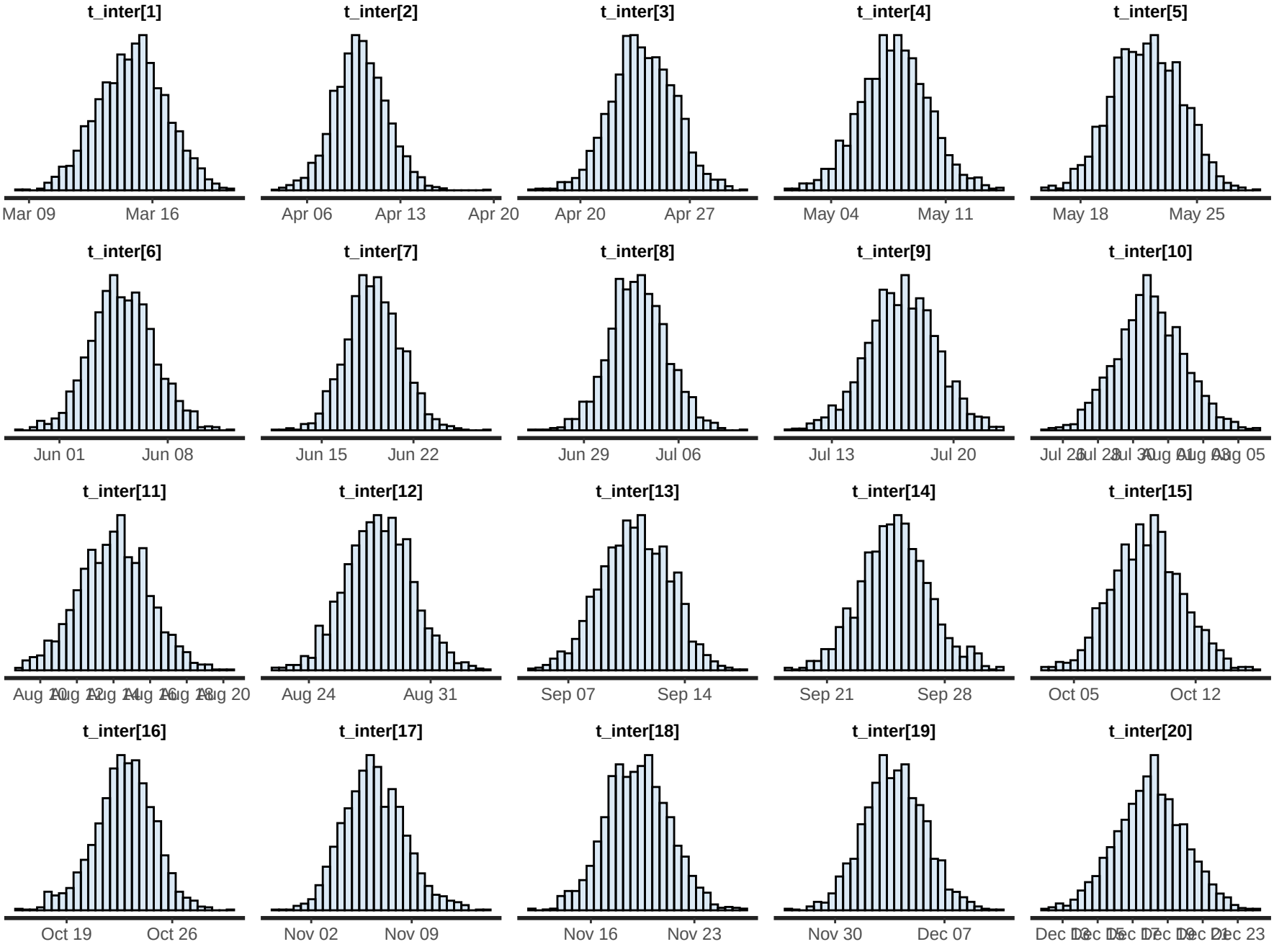
beta_multiplier[18]
beta_multiplier[19]
beta_multiplier[20]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Mar 16
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Apr 06
Apr 13
Apr 20
t_inter[3]
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Apr 27
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May 04
May 11
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May 18
May 25
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Jun 01
Jun 08
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Jun 15
Jun 22
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Jun 29
Jul 06
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Jul 20
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Nov 09
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Nov 16
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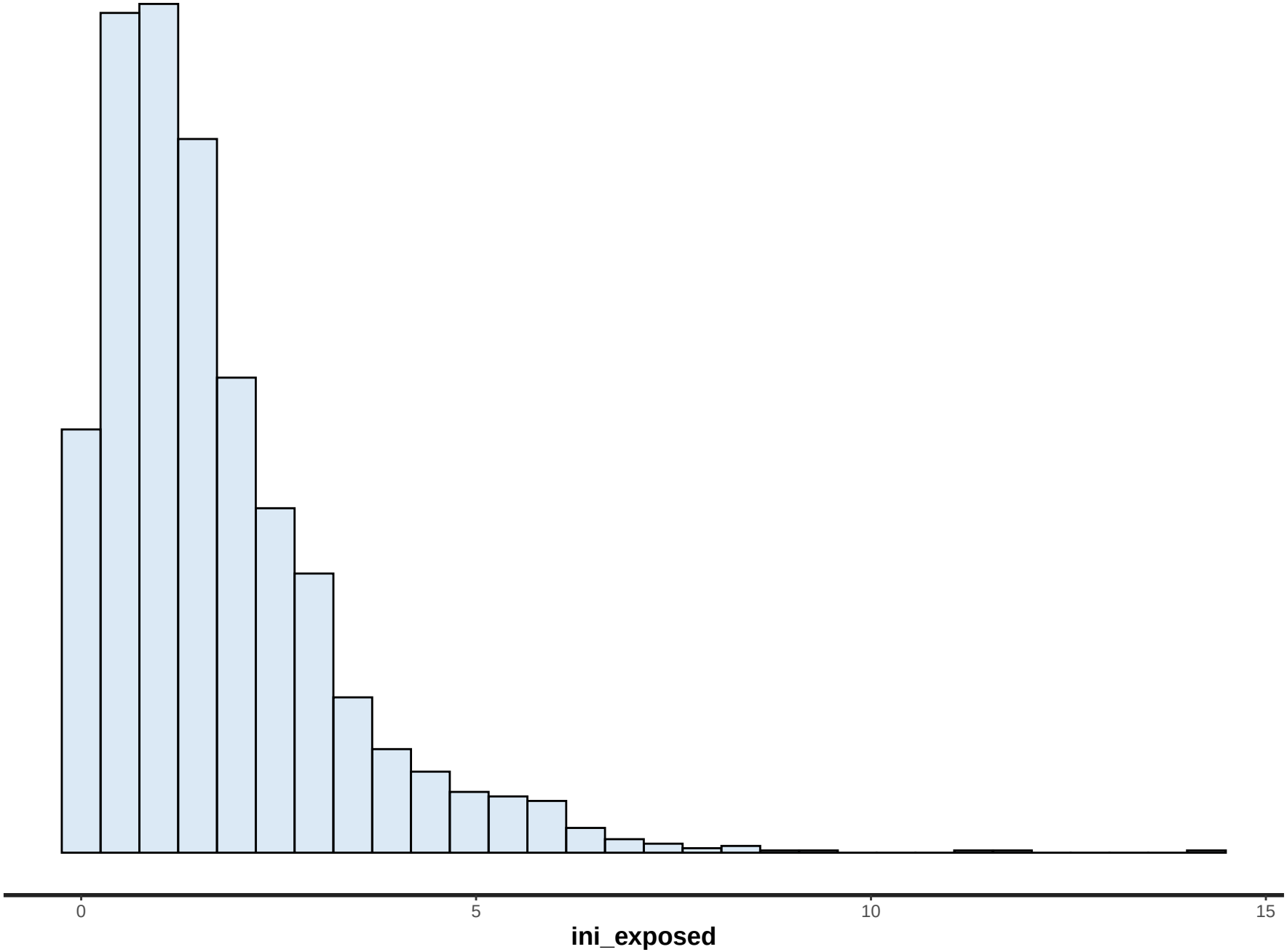
Dec 13
Dec 15
Dec 17
Dec 19
Dec 21
Dec 23


0
5
10
15
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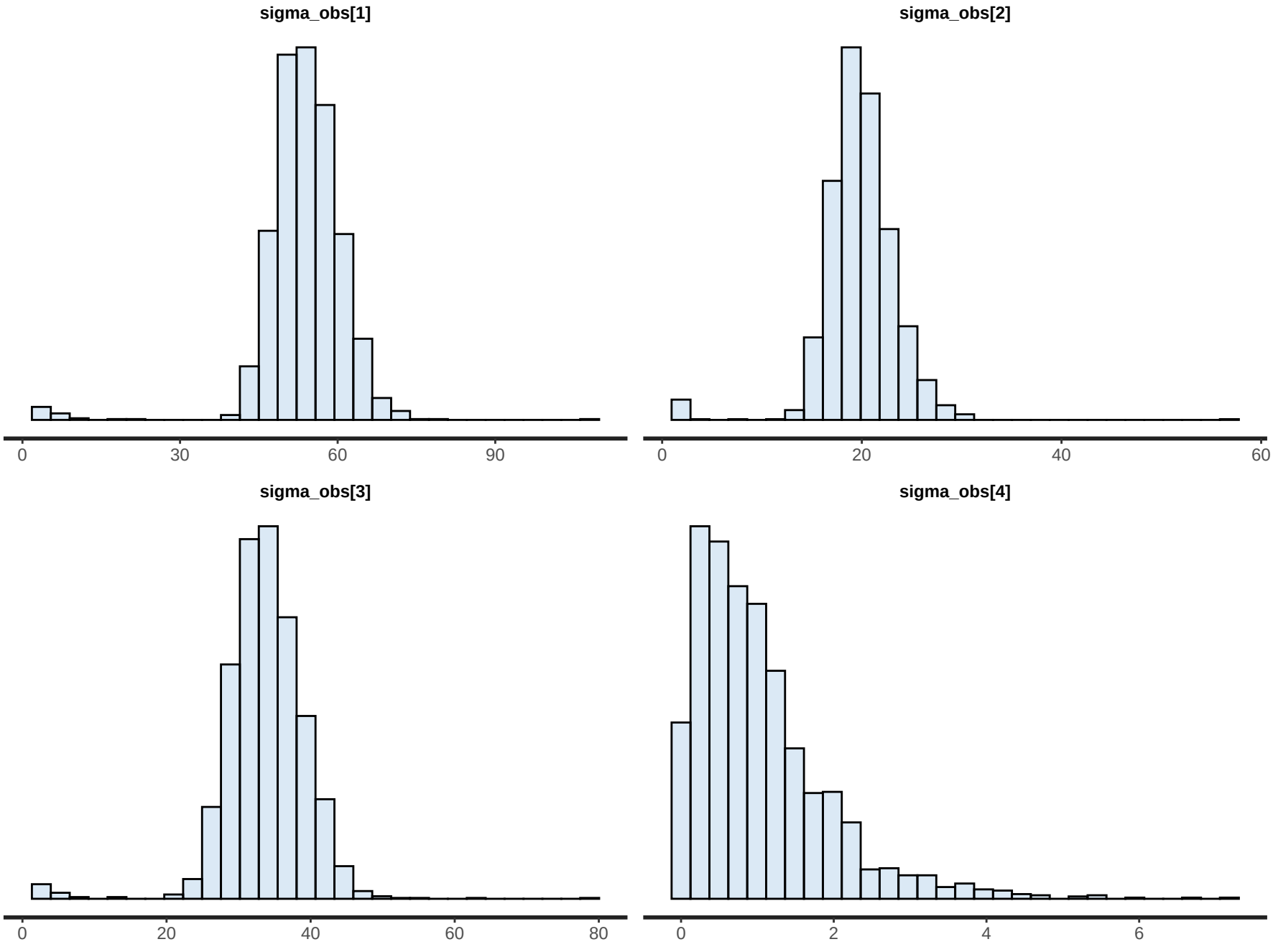
sigma_obs[1]
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30
60
90
sigma_obs[2]
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20
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60
sigma_obs[3]
0
20
40
60
80
sigma_obs[4]
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2
4
6