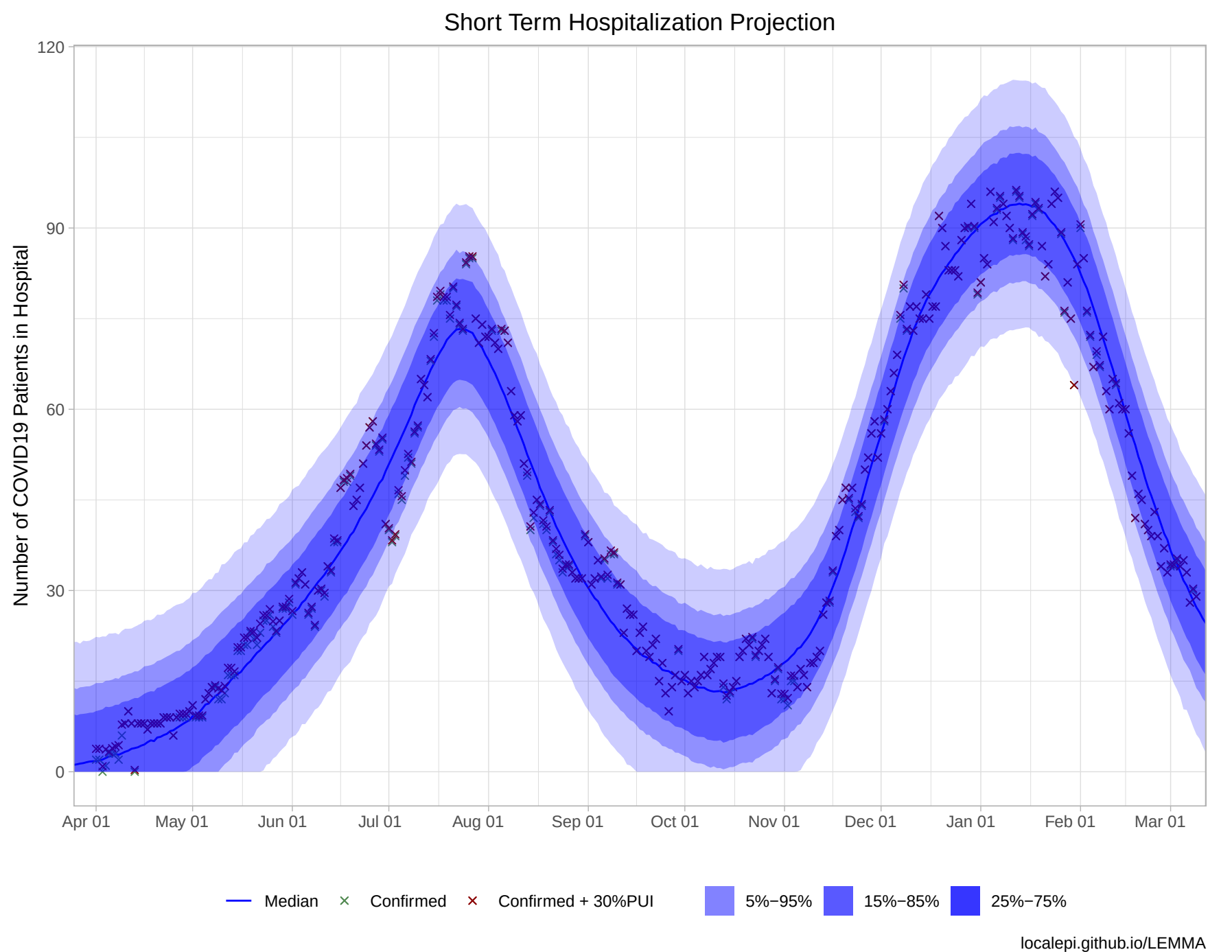
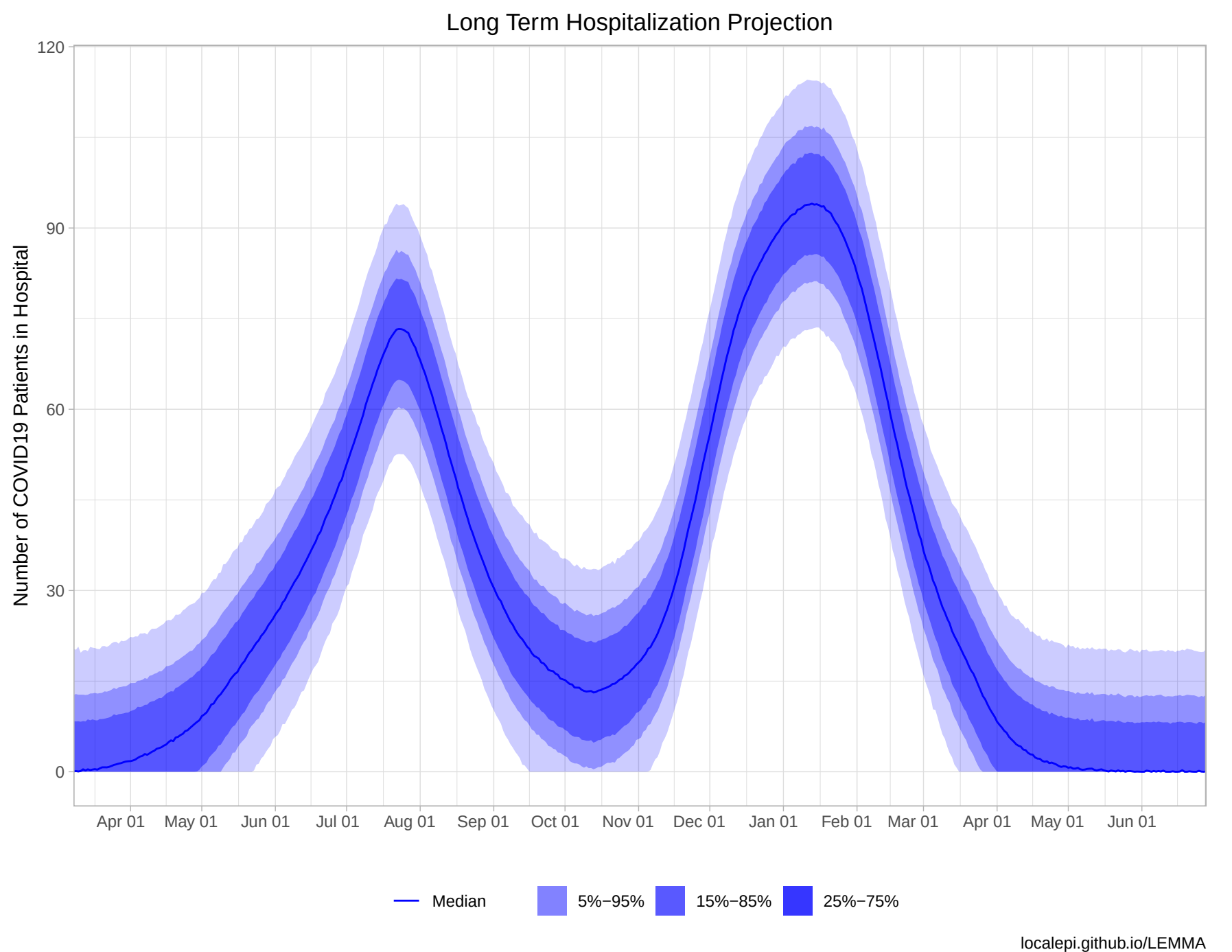
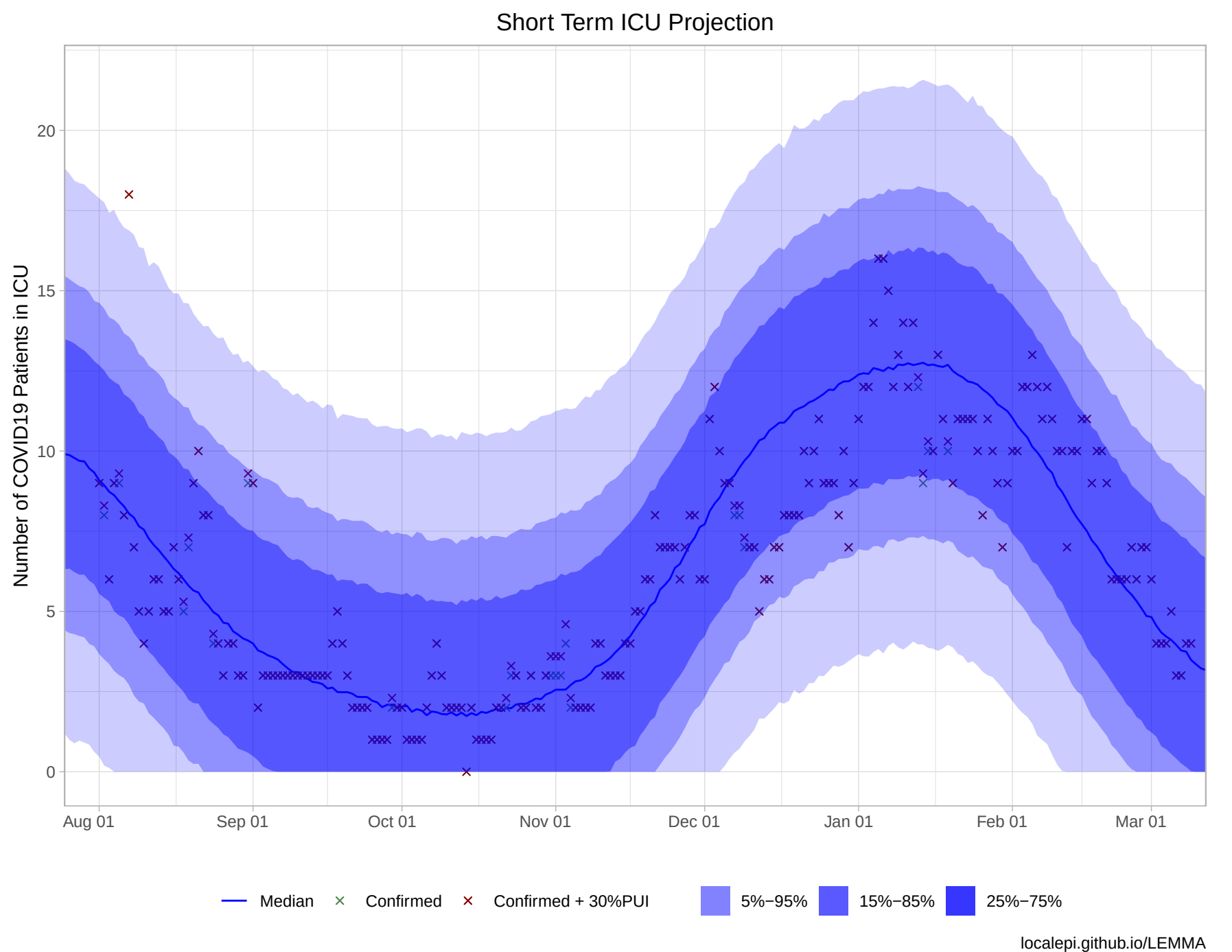
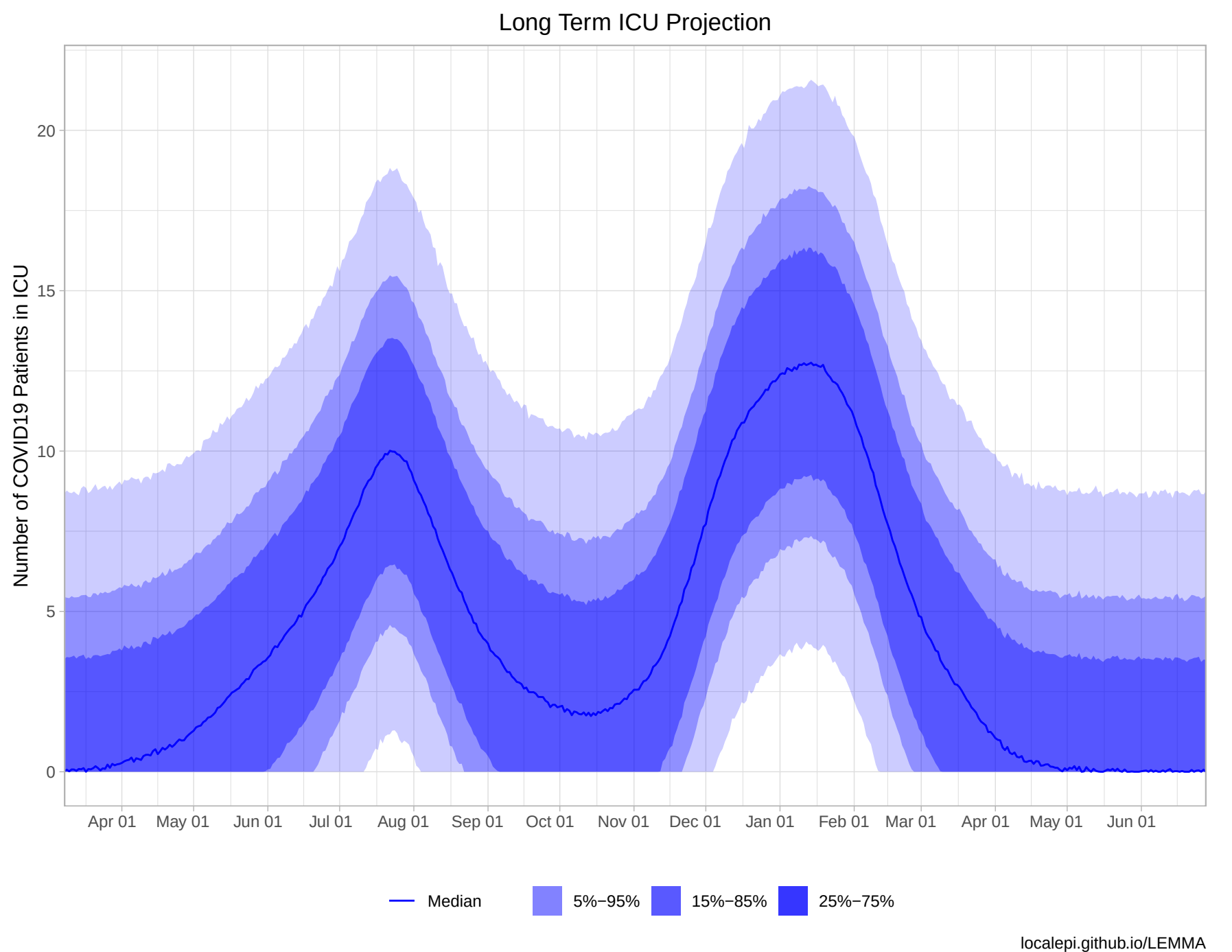
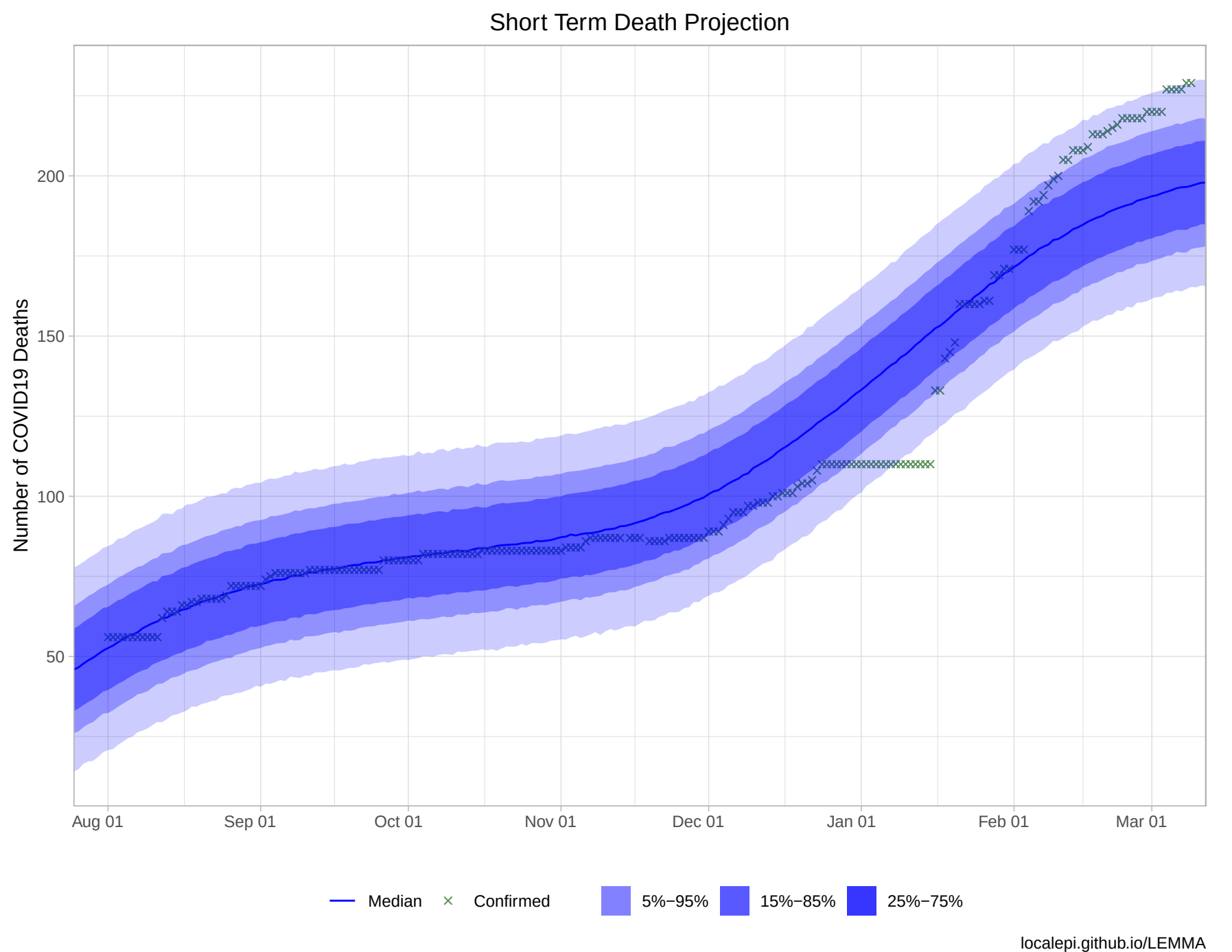
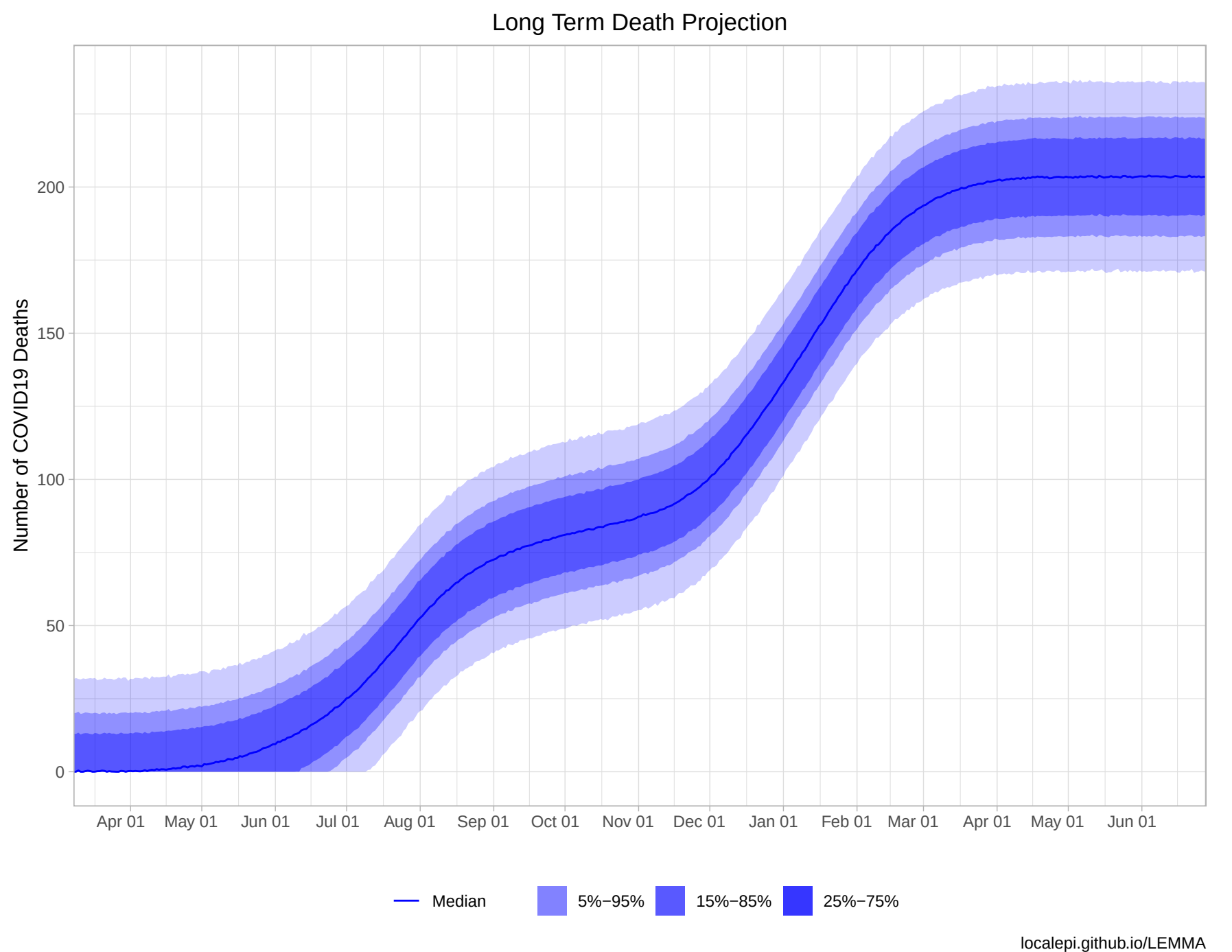

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
120
90
60
30
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

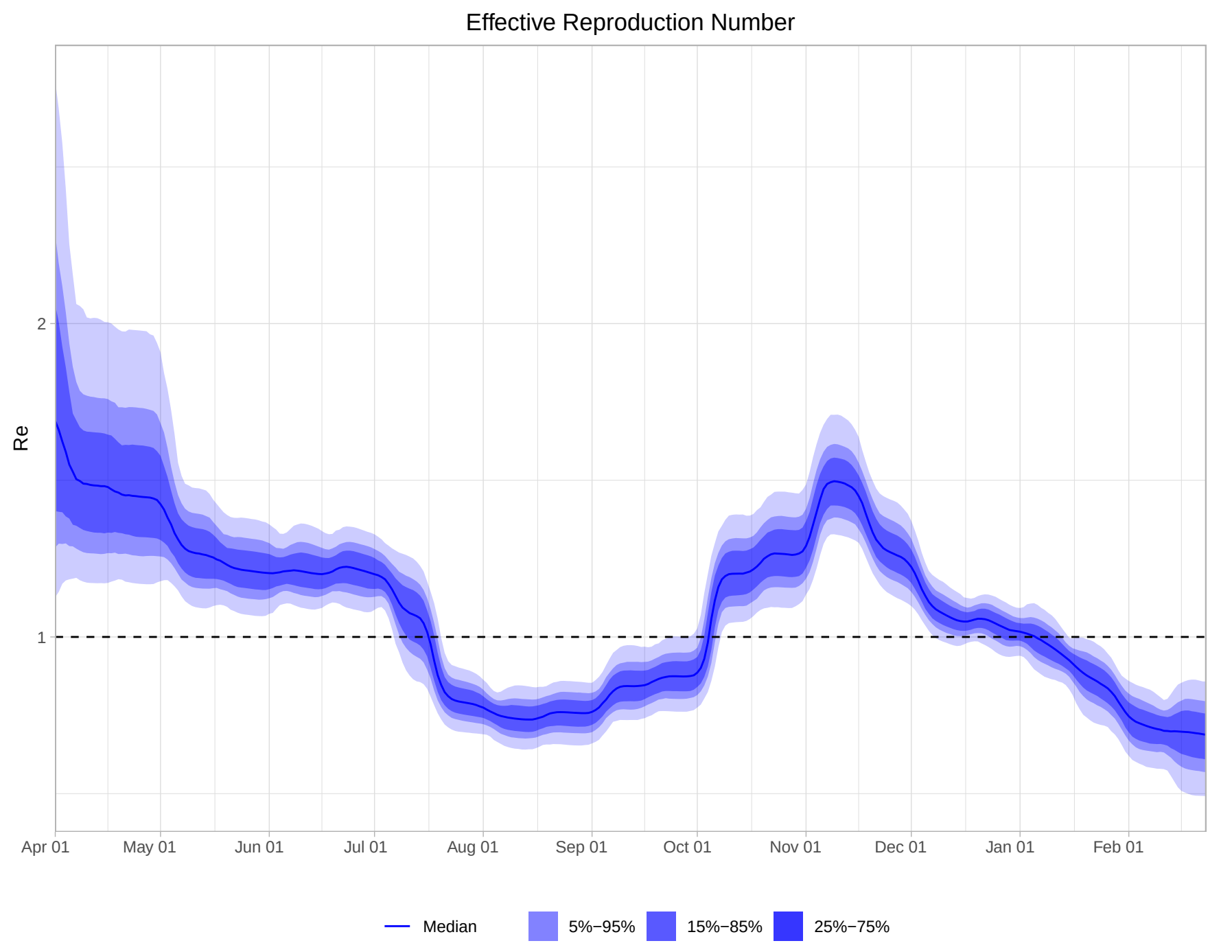

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
120
90
60
30
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Apr 01
May 01
Jun 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
5
10
15
20
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 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
5
10
15
20
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Apr 01
May 01
Jun 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

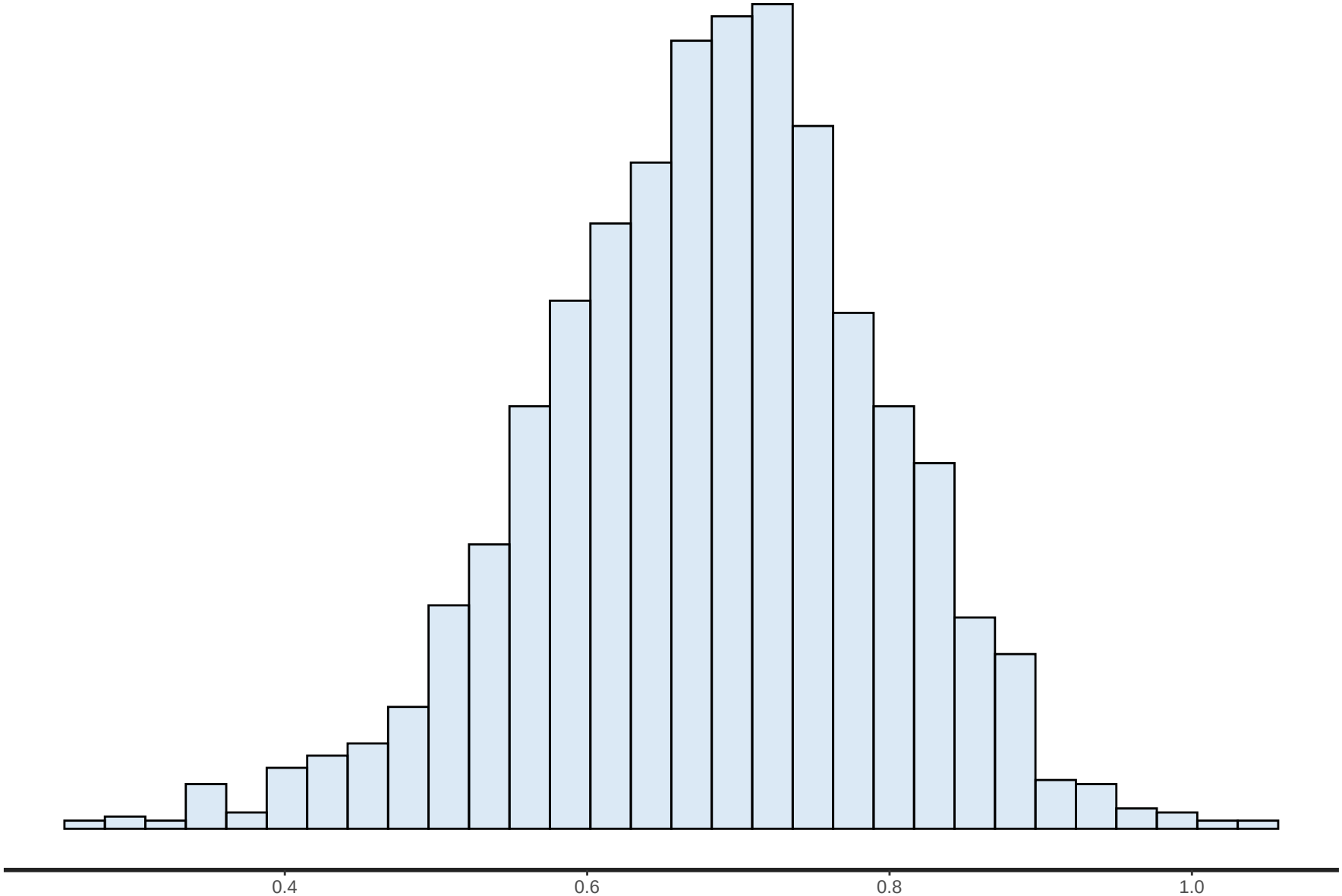

Short Term Death Projection
Number of COVID19 Deaths
200
150
100
50
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

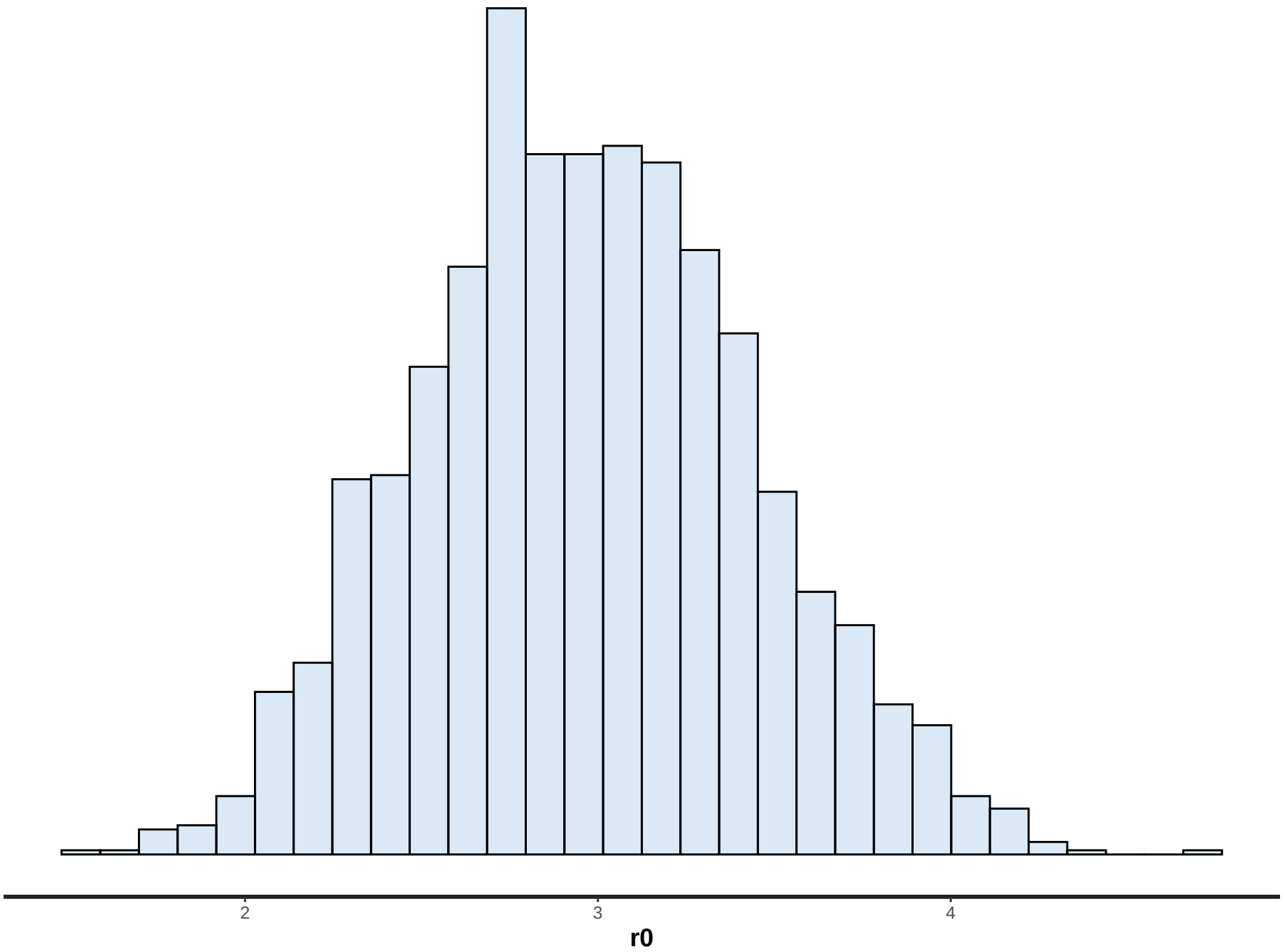

Long Term Death Projection
Number of COVID19 Deaths
0
50
100
150
200
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Apr 01
May 01
Jun 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

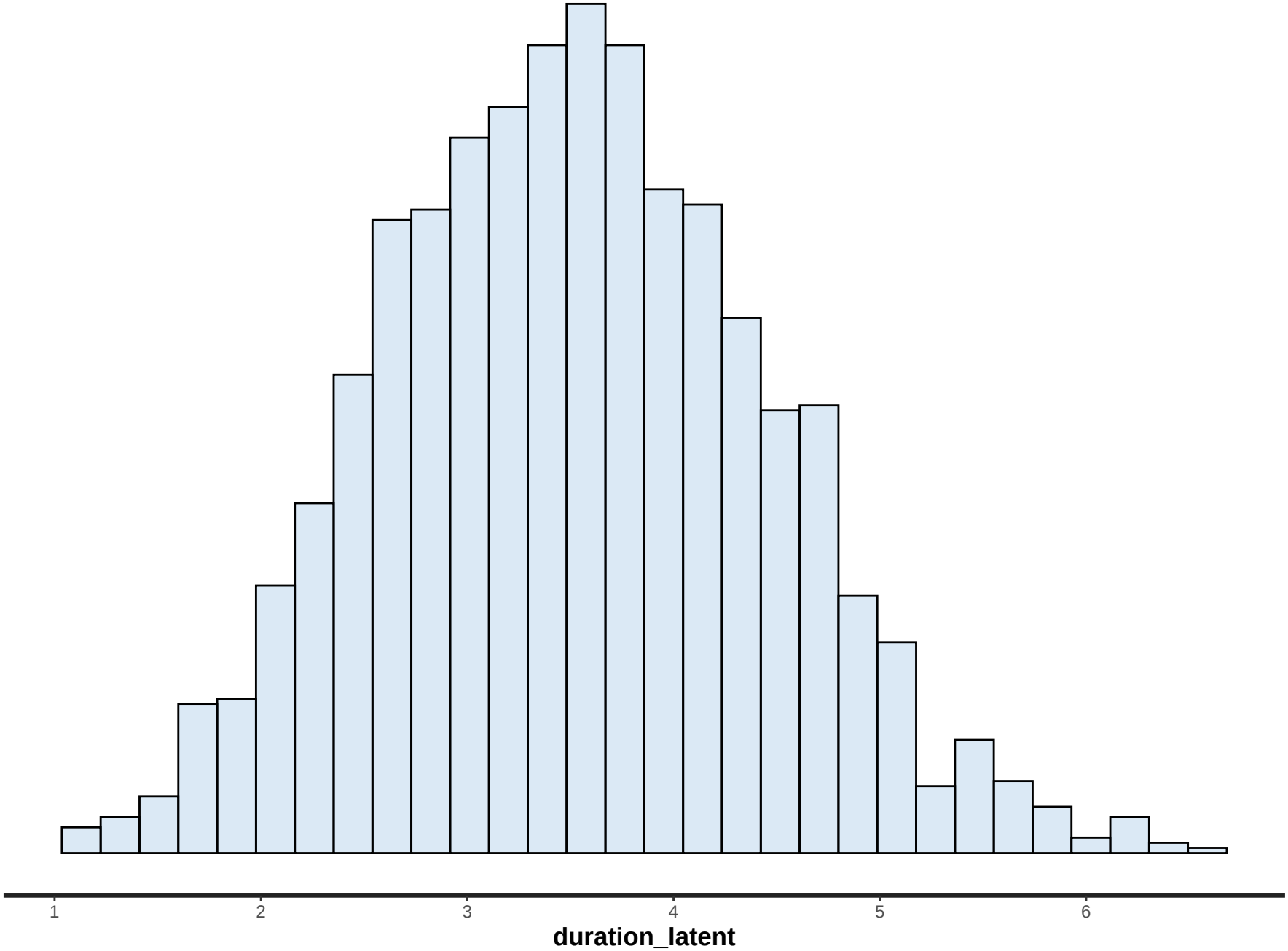

Effective Reproduction Number
Re
2
1
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%

Rt as of 2021−02−23

5%	10%	25%	50%	75%	90%	95%
0.49	0.54	0.61	0.69	0.76	0.82	0.86




2
3
4
r0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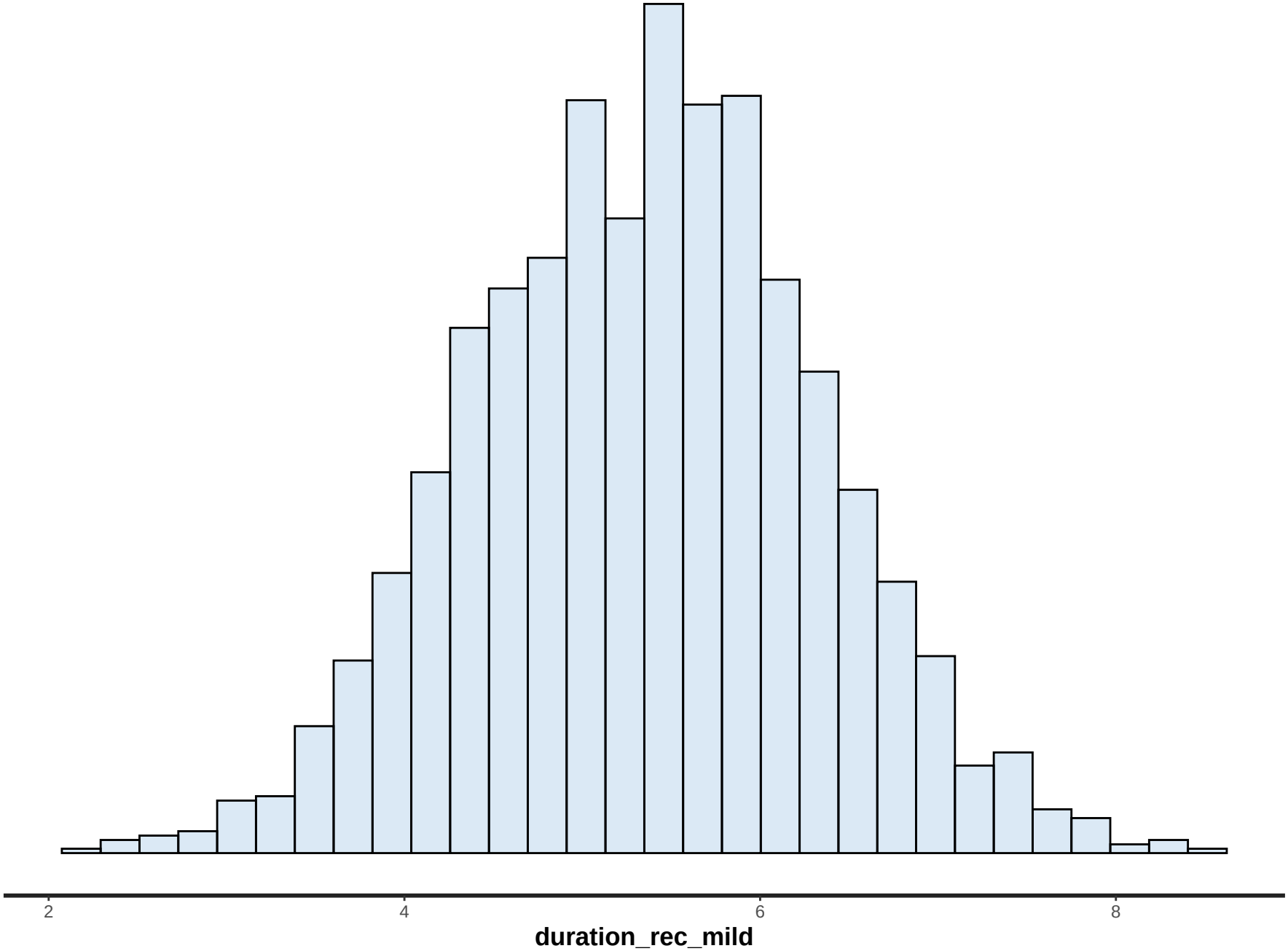
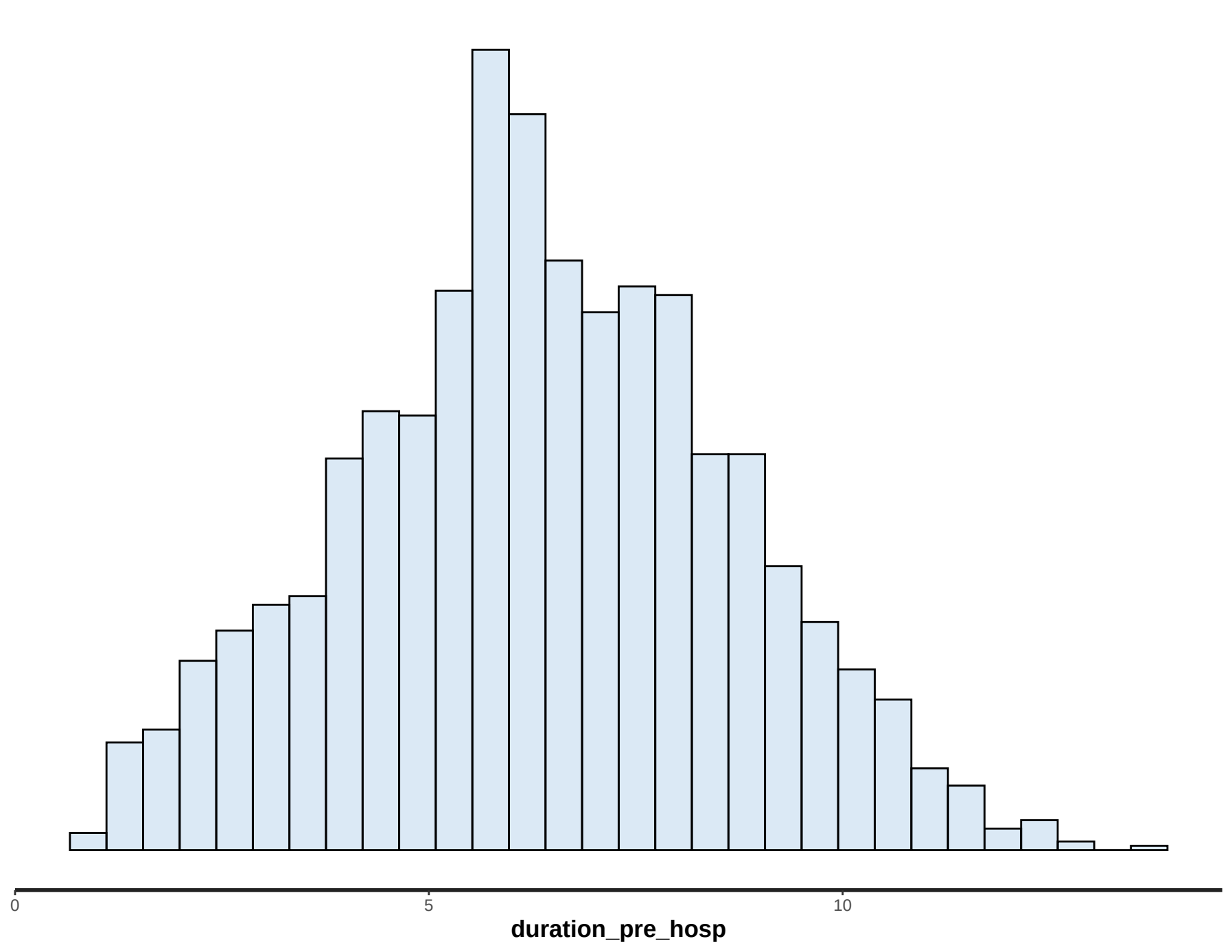
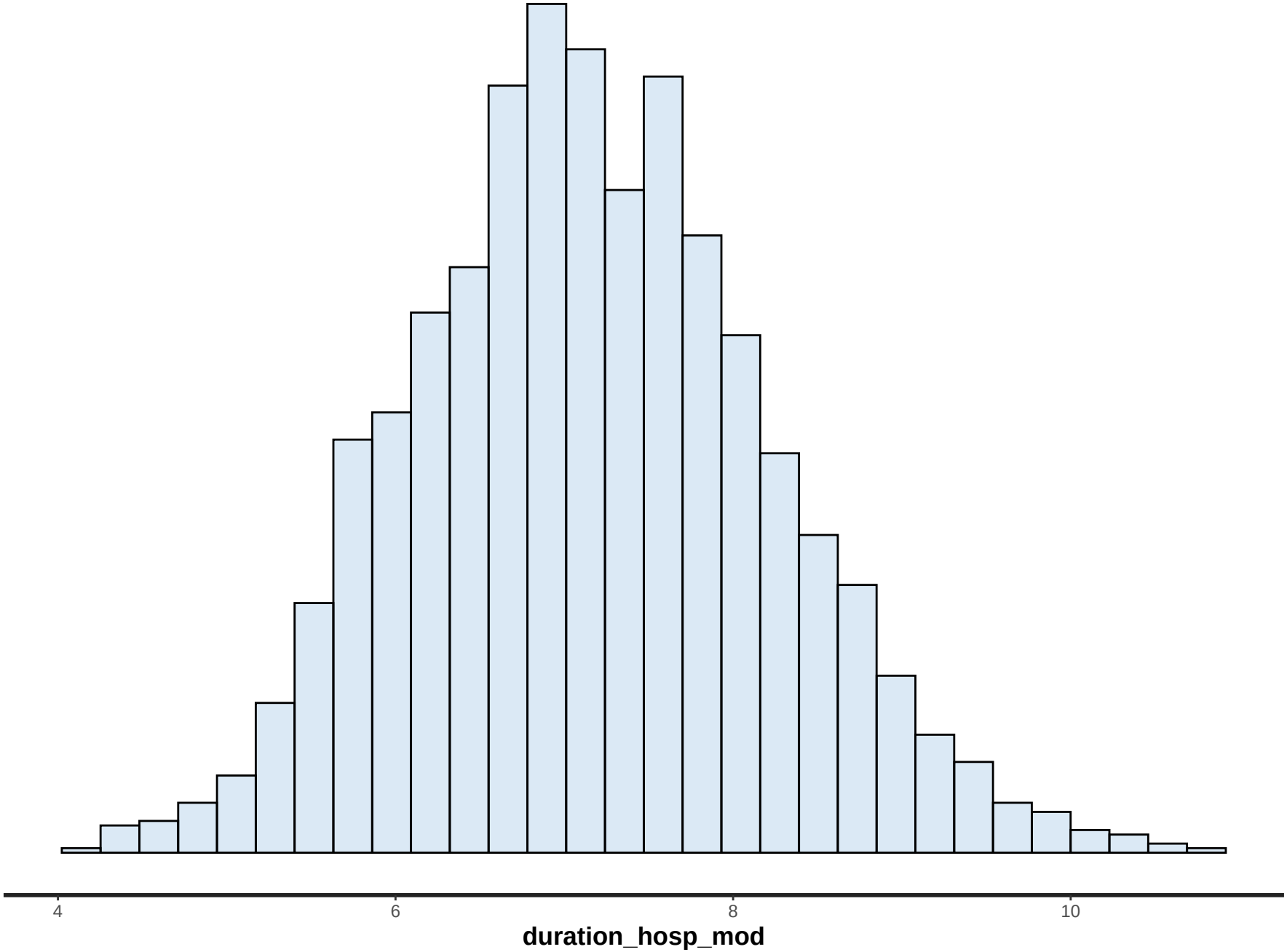
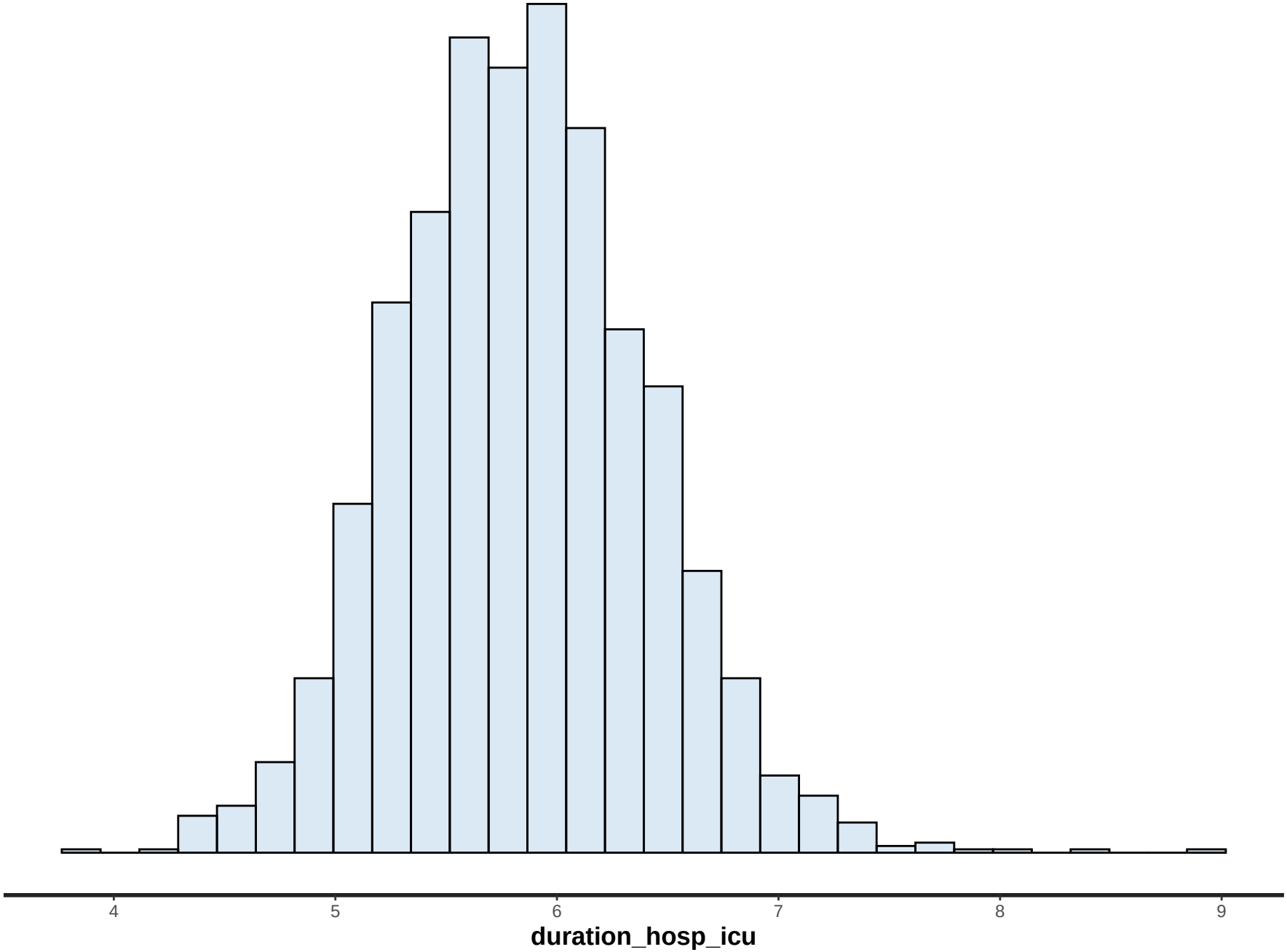
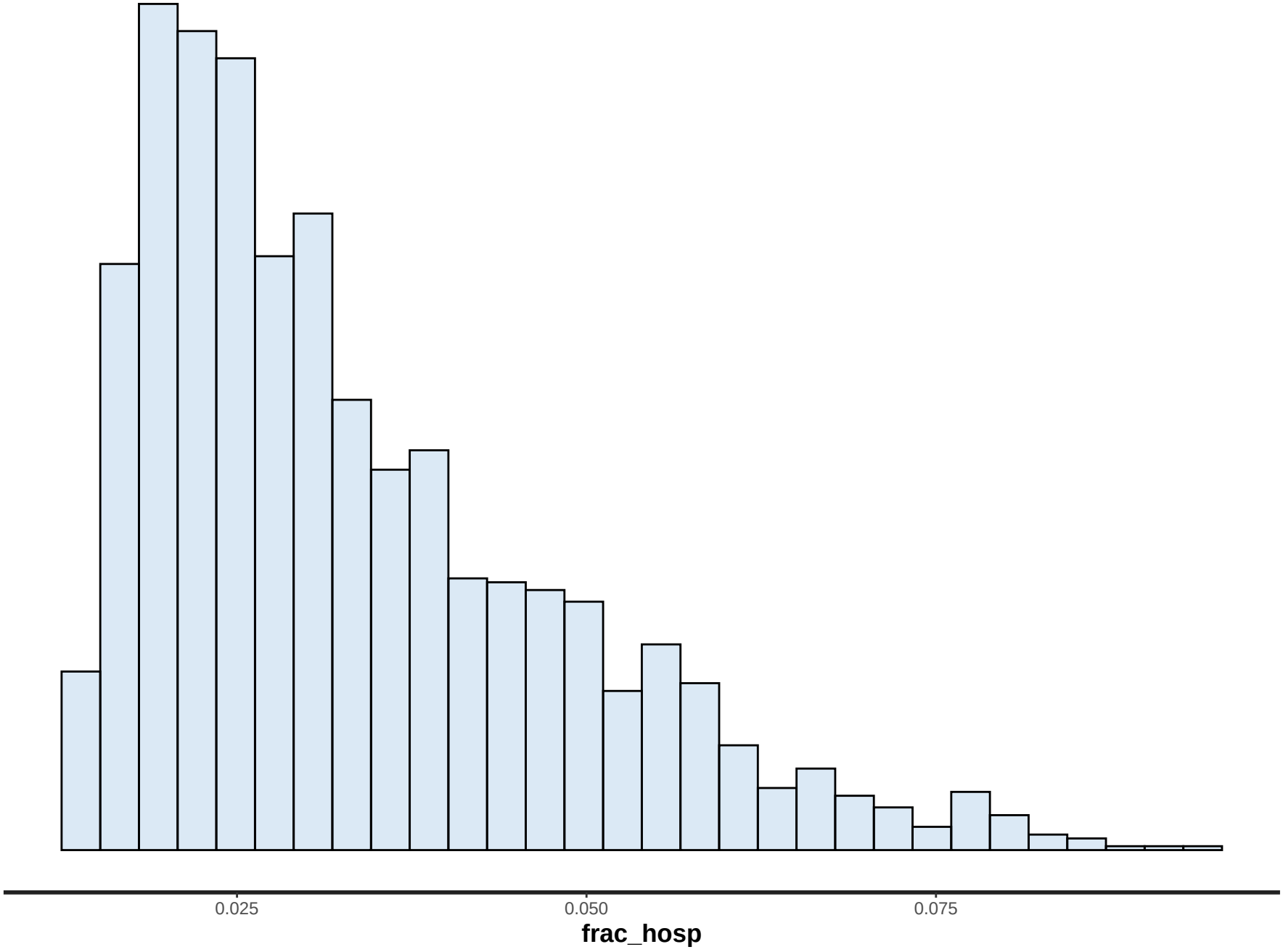
2
3
4
5
6
duration_latent


2
4
6
8
duration_rec_mild


0
5
10
duration_pre_hosp


4
6
8
10
duration_hosp_mod


4
5
6
7
8
9
duration_hosp_icu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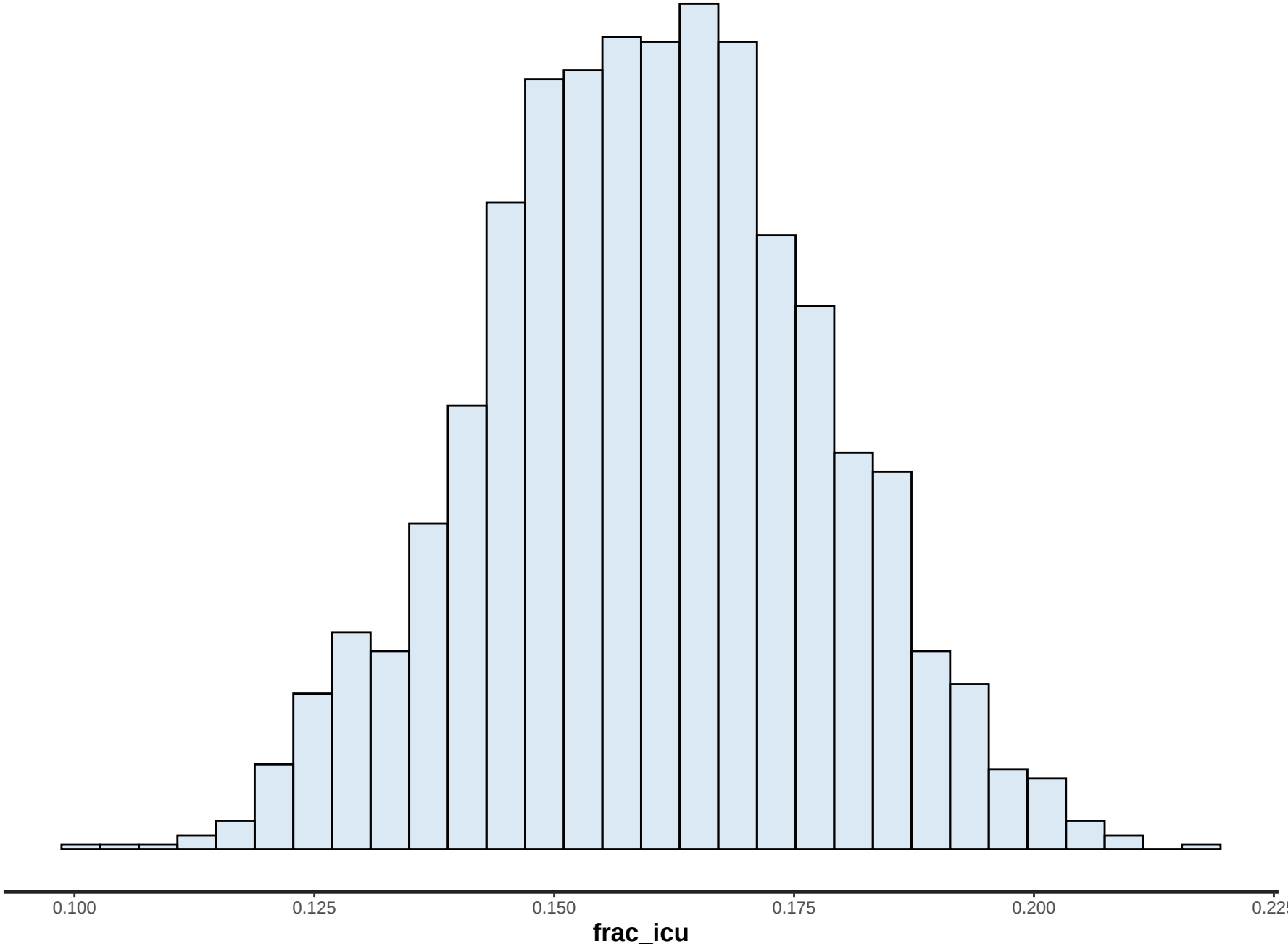
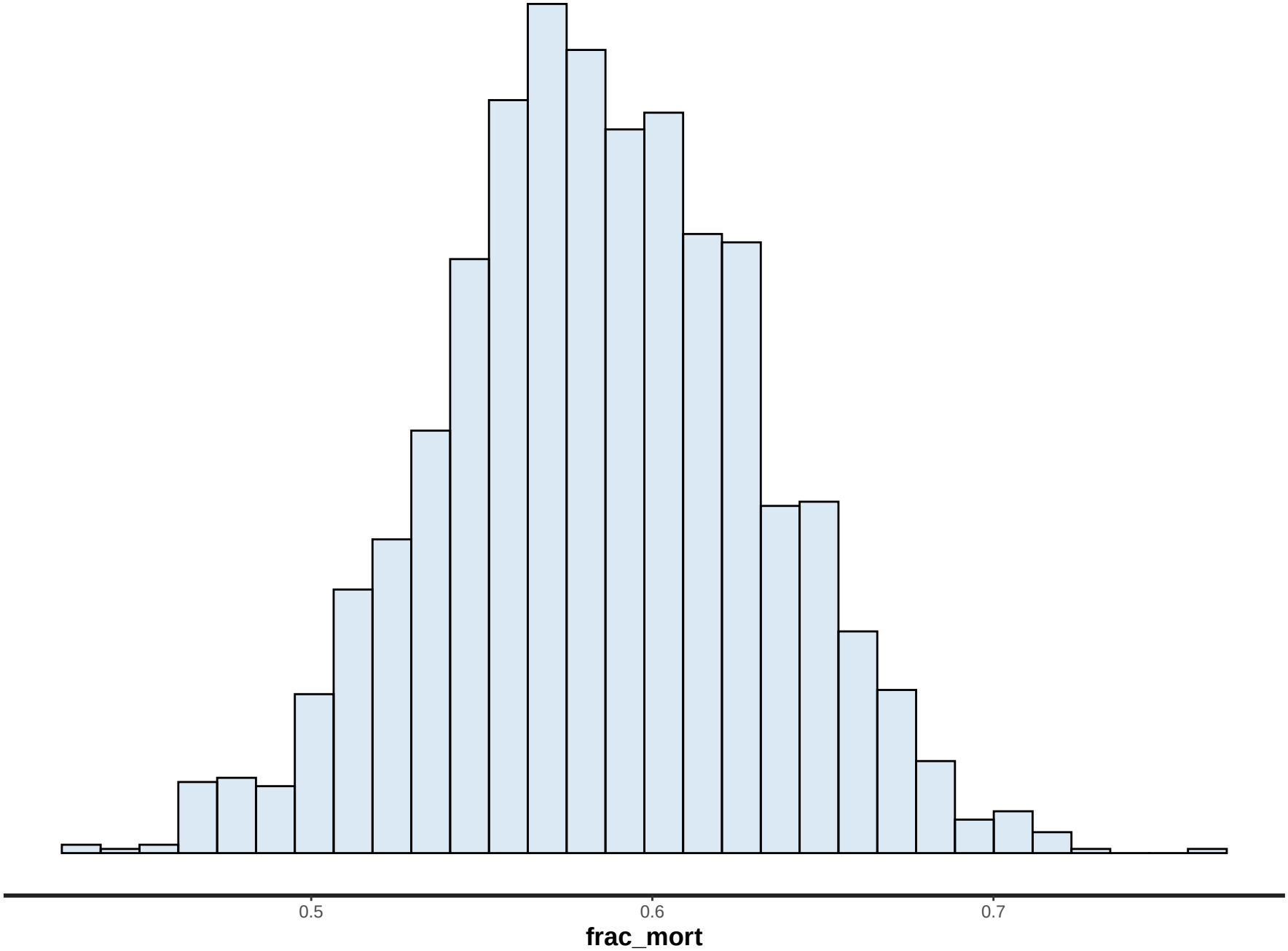
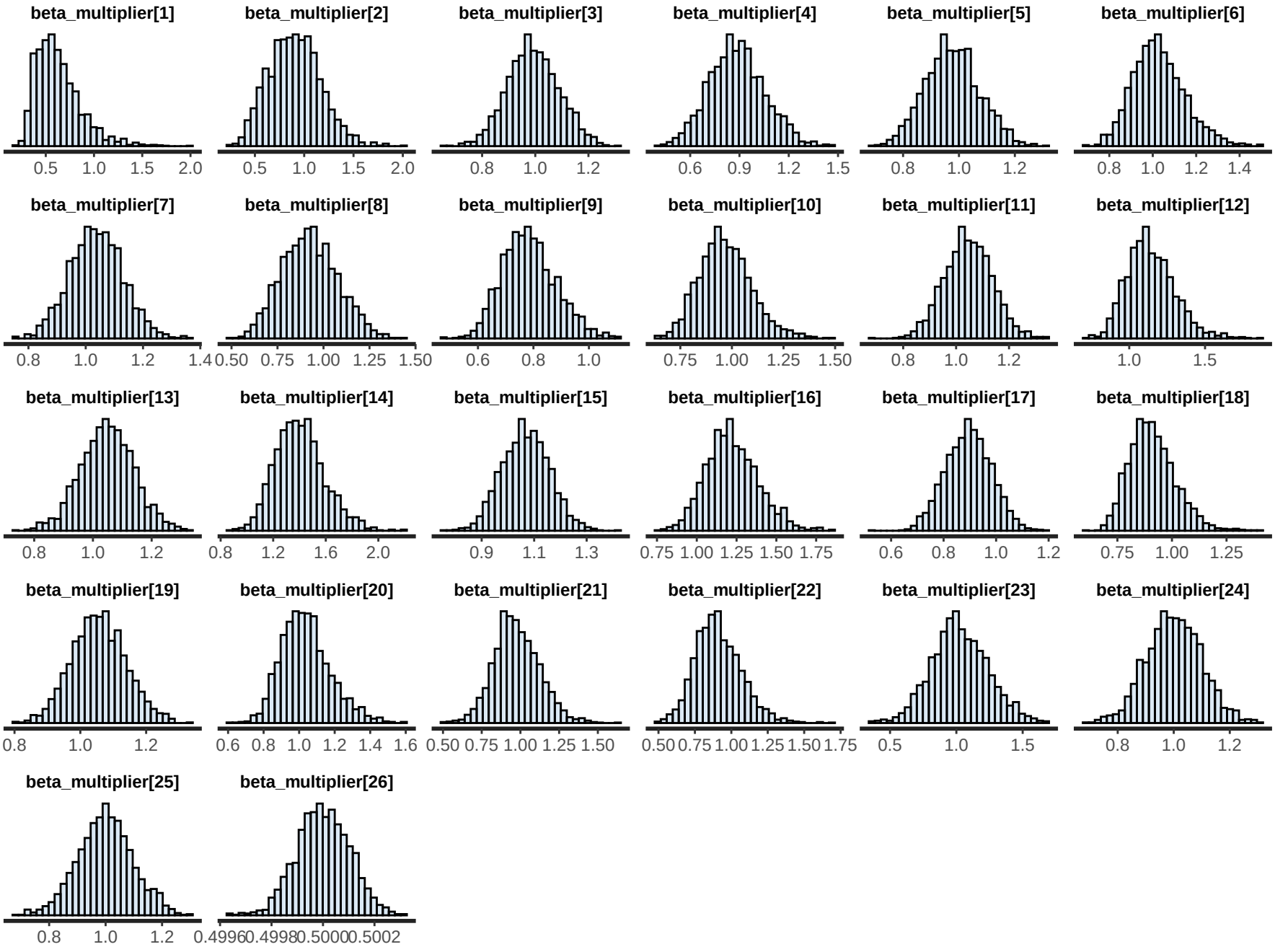
0.050
0.075
frac_hosp


0.100
0.125
0.150
0.175
0.200
frac_icu


0.5
0.6
0.7
frac_mort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beta_multiplier[4]
0.6 0.9 1.2 1.5
beta_multiplier[5]
0.8 1.0 1.2
beta_multiplier[6]
0.8 1.0 1.2 1.4
beta_multiplier[7]
0.8 1.0 1.2 1.4
beta_multiplier[8]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[9]
0.6 0.8 1.0
beta_multiplier[10]
0.75 1.00 1.25 1.50
beta_multiplier[11]
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beta_multiplier[12]
1.0 1.5
beta_multiplier[13]
0.8 1.0 1.2
beta_multiplier[14]
0.8 1.2 1.6 2.0
beta_multiplier[15]
0.9 1.1 1.3
beta_multiplier[16]
0.75 1.00 1.25 1.50 1.75
beta_multiplier[17]
0.6 0.8 1.0 1.2
beta_multiplier[18]
0.75 1.00 1.25
beta_multiplier[19]
0.8 1.0 1.2
beta_multiplier[20]
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beta_multiplier[21]
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beta_multiplier[22]
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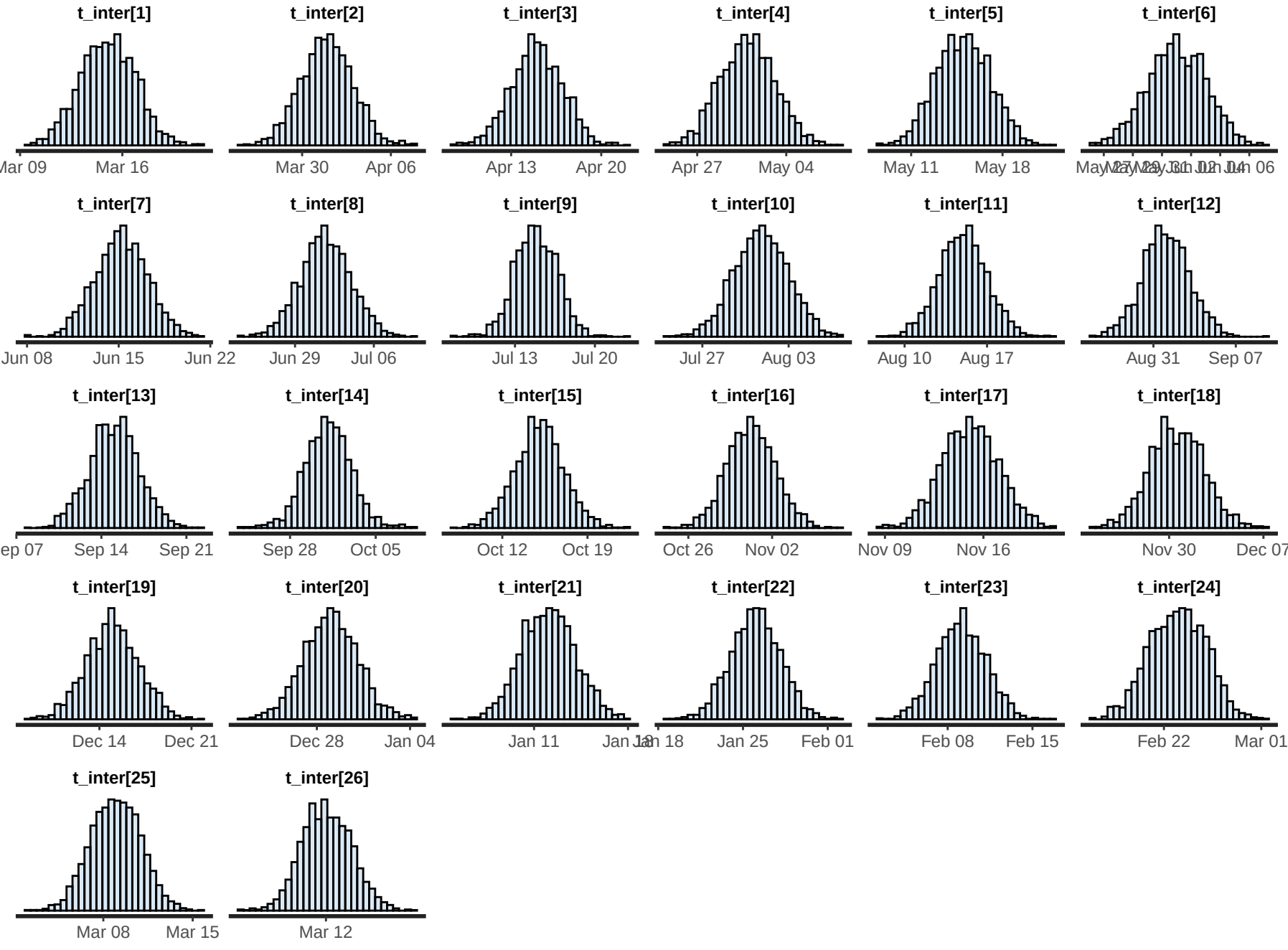
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Mar 16
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Mar 30
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May 29
May 31
Jun 02
Jun 04
Jun 06
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Jun 08
Jun 15
Jun 22
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Jul 06
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Jul 20
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Aug 31
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Dec 21
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Feb 22
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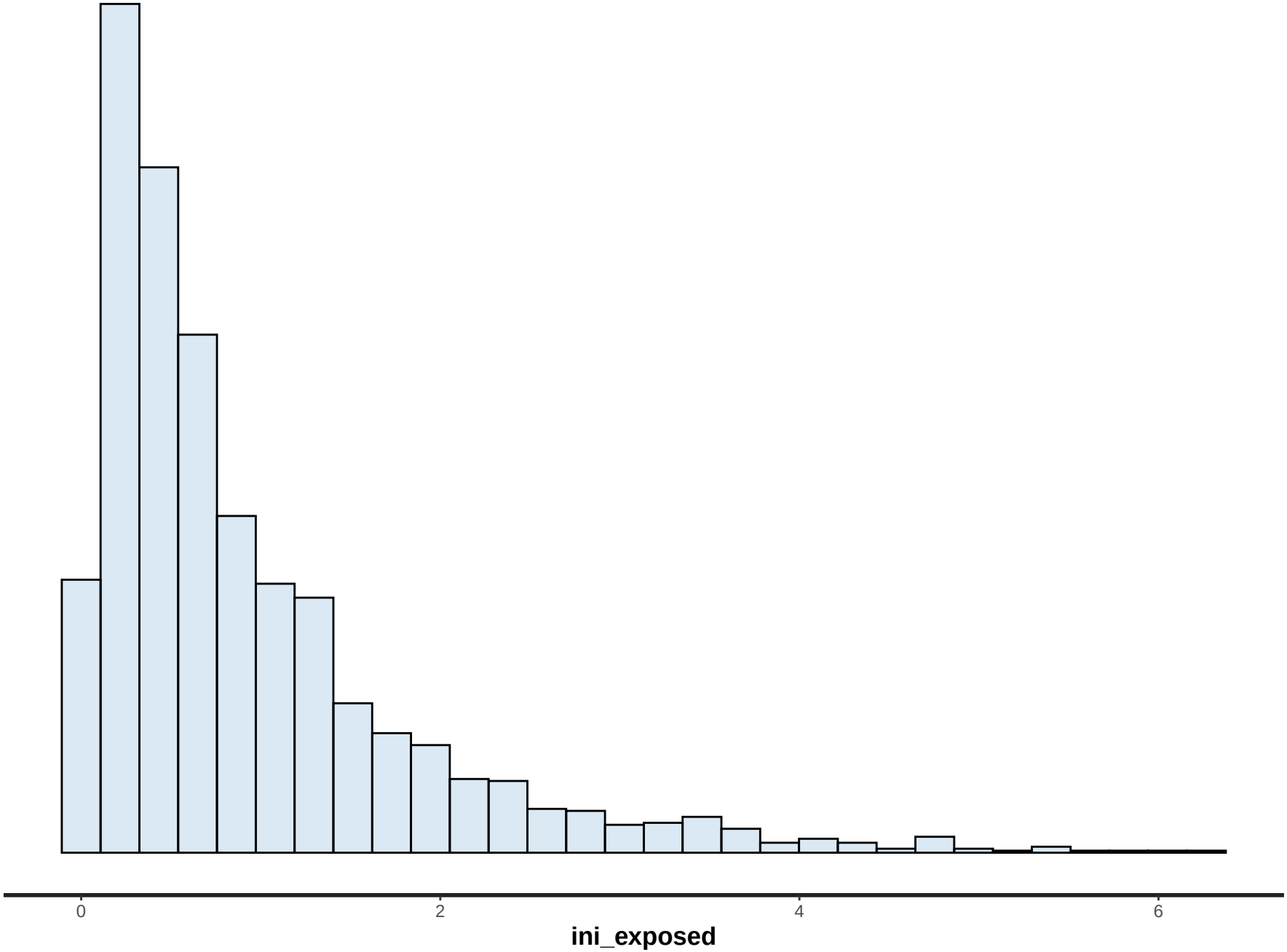
Mar 08
Mar 15
t_inter[26]
Mar 12


0
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4
6
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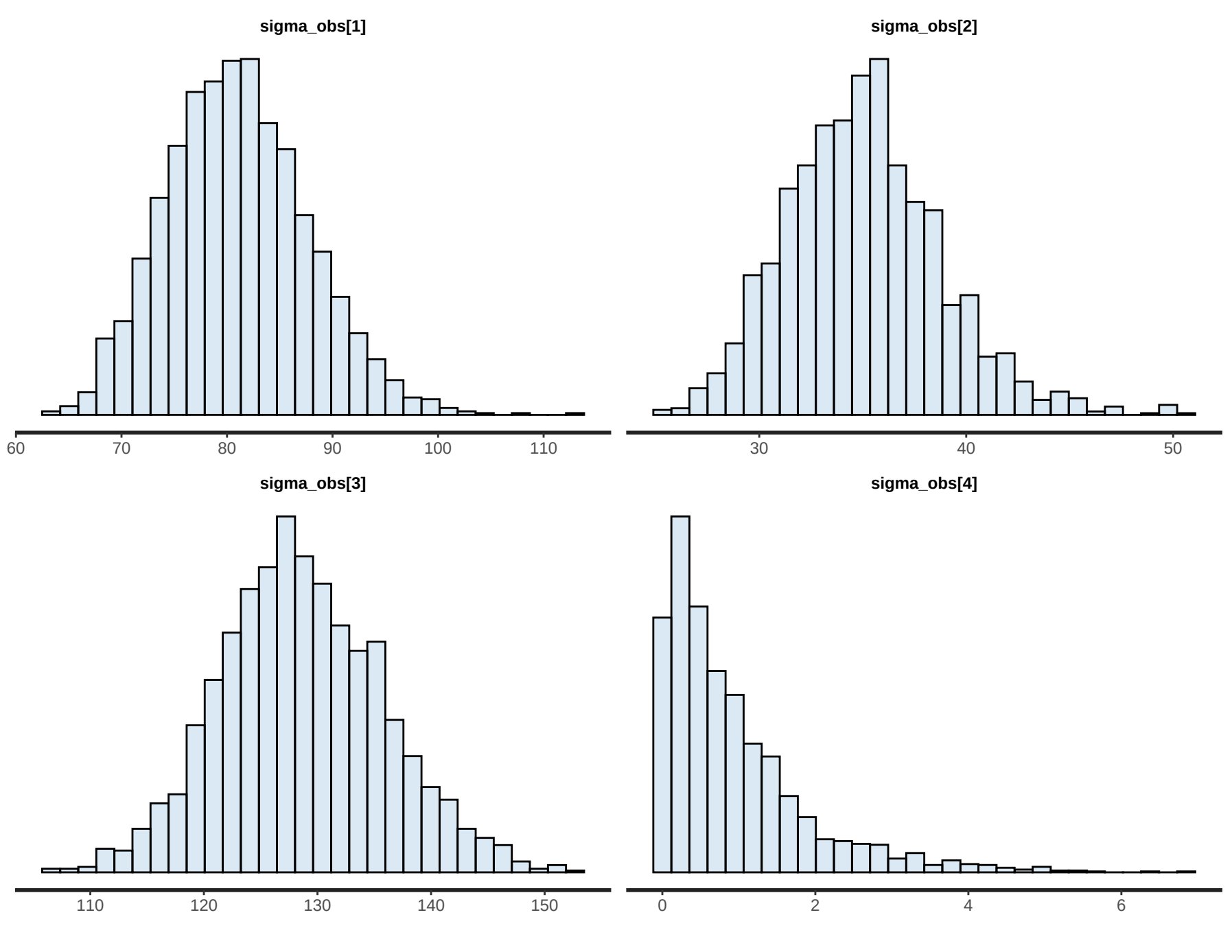
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100
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sigma_obs[3]
110
120
130
140
150
sigma_obs[4]
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2
4
6