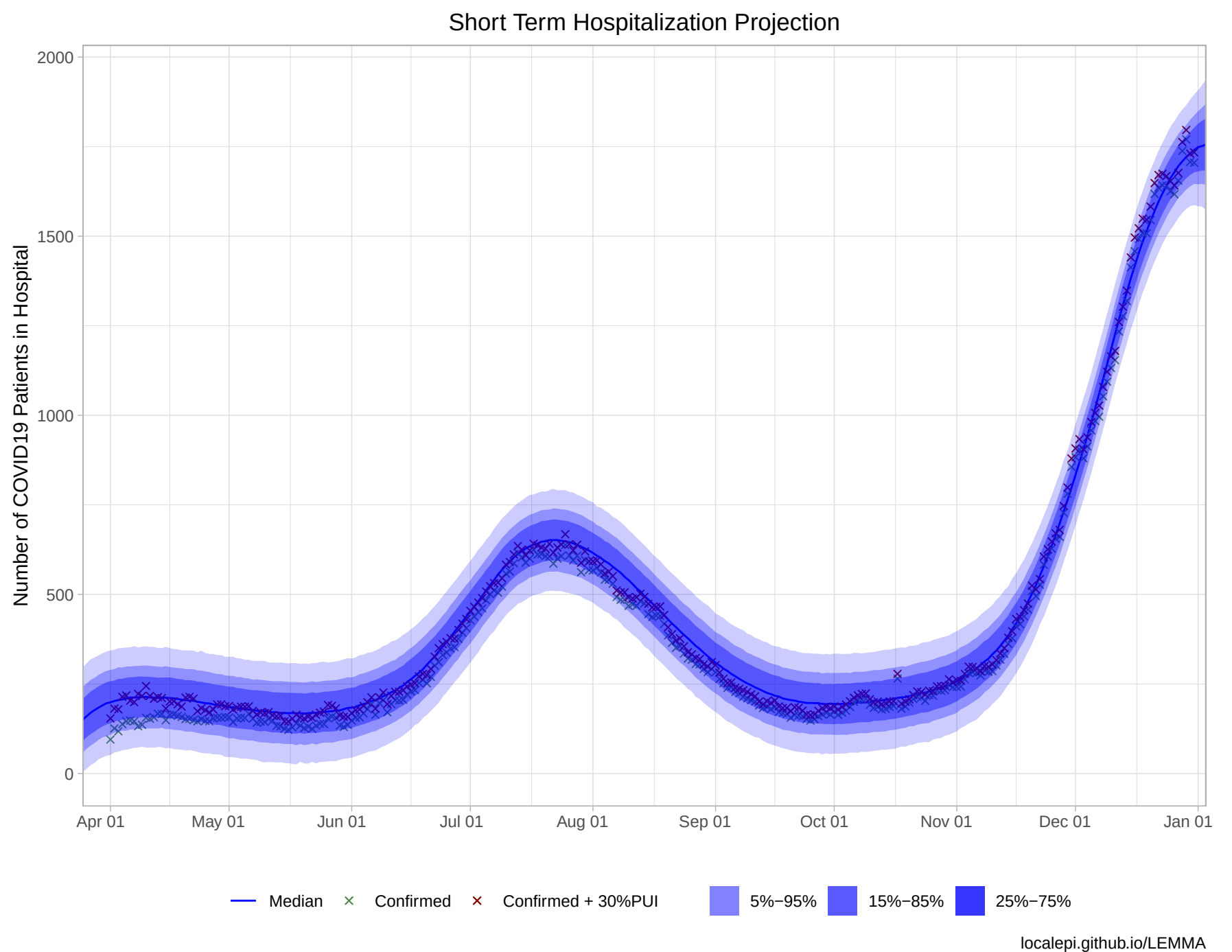
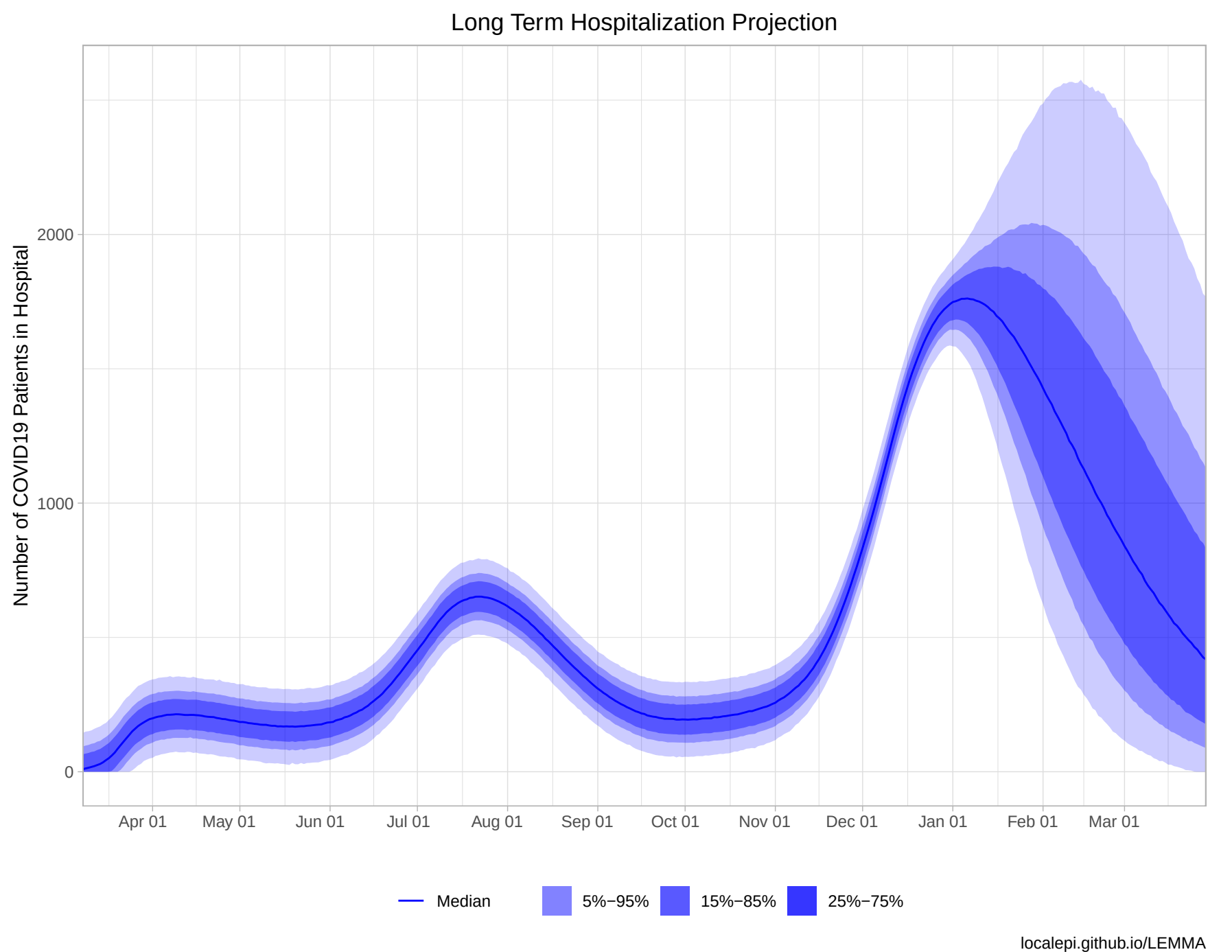
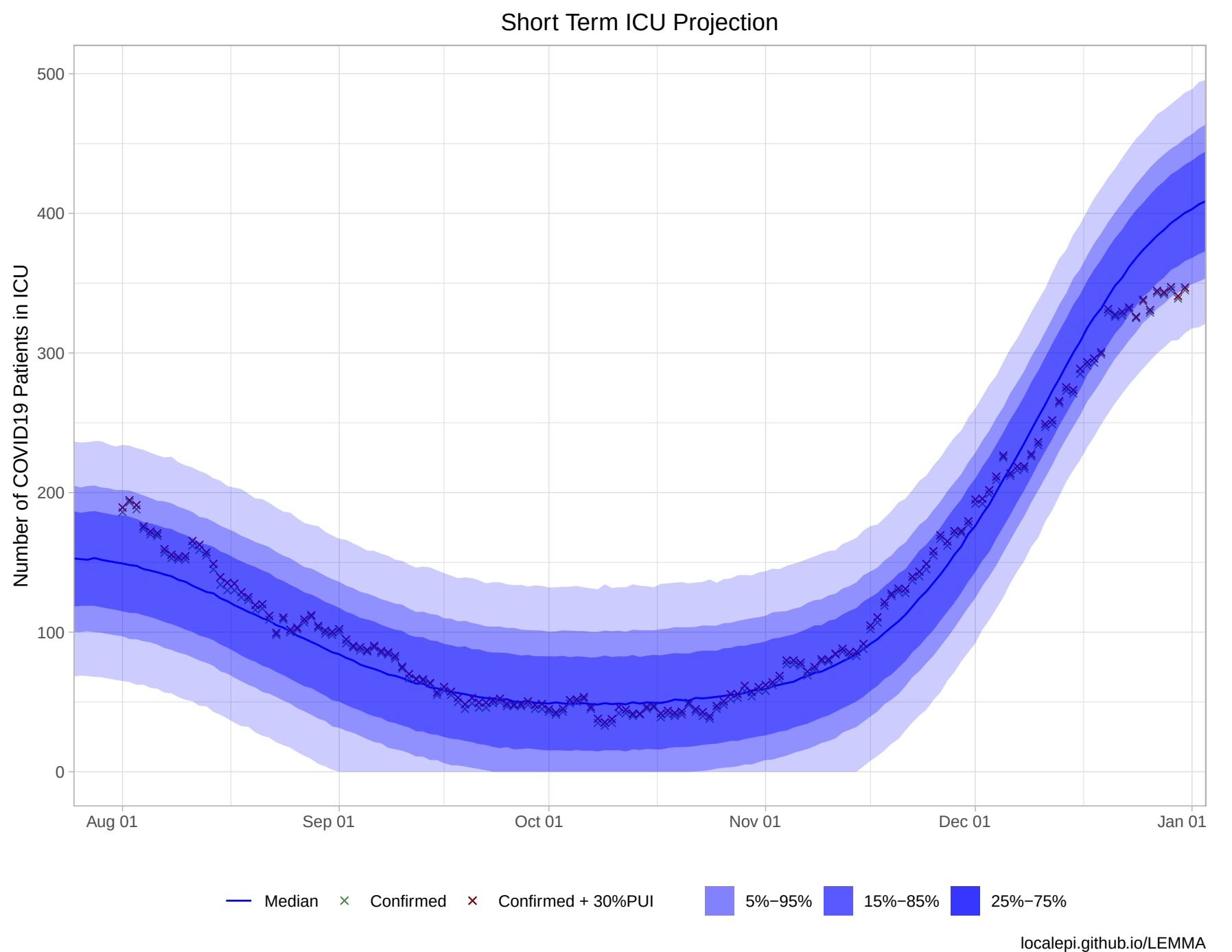
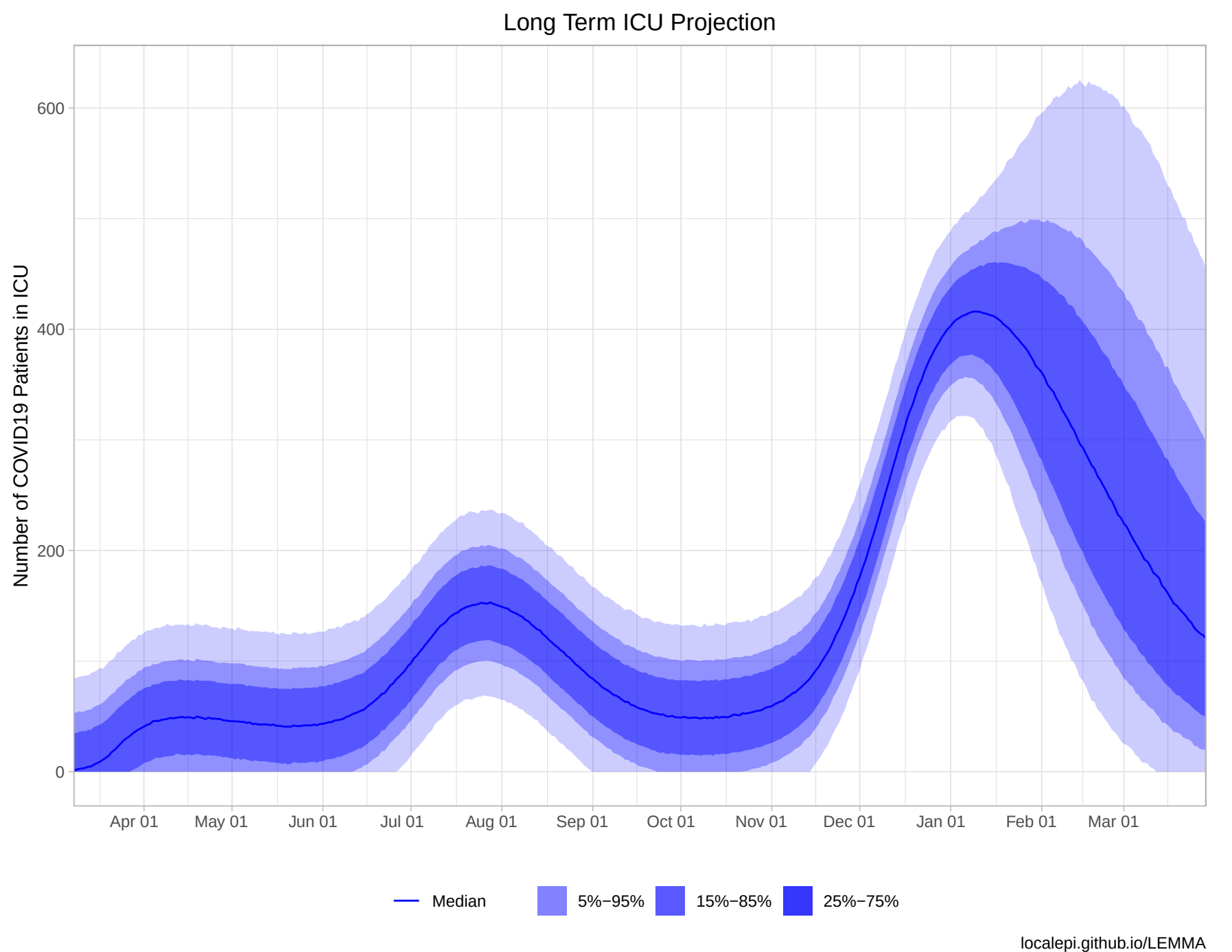
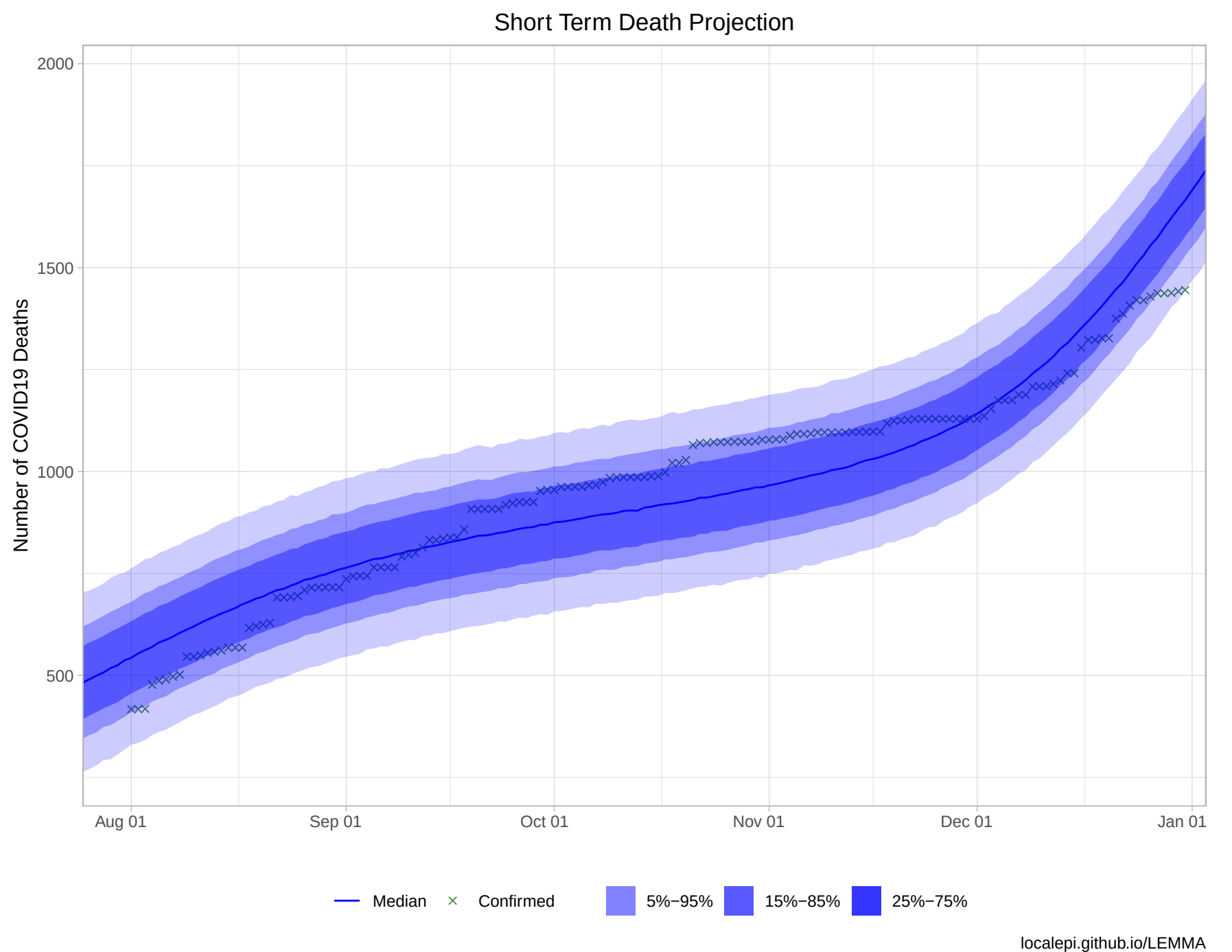
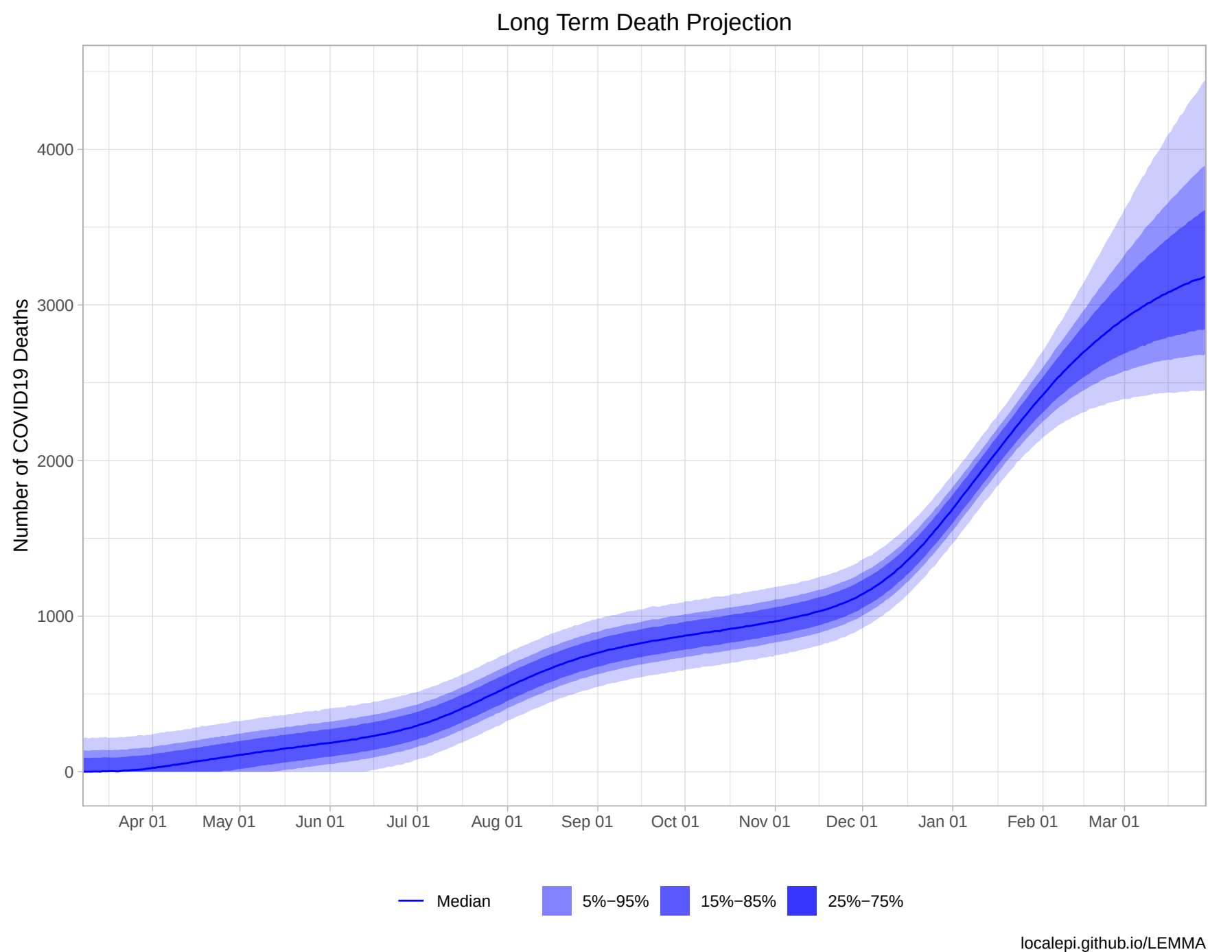

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
2000
1500
1000
500
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

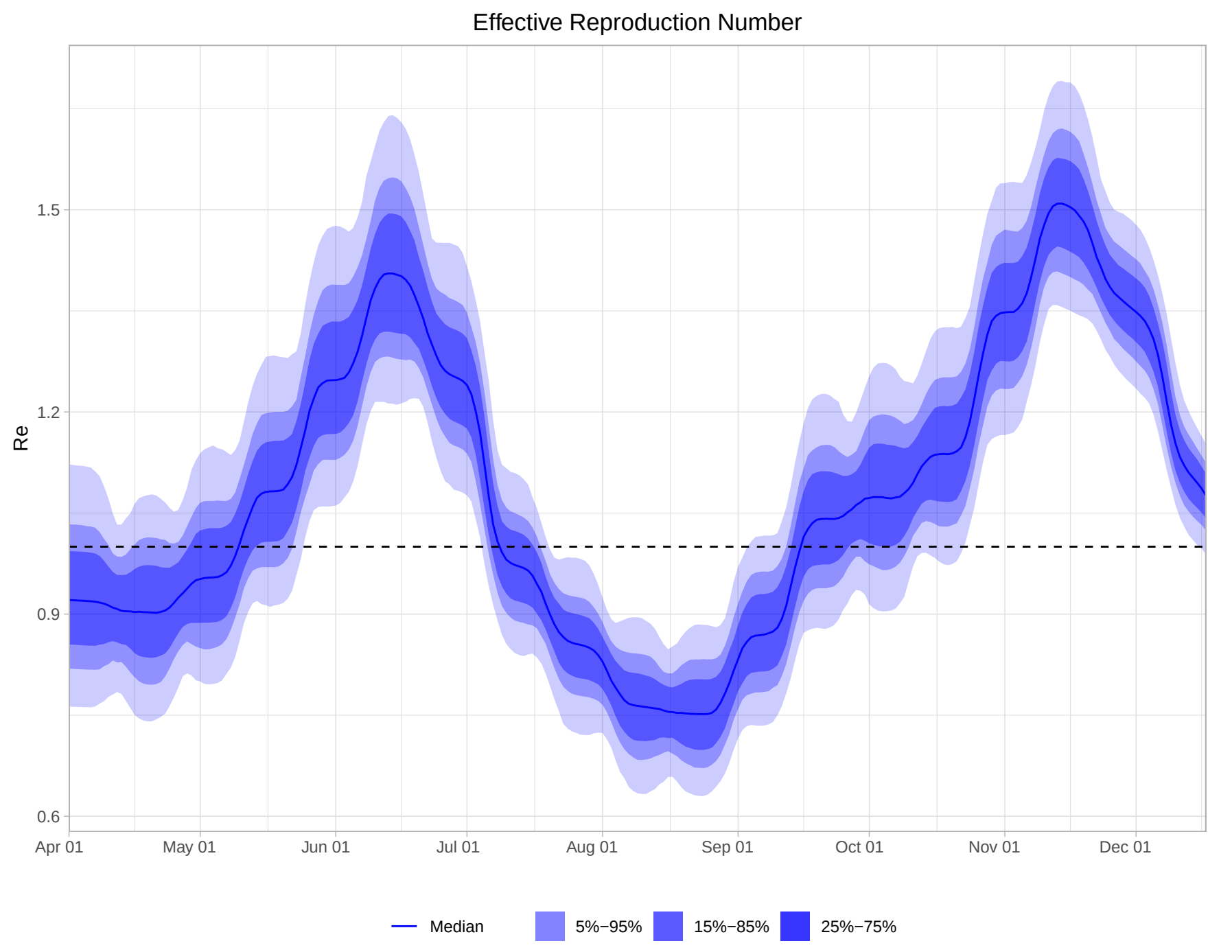

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
2000
1000
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
500
400
300
200
100
0
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

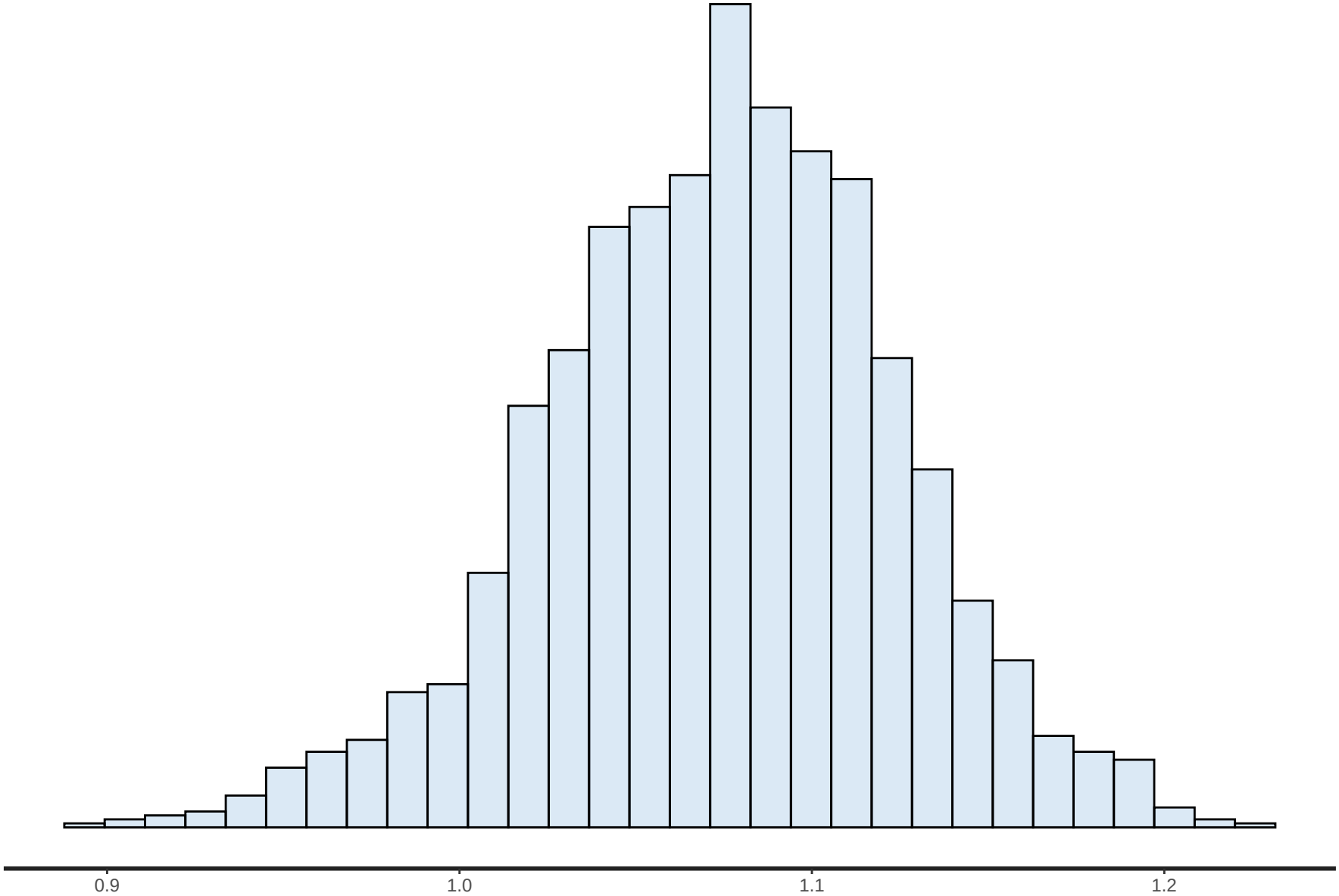

Short Term Death Projection
Number of COVID19 Deaths
2000
1500
1000
500
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

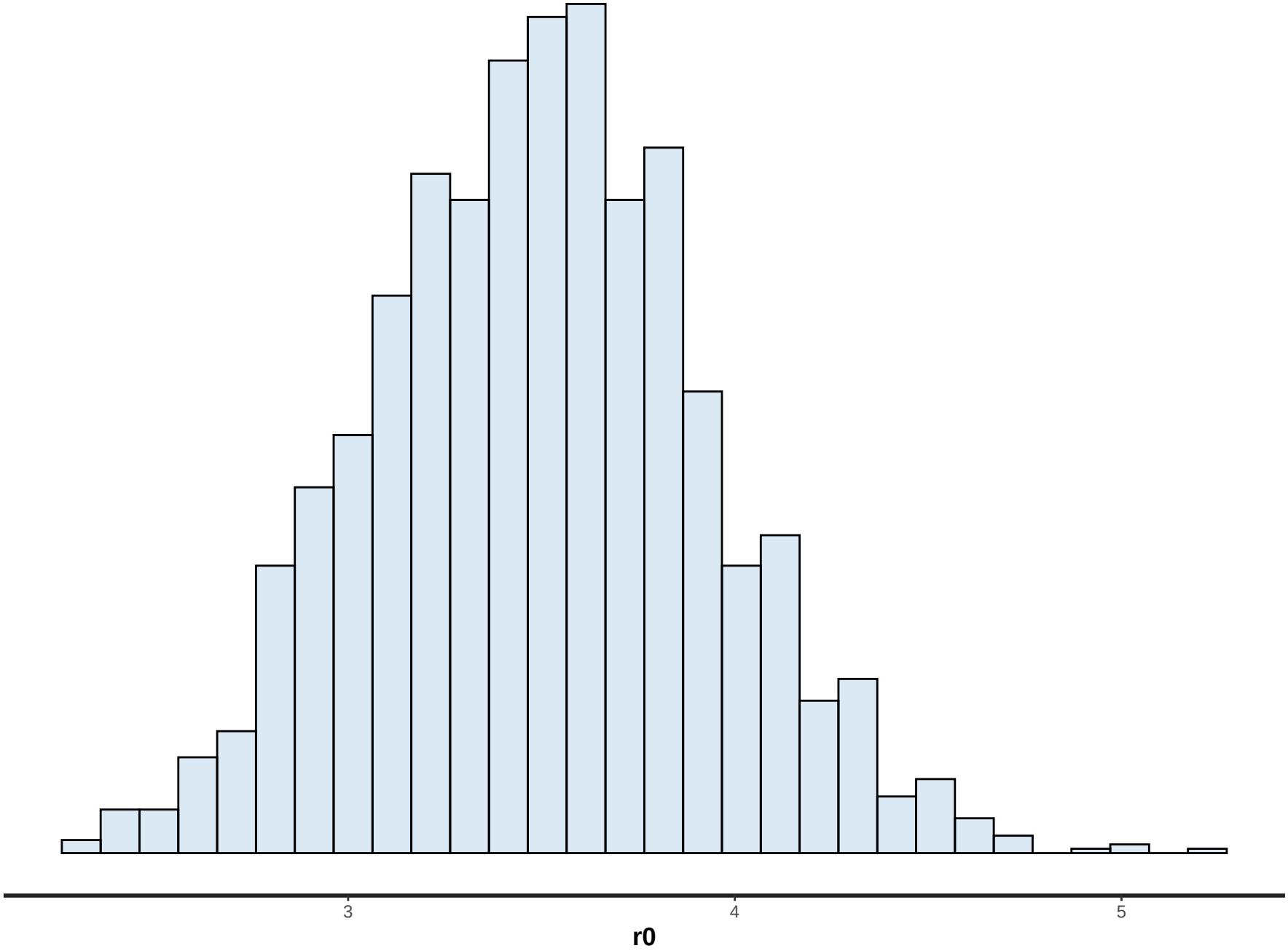

Long Term Death Projection
Number of COVID19 Deaths
0
1000
2000
3000
4000
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Effective Reproduction Number
Re
1.5
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 2020−12−17

5%	10%	25%	50%	75%	90%	95%
0.99	1.01	1.04	1.08	1.11	1.14	1.15

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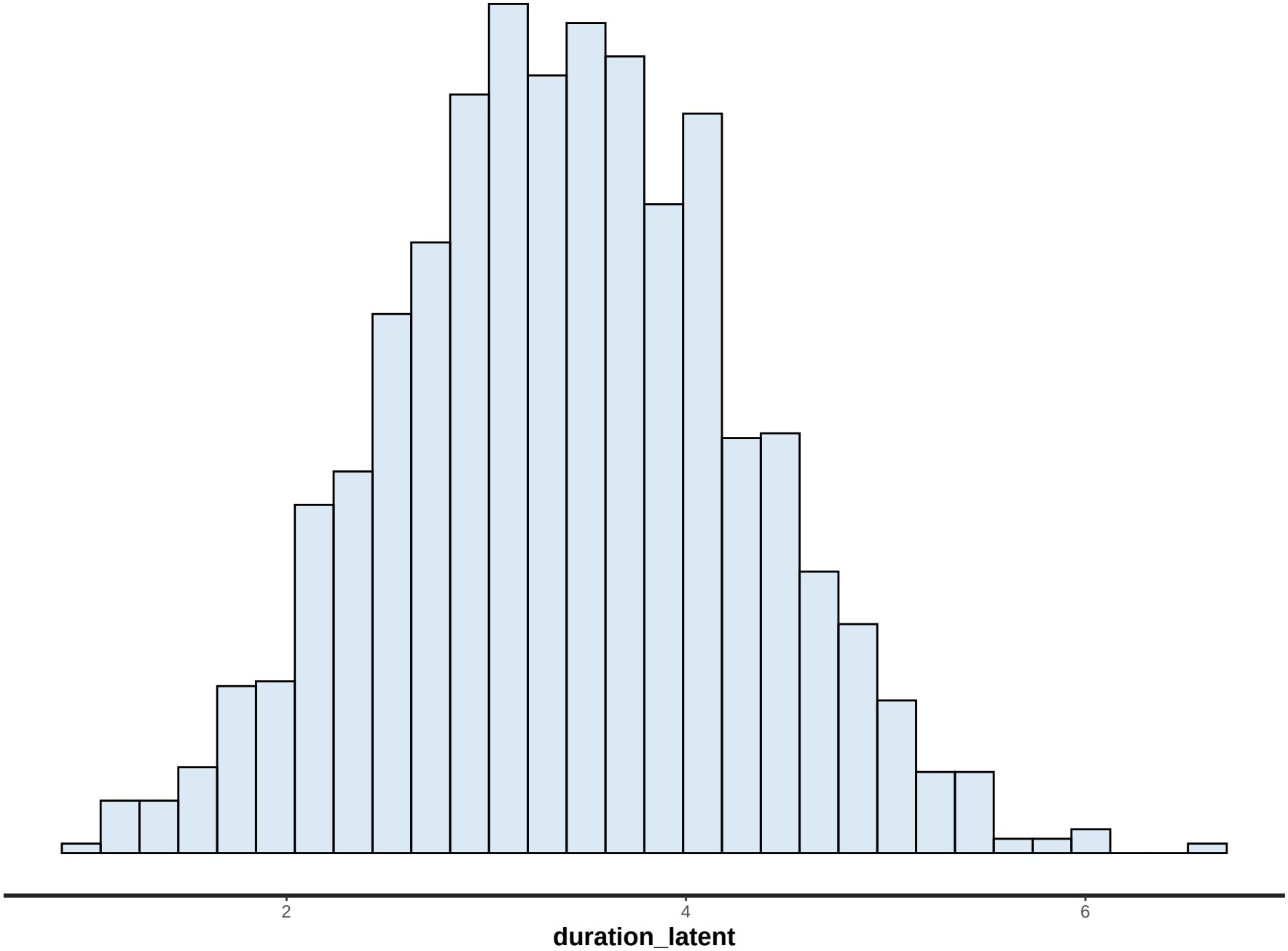
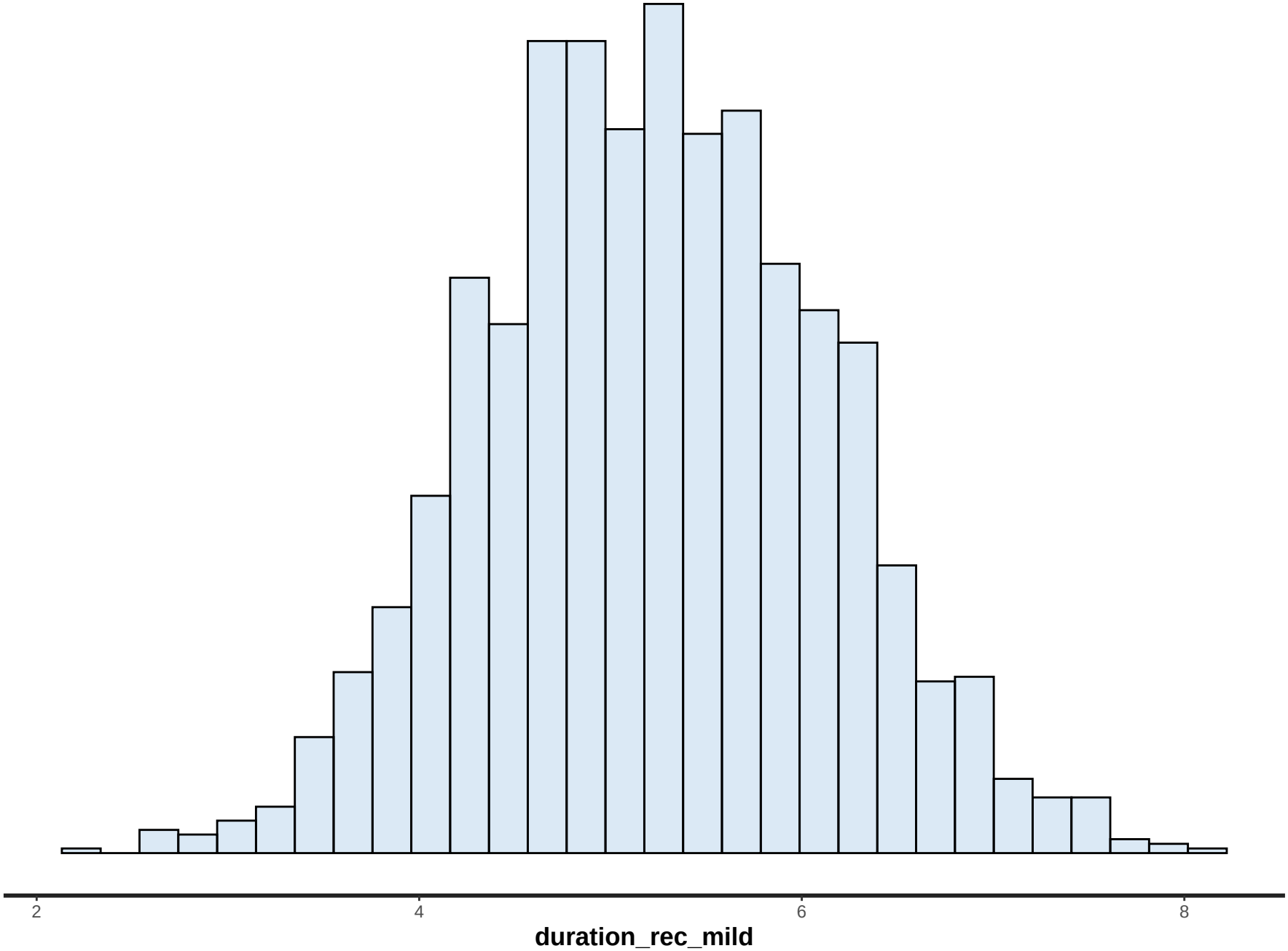
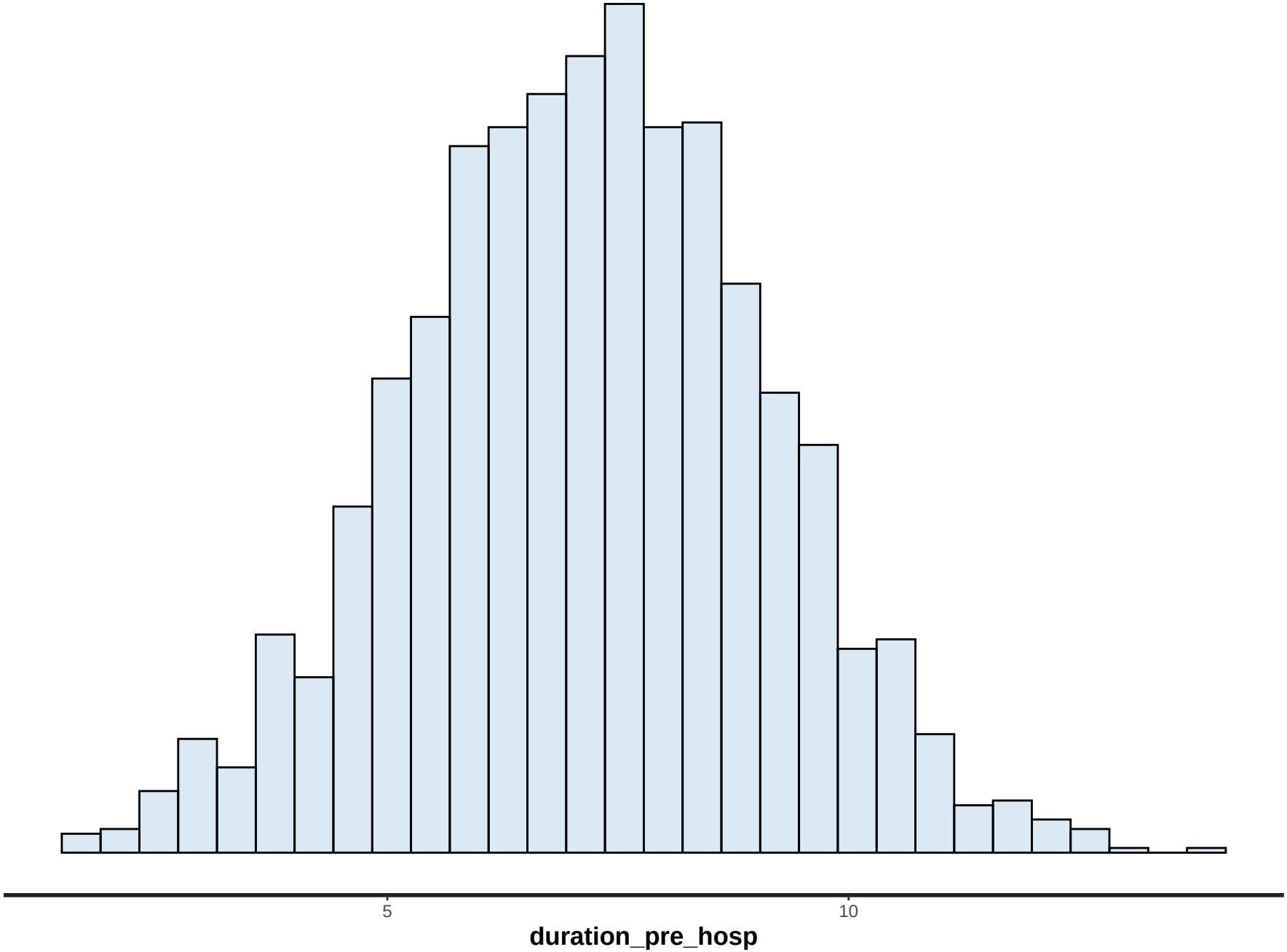
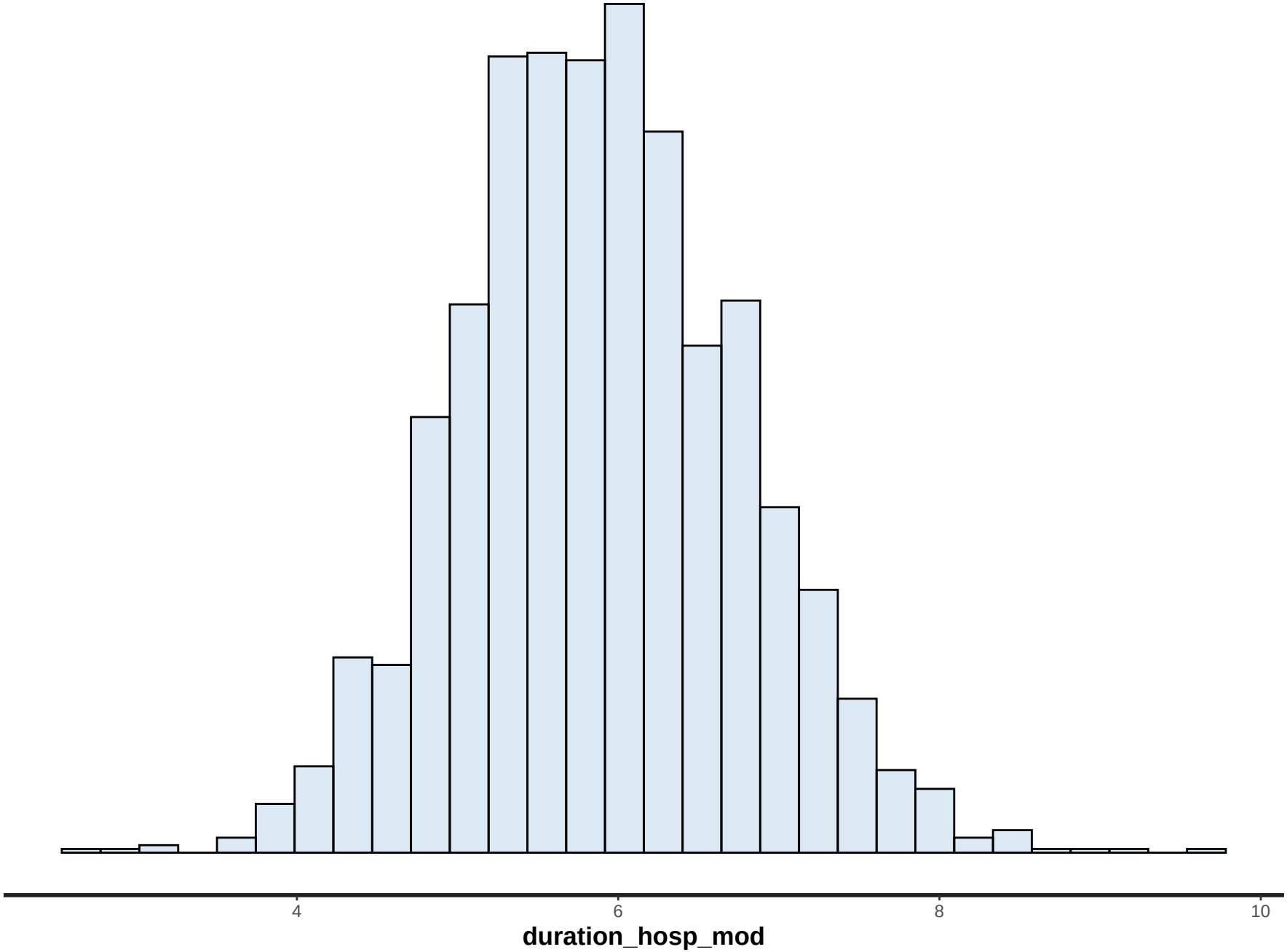
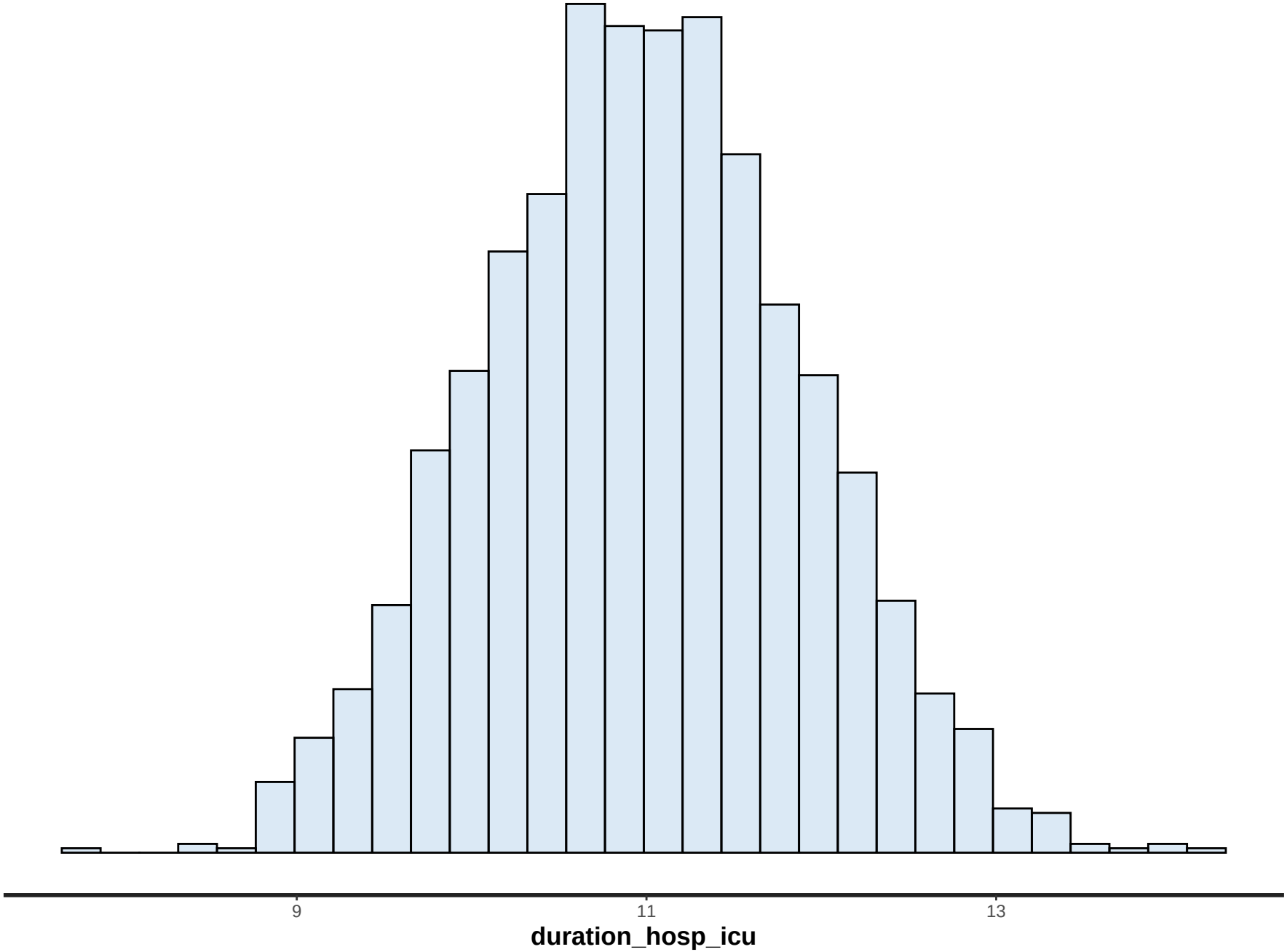
4
5
r0

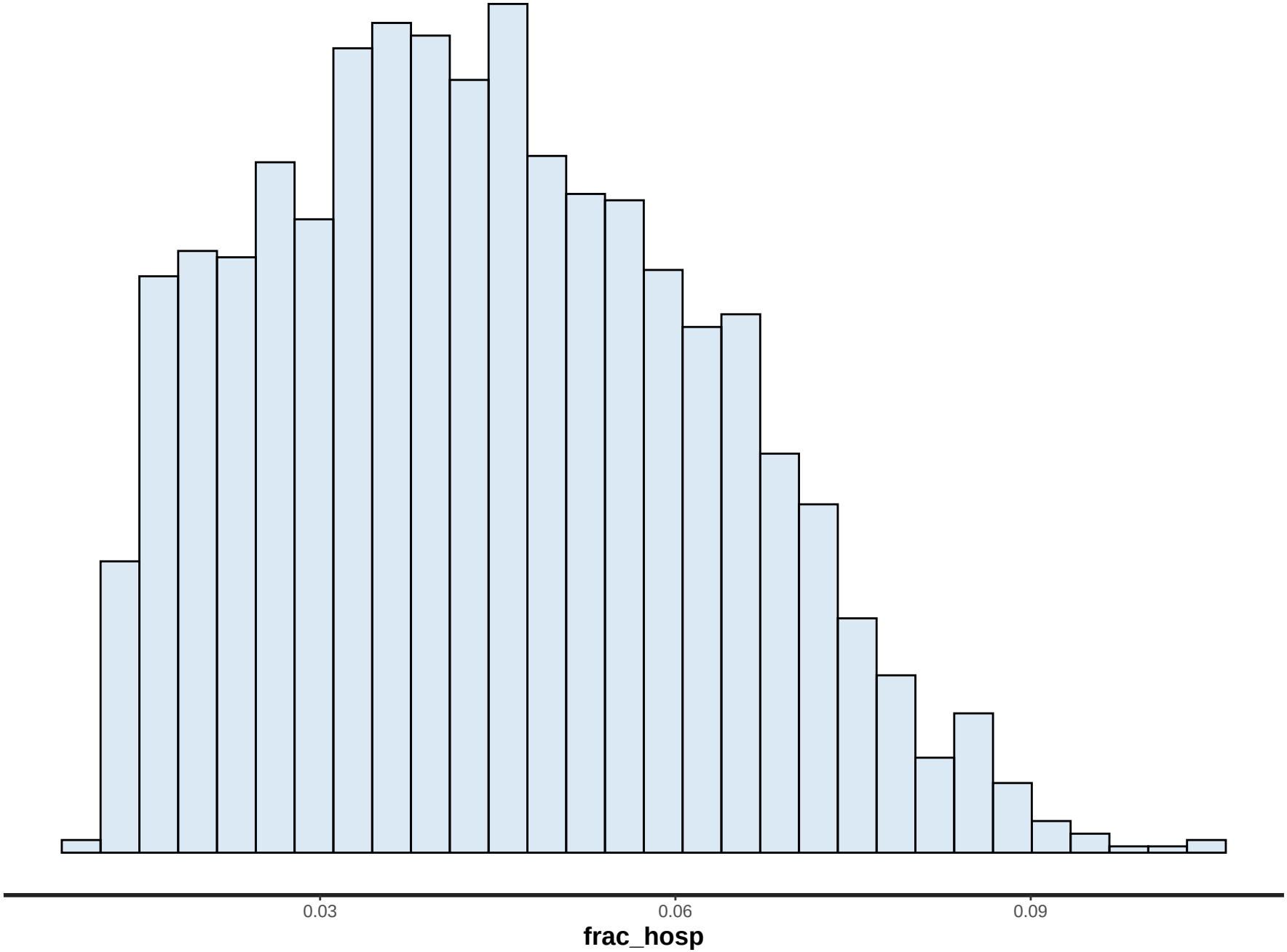

2
4
6
duration_latent


2
4
6
8
duration_rec_mild


5
10
duration_pre_hosp


4
6
8
10
duration_hosp_mod


9
11
13
duration_hosp_icu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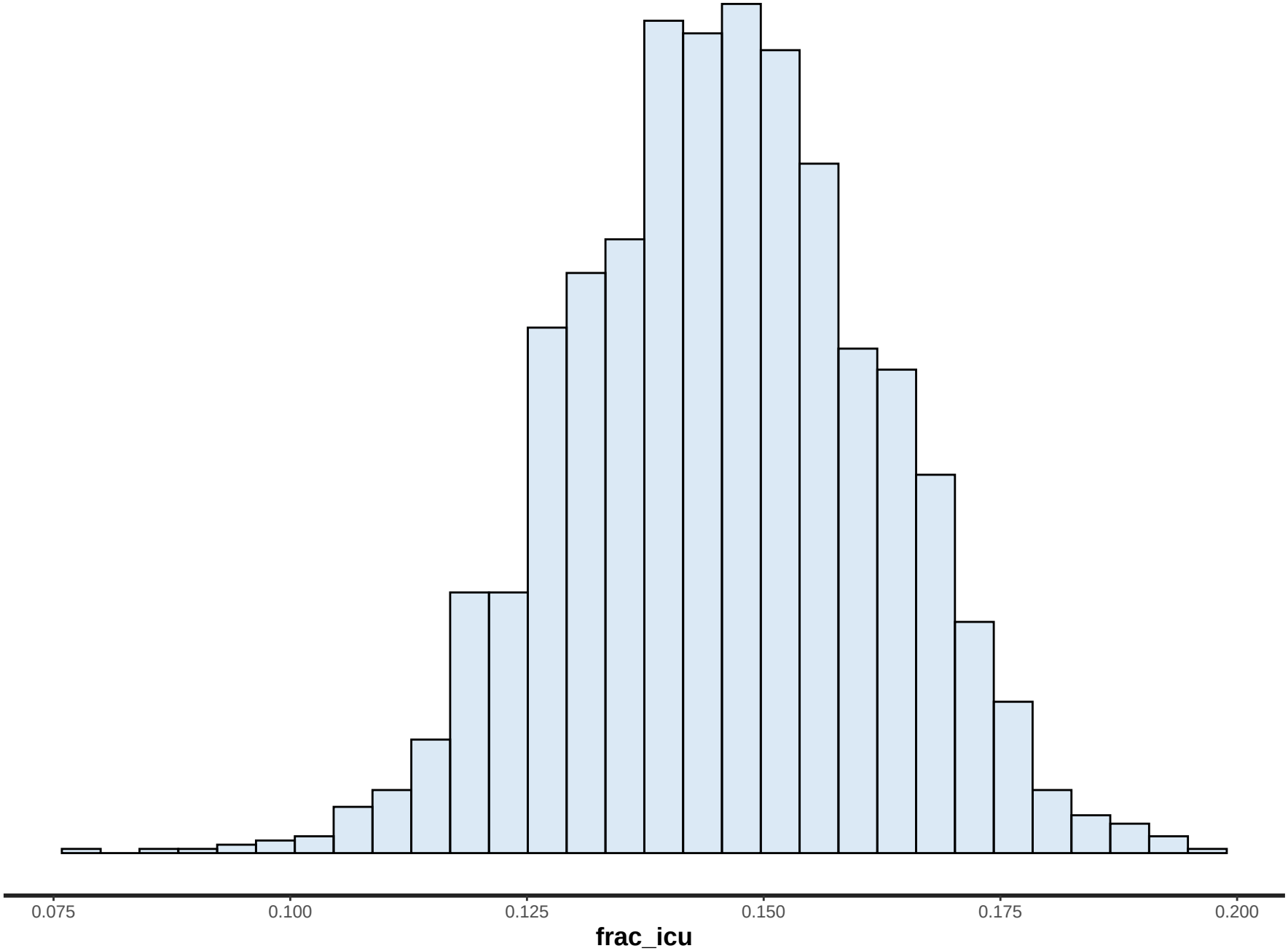
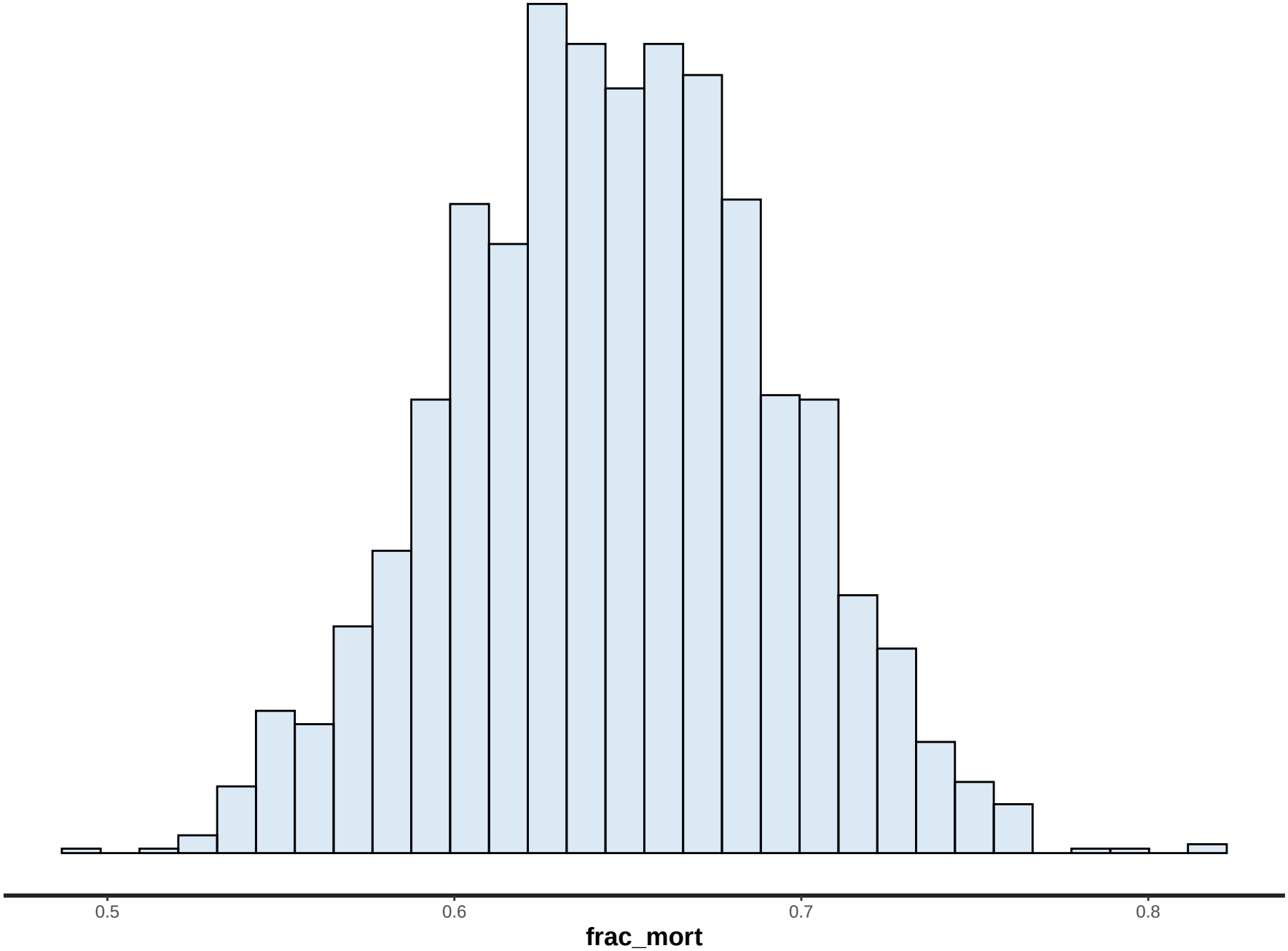
0.06
0.09
frac_hosp


0.075
0.100
0.125
0.150
0.175
0.200
frac_icu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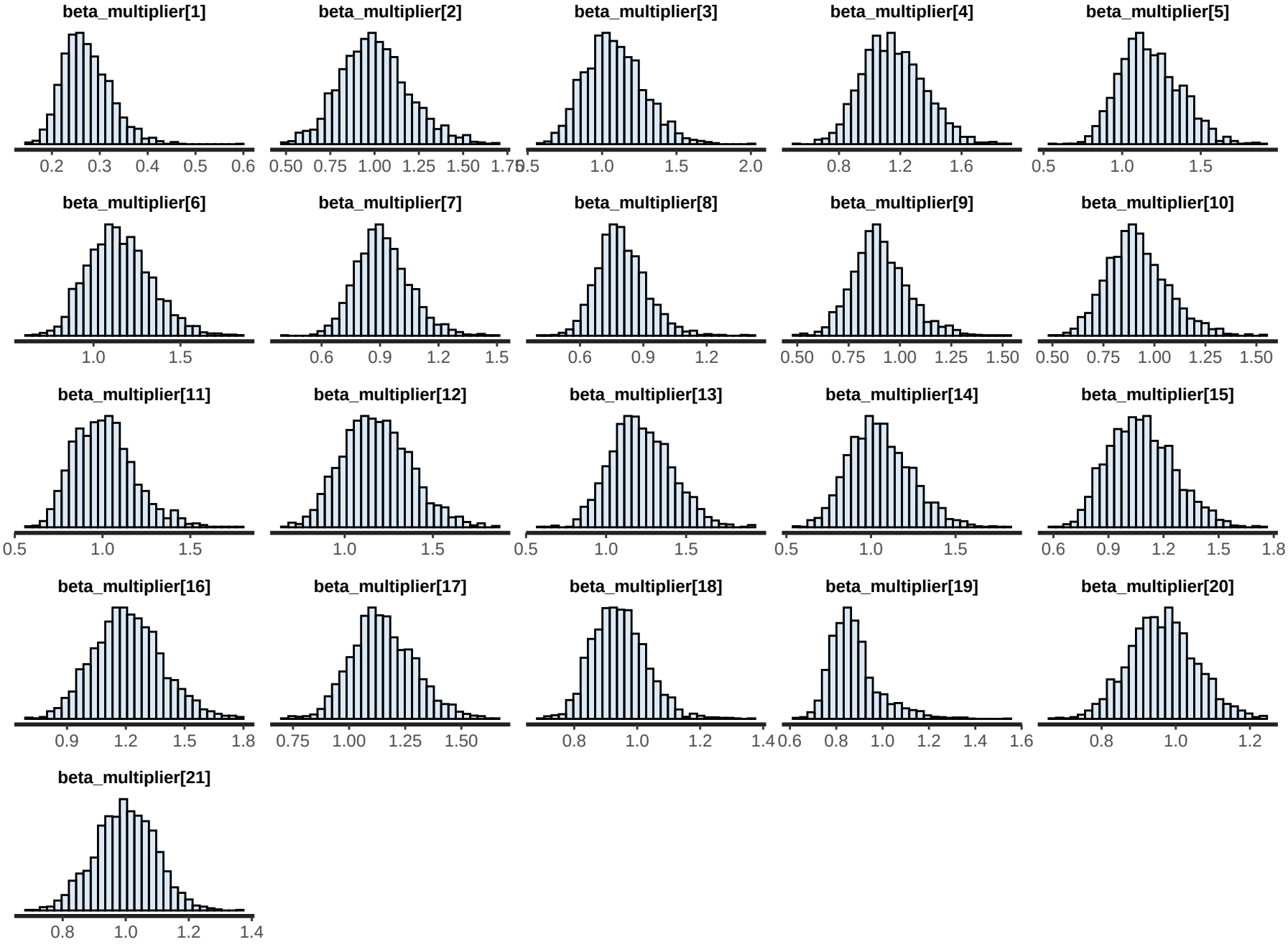
0.6
0.7
0.8
frac_mort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beta_multiplier[3]
0.5 1.0 1.5 2.0
beta_multiplier[4]
0.8 1.2 1.6
beta_multiplier[5]
0.5 1.0 1.5
beta_multiplier[6]
1.0 1.5
beta_multiplier[7]
0.6 0.9 1.2 1.5
beta_multiplier[8]
0.6 0.9 1.2
beta_multiplier[9]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[10]
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beta_multiplier[11]
0.5 1.0 1.5
beta_multiplier[12]
1.0 1.5
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0.6 0.9 1.2 1.5 1.8
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beta_multiplier[17]
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beta_multiplier[19]
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beta_multiplier[21]
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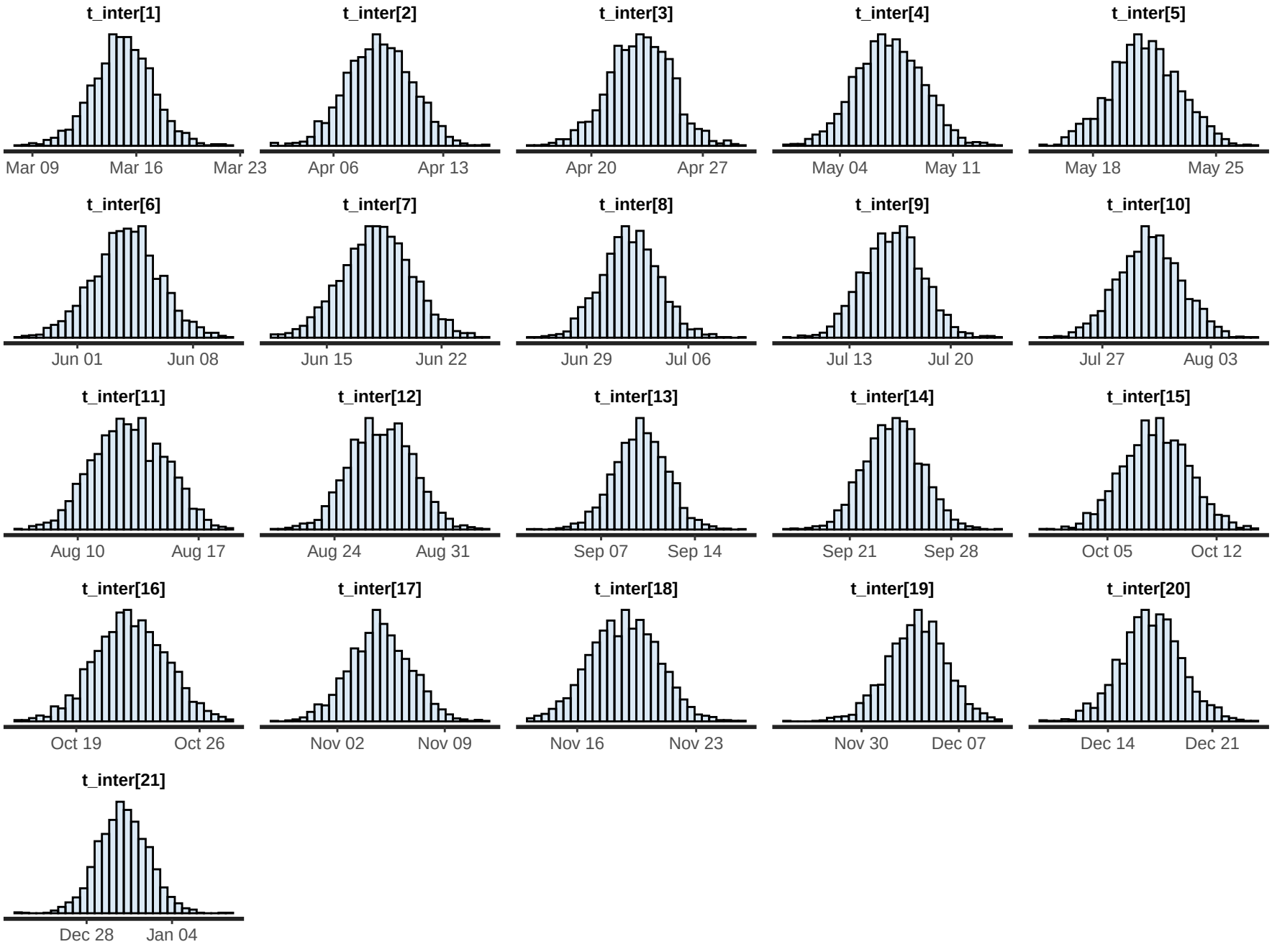
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Apr 27
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May 11
t_inter[5]
May 18
May 25
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Jun 01
Jun 08
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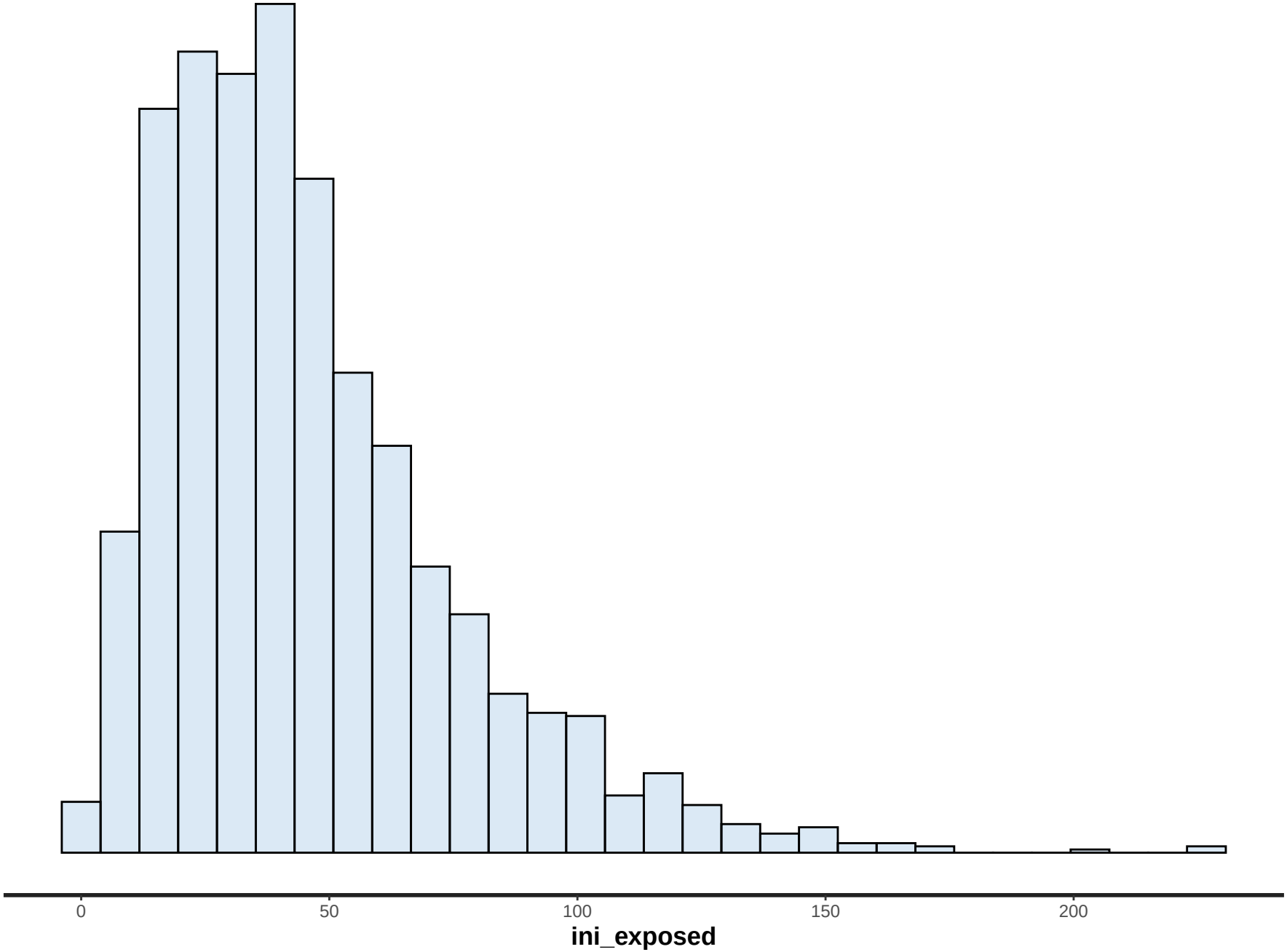
Dec 28
Jan 04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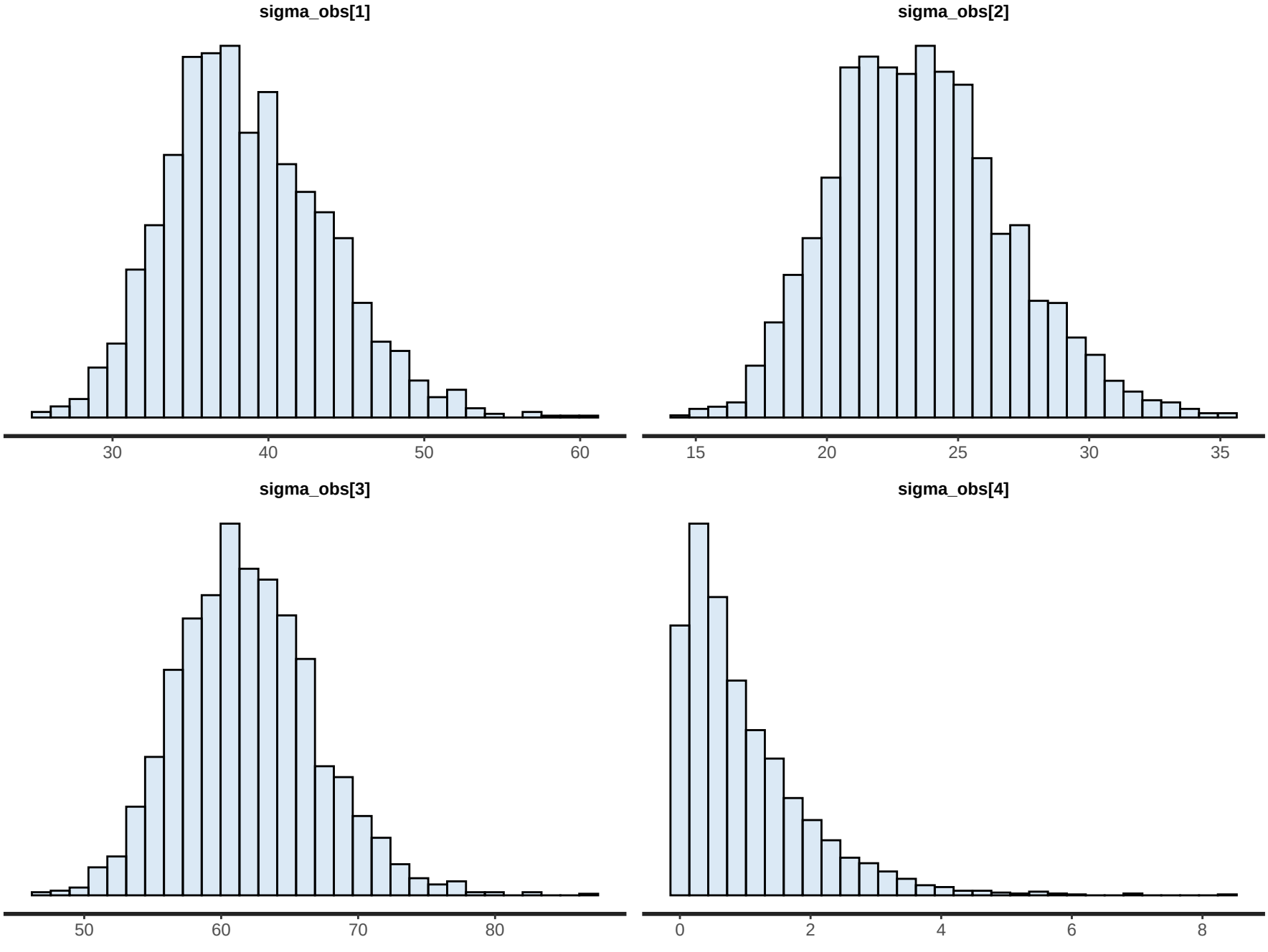
50
100
150
200
ini_exposed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