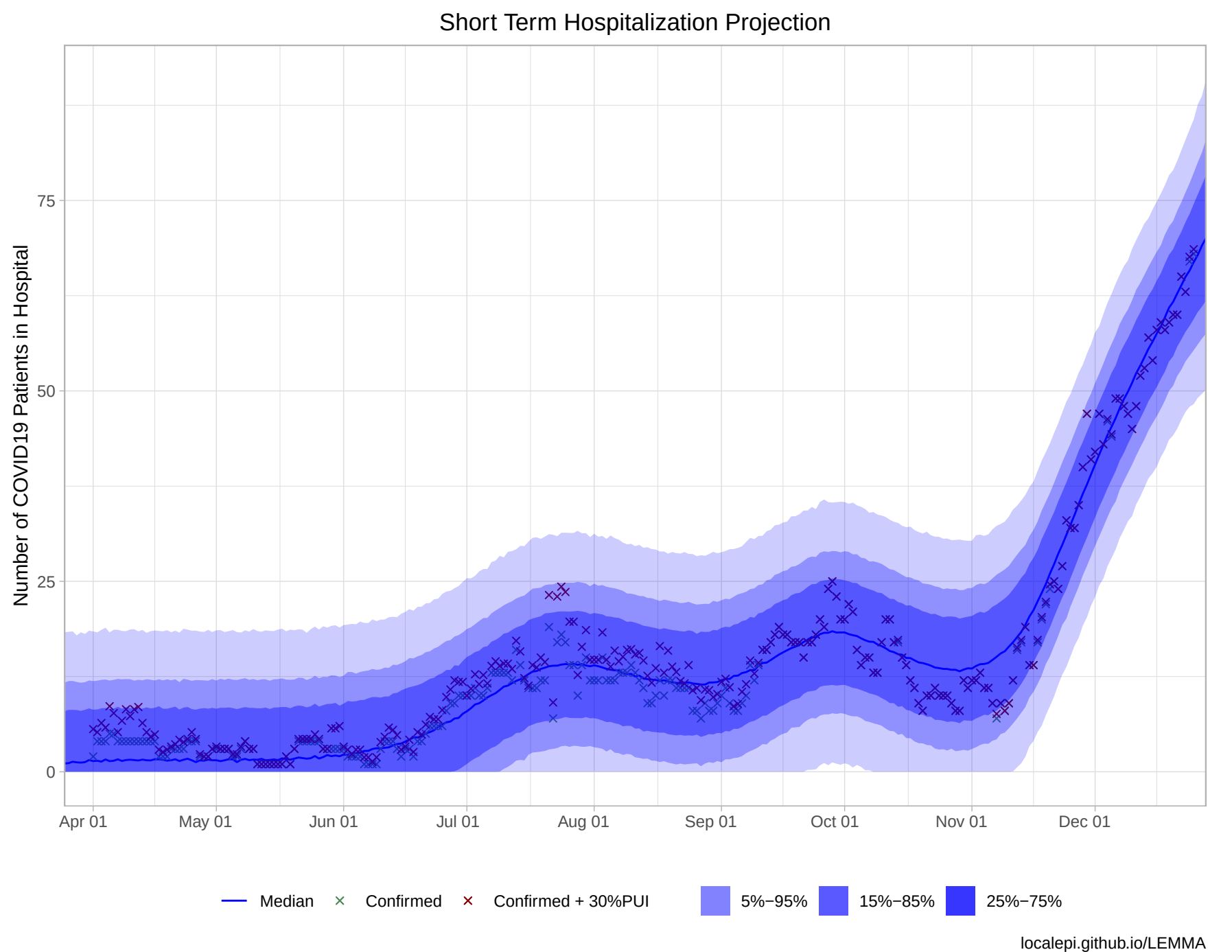
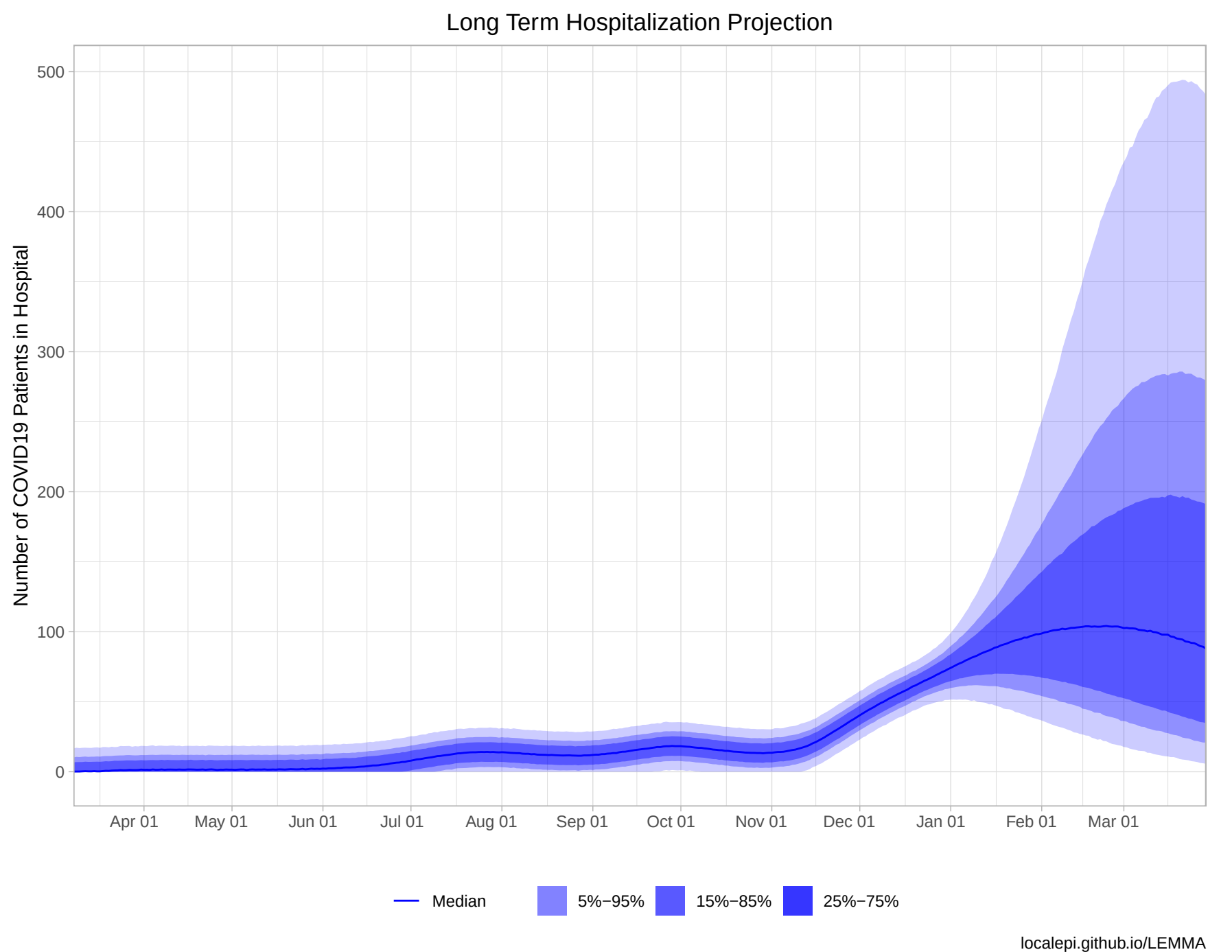
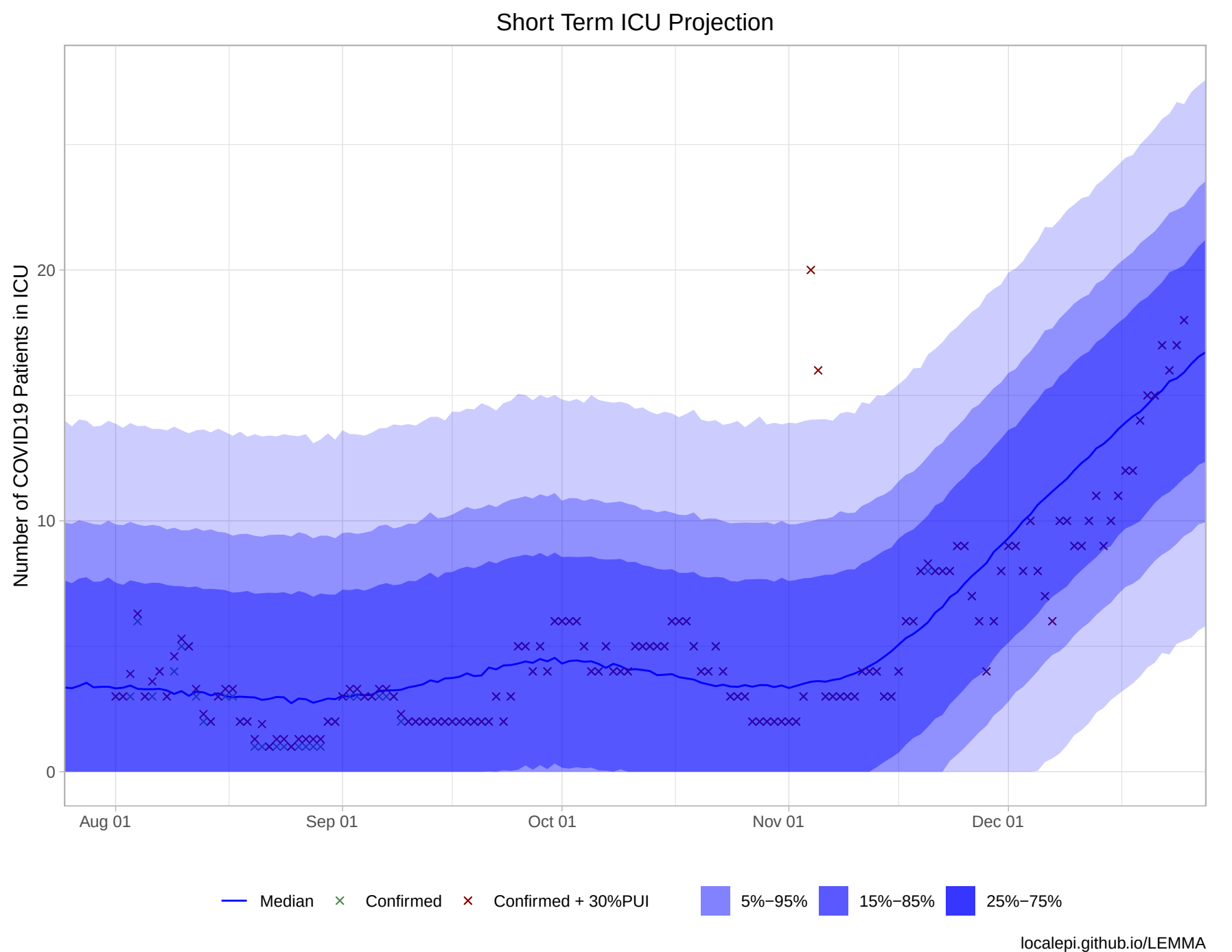
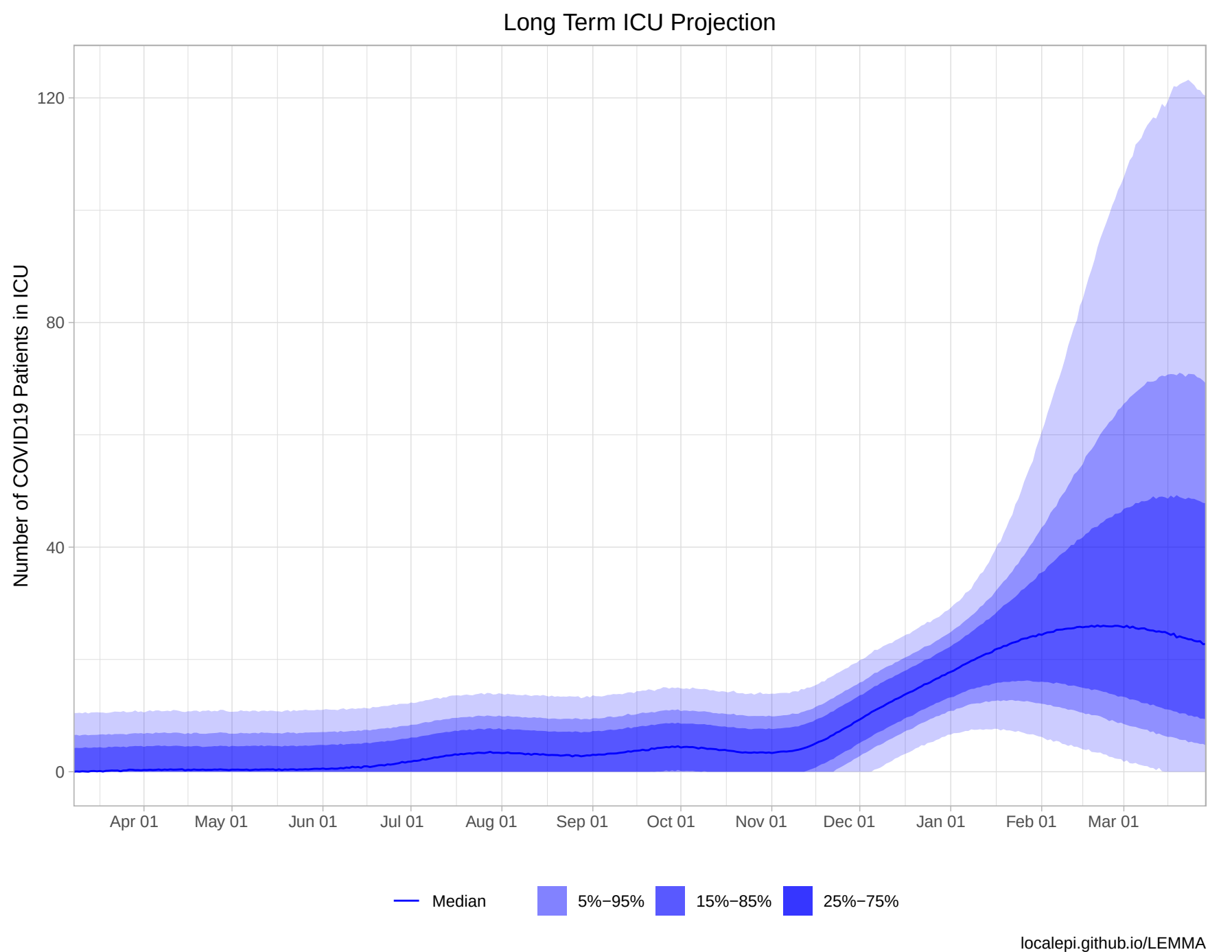
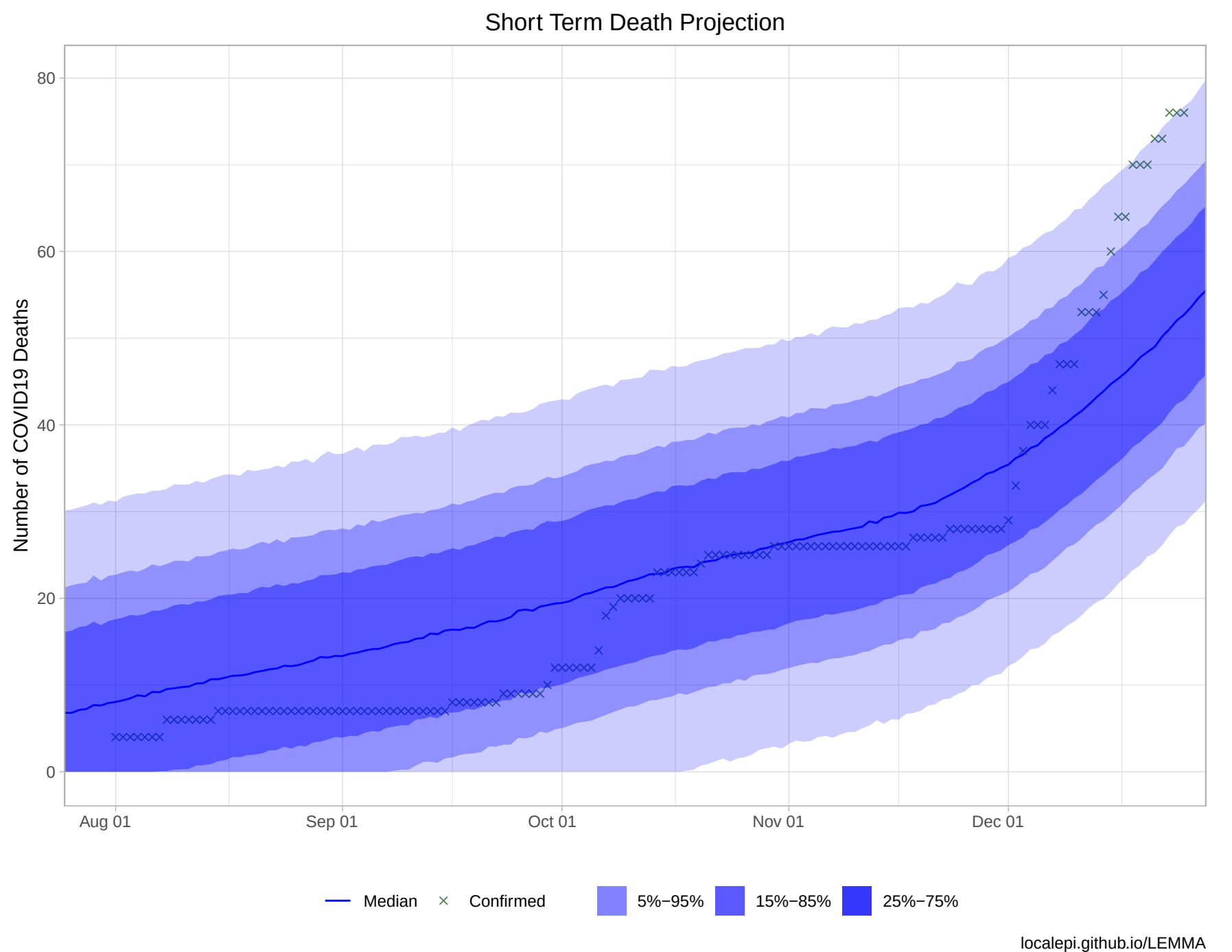
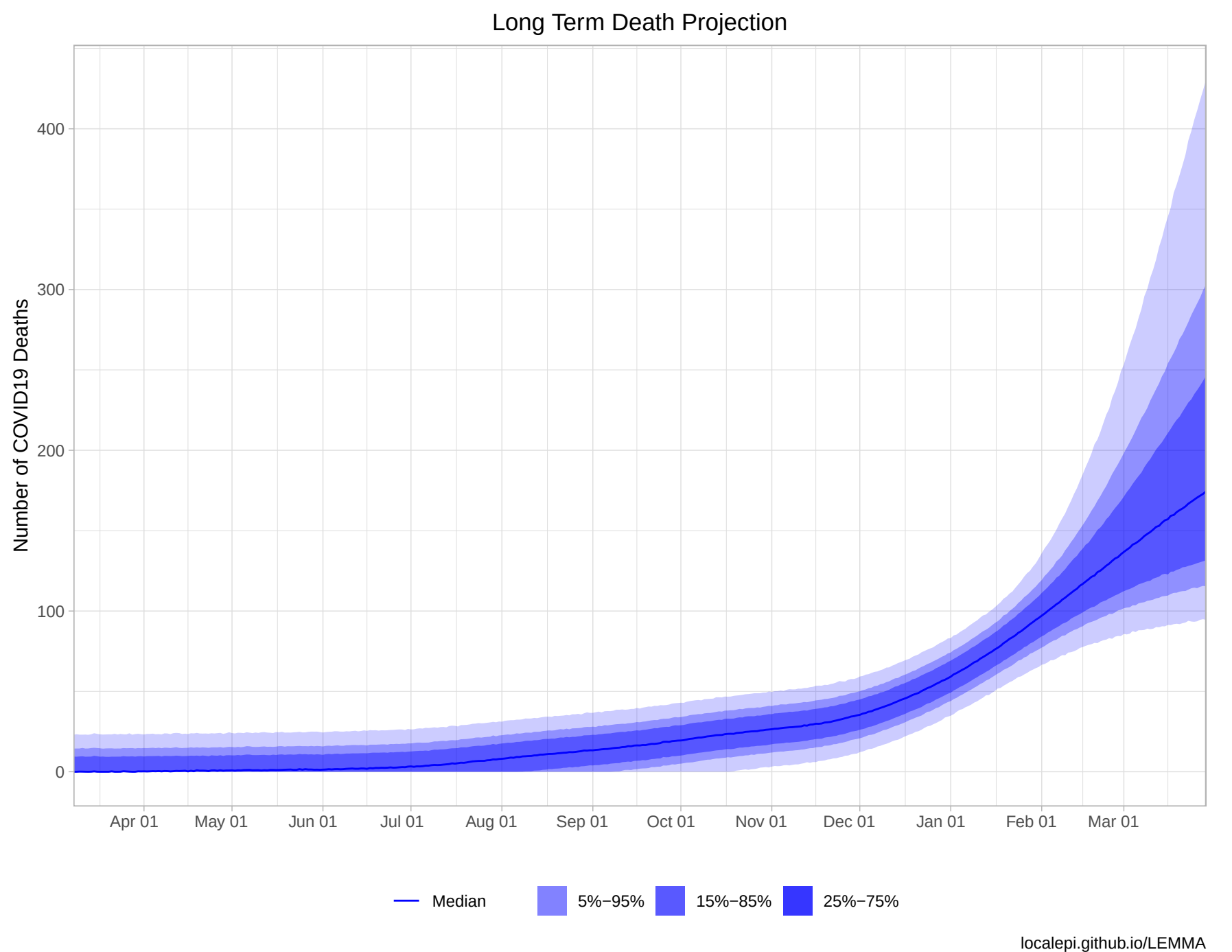

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
25
50
75
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

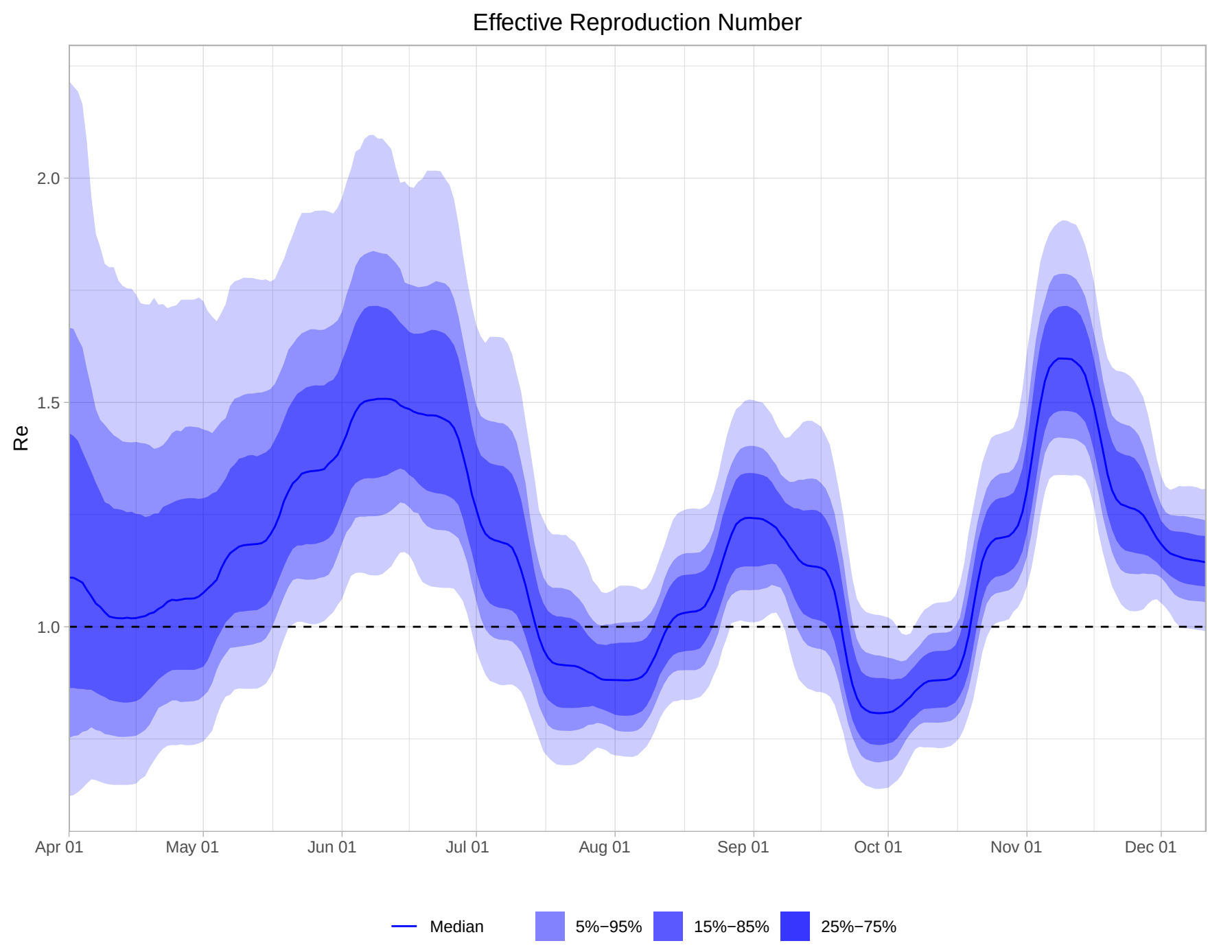

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
500
400
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
20
10
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
120
80
40
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

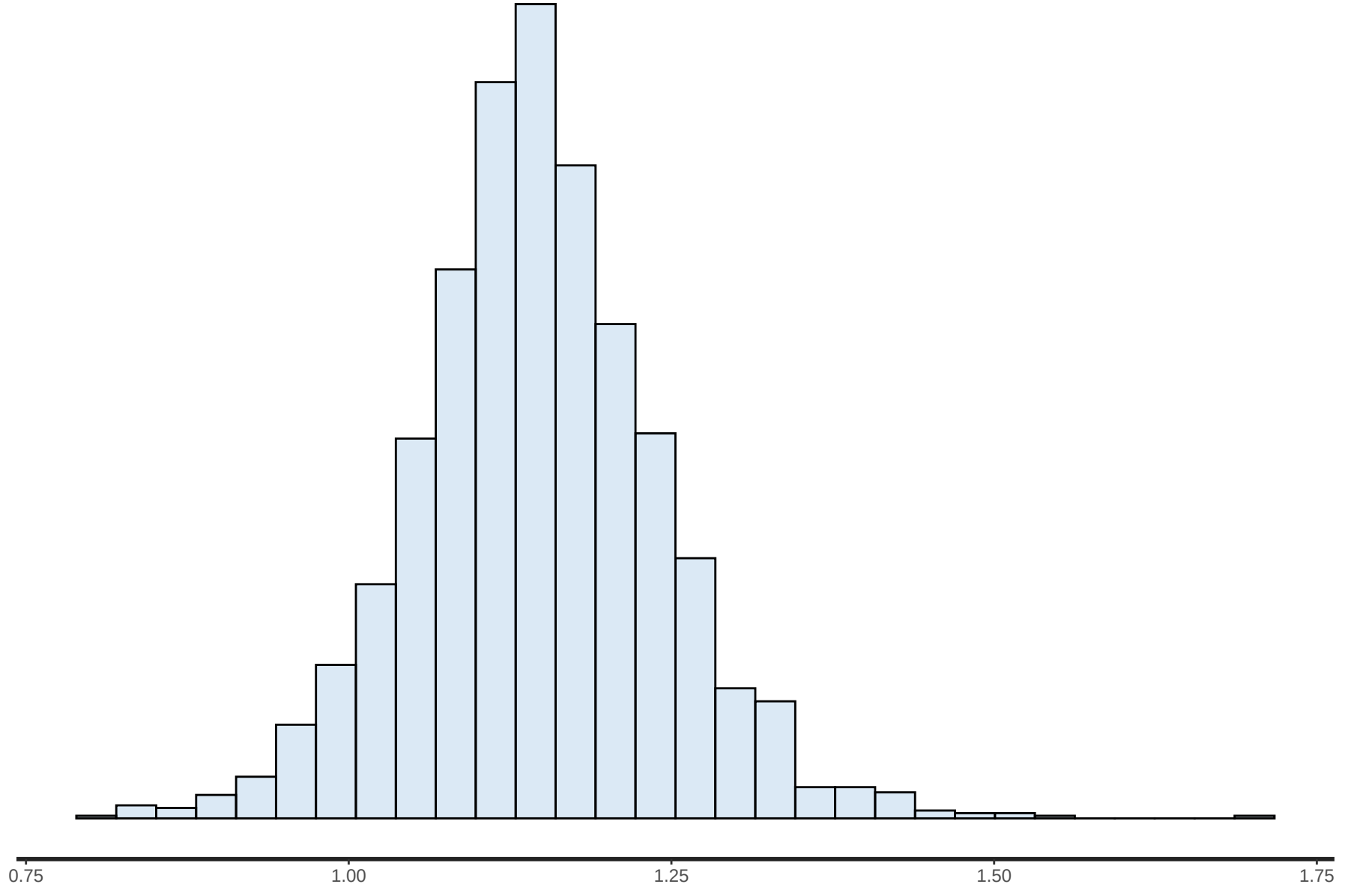

Short Term Death Projection
Number of COVID19 Deaths
80
60
40
20
0
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

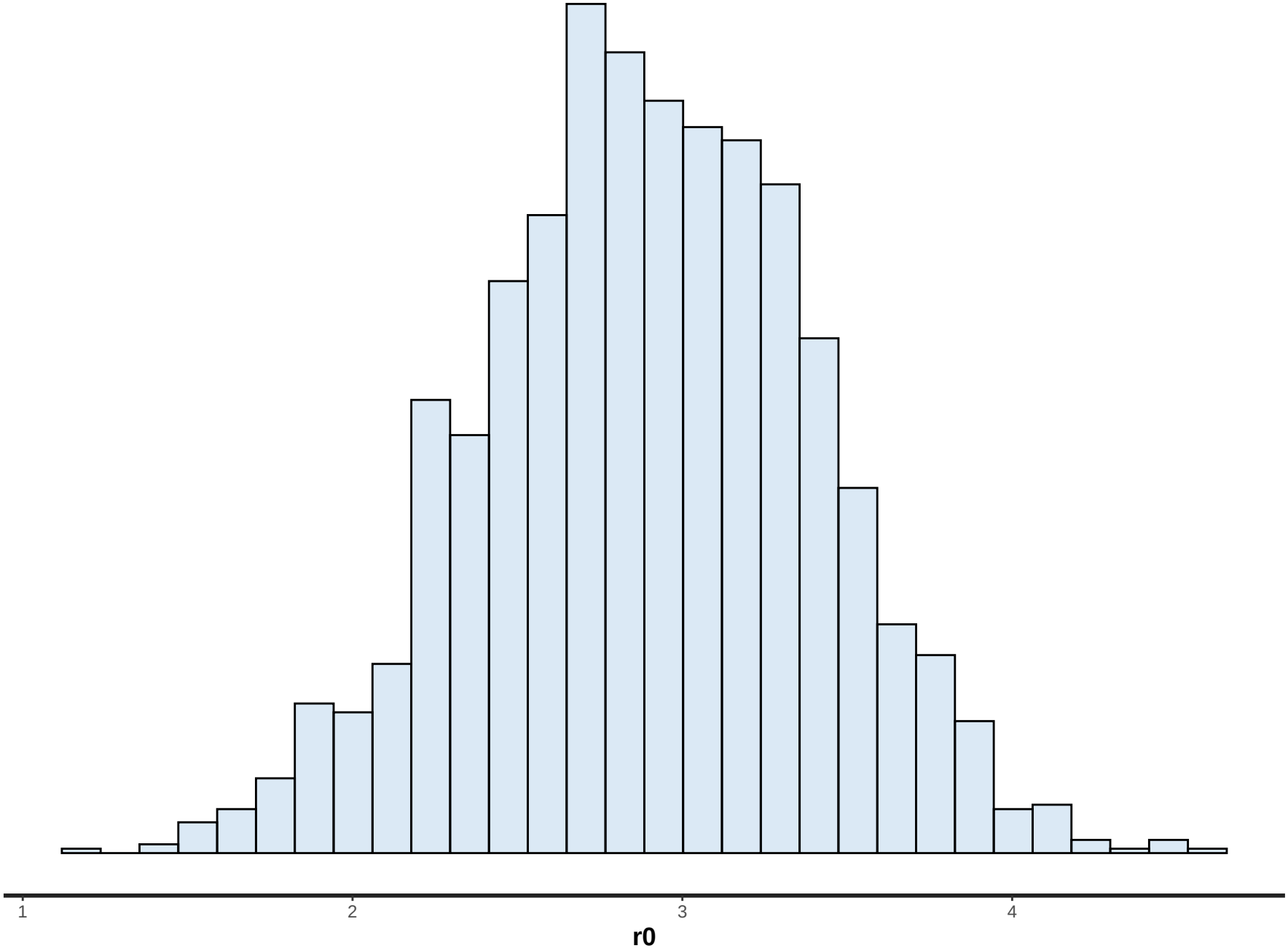

Long Term Death Projection
Number of COVID19 Deaths
400
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

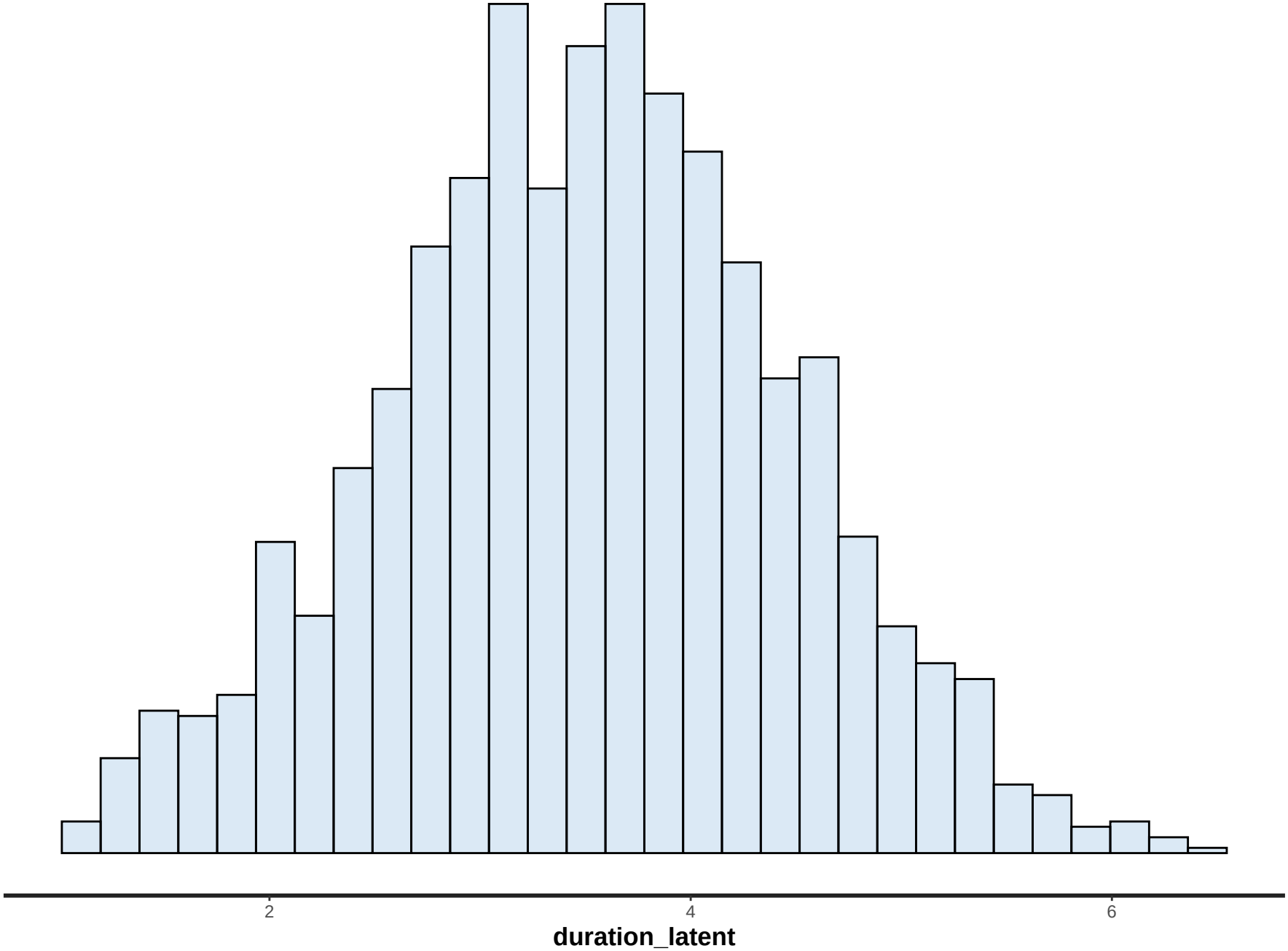

Effective Reproduction Number
Re
2.0
1.5
1.0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

Rt as of 2020−12−11

5%	10%	25%	50%	75%	90%	95%
0.99	1.03	1.09	1.14	1.20	1.26	1.31




1
2
3
4
r0


2
4
6
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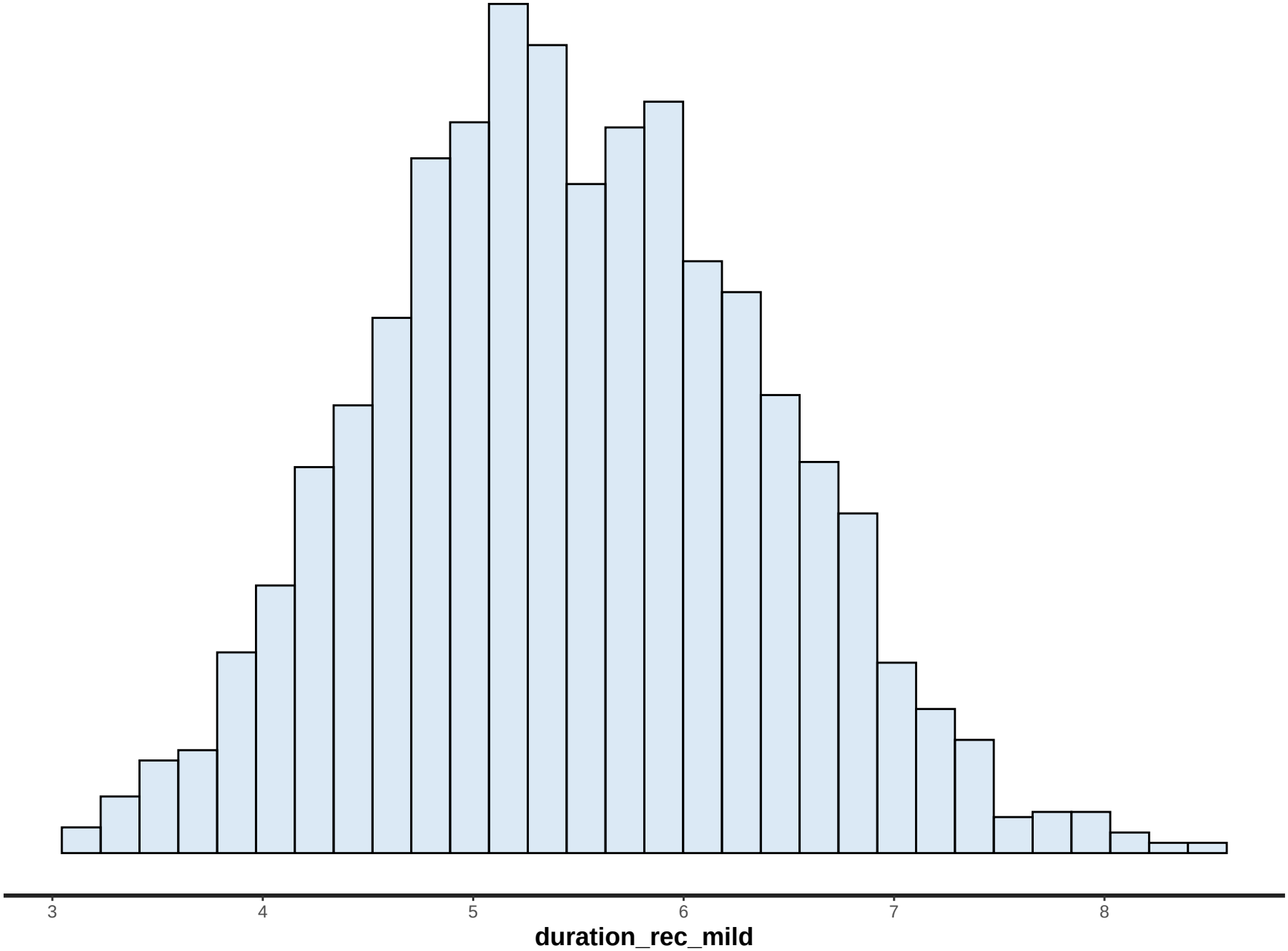
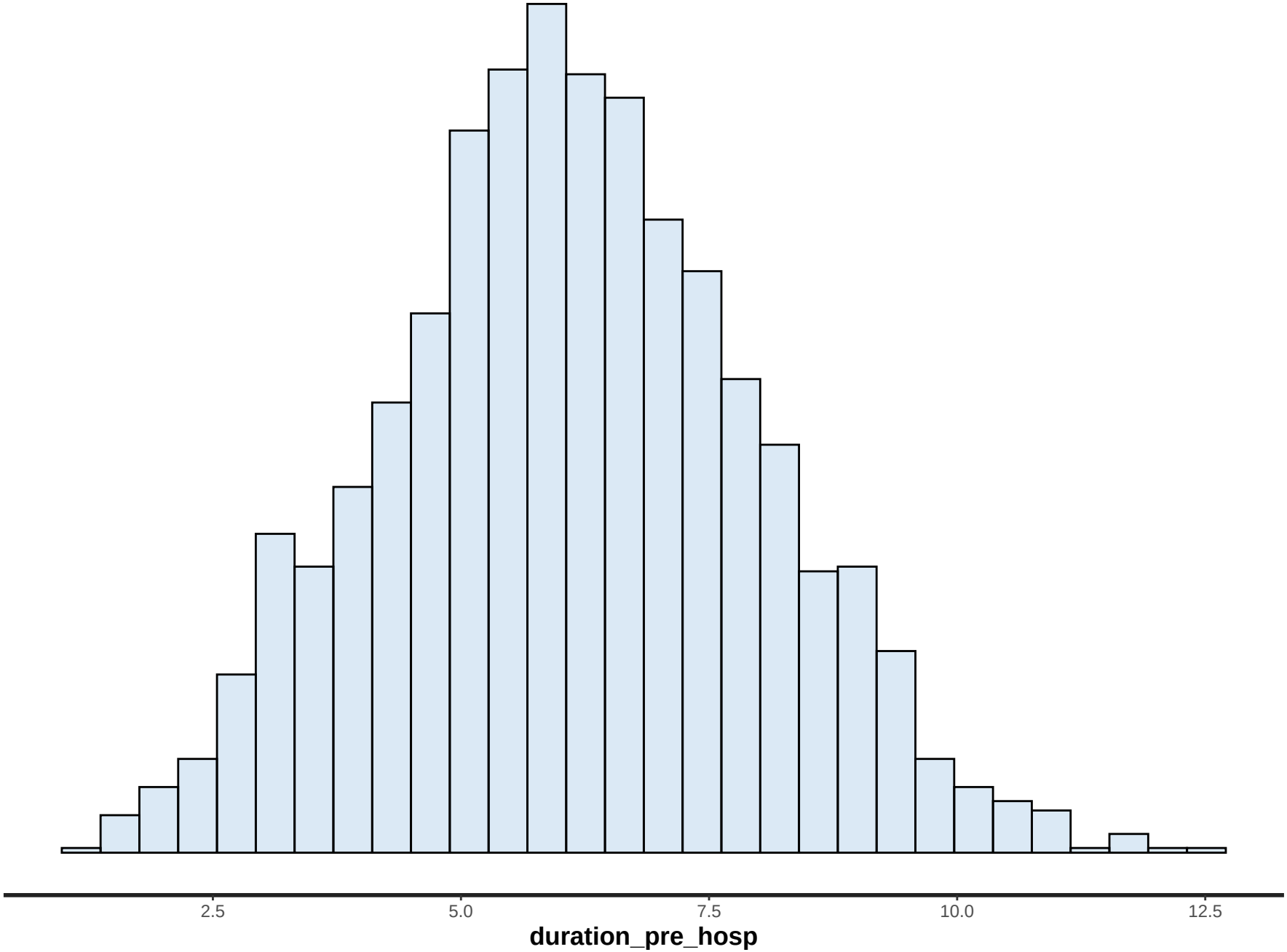
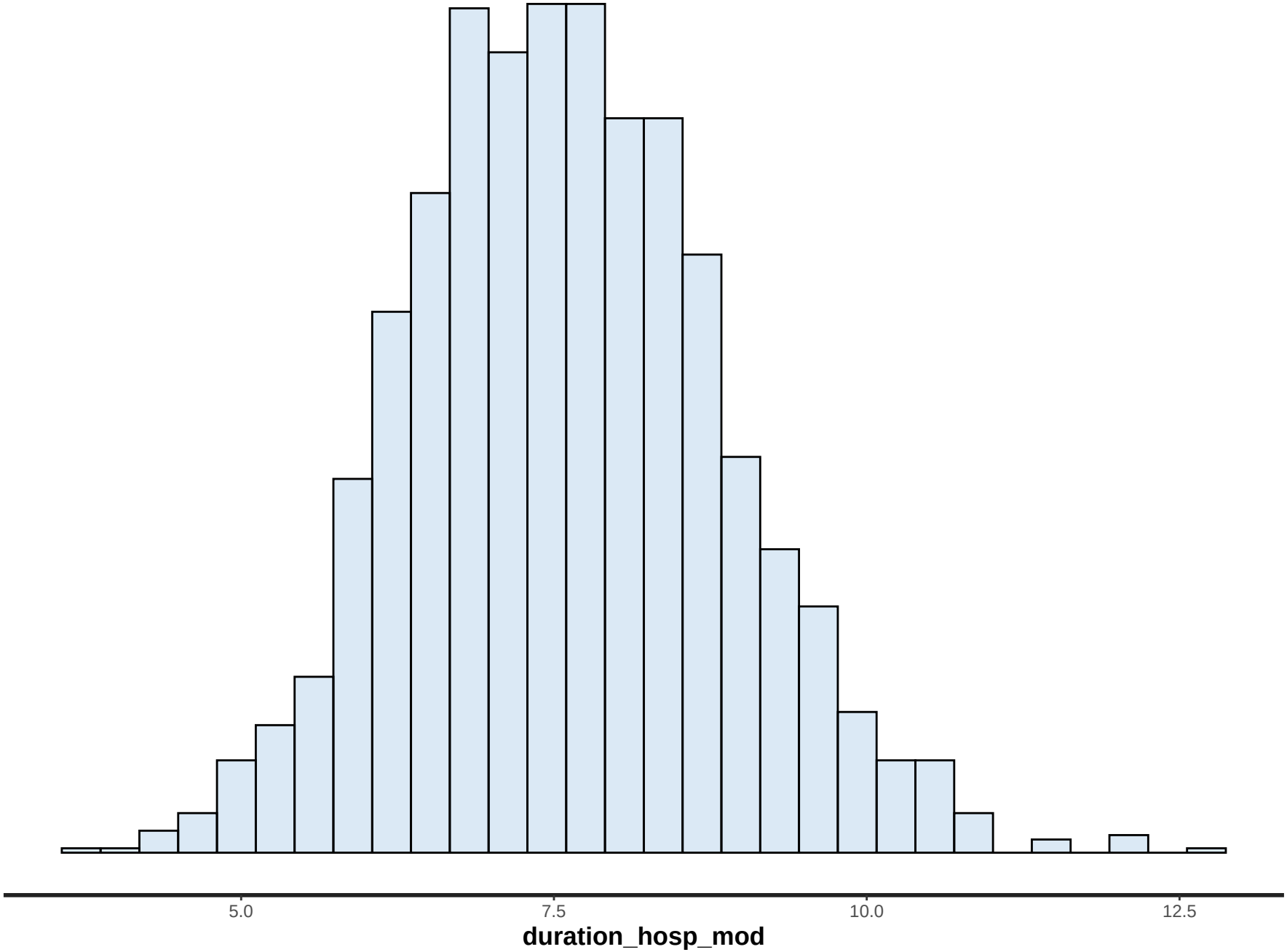

3
4
5
6
7
8
duration_rec_mild


2.5
5.0
7.5
10.0
12.5
duration_pre_hosp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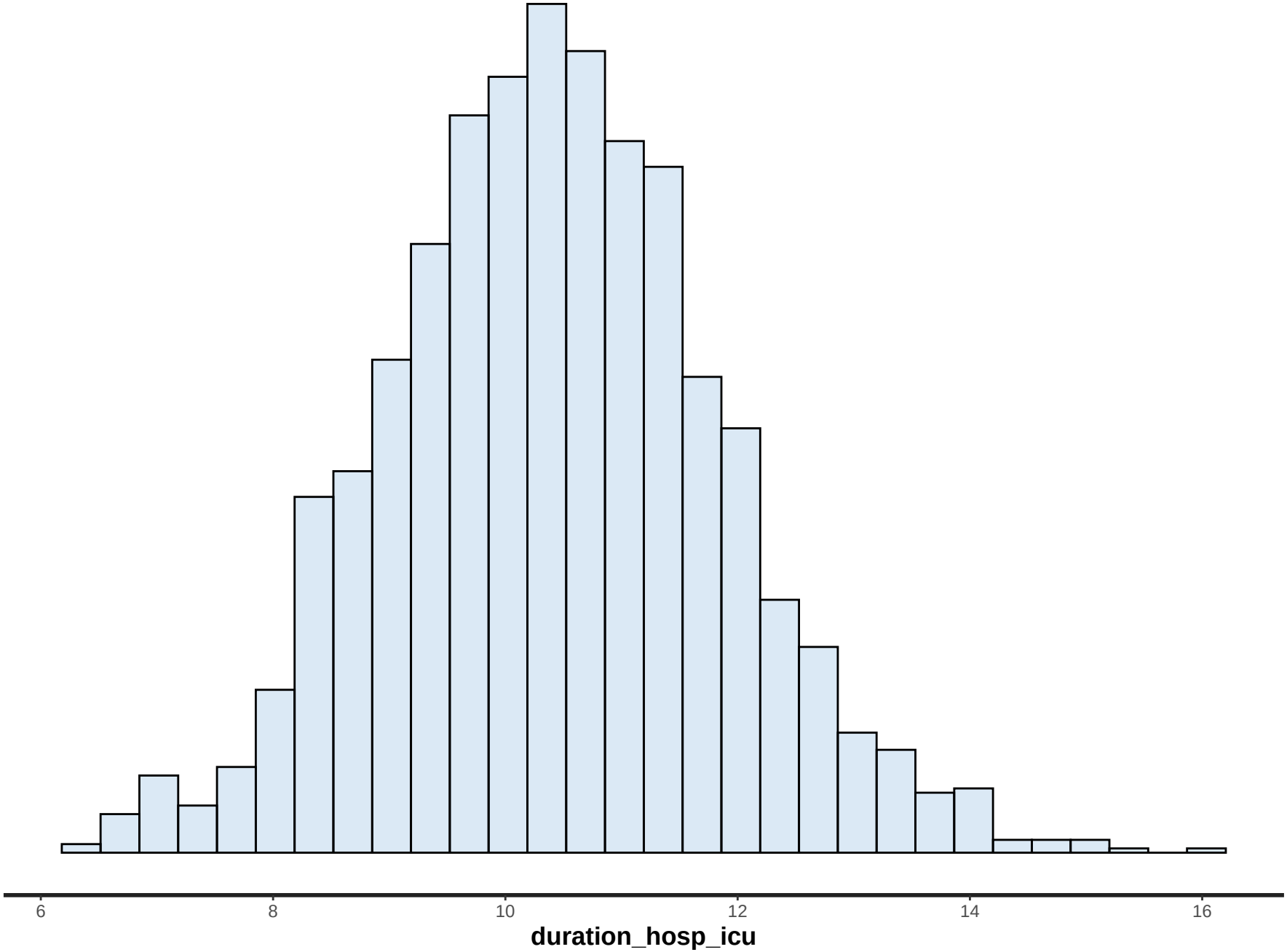
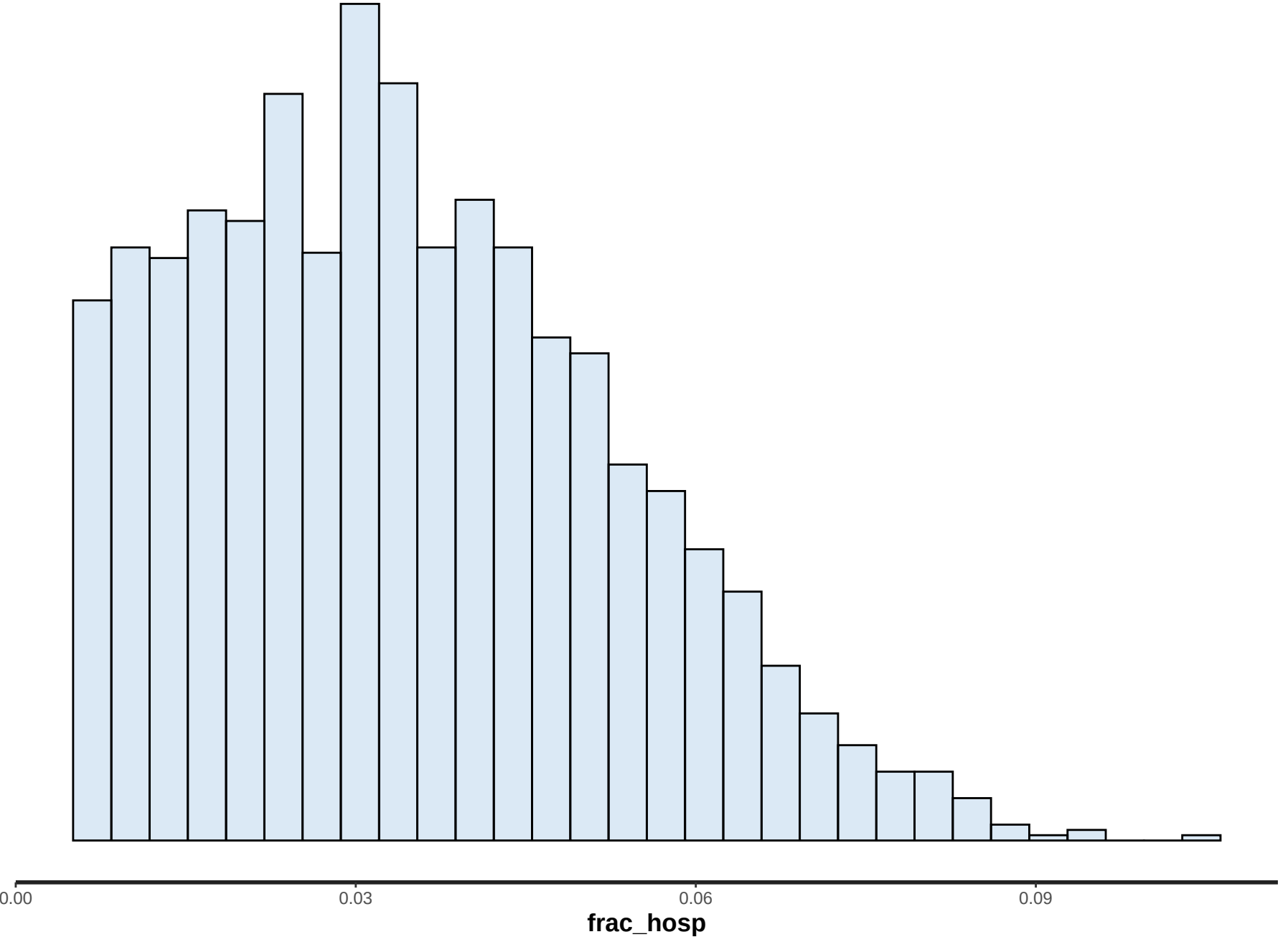
7.5
10.0
12.5
duration_hosp_mod


6
8
10
12
14
16
duration_hosp_icu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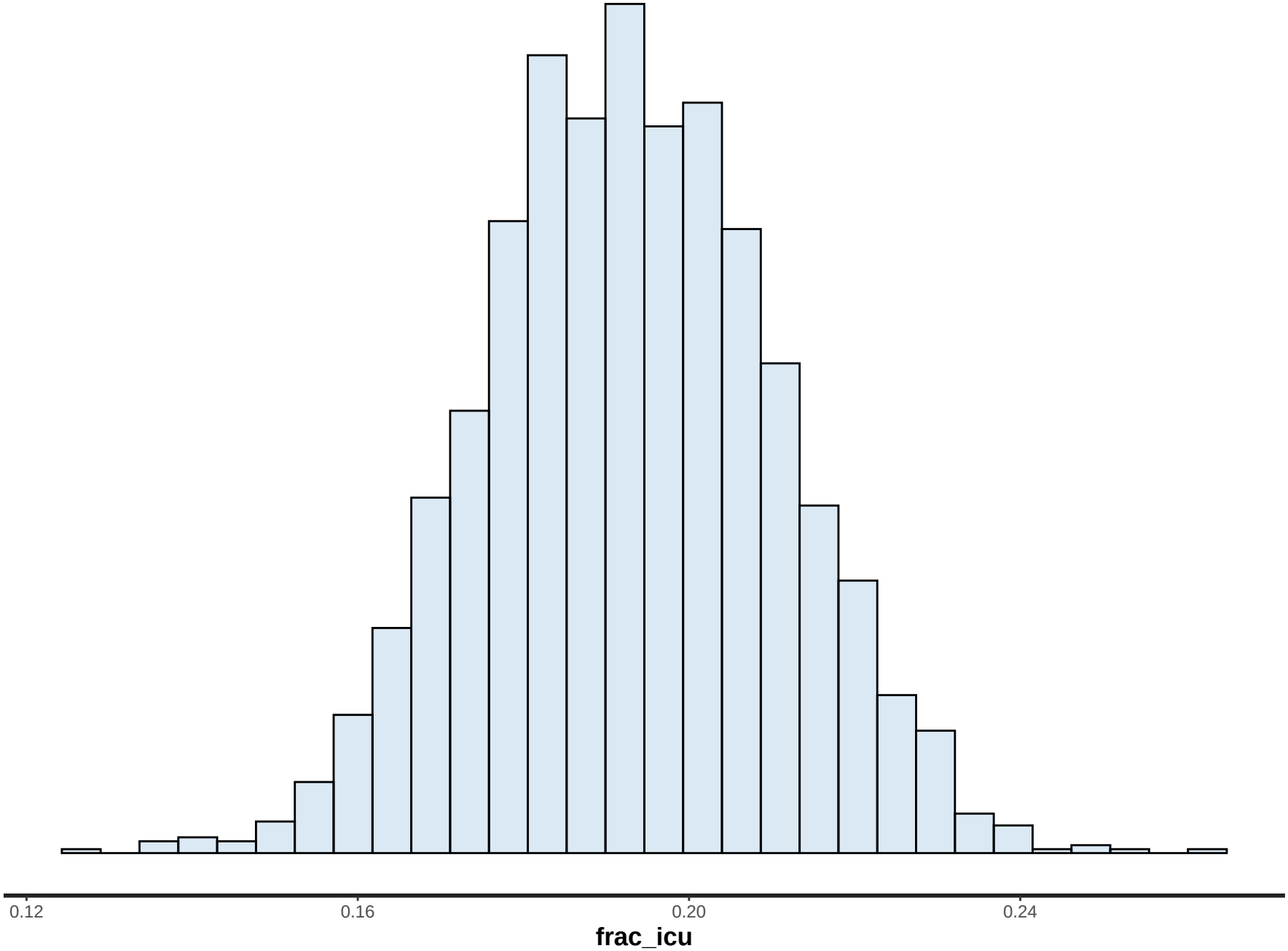
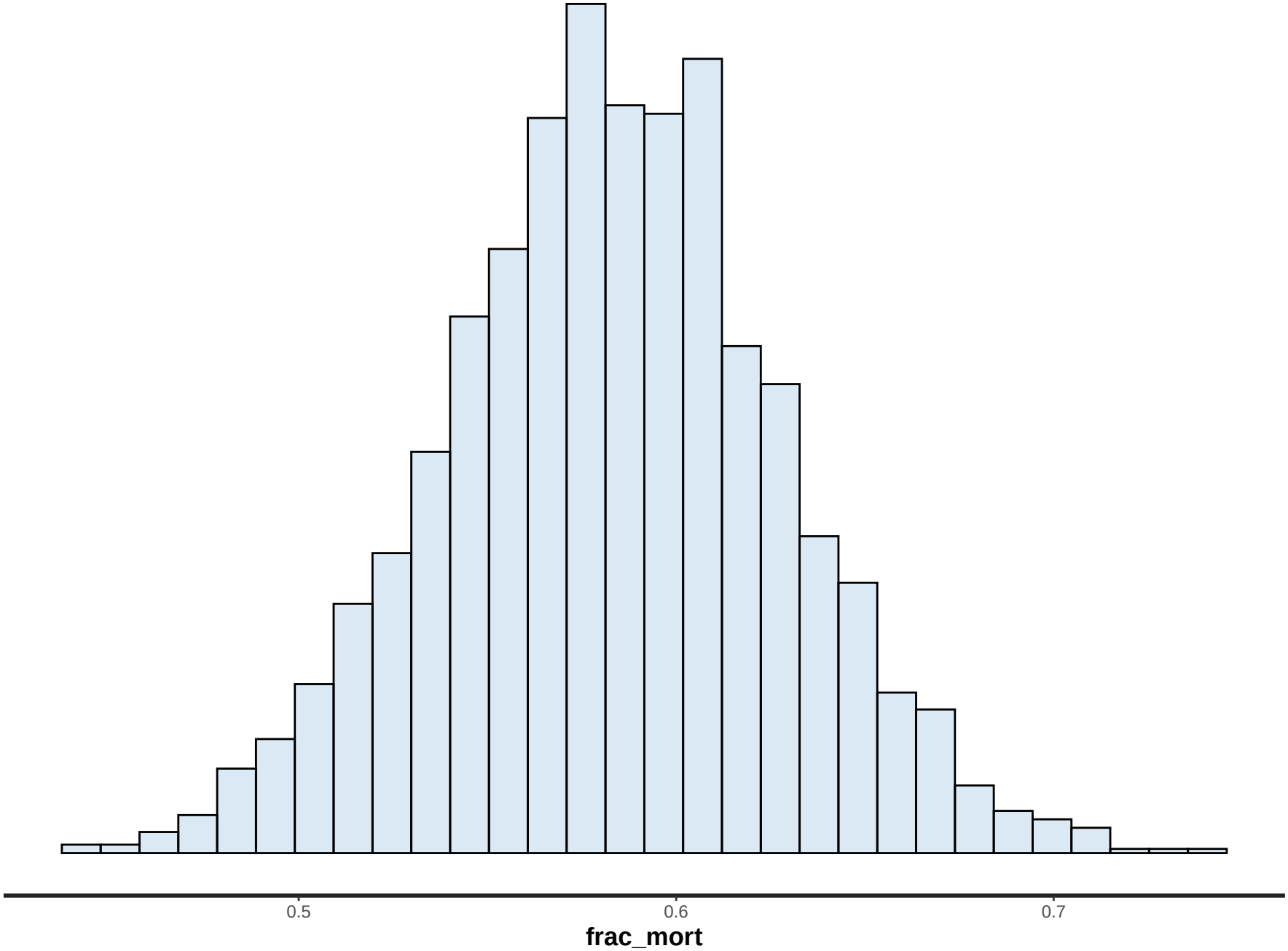
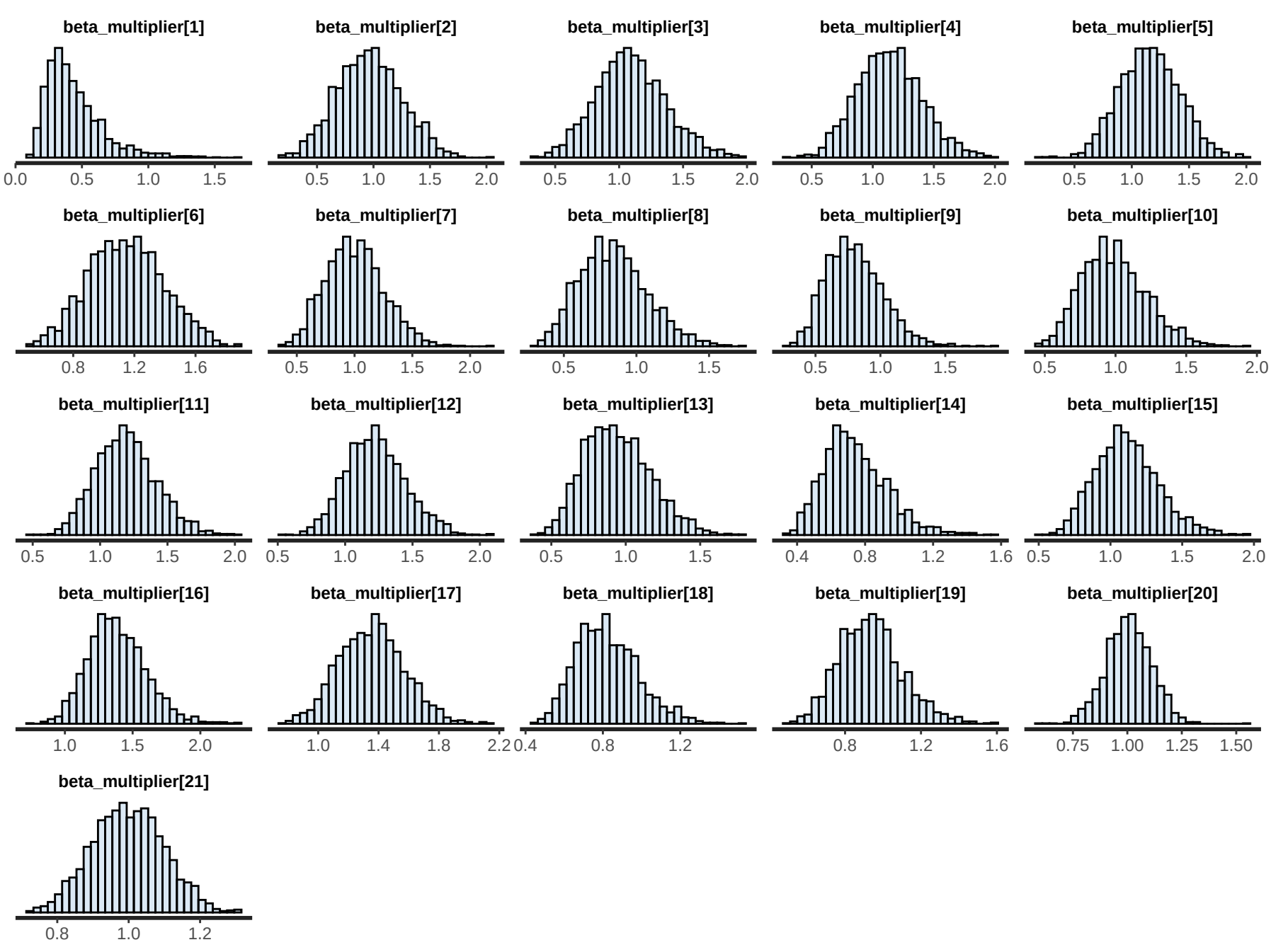
0.03
0.06
0.09
frac_hosp


0.12
0.16
0.20
0.24
frac_icu


0.5
0.6
0.7
frac_mort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beta_multiplier[6]
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beta_multiplier[7]
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beta_multiplier[9]
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beta_multiplier[10]
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beta_multiplier[15]
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1.0 1.5 2.0
beta_multiplier[17]
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beta_multiplier[18]
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beta_multiplier[19]
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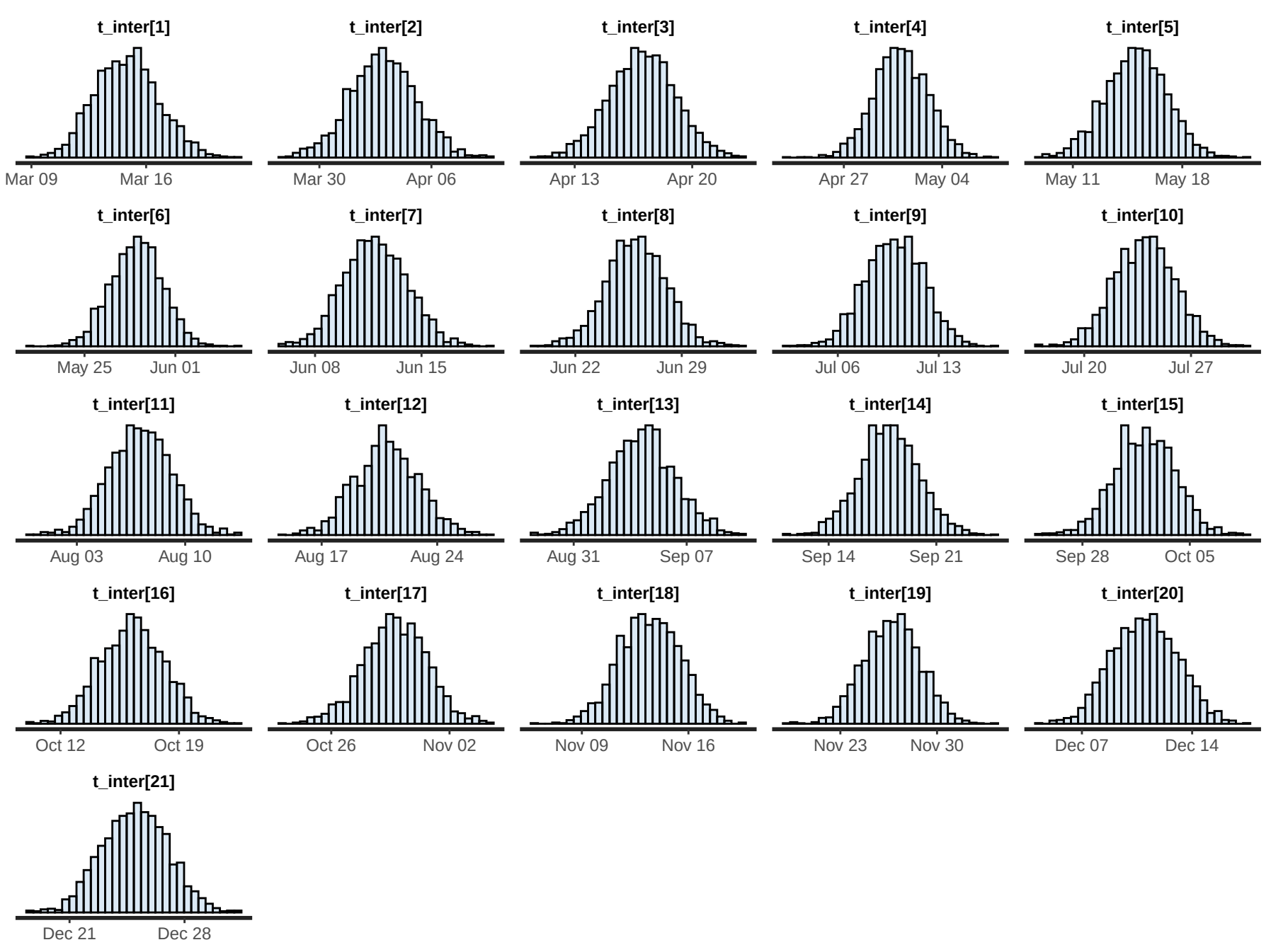
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May 11
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May 25
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Aug 31
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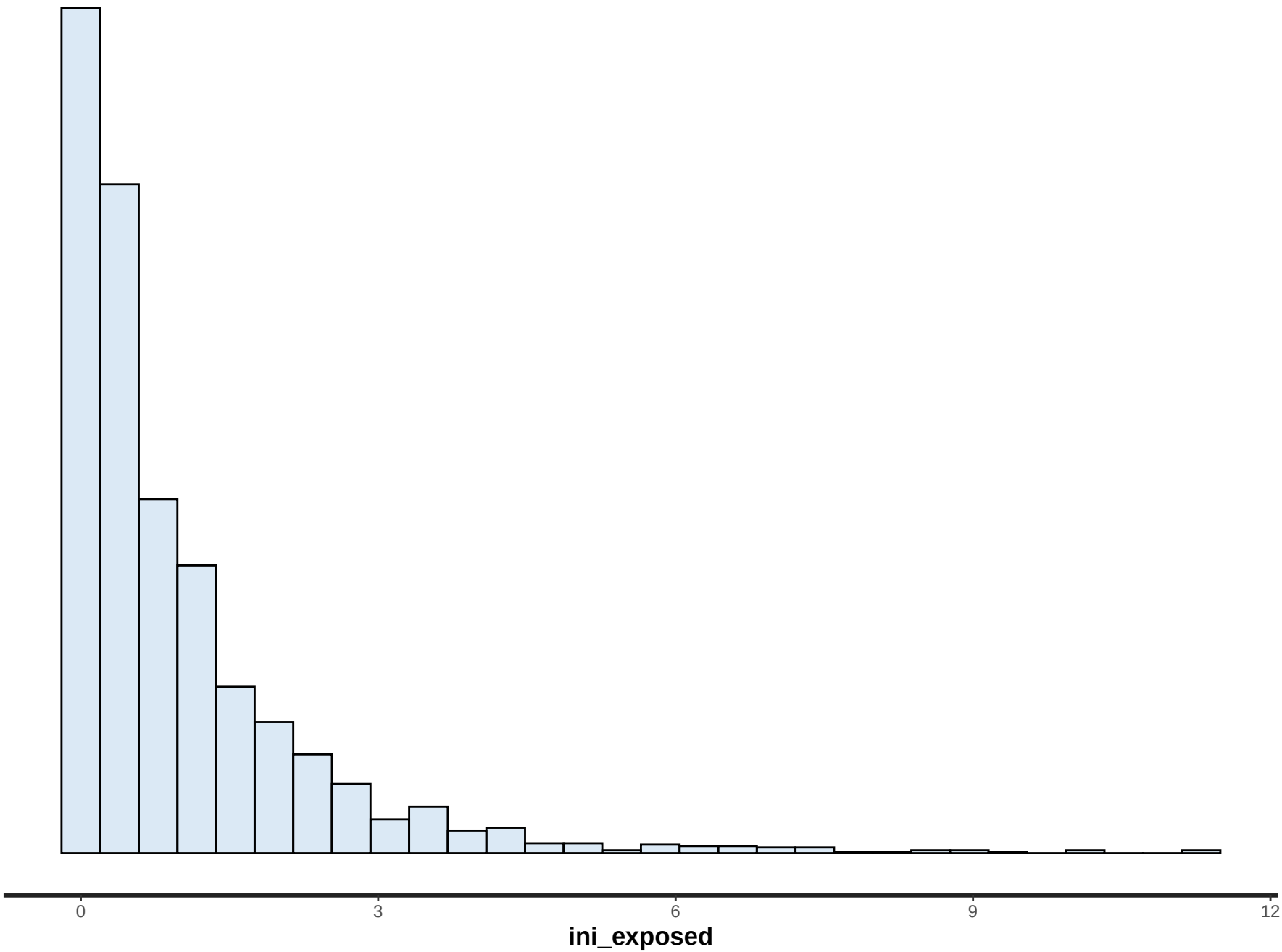
Dec 21
Dec 28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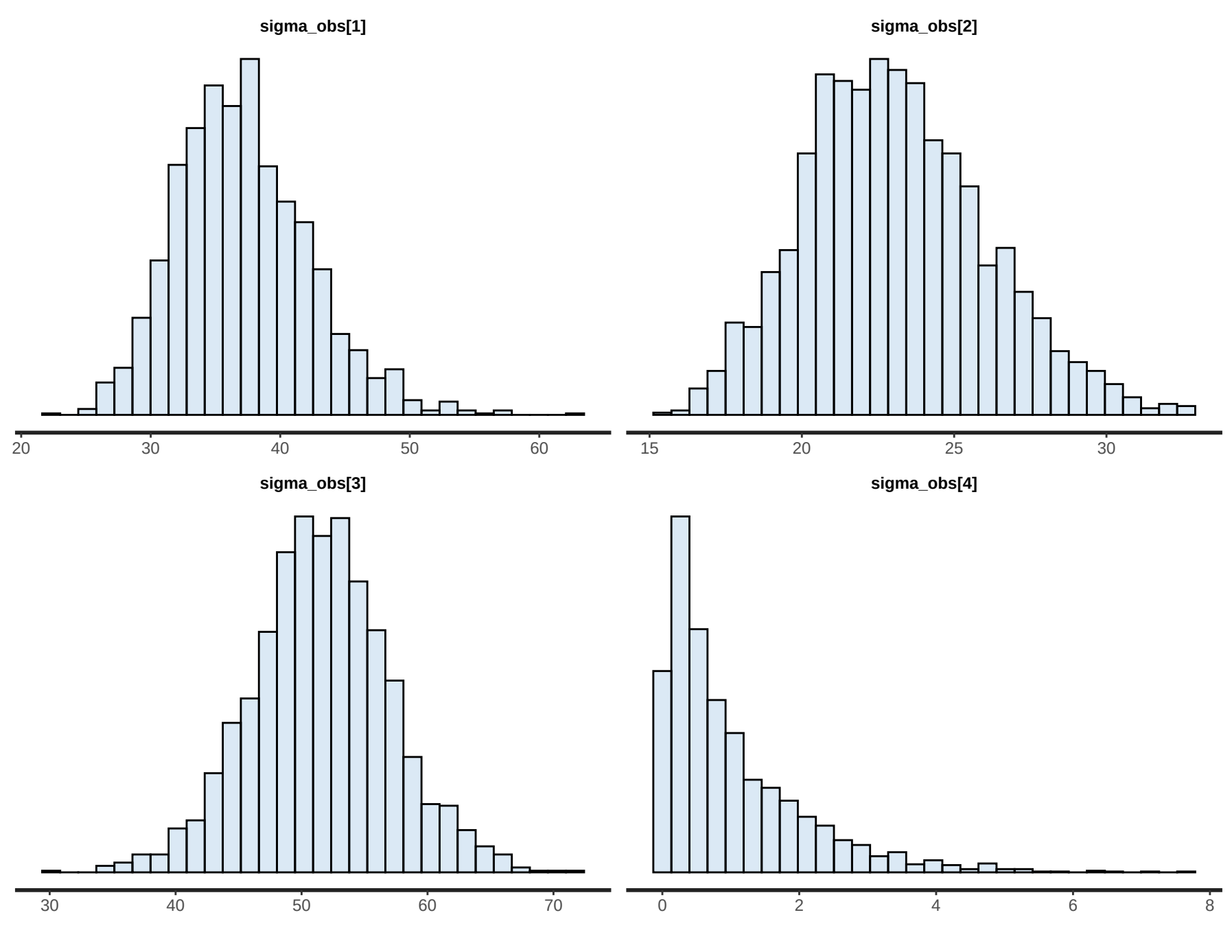
6
9
12
ini_exposed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sigma_obs[4]
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8