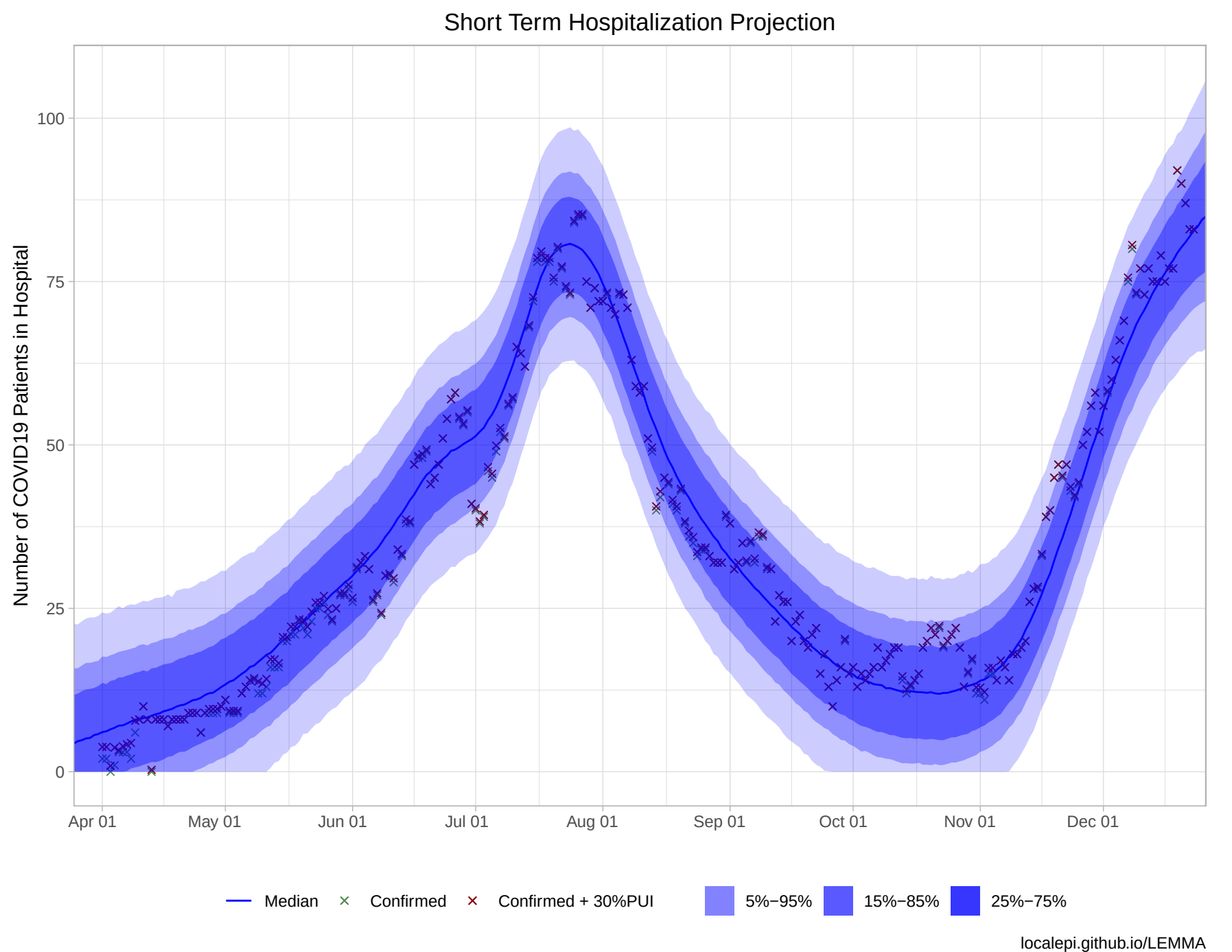
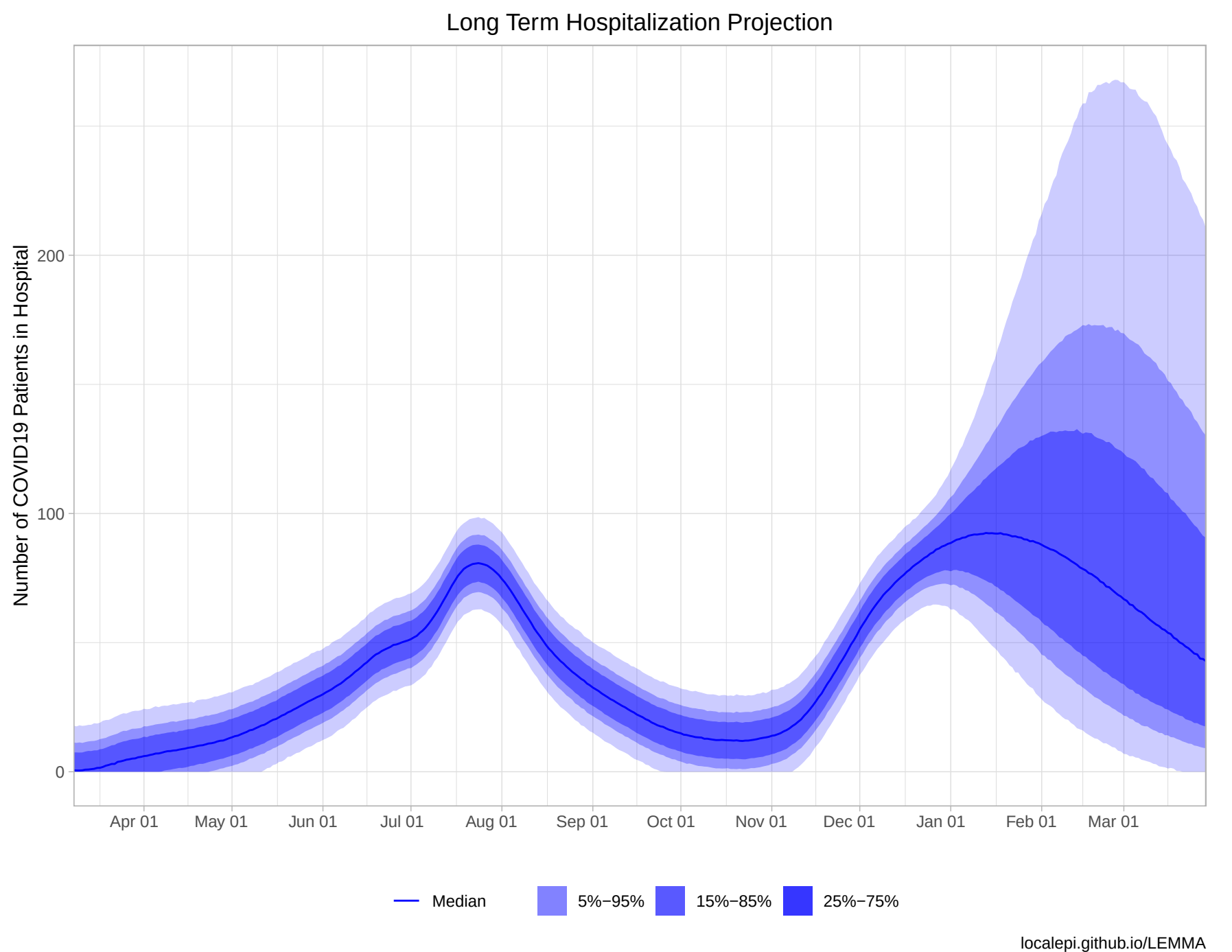
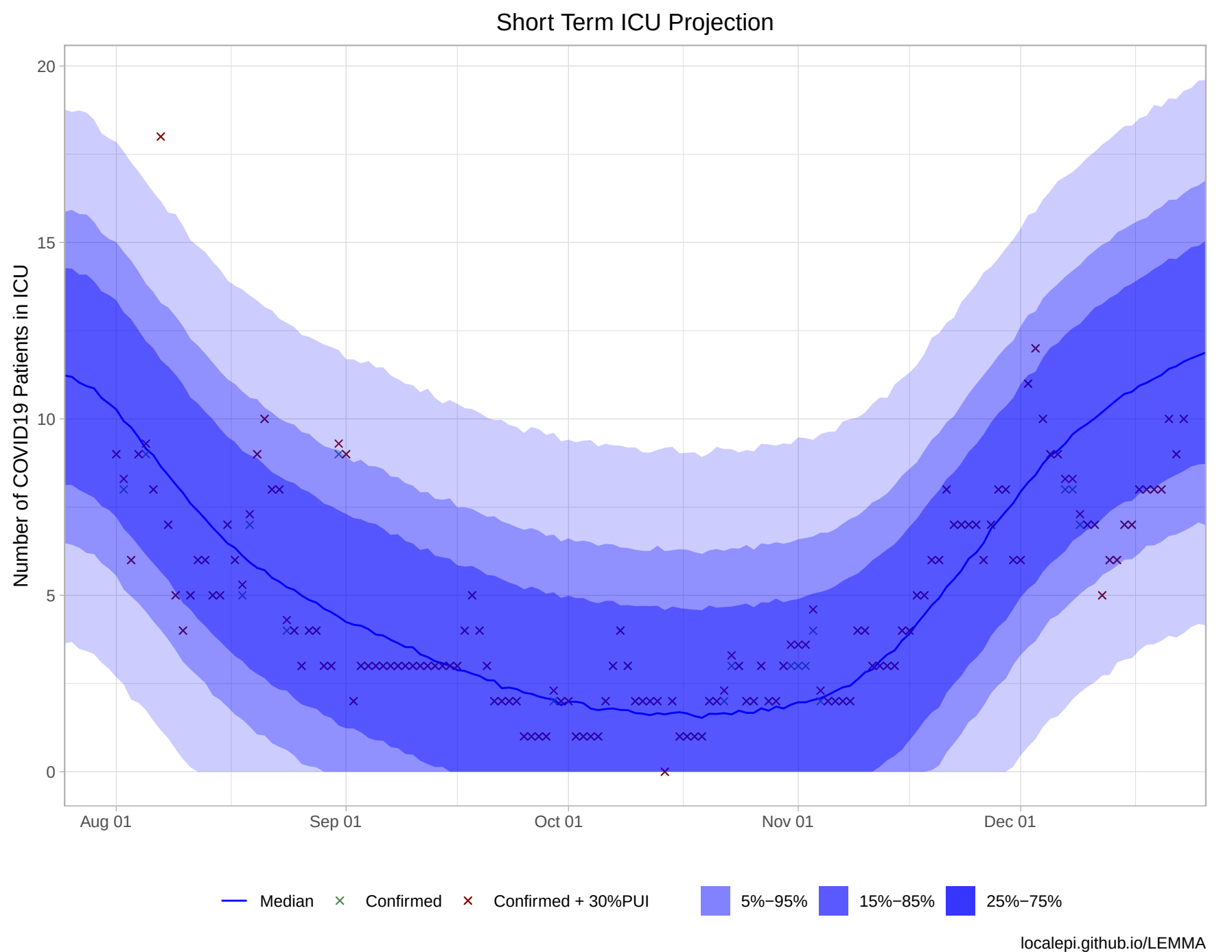
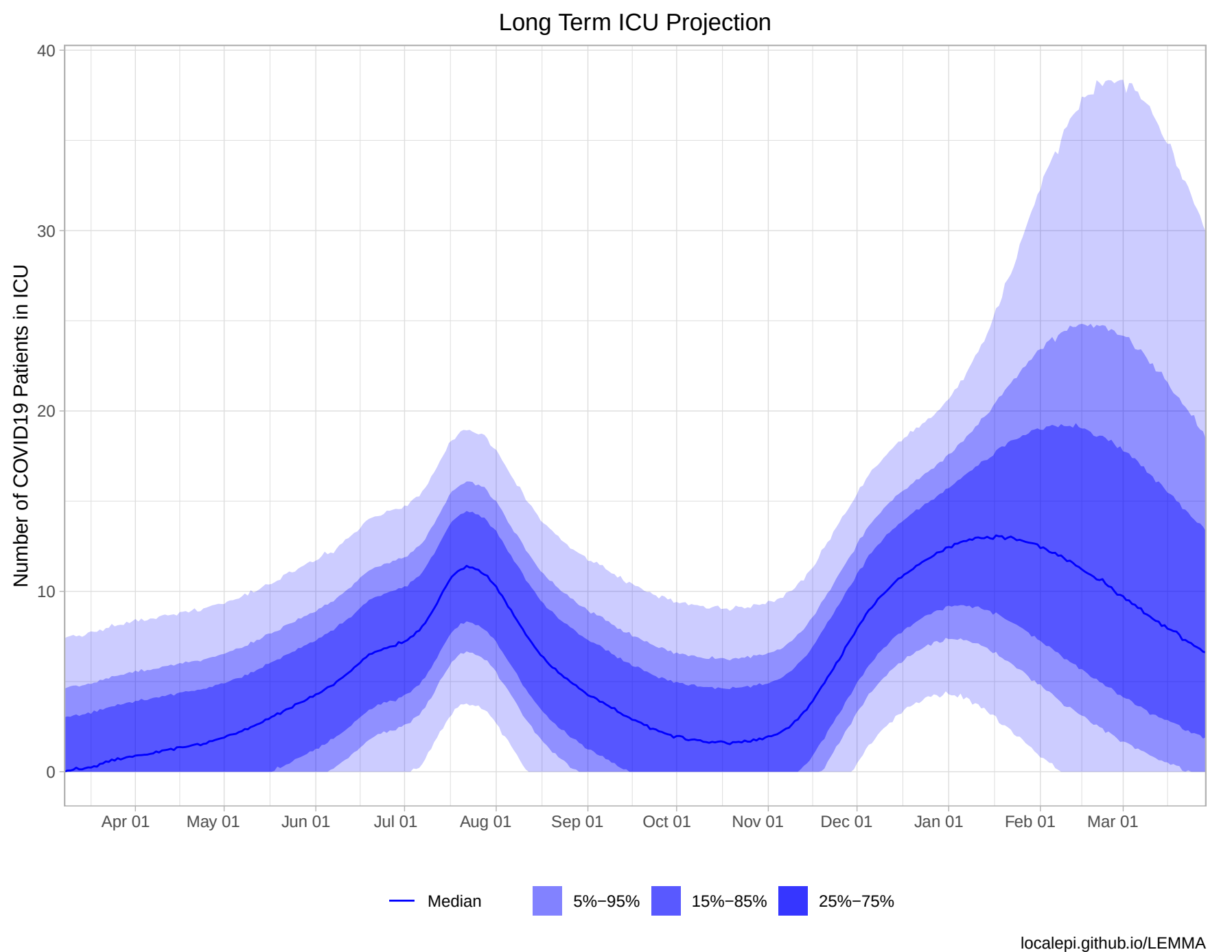
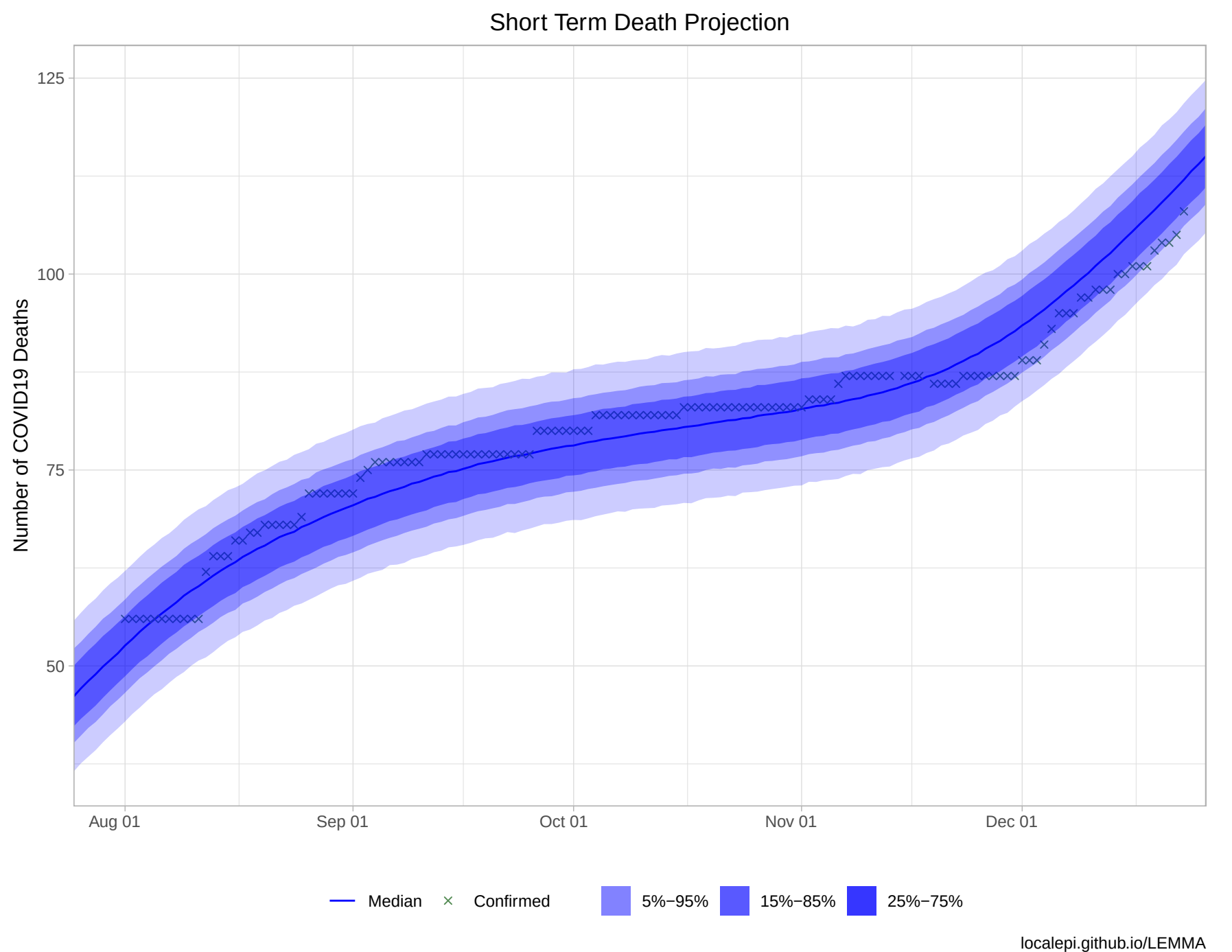
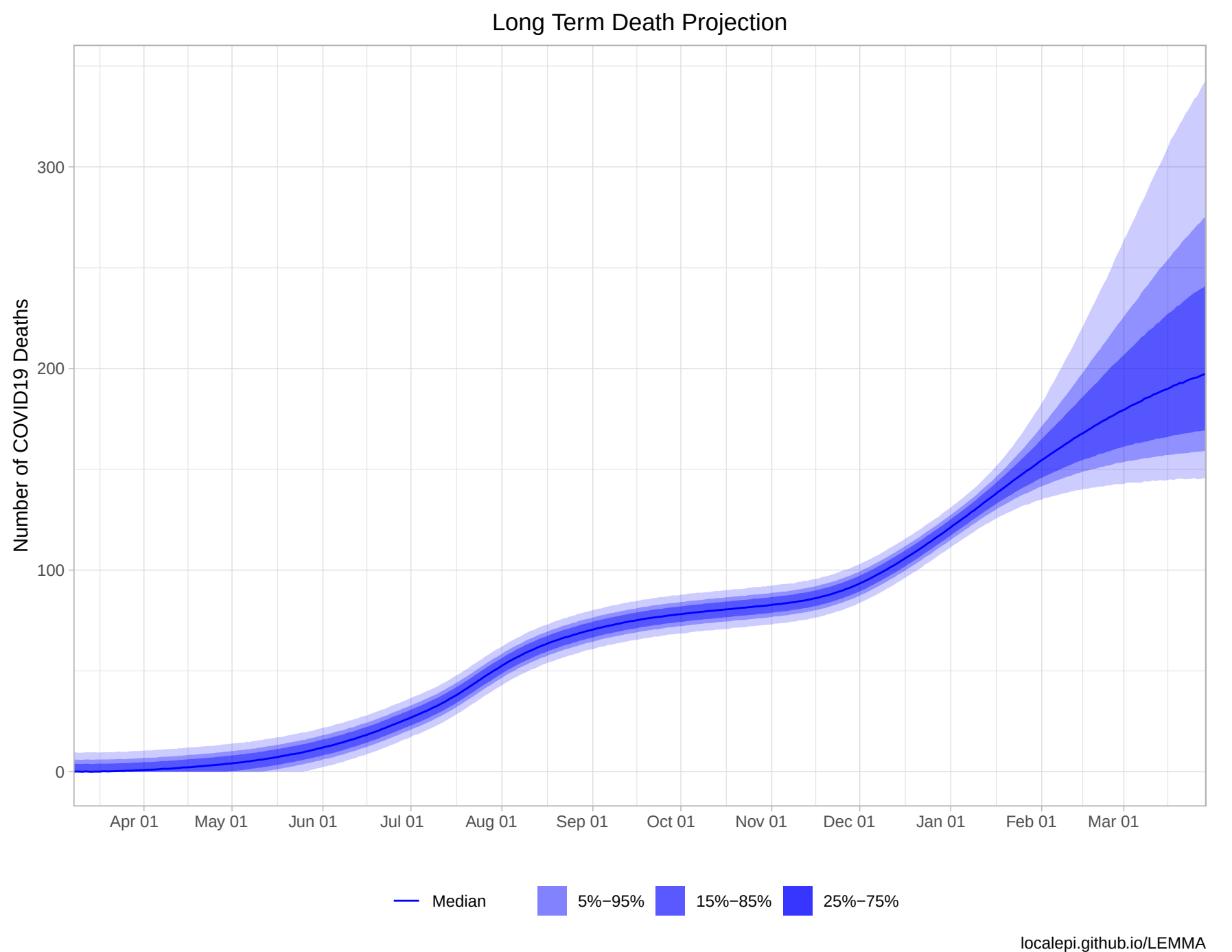

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
100
75
50
25
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

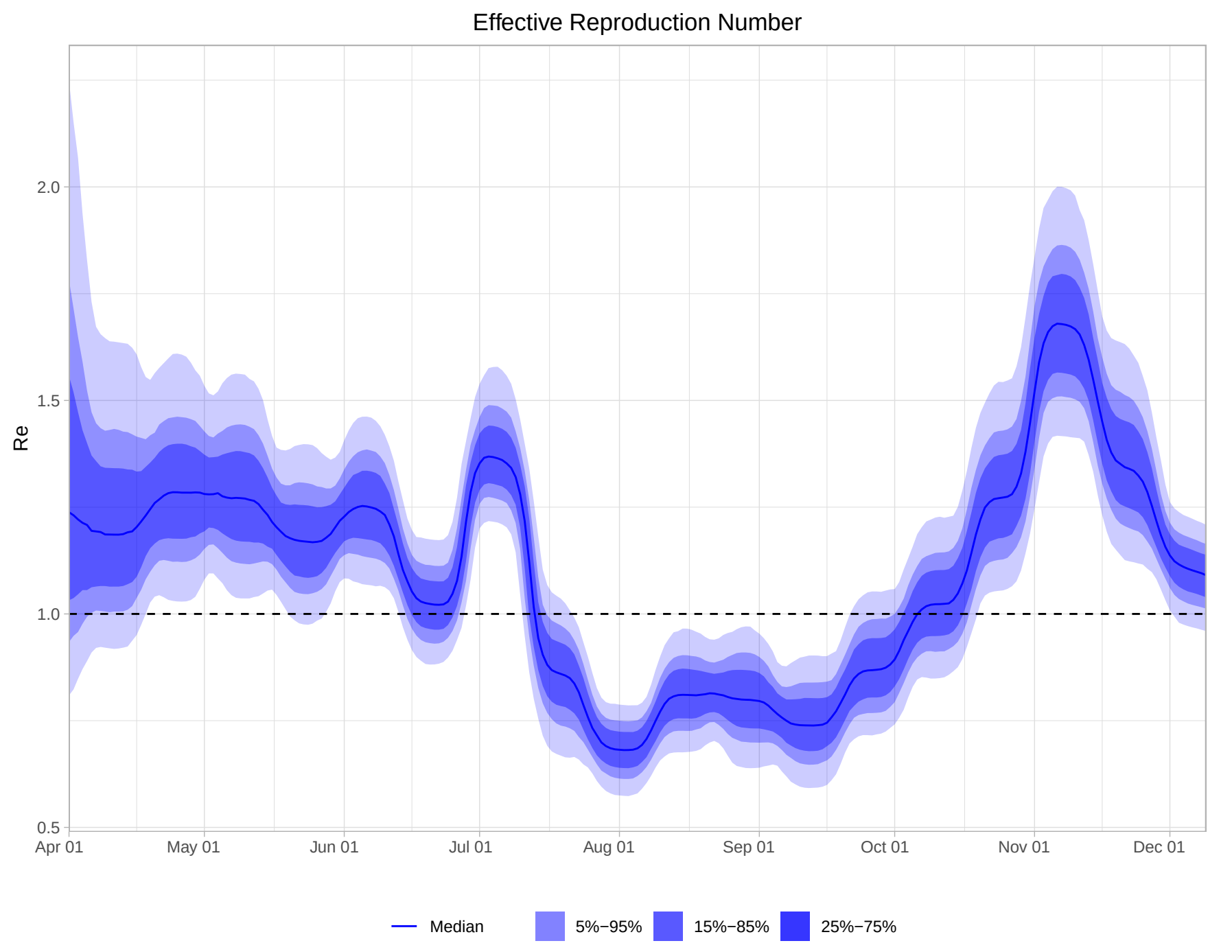

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


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
40
30
20
10
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

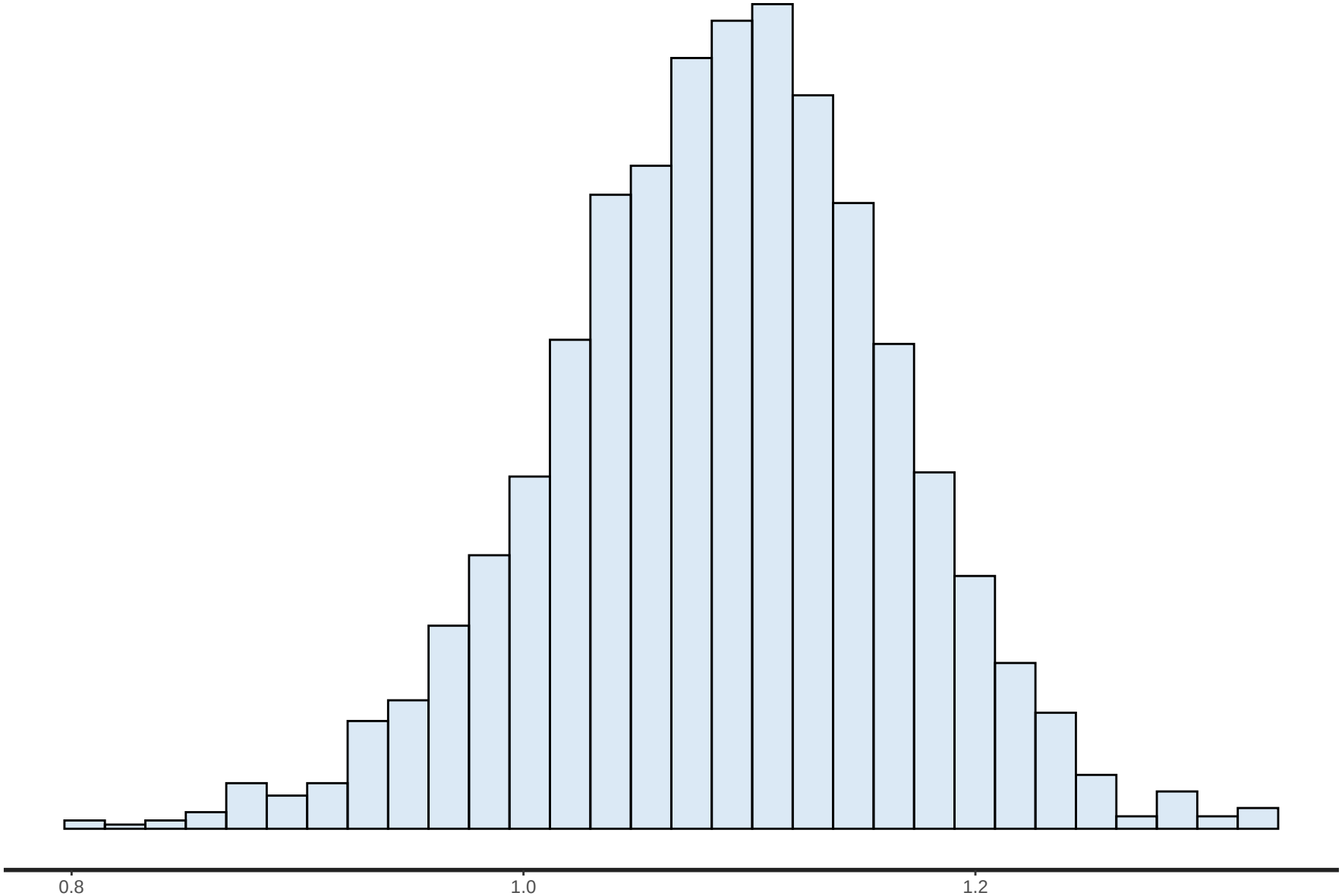

Short Term Death Projection
Number of COVID19 Deaths
125
100
75
50
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

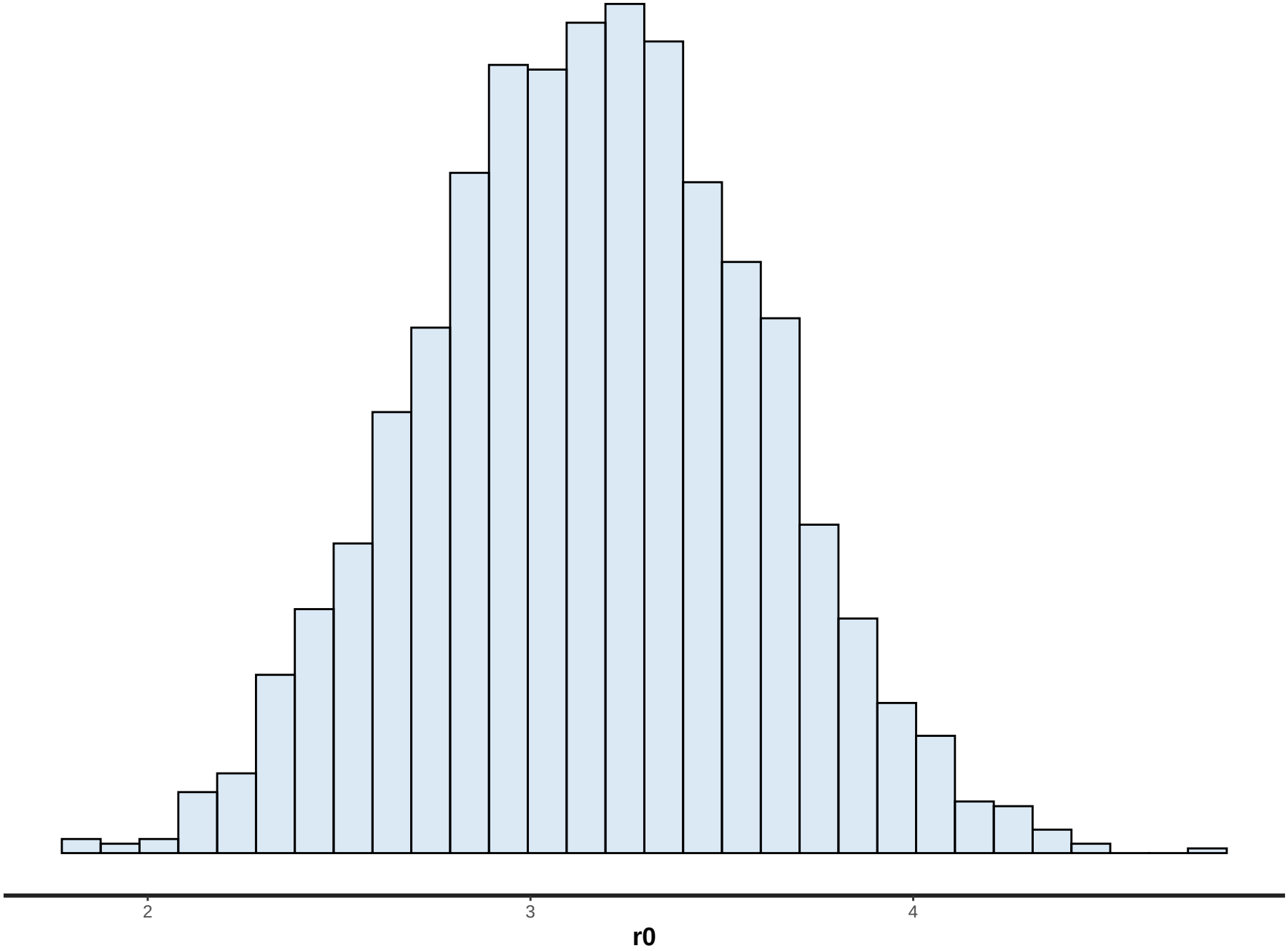

Long Term Death Projection
Number of COVID19 Deaths
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

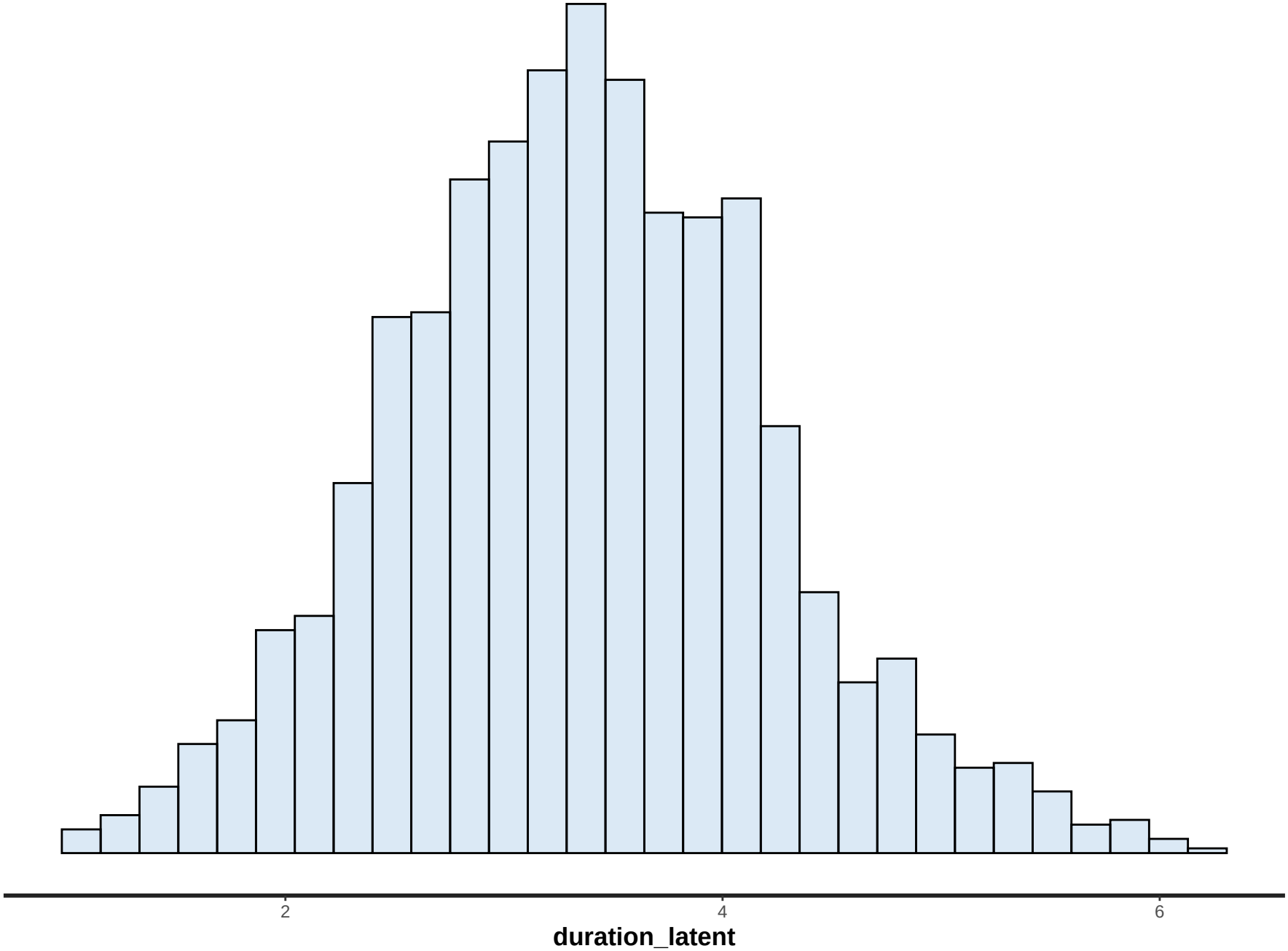

Effective Reproduction Number
Re
2.0
1.5
1.0
0.5
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

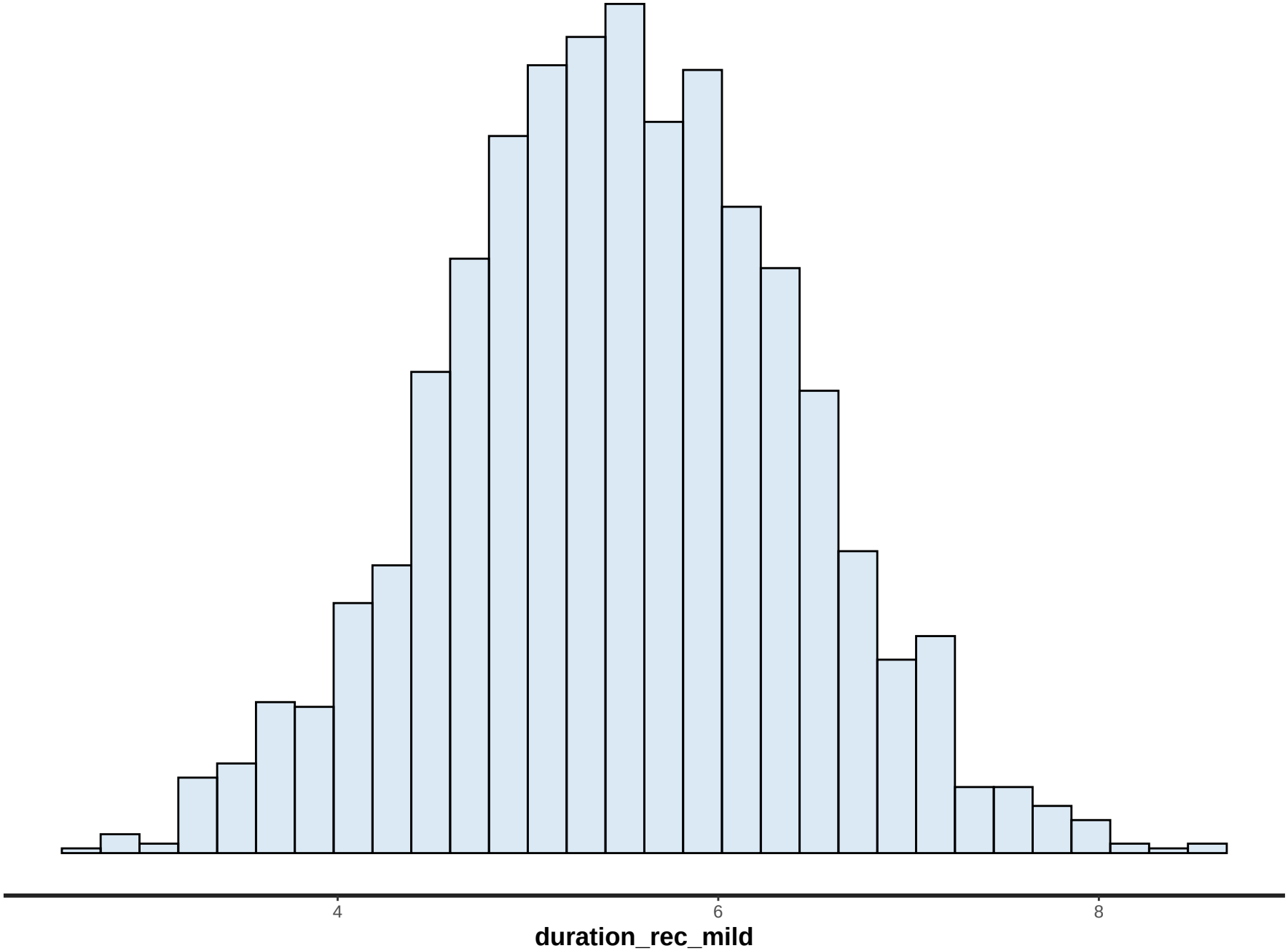
Rt as of 2020−12−09

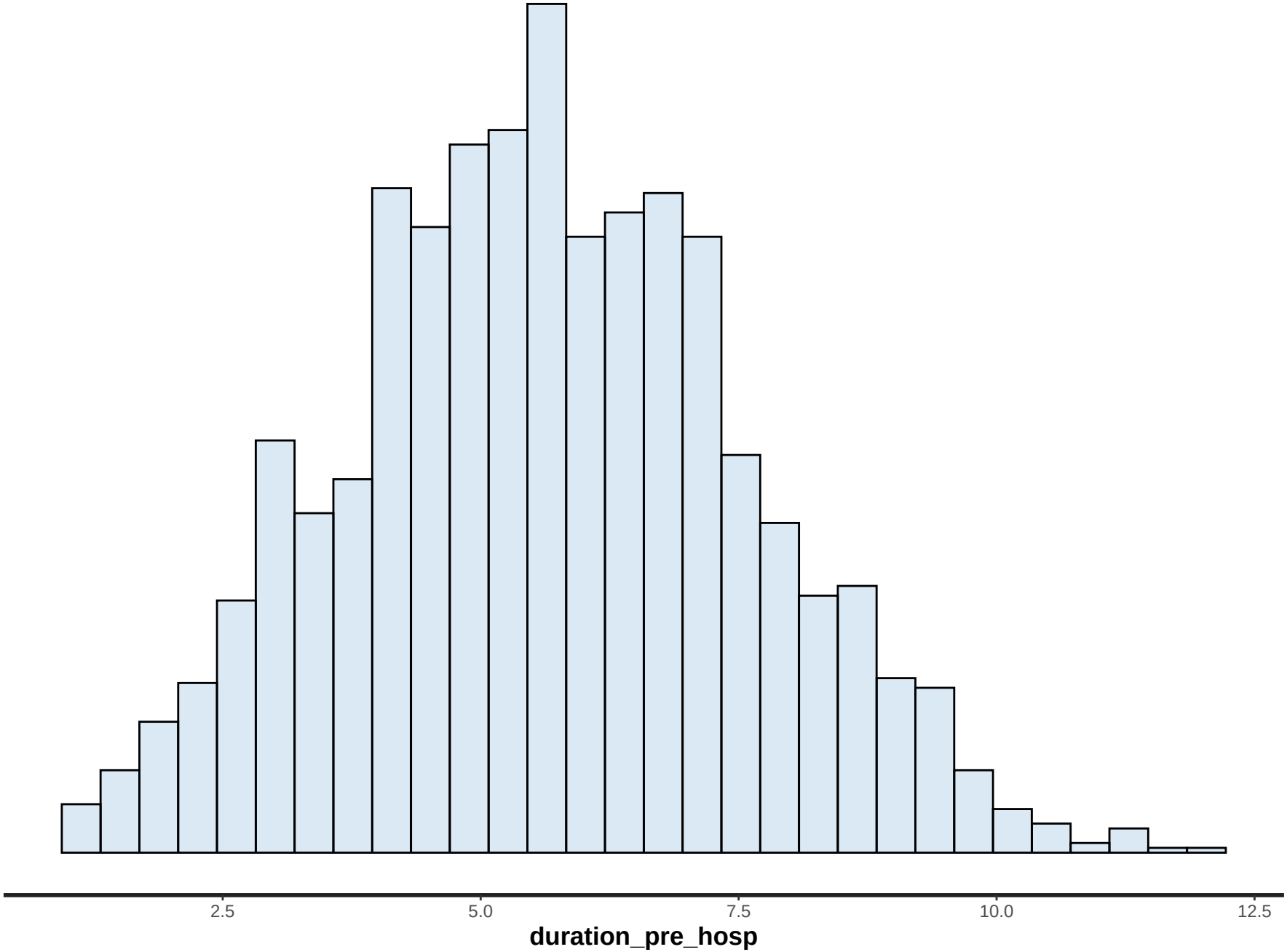
5%	10%	25%	50%	75%	90%	95%
0.96	0.99	1.04	1.09	1.14	1.18	1.21

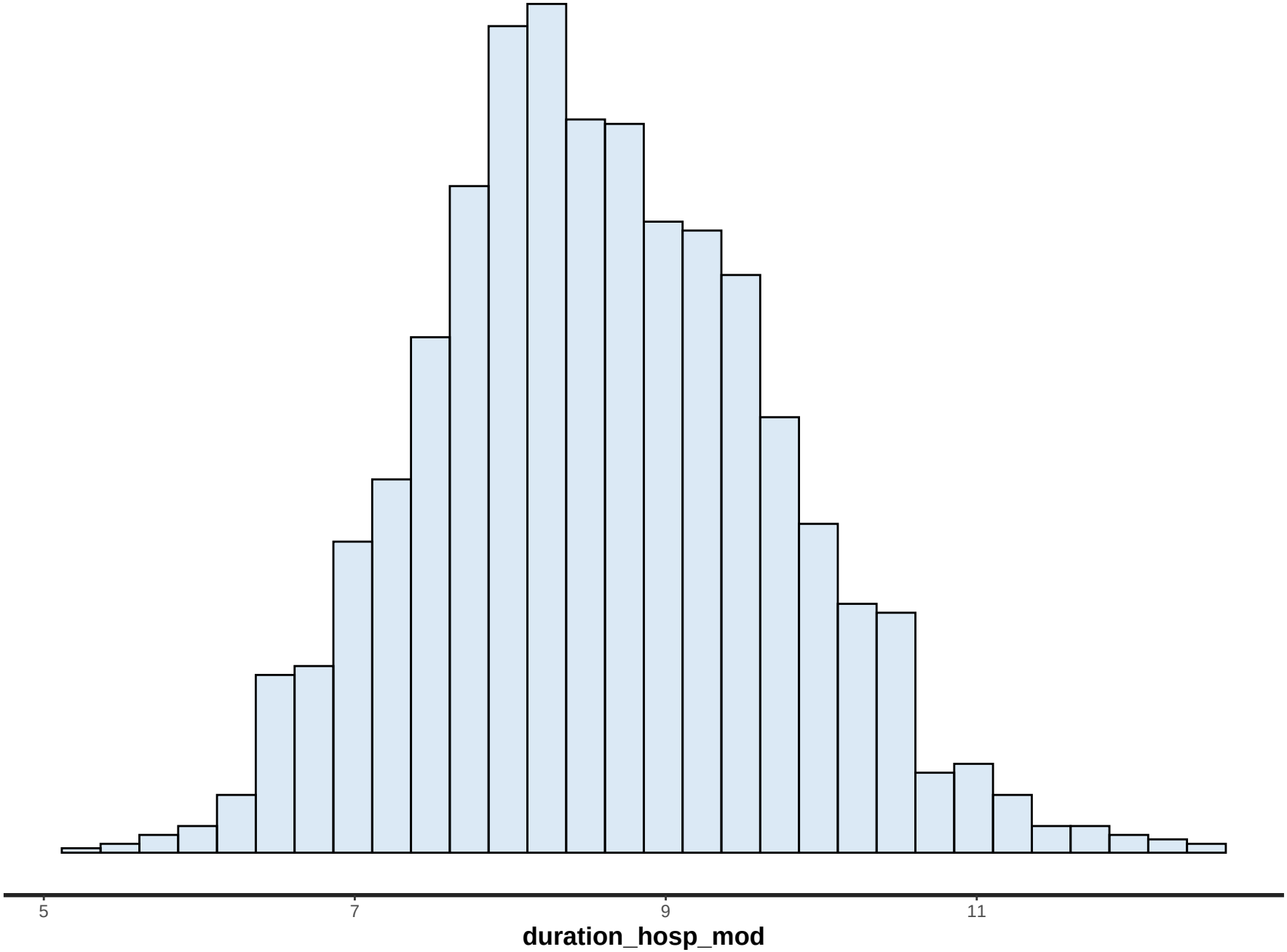


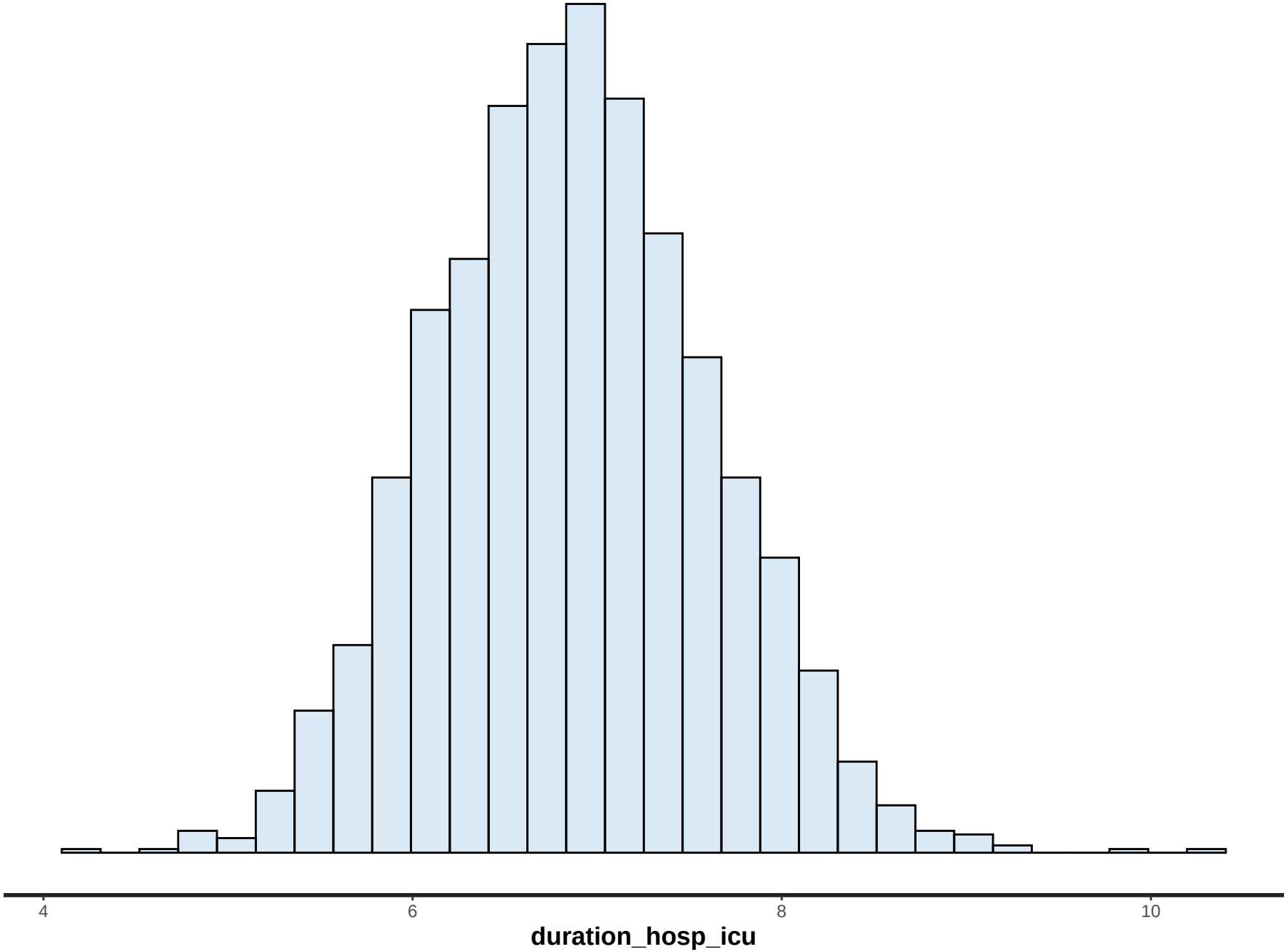

2
3
4
r0

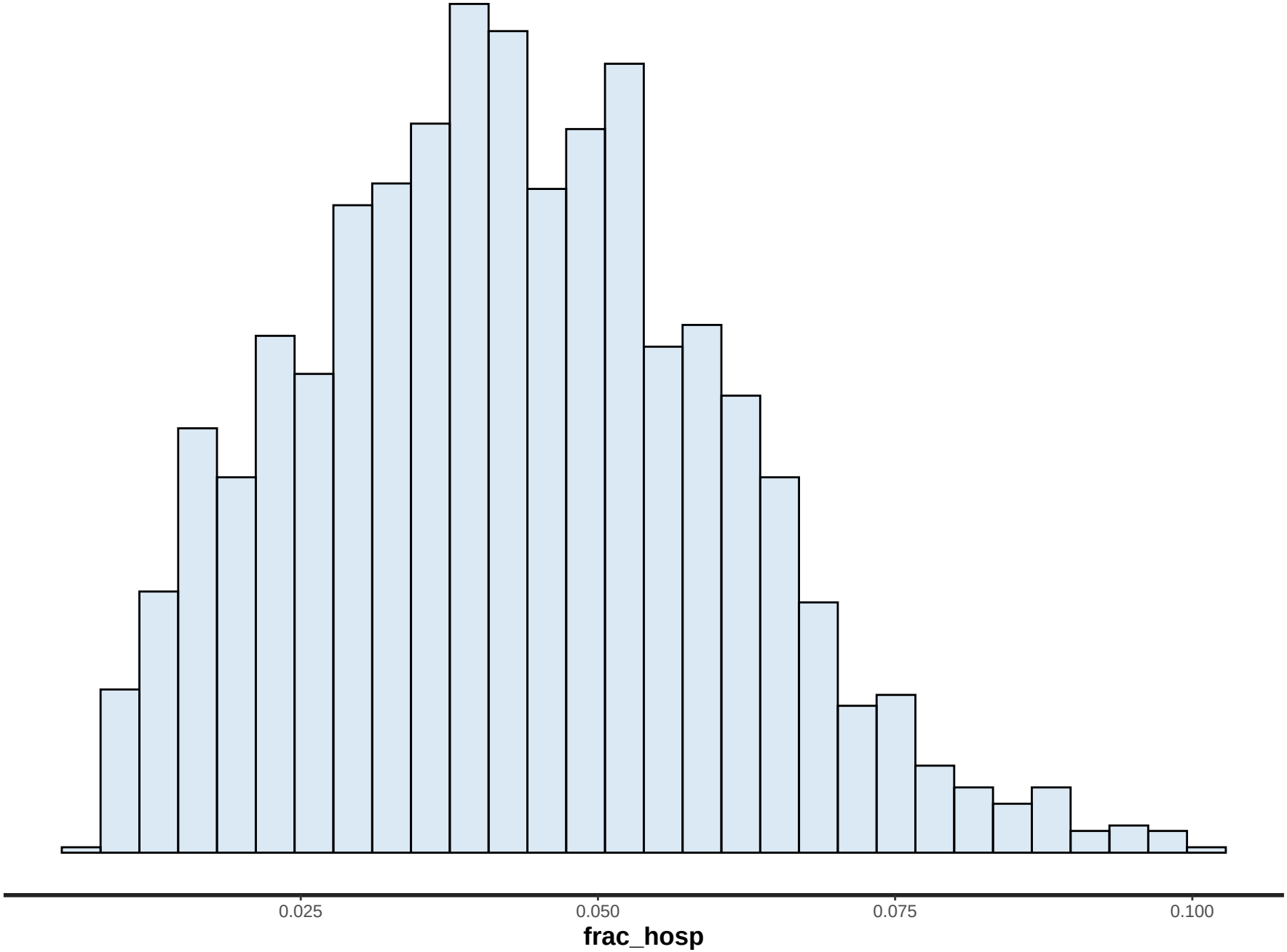

2
4
6
duration_latent


4
6
8
duration_rec_mild


2.5
5.0
7.5
10.0
12.5
duration_pre_hosp


5
7
9
11
duration_hosp_mod


4
6
8
10
duration_hosp_icu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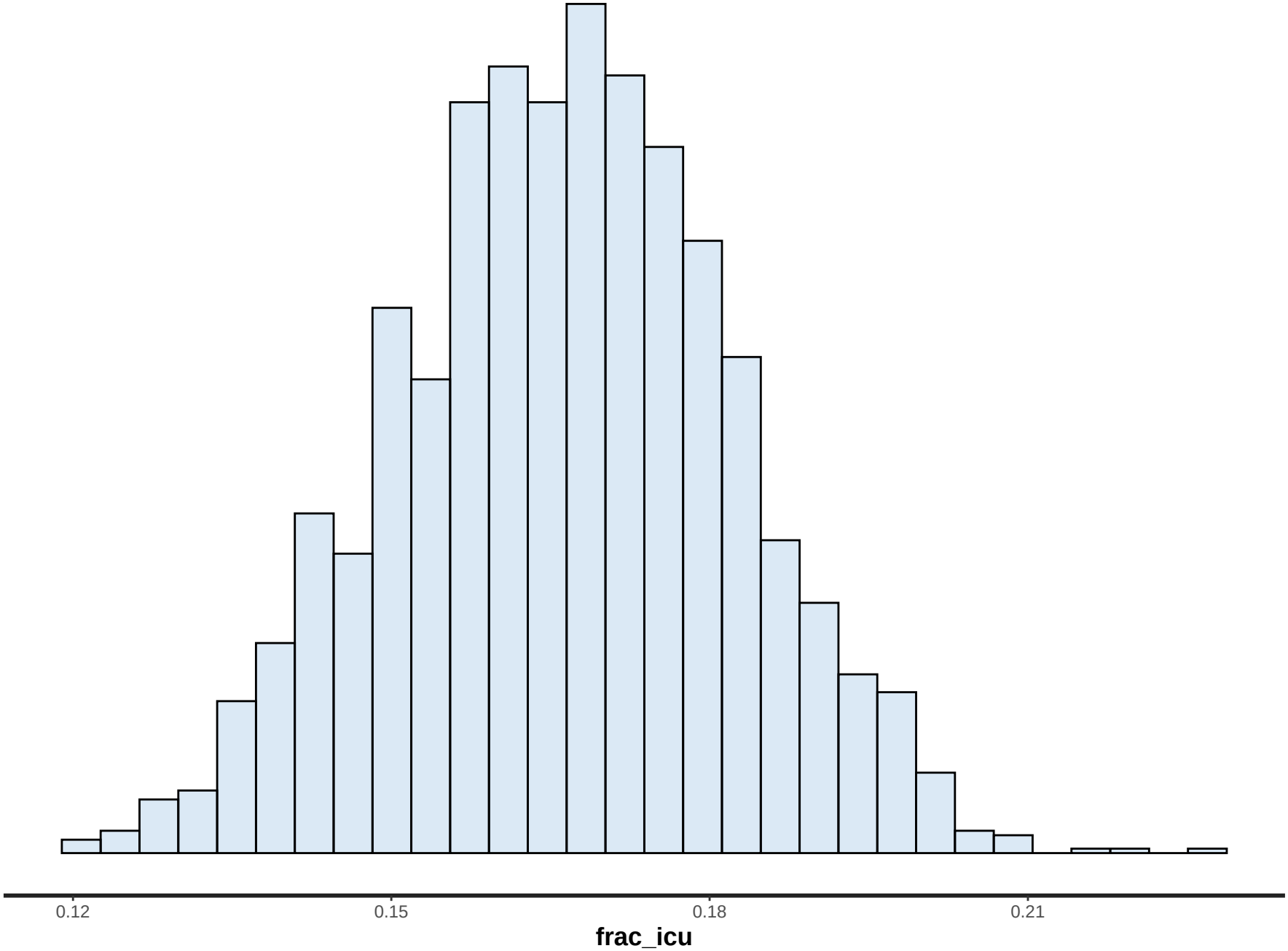
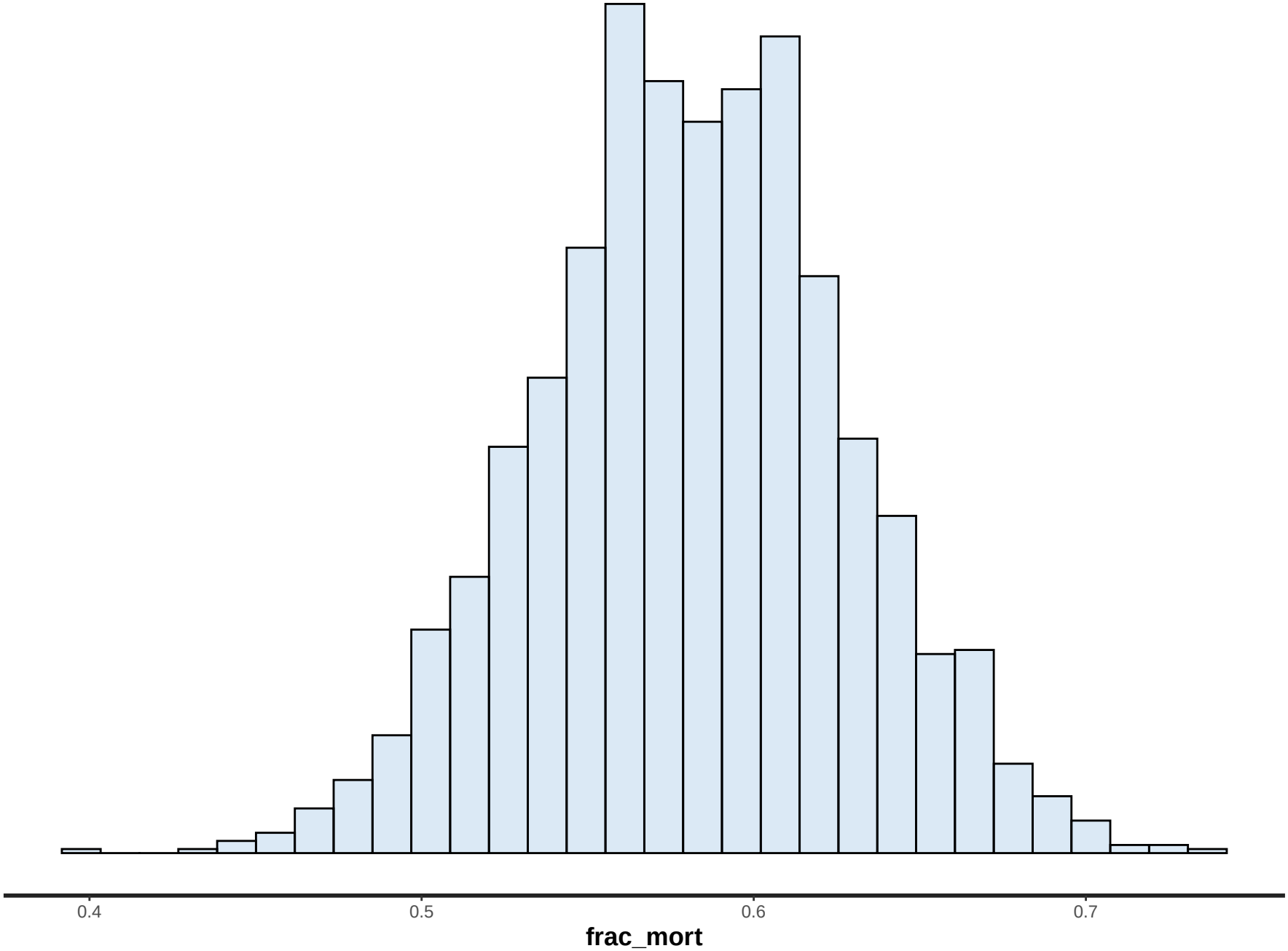
0.050
0.075
0.100
frac_hosp


0.12
0.15
0.18
0.21
frac_icu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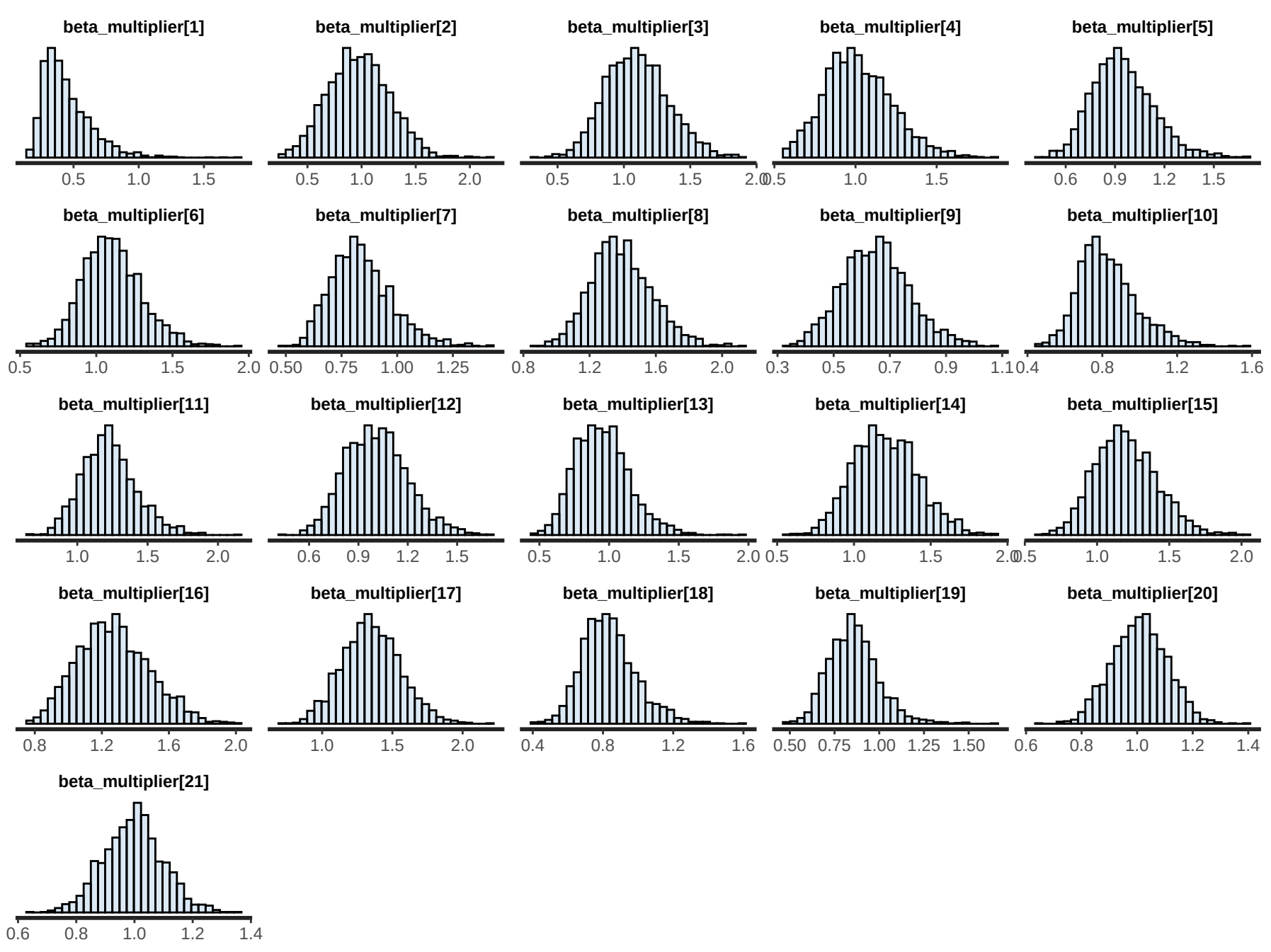
0.5
0.6
0.7
frac_mort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beta_multiplier[4]
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beta_multiplier[5]
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beta_multiplier[6]
0.5 1.0 1.5 2.0
beta_multiplier[7]
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beta_multiplier[8]
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beta_multiplier[9]
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beta_multiplier[10]
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beta_multiplier[11]
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beta_multiplier[12]
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beta_multiplier[16]
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beta_multiplier[17]
1.0 1.5 2.0
beta_multiplier[18]
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beta_multiplier[19]
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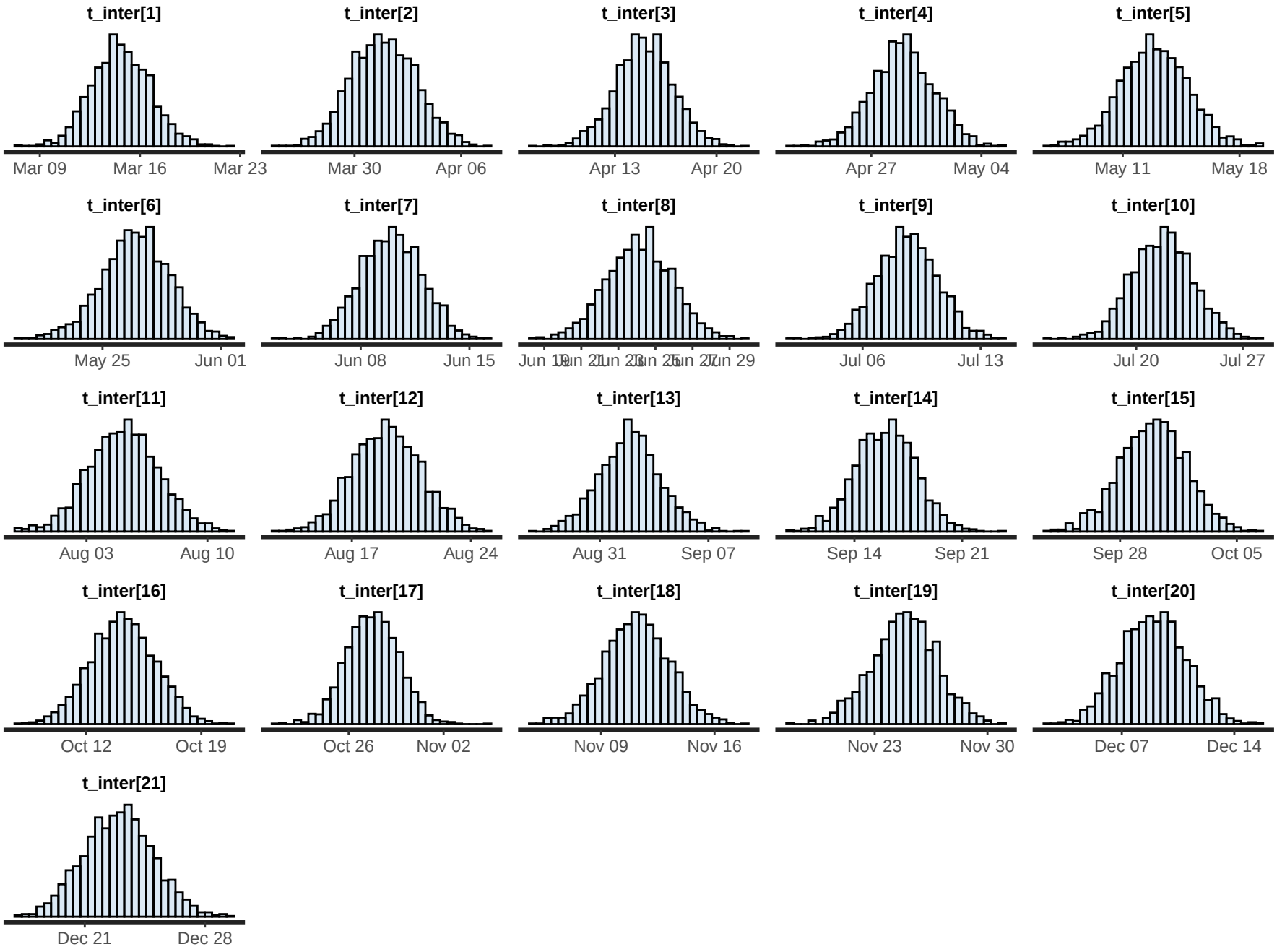
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May 11
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May 25
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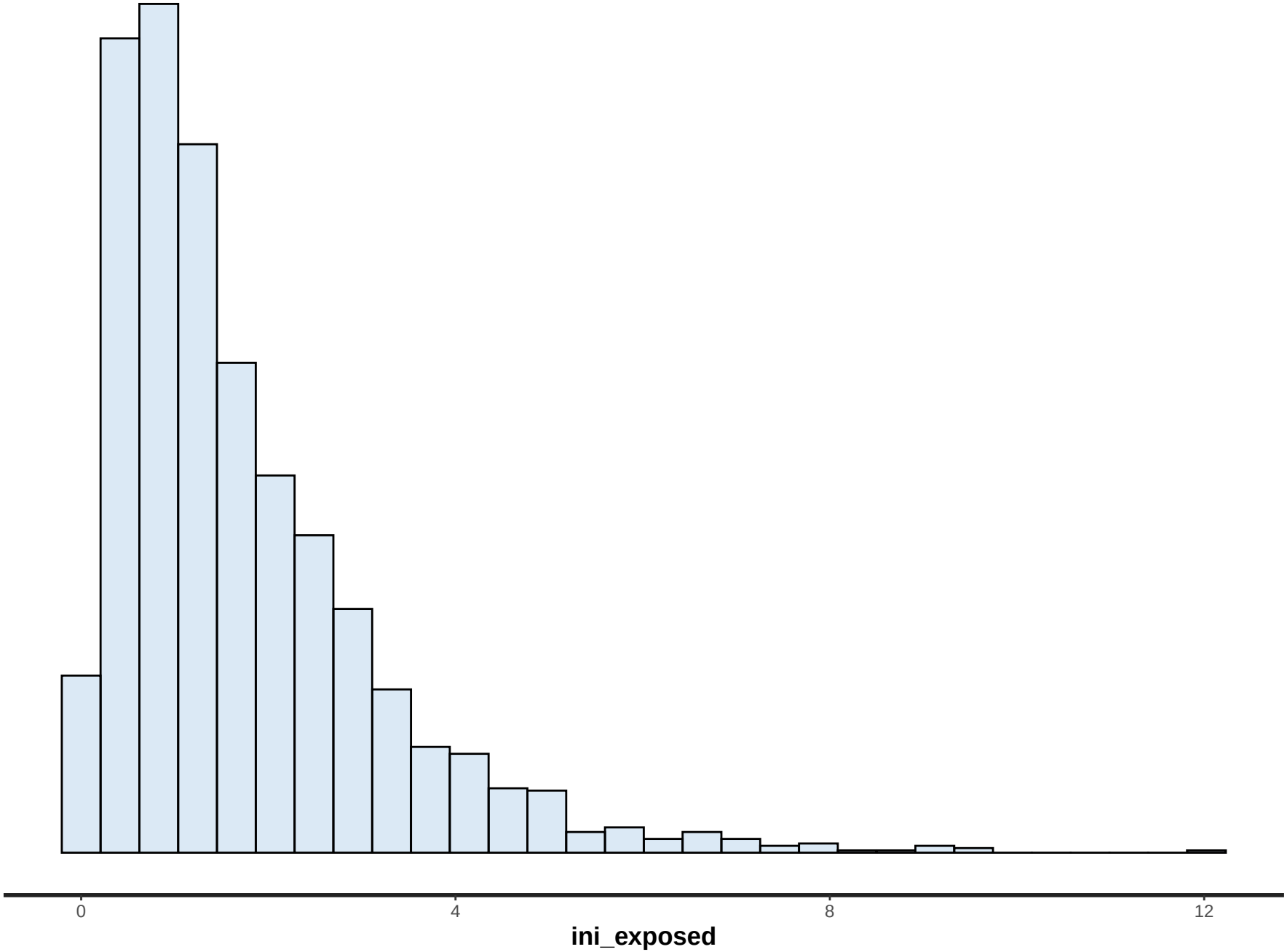
Dec 21
Dec 28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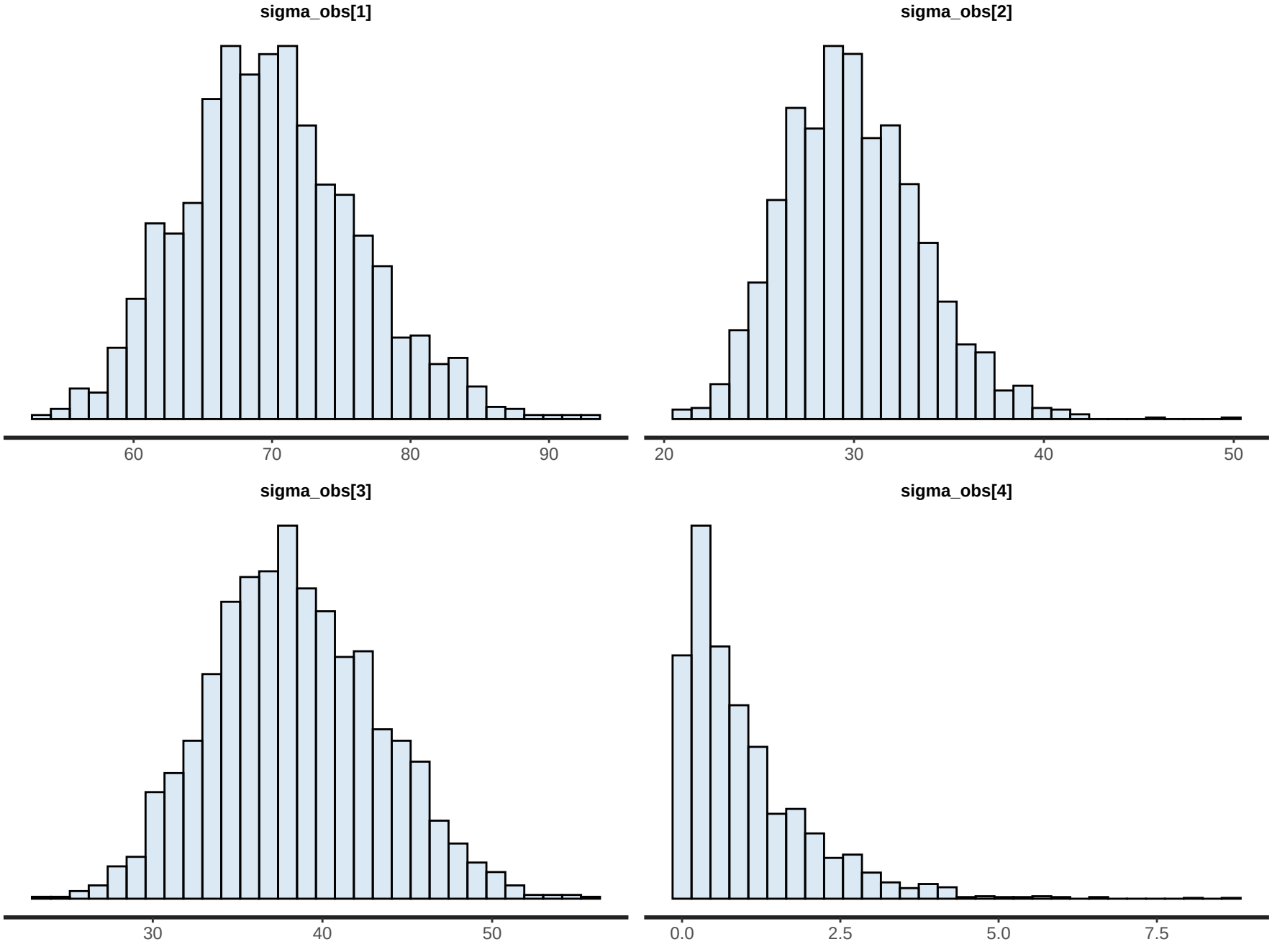
4
8
12
ini_exposed


sigma_obs[1]
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50
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5.0
7.5