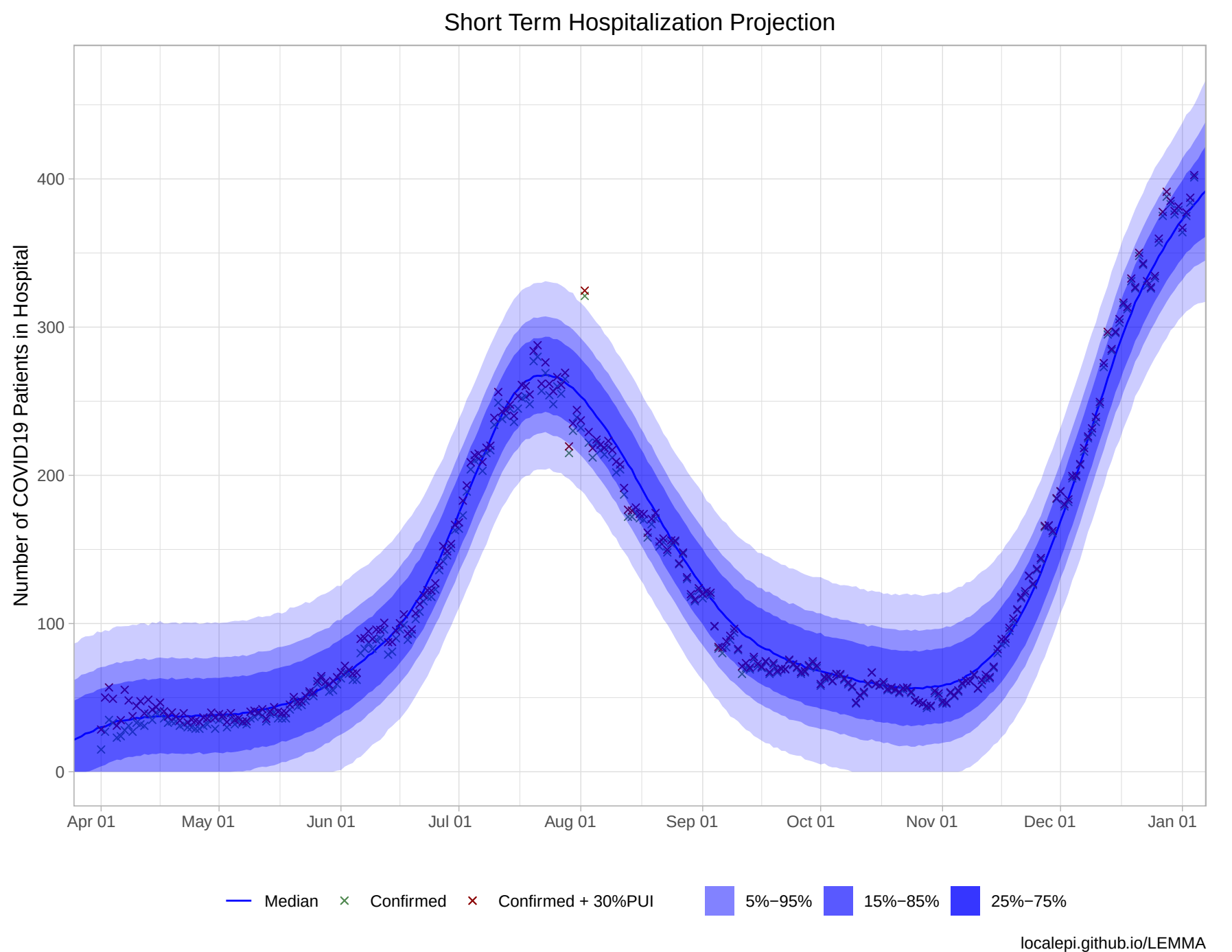
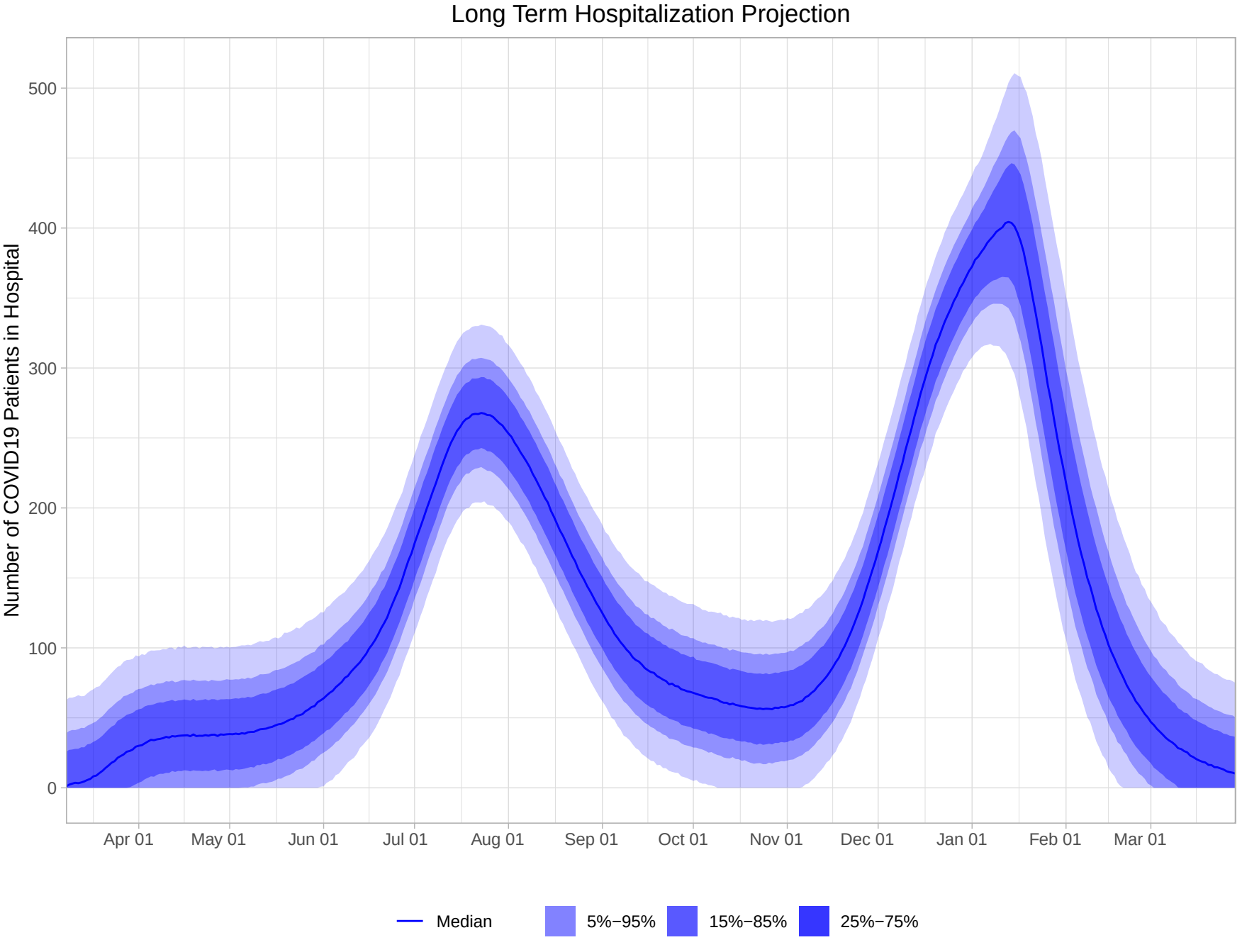
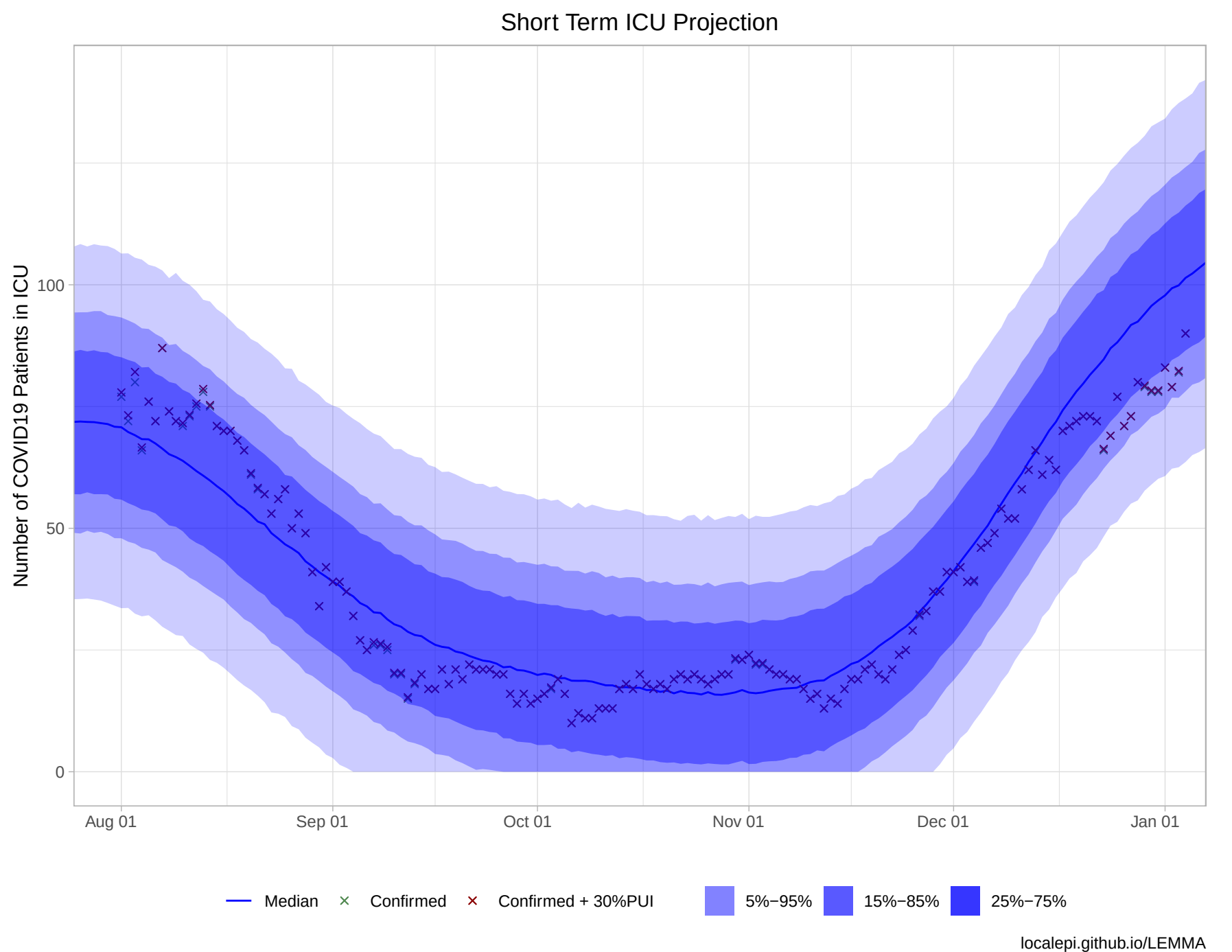
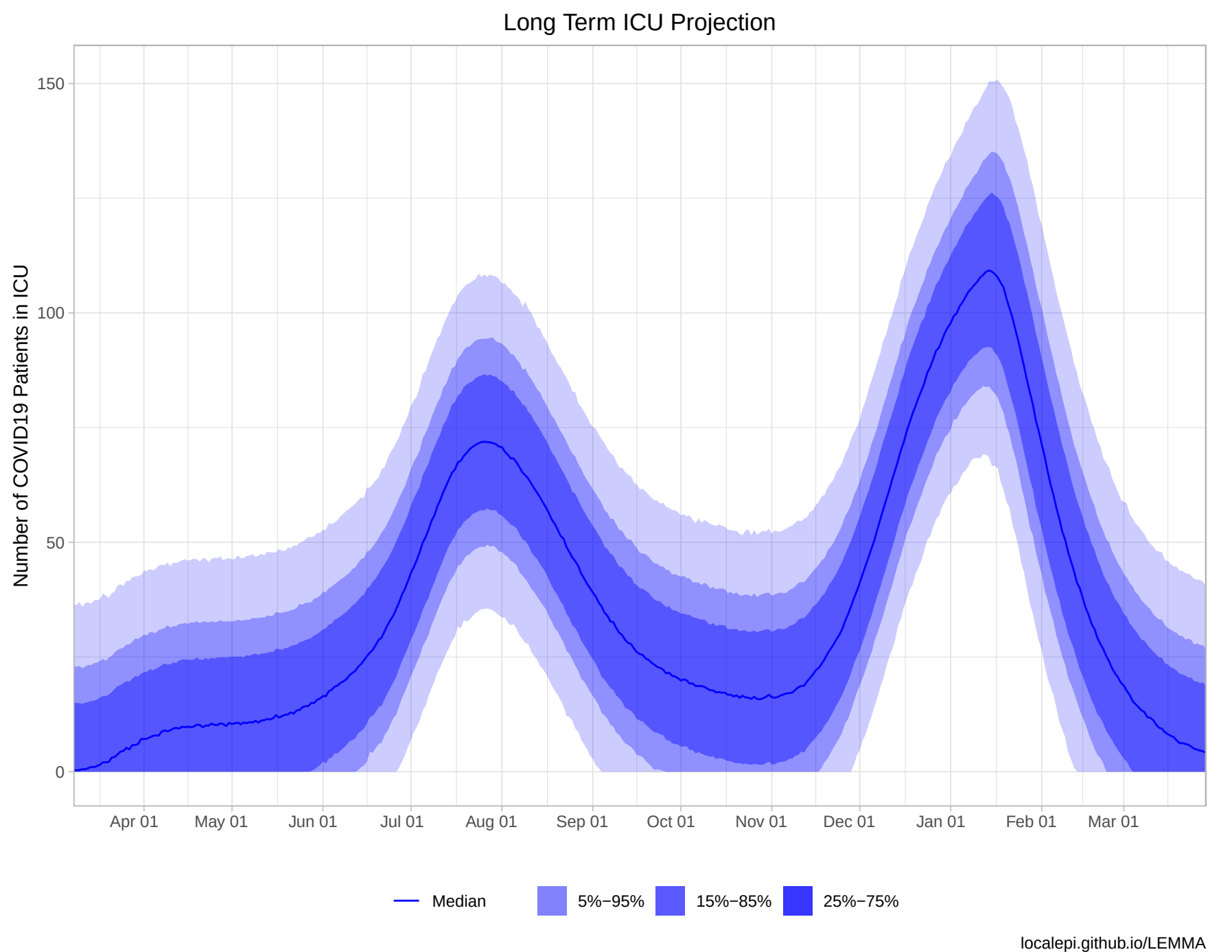
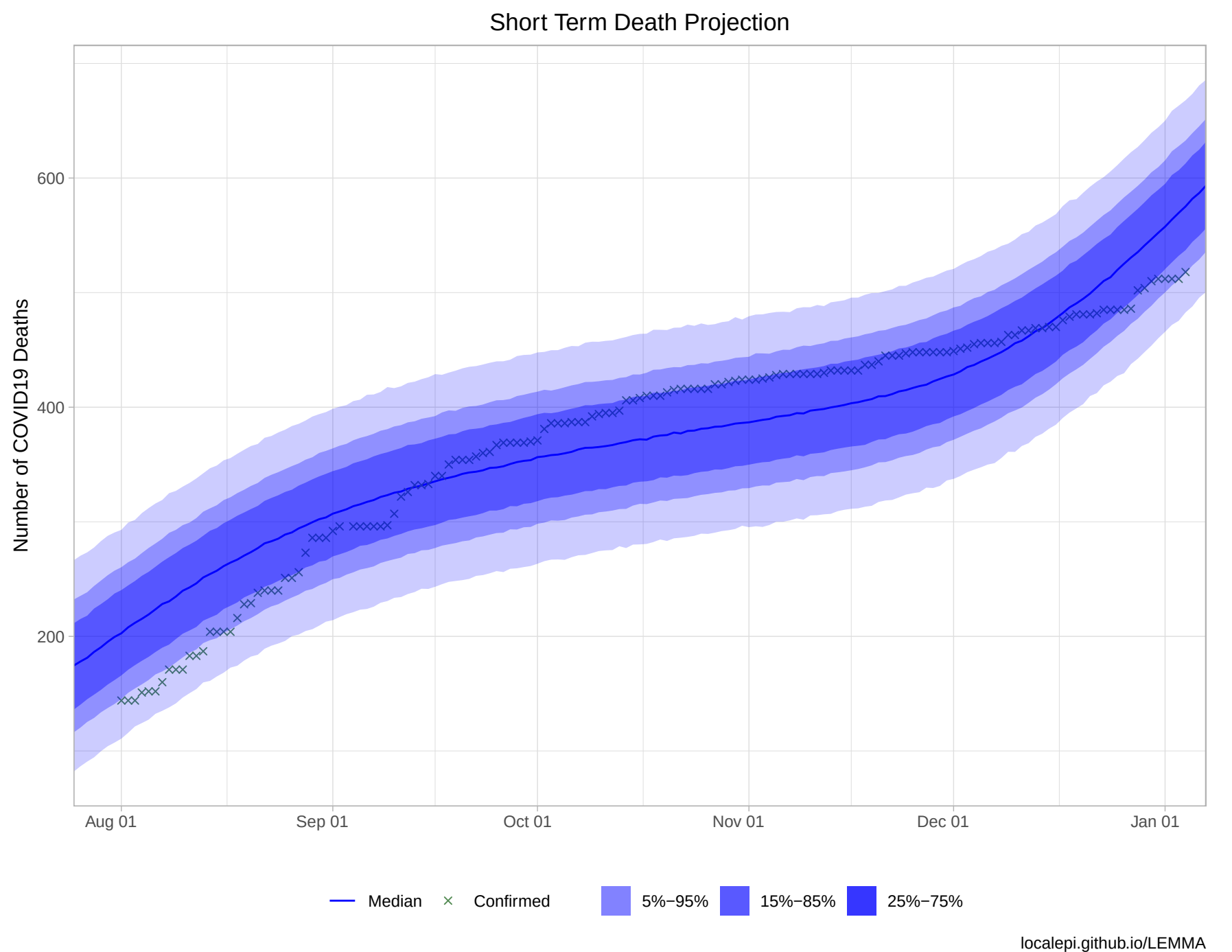
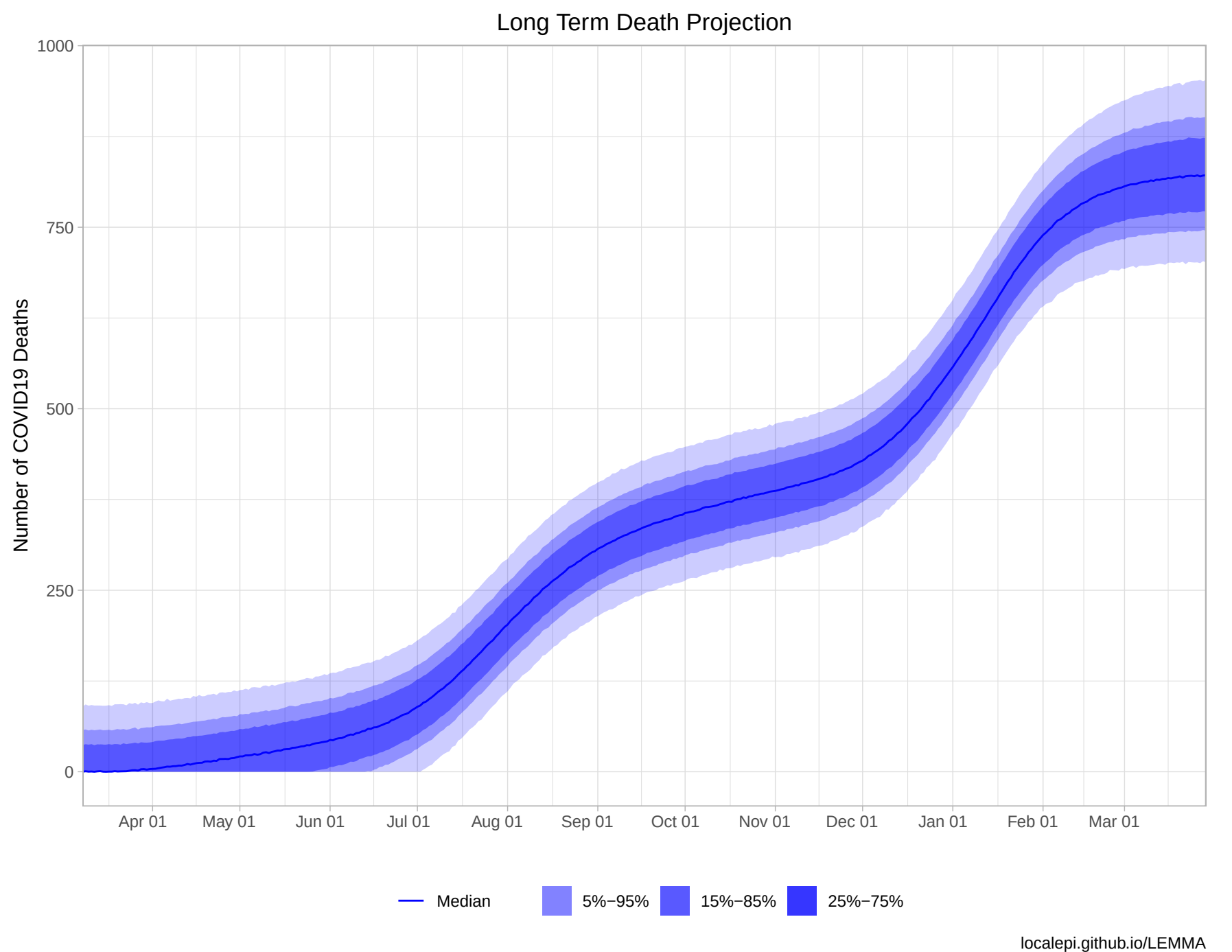

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
100
200
300
400
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

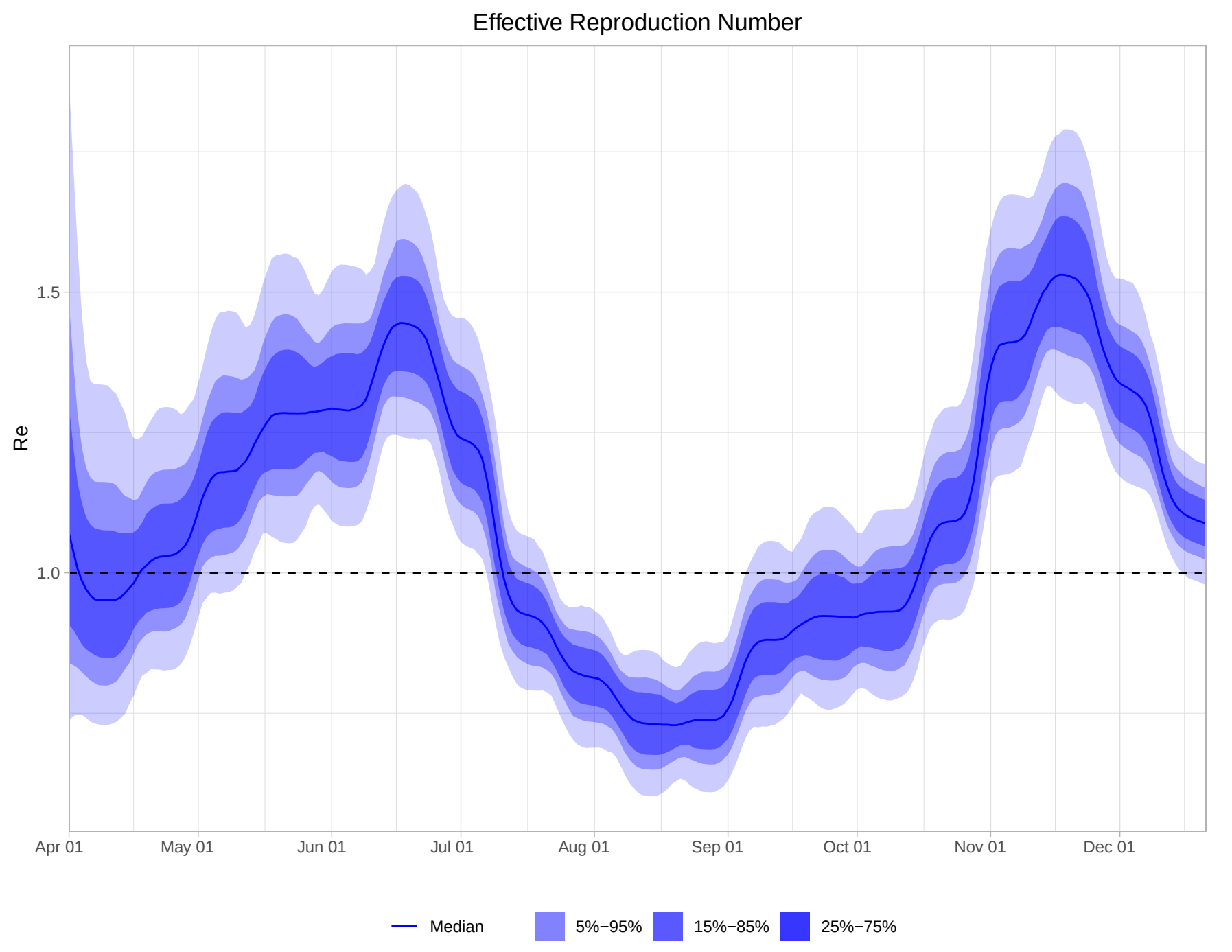

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
500
400
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
100
50
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
150
100
50
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

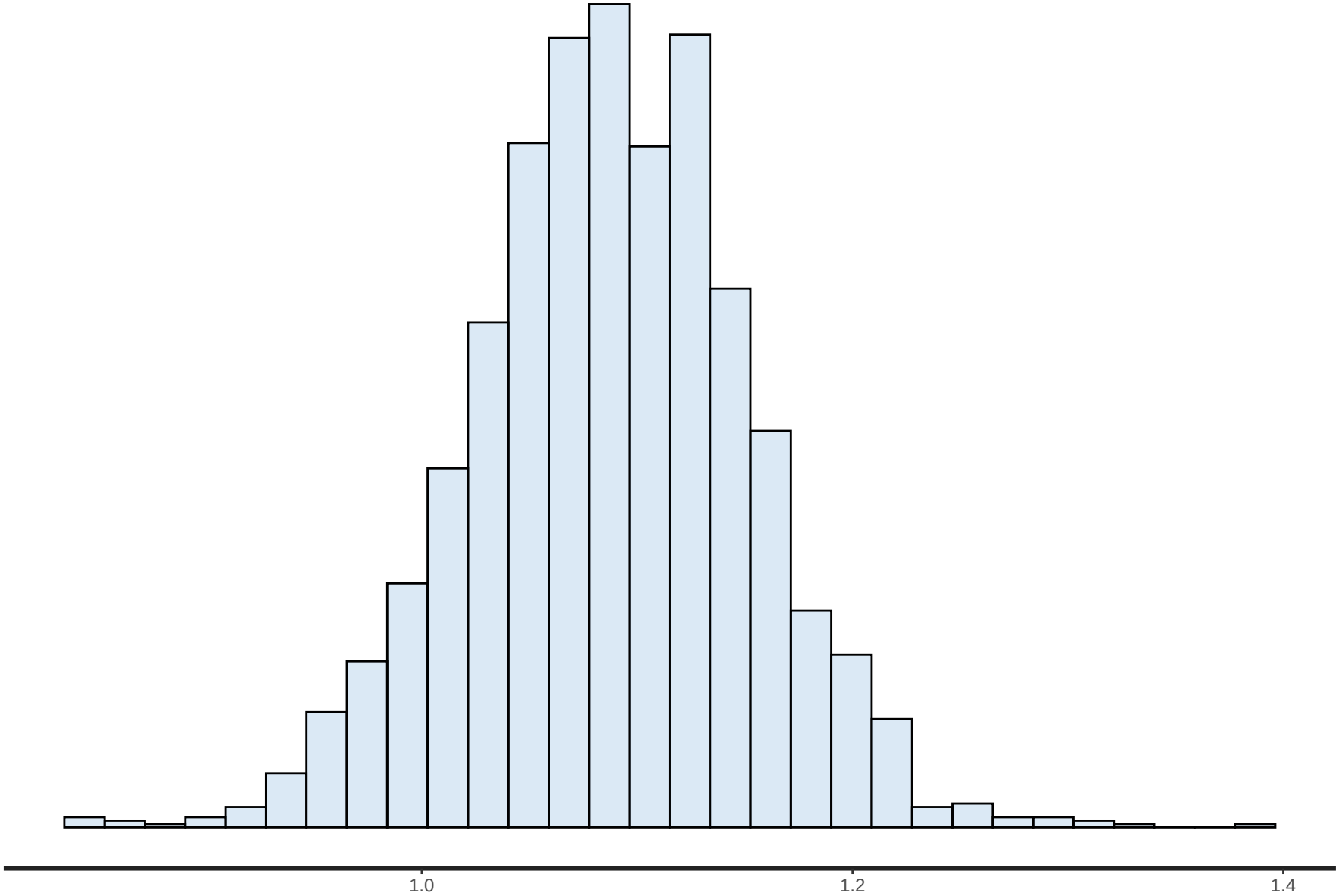

Short Term Death Projection
Number of COVID19 Deaths
600
400
200
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

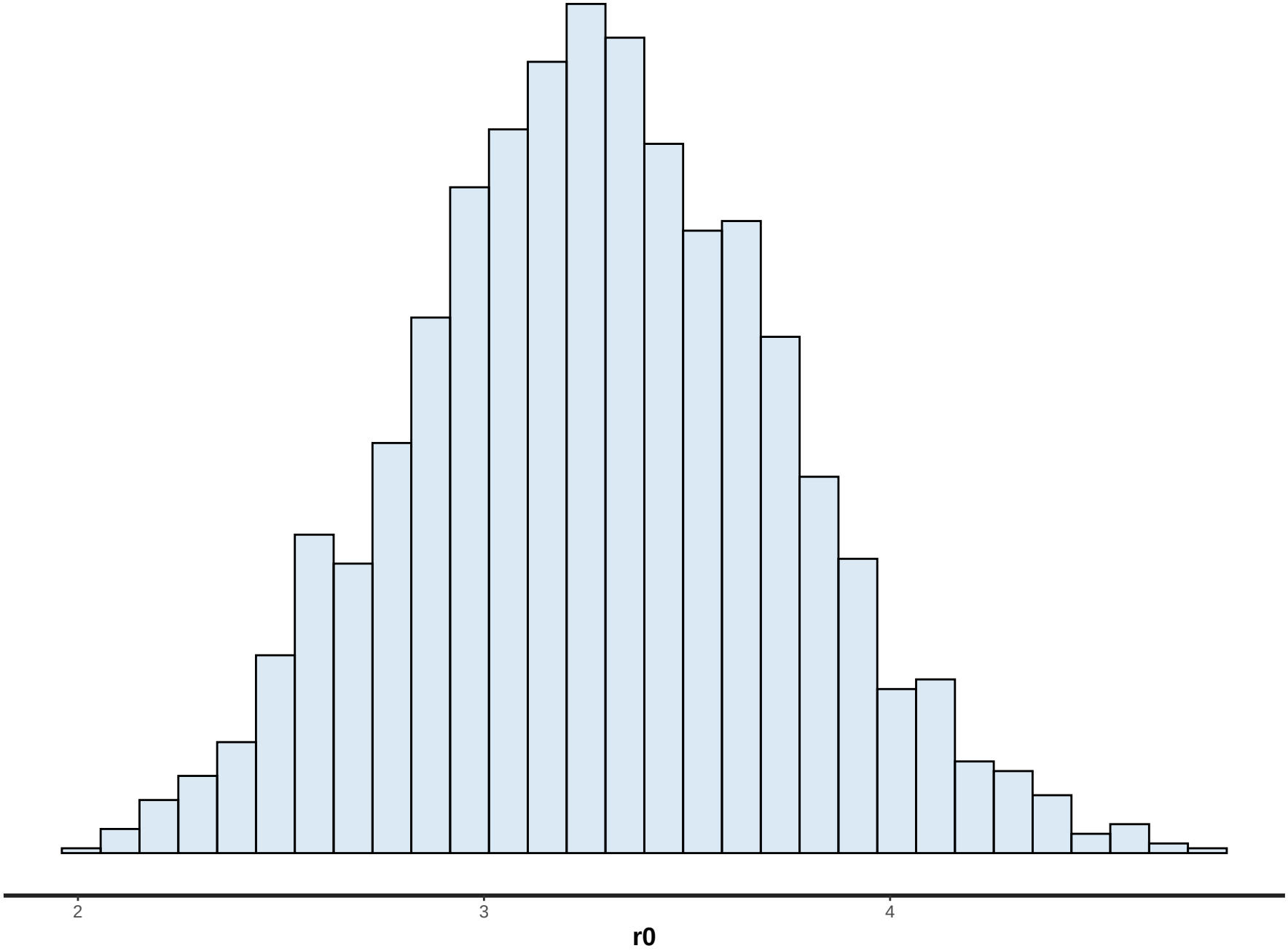

Long Term Death Projection
Number of COVID19 Deaths
1000
750
500
250
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

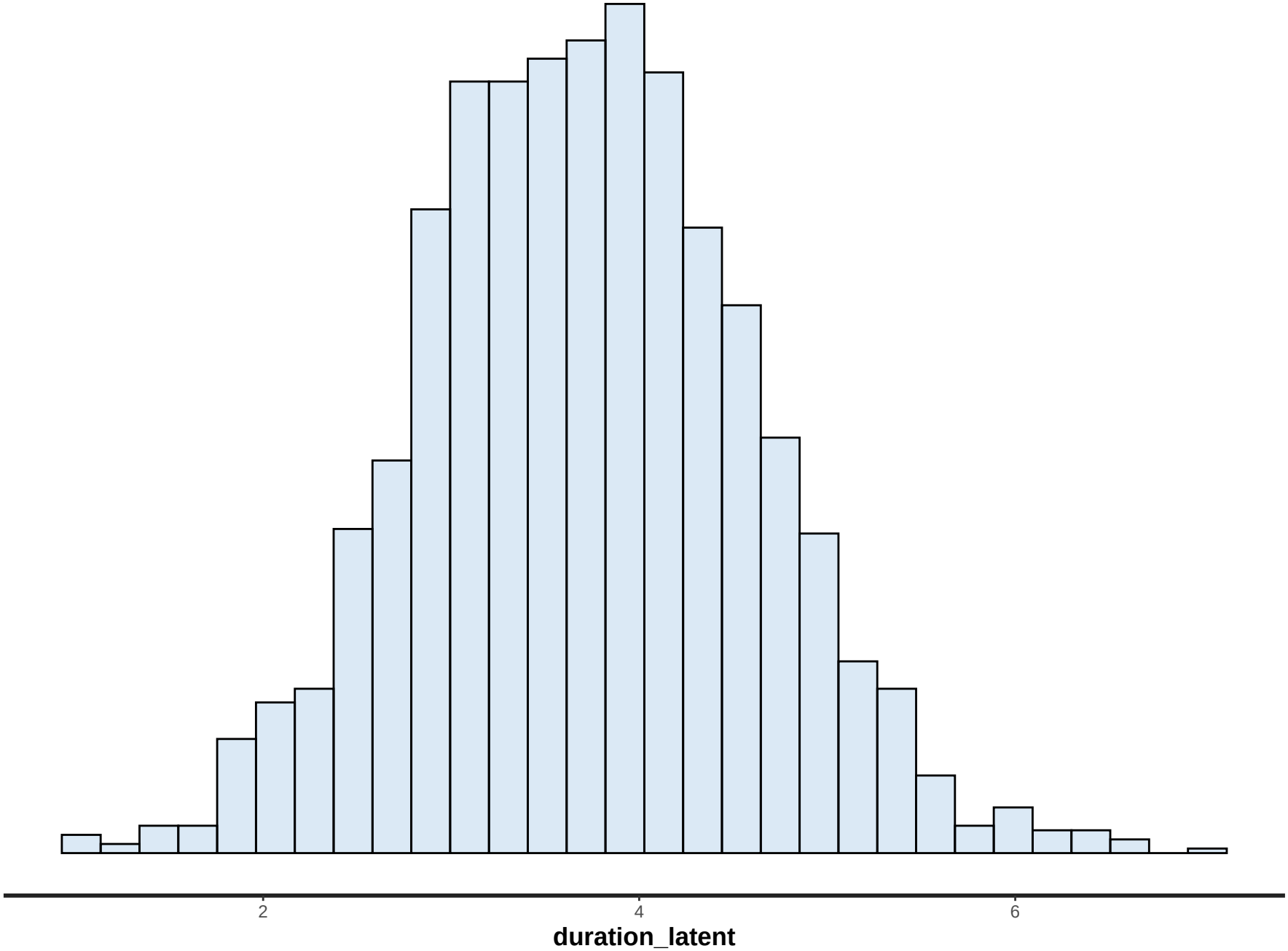

Effective Reproduction Number
Re
1.5
1.0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

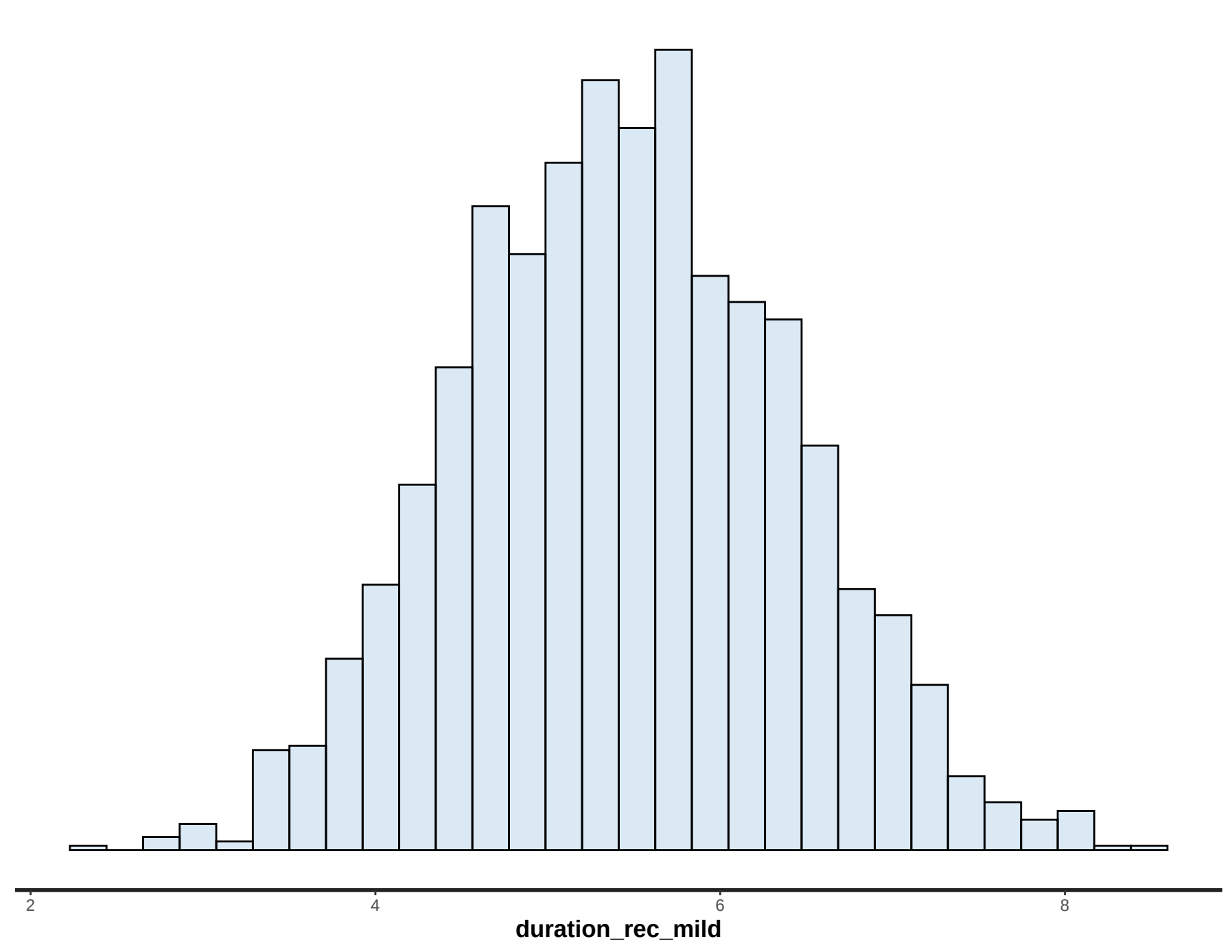
Rt as of 2020−12−21

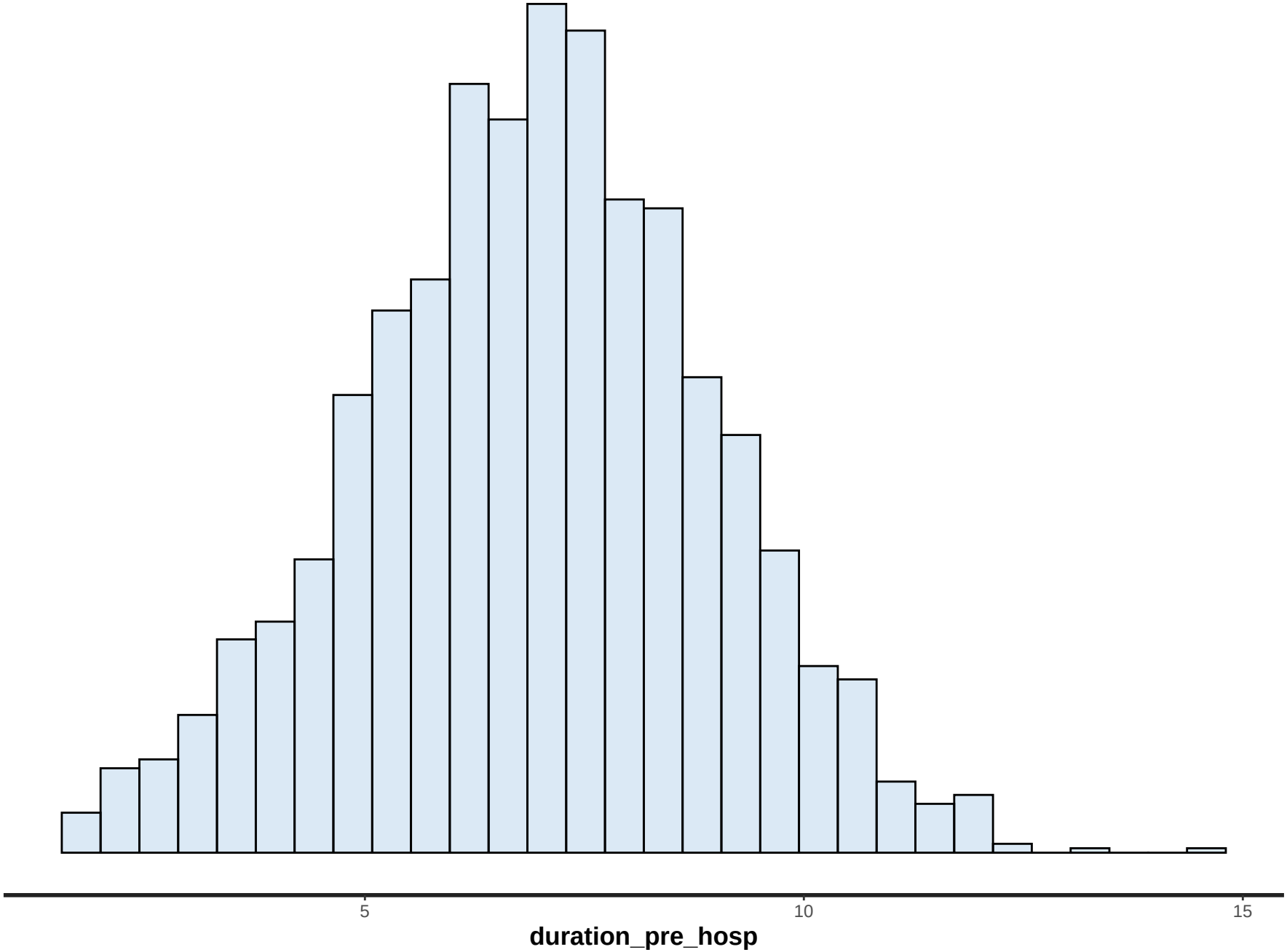
5%	10%	25%	50%	75%	90%	95%
0.98	1.01	1.05	1.09	1.13	1.17	1.19

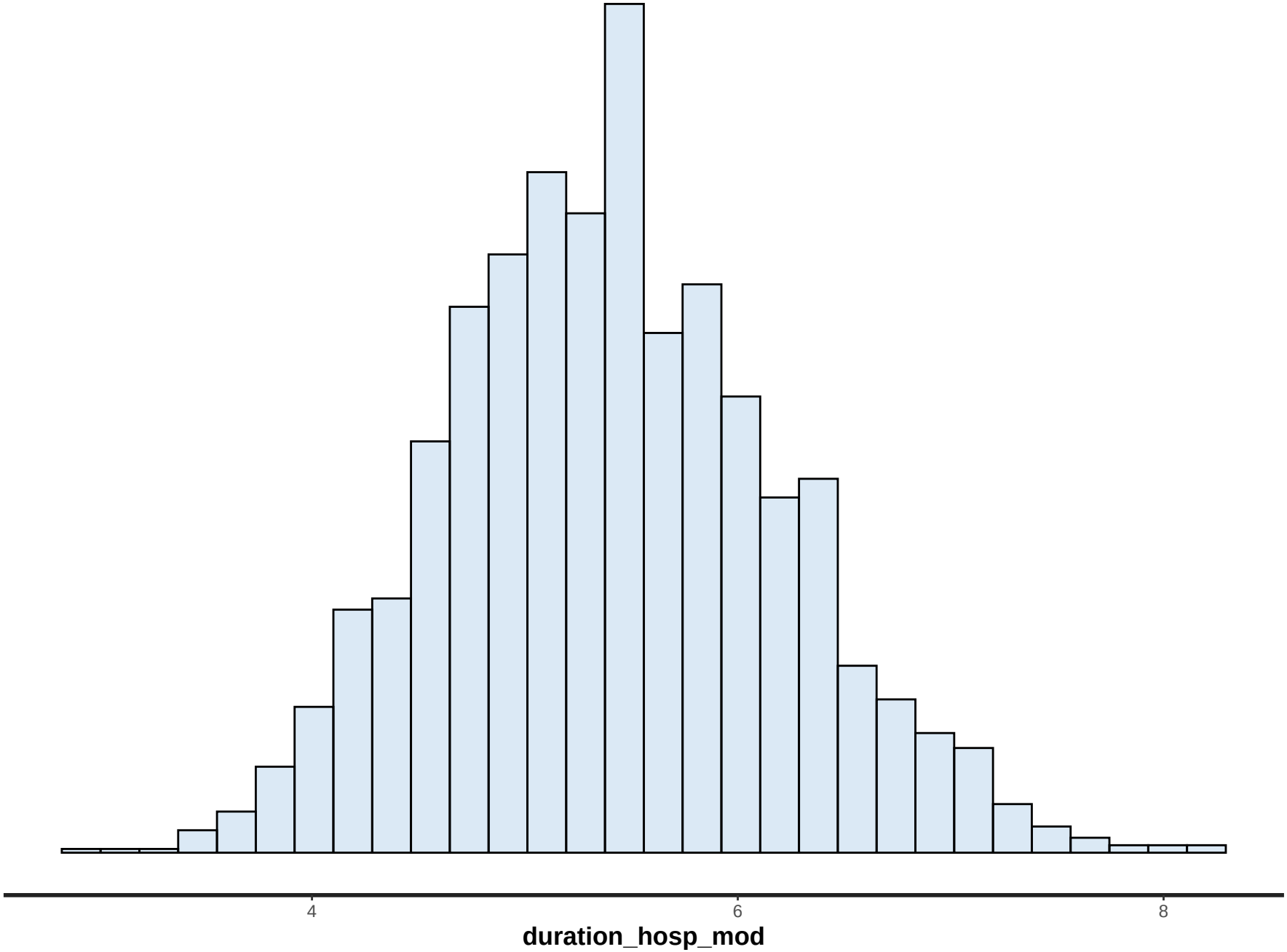


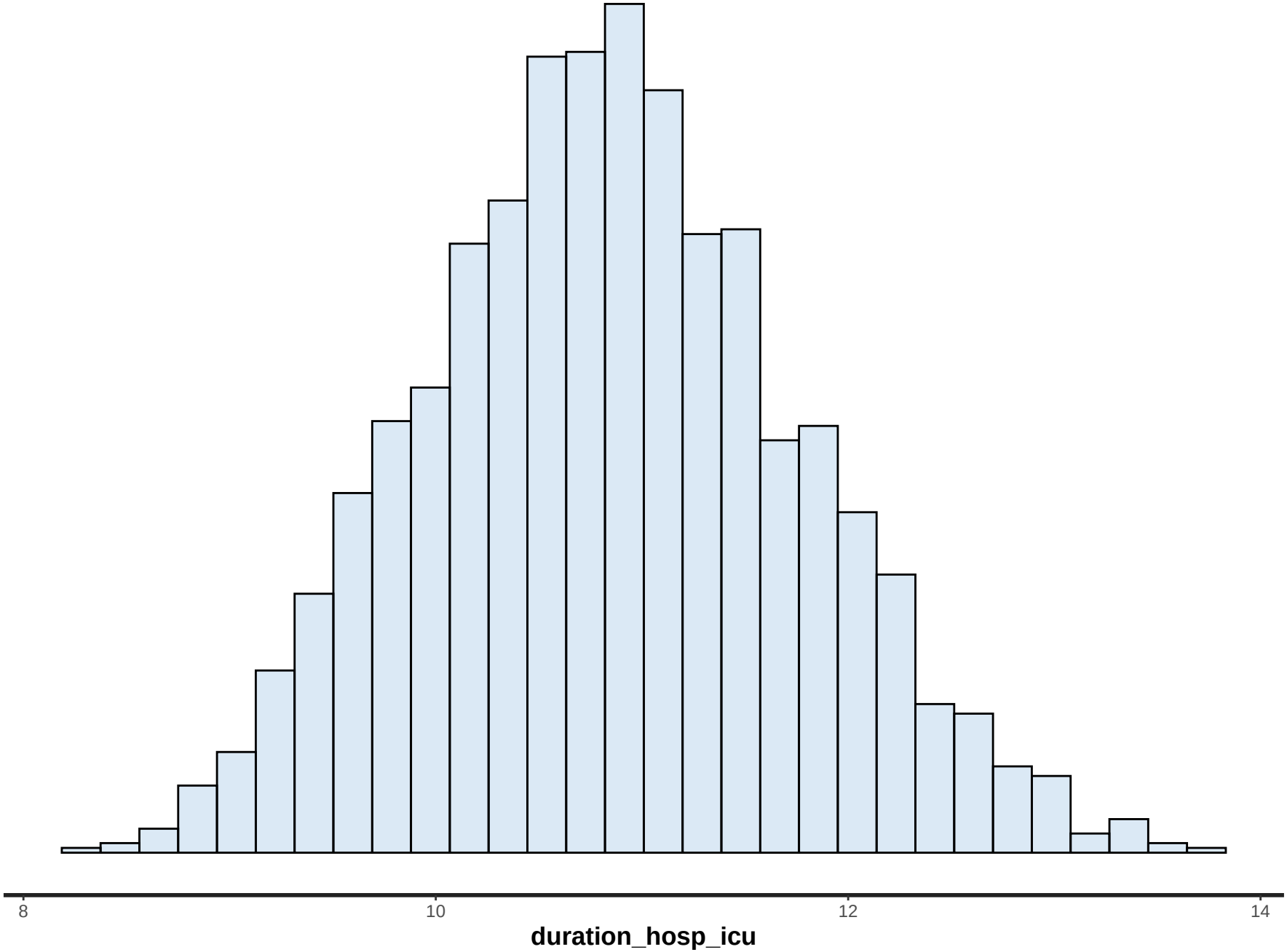

2
3
4
r0

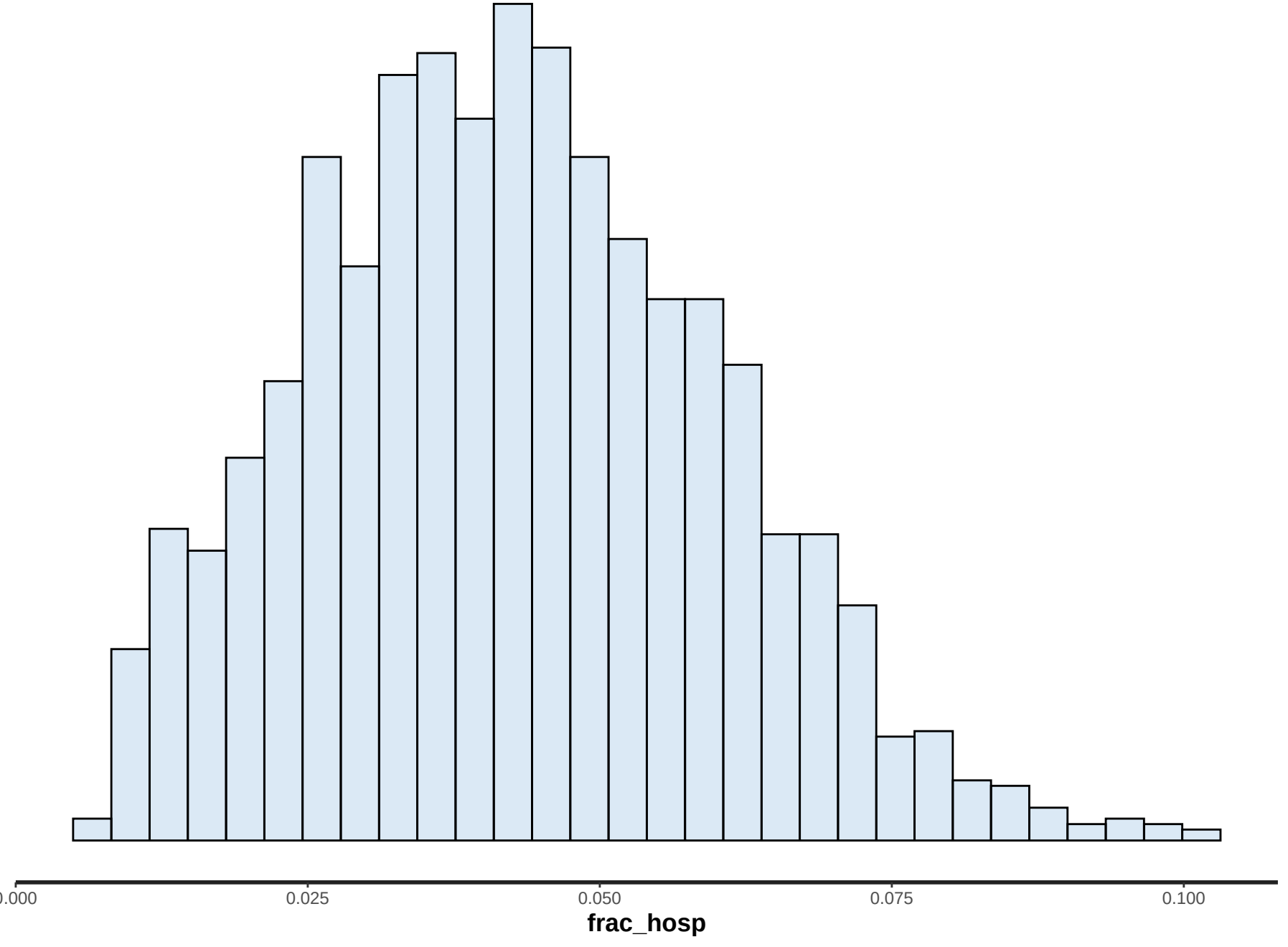

2
4
6
duration_latent

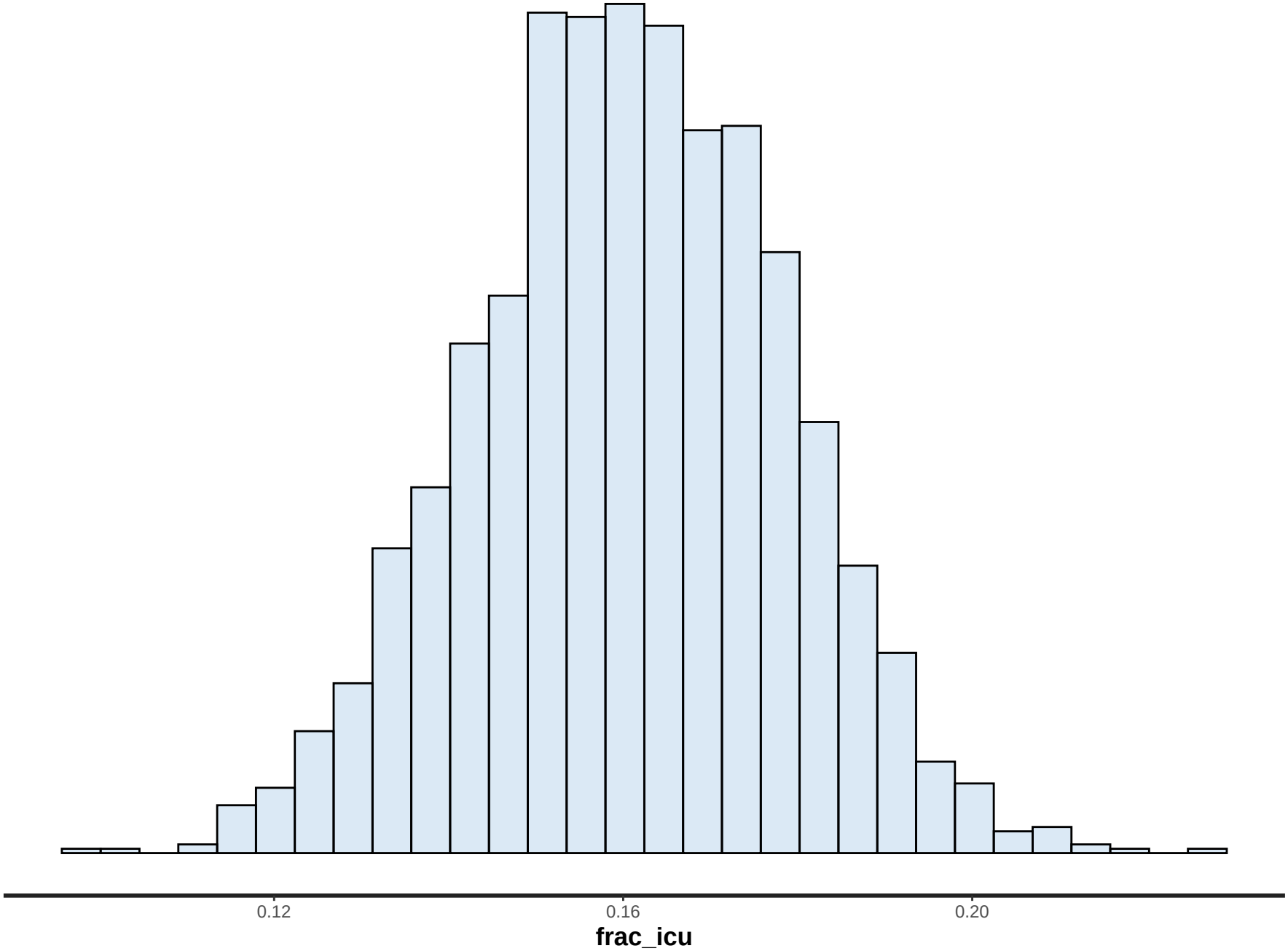

2
4
6
8
duration_rec_mild

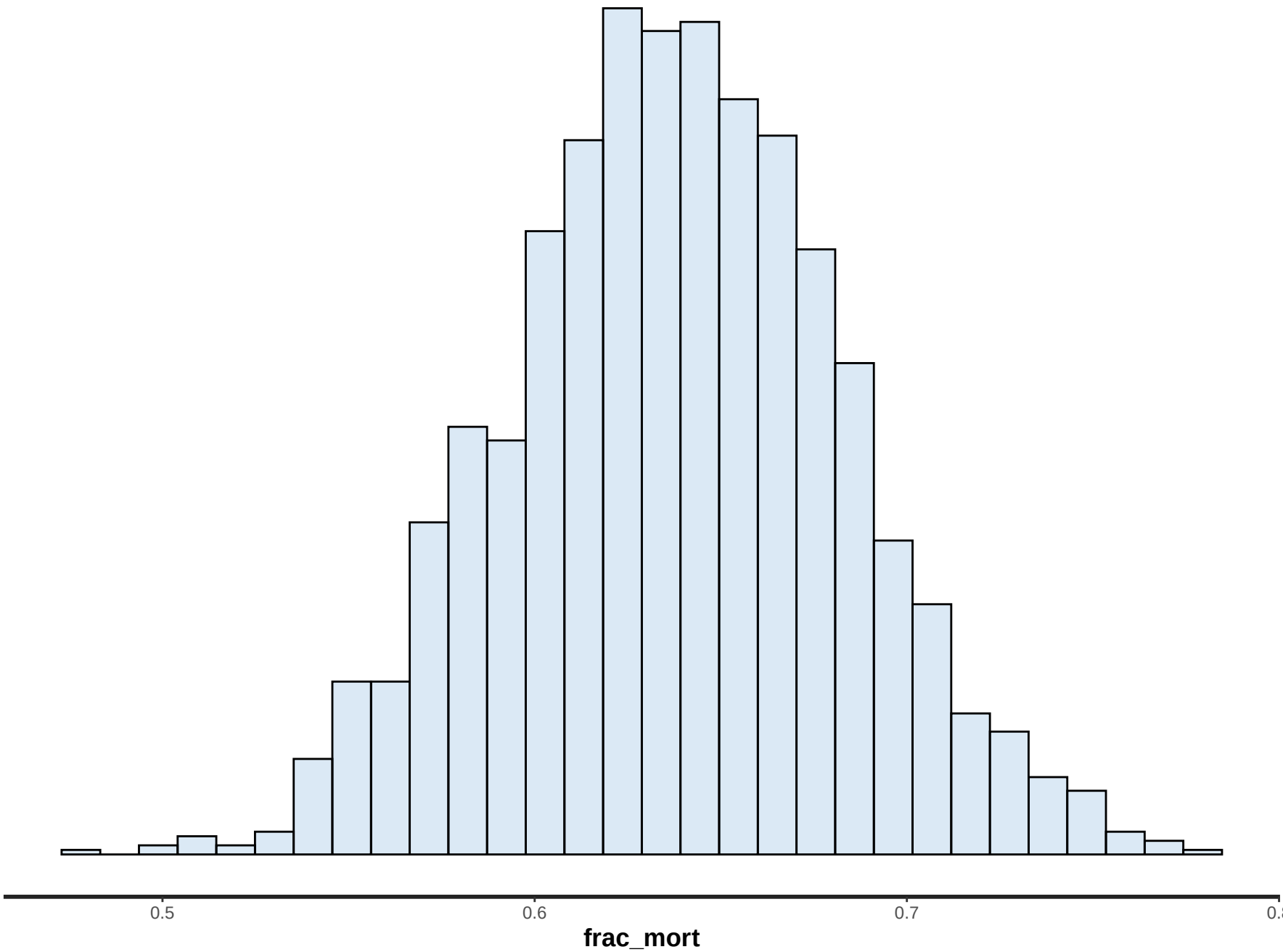

5
10
15
duration_pre_hosp

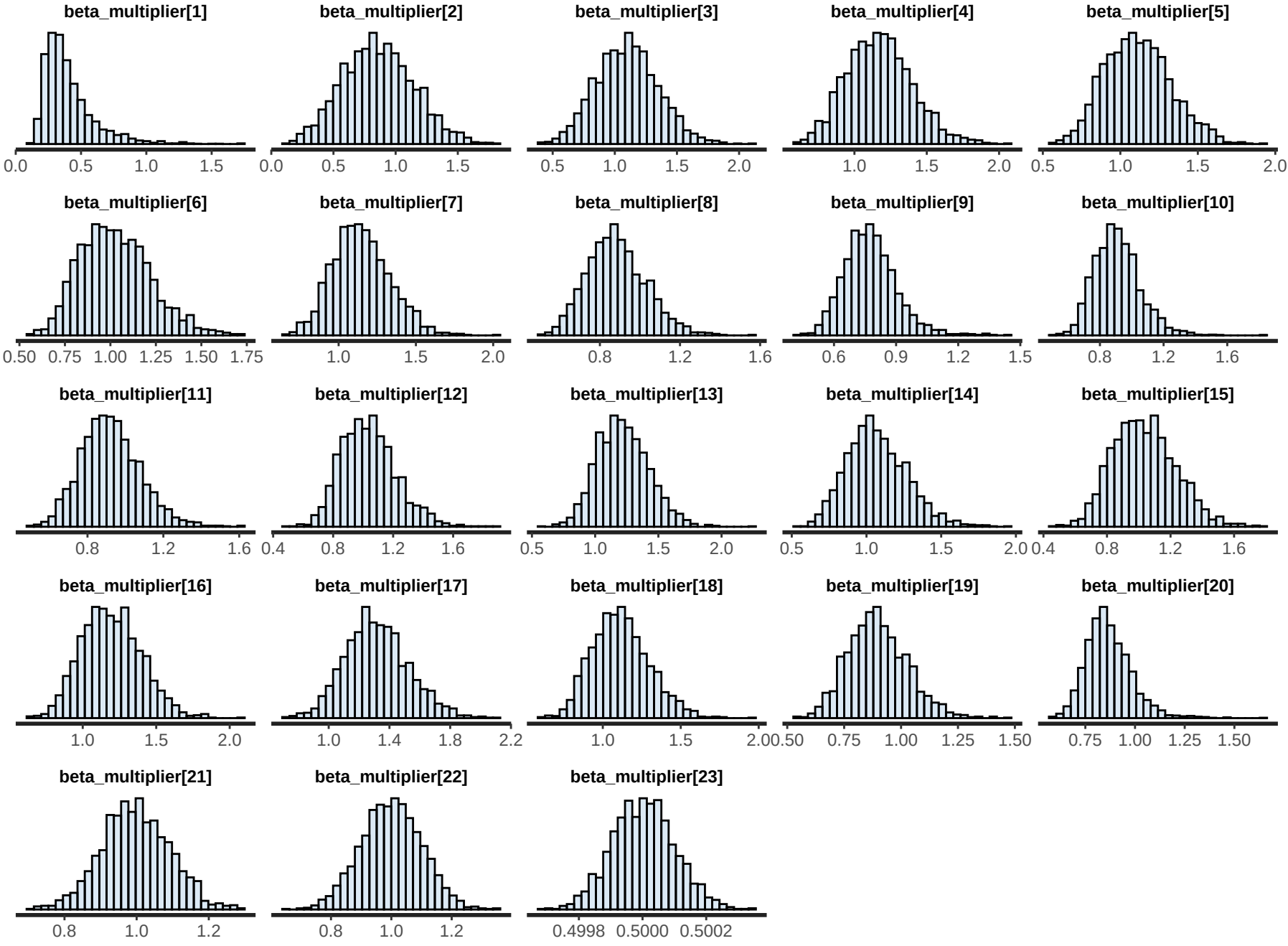

4
6
8
duration_hosp_mod


8
10
12
14
duration_hosp_icu


0.000
0.025
0.050
0.075
0.100
frac_hosp


0.12
0.16
0.20
frac_icu


0.5
0.6
0.7
0.8
frac_mort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beta_multiplier[2]
0.0 0.5 1.0 1.5
beta_multiplier[3]
0.5 1.0 1.5 2.0
beta_multiplier[4]
1.0 1.5 2.0
beta_multiplier[5]
0.5 1.0 1.5 2.0
beta_multiplier[6]
0.50 0.75 1.00 1.25 1.50 1.75
beta_multiplier[7]
1.0 1.5 2.0
beta_multiplier[8]
0.8 1.2 1.6
beta_multiplier[9]
0.6 0.9 1.2 1.5
beta_multiplier[10]
0.8 1.2 1.6
beta_multiplier[11]
0.8 1.2 1.6
beta_multiplier[12]
0.4 0.8 1.2 1.6
beta_multiplier[13]
0.5 1.0 1.5 2.0
beta_multiplier[14]
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beta_multiplier[15]
0.4 0.8 1.2 1.6
beta_multiplier[16]
1.0 1.5 2.0
beta_multiplier[17]
1.0 1.4 1.8 2.2
beta_multiplier[18]
1.0 1.5 2.0
beta_multiplier[19]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[20]
0.75 1.00 1.25 1.50
beta_multiplier[21]
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beta_multiplier[22]
0.8 1.0 1.2
beta_multiplier[23]
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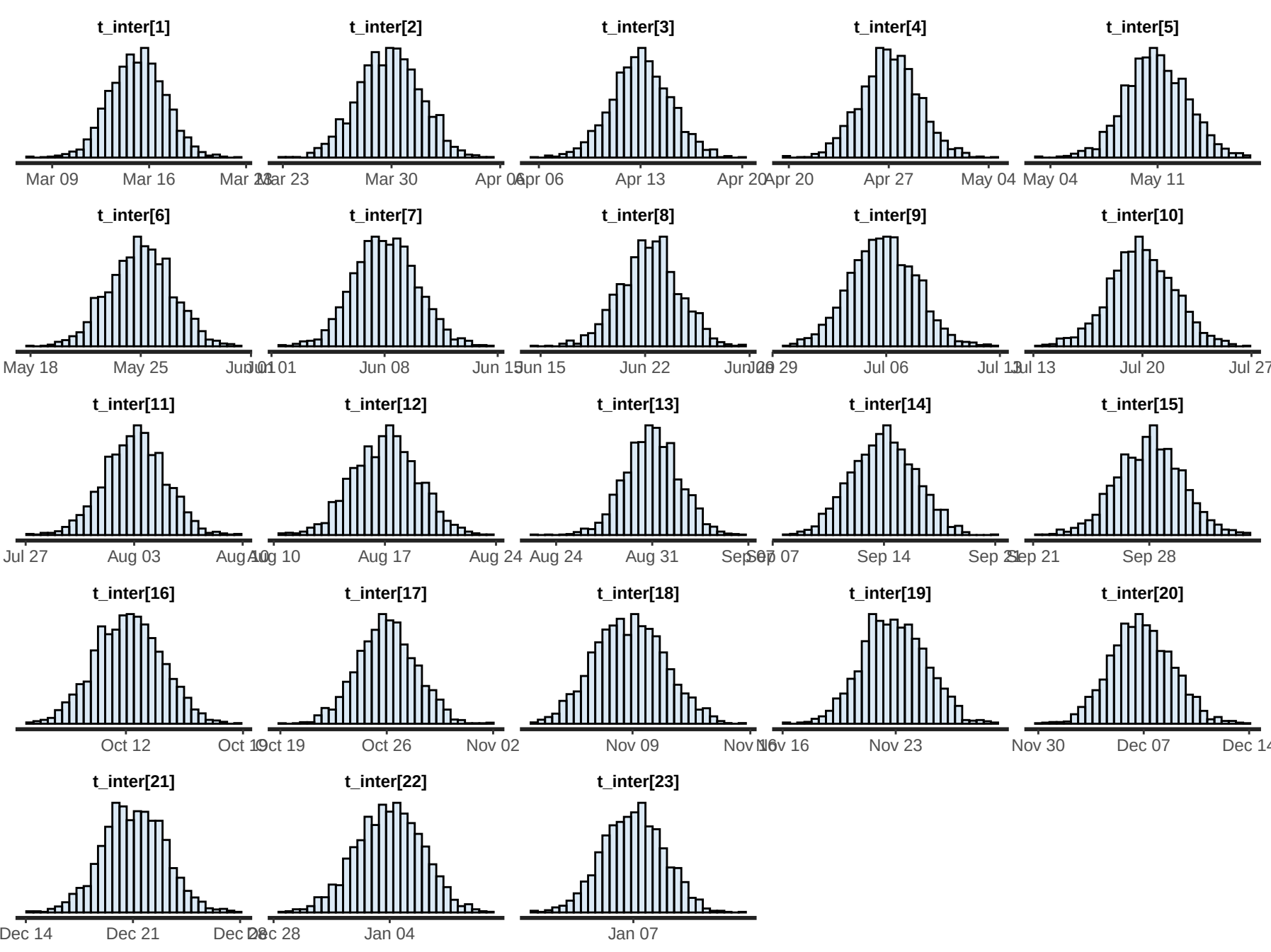
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Mar 23
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Apr 06
Apr 13
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May 04
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May 18
May 25
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Jun 15
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Jun 29
Jul 06
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Nov 09
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Nov 23
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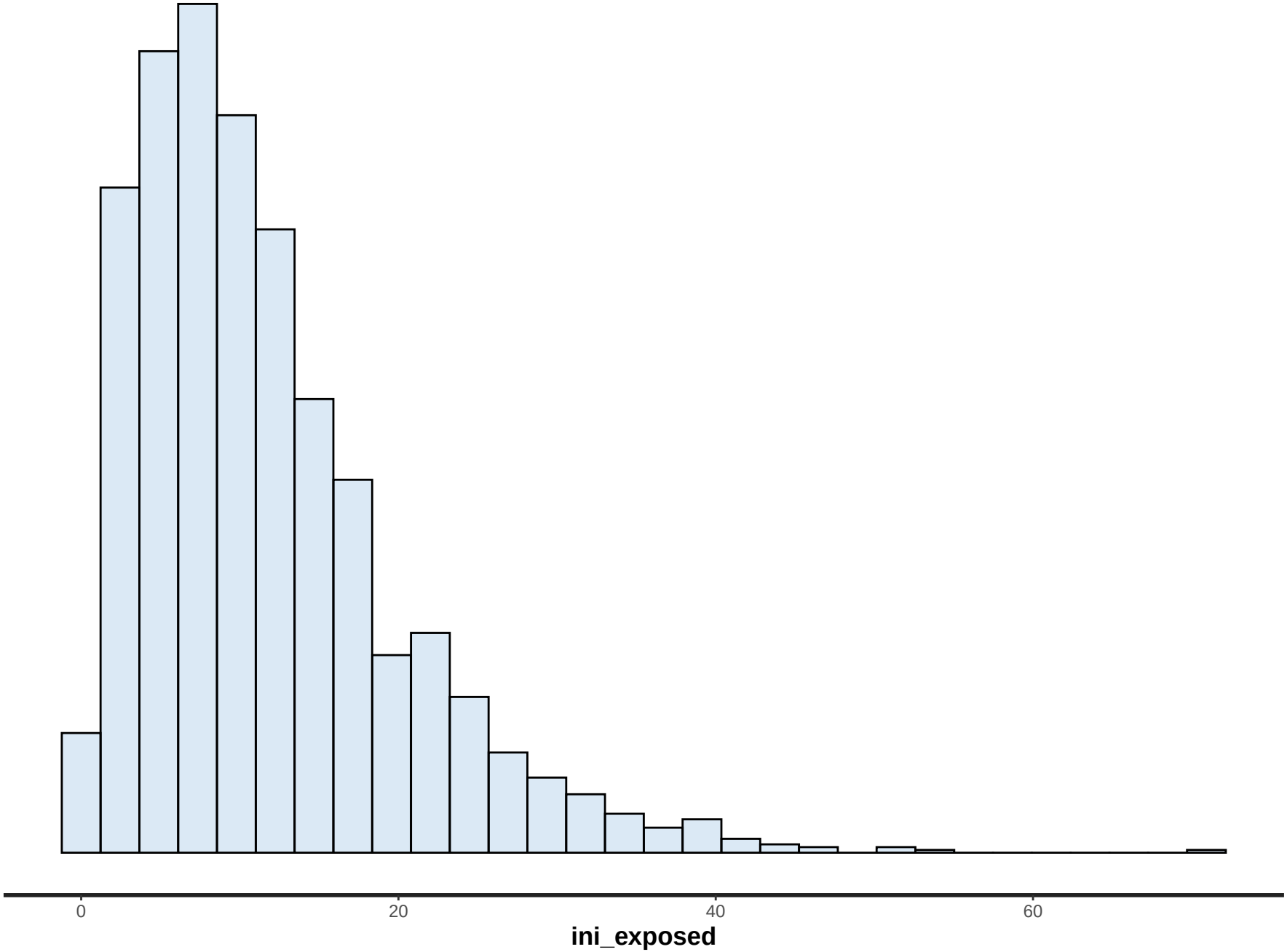
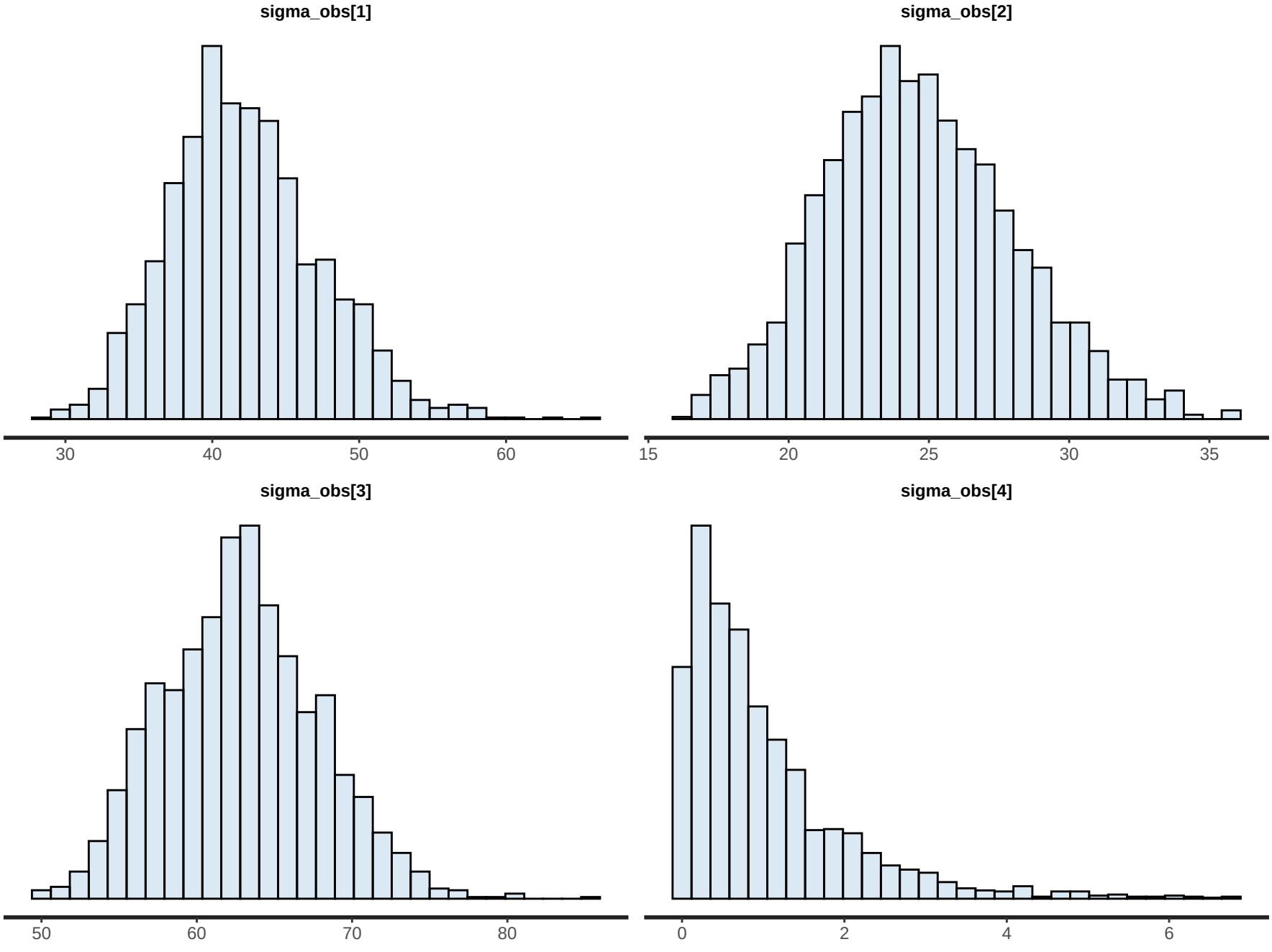
Dec 28
Jan 04
t_inter[23]
Jan 07


0
20
40
60
ini_exposed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sigma_obs[4]
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6