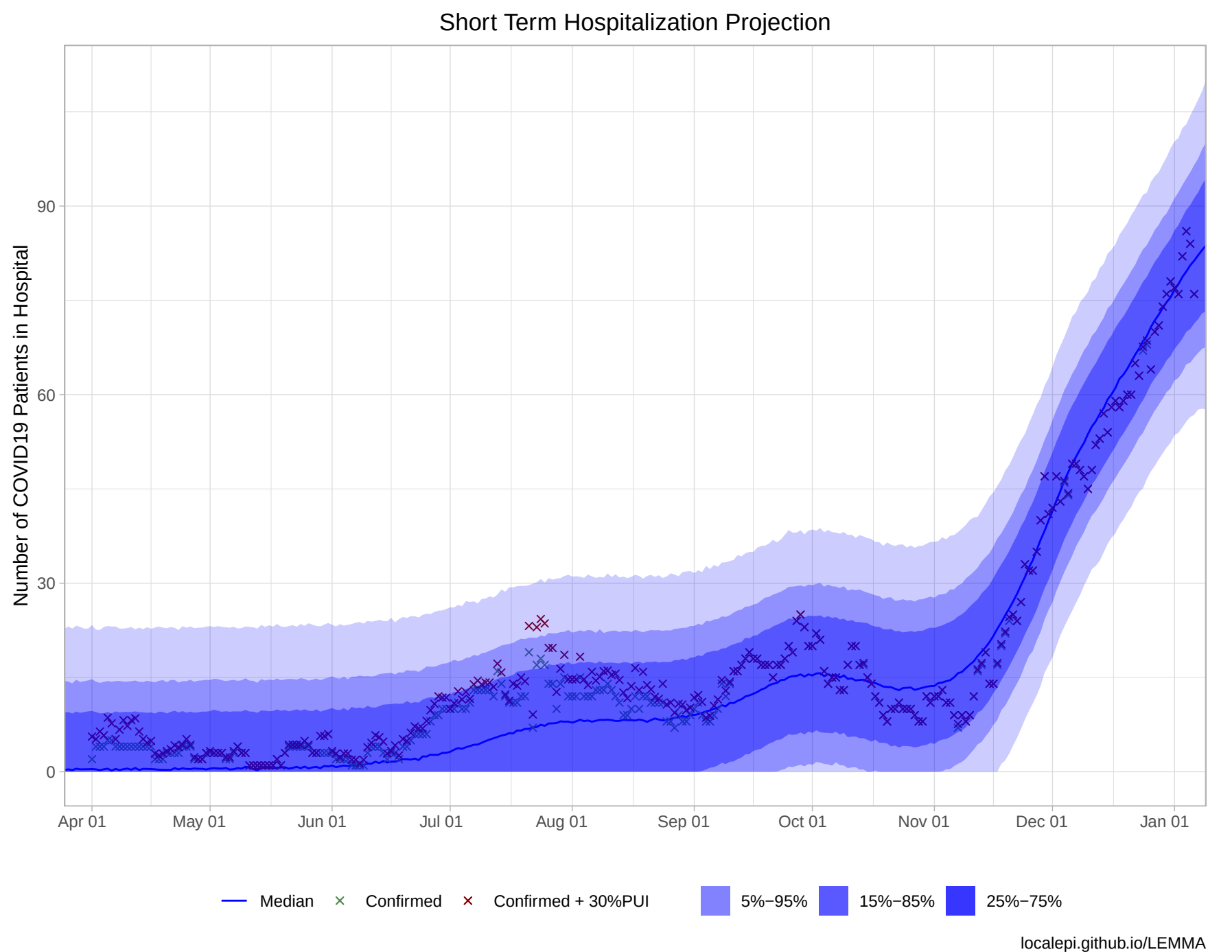
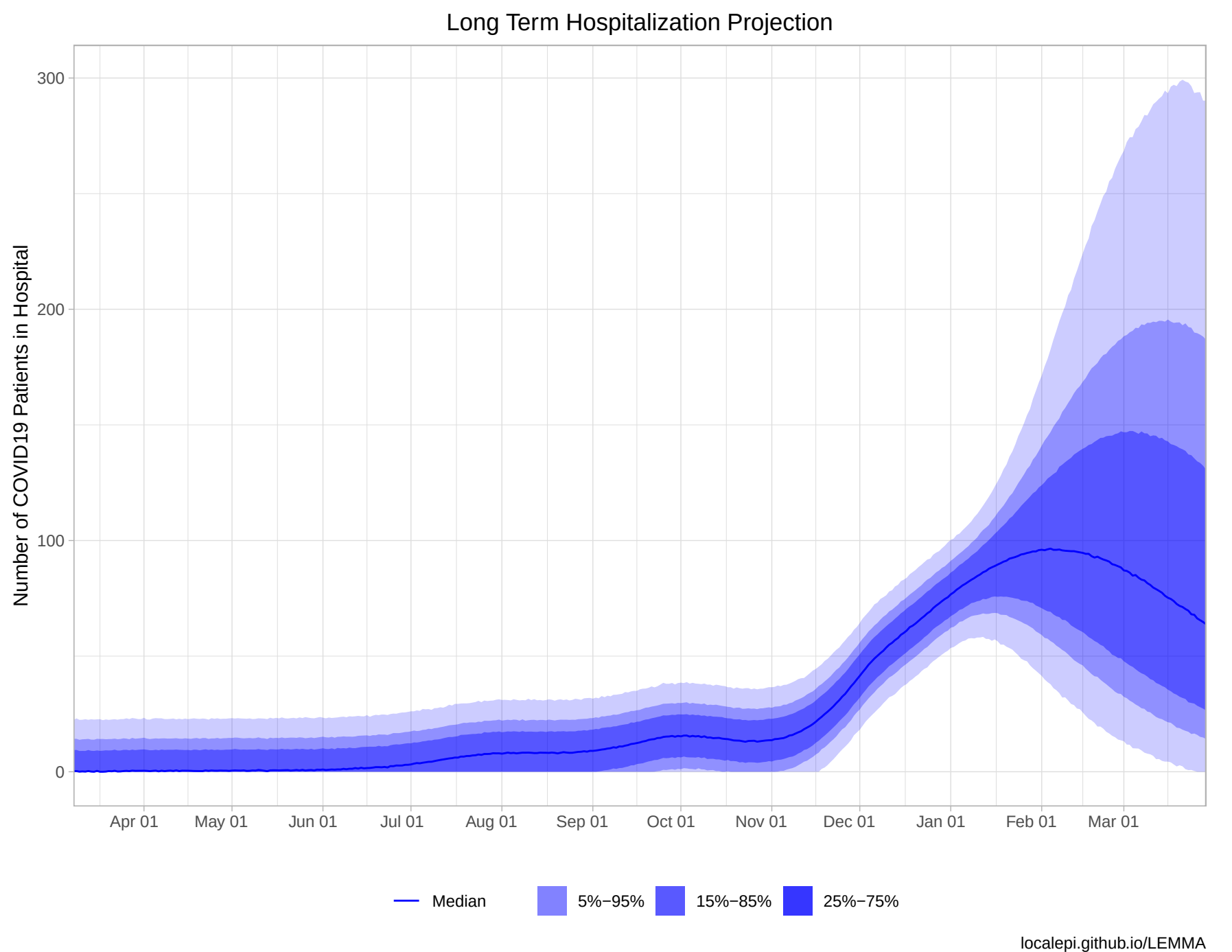
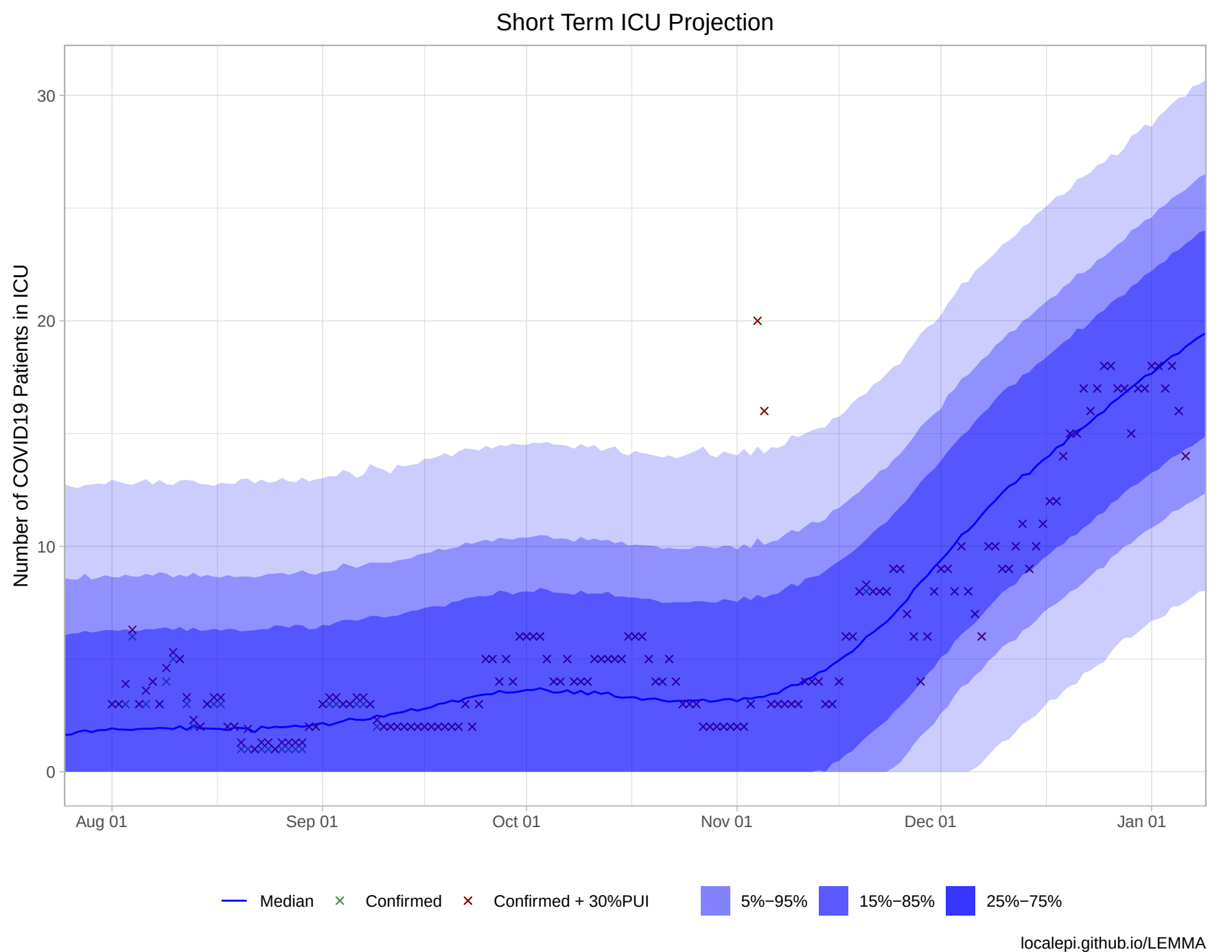
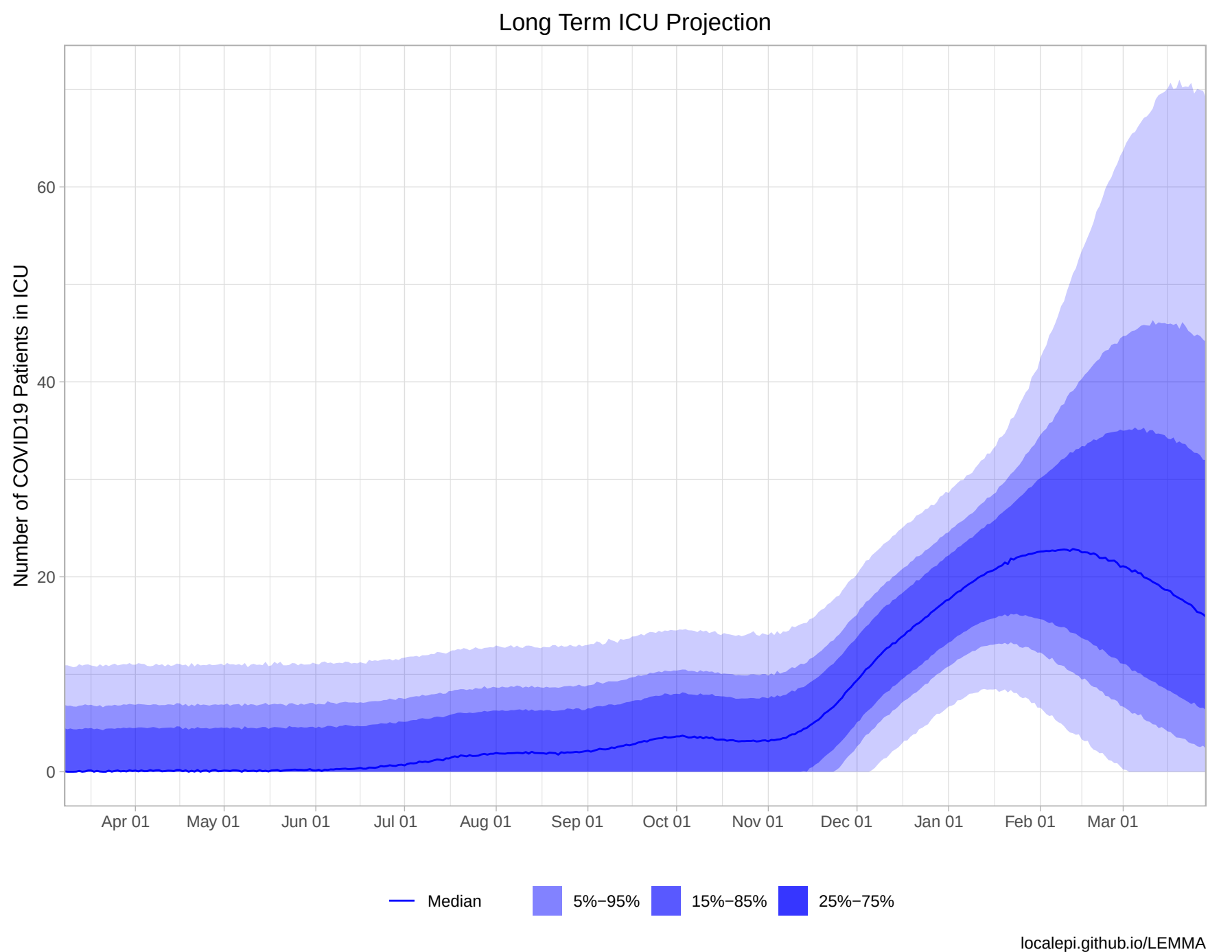
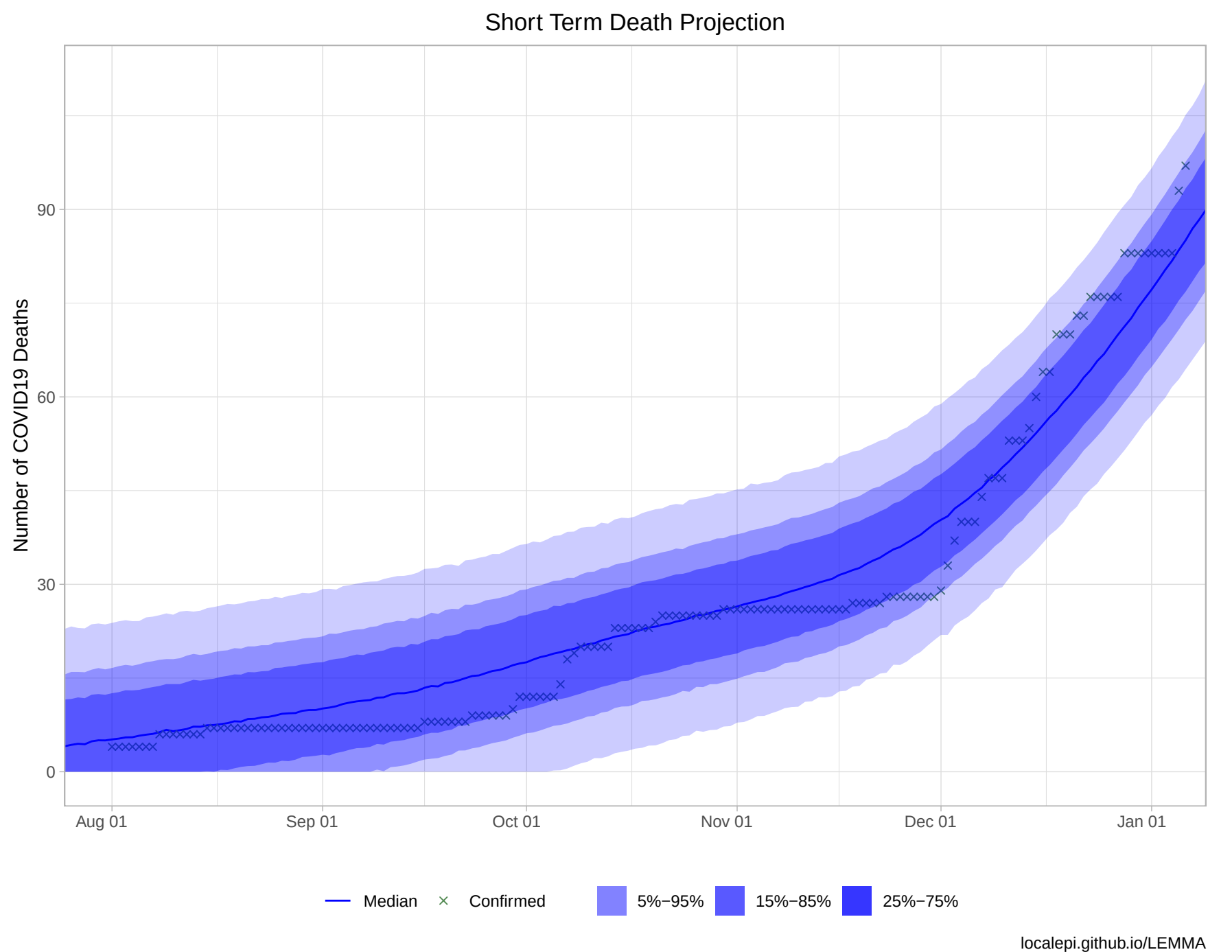
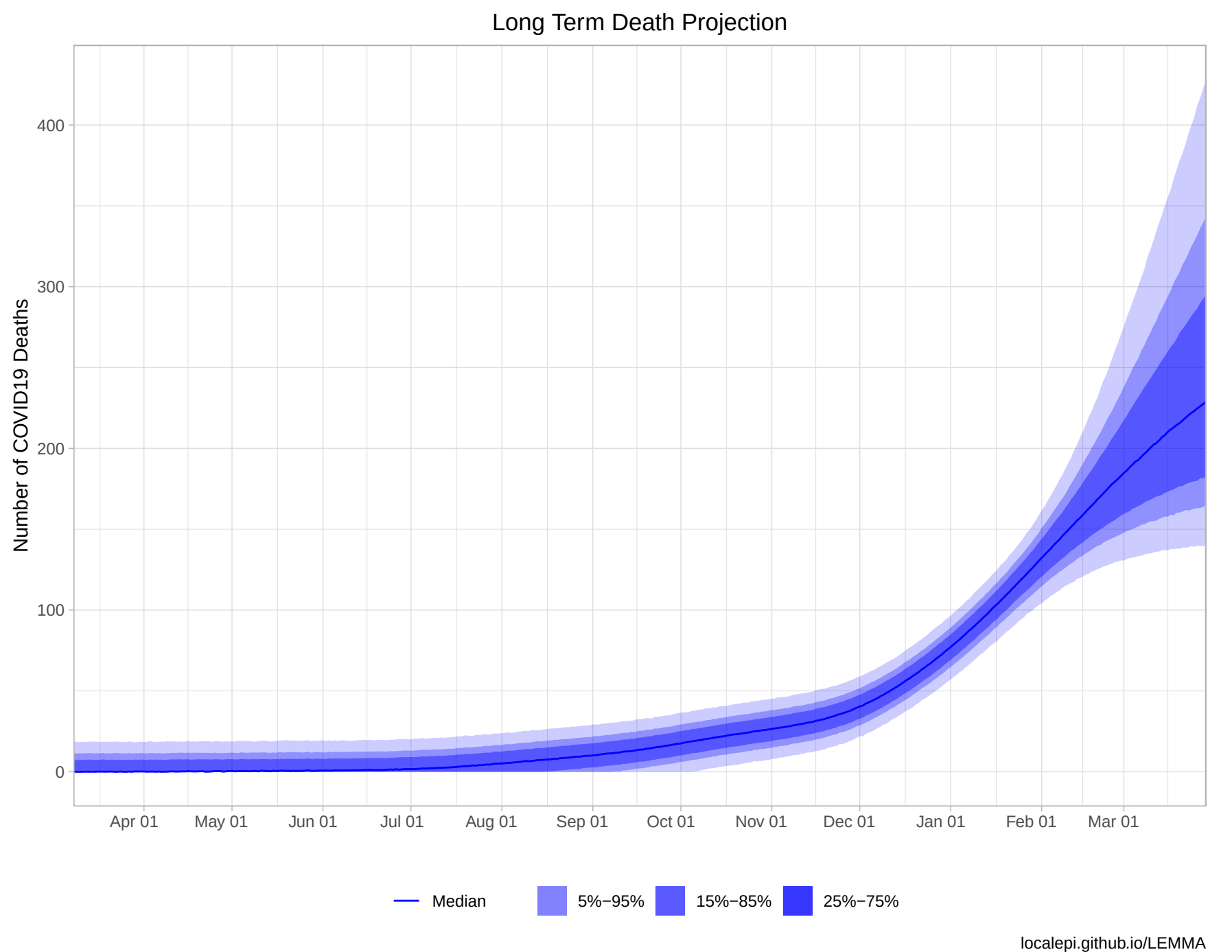

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
30
60
90
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

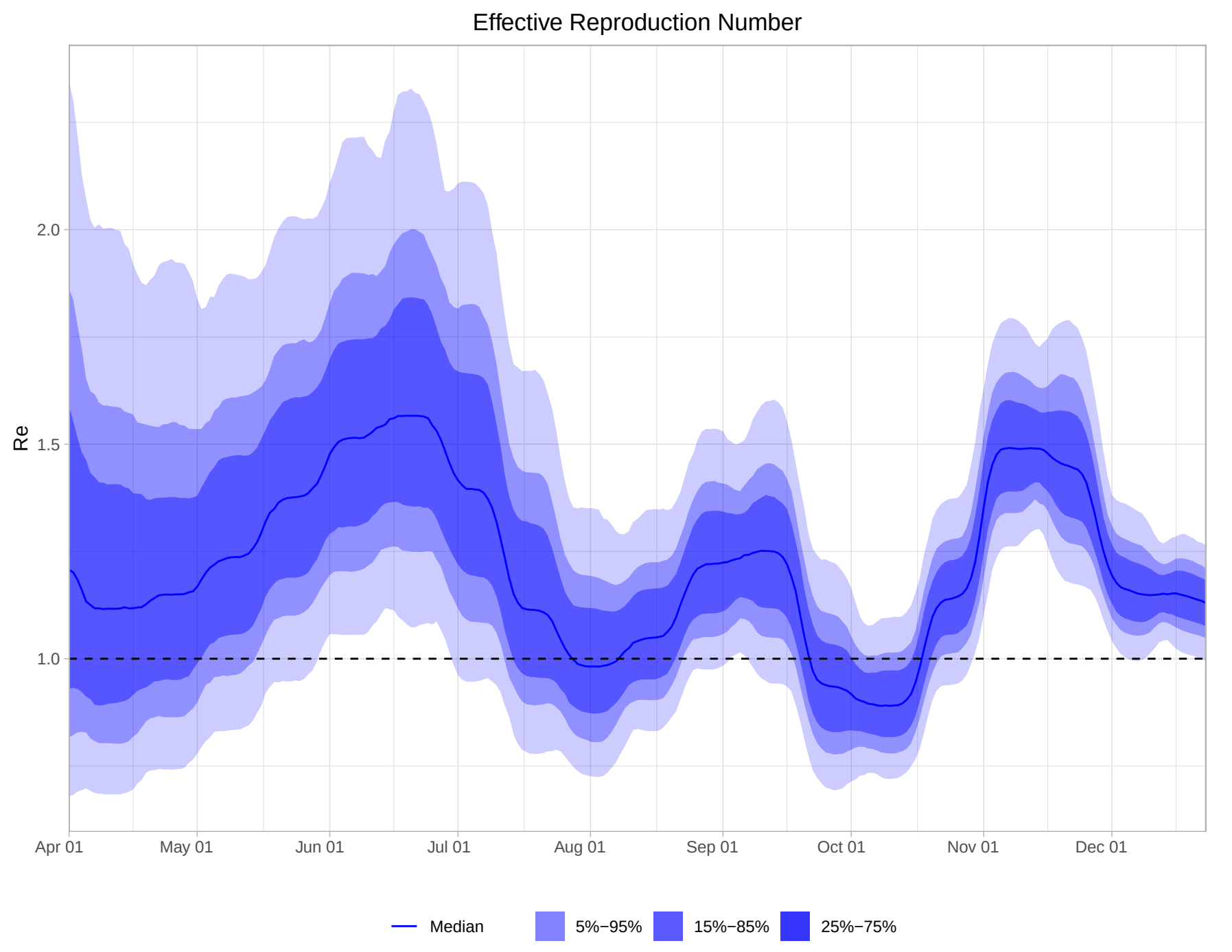

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
30
20
10
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
0
20
40
60
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

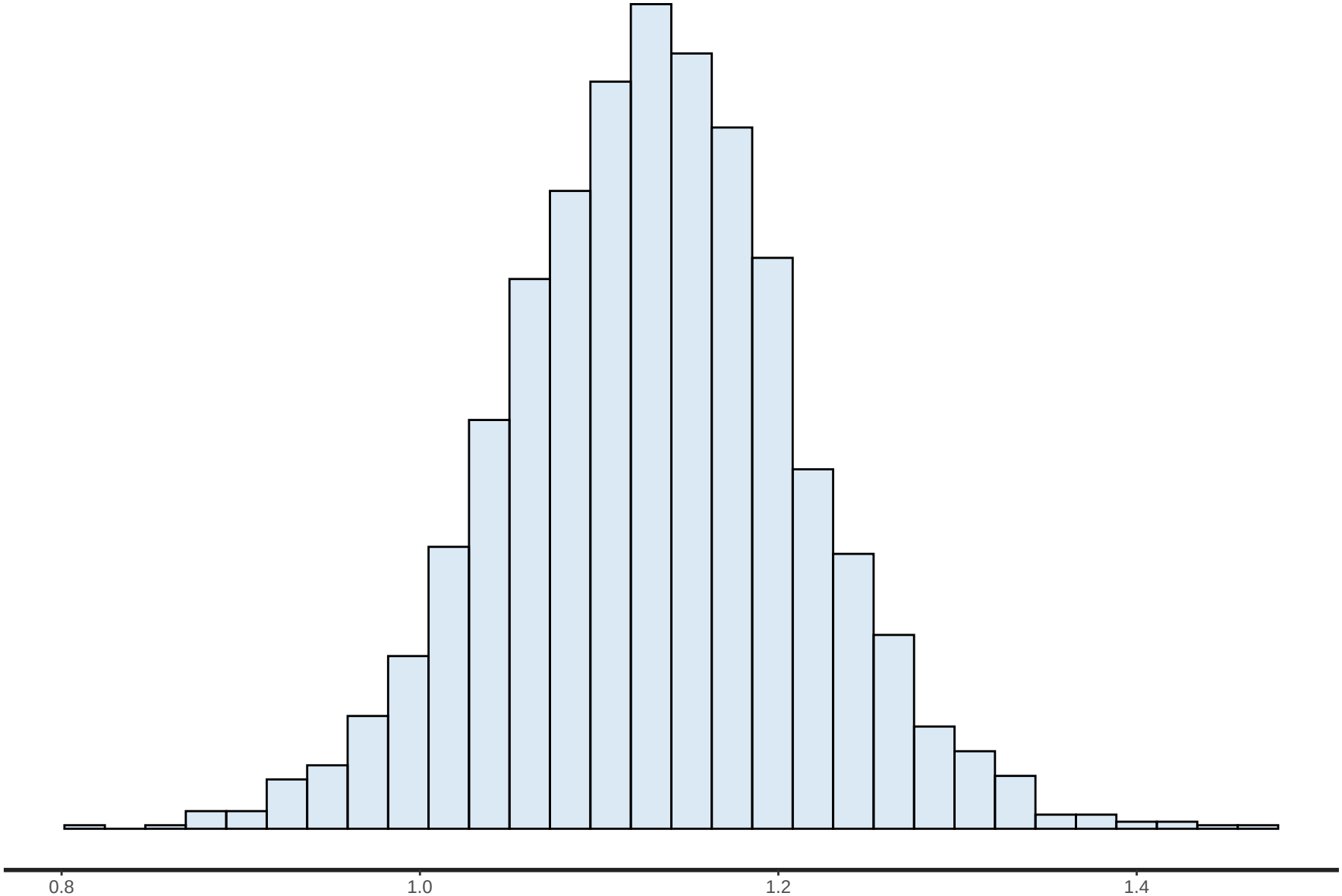

Short Term Death Projection
Number of COVID19 Deaths
0
30
60
90
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

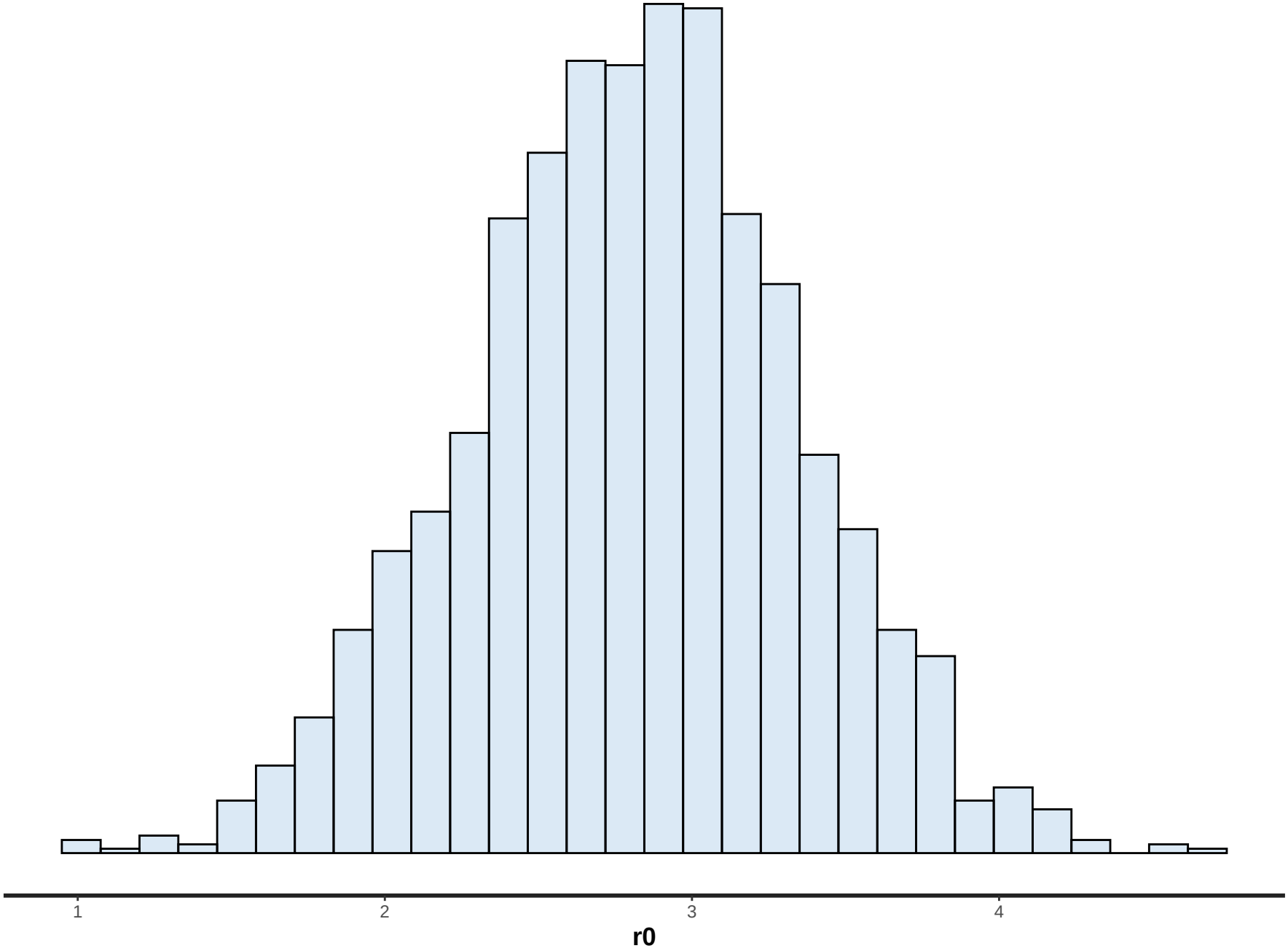

Long Term Death Projection
Number of COVID19 Deaths
400
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

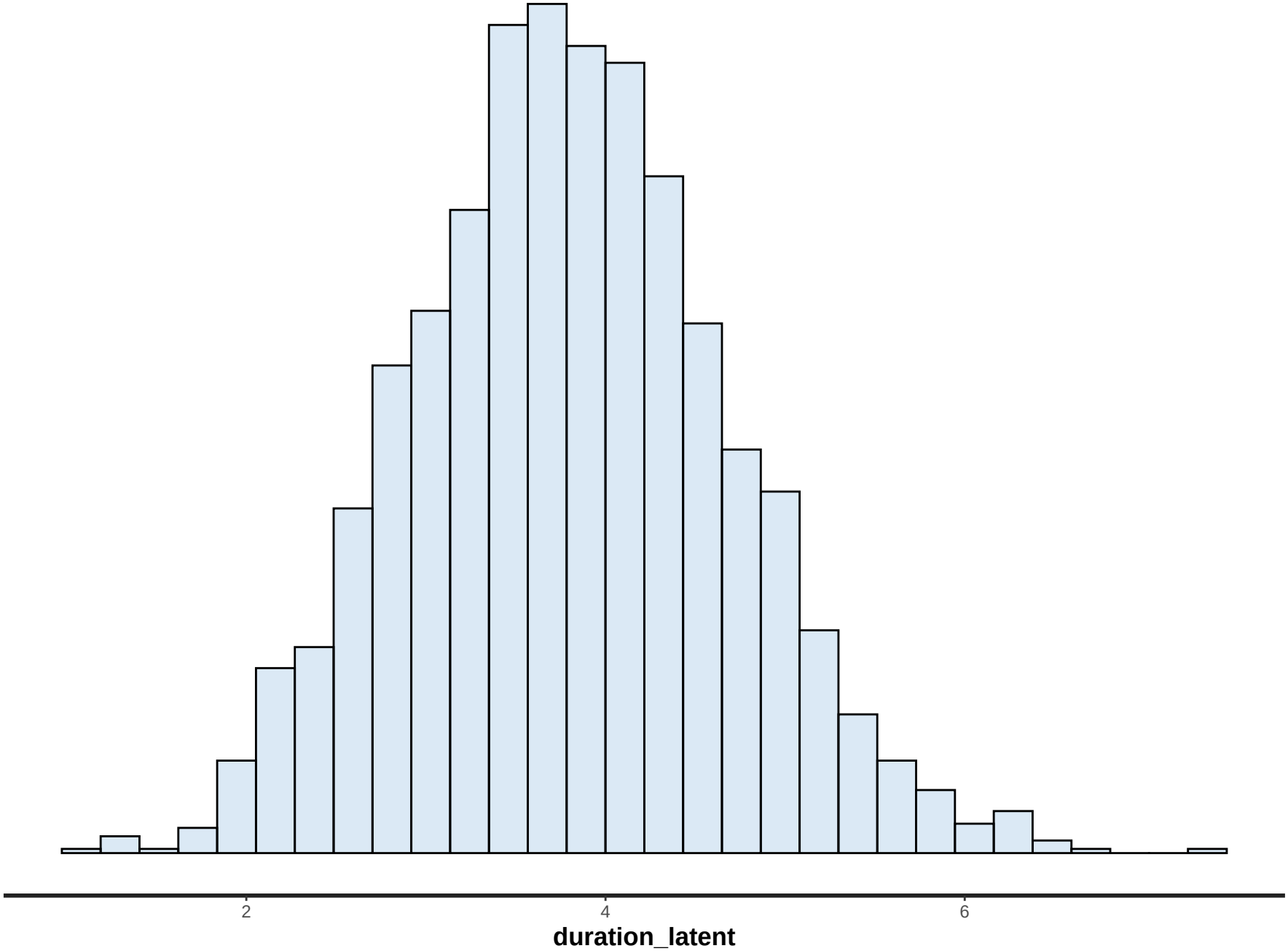

Effective Reproduction Number
Re
2.0
1.5
1.0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

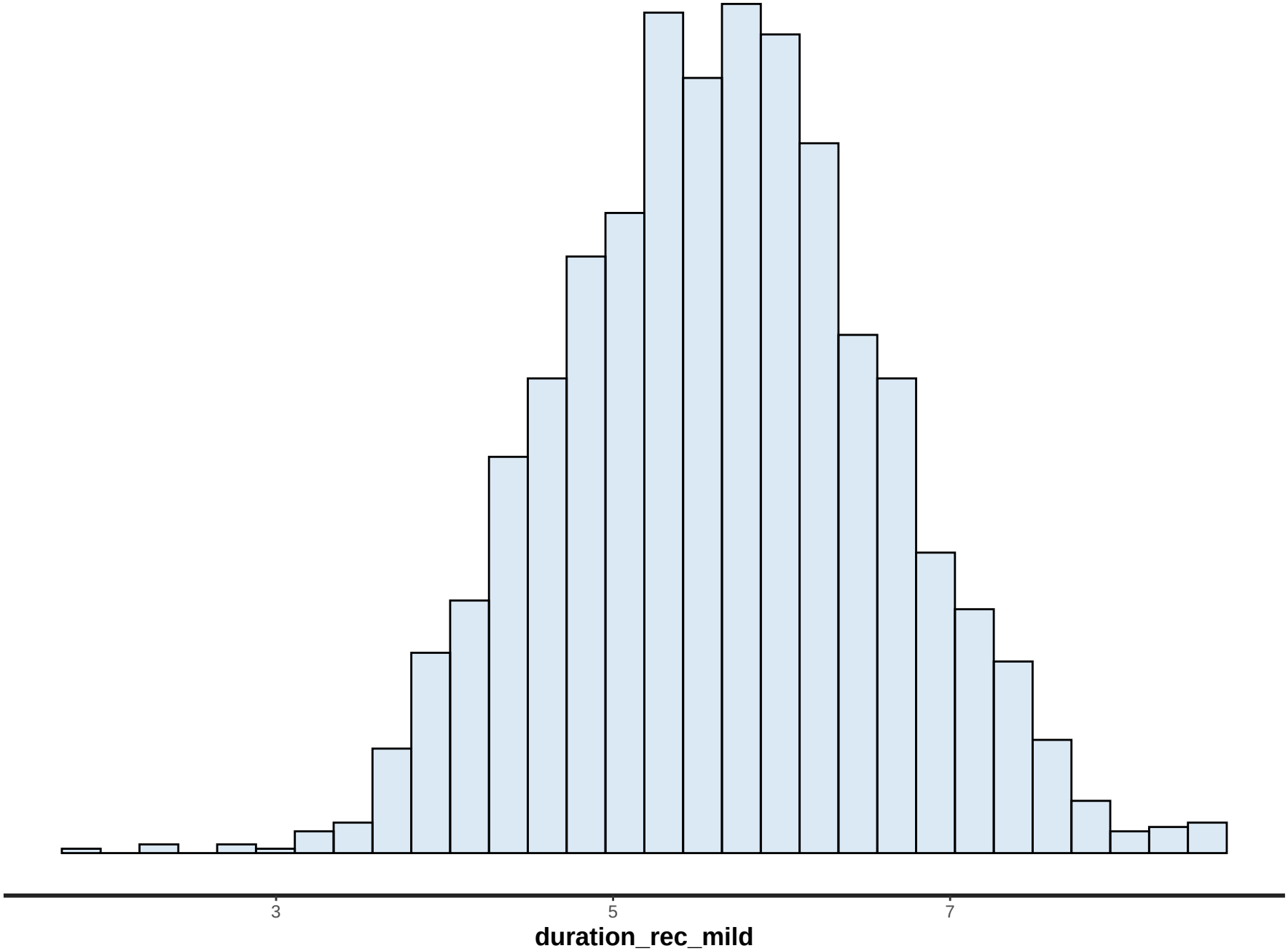
Rt as of 2020−12−23

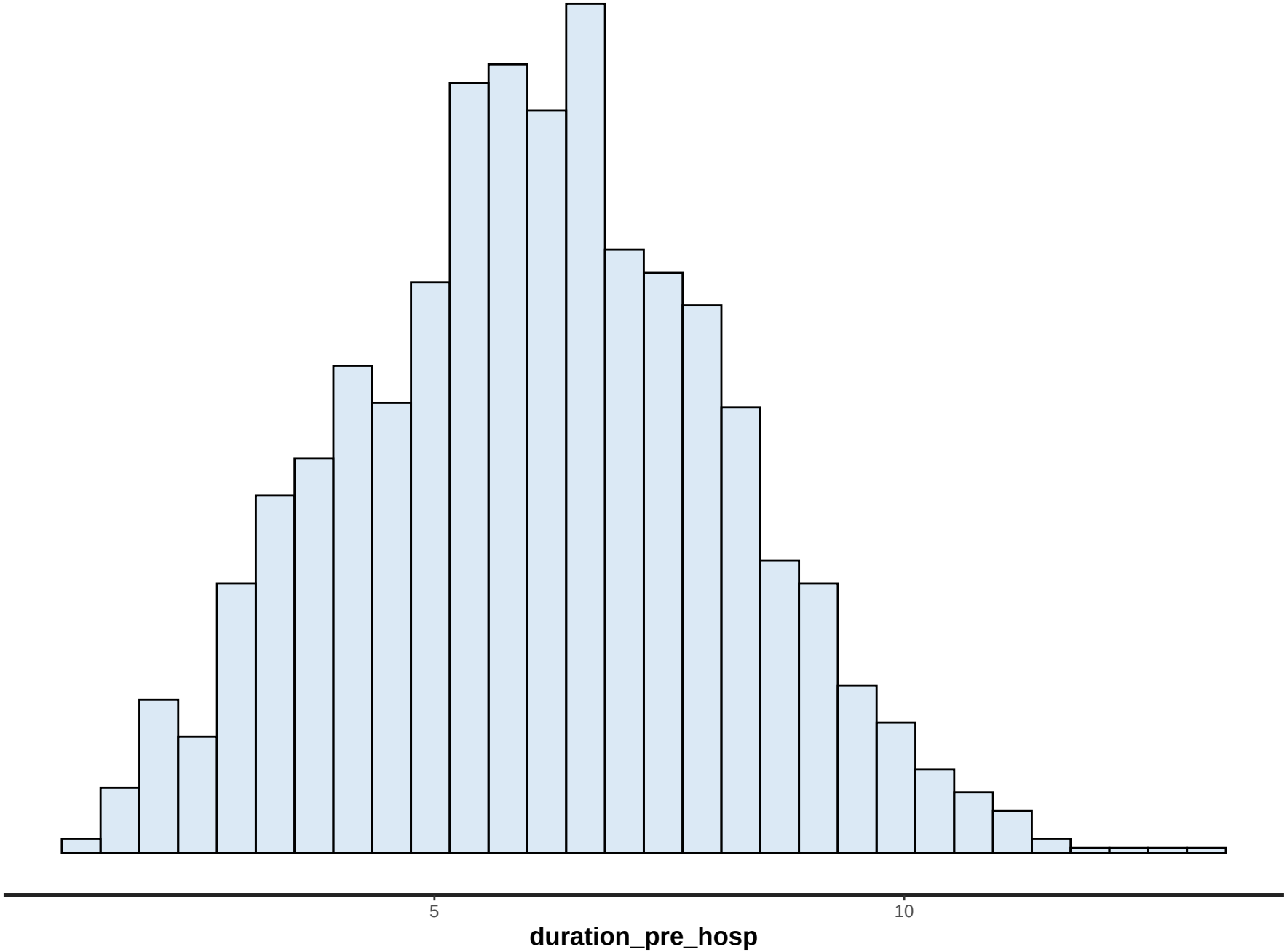
5%	10%	25%	50%	75%	90%	95%
0.99	1.03	1.08	1.13	1.18	1.23	1.26

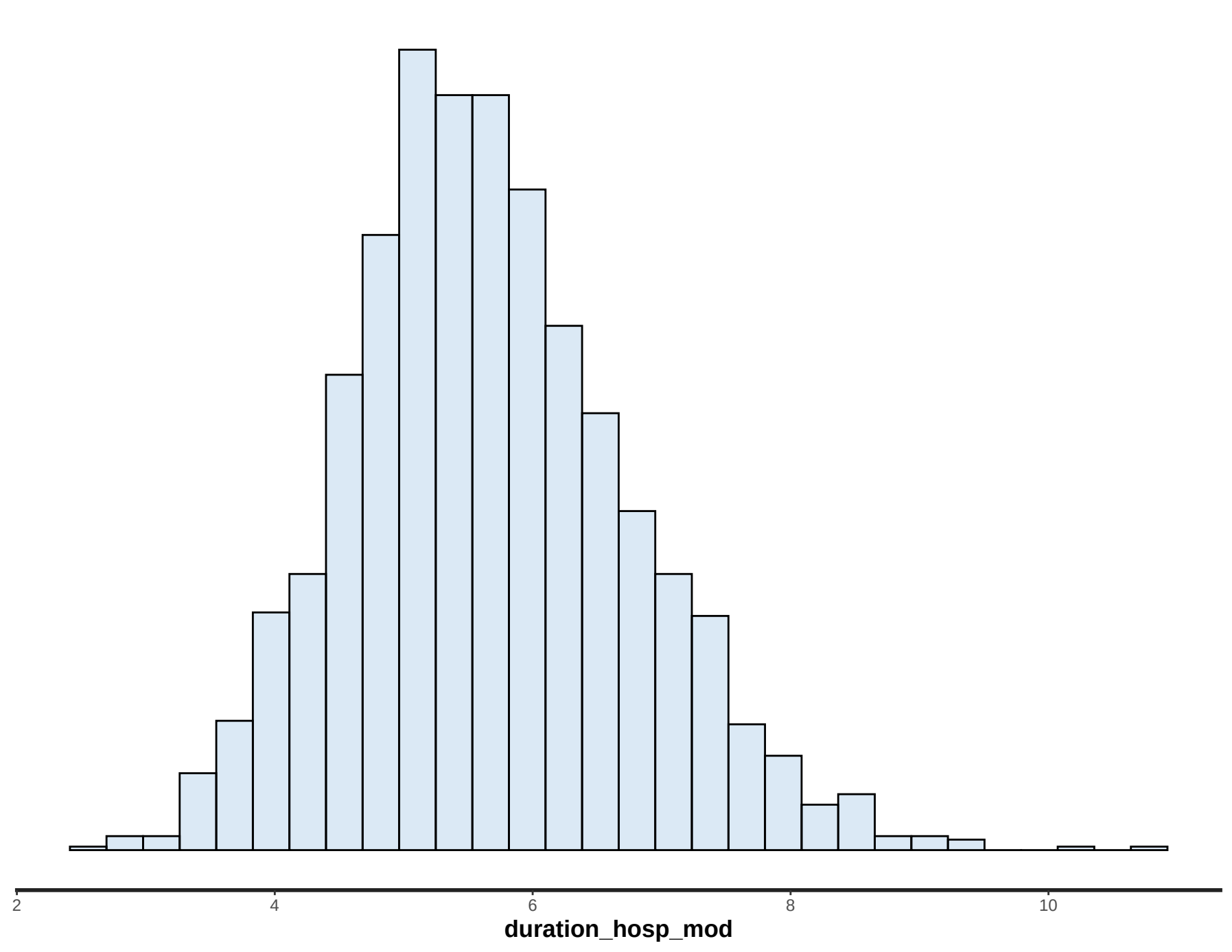


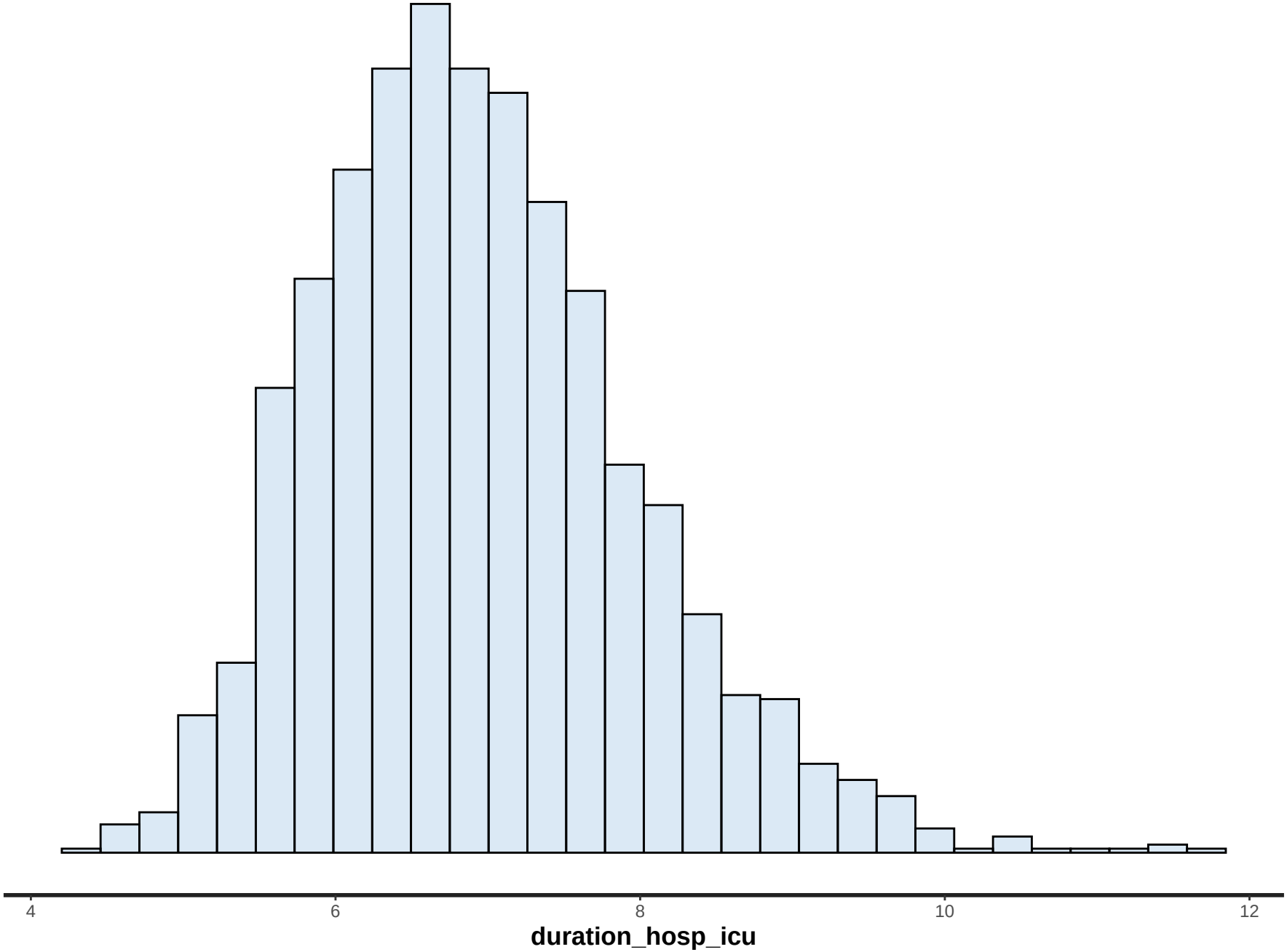

1
2
3
4
r0

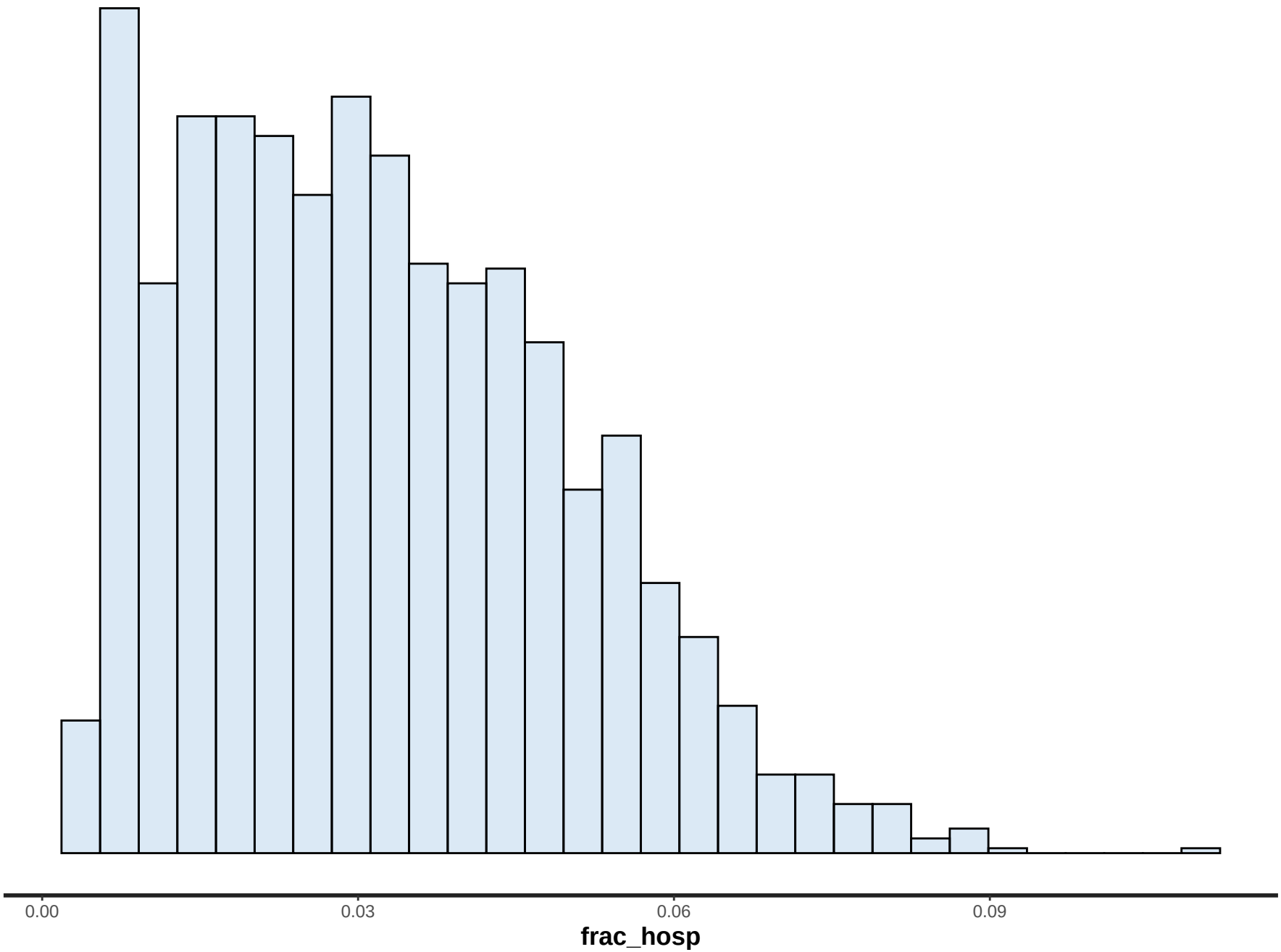

2
4
6
duration_latent


3
5
7
duration_rec_mild


5
10
duration_pre_hosp


2
4
6
8
10
duration_hosp_mod


4
6
8
10
12
duration_hosp_icu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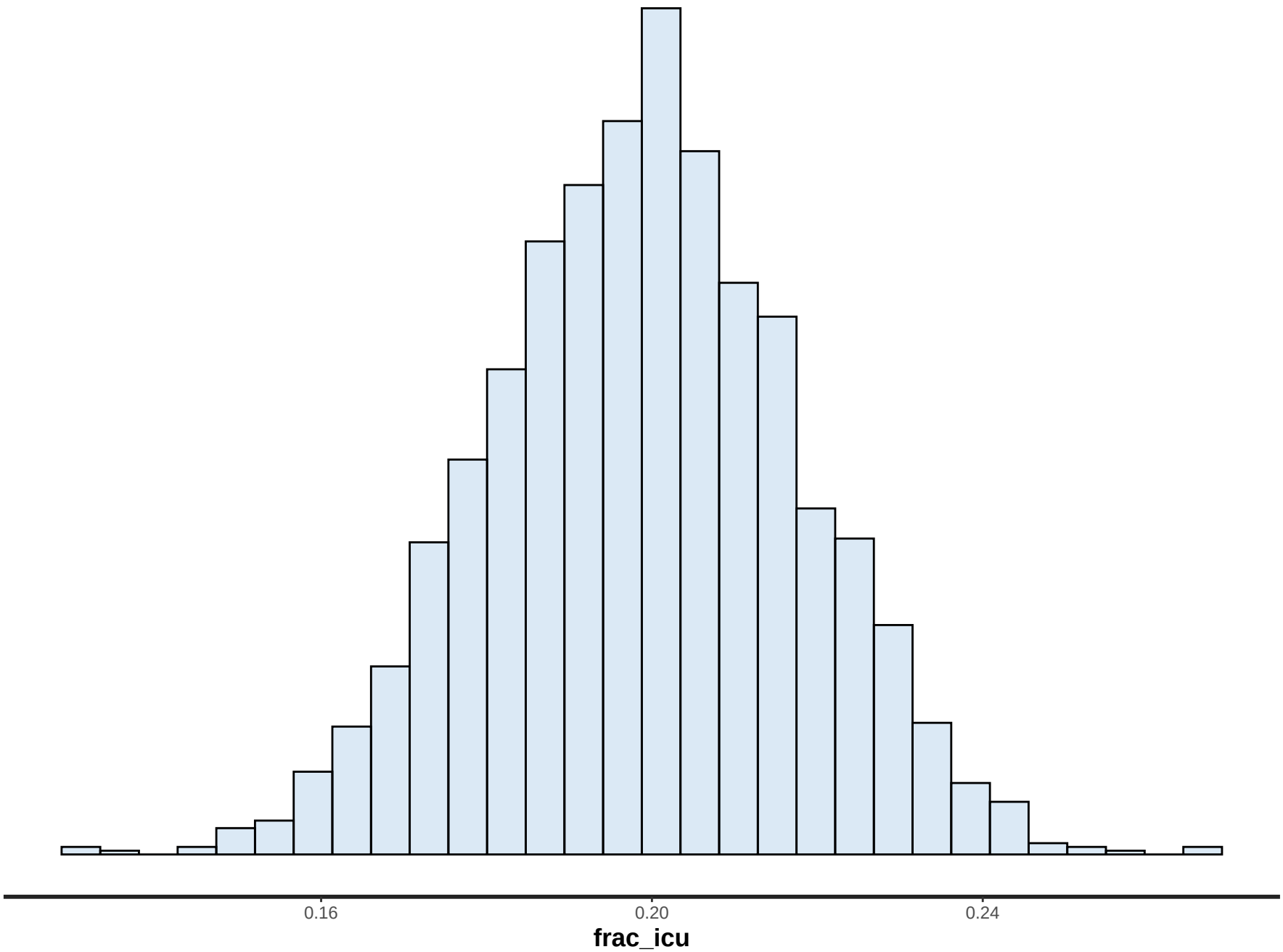
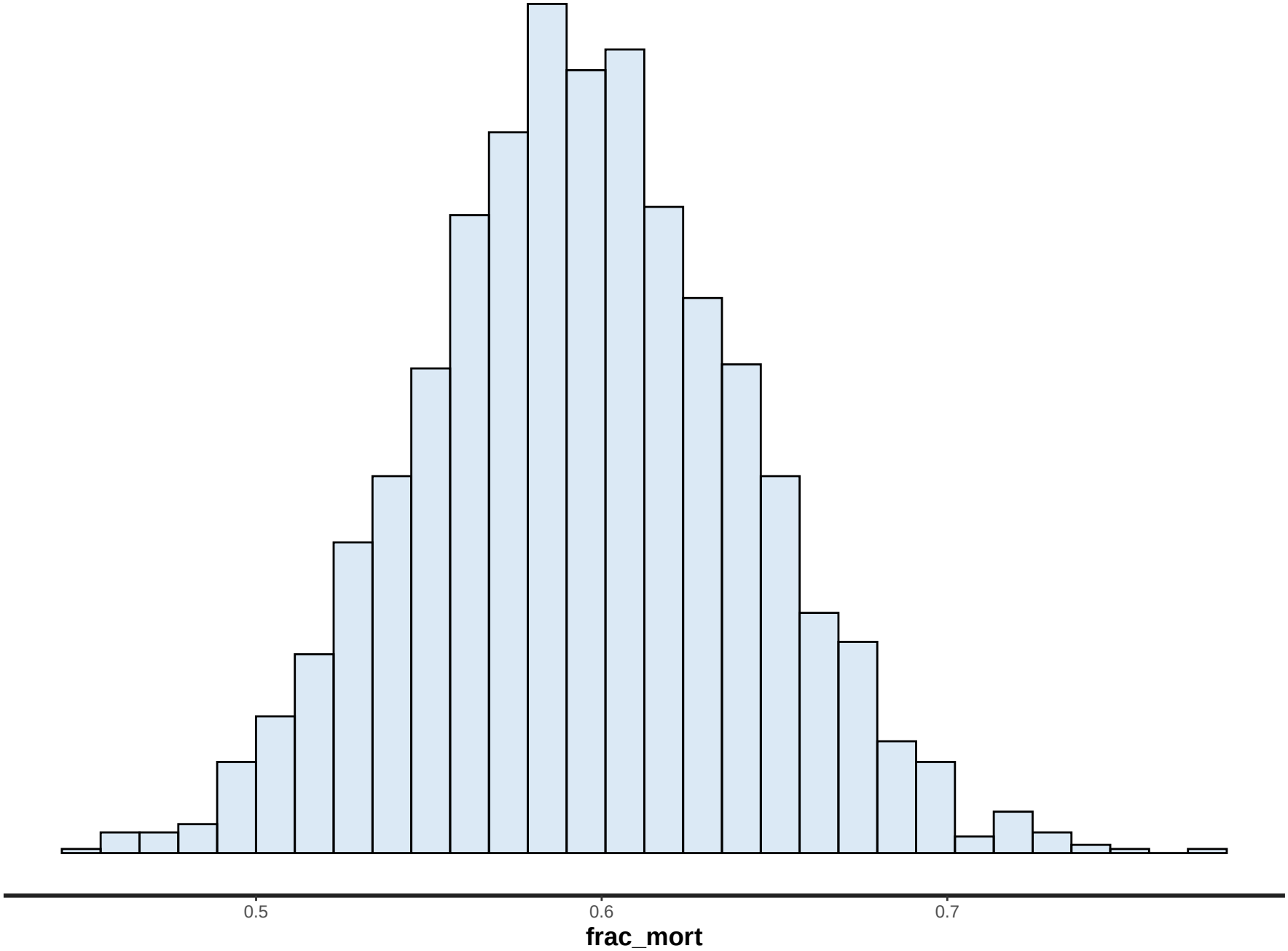
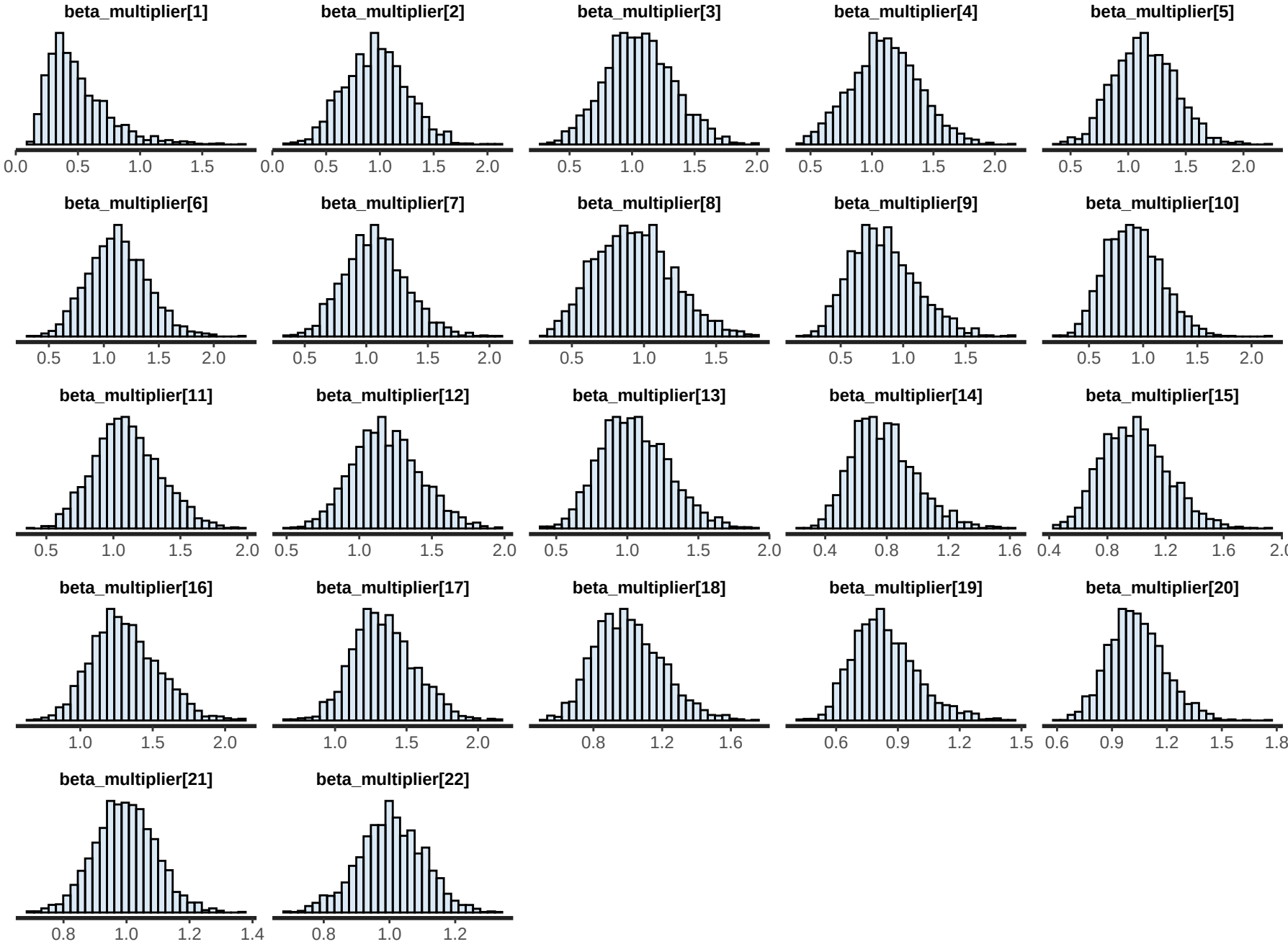
0.03
0.06
0.09
frac_hosp


0.16
0.20
0.24
frac_icu


0.5
0.6
0.7
frac_mort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beta_multiplier[2]
0.0 0.5 1.0 1.5 2.0
beta_multiplier[3]
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beta_multiplier[4]
0.5 1.0 1.5 2.0
beta_multiplier[5]
0.5 1.0 1.5 2.0
beta_multiplier[6]
0.5 1.0 1.5 2.0
beta_multiplier[7]
0.5 1.0 1.5 2.0
beta_multiplier[8]
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beta_multiplier[9]
0.5 1.0 1.5
beta_multiplier[10]
0.5 1.0 1.5 2.0
beta_multiplier[11]
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beta_multiplier[15]
0.4 0.8 1.2 1.6 2.0
beta_multiplier[16]
1.0 1.5 2.0
beta_multiplier[17]
1.0 1.5 2.0
beta_multiplier[18]
0.8 1.2 1.6
beta_multiplier[19]
0.6 0.9 1.2 1.5
beta_multiplier[20]
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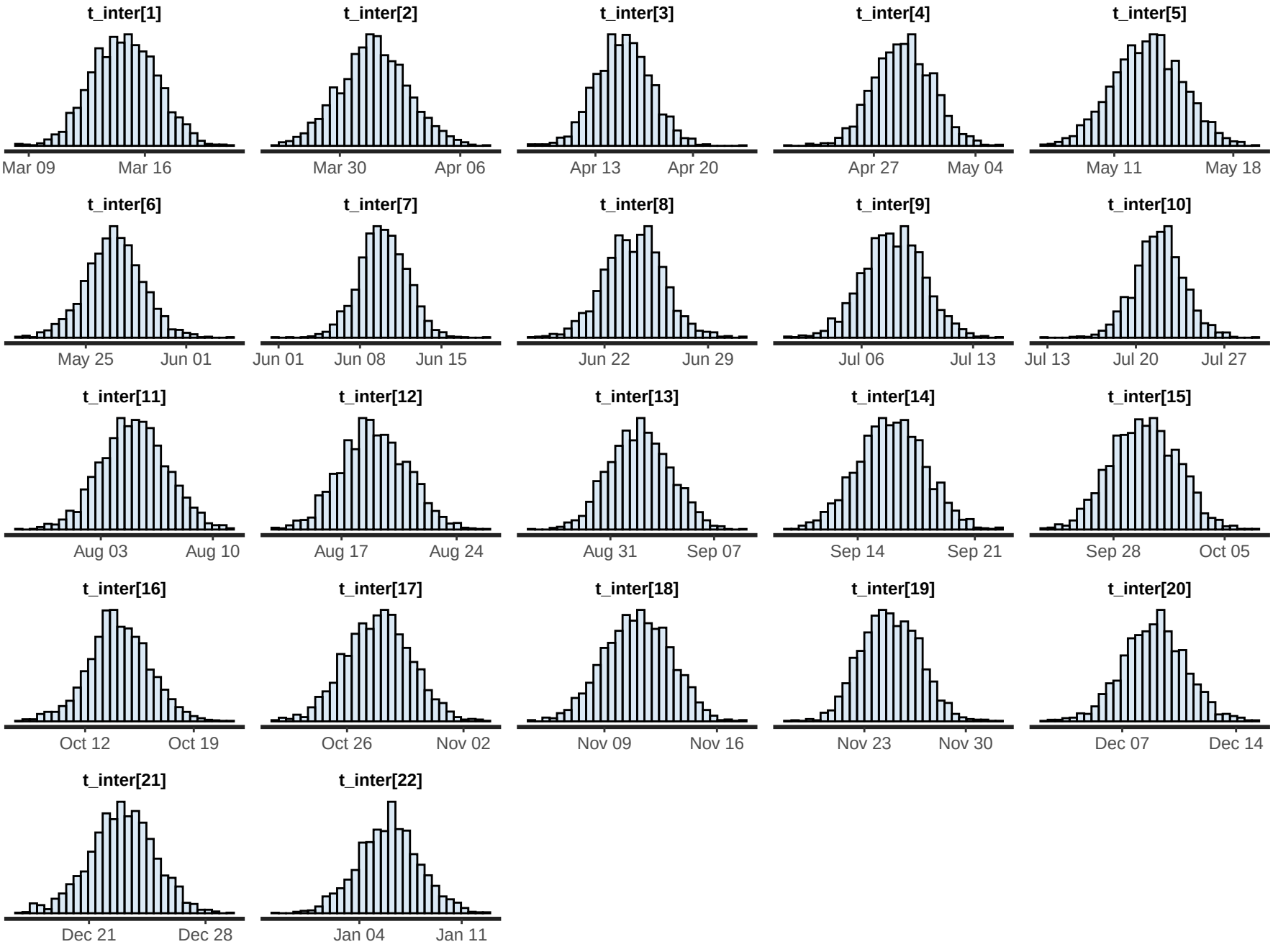
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Mar 16
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Apr 13
Apr 20
t_inter[4]
Apr 27
May 04
t_inter[5]
May 11
May 18
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May 25
Jun 01
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Jun 08
Jun 15
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Jul 27
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Nov 09
Nov 16
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Nov 23
Nov 30
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Dec 07
Dec 14
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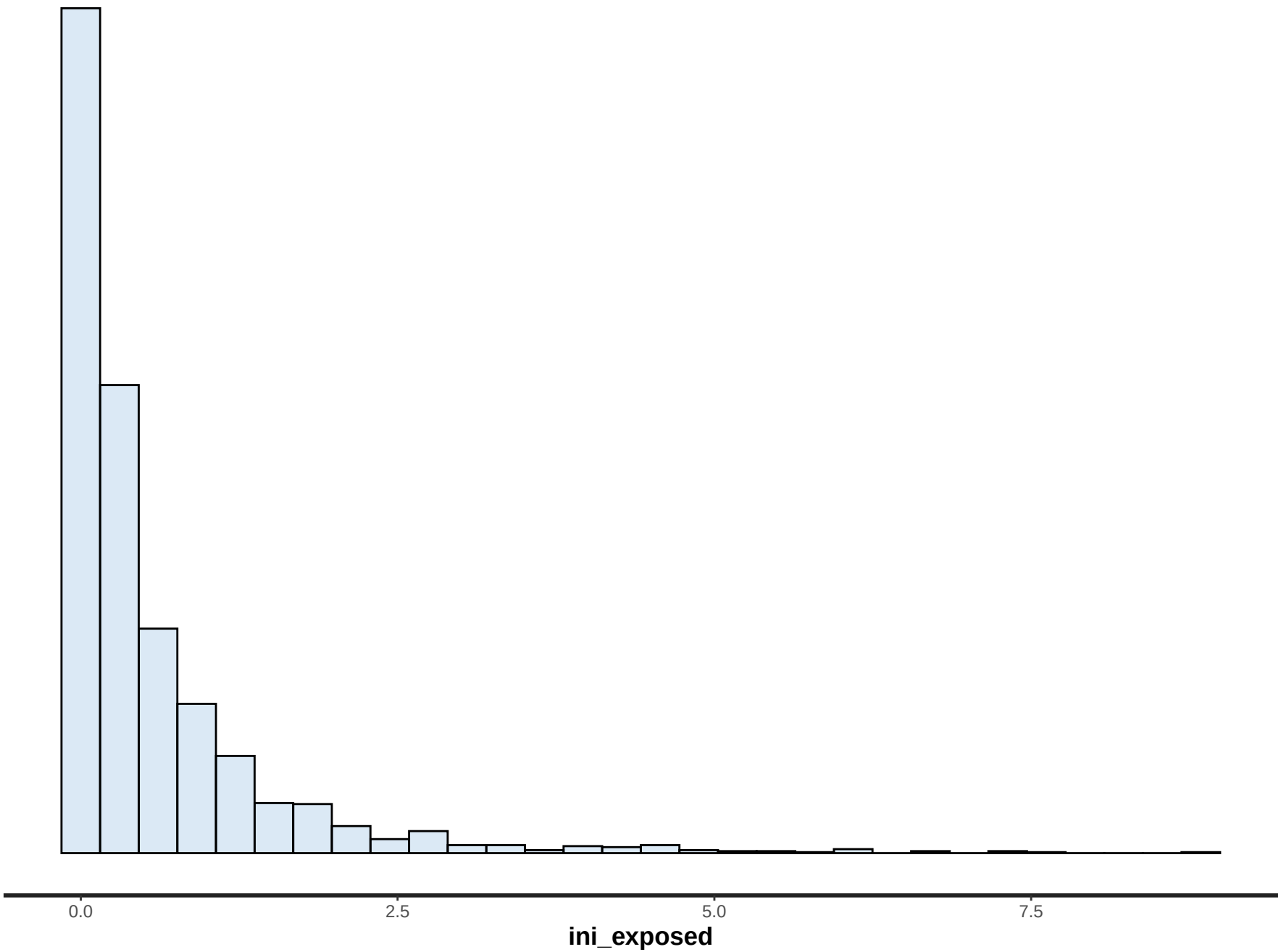
Dec 21
Dec 28
t_inter[22]
Jan 04
Jan 11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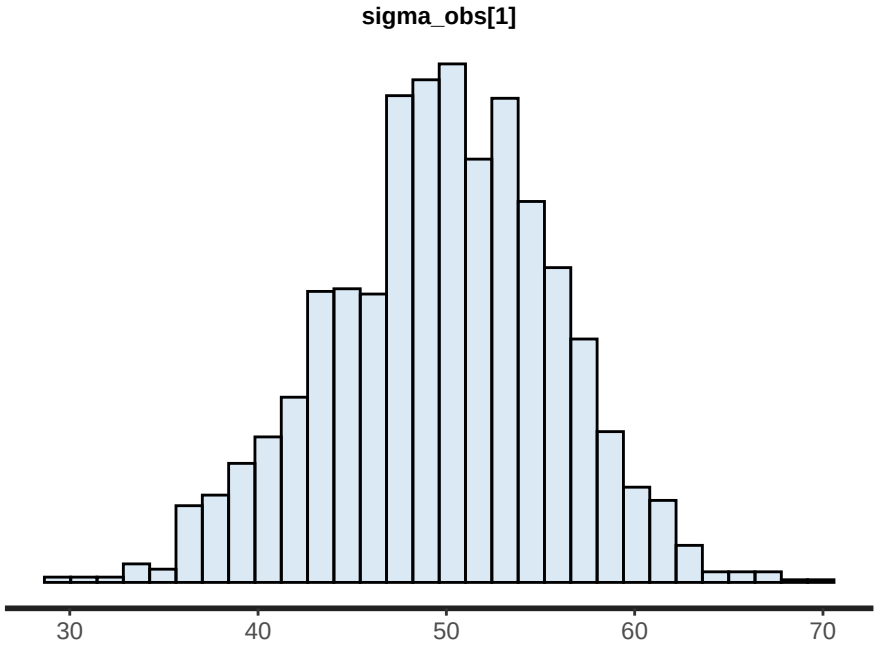
2.5
5.0
7.5
ini_exposed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50
60
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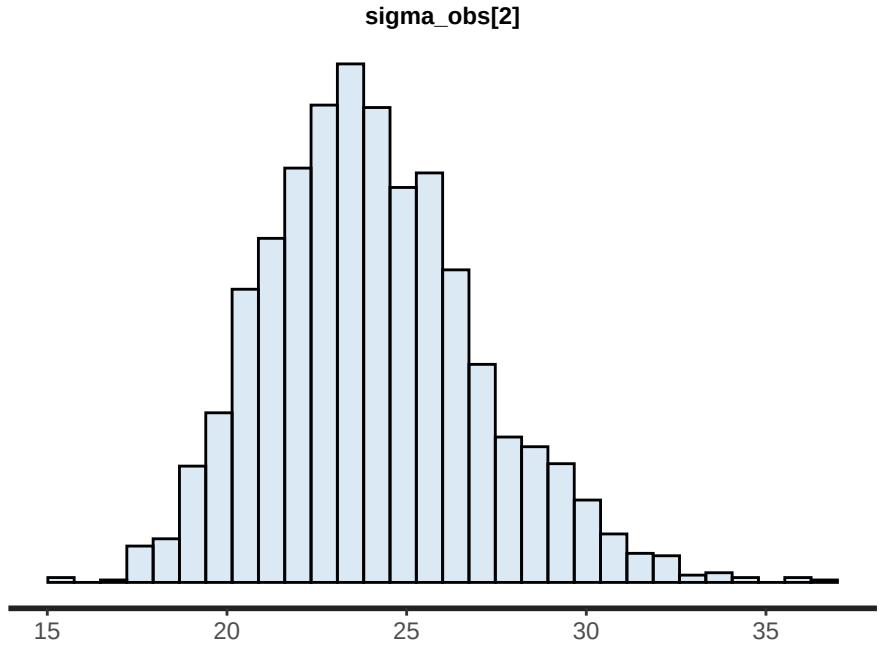
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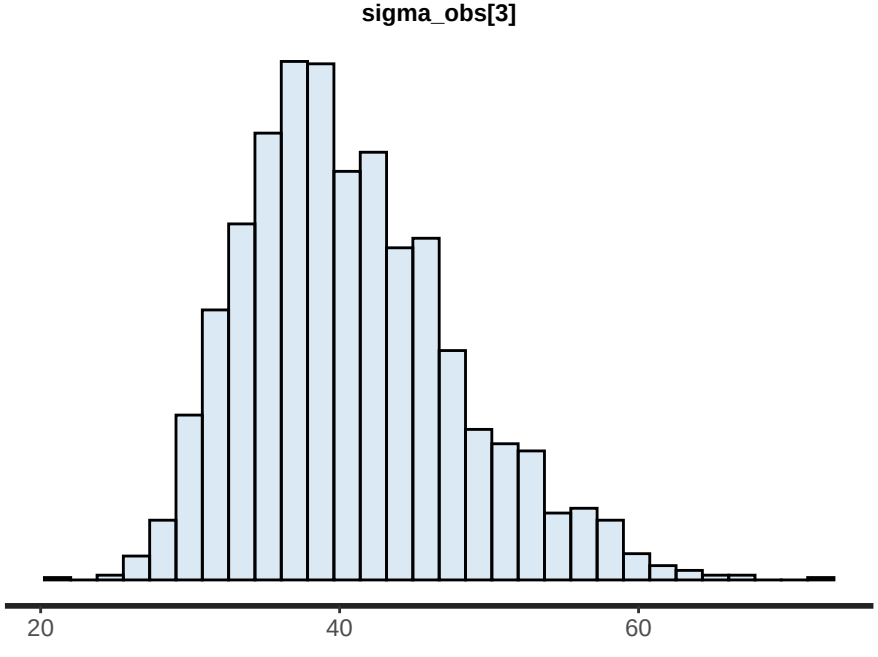
20
25
30
35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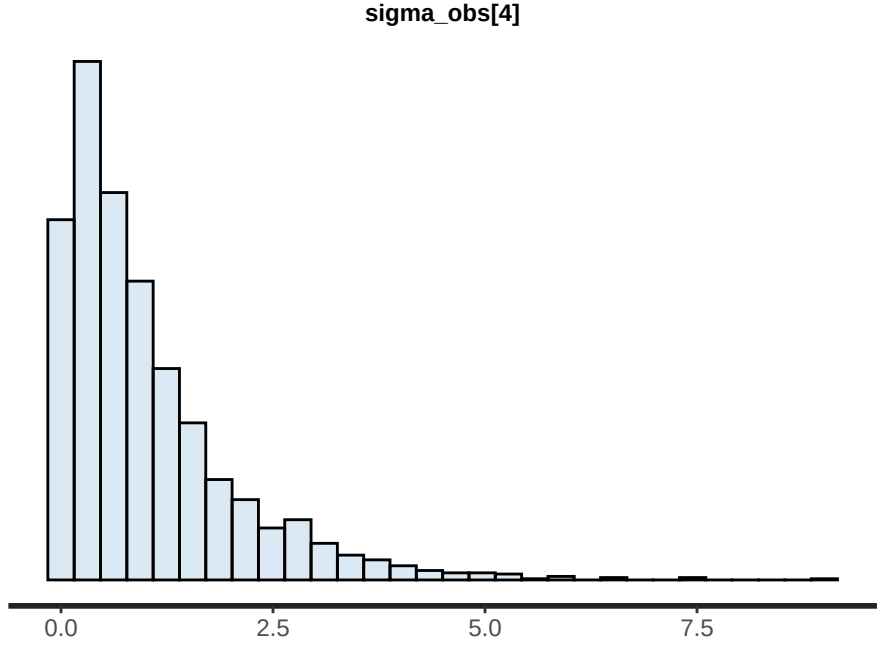
sigma_obs[4]
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2.5
5.0
7.5