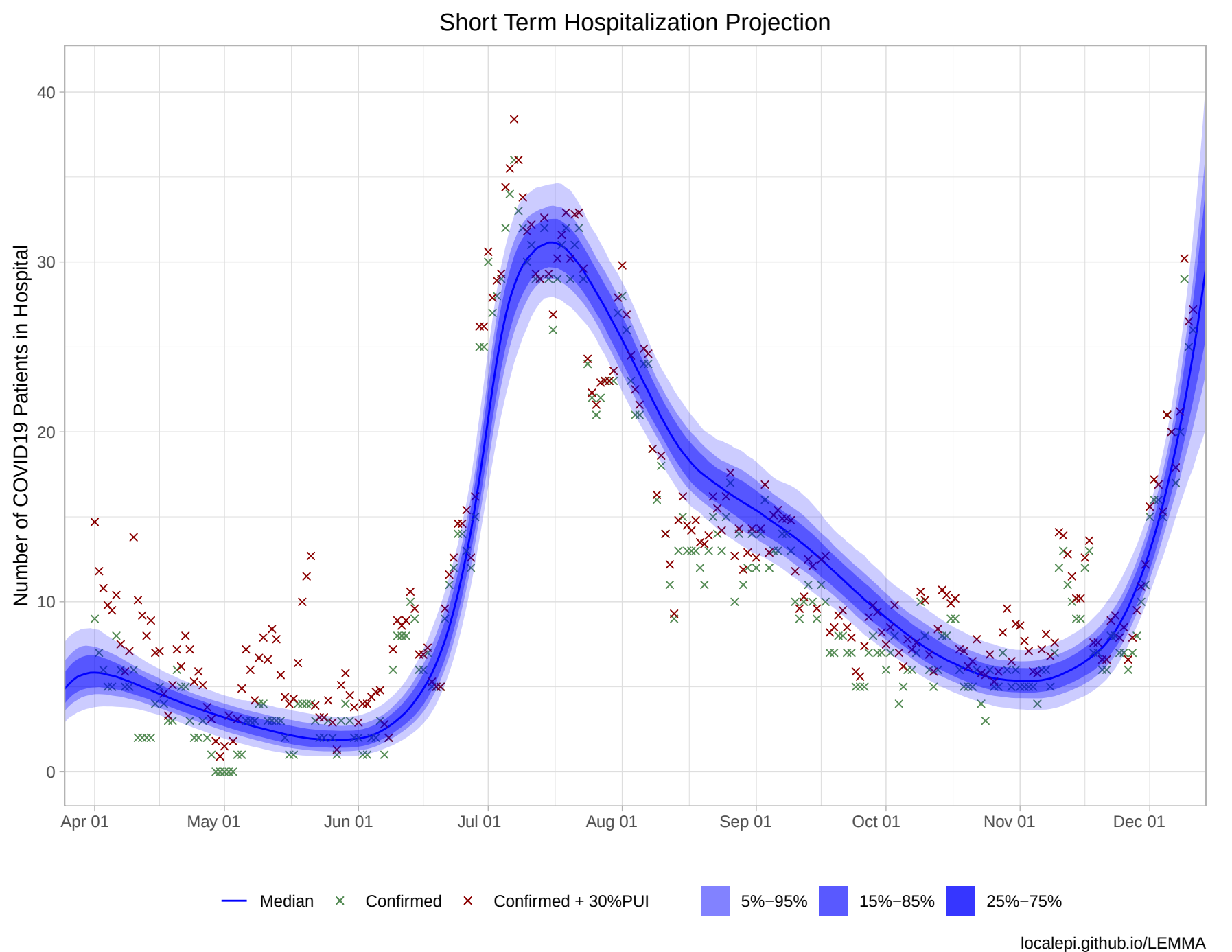
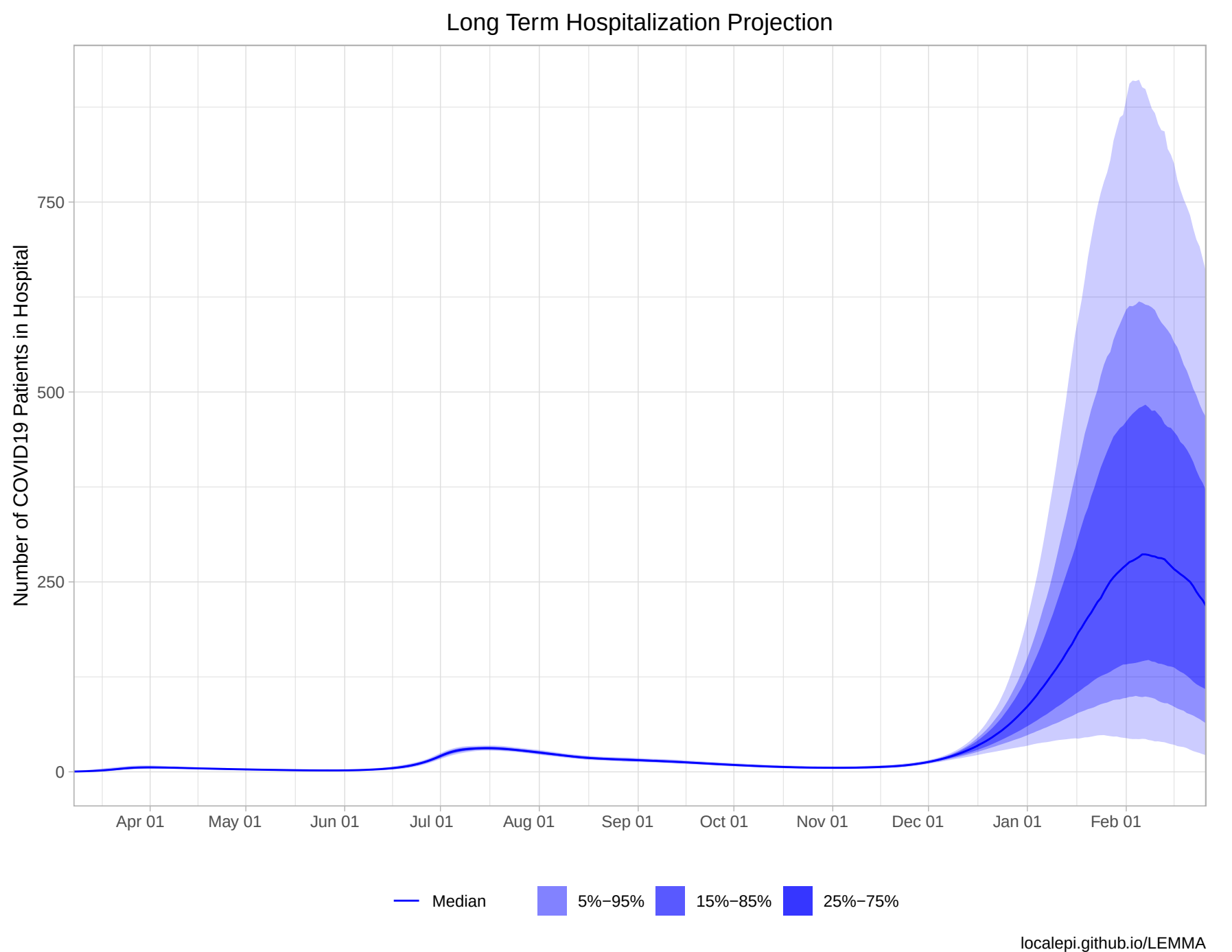
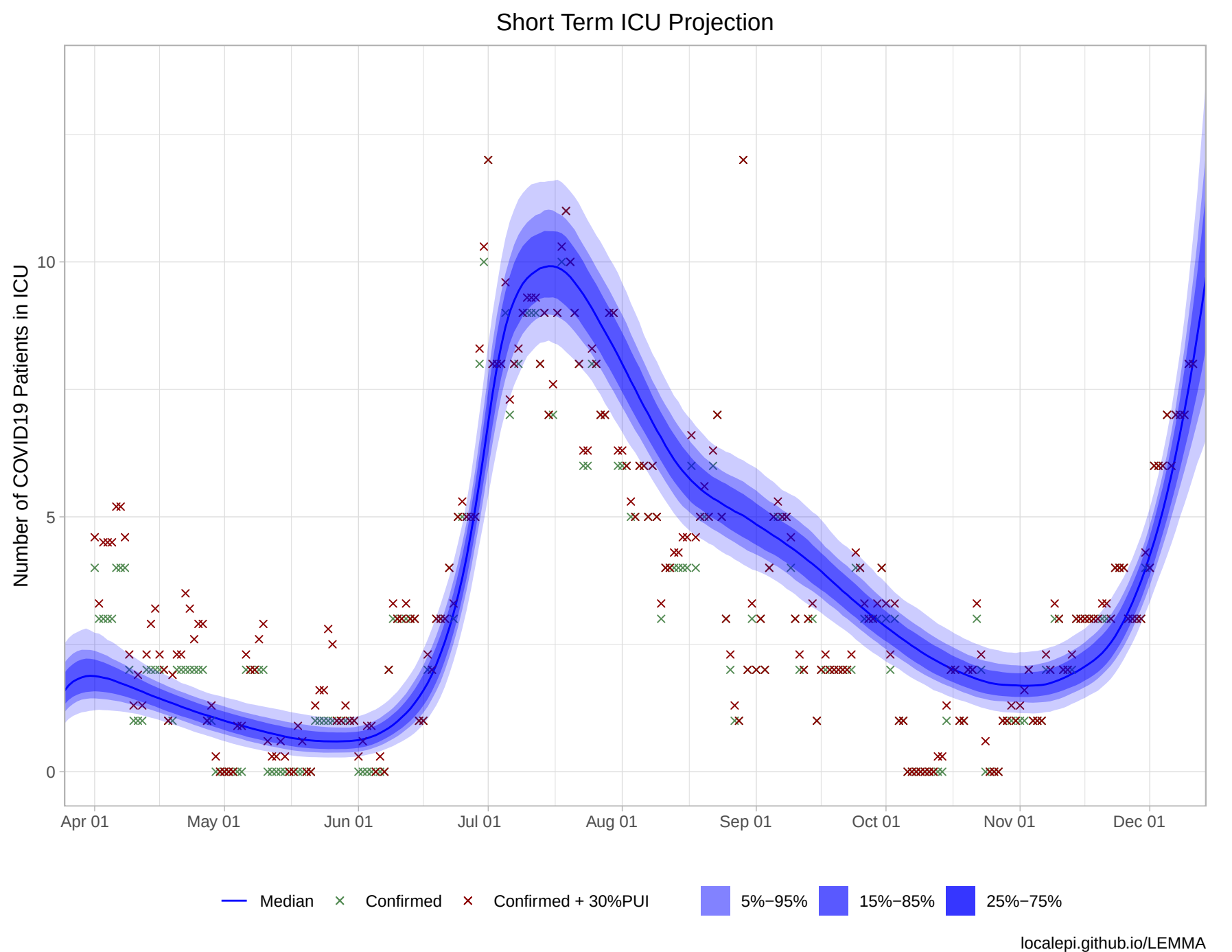
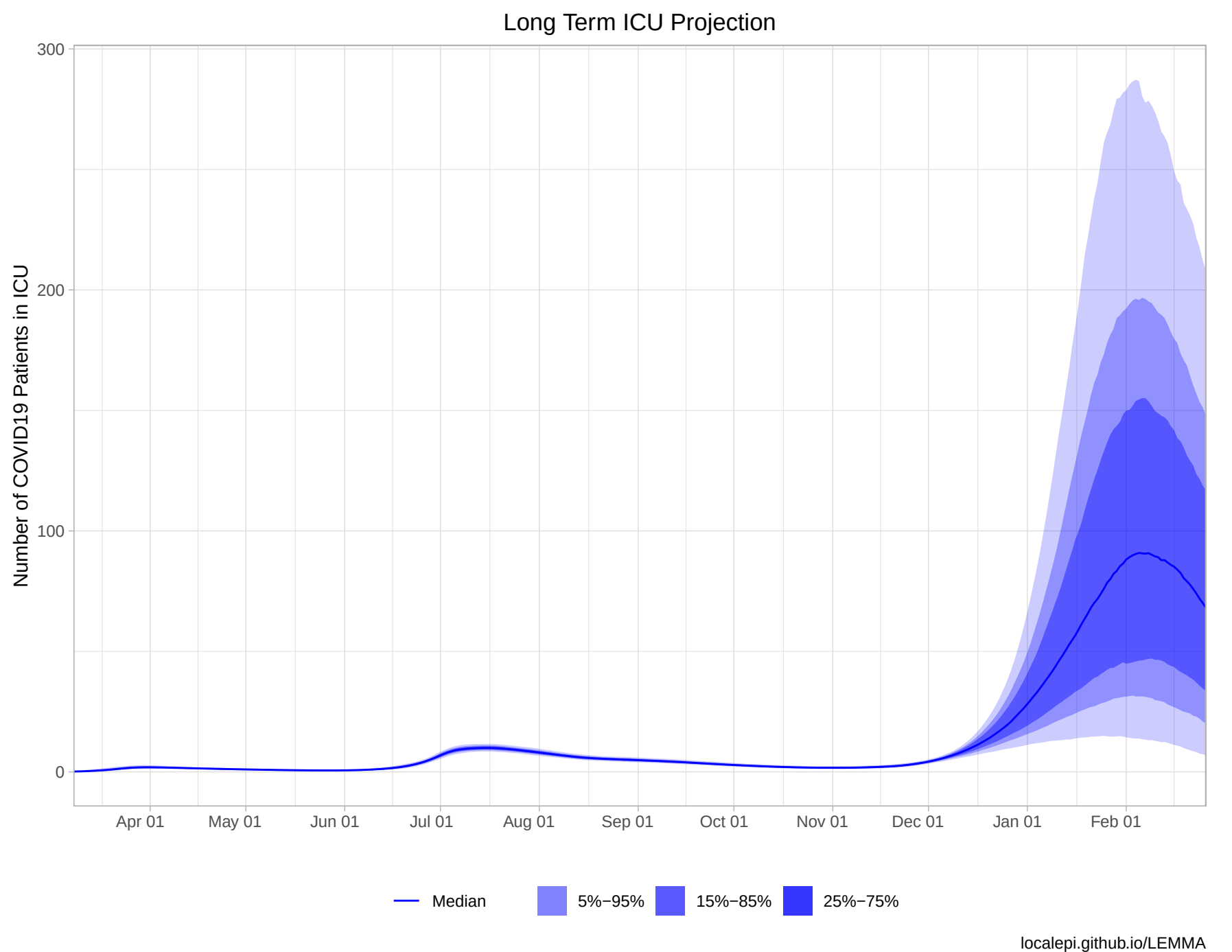
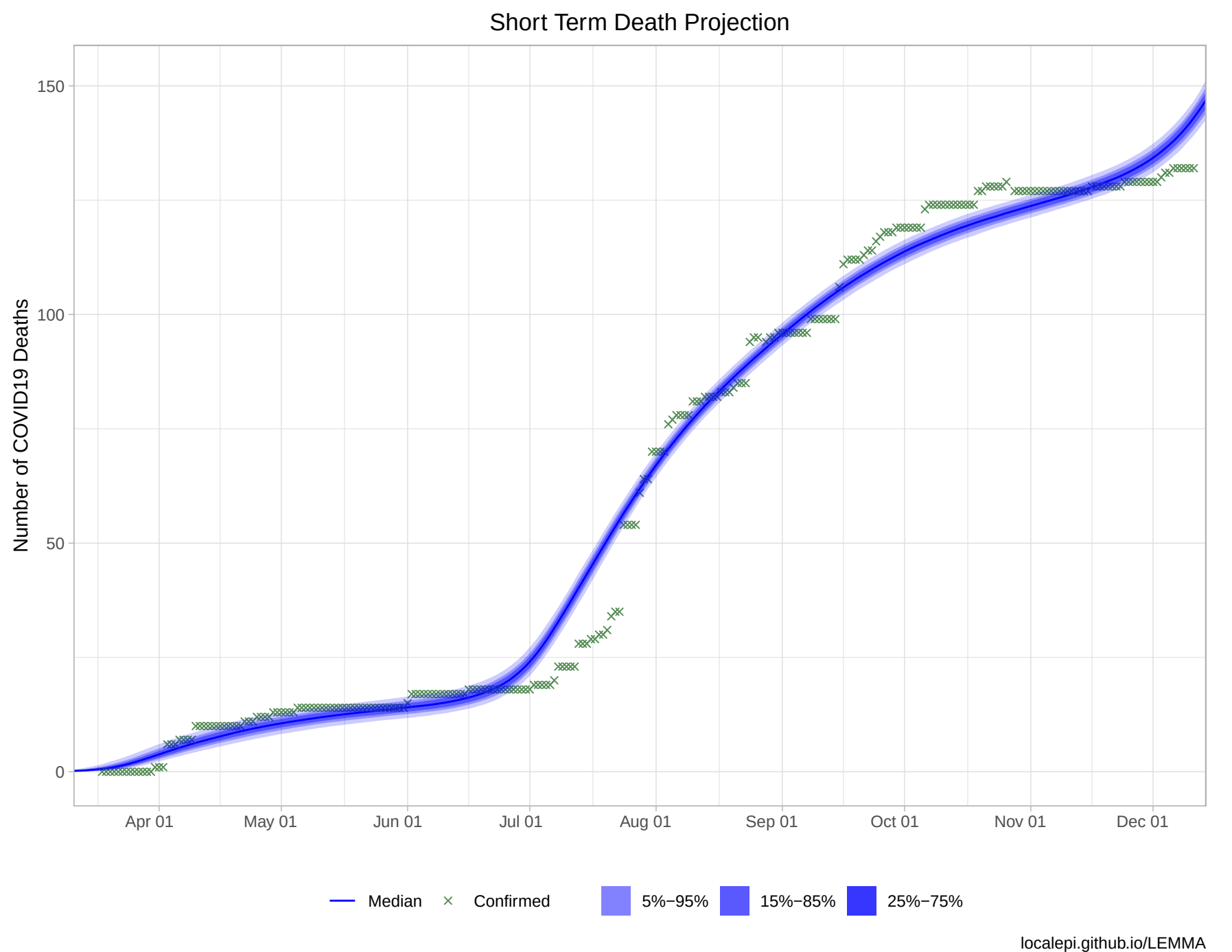
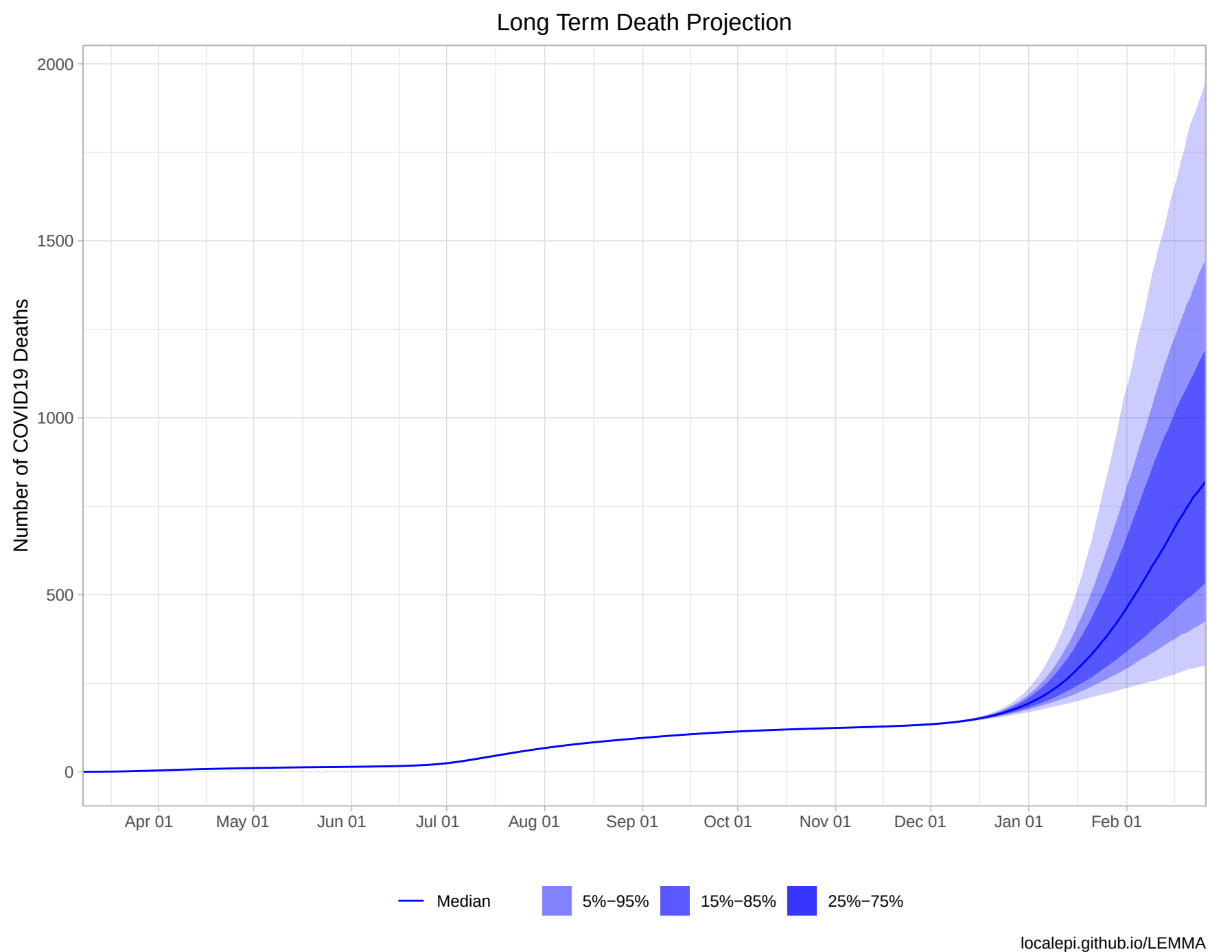

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
40
30
20
10
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

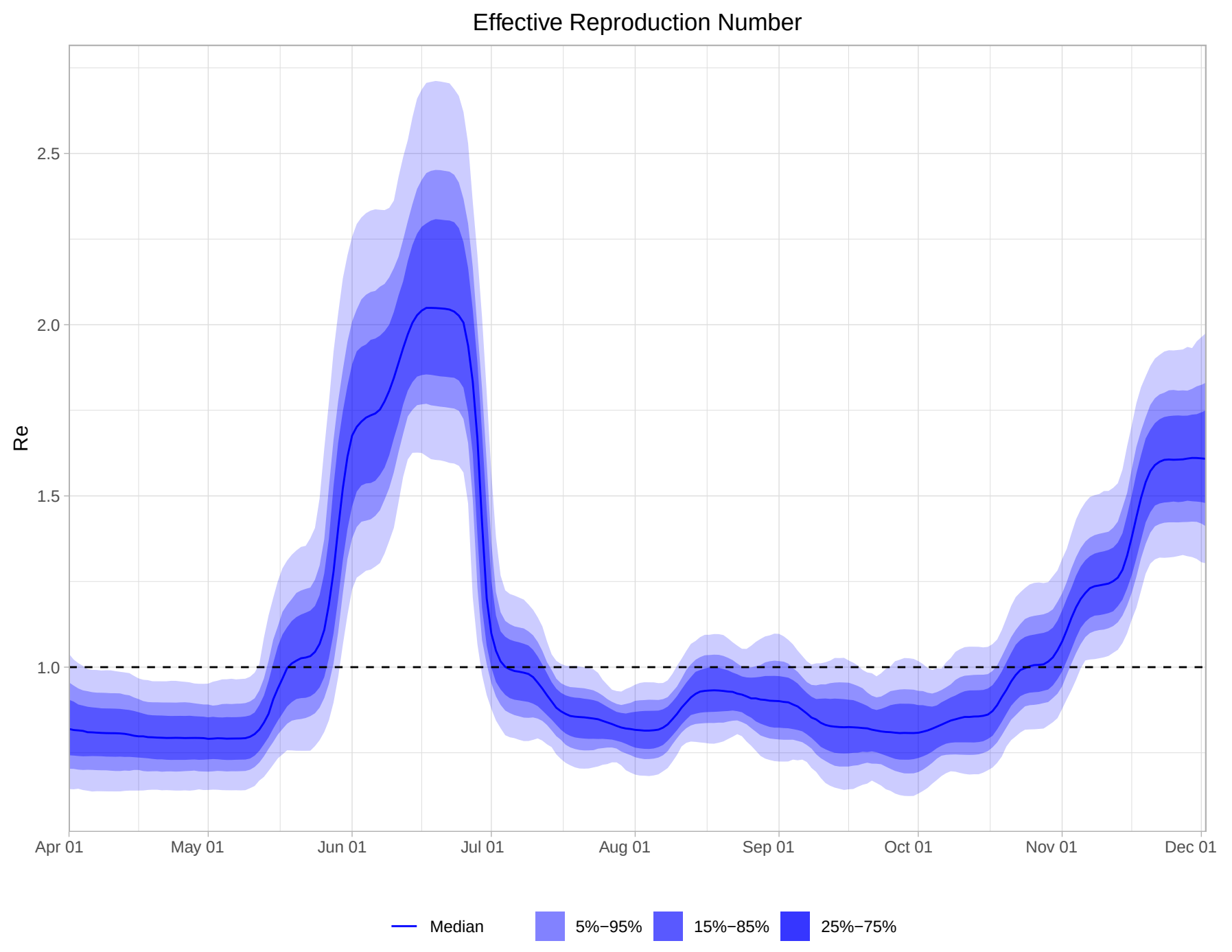

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
750
500
250
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
5
10
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 ICU Projection
Number of COVID19 Patients in ICU
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
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

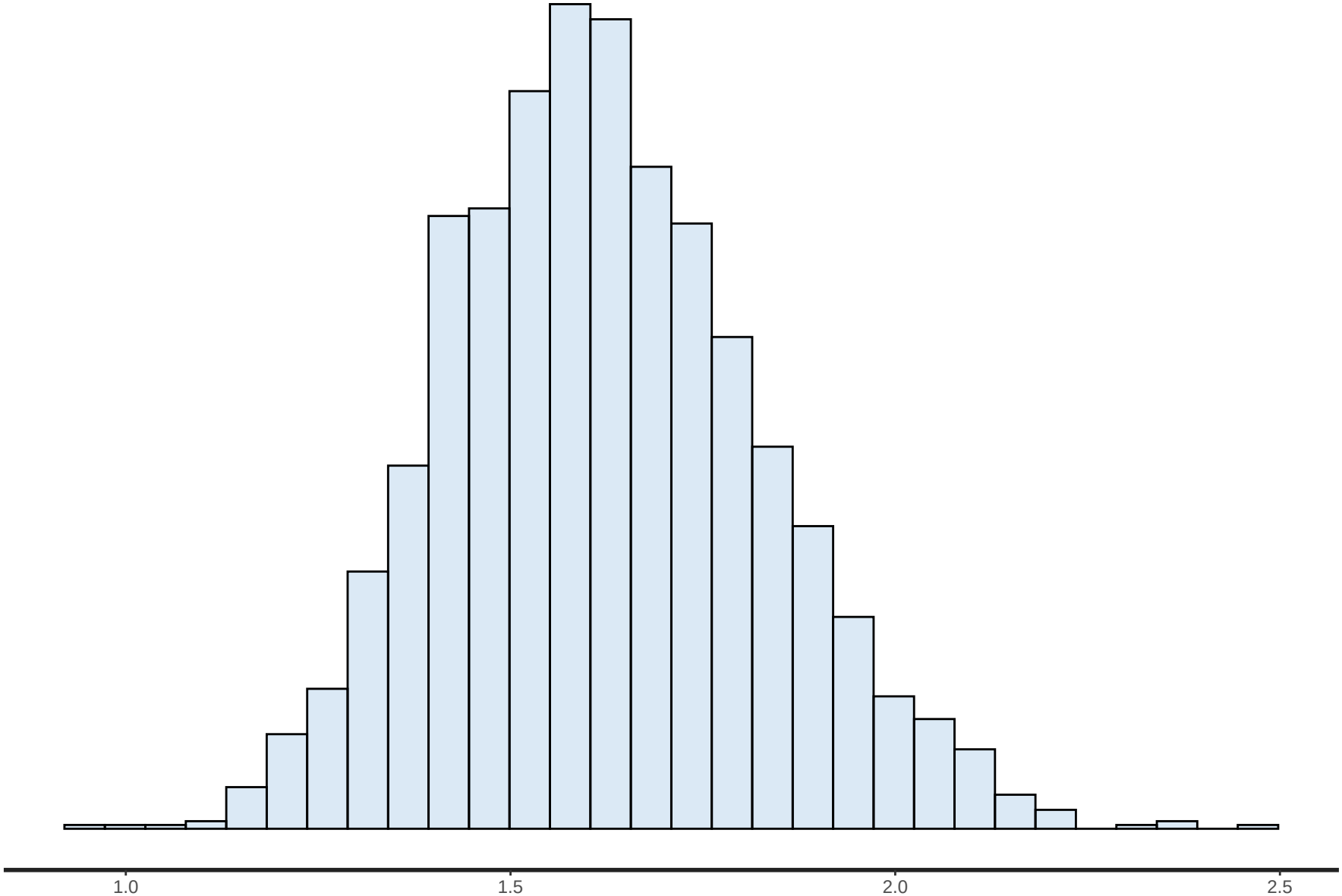

Short Term Death Projection
Number of COVID19 Deaths
150
100
50
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

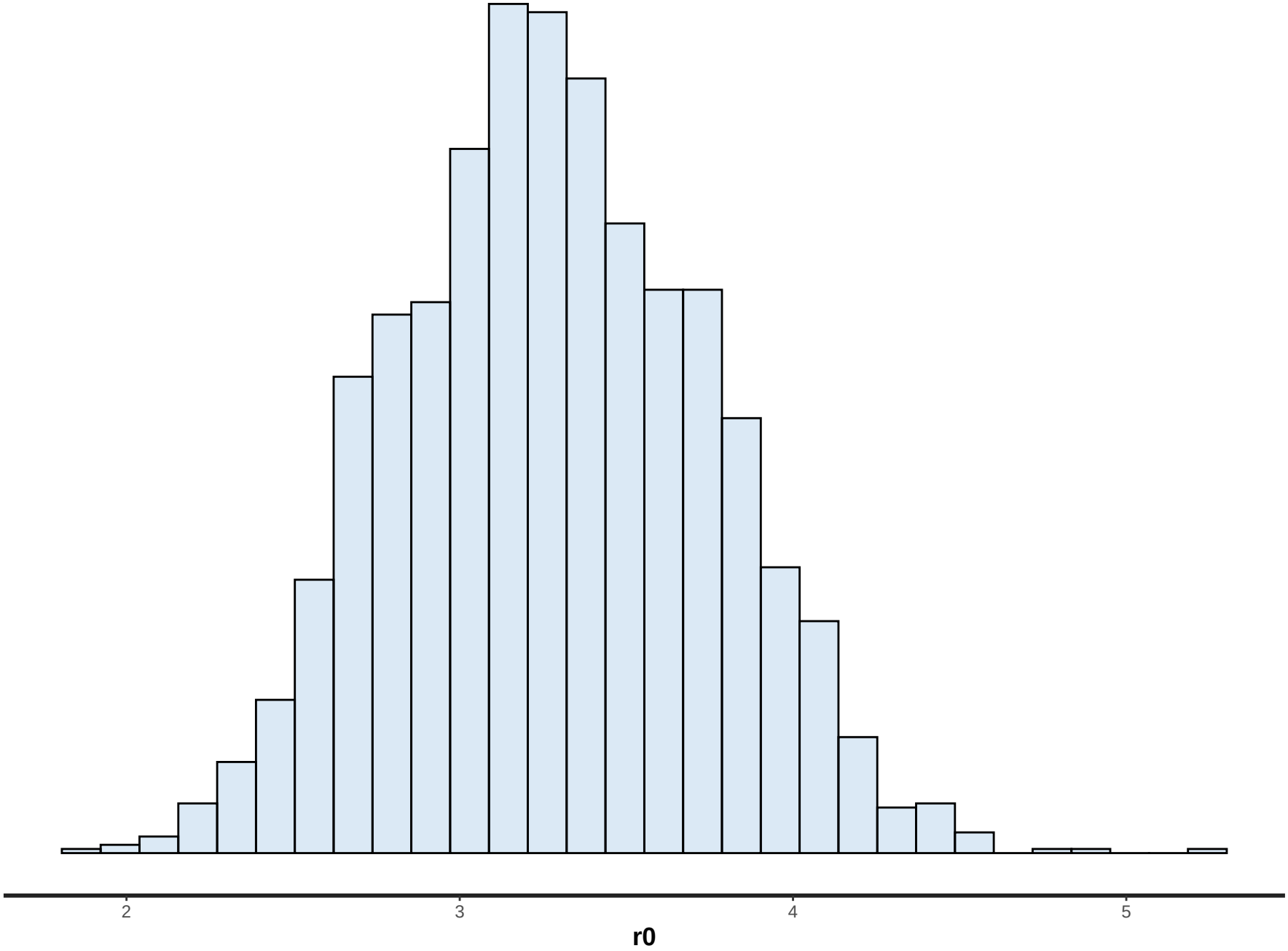

Long Term Death Projection
Number of COVID19 Deaths
2000
1500
1000
500
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

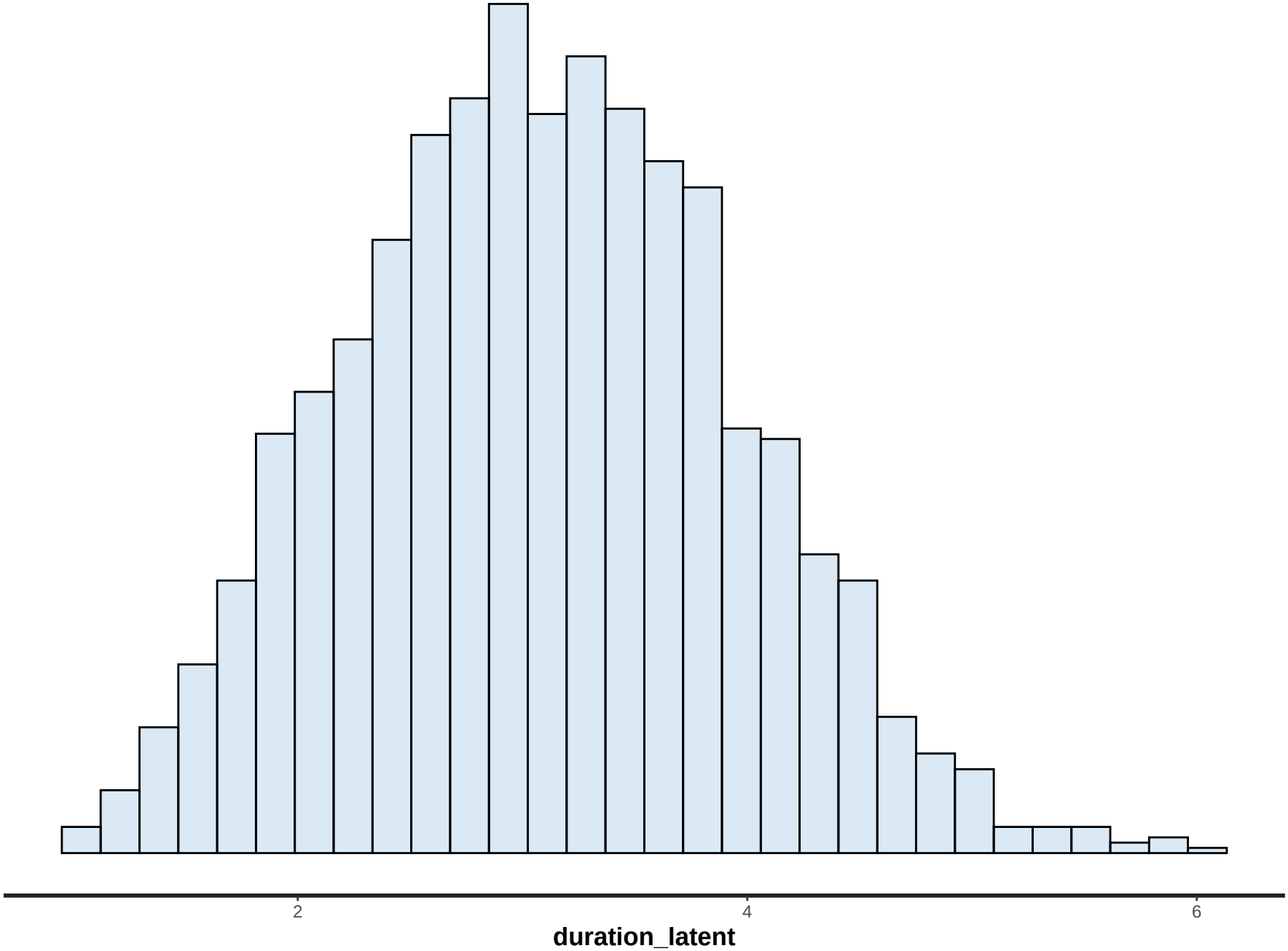

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

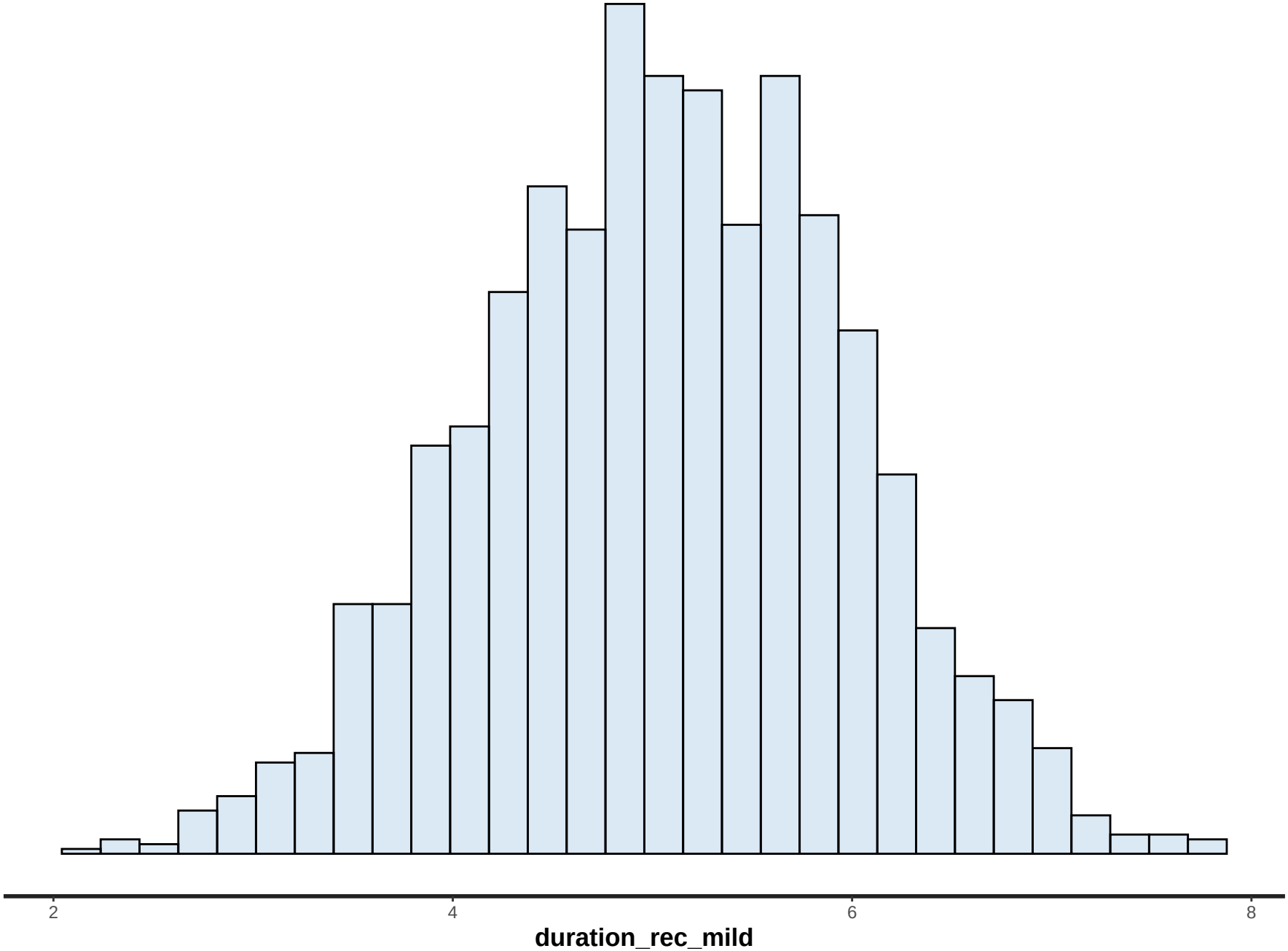
Rt as of 2020−12−02

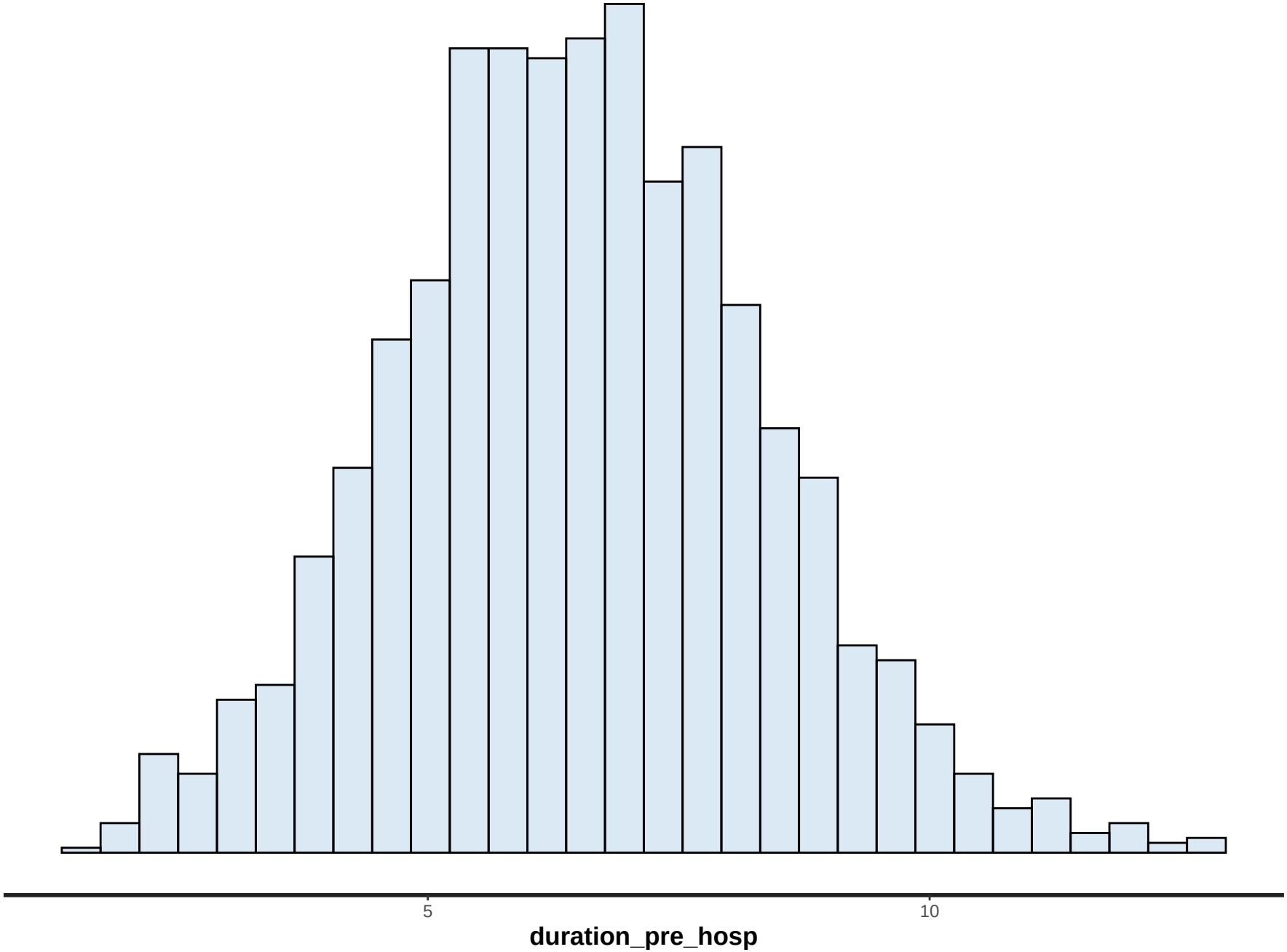
5%	10%	25%	50%	75%	90%	95%
1.30	1.37	1.48	1.61	1.75	1.89	1.98

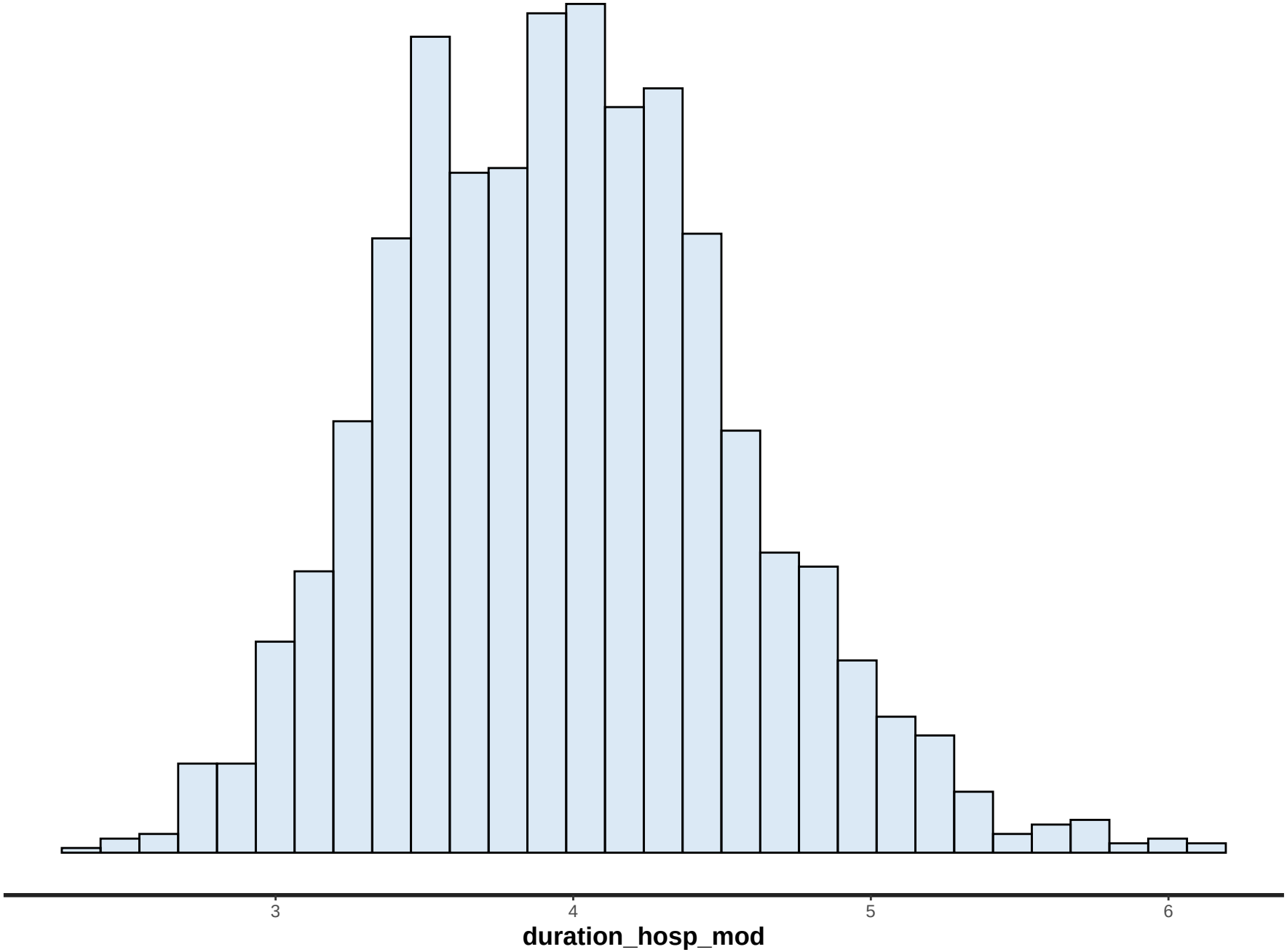


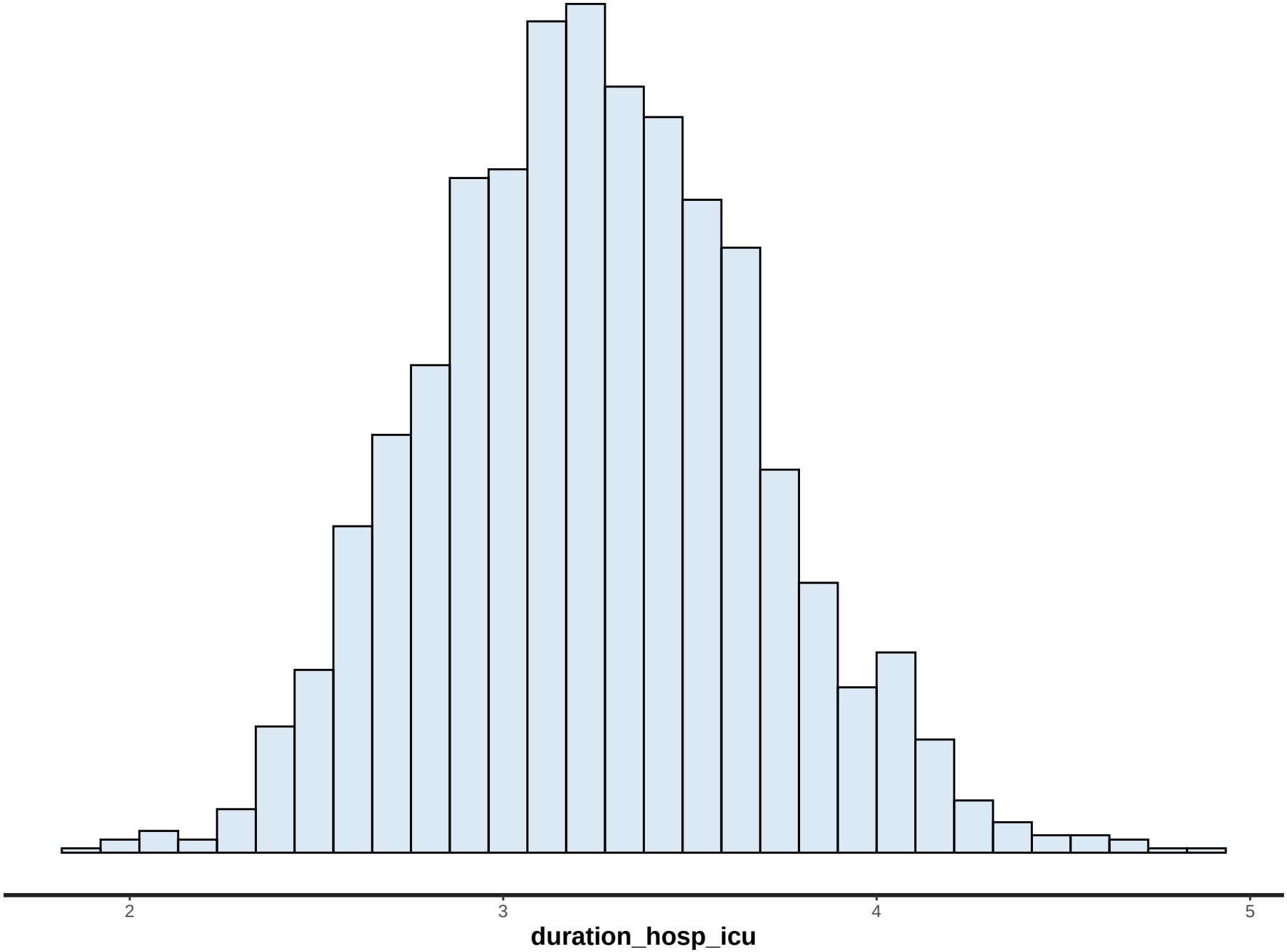

2
3
4
5
r0

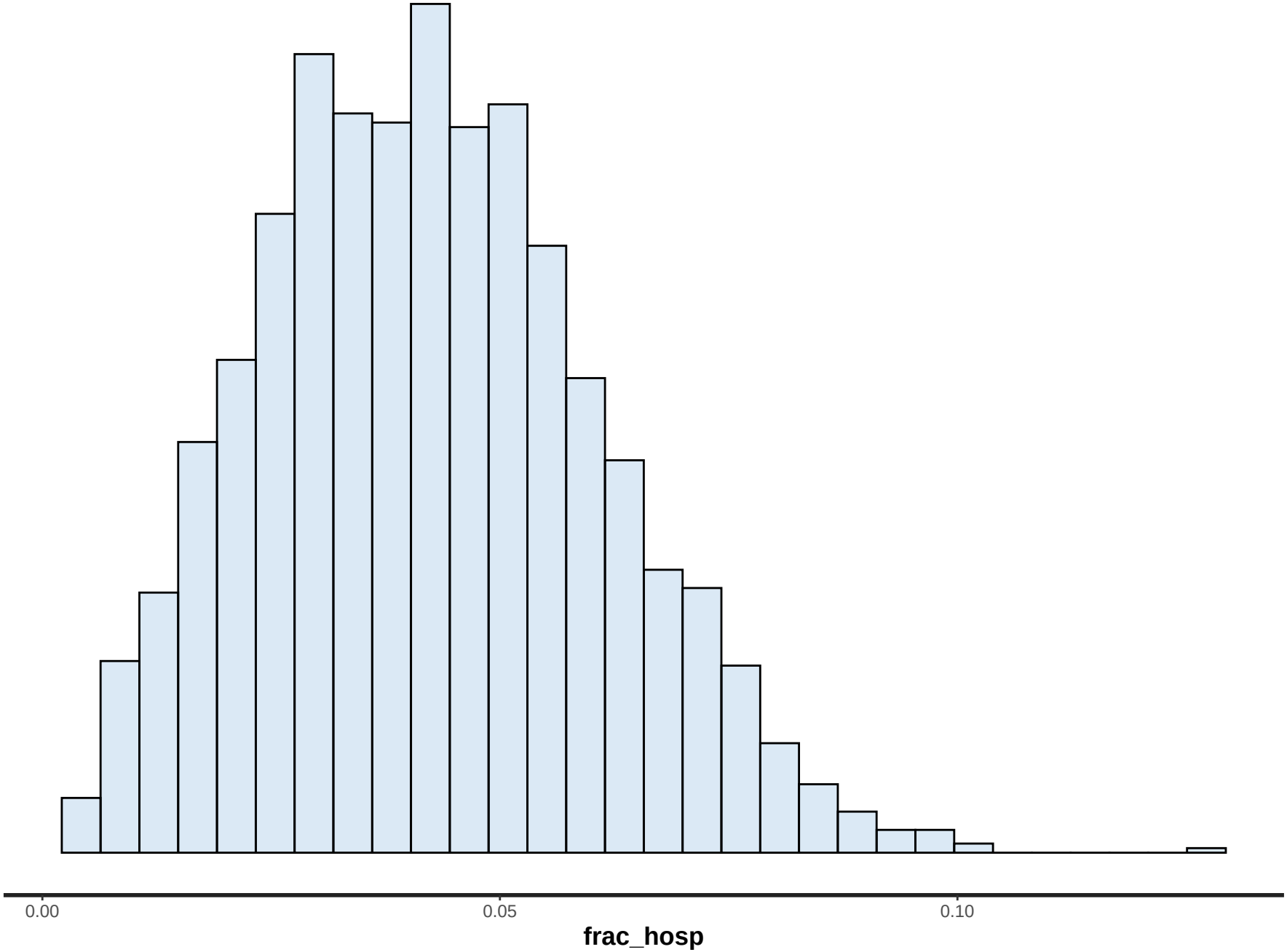

2
4
6
duration_latent

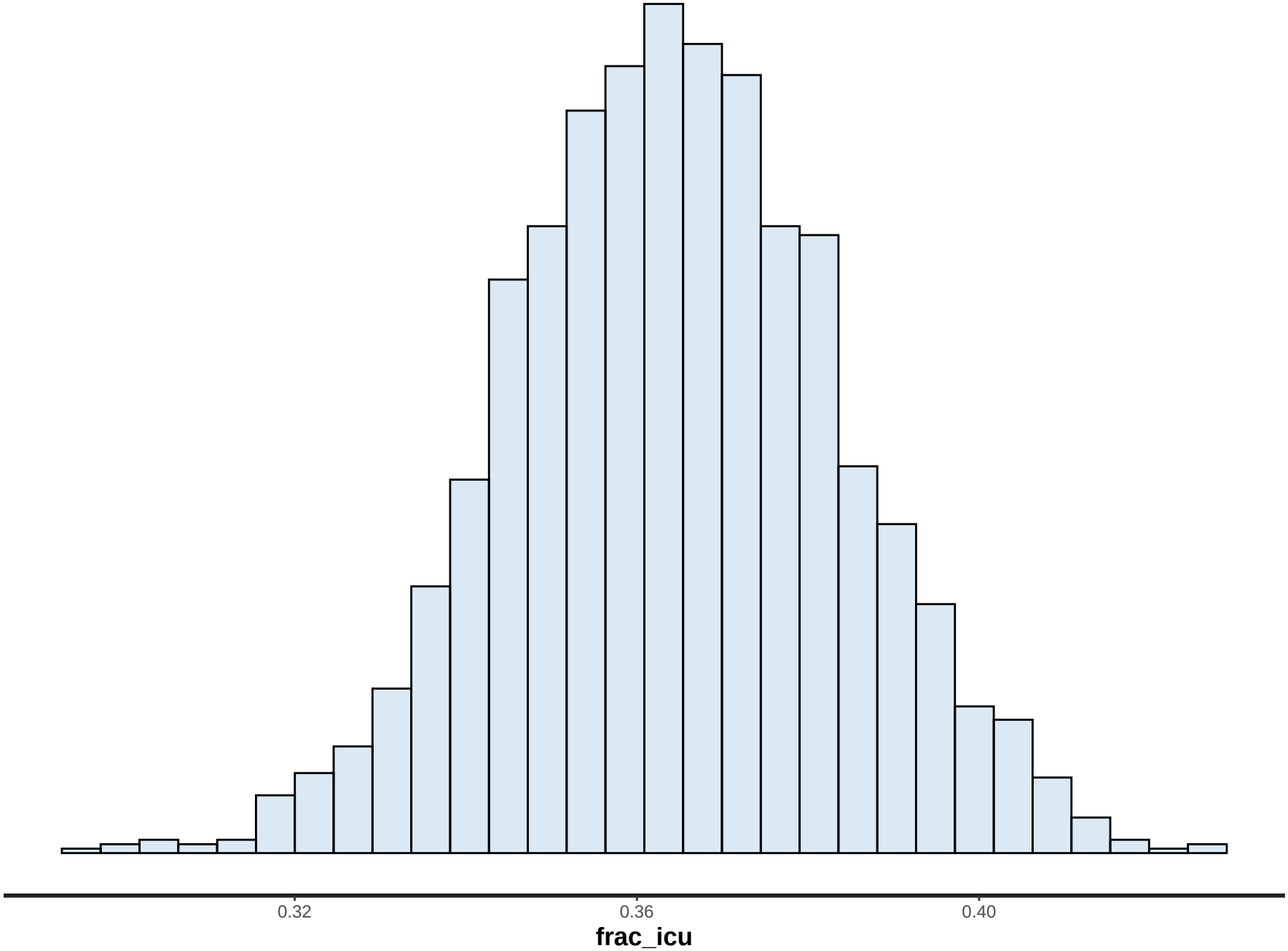

2
4
6
8
duration_rec_mild

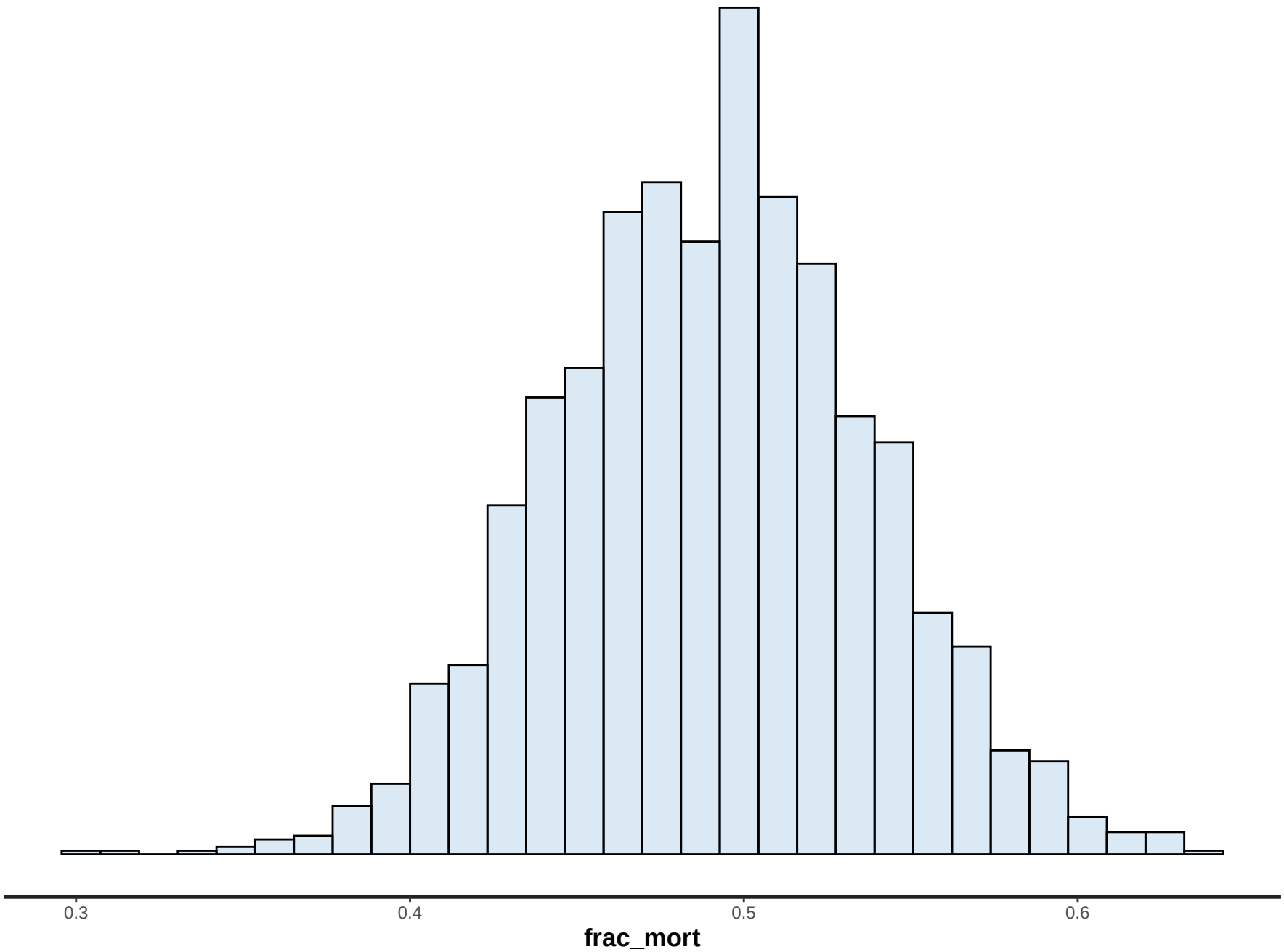

5
10
duration_pre_hosp

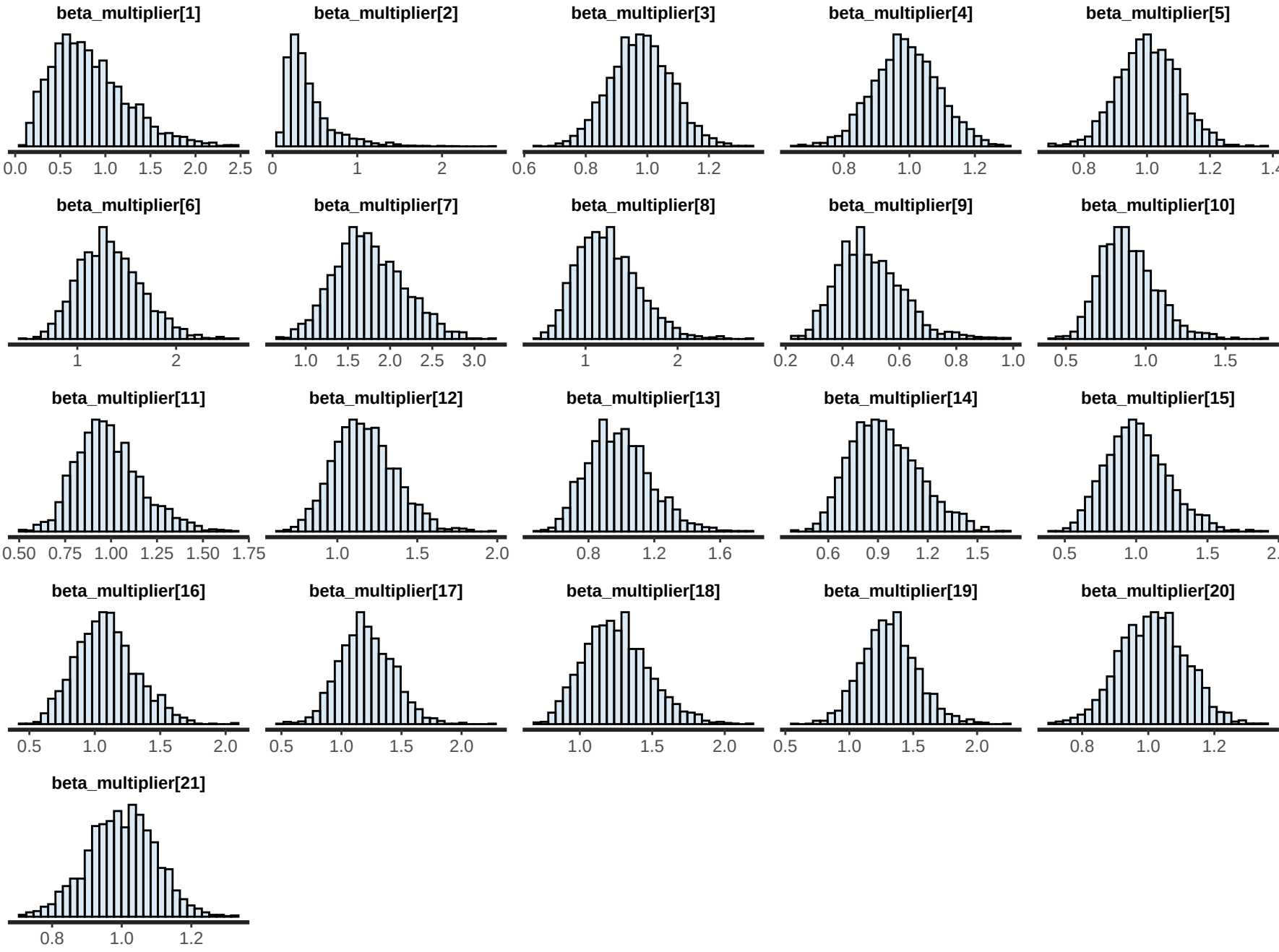

3
4
5
6
duration_hosp_mod


2
3
4
5
duration_hosp_icu


0.00
0.05
0.10
frac_hosp


0.32
0.36
0.40
frac_icu


0.3
0.4
0.5
0.6
frac_mort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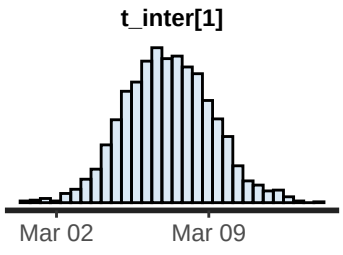
0.0 0.5 1.0 1.5 2.0 2.5
beta_multiplier[2]
0 1 2
beta_multiplier[3]
0.6 0.8 1.0 1.2
beta_multiplier[4]
0.8 1.0 1.2
beta_multiplier[5]
0.8 1.0 1.2 1.4
beta_multiplier[6]
1 2
beta_multiplier[7]
1.0 1.5 2.0 2.5 3.0
beta_multiplier[8]
1 2
beta_multiplier[9]
0.2 0.4 0.6 0.8 1.0
beta_multiplier[10]
0.5 1.0 1.5
beta_multiplier[11]
0.50 0.75 1.00 1.25 1.50 1.75
beta_multiplier[12]
1.0 1.5 2.0
beta_multiplier[13]
0.8 1.2 1.6
beta_multiplier[14]
0.6 0.9 1.2 1.5
beta_multiplier[15]
0.5 1.0 1.5 2.0
beta_multiplier[16]
0.5 1.0 1.5 2.0
beta_multiplier[17]
0.5 1.0 1.5 2.0
beta_multiplier[18]
1.0 1.5 2.0
beta_multiplier[19]
0.5 1.0 1.5 2.0
beta_multiplier[20]
0.8 1.0 1.2
beta_multiplier[21]
0.8 1.0 1.2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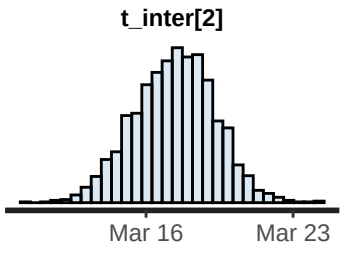
Mar 02
Mar 09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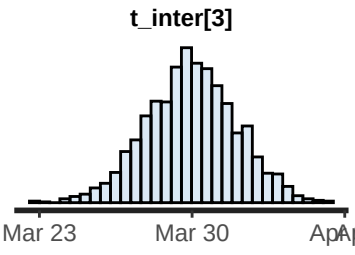
Mar 16
Mar 23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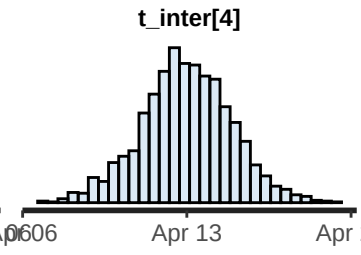
Mar 23
Mar 30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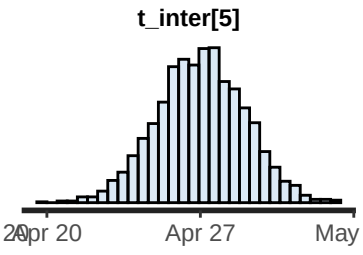
Apr 13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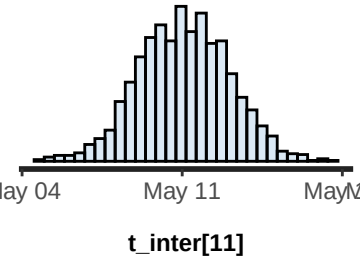
Apr 20
Apr 27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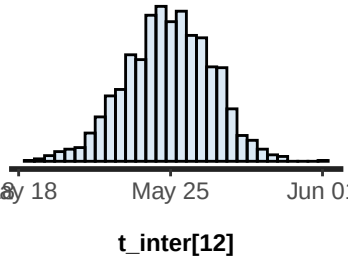
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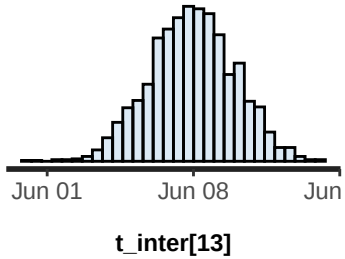
May 25
Jun 01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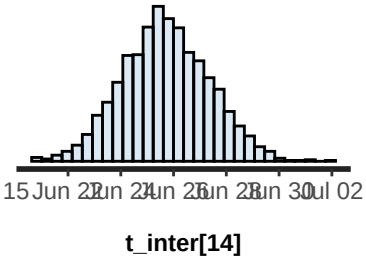
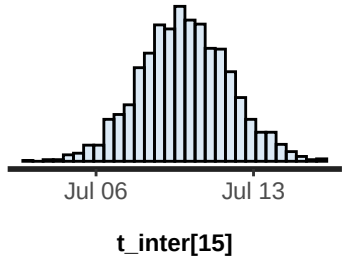
Jun 01
Jun 08


t_inter[9]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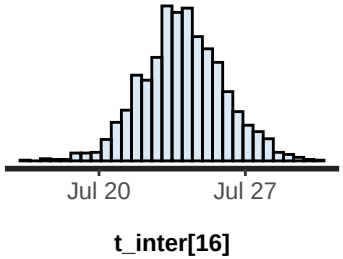
Jul 06
Jul 13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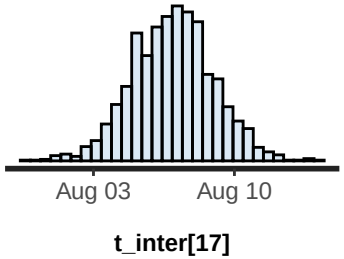
Jul 20
Jul 27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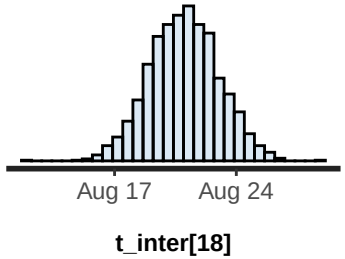
Aug 03
Aug 10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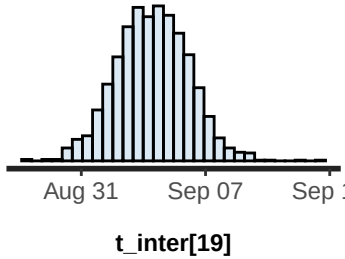
Aug 17
Aug 24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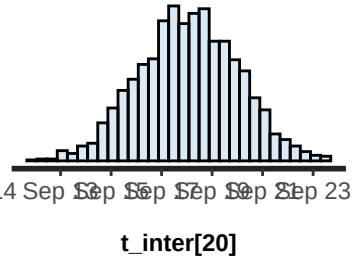
Aug 31
Sep 07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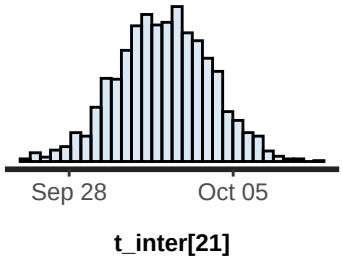
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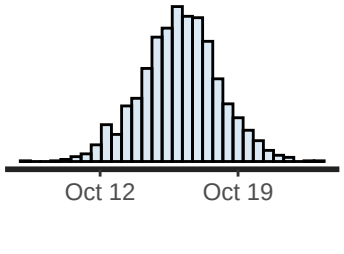
Sep 28
Oct 05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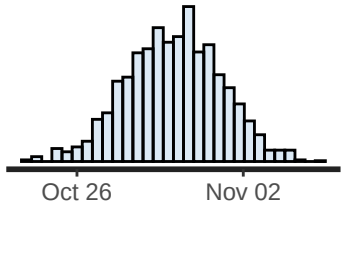
Oct 12
Oct 19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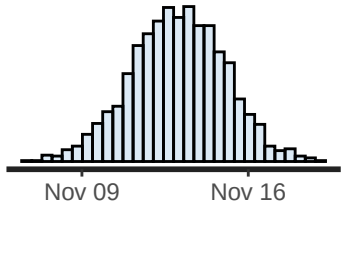
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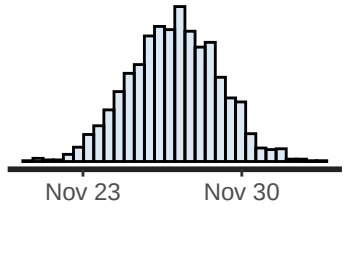
Nov 09
Nov 16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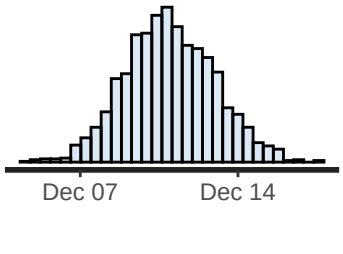
Nov 23
Nov 30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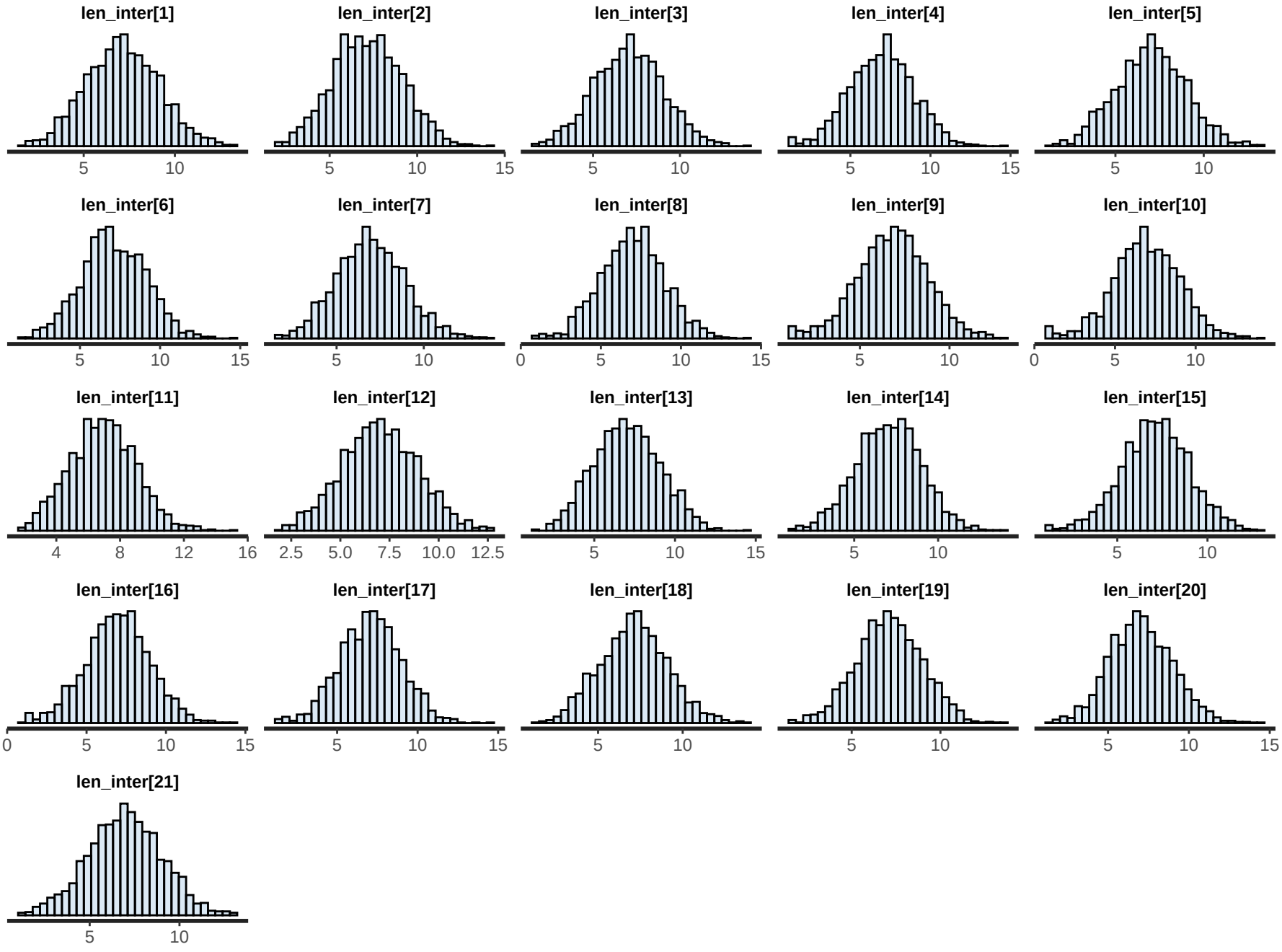
Dec 07
Dec 14


len_inter[1]
len_inter[2]
len_inter[3]
len_inter[4]
len_inter[5]
len_inter[6]
len_inter[7]
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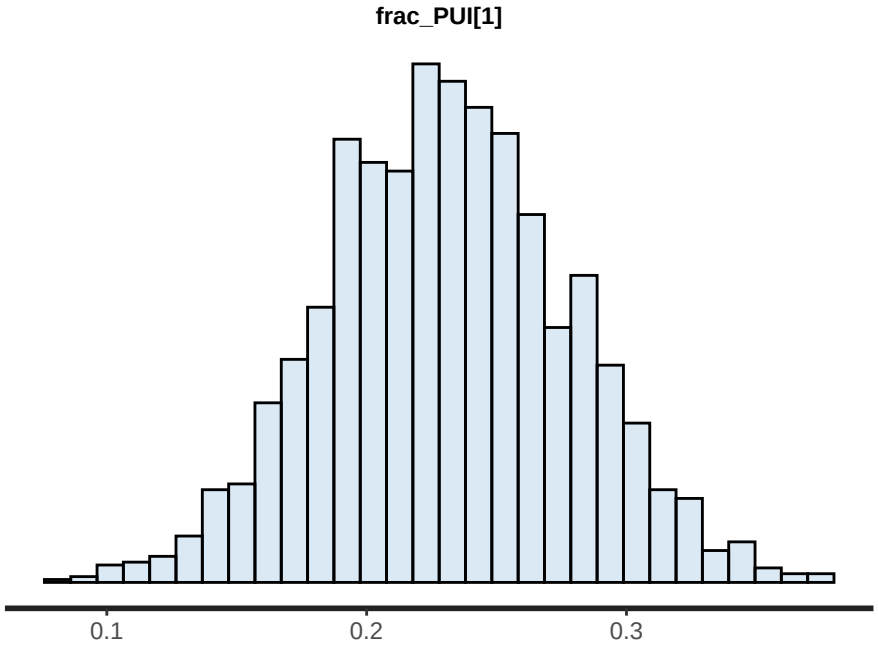
len_inter[12]
len_inter[13]
len_inter[14]
len_inter[15]
len_inter[16]
len_inter[17]
len_inter[18]
len_inter[19]
len_inter[20]
len_inter[21]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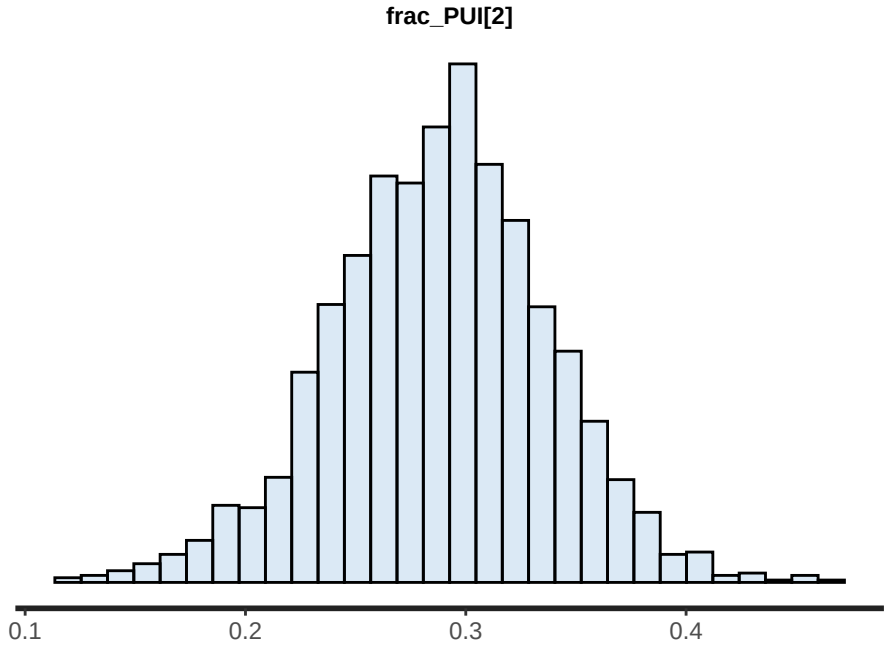
0.2
0.3


frac_PUI[2]
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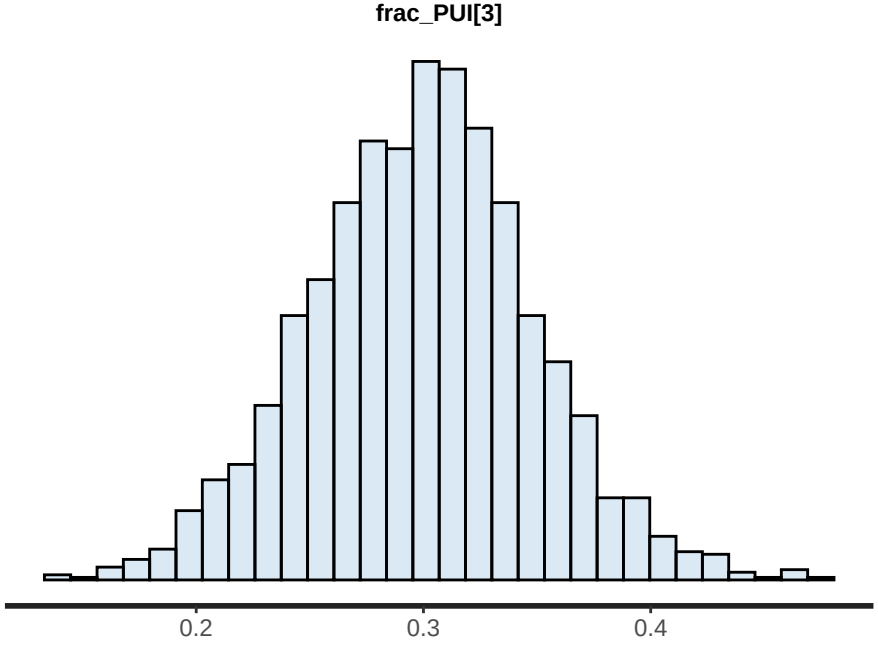
0.2
0.3
0.4


frac_PUI[3]
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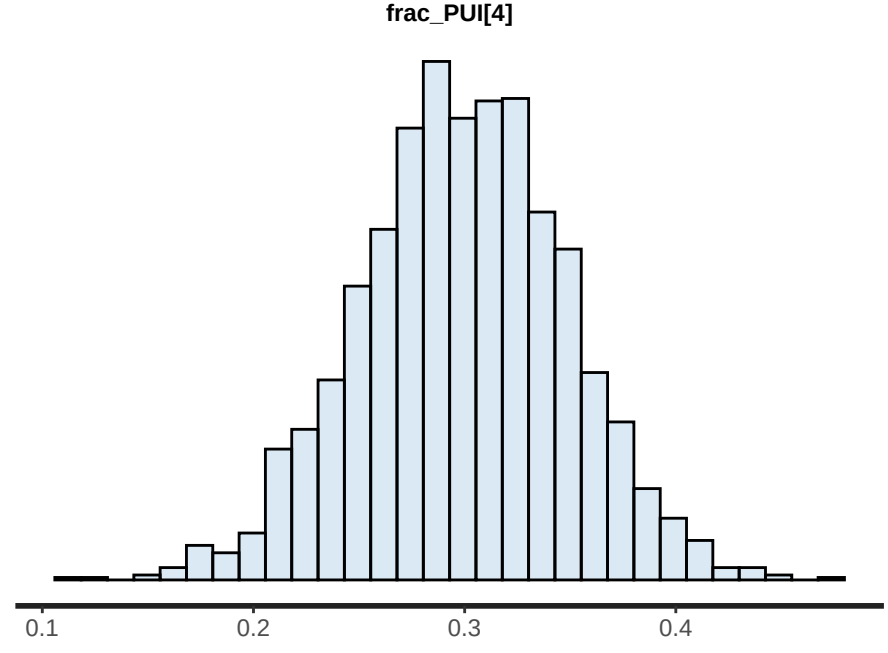
0.4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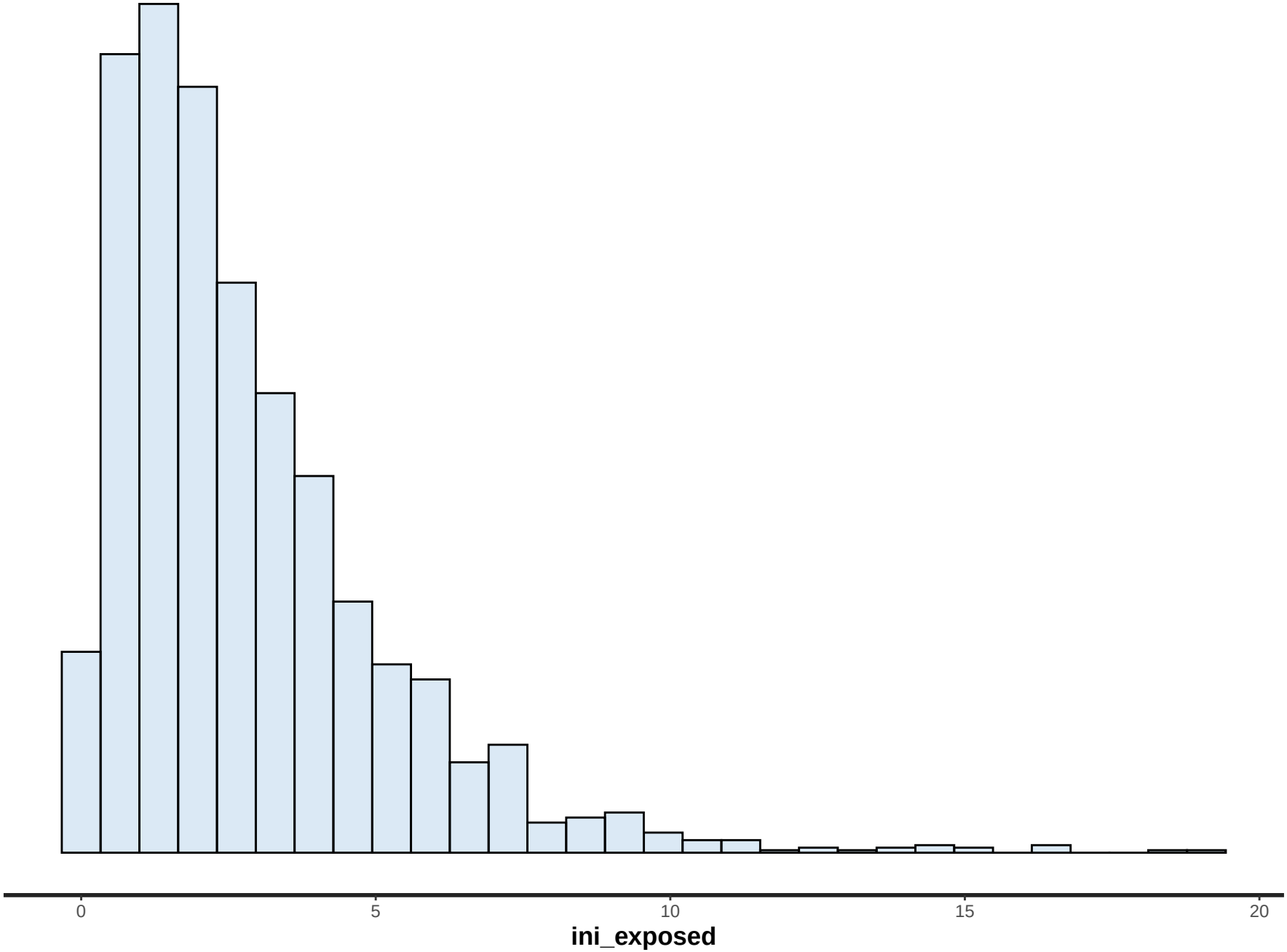
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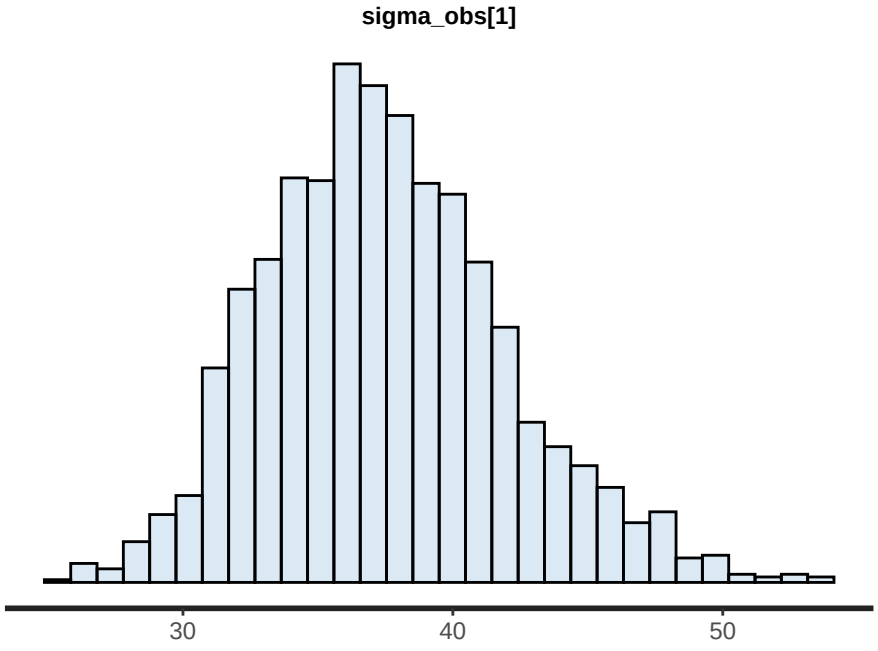
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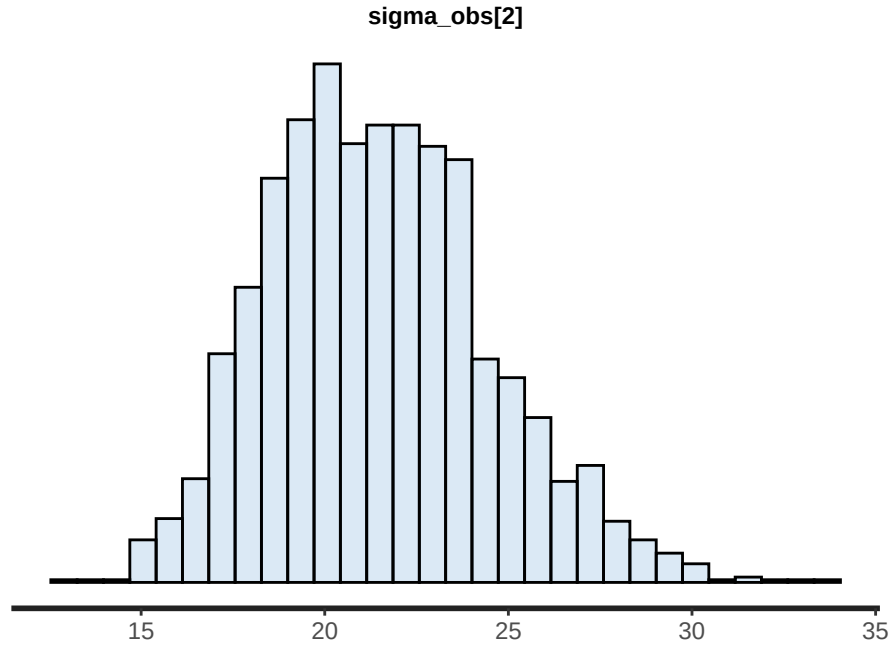
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25
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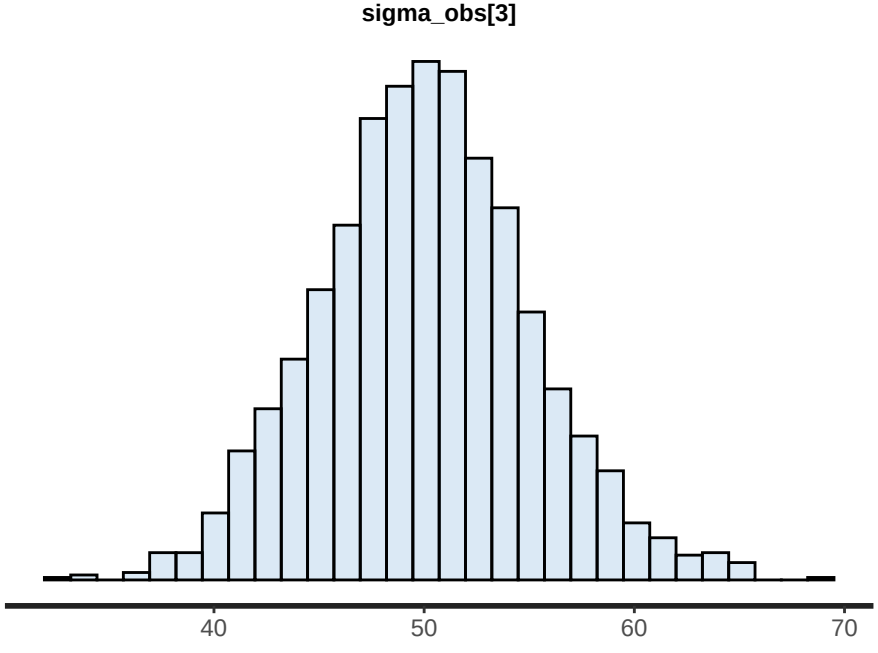
35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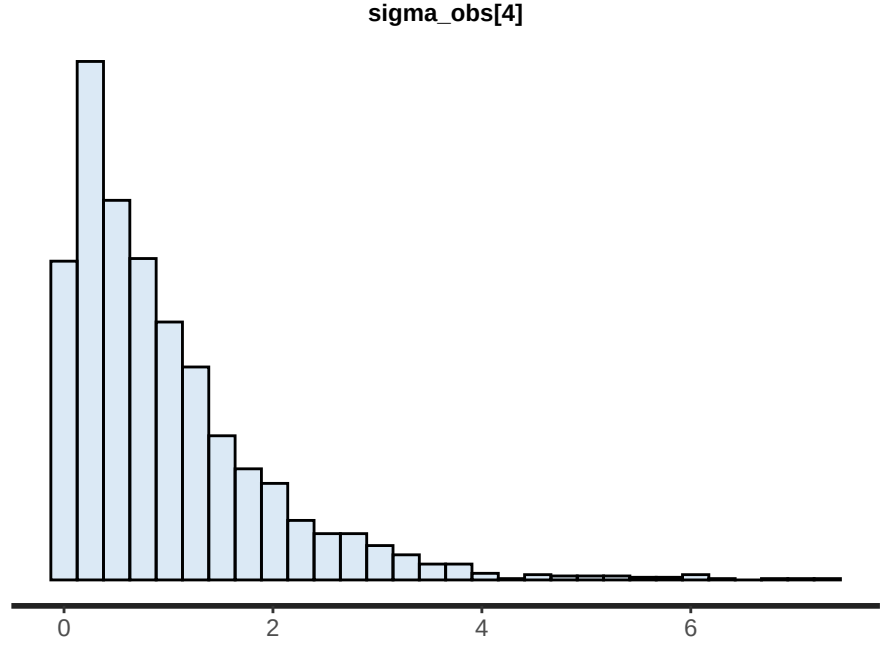
70


sigma_obs[4]
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2
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6