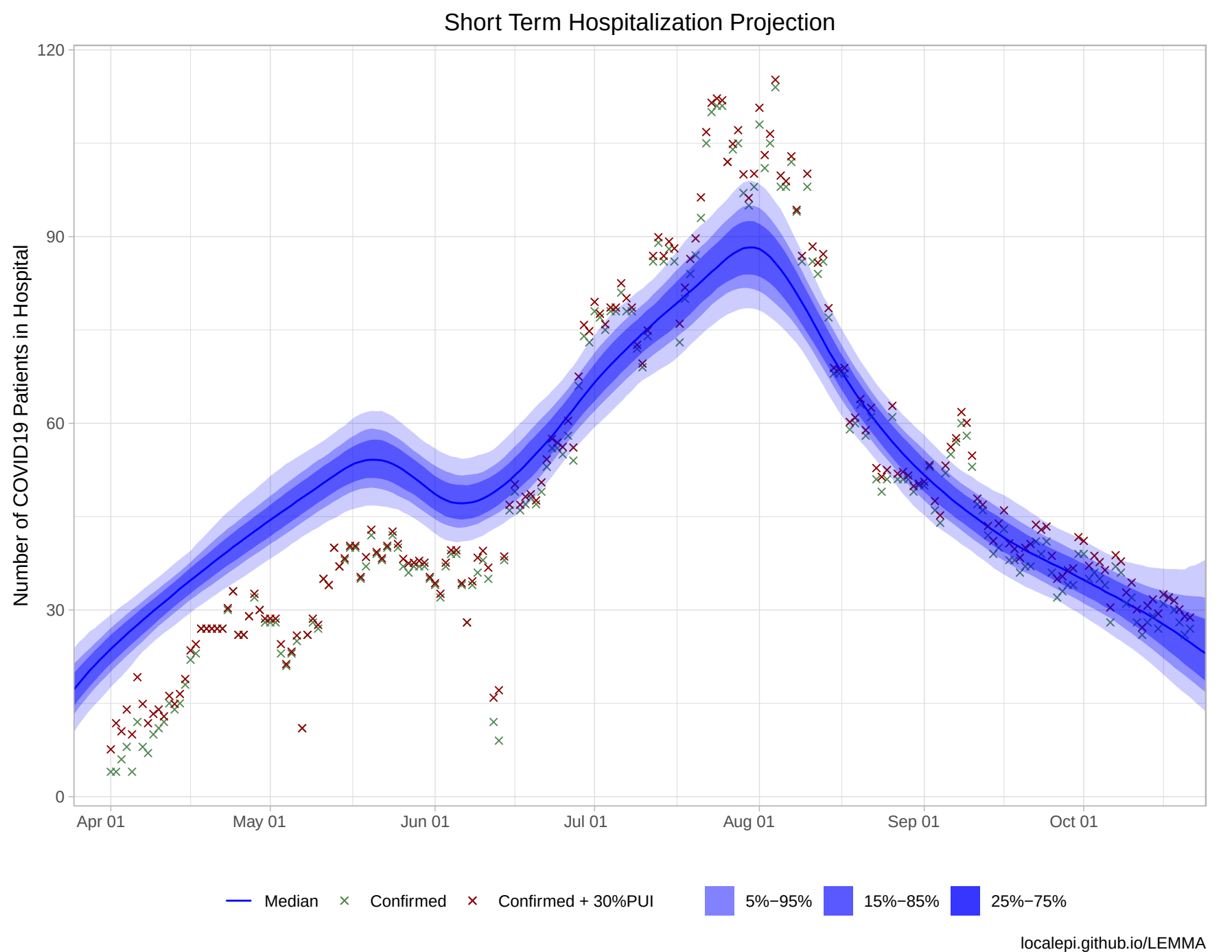
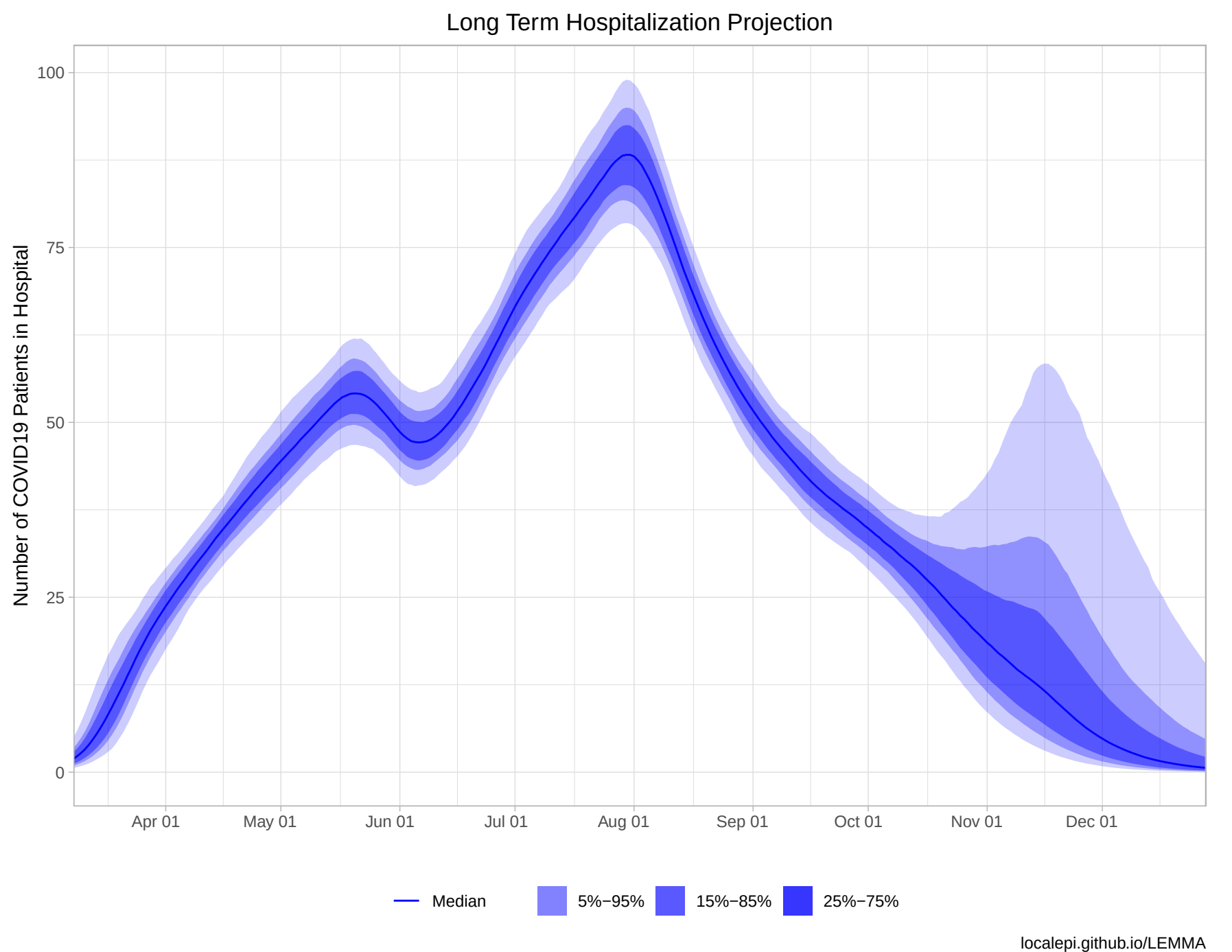
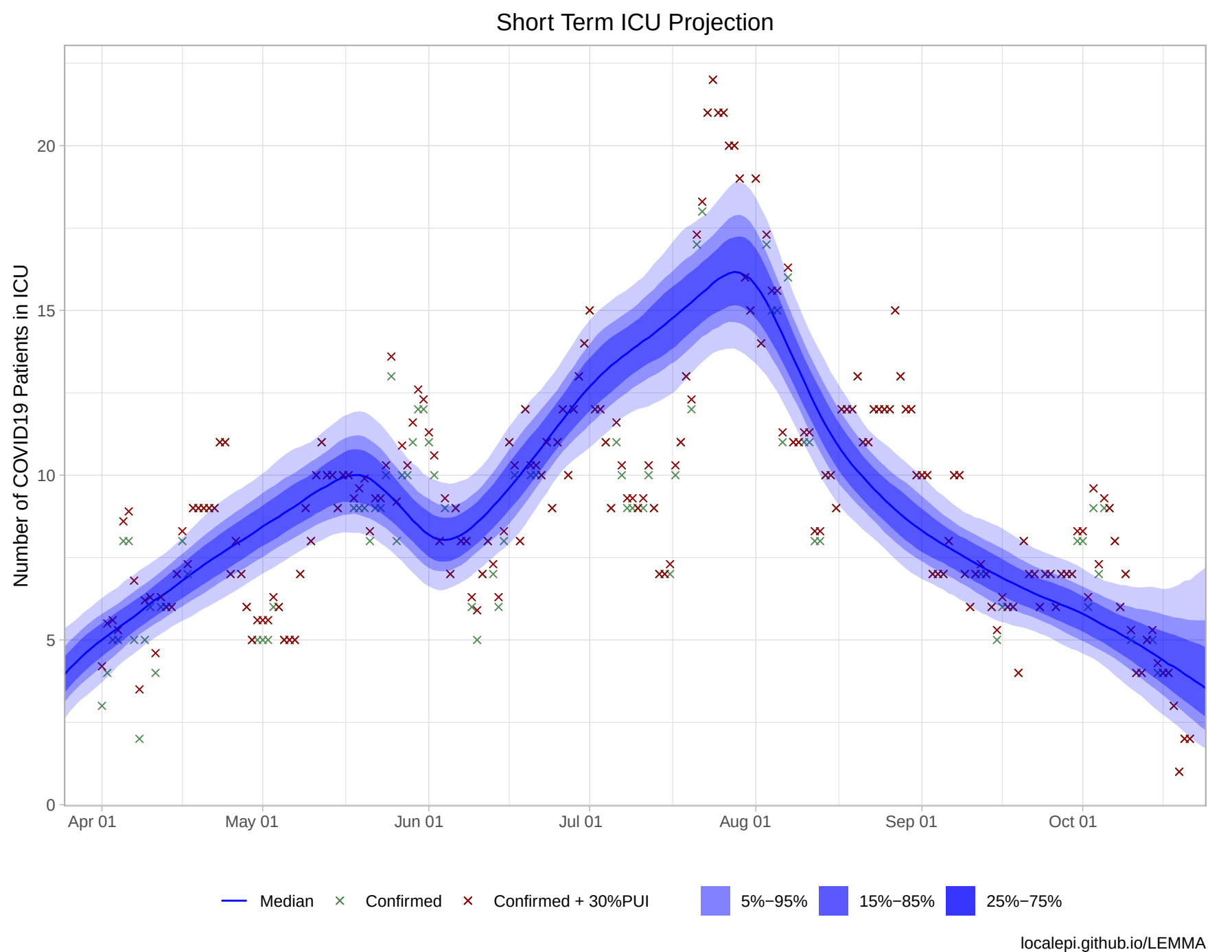
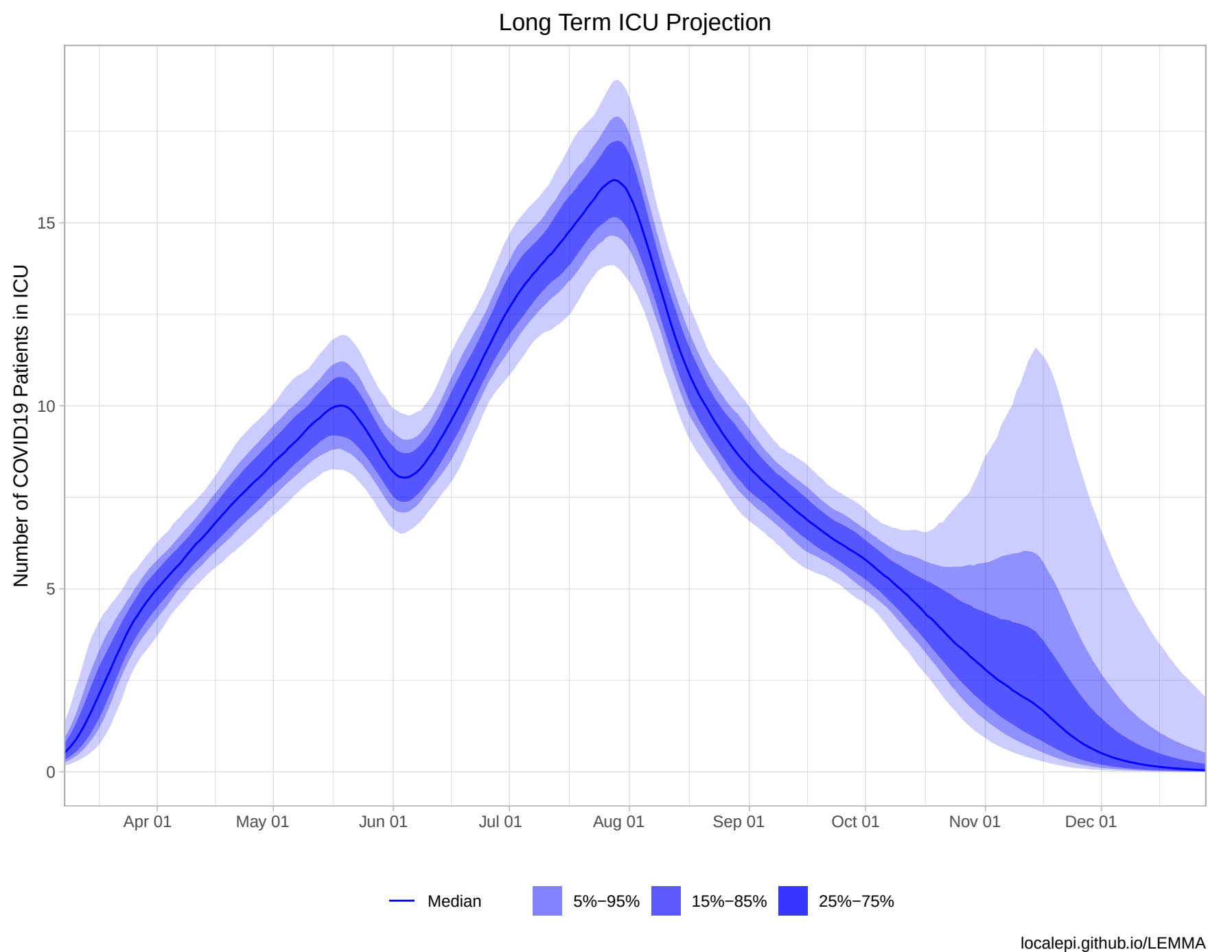
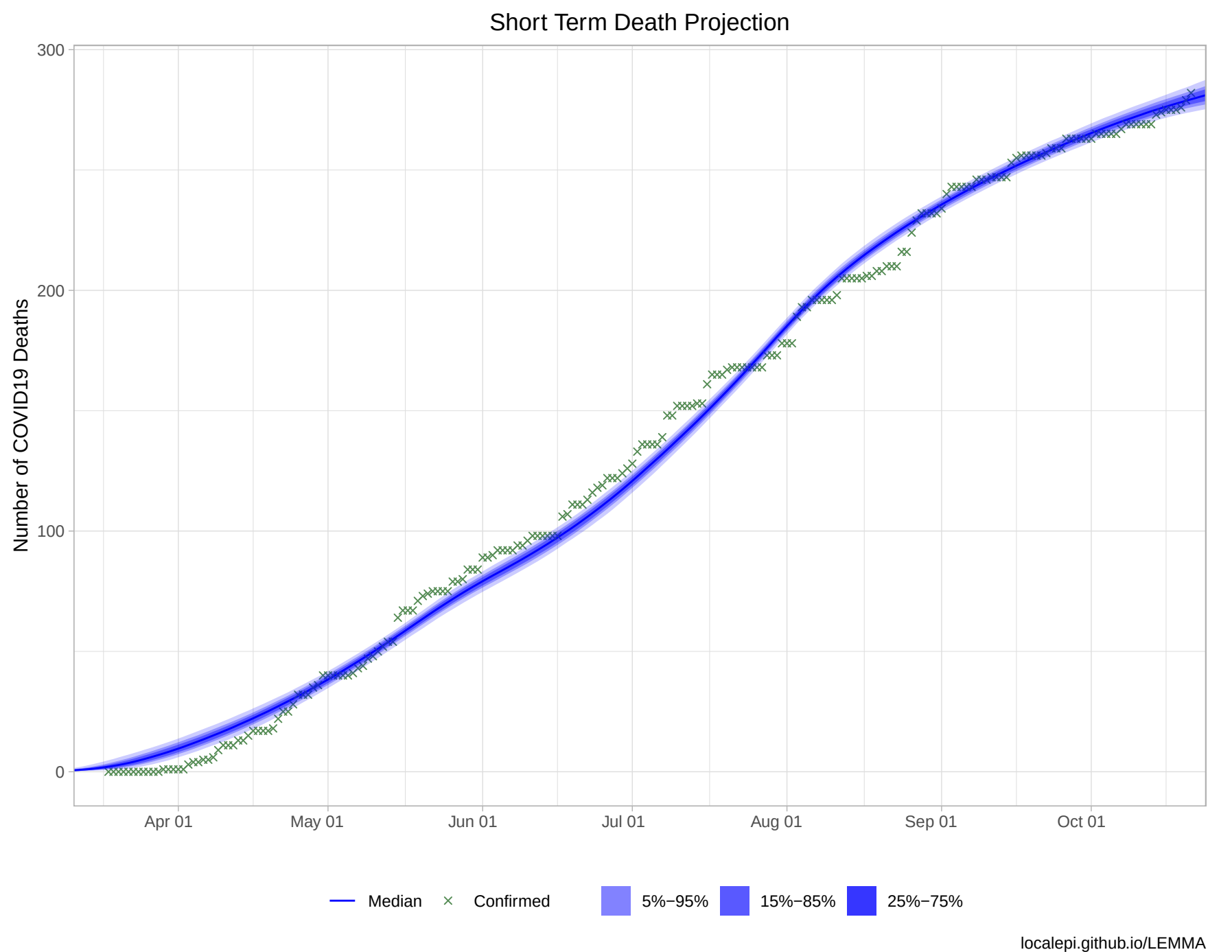
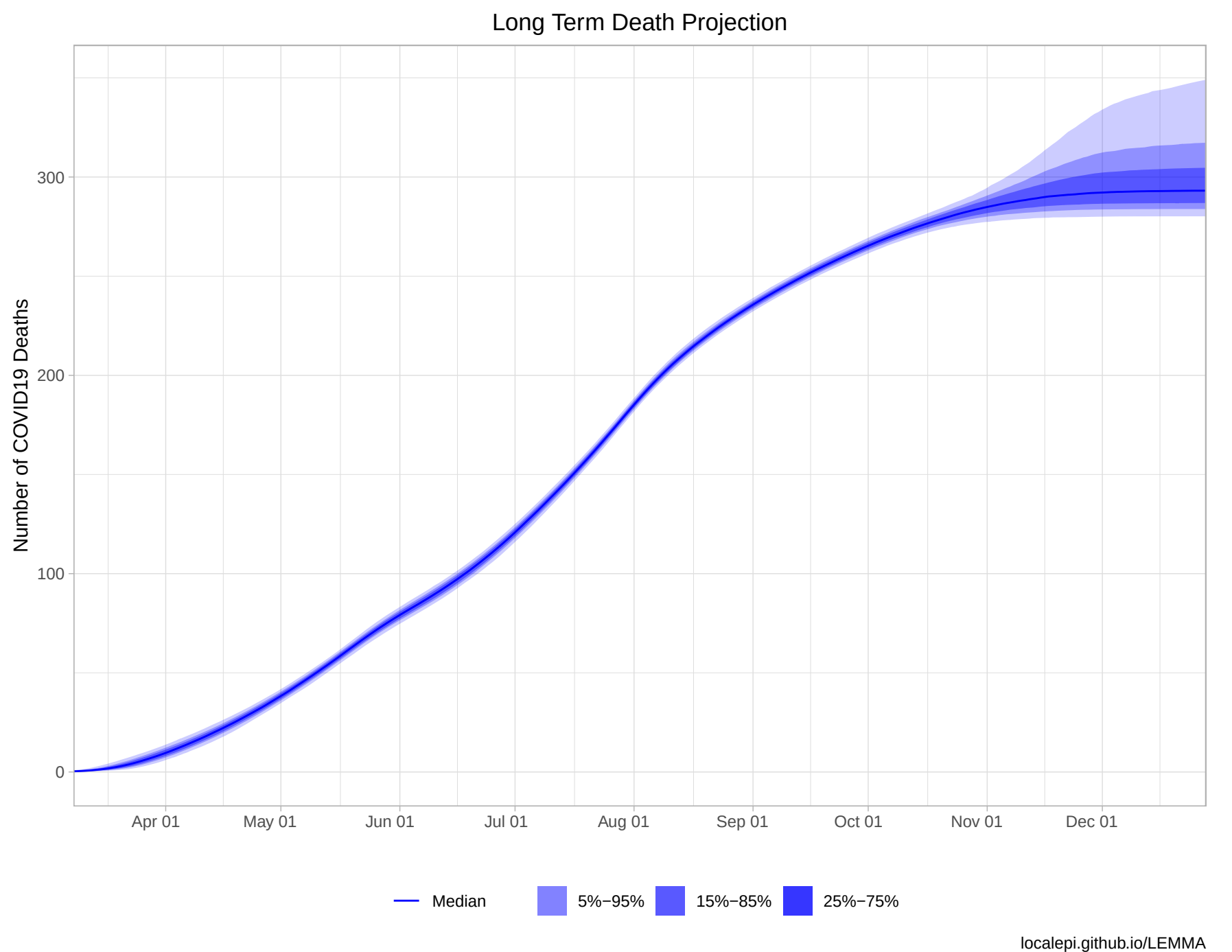

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
120
90
60
30
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

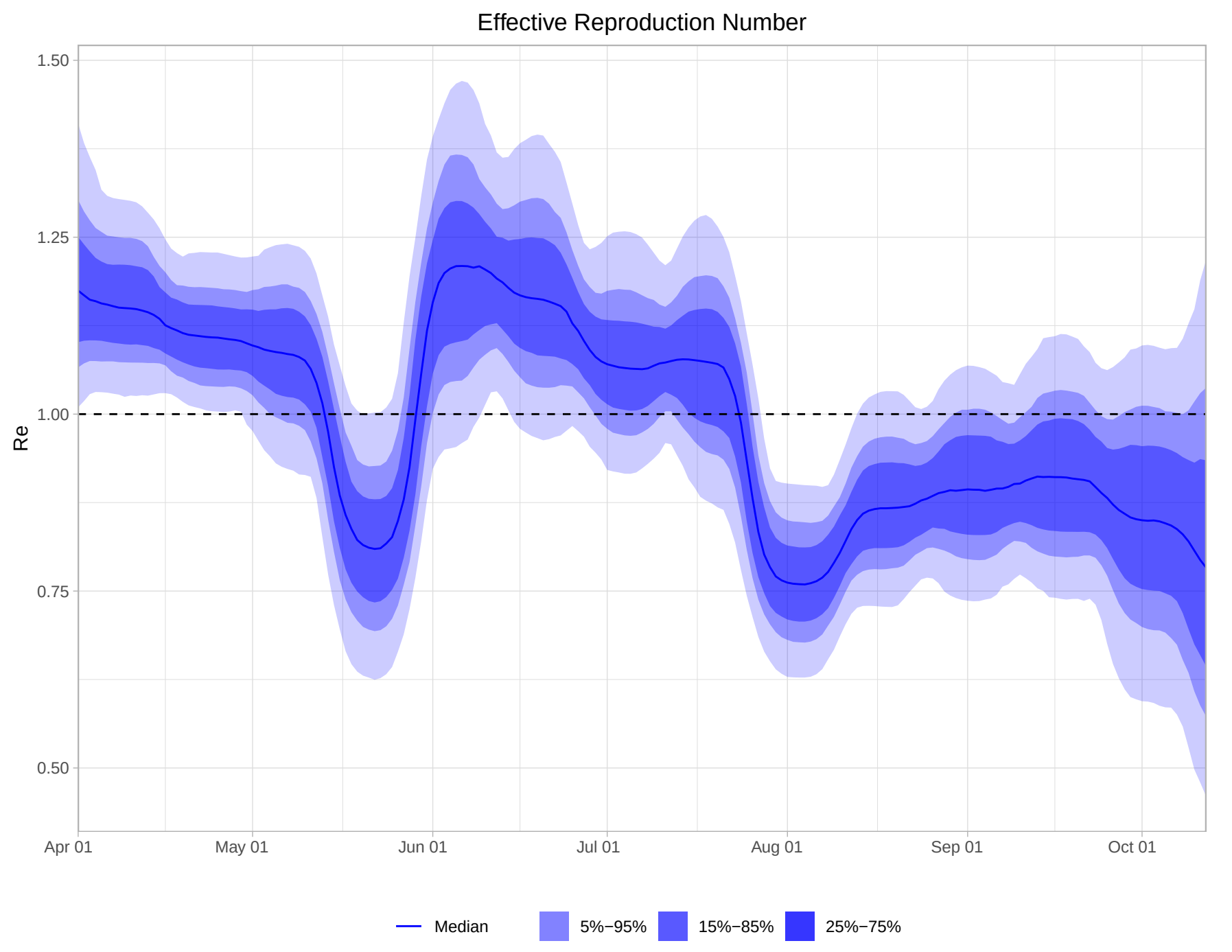

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
100
75
50
25
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
5
10
15
20
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 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
5
10
15
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%
localepi.github.io/LEMMA

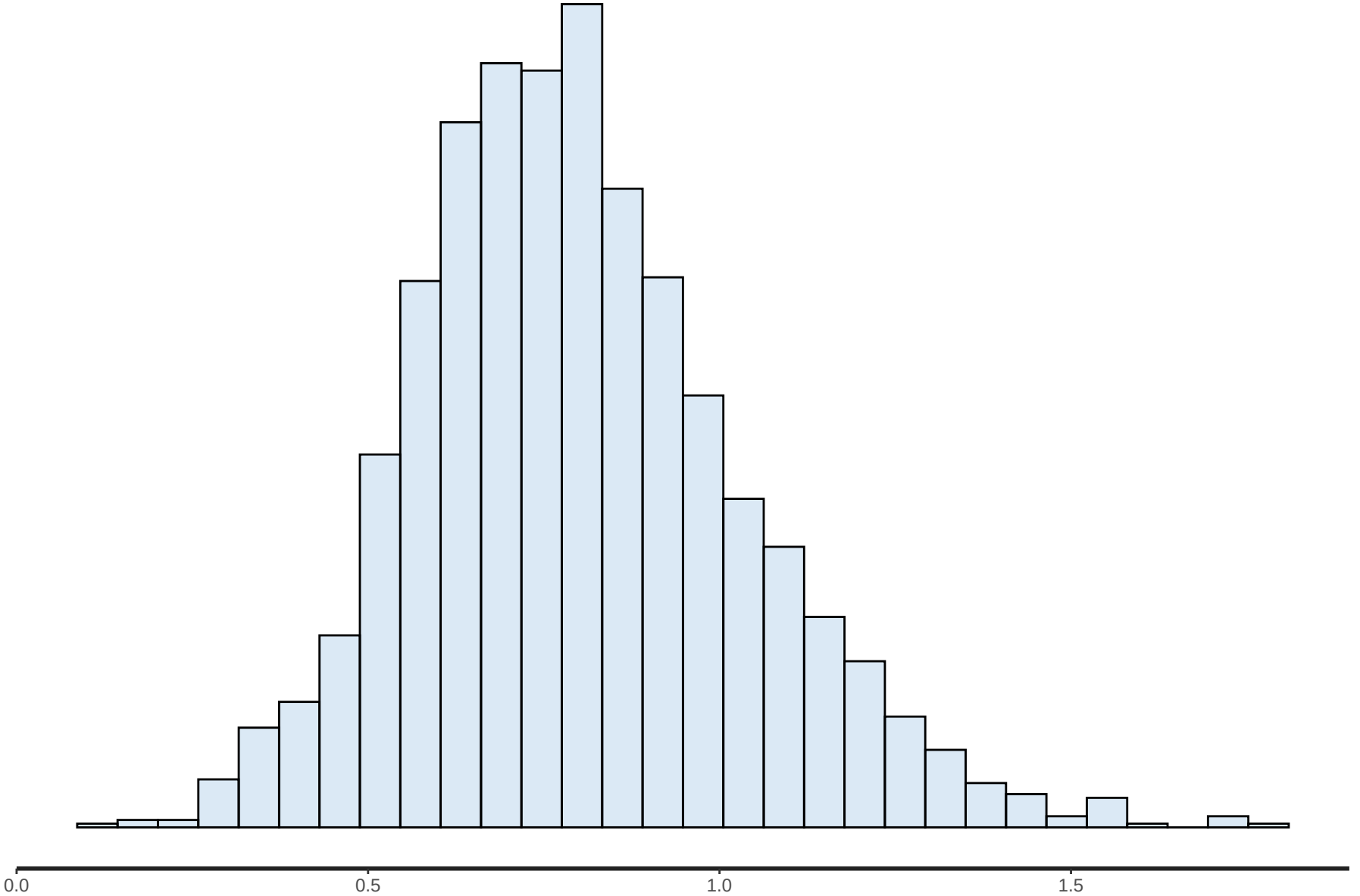

Short Term Death Projection
Number of COVID19 Deaths
300
200
100
0
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

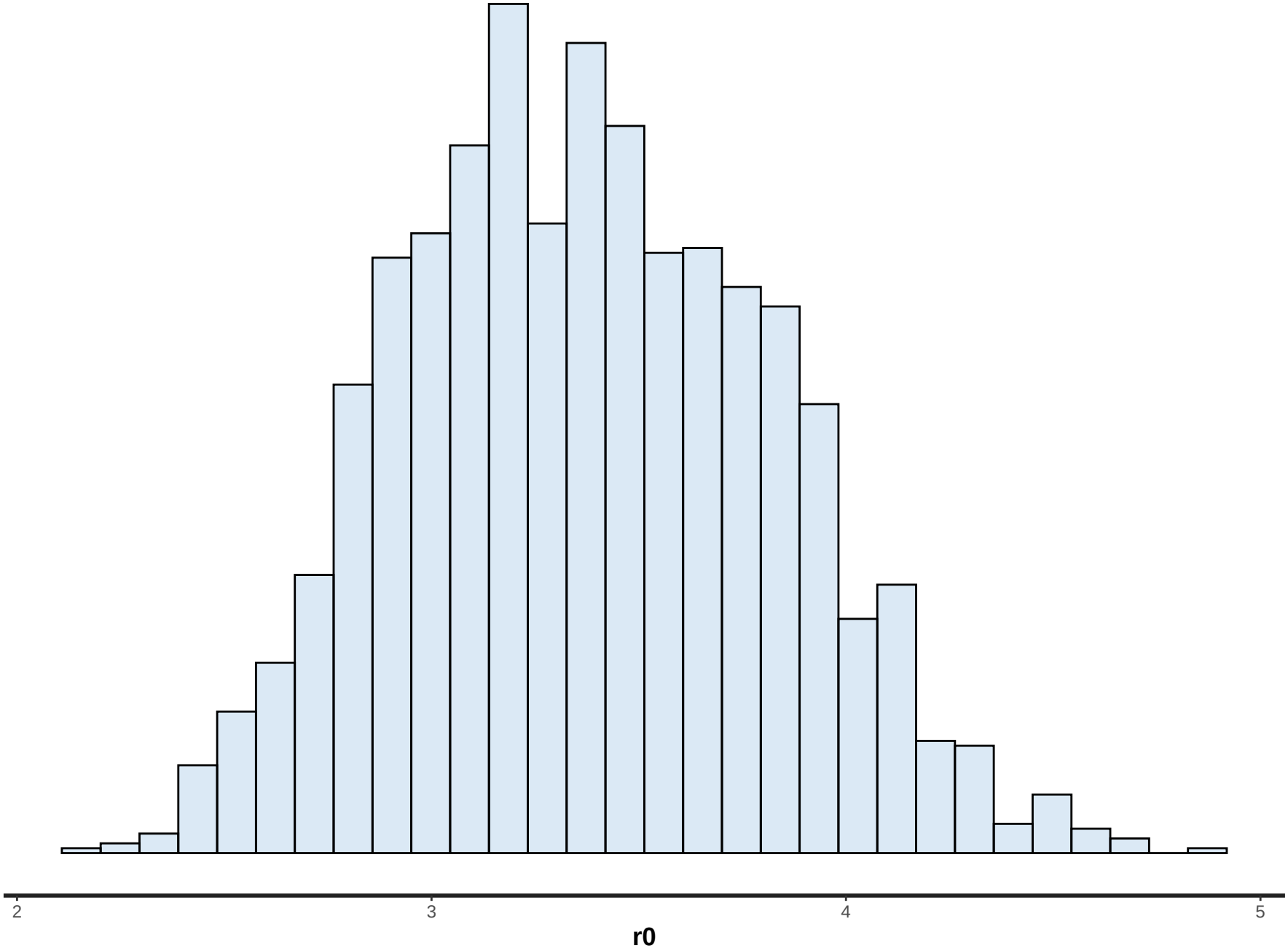

Long Term Death Projection
Number of COVID19 Deaths
0
100
200
300
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

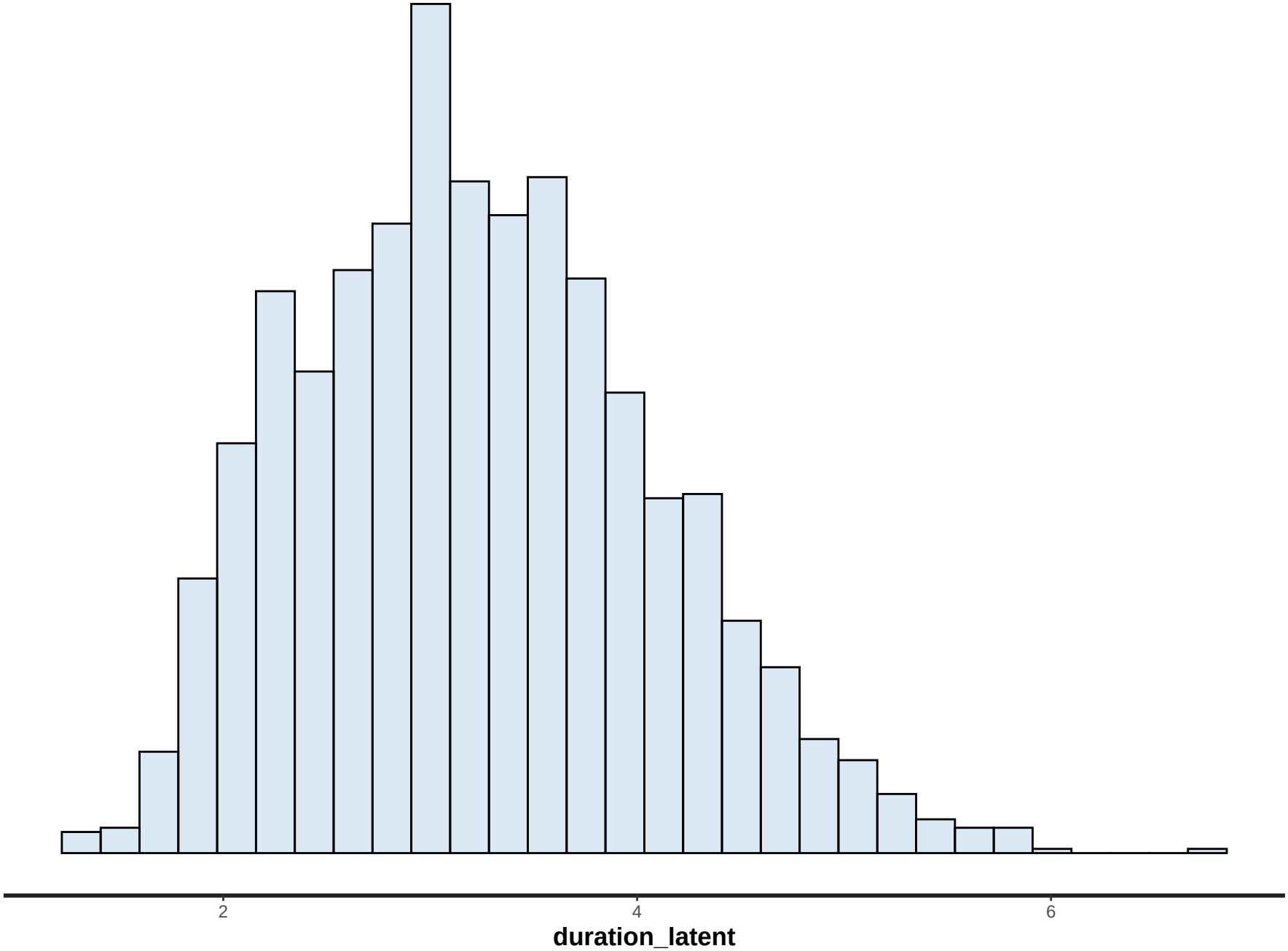

Effective Reproduction Number
Re
1.50
1.25
1.00
0.75
0.50
Apr 01
May 01
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Median
5%−95%
15%−85%
25%−75%

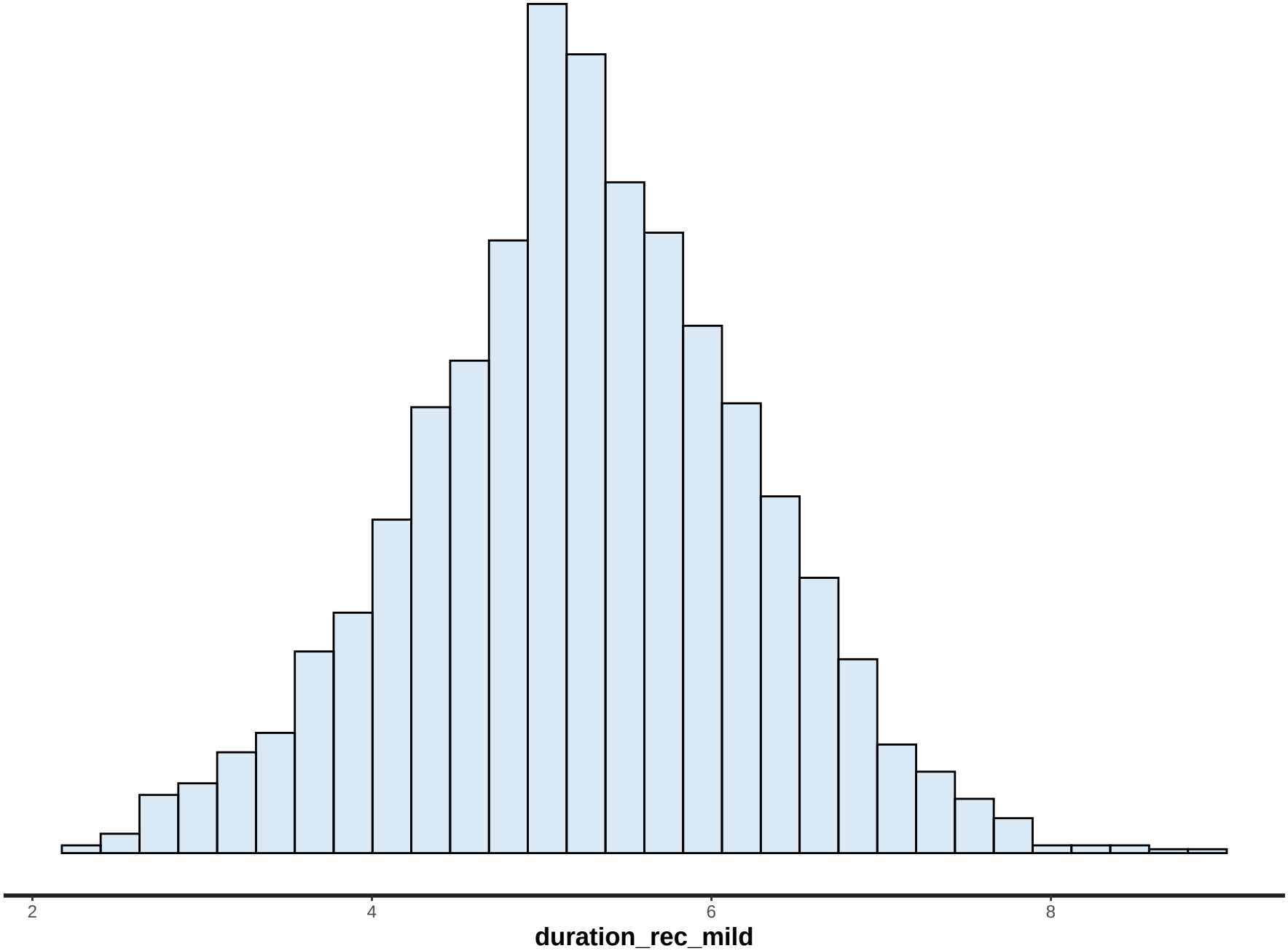
Rt as of 2020−10−12

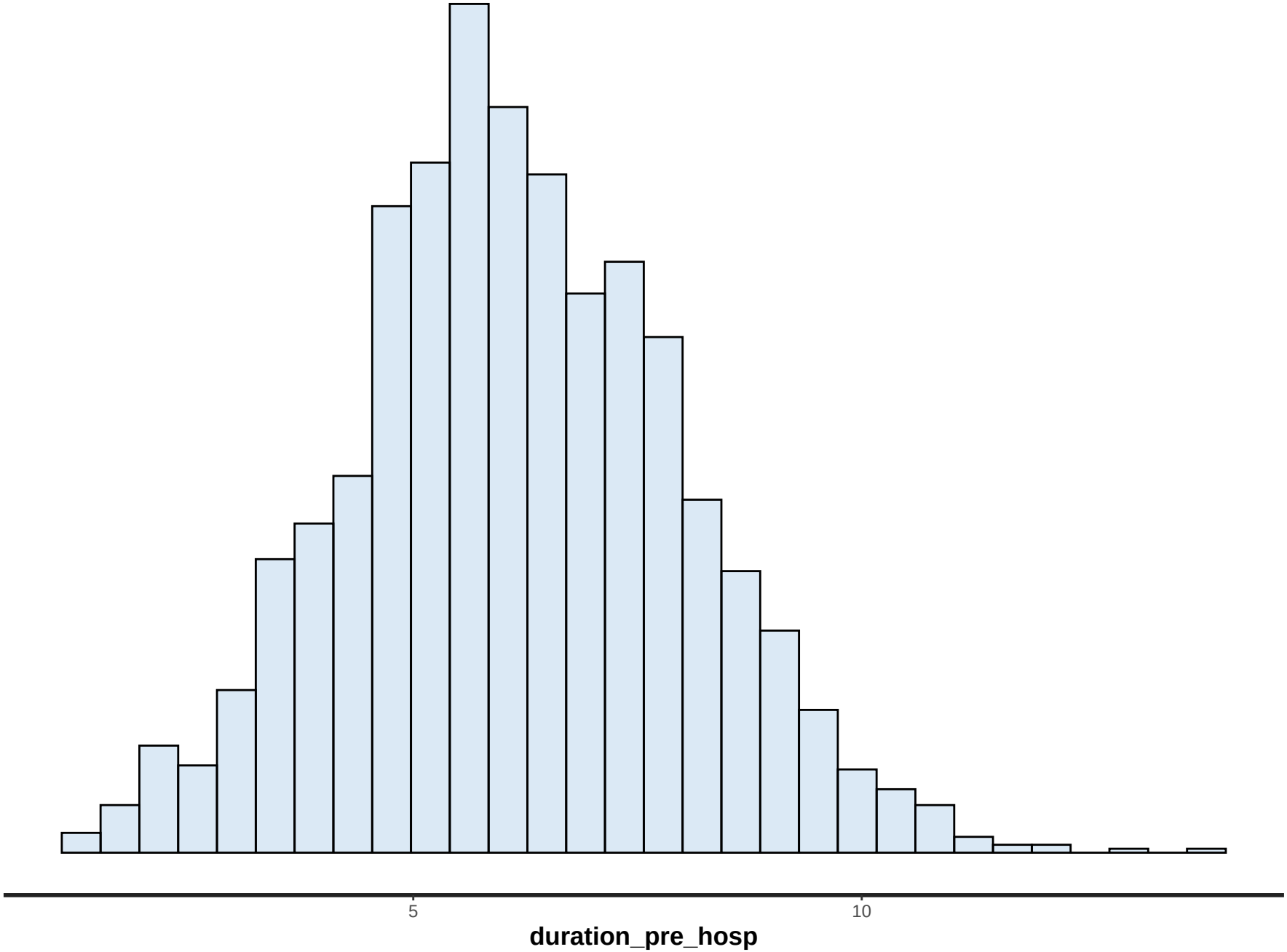
5%	10%	25%	50%	75%	90%	95%
0.46	0.53	0.64	0.78	0.93	1.11	1.22

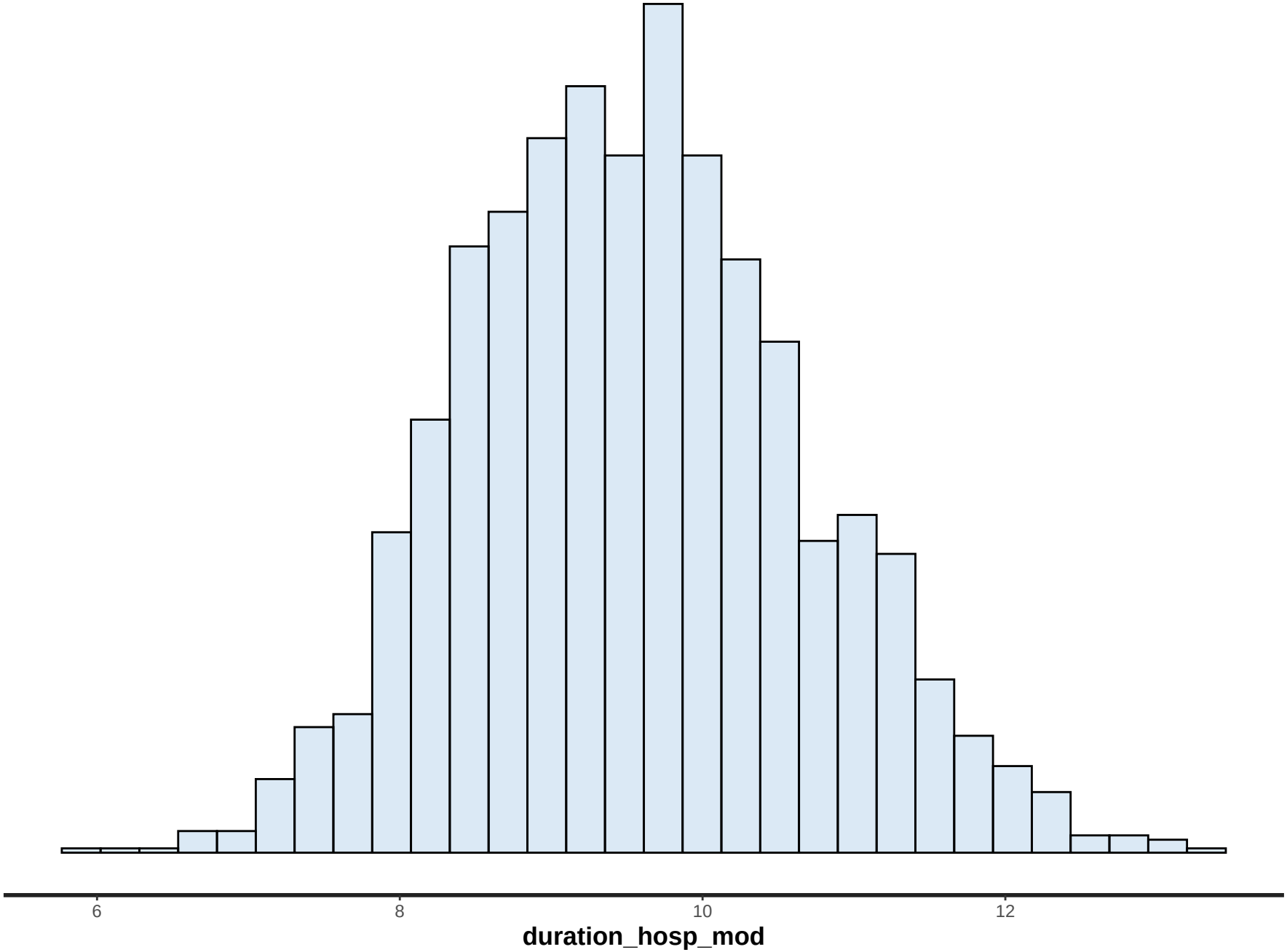


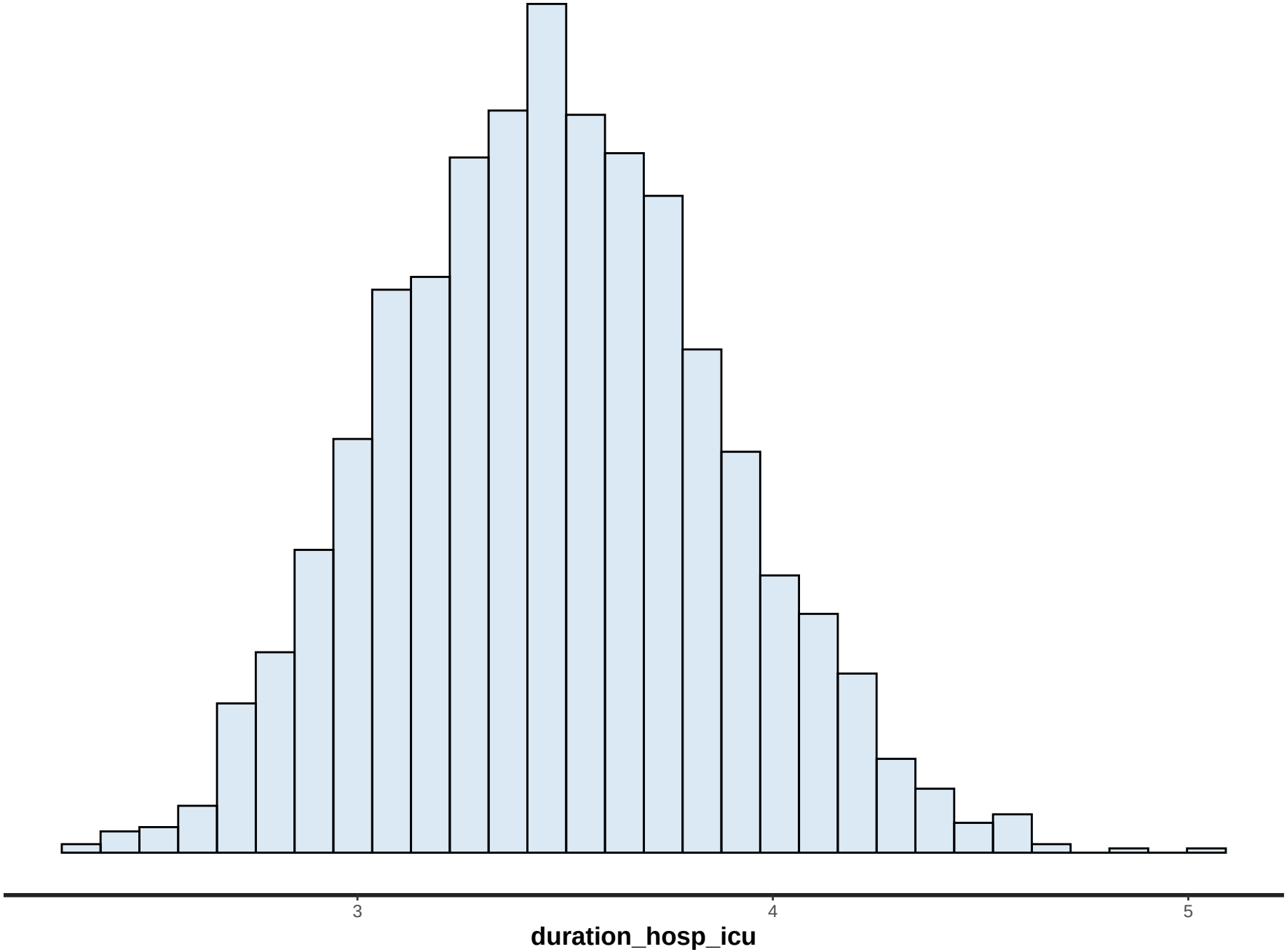

2
3
4
5
r0

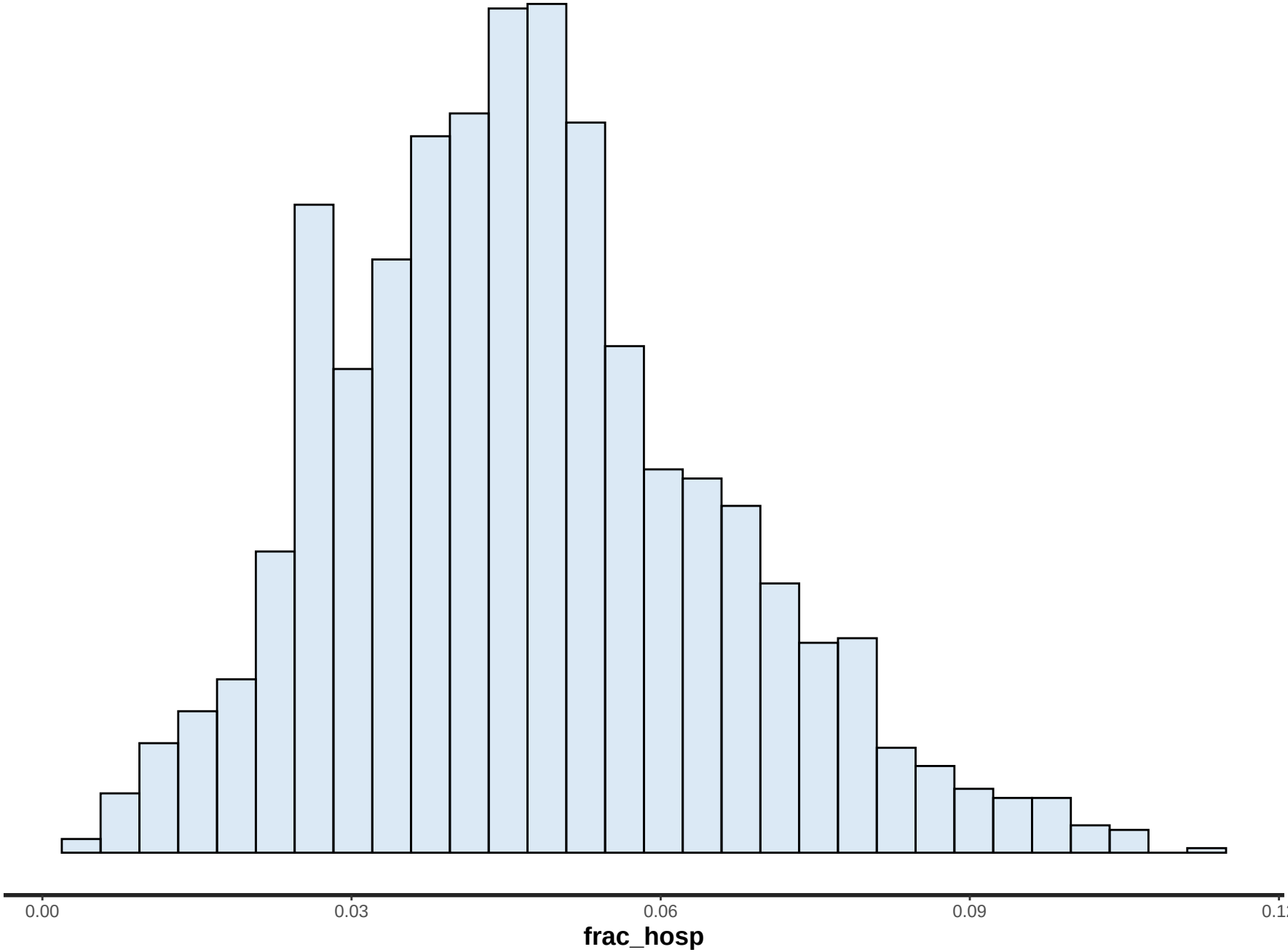

2
4
6
duration_latent

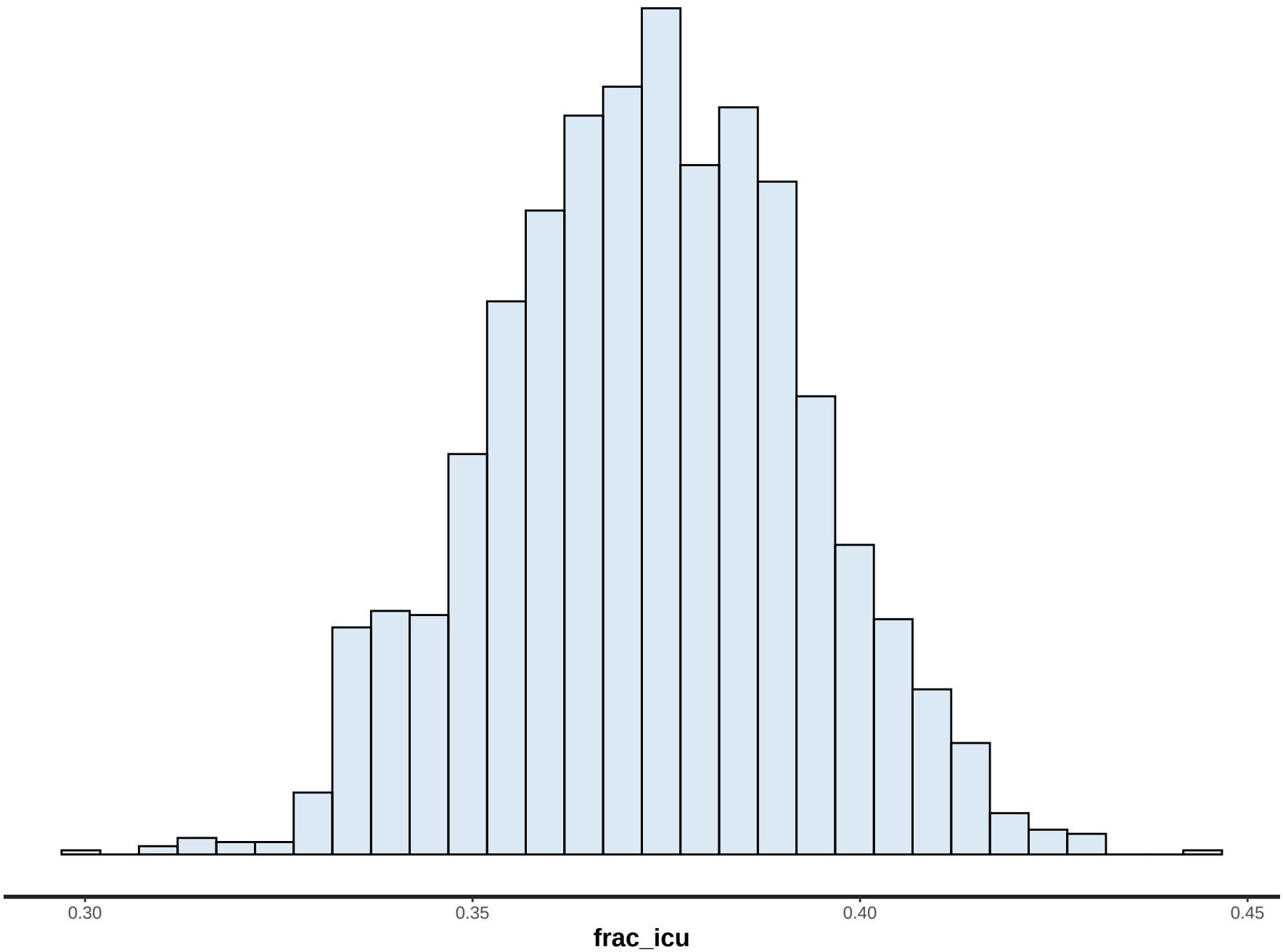

2
4
6
8
duration_rec_mild


5
10
duration_pre_hosp


6
8
10
12
duration_hosp_mod


3
4
5
duration_hosp_icu


0.00
0.03
0.06
0.09
0.12
frac_hosp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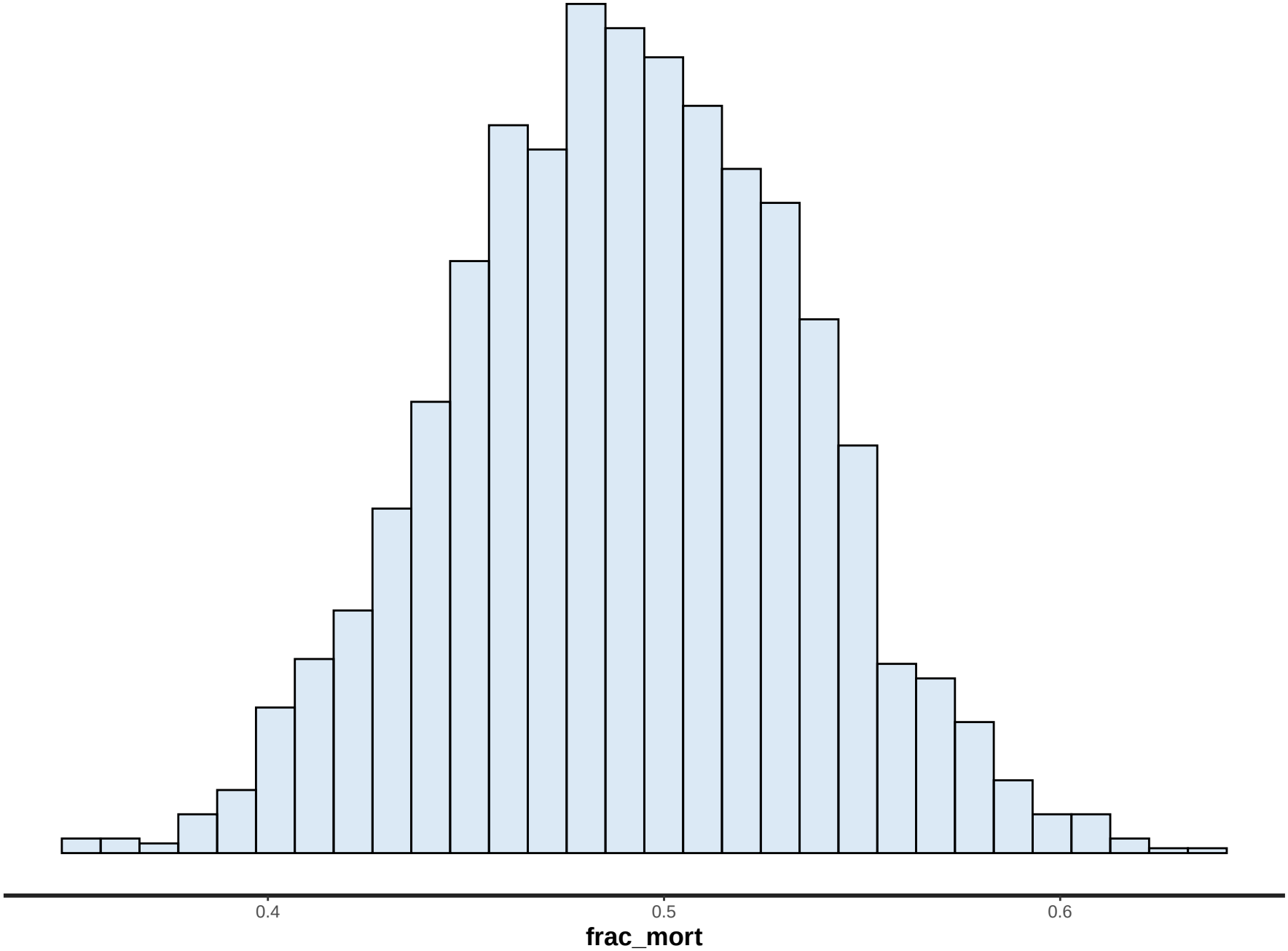
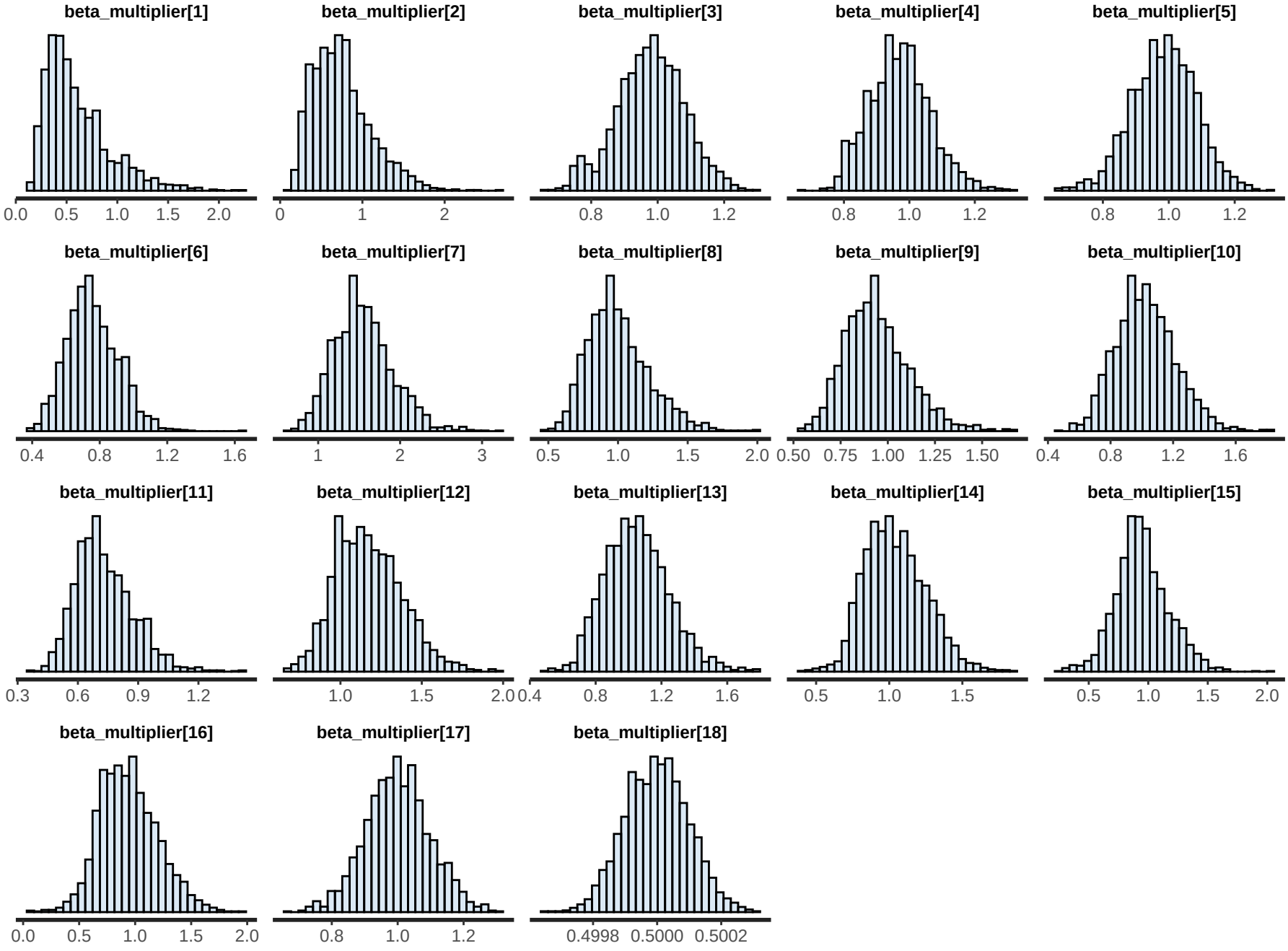
0.35
0.40
0.45
frac_icu


0.4
0.5
0.6
frac_mort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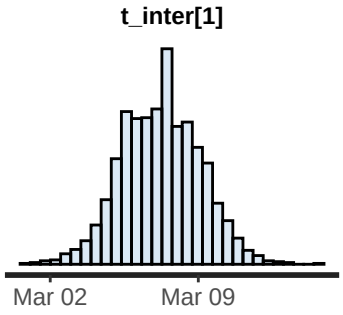
0.0 0.5 1.0 1.5 2.0
beta_multiplier[2]
0 1 2
beta_multiplier[3]
0.8 1.0 1.2
beta_multiplier[4]
0.8 1.0 1.2
beta_multiplier[5]
0.8 1.0 1.2
beta_multiplier[6]
0.4 0.8 1.2 1.6
beta_multiplier[7]
1 2 3
beta_multiplier[8]
0.5 1.0 1.5 2.0
beta_multiplier[9]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[10]
0.4 0.8 1.2 1.6
beta_multiplier[11]
0.3 0.6 0.9 1.2
beta_multiplier[12]
1.0 1.5 2.0
beta_multiplier[13]
0.4 0.8 1.2 1.6
beta_multiplier[14]
0.5 1.0 1.5
beta_multiplier[15]
0.5 1.0 1.5 2.0
beta_multiplier[16]
0.0 0.5 1.0 1.5 2.0
beta_multiplier[17]
0.8 1.0 1.2
beta_multiplier[18]
0.4998 0.5000 0.5002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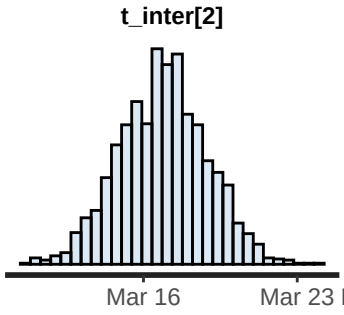
Mar 02
Mar 09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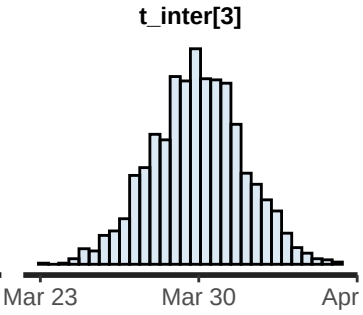
Mar 16
Mar 23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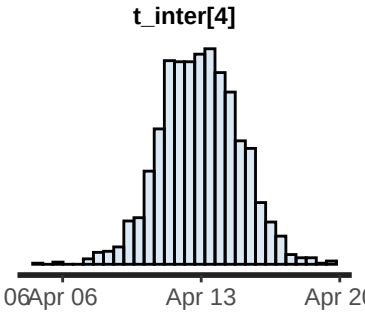
Mar 23
Mar 30
Apr 06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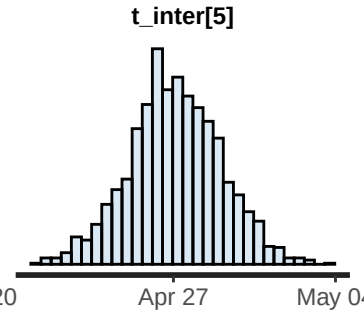
Apr 06
Apr 13
Apr 20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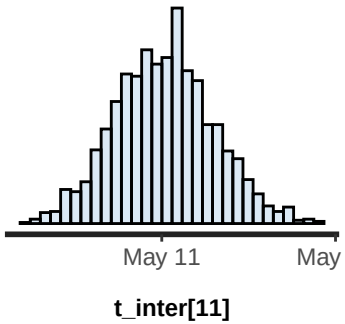
Apr 27
May 04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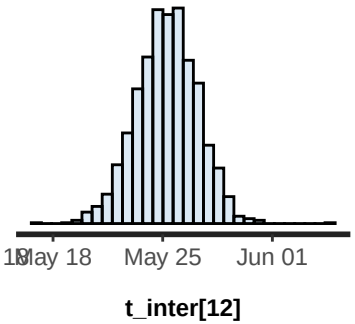
May 11
May 18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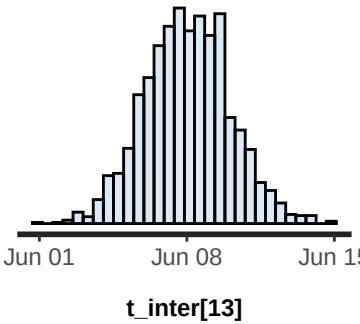
May 18
May 25
Jun 01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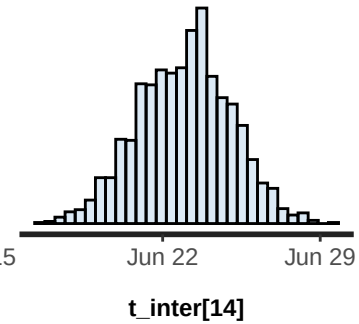
Jun 01
Jun 08
Jun 15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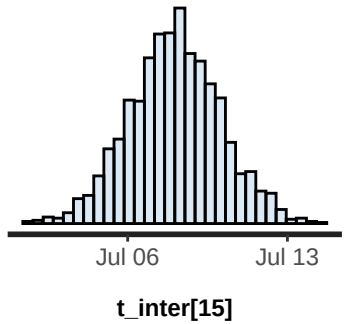
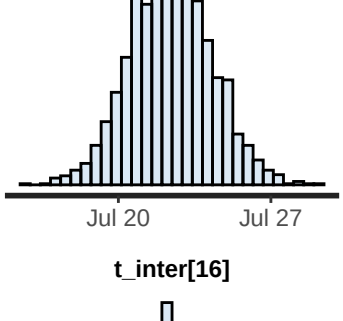
Jun 22
Jun 29


t_inter[10]
Jul 06
Jul 13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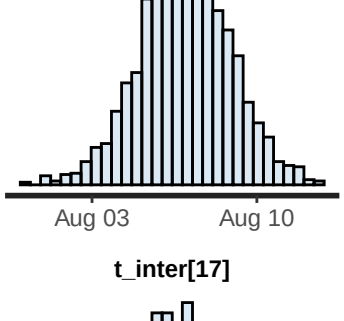
Jul 20
Jul 27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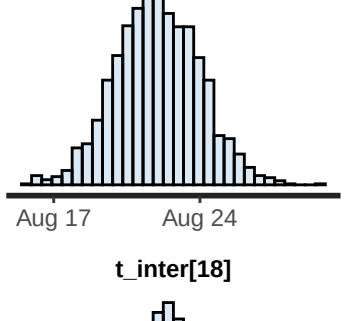
Aug 03
Aug 10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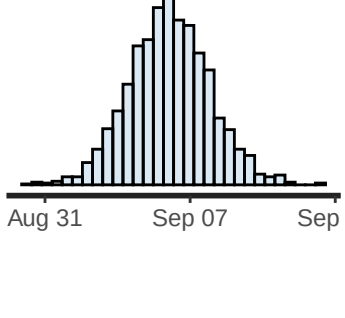
Aug 17
Aug 24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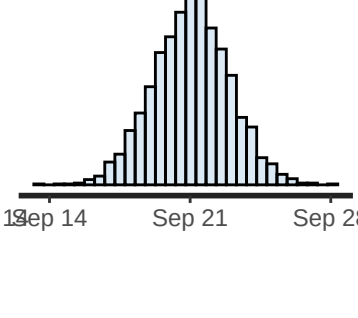
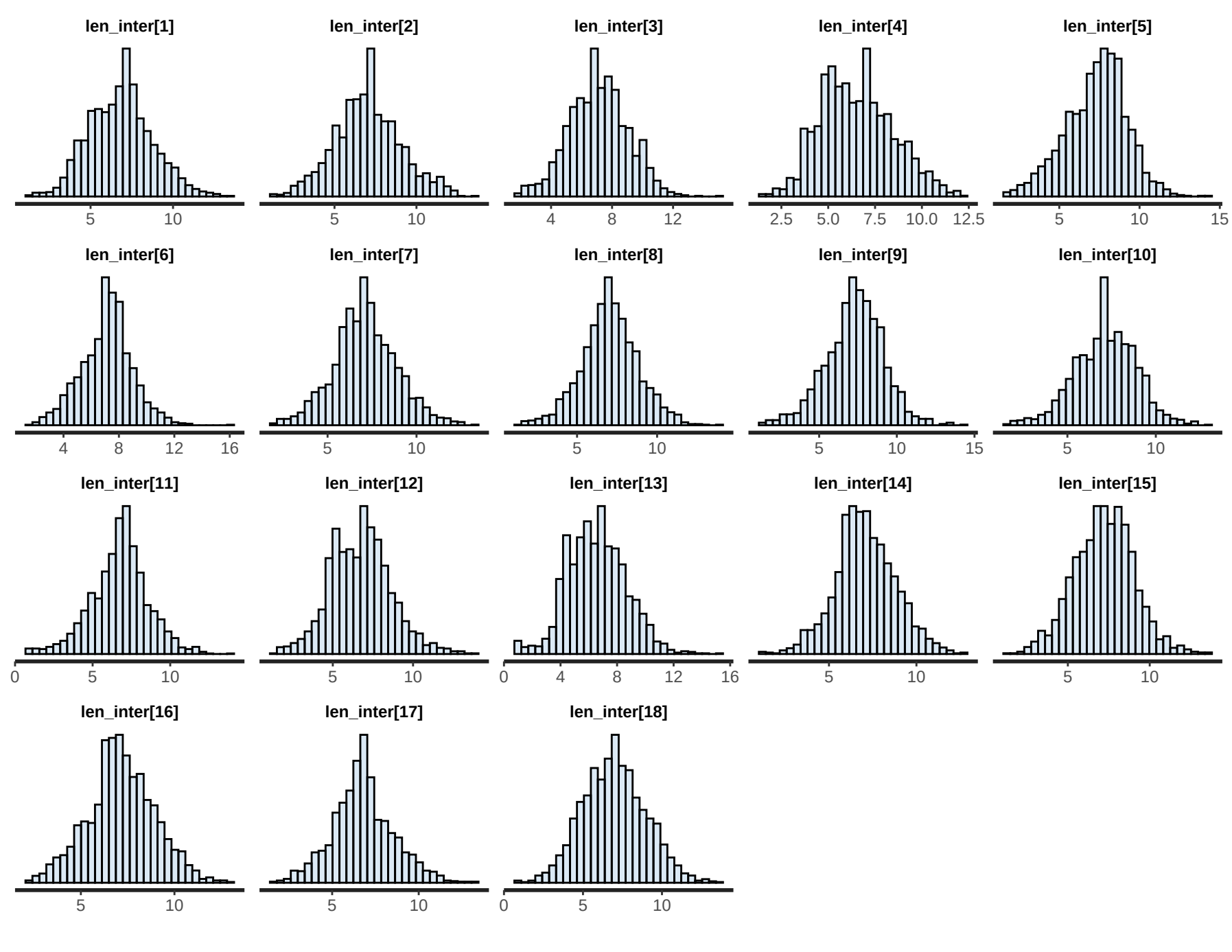
Aug 31
Sep 07
Sep 14


t_inter[15]
Sep 14
Sep 21
Sep 28

t_inter[16]
Oct 05
Oct 12

t_inter[17]
Oct 19
Oct 26

t_inter[18]
Nov 07


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[9]
len_inter[10]
len_inter[11]
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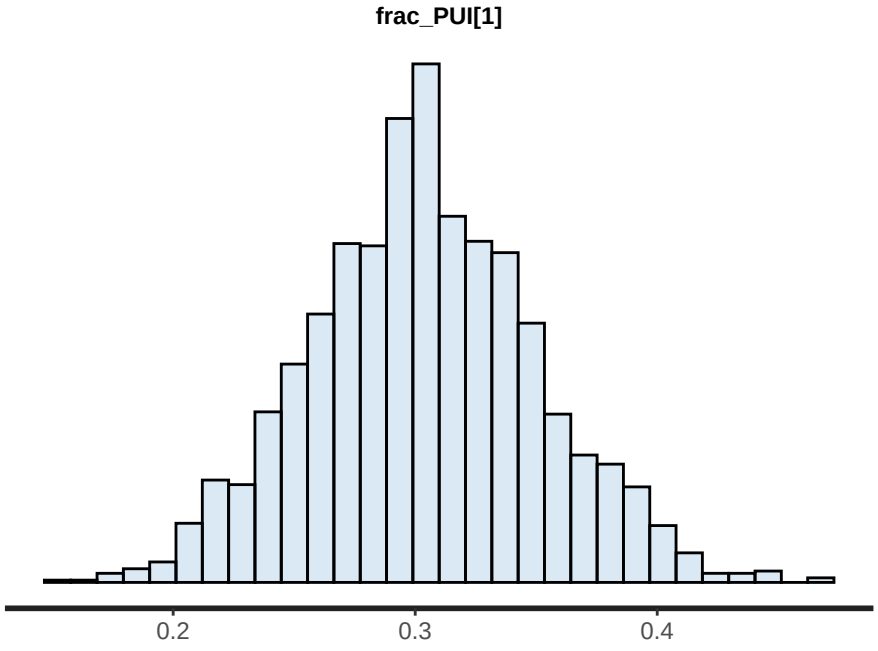
len_inter[13]
len_inter[14]
len_inter[15]
len_inter[16]
len_inter[17]
len_inter[18]


frac_PUI[1]
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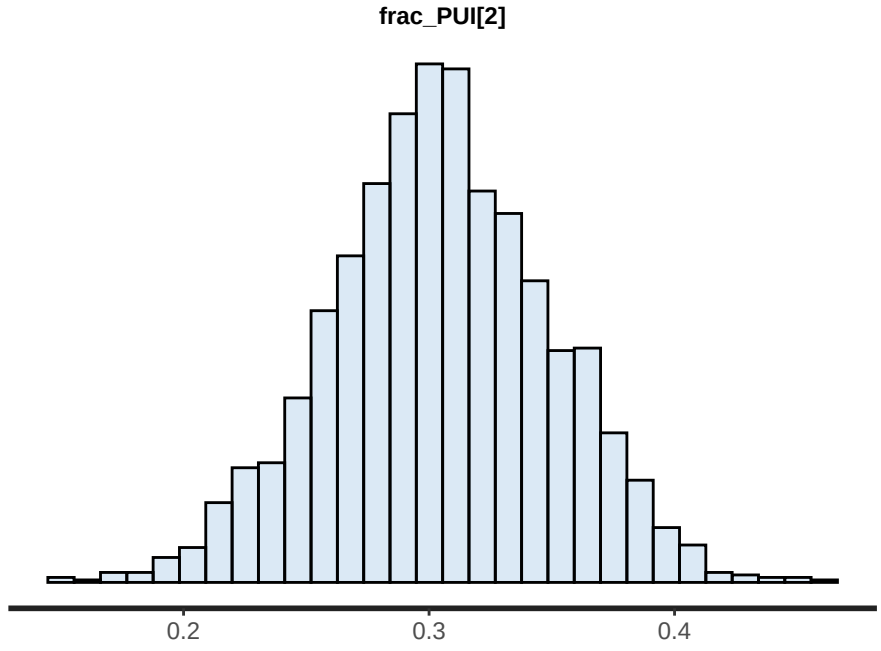
0.3
0.4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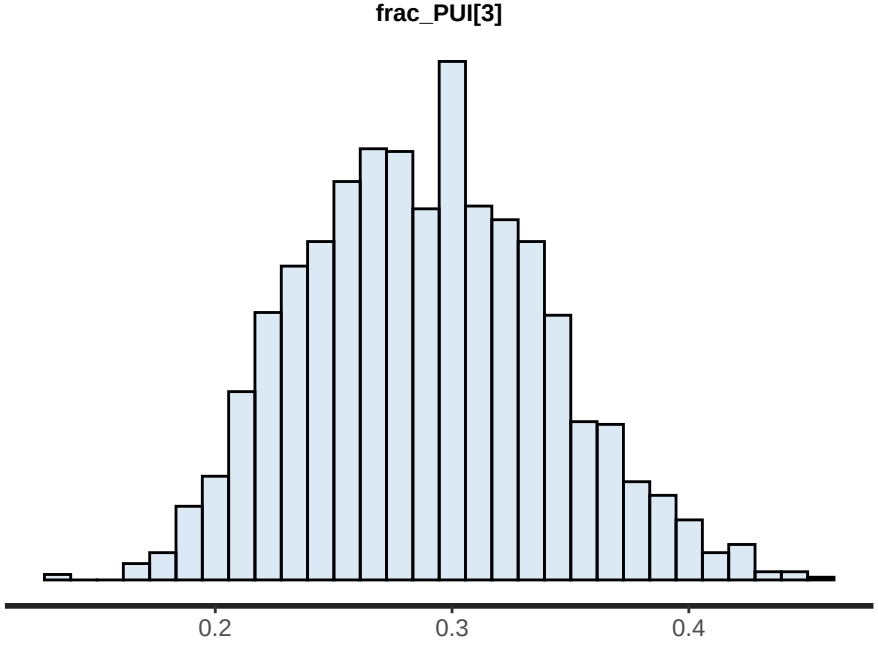
0.3
0.4


frac_PUI[3]
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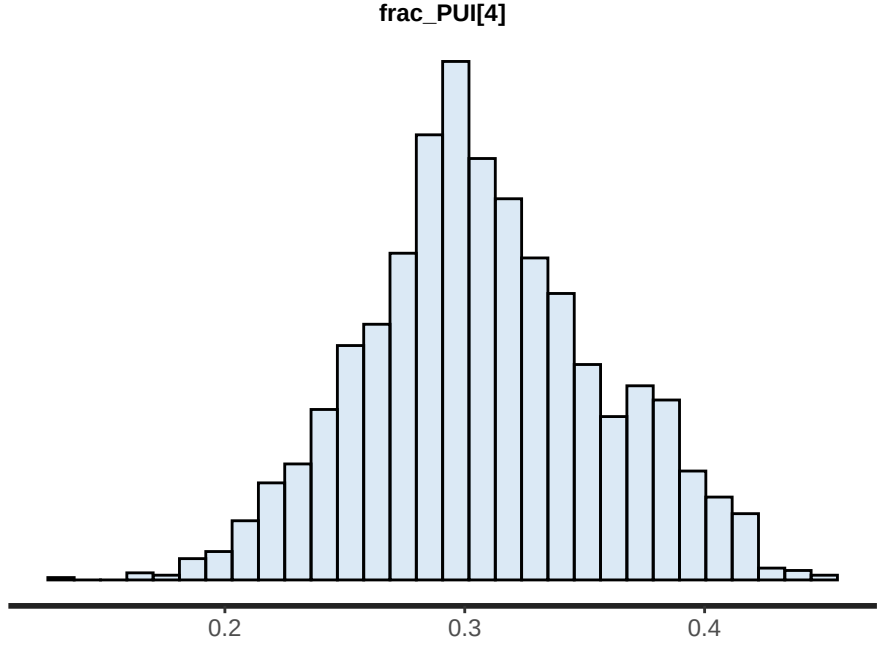
0.3
0.4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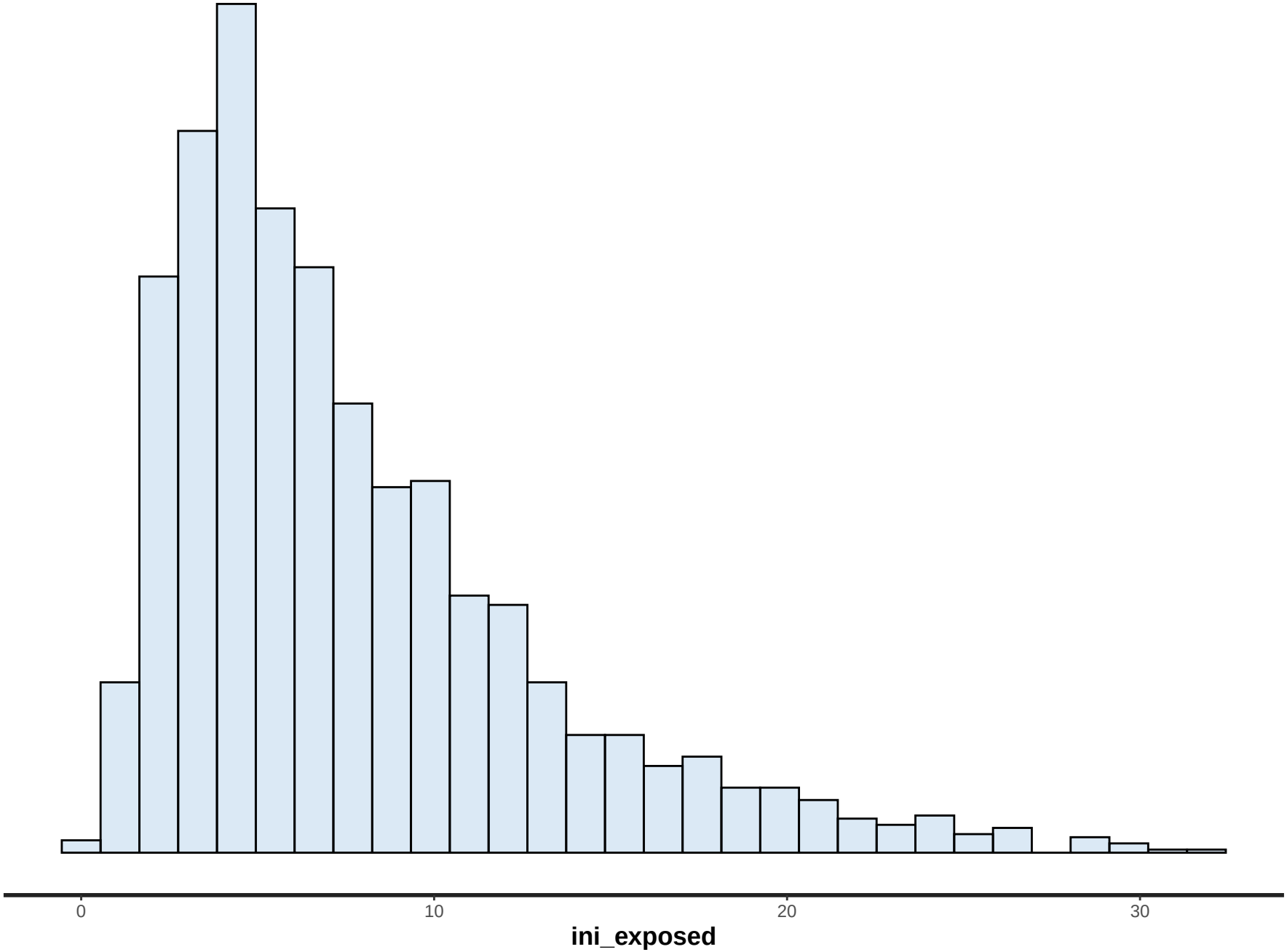
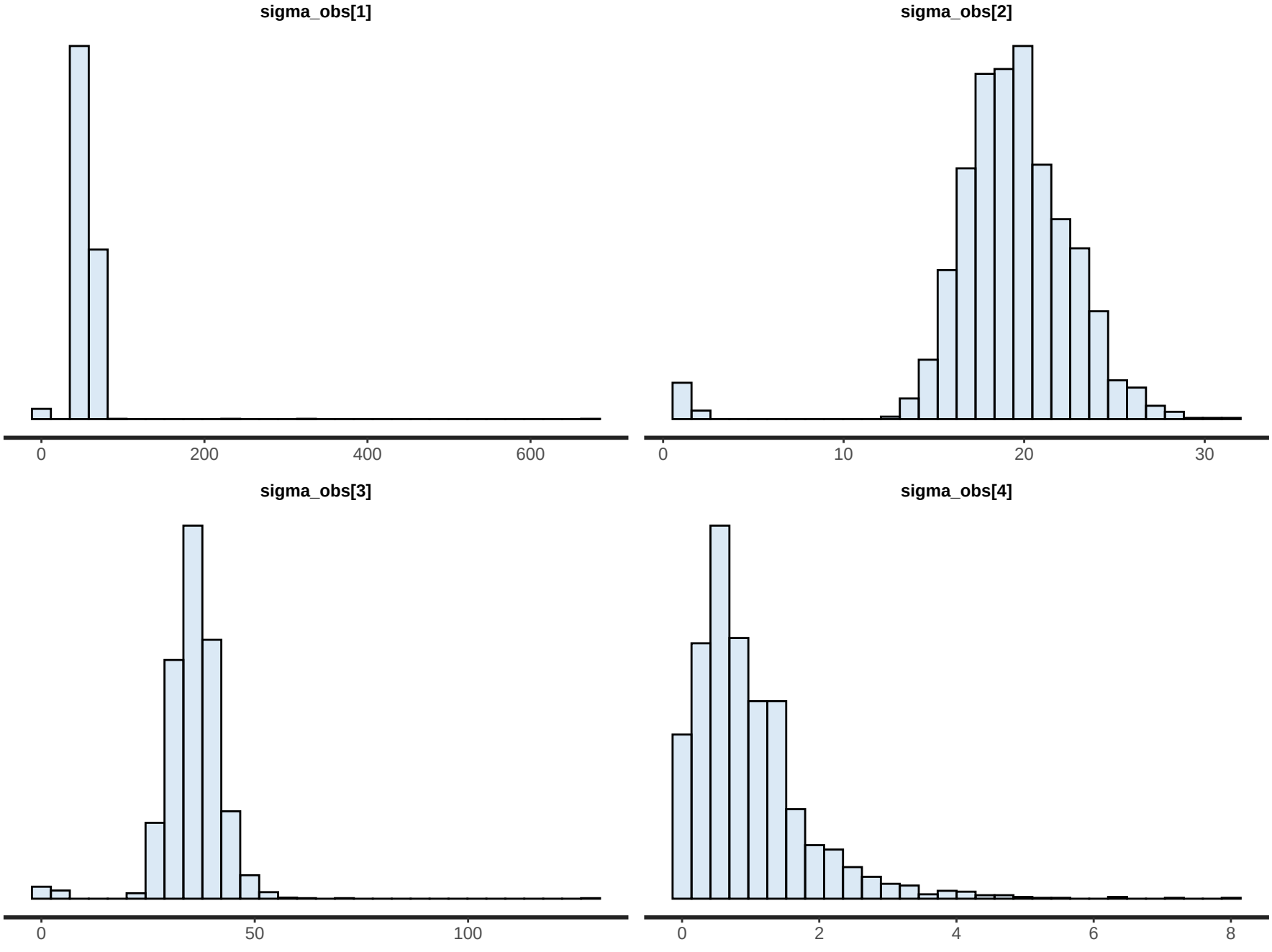
0.3
0.4


0
10
20
30
ini_exposed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400
600
sigma_obs[2]
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10
20
30
sigma_obs[3]
0
50
100
sigma_obs[4]
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2
4
6
8