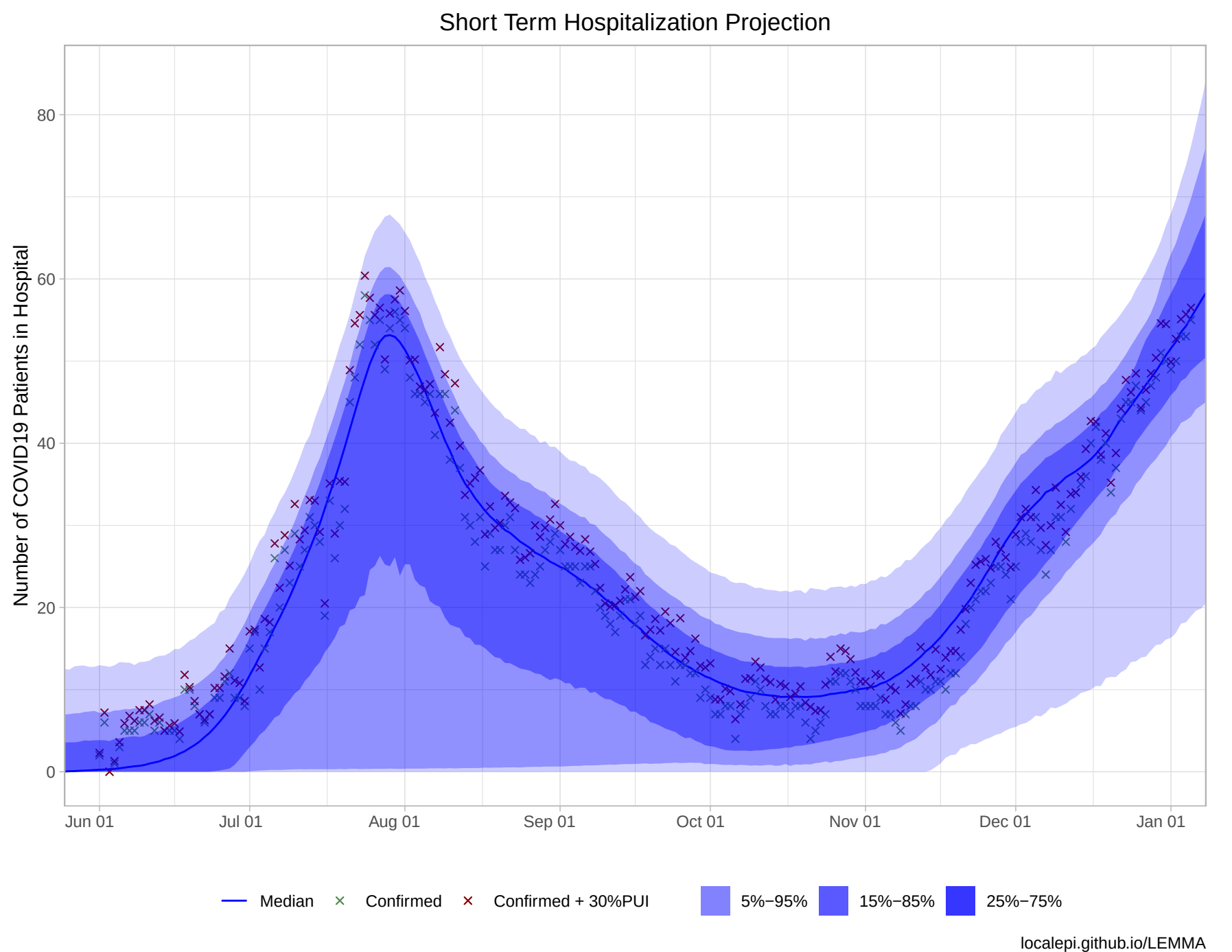
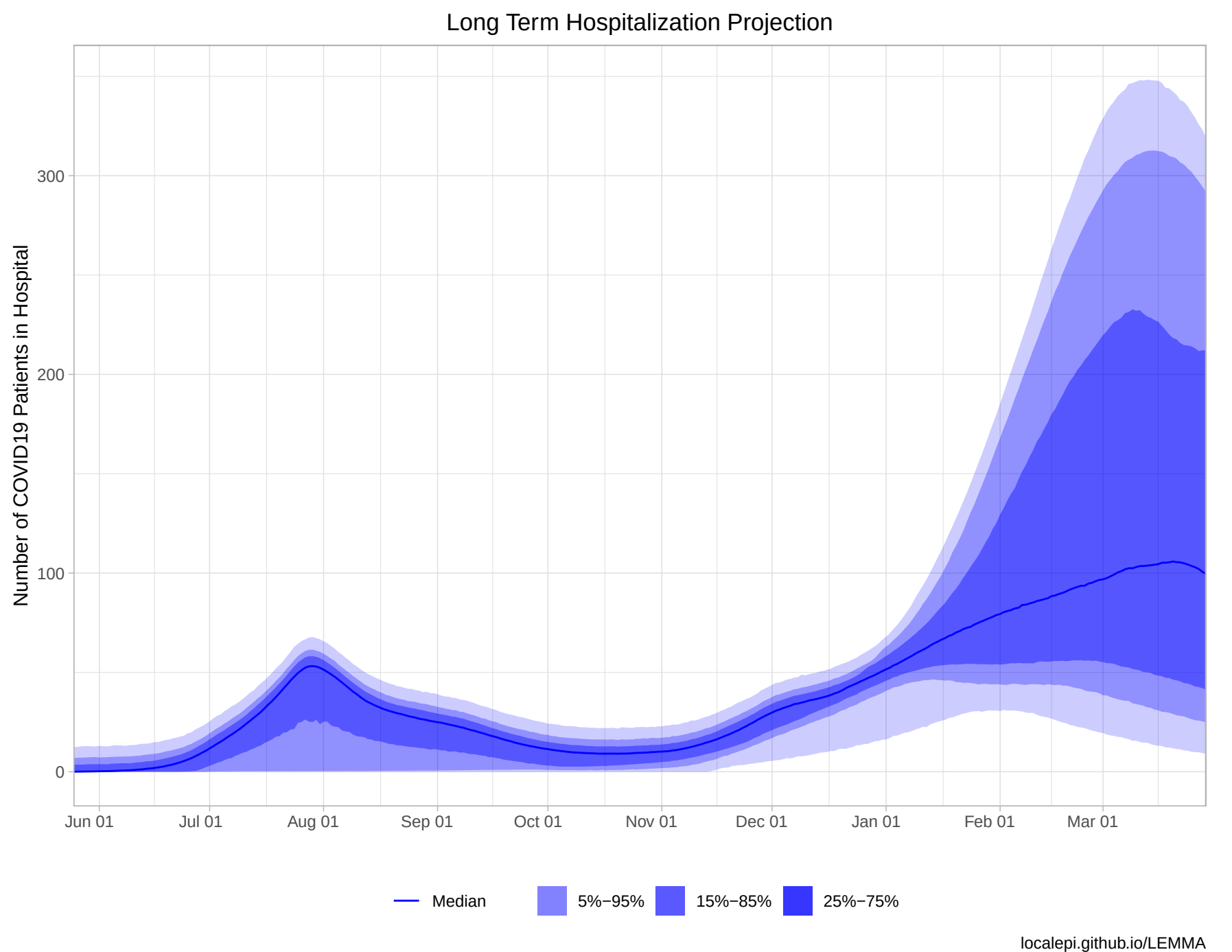
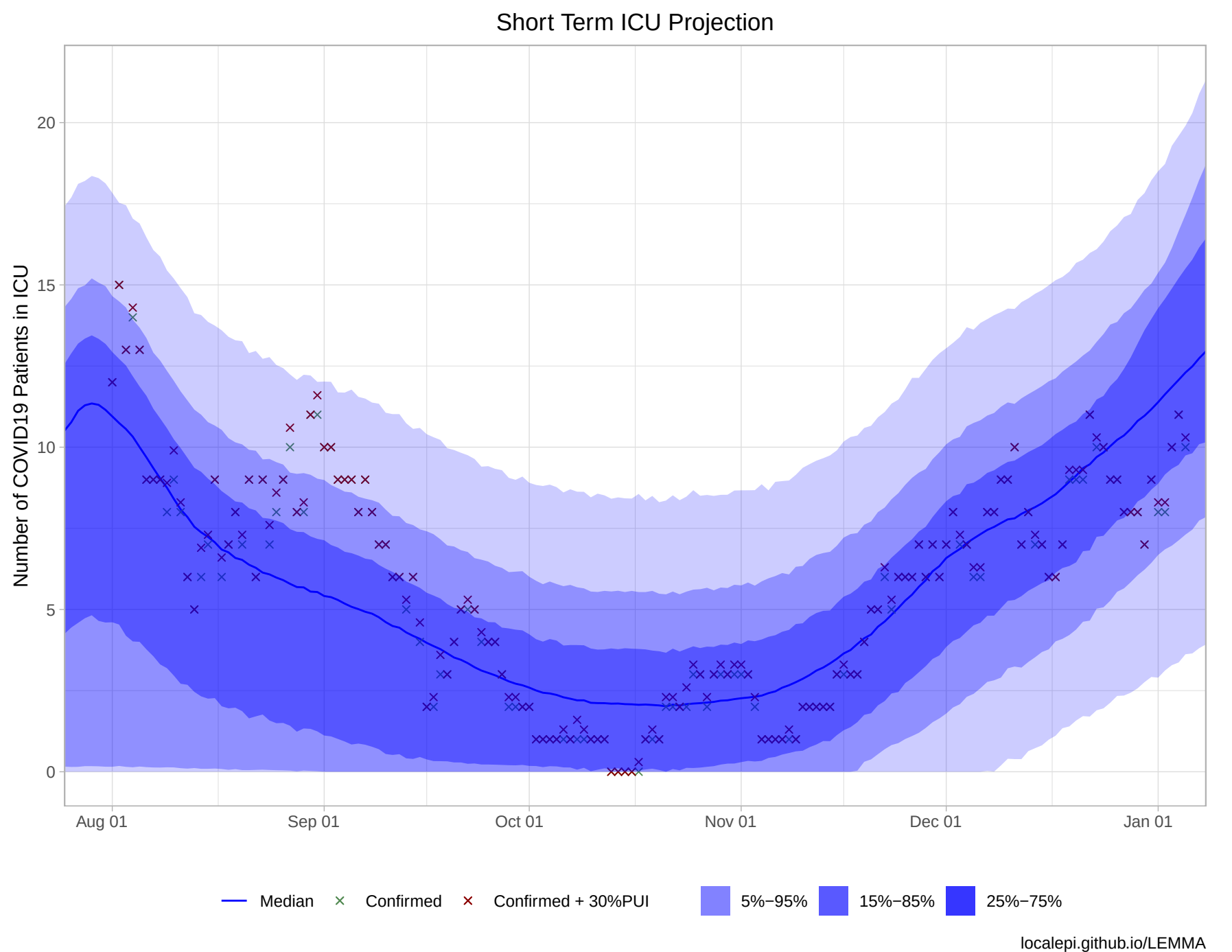
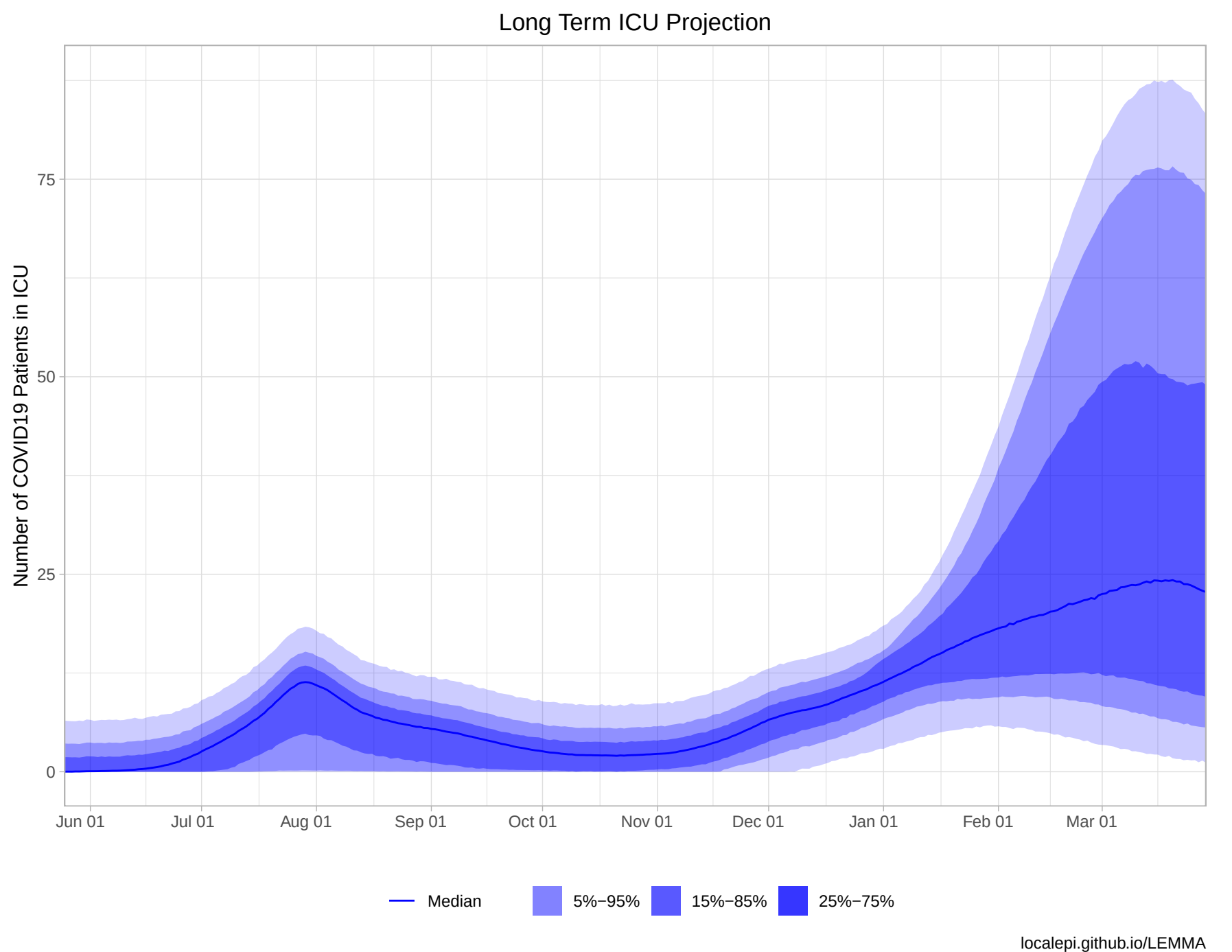
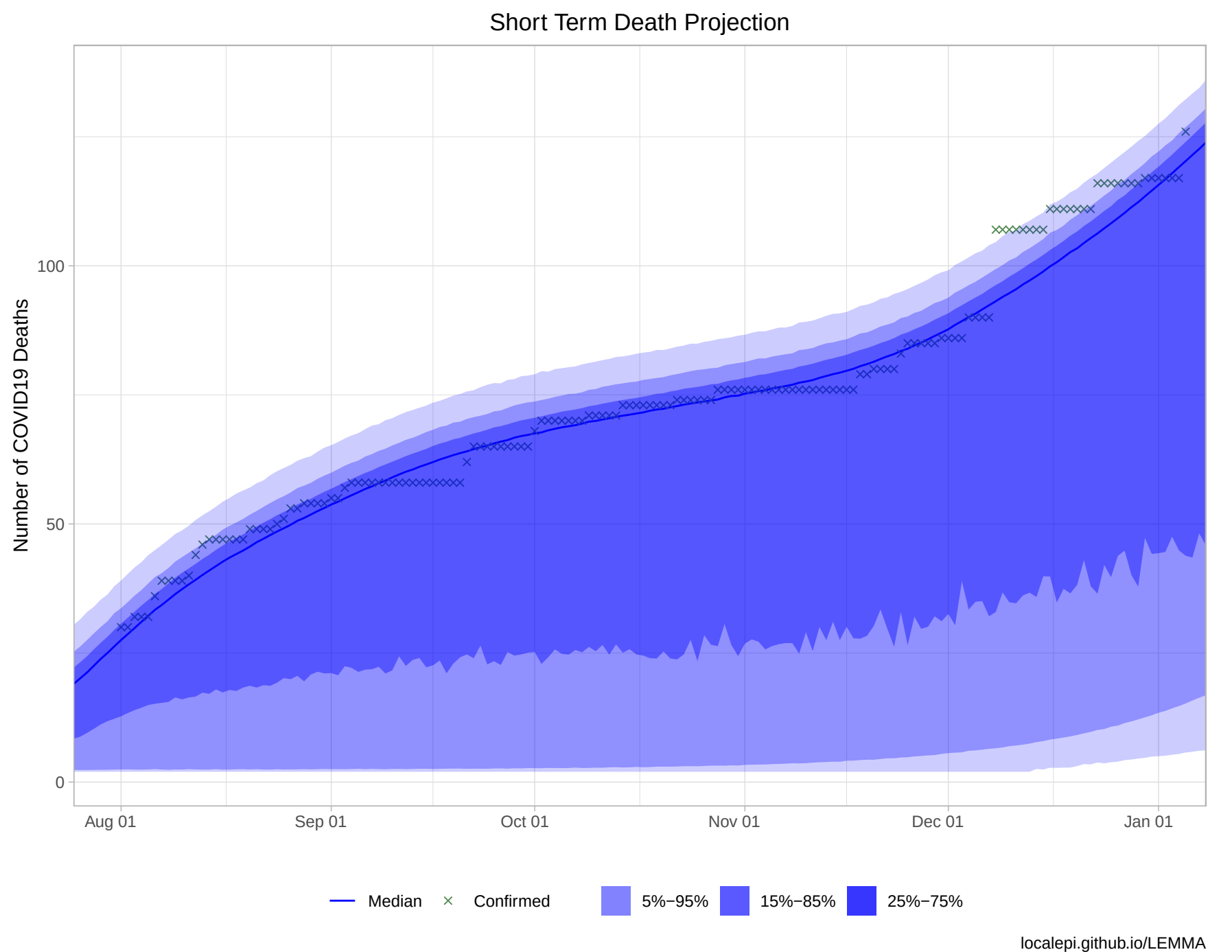
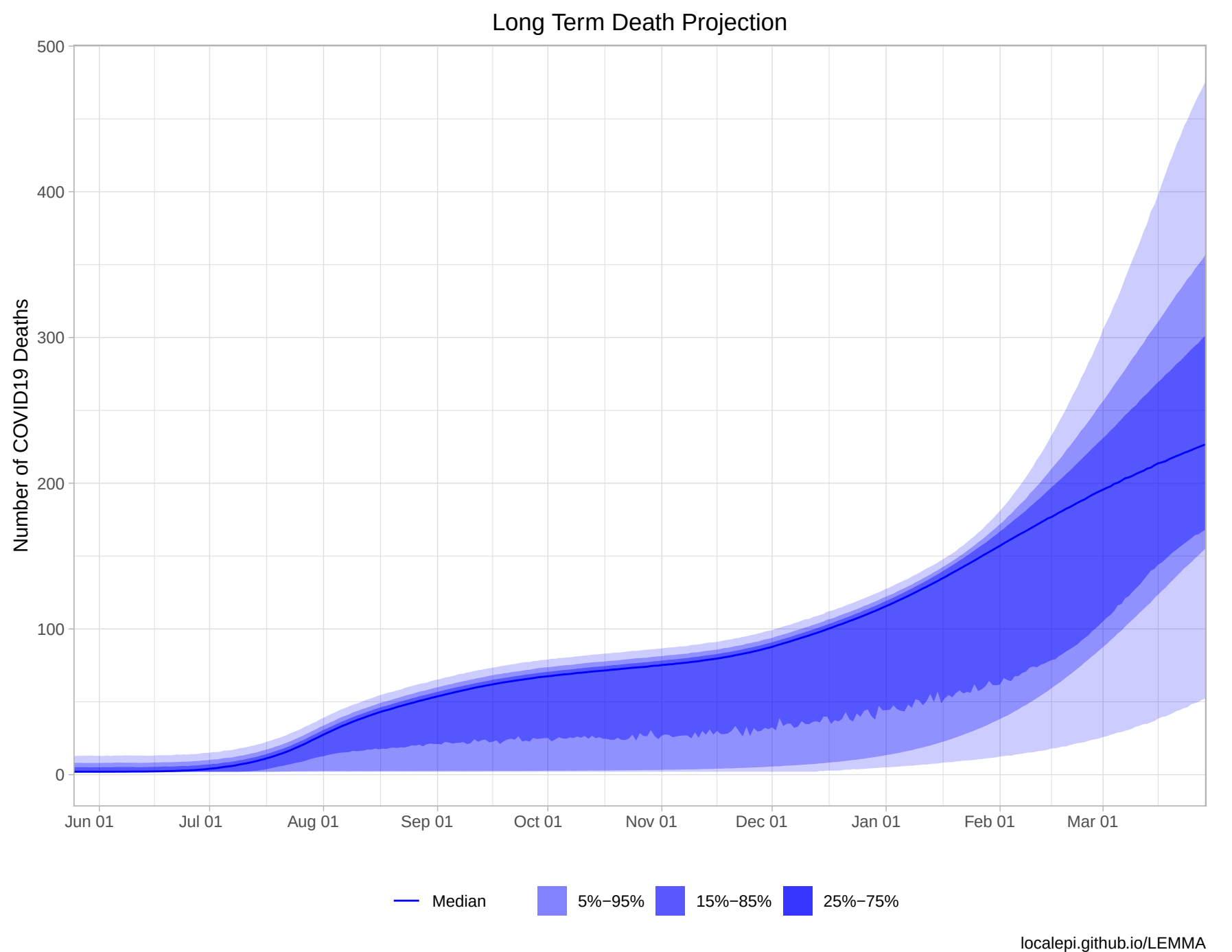

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
20
40
60
80
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

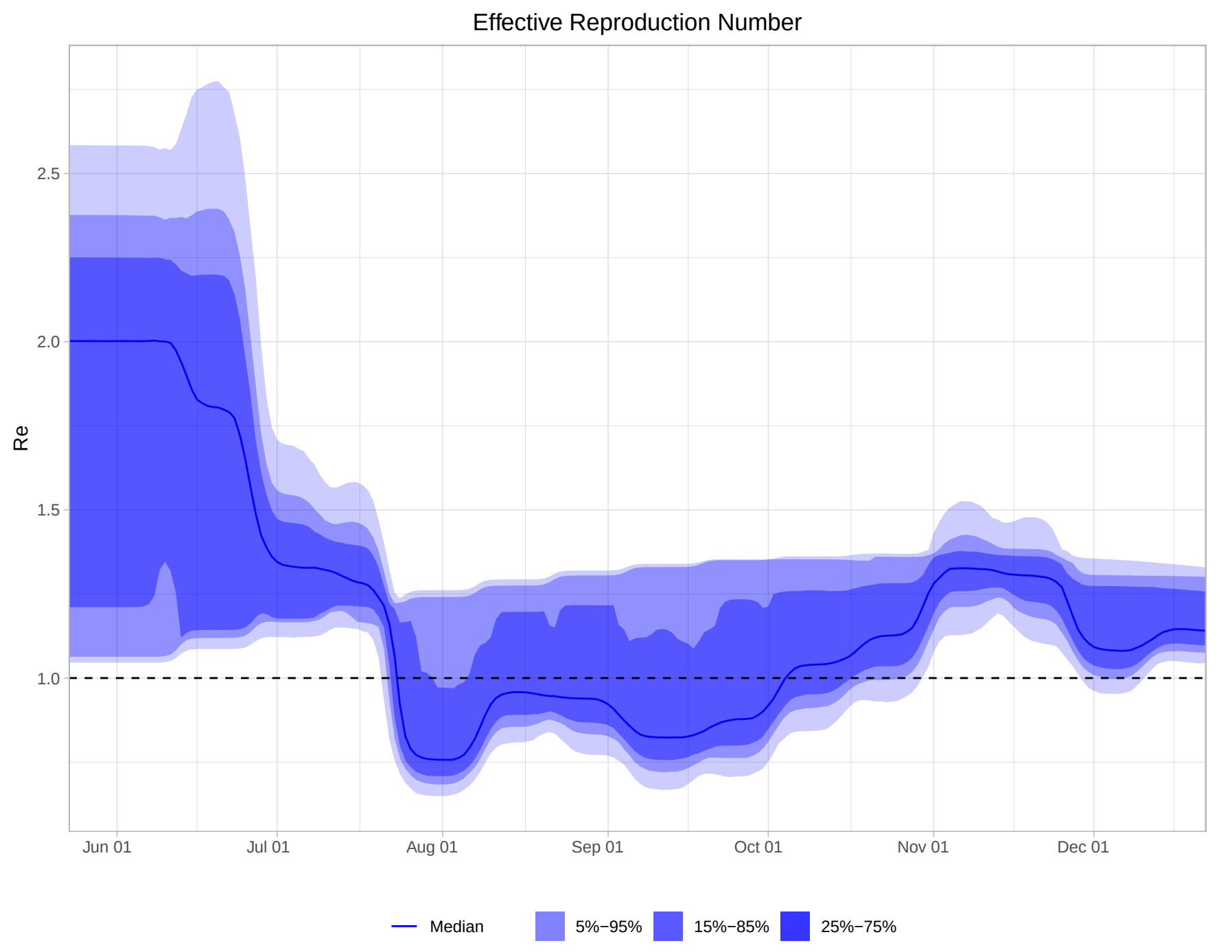

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
300
200
100
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
5
10
15
20
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
25
50
75
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

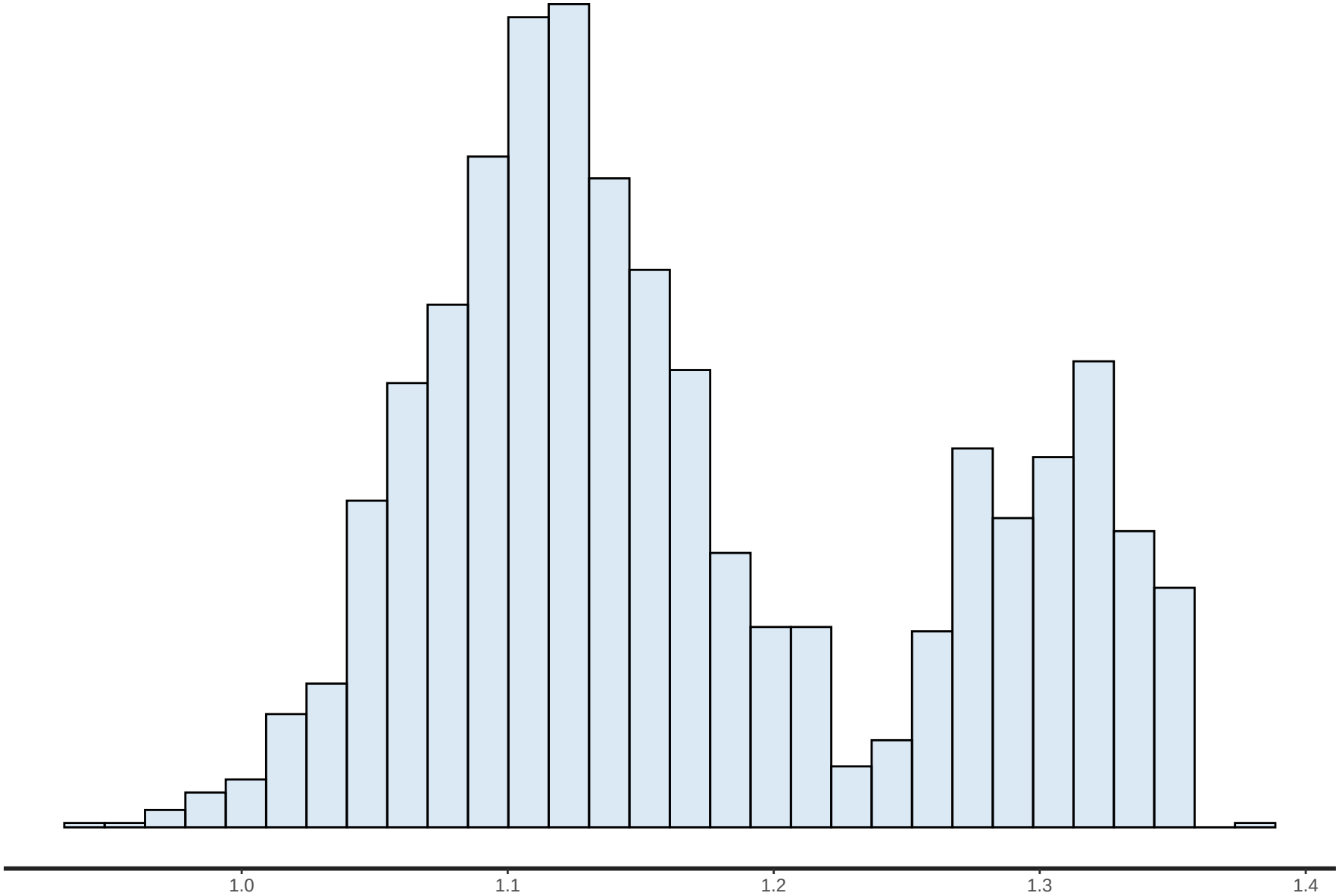

Short Term Death Projection
Number of COVID19 Deaths
0
50
100
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

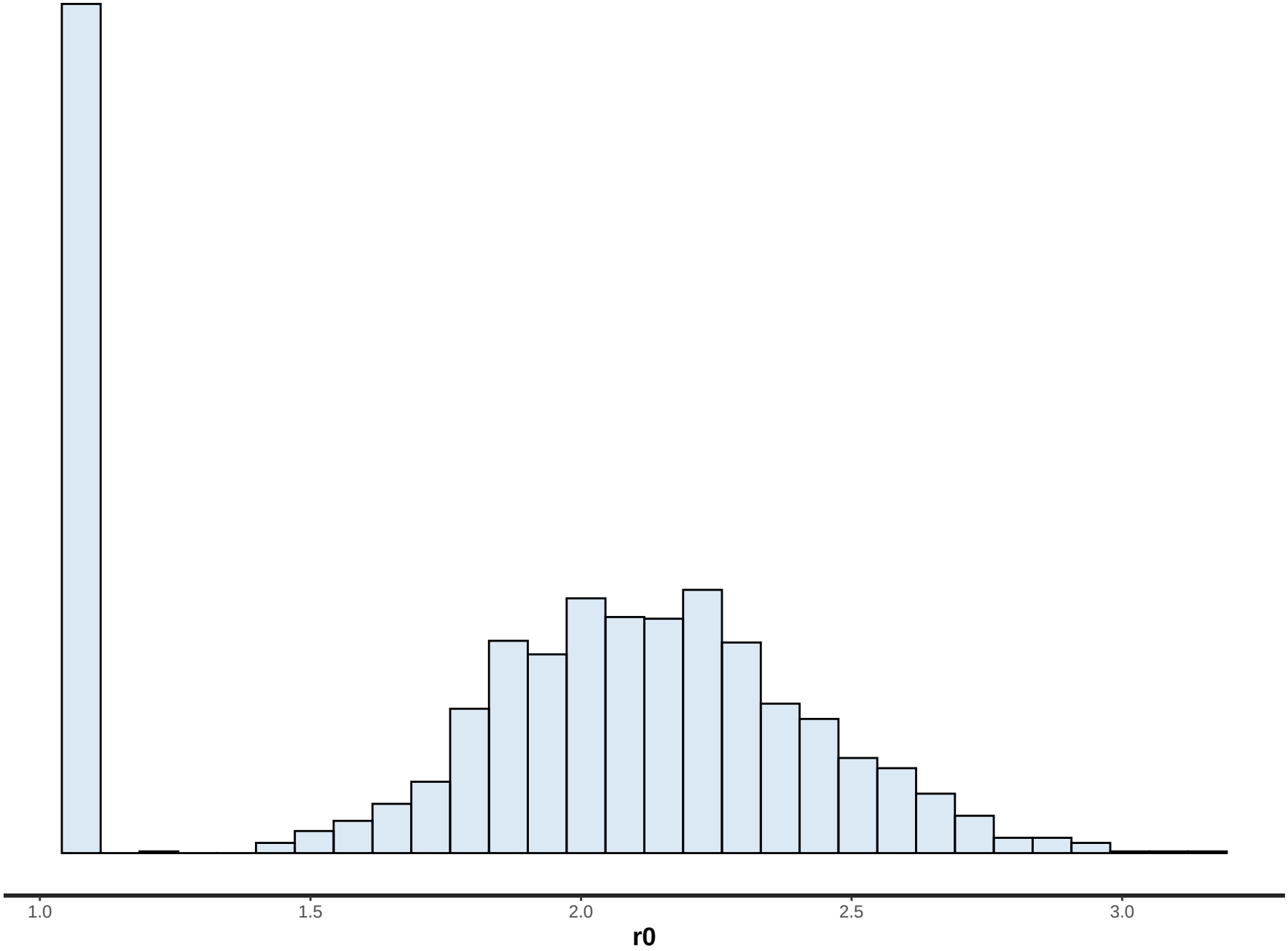

Long Term Death Projection
Number of COVID19 Deaths
500
400
300
200
100
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

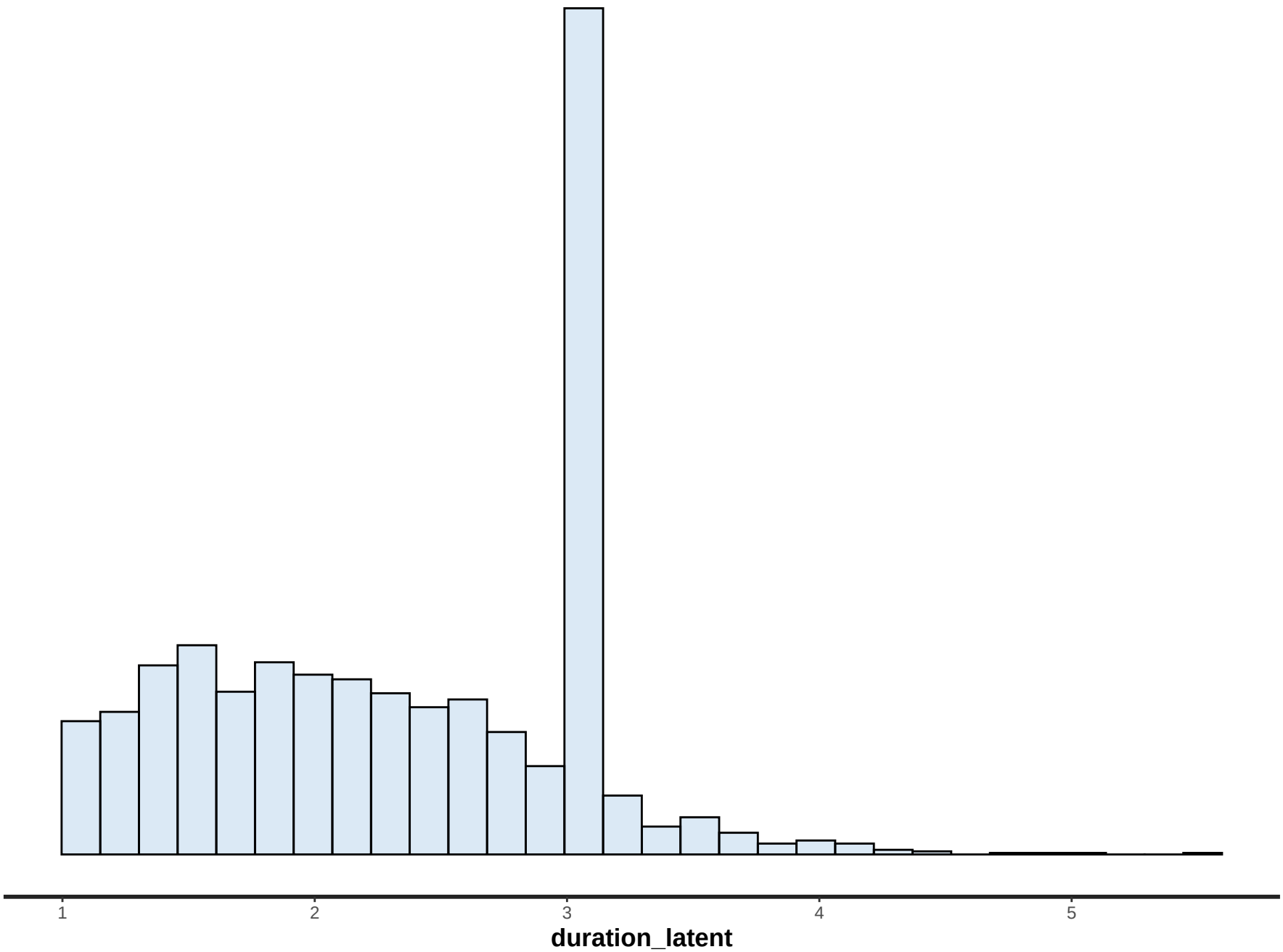

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

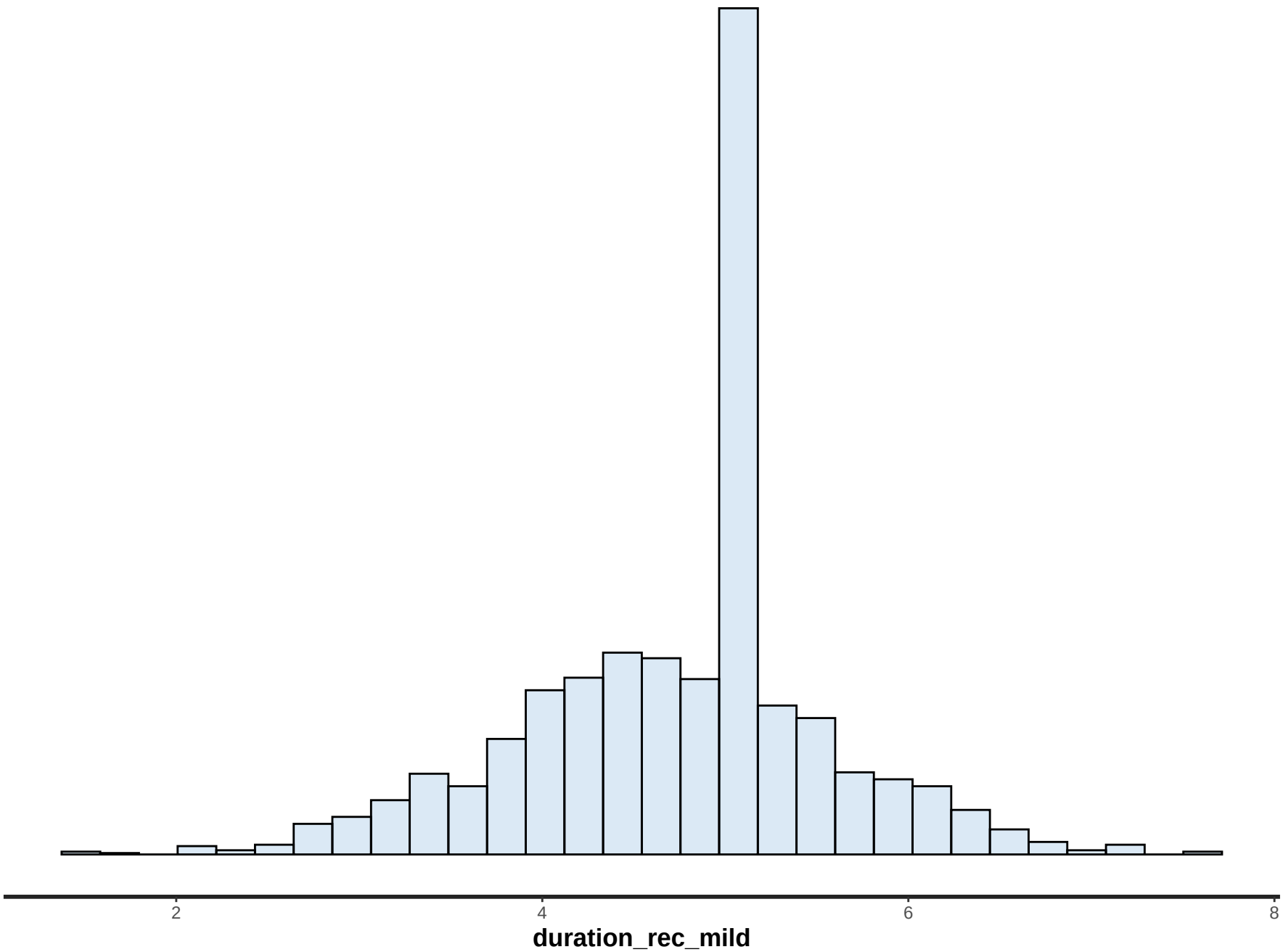
Rt as of 2020−12−22

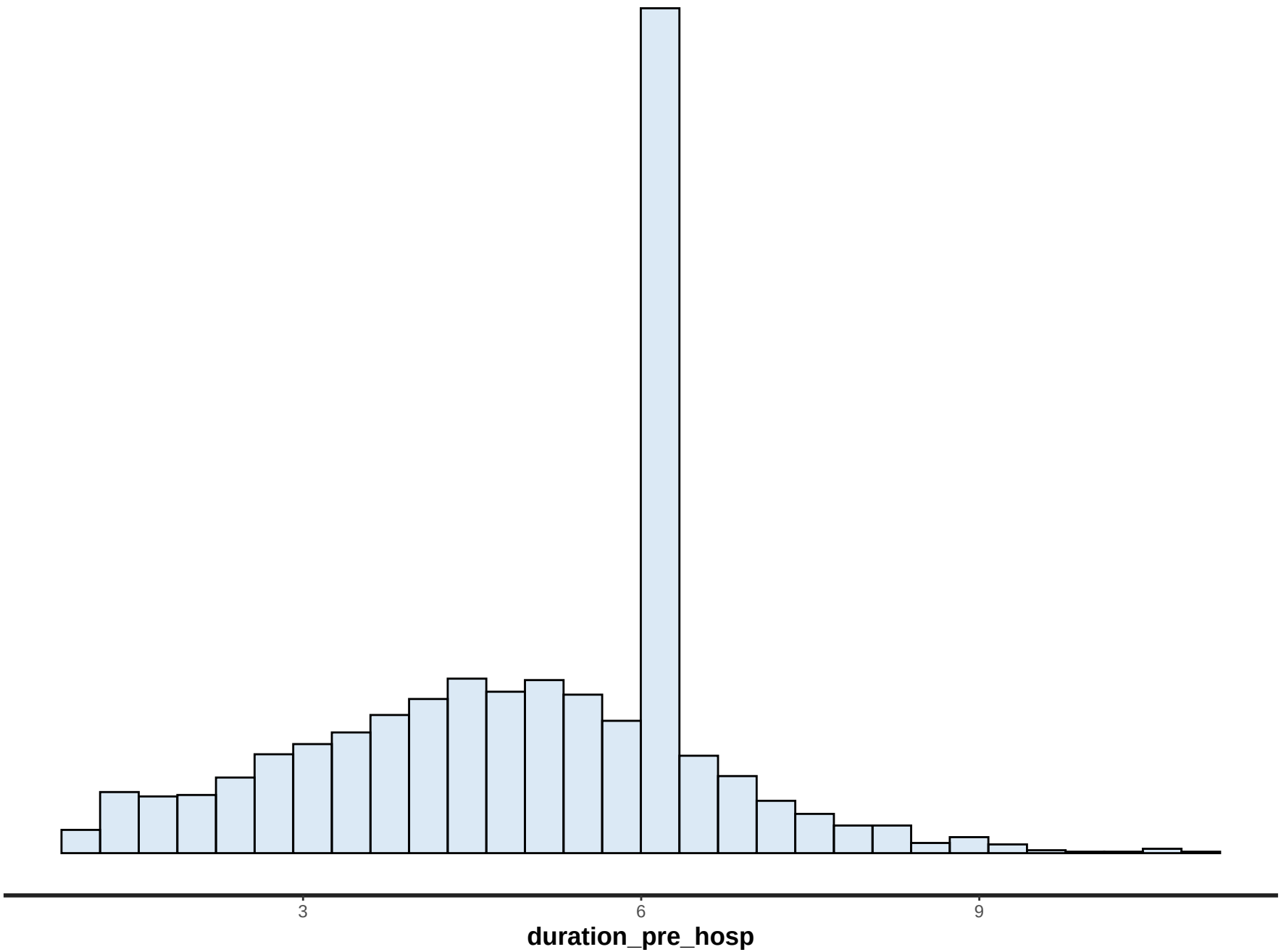
5%	10%	25%	50%	75%	90%	95%
1.04	1.06	1.10	1.14	1.26	1.32	1.33

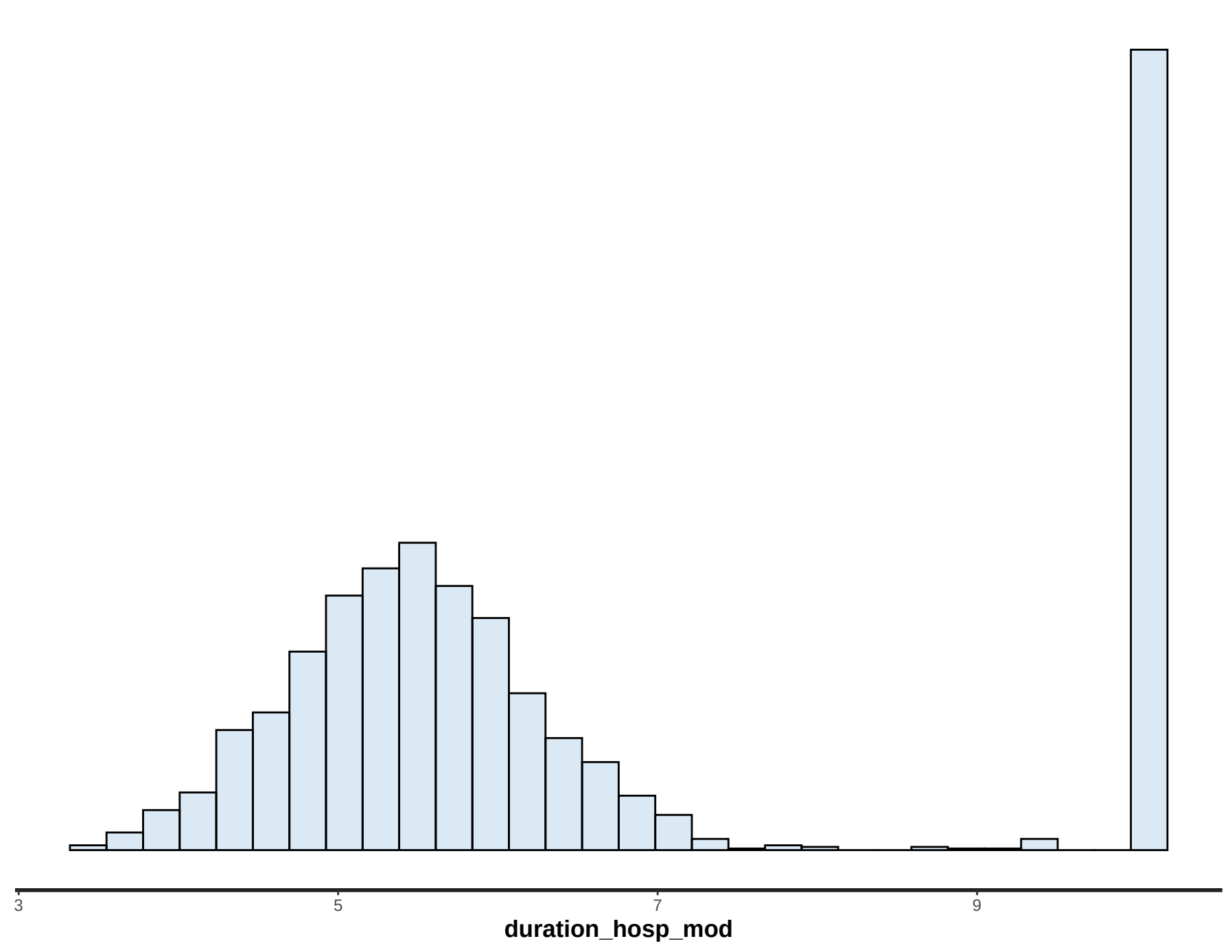


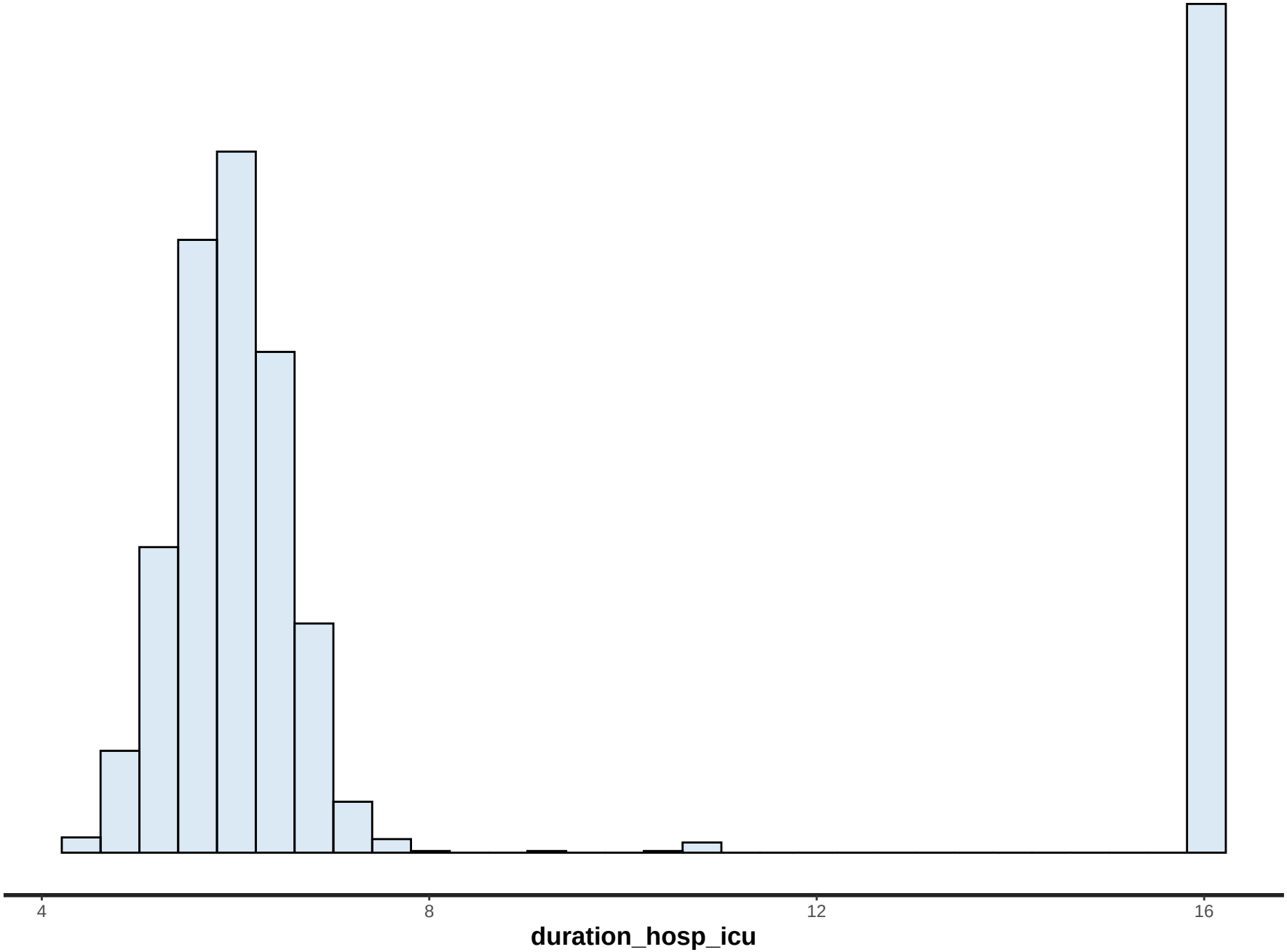

1.0
1.5
2.0
2.5
3.0
r0

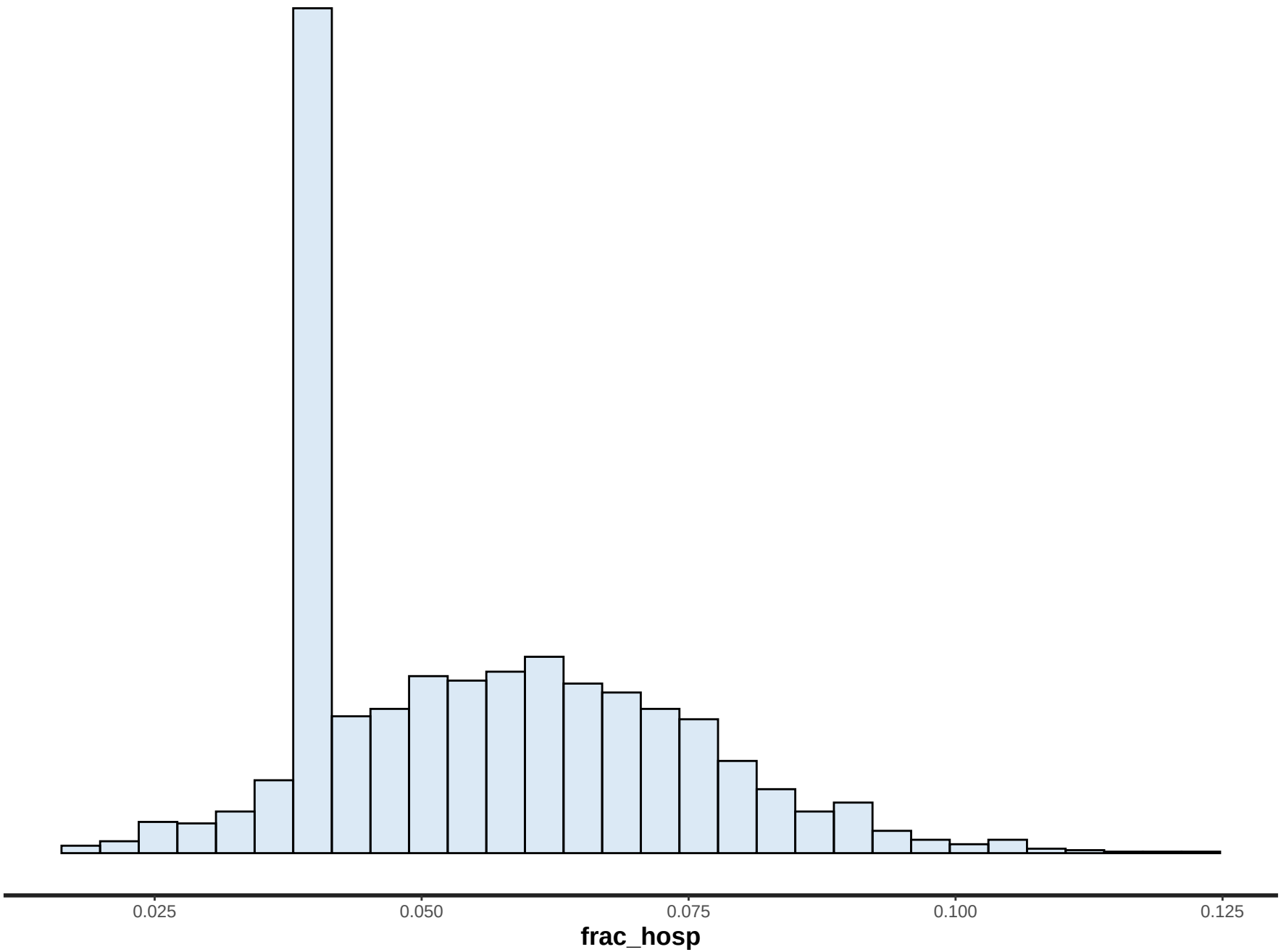

1
2
3
4
5
duration_latent

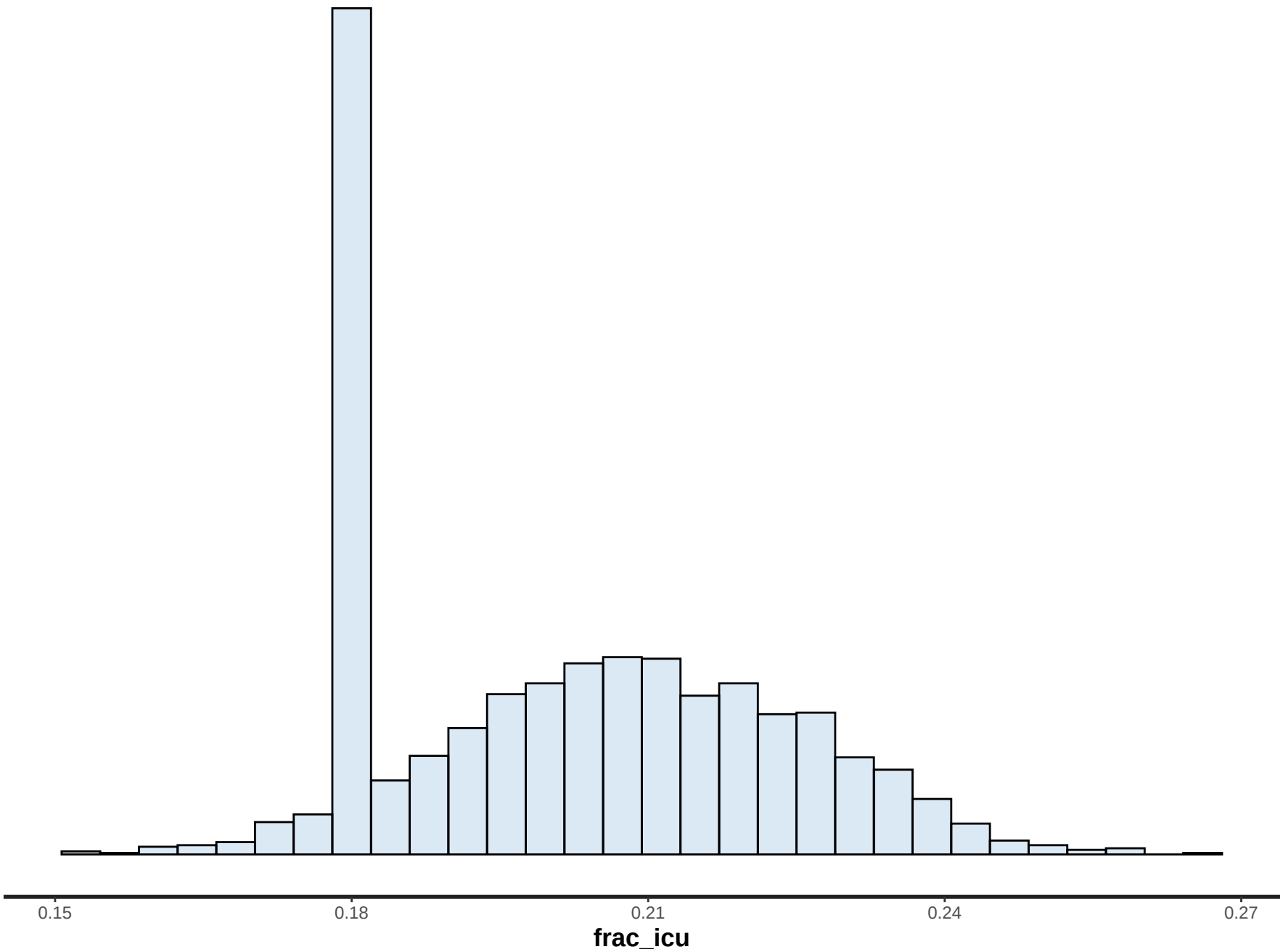

2
4
6
8
duration_rec_mild

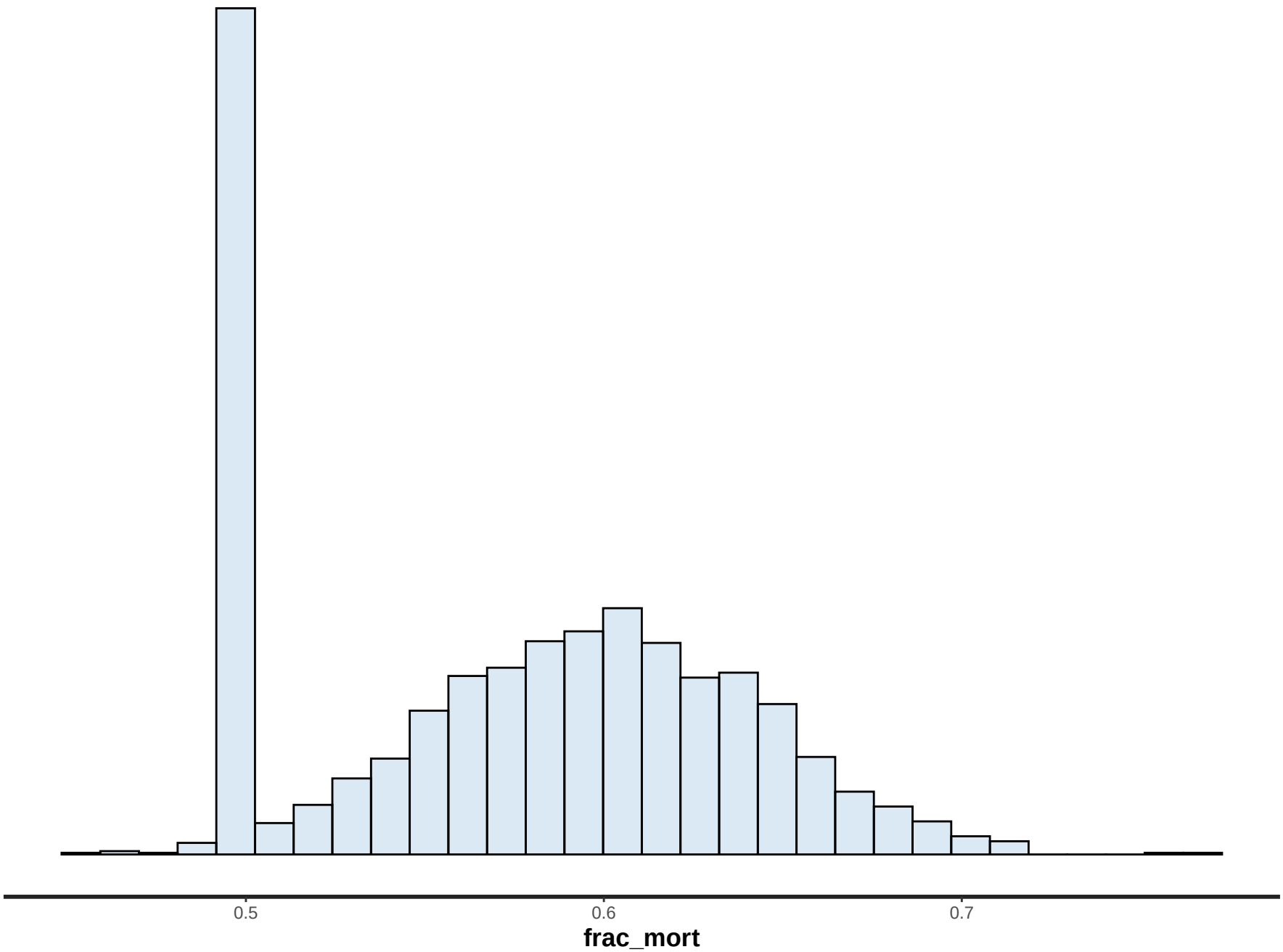

3
6
9
duration_pre_hosp

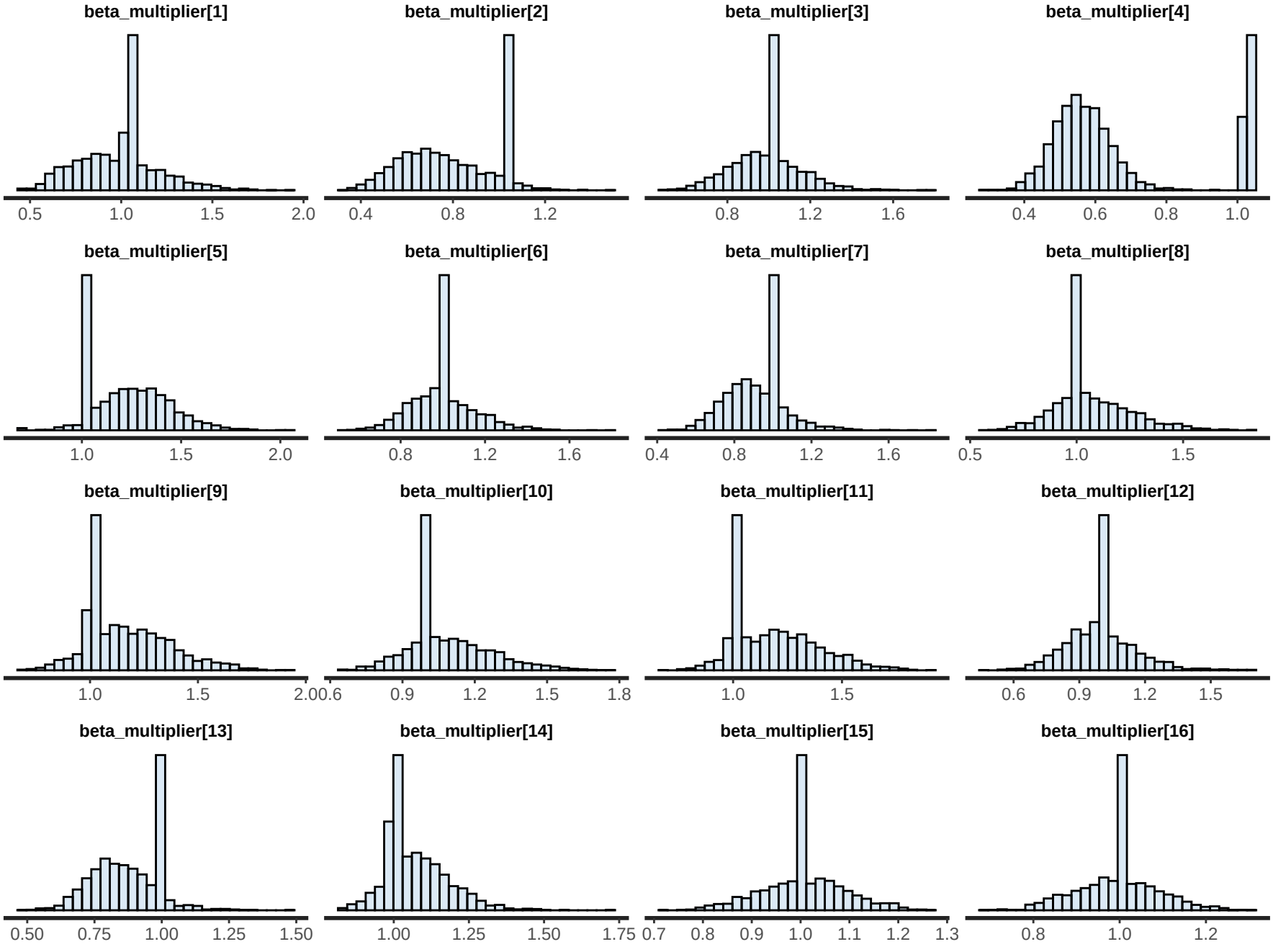

3
5
7
9
duration_hosp_mod


4
8
12
16
duration_hosp_icu


0.025
0.050
0.075
0.100
0.125
frac_hosp


0.15
0.18
0.21
0.24
0.27
frac_icu


0.5
0.6
0.7
frac_mort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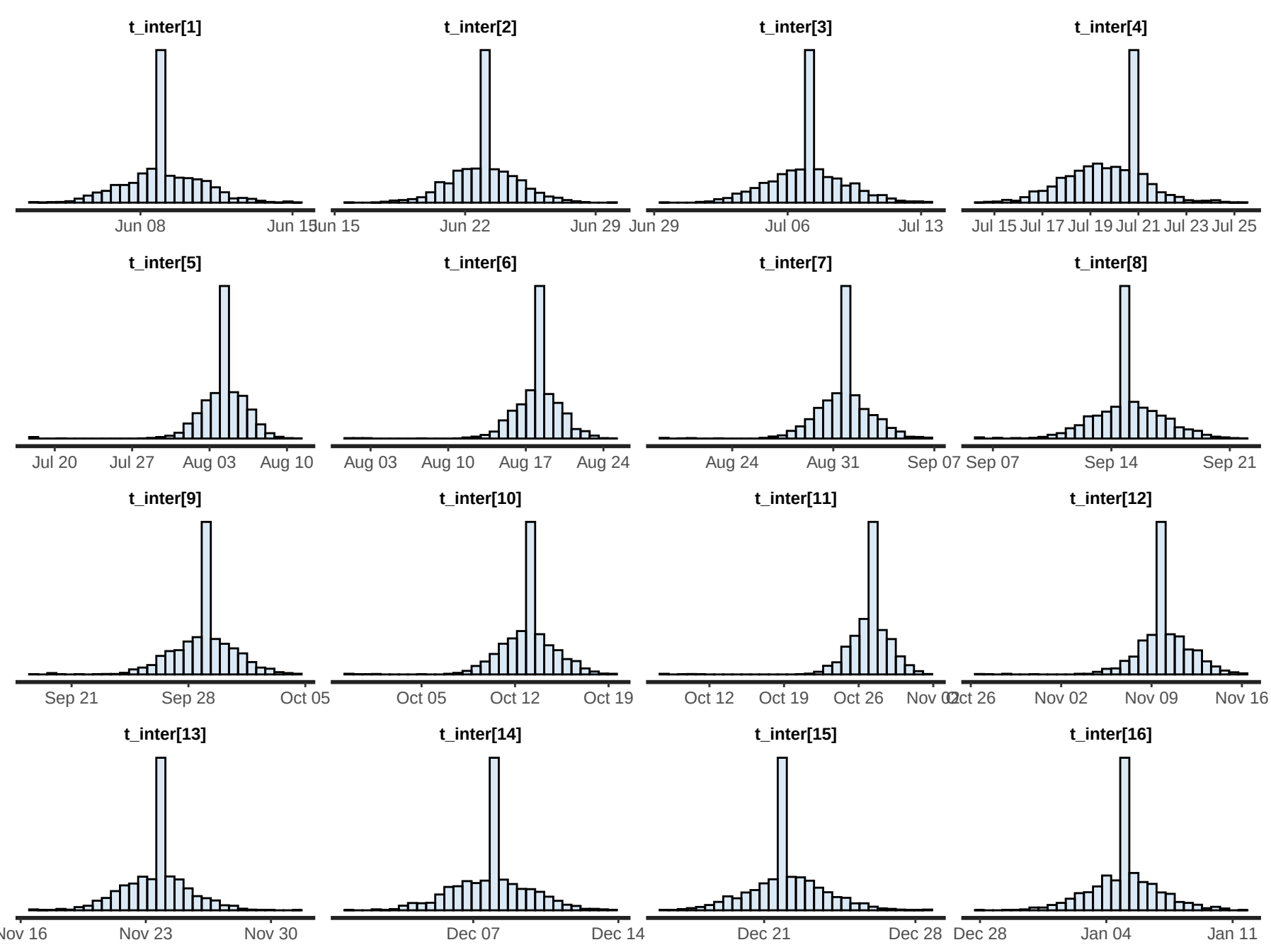
0.5 1.0 1.5 2.0
beta_multiplier[2]
0.4 0.8 1.2
beta_multiplier[3]
0.8 1.2 1.6
beta_multiplier[4]
0.4 0.6 0.8 1.0
beta_multiplier[5]
1.0 1.5 2.0
beta_multiplier[6]
0.8 1.2 1.6
beta_multiplier[7]
0.4 0.8 1.2 1.6
beta_multiplier[8]
0.5 1.0 1.5
beta_multiplier[9]
1.0 1.5 2.0
beta_multiplier[10]
0.6 0.9 1.2 1.5 1.8
beta_multiplier[11]
1.0 1.5
beta_multiplier[12]
0.6 0.9 1.2 1.5
beta_multiplier[13]
0.50 0.75 1.00 1.25 1.50
beta_multiplier[14]
1.00 1.25 1.50 1.75
beta_multiplier[15]
0.7 0.8 0.9 1.0 1.1 1.2 1.3
beta_multiplier[16]
0.8 1.0 1.2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Jun 15
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Jul 17
Jul 19
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Jul 23
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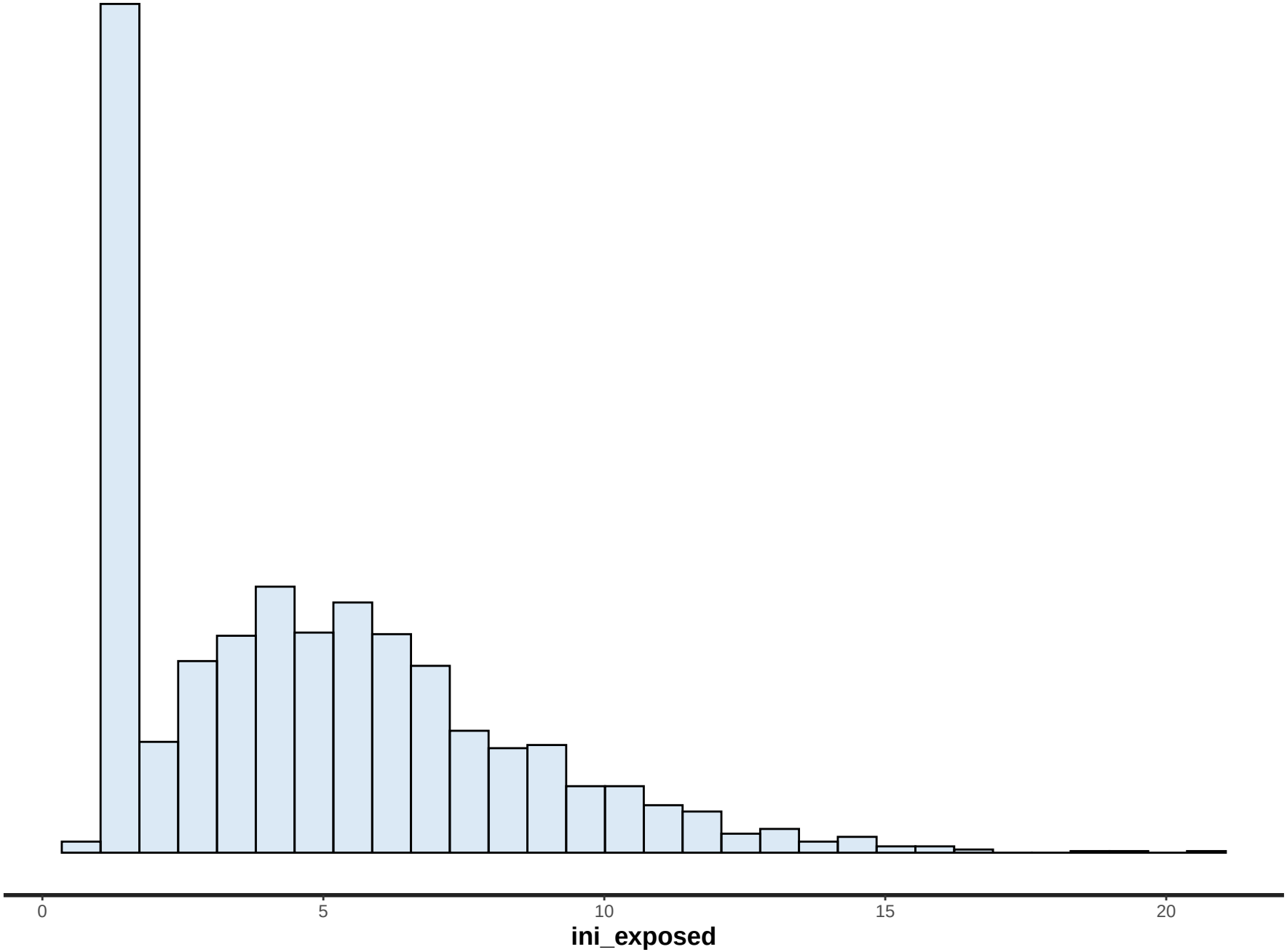
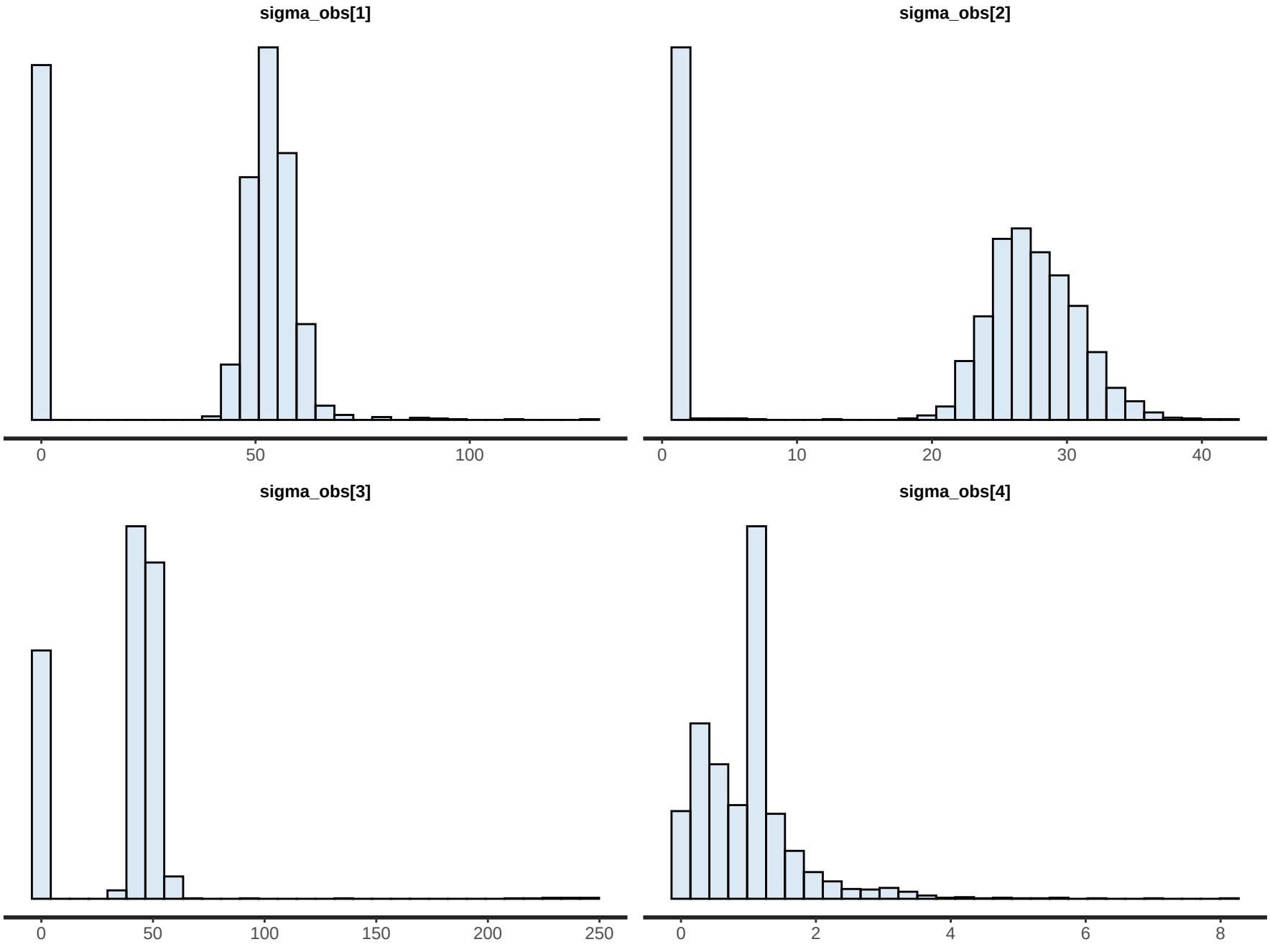
Dec 21
Dec 28
t_inter[16]
Dec 28
Jan 04
Jan 11


0
5
10
15
20
ini_exposed


sigma_obs[1]
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50
100
sigma_obs[2]
0
10
20
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40
sigma_obs[3]
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50
100
150
200
250
sigma_obs[4]
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2
4
6
8