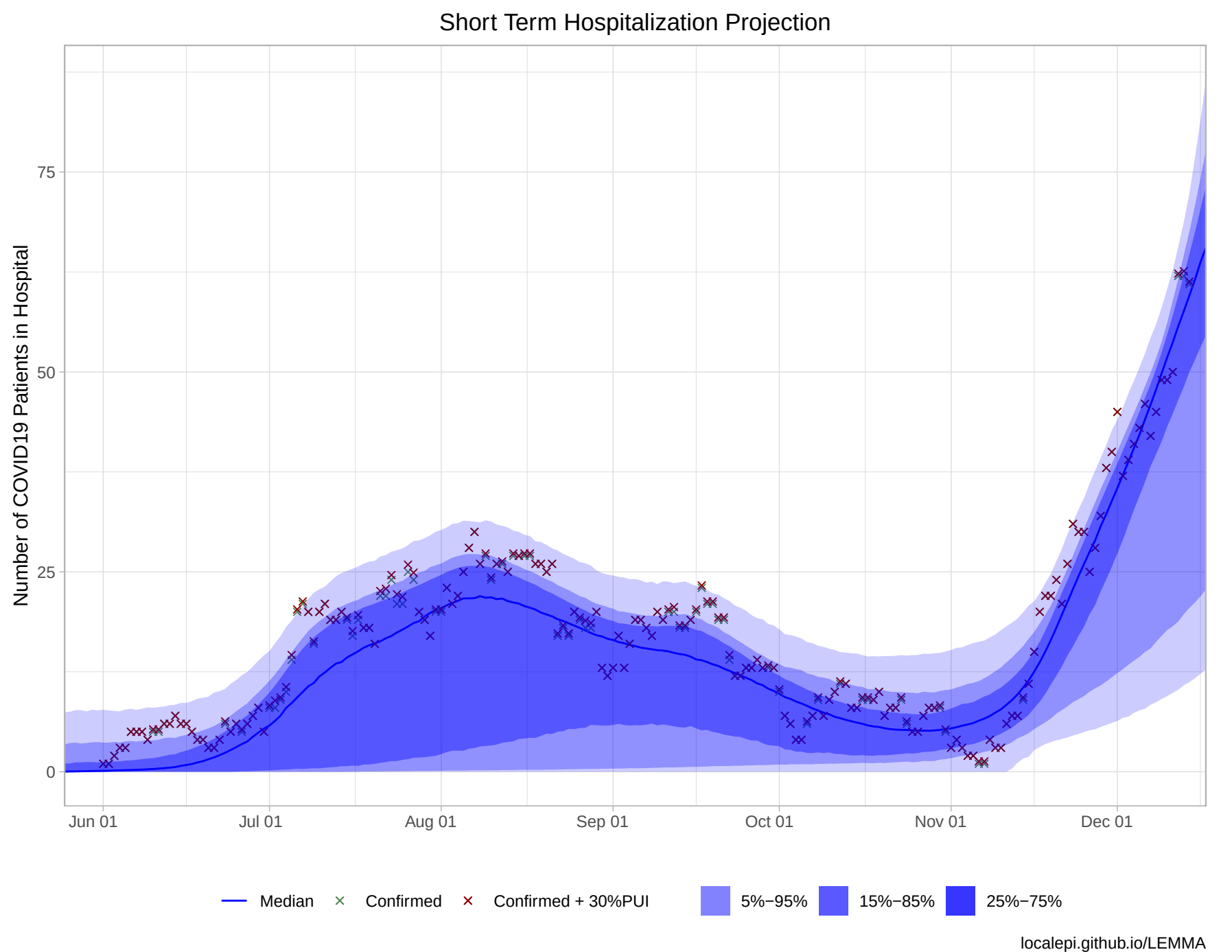
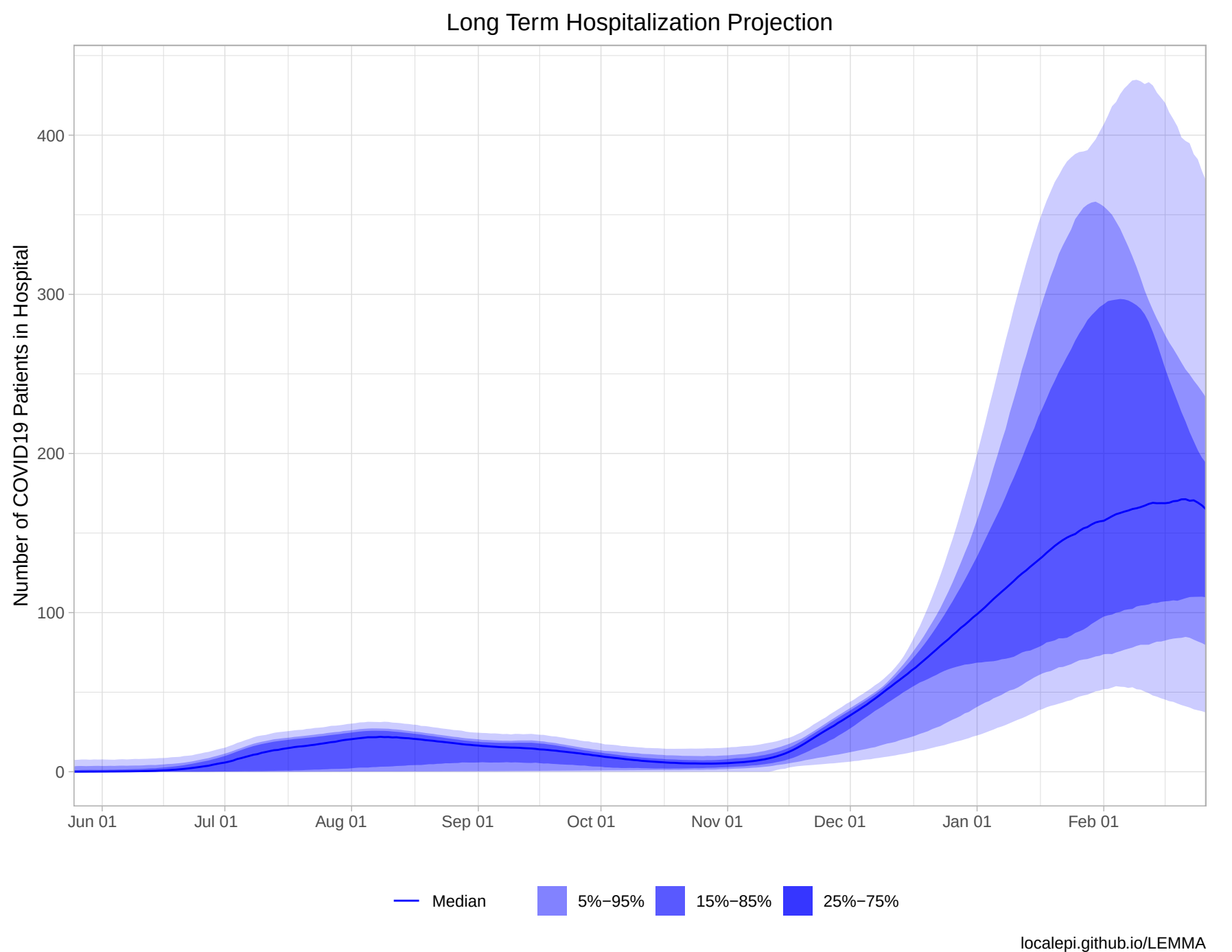
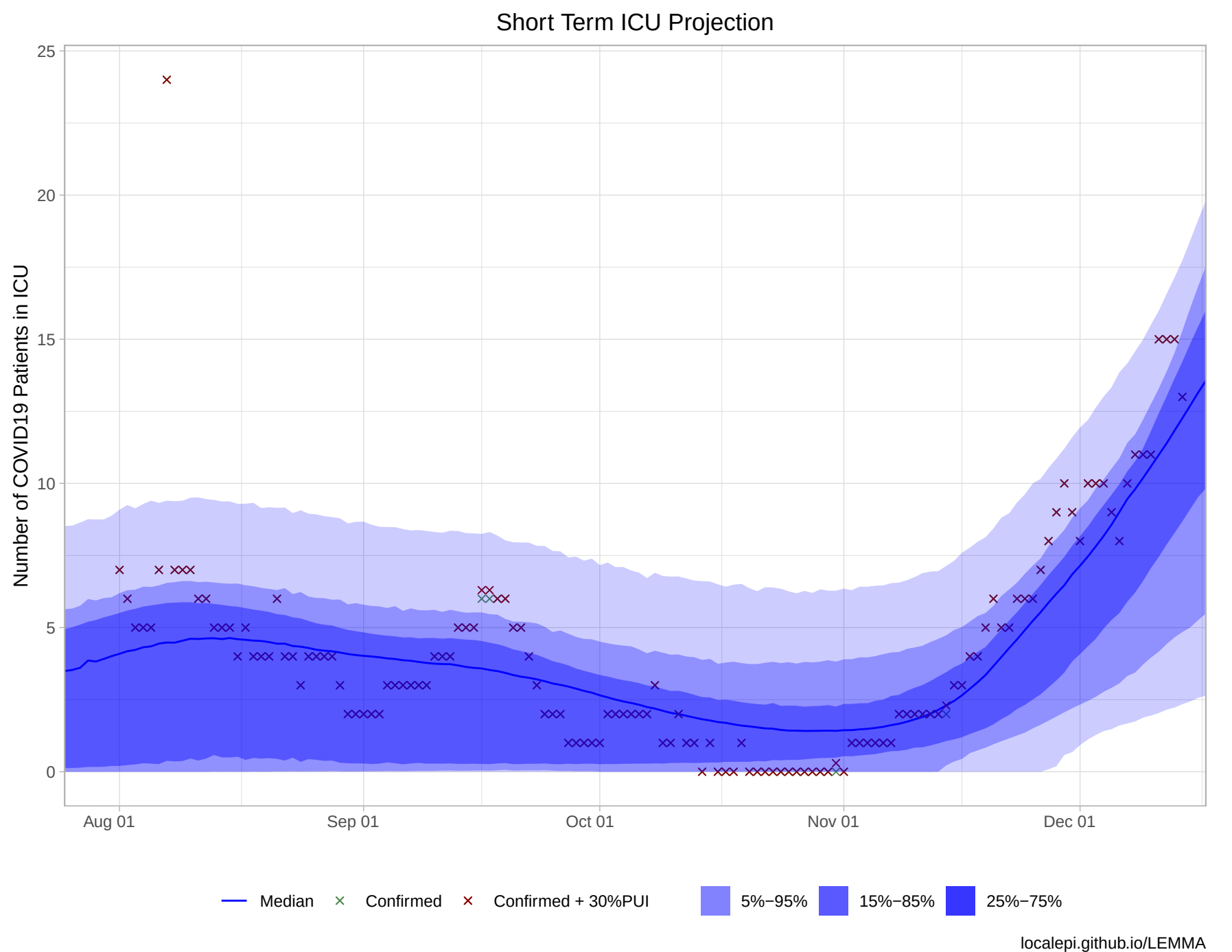
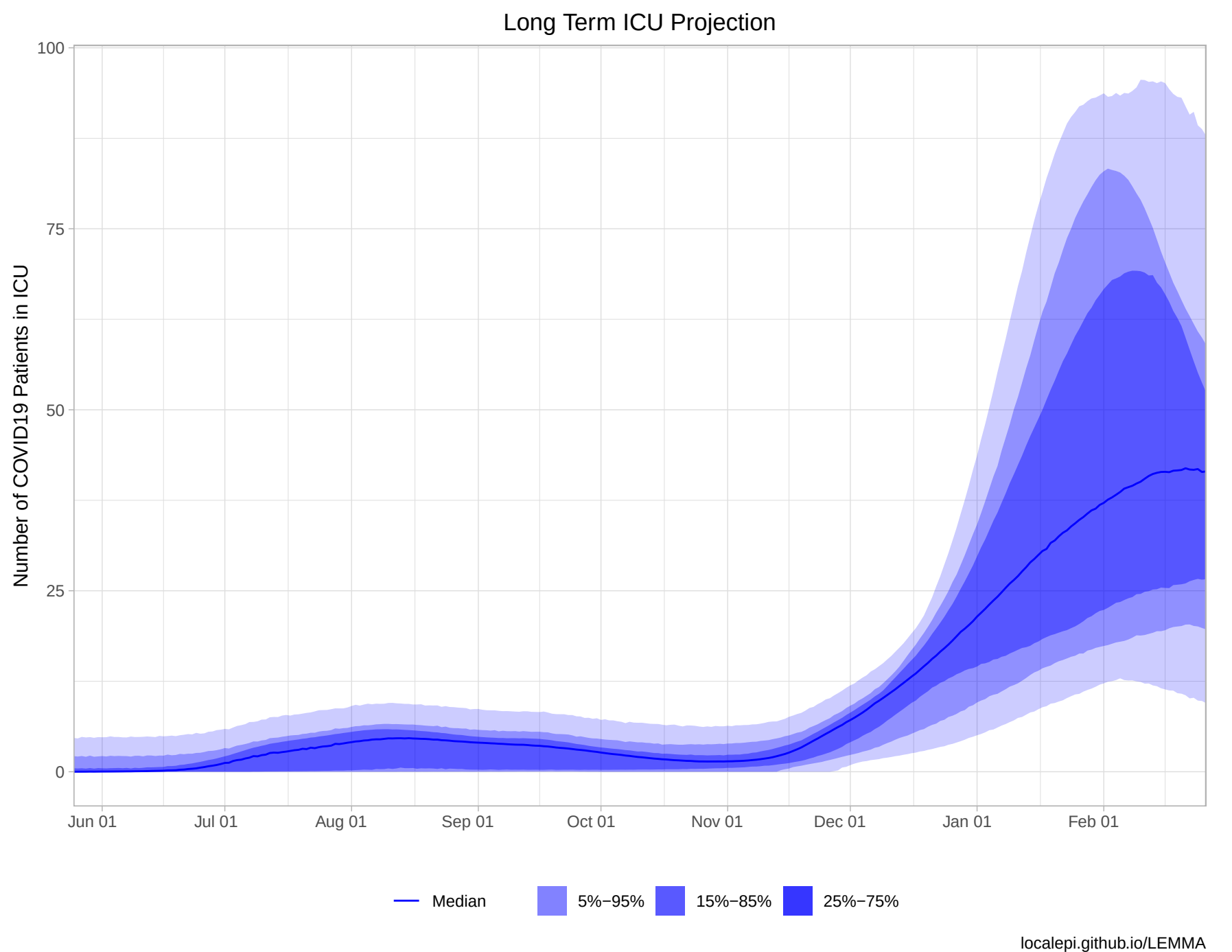
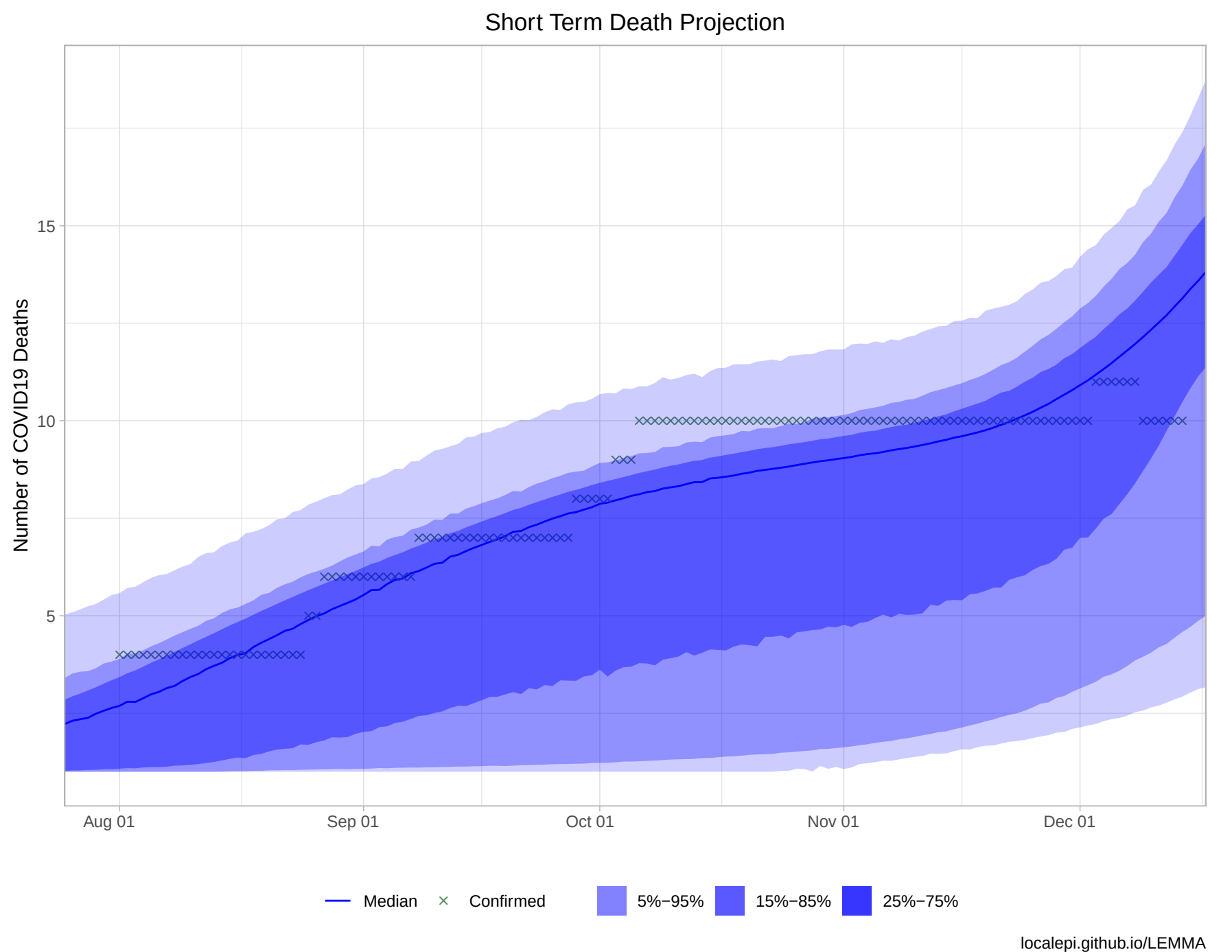
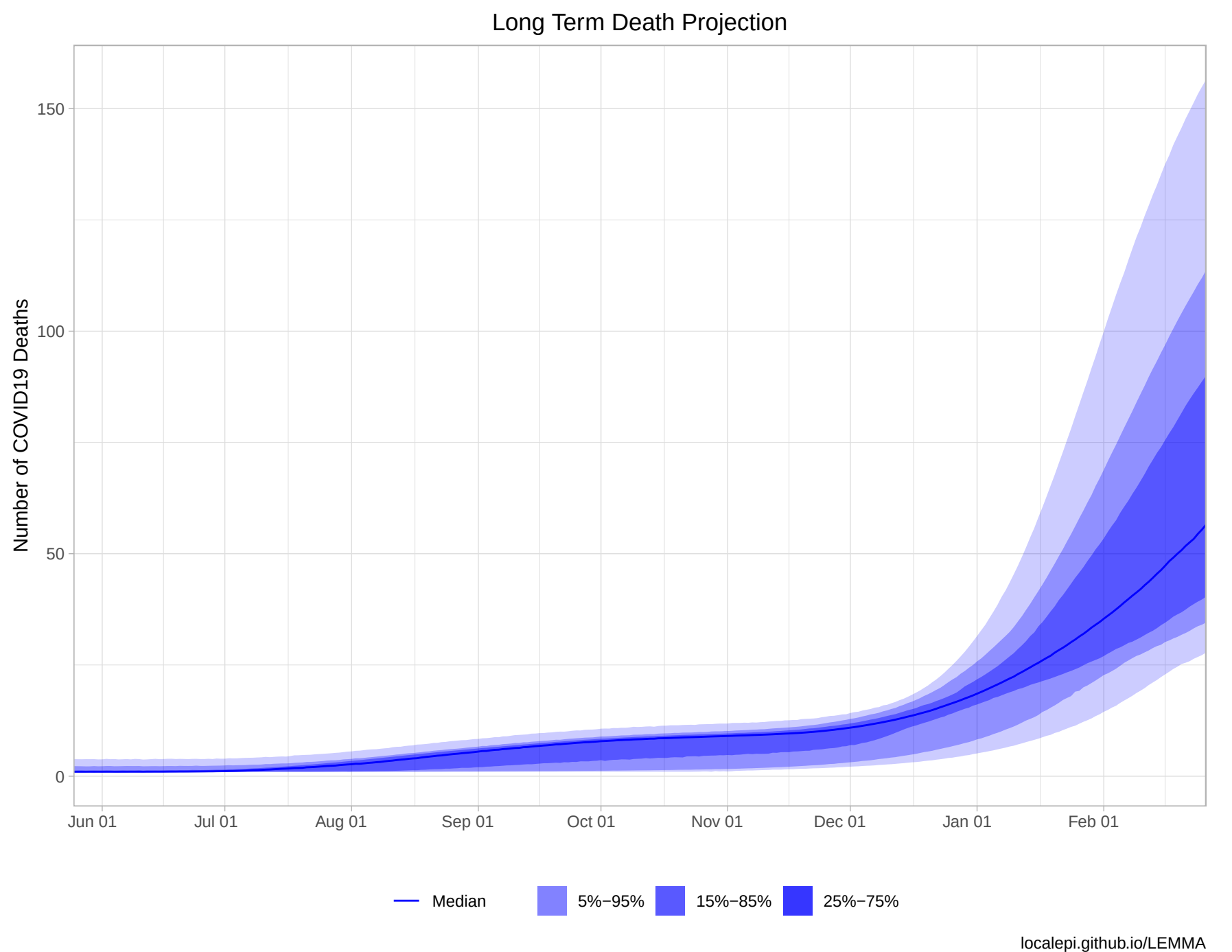

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
25
50
75
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

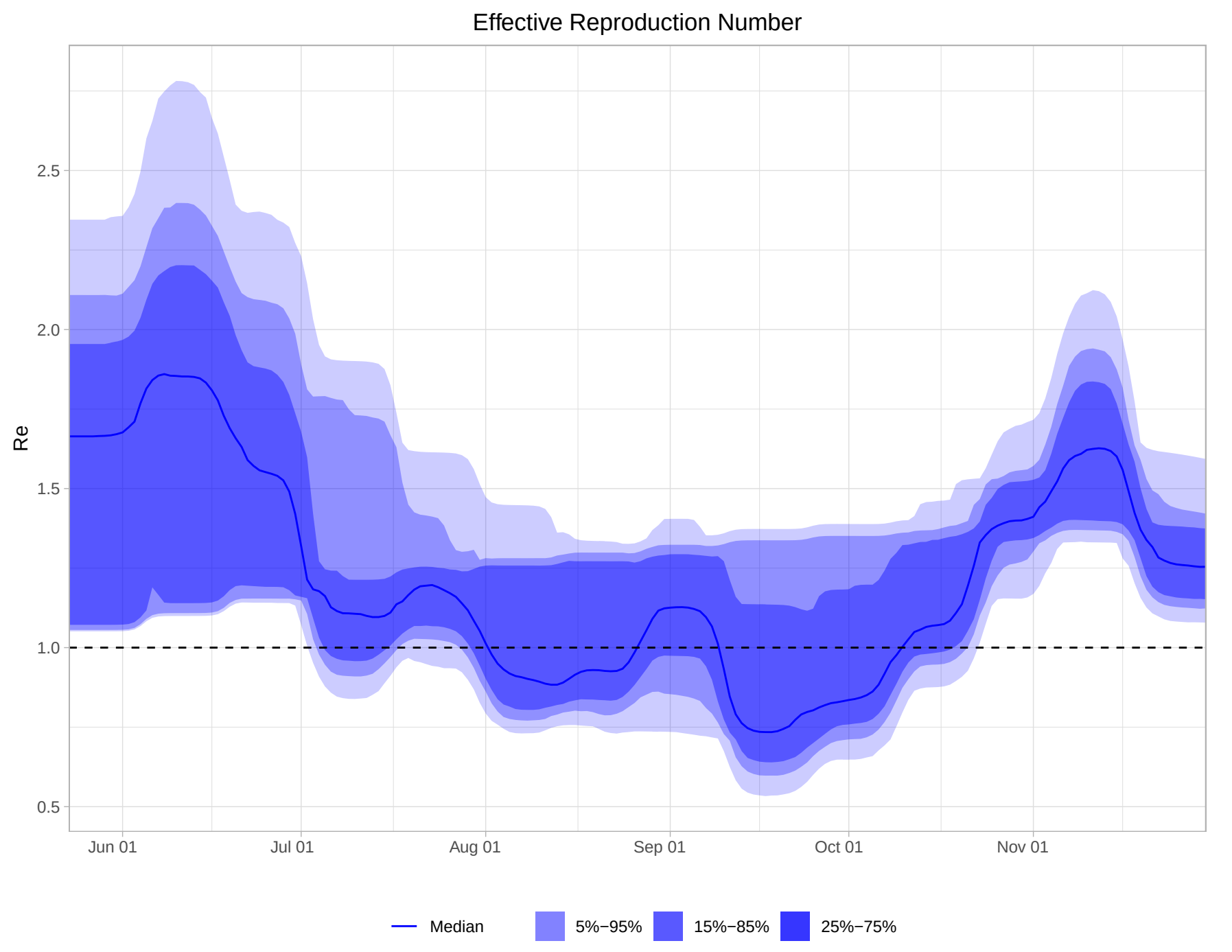

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
400
300
200
100
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
25
20
15
10
5
0
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
100
75
50
25
0
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

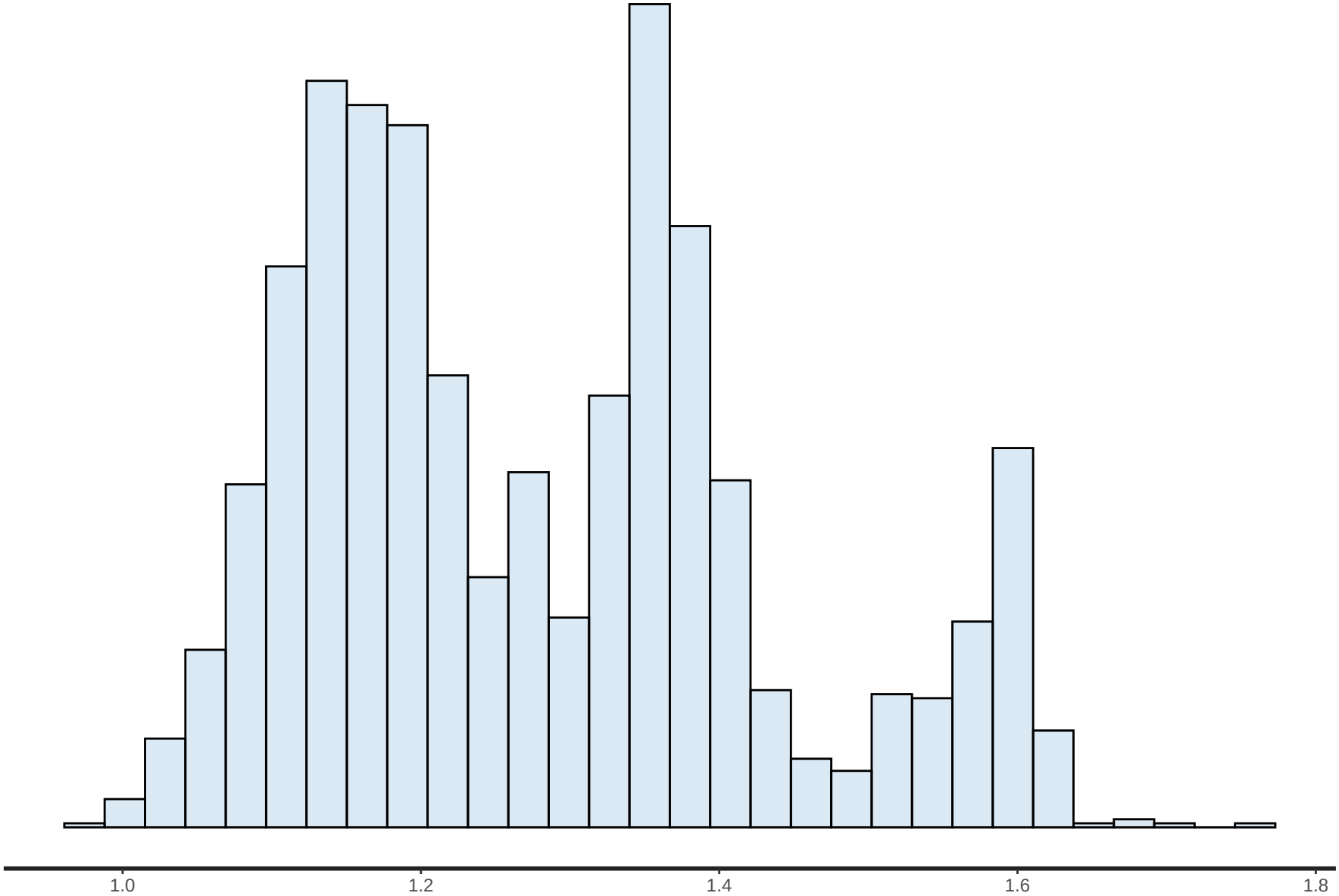

Short Term Death Projection
Number of COVID19 Deaths
15
10
5
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

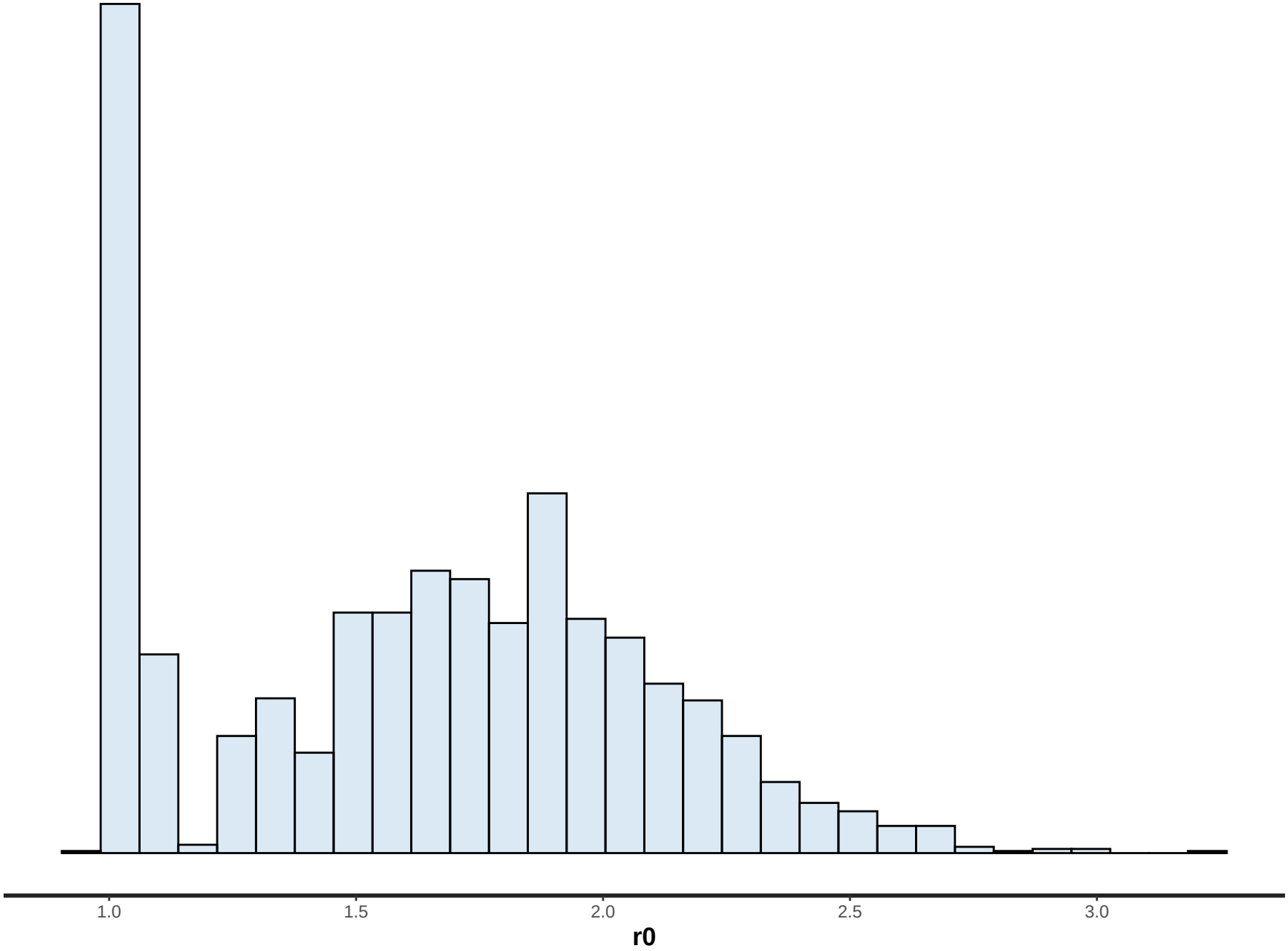

Long Term Death Projection
Number of COVID19 Deaths
150
100
50
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

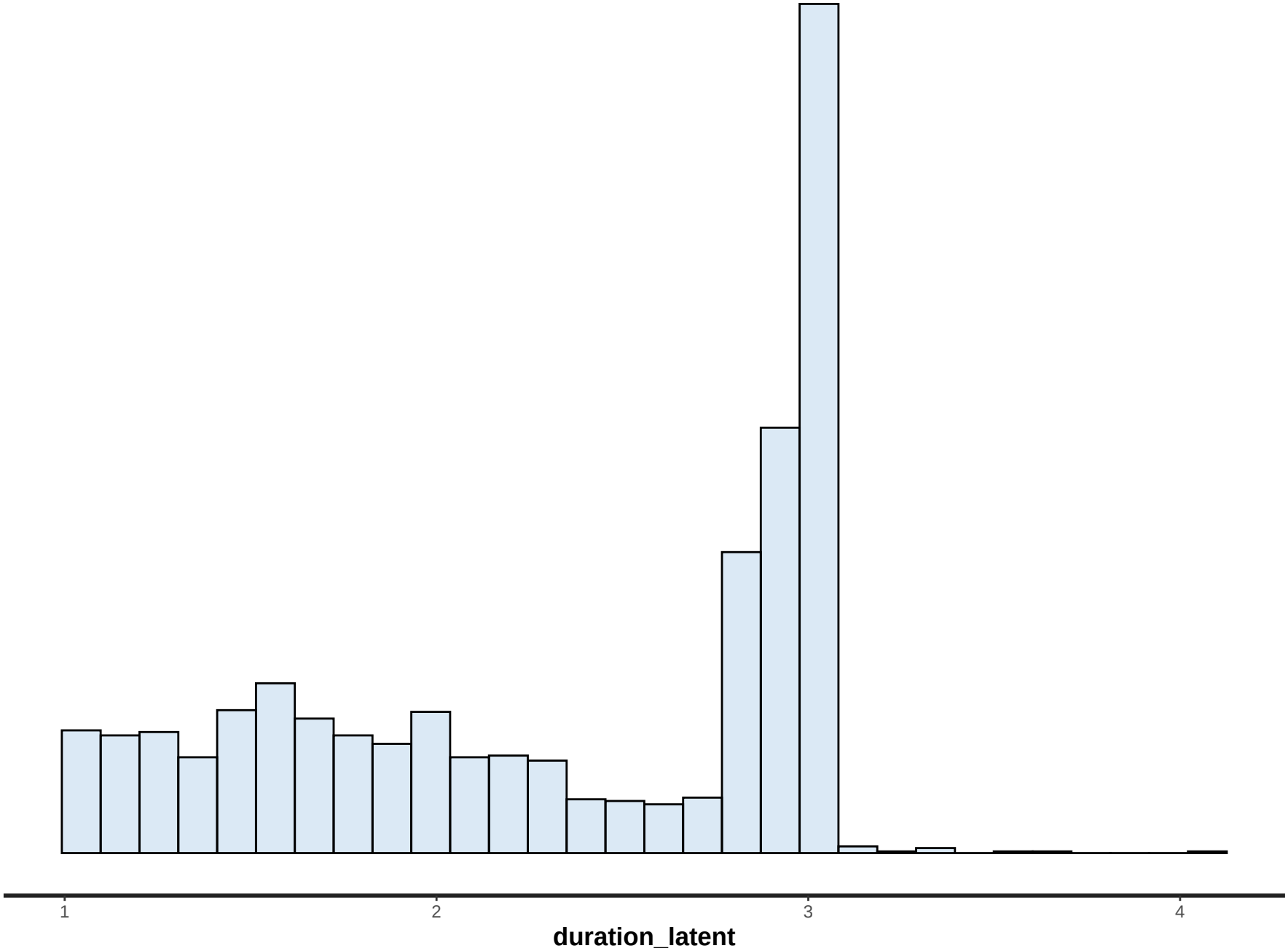

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
0.5
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Median
5%−95%
15%−85%
25%−75%

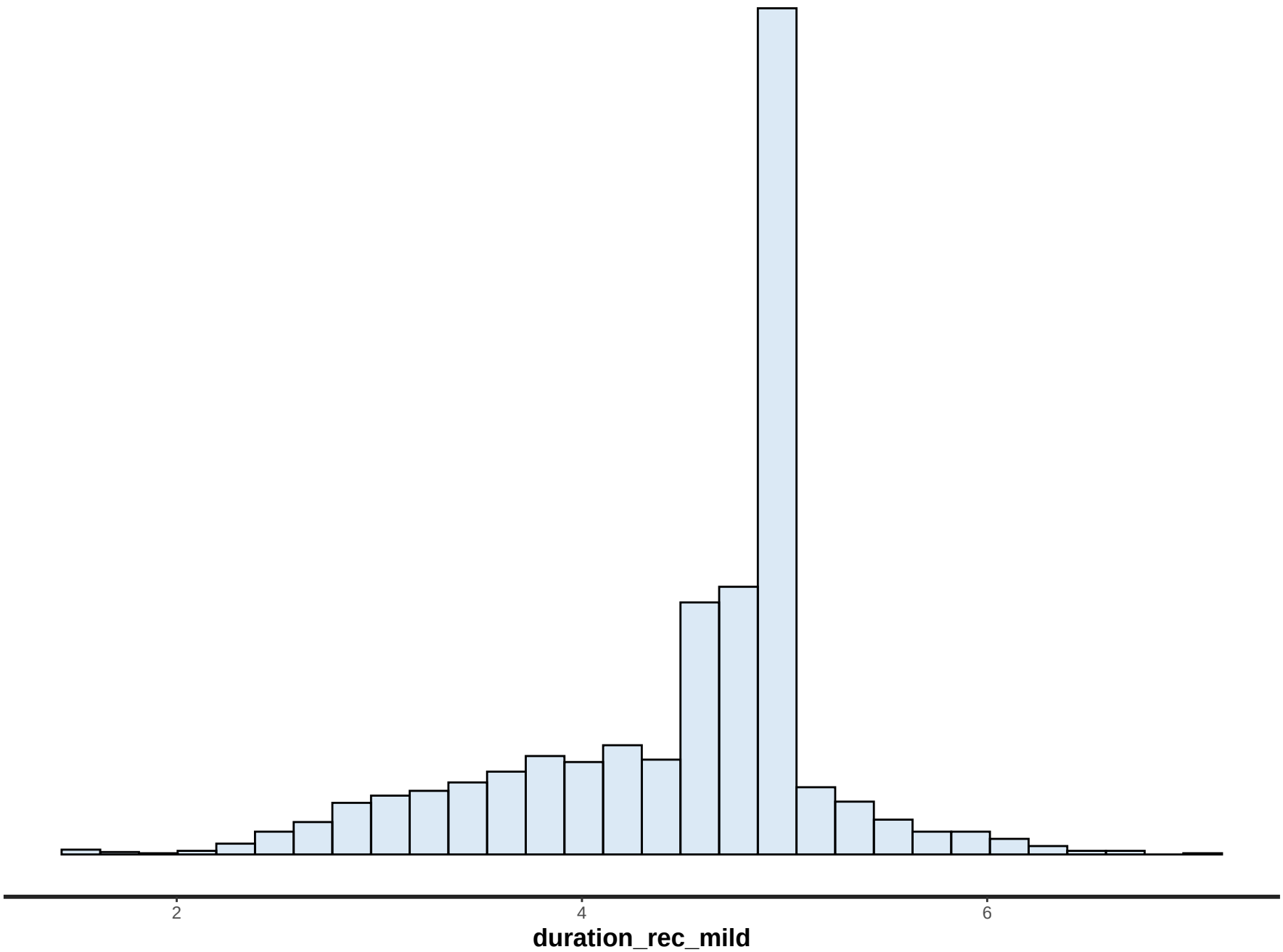
Rt as of 2020−11−30

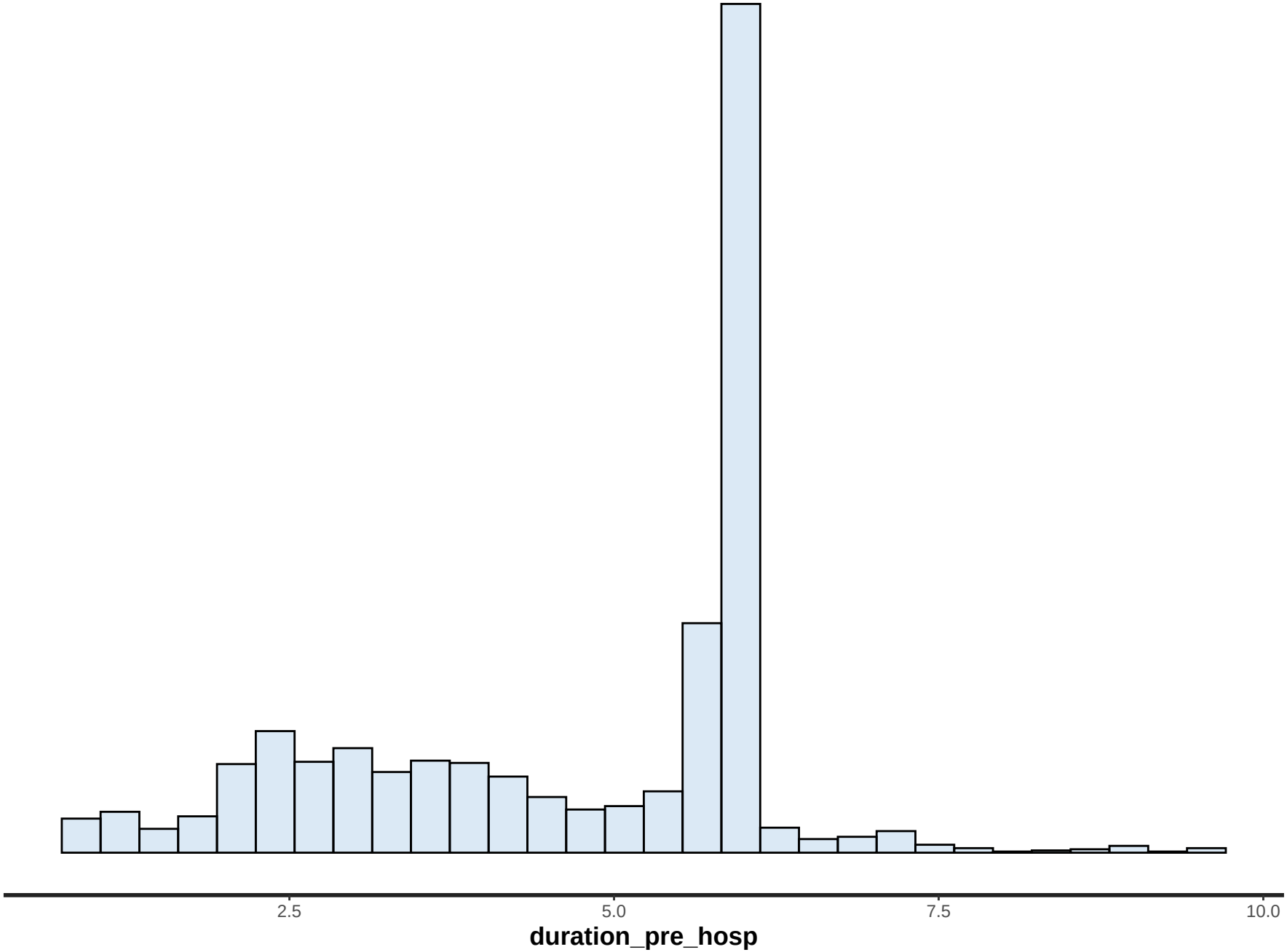
5%	10%	25%	50%	75%	90%	95%
1.08	1.11	1.15	1.25	1.37	1.53	1.59

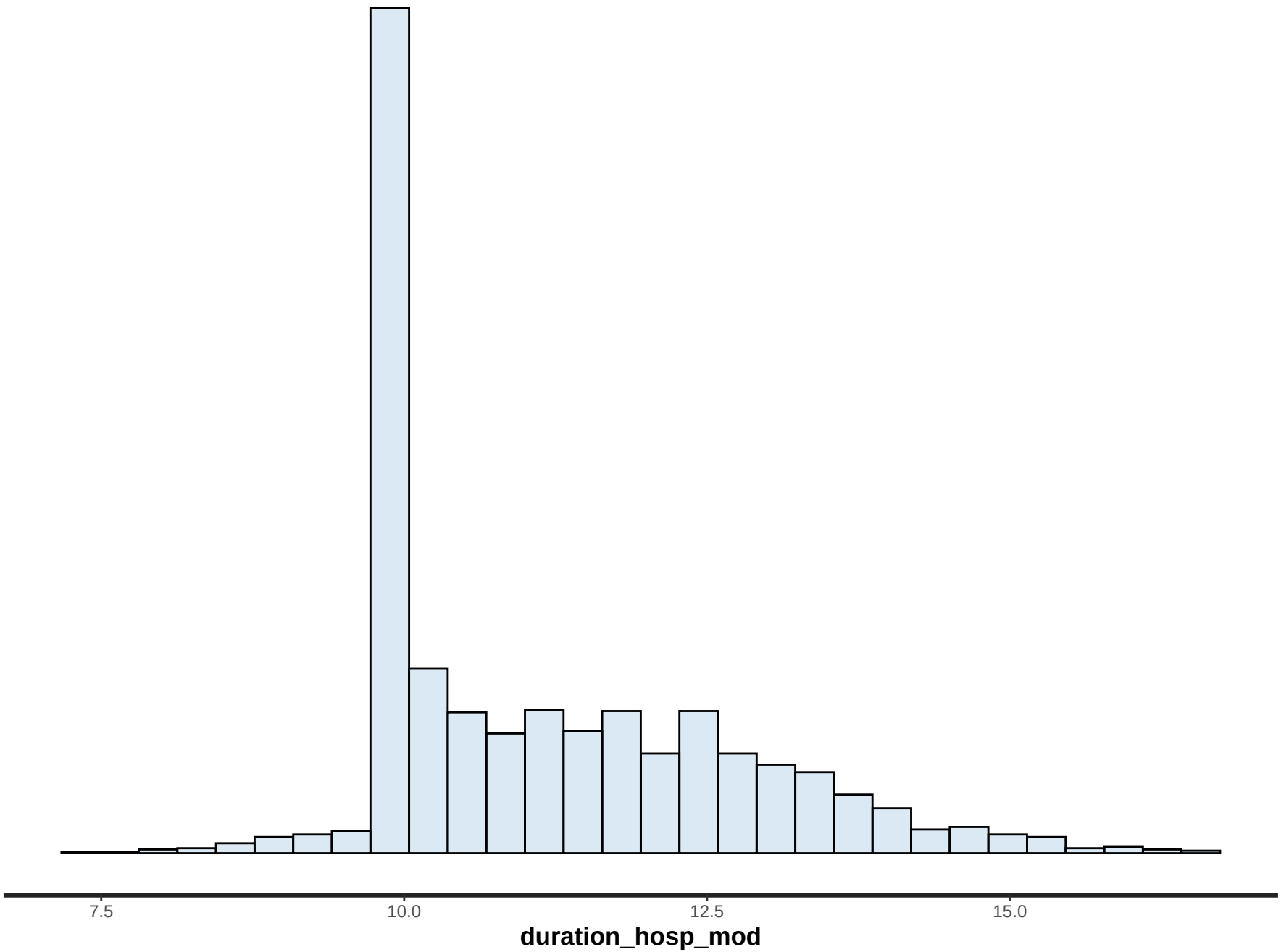


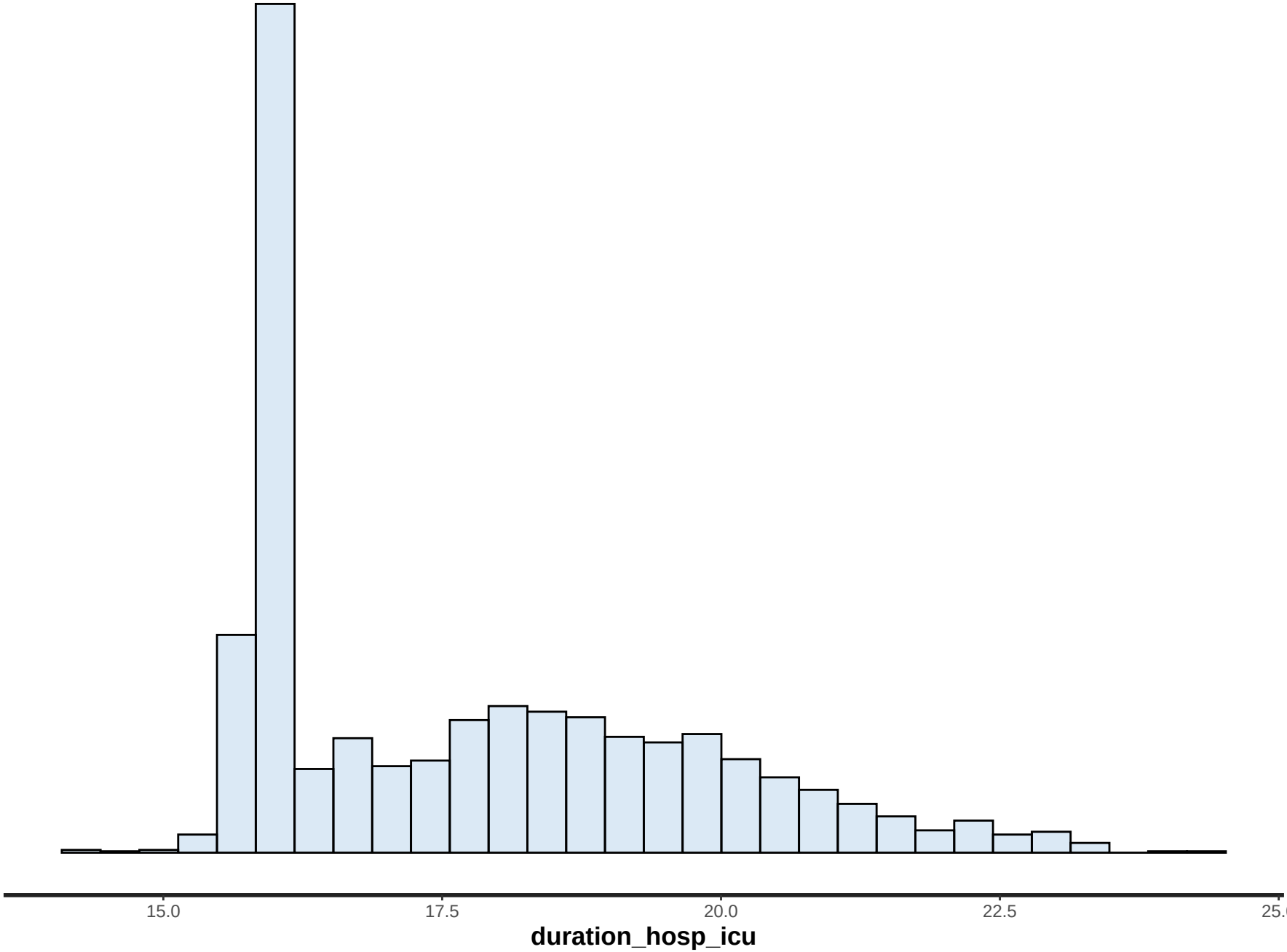

1.0
1.5
2.0
2.5
3.0
r0

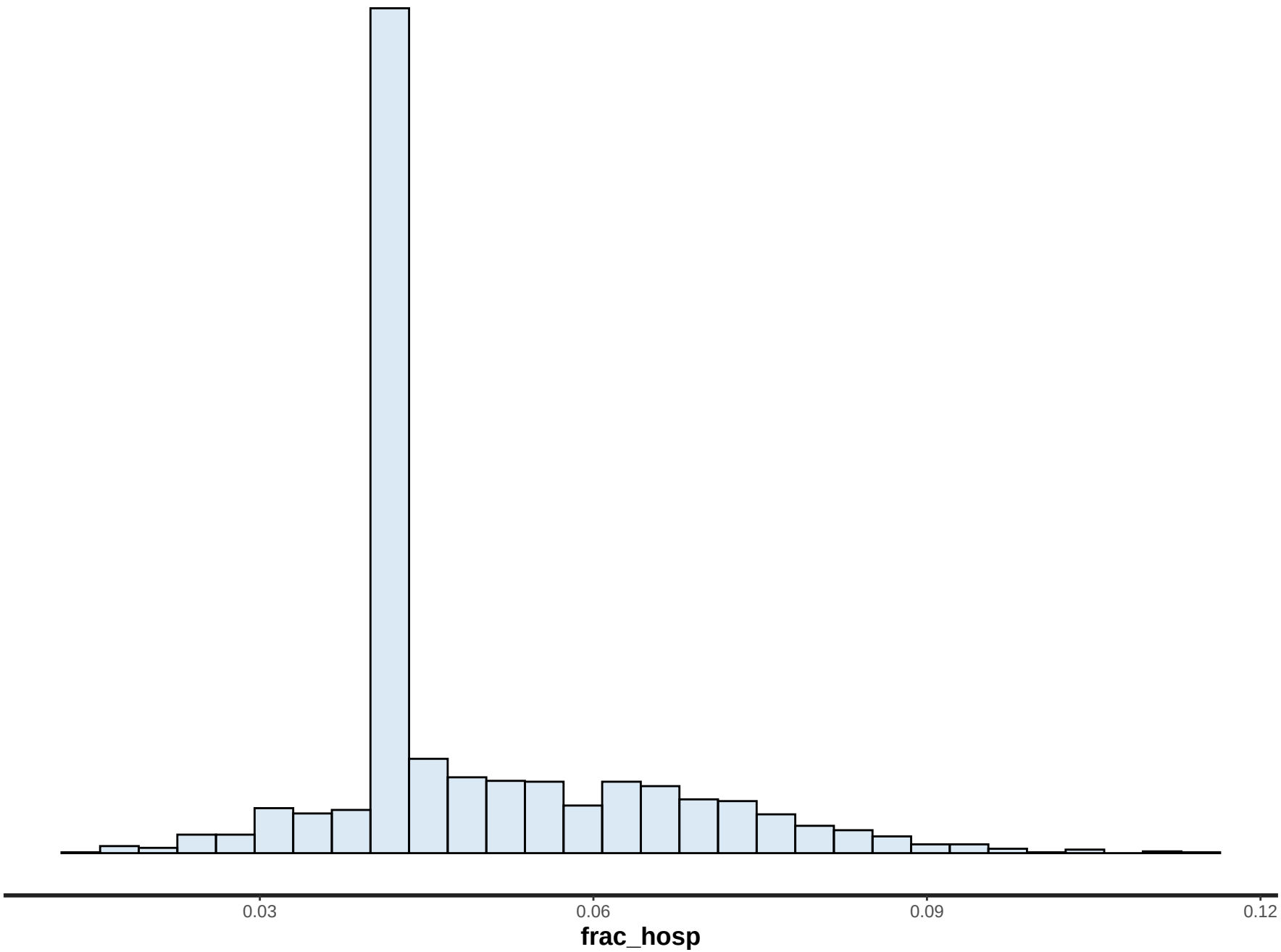

1
2
3
4
duration_latent

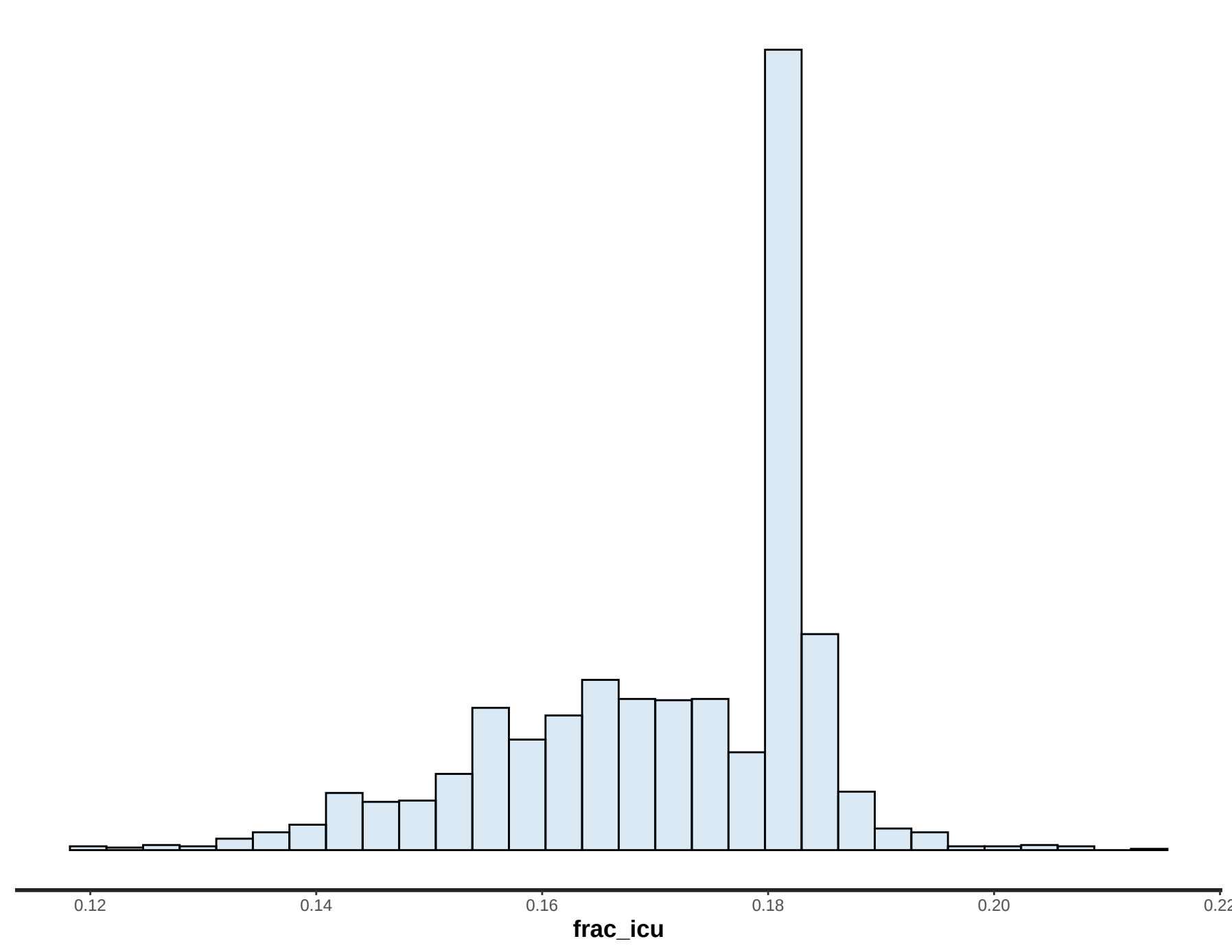

2
4
6
duration_rec_mild

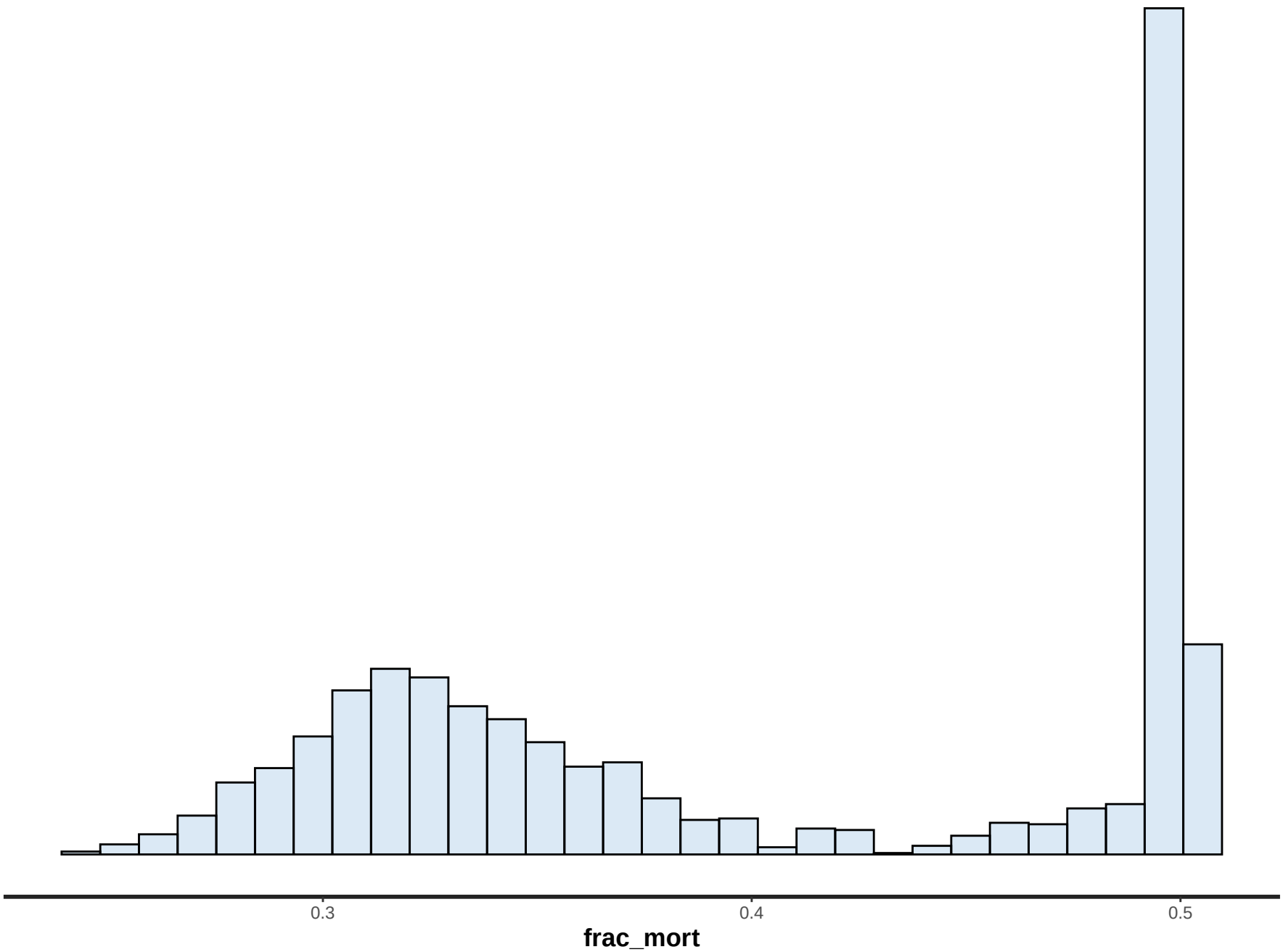

2.5
5.0
7.5
10.0
duration_pre_hosp

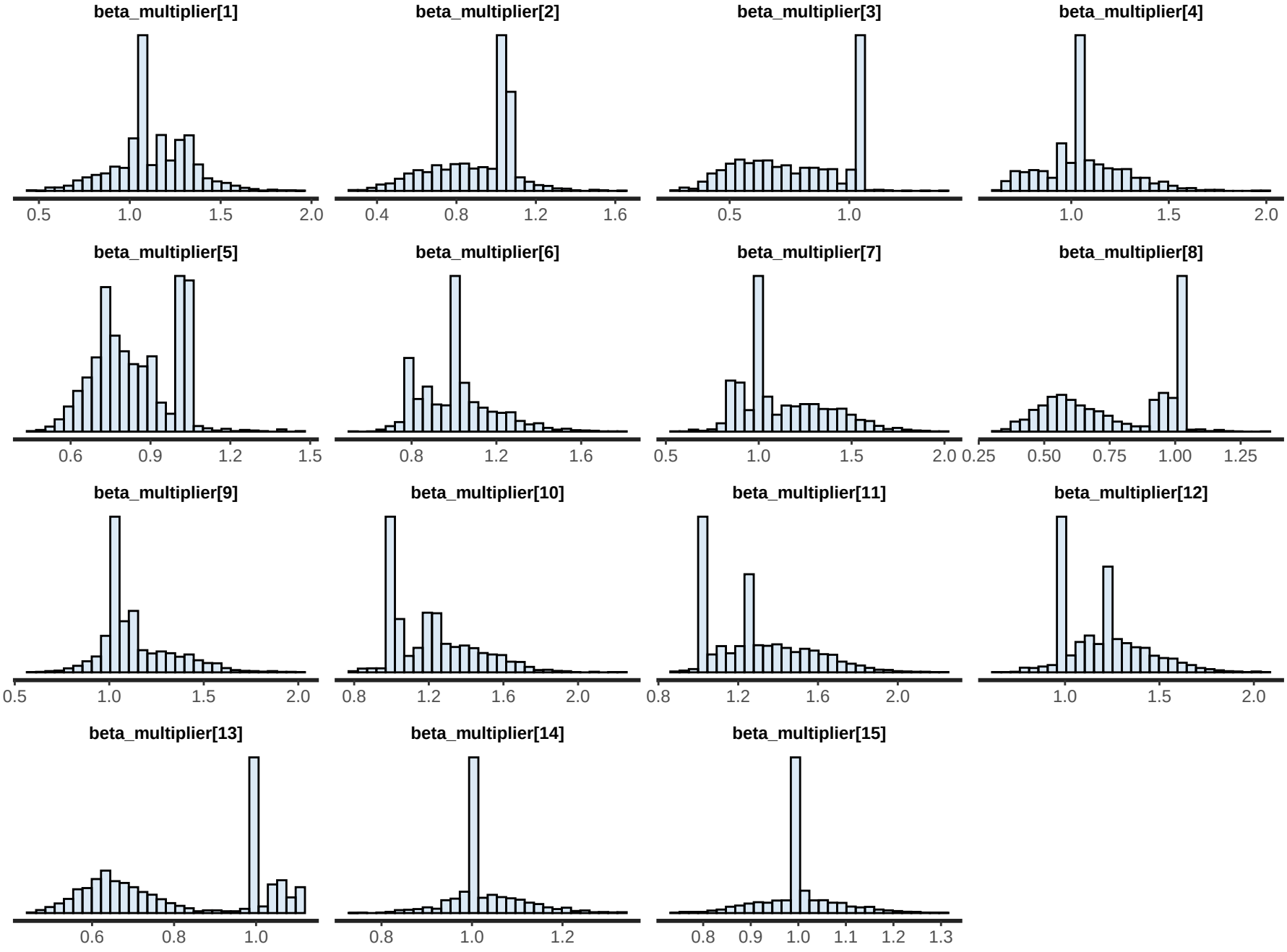

7.5
10.0
12.5
15.0
duration_hosp_mod


15.0
17.5
20.0
22.5
25.0
duration_hosp_icu


0.03
0.06
0.09
0.12
frac_hosp


0.12
0.14
0.16
0.18
0.20
0.22
frac_icu


0.3
0.4
0.5
frac_mort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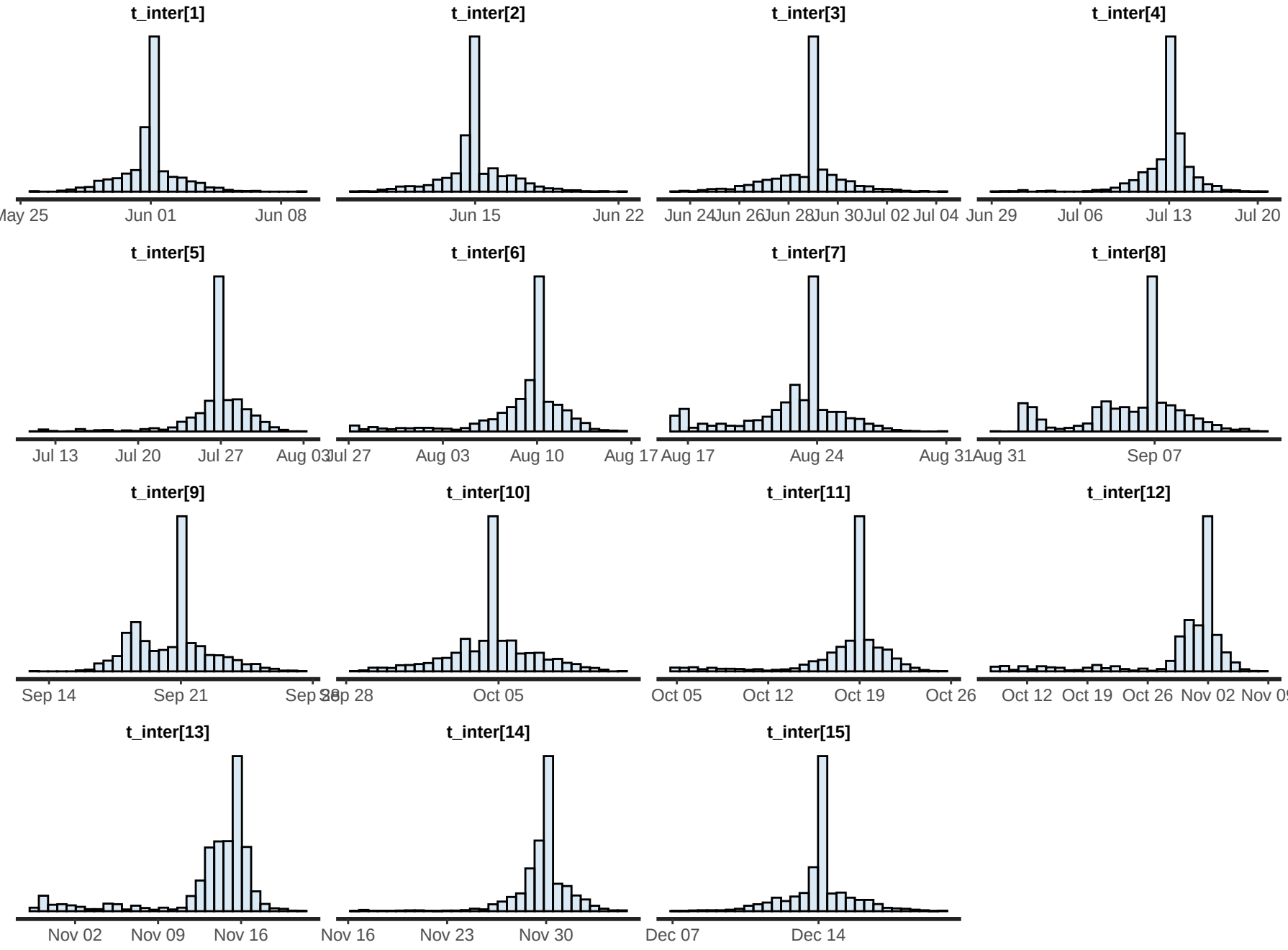
beta_multiplier[2]
0.4 0.8 1.2 1.6
beta_multiplier[3]
0.5 1.0
beta_multiplier[4]
1.0 1.5 2.0
beta_multiplier[5]
0.6 0.9 1.2 1.5
beta_multiplier[6]
0.8 1.2 1.6
beta_multiplier[7]
0.5 1.0 1.5 2.0
beta_multiplier[8]
0.25 0.50 0.75 1.00 1.25
beta_multiplier[9]
0.5 1.0 1.5 2.0
beta_multiplier[10]
0.8 1.2 1.6 2.0
beta_multiplier[11]
0.8 1.2 1.6 2.0
beta_multiplier[12]
1.0 1.5 2.0
beta_multiplier[13]
0.6 0.8 1.0
beta_multiplier[14]
0.8 1.0 1.2
beta_multiplier[15]
0.8 0.9 1.0 1.1 1.2 1.3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May 25
Jun 01
Jun 08
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Jun 15
Jun 22
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Jun 24
Jun 26
Jun 28
Jun 30
Jul 02
Jul 04
t_inter[4]
Jun 29
Jul 06
Jul 13
Jul 20
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Jul 20
Jul 27
Aug 03
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Jul 27
Aug 03
Aug 10
Aug 17
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Aug 24
Aug 31
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Sep 21
Sep 28
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Oct 05
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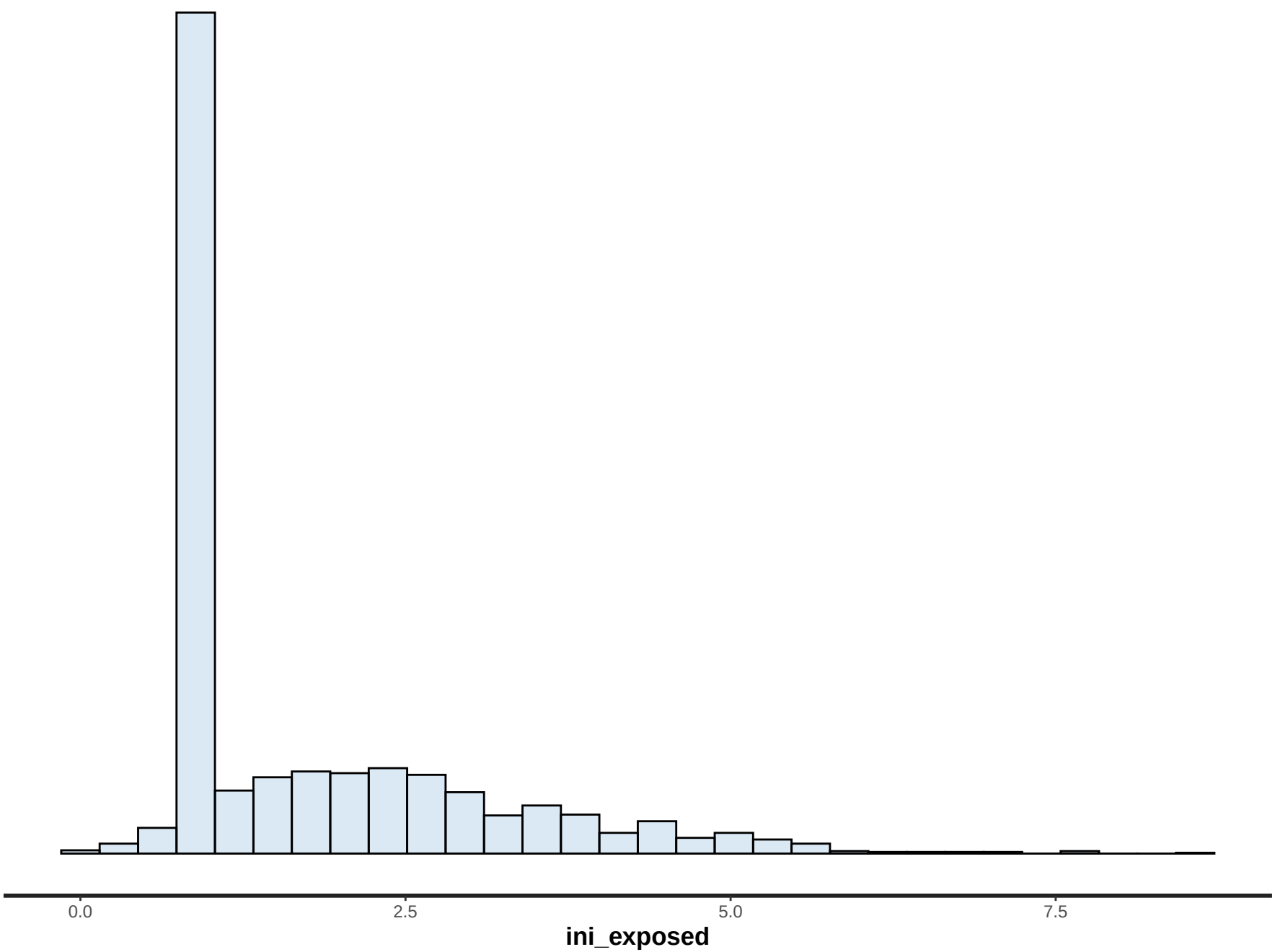
Oct 12
Oct 19
Oct 26
t_inter[12]
Oct 12
Oct 19
Oct 26
Nov 02
Nov 09
t_inter[13]
Nov 02
Nov 09
Nov 16
t_inter[14]
Nov 16
Nov 23
Nov 30
t_inter[15]
Dec 07
Dec 14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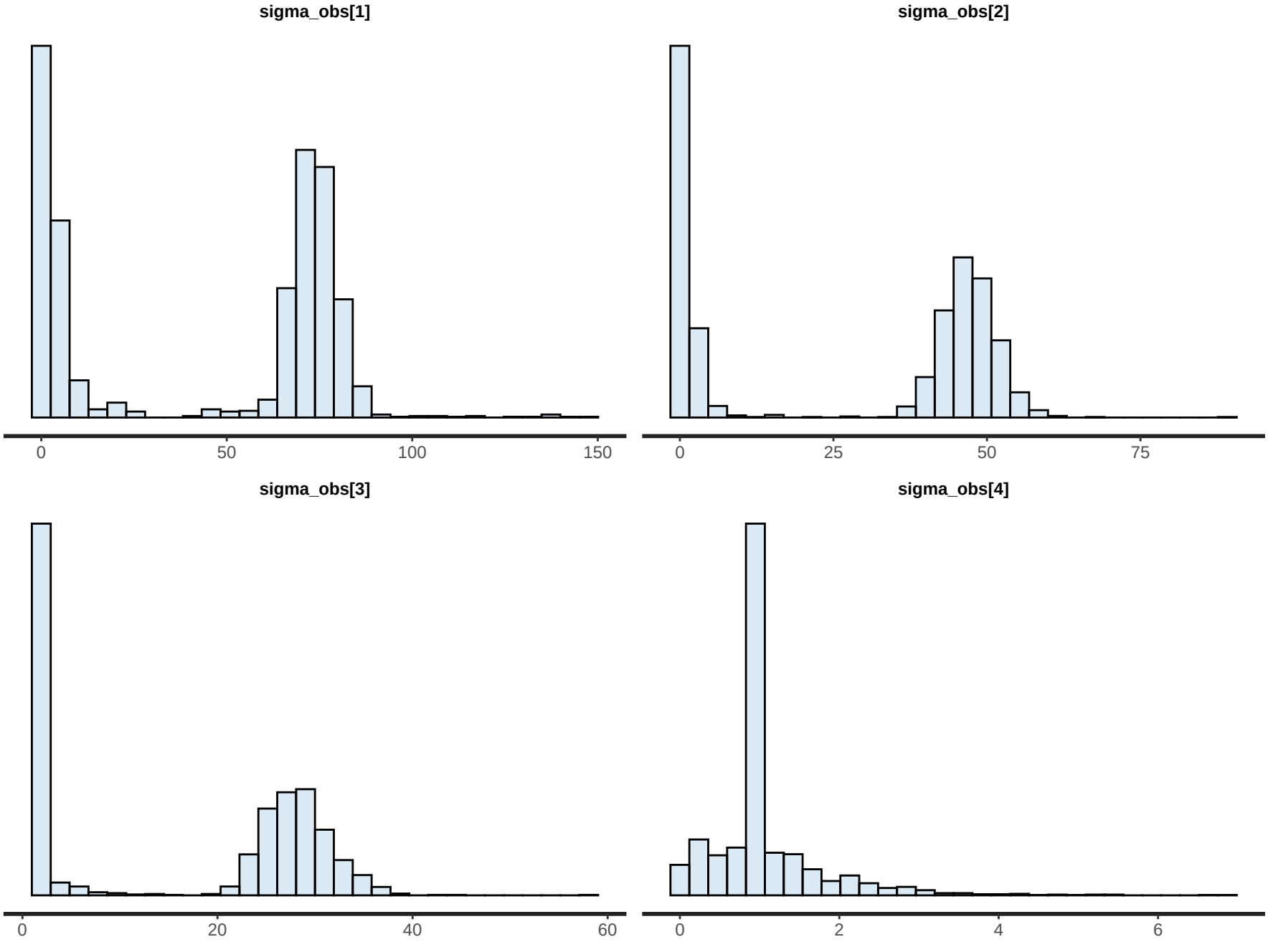
2.5
5.0
7.5
ini_exposed


sigma_obs[1]
0
50
100
150
sigma_obs[2]
0
25
50
75
sigma_obs[3]
0
20
40
60
sigma_obs[4]
0
2
4
6