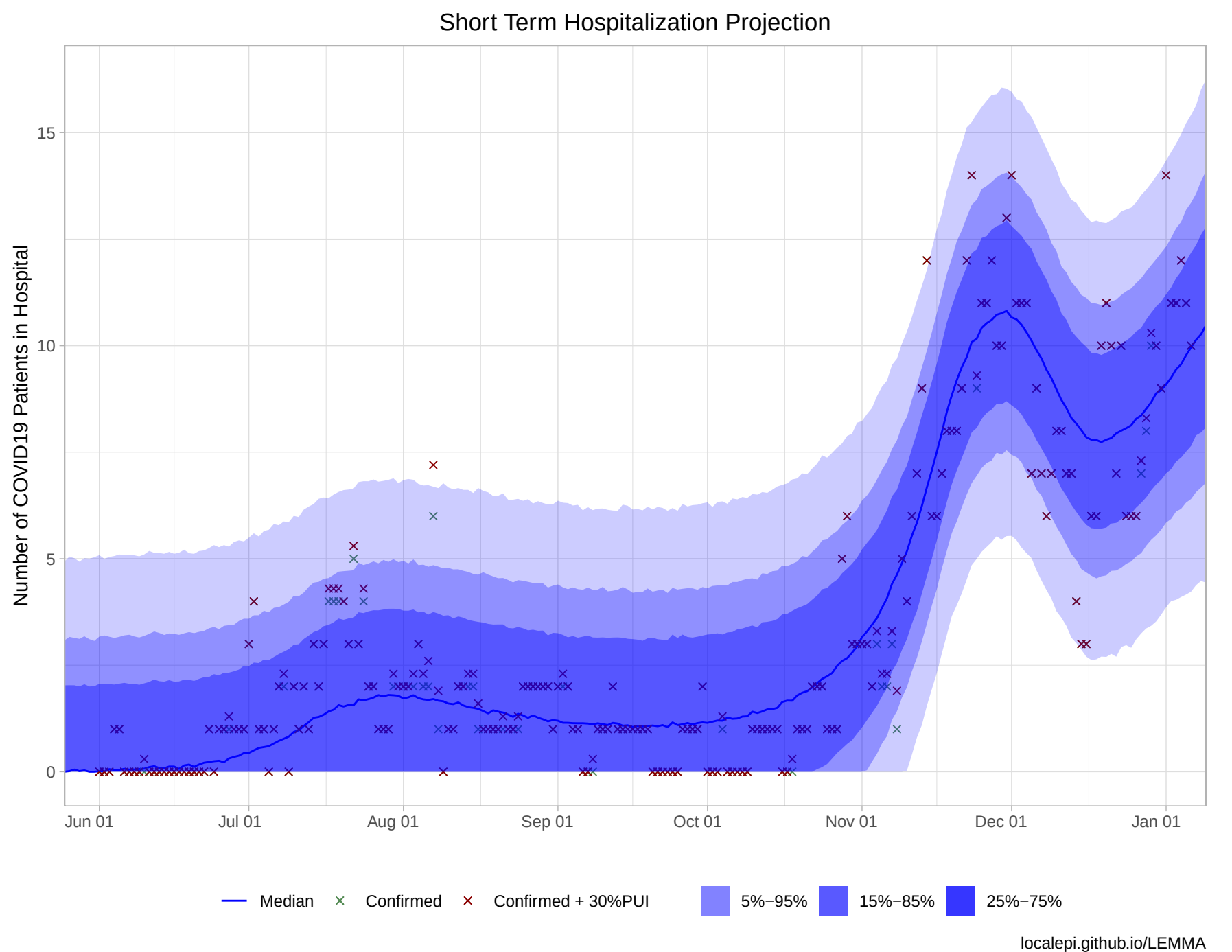
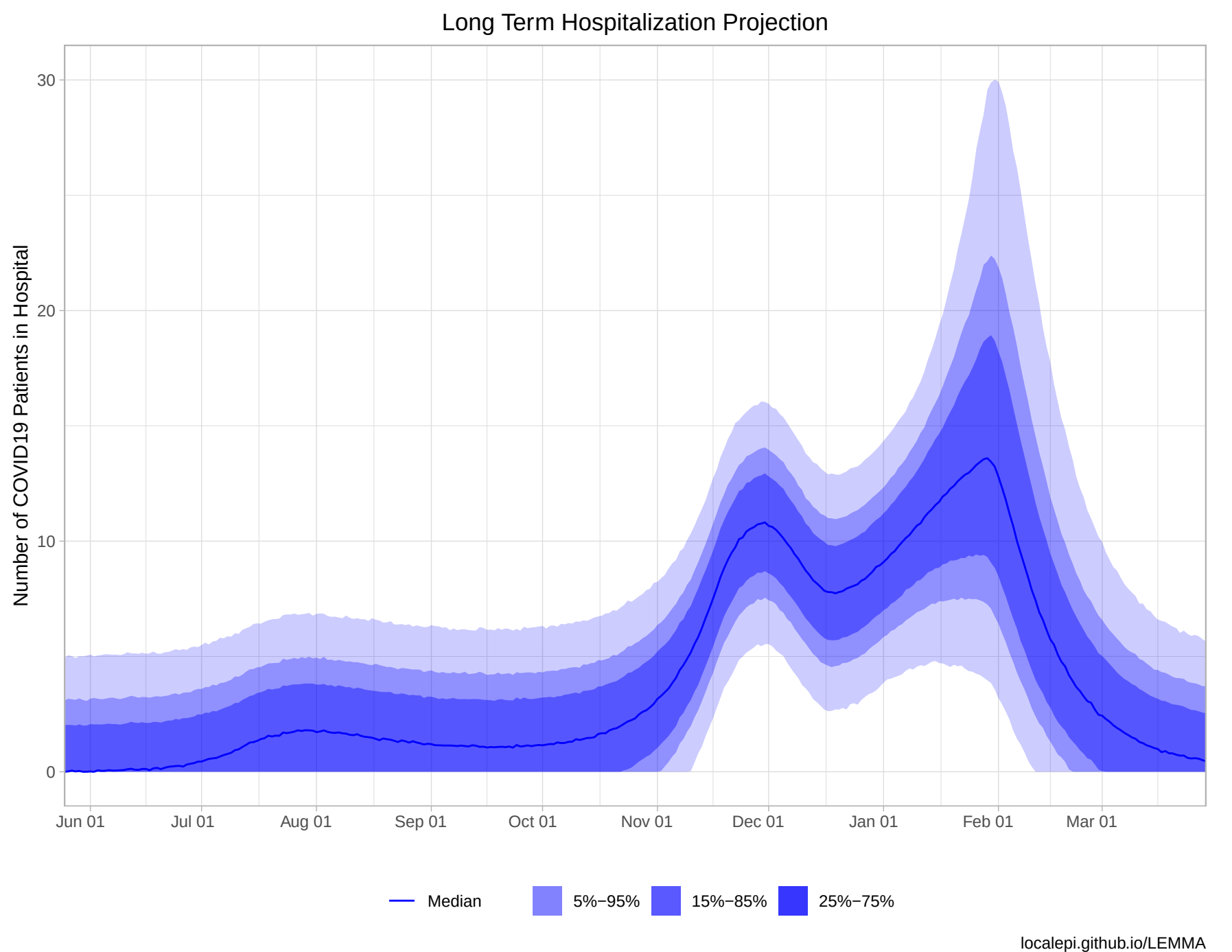
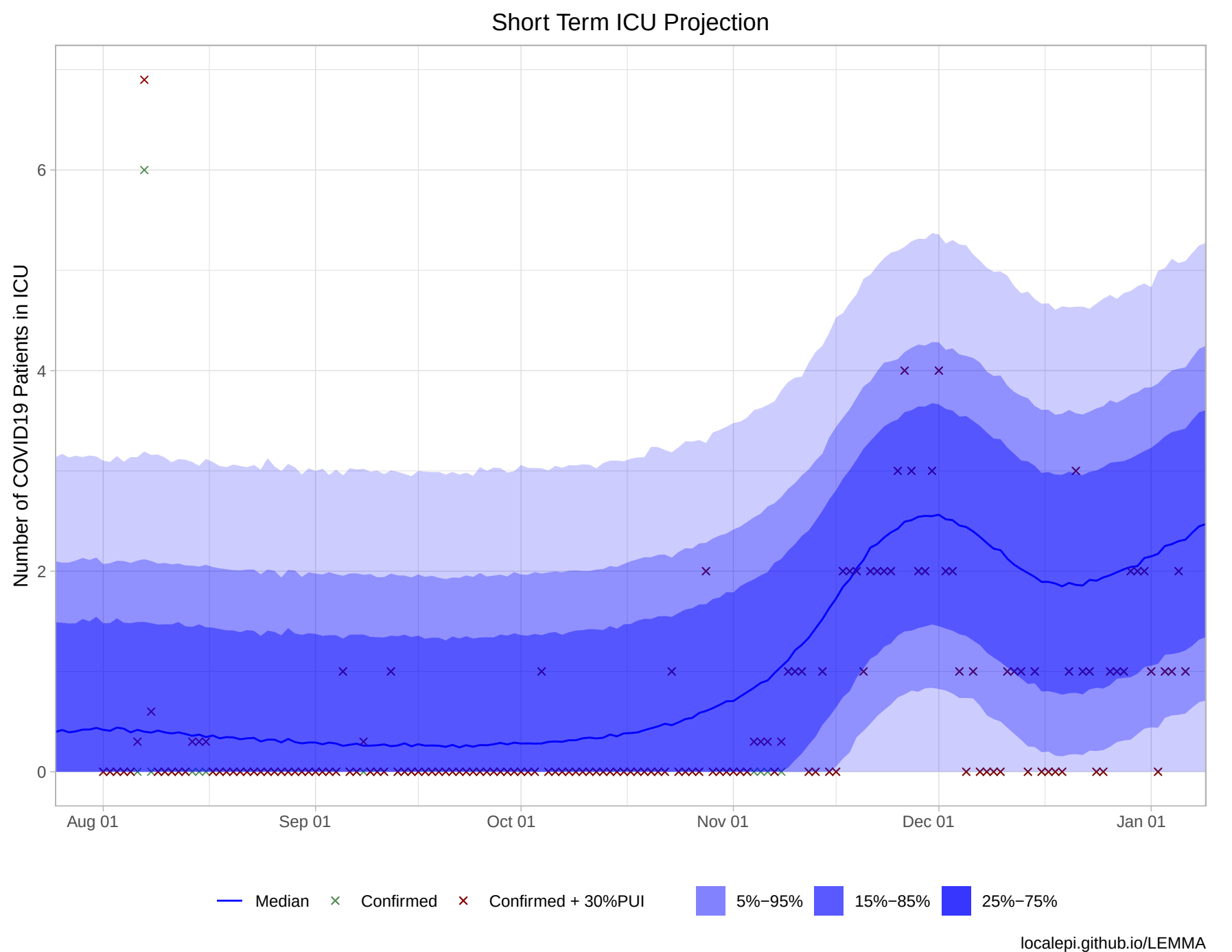
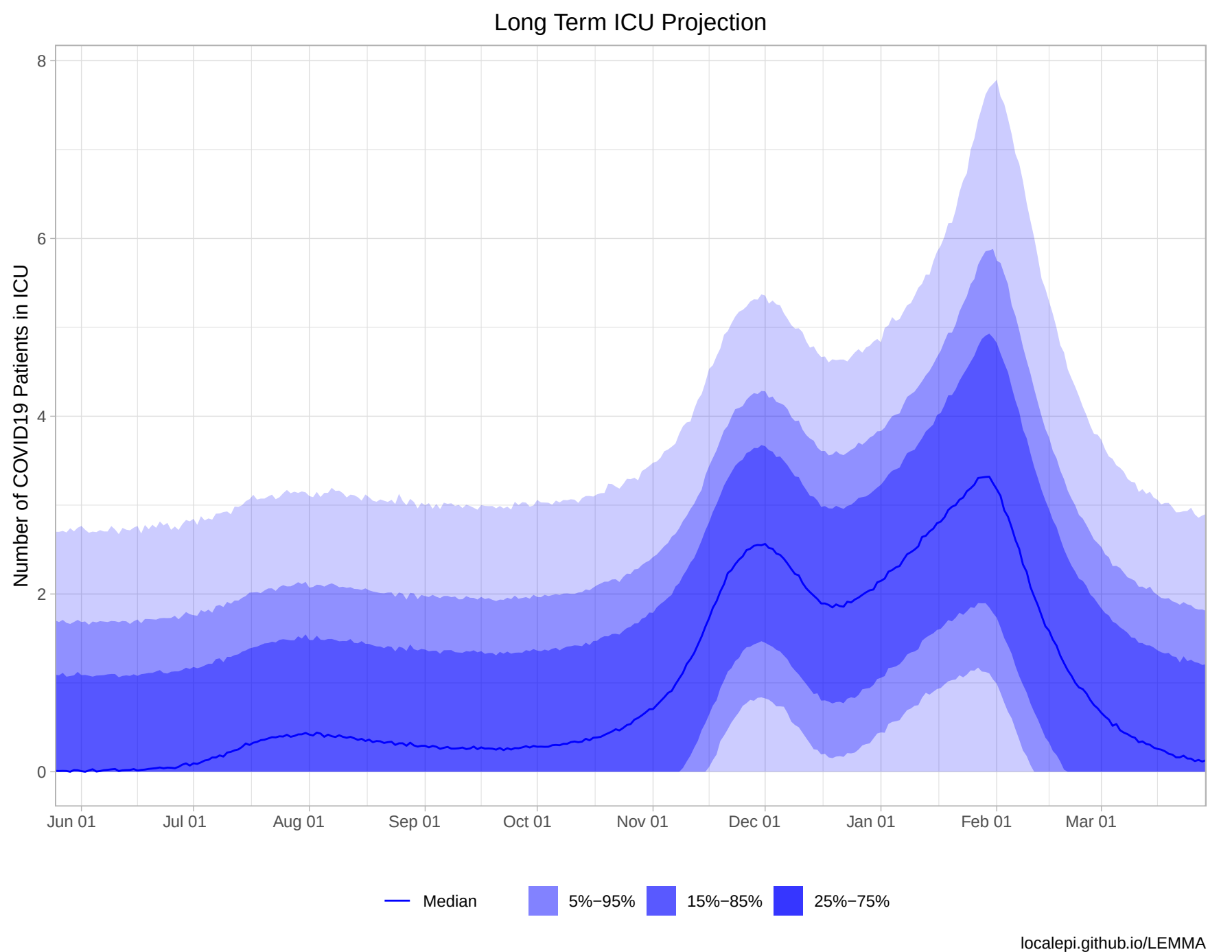
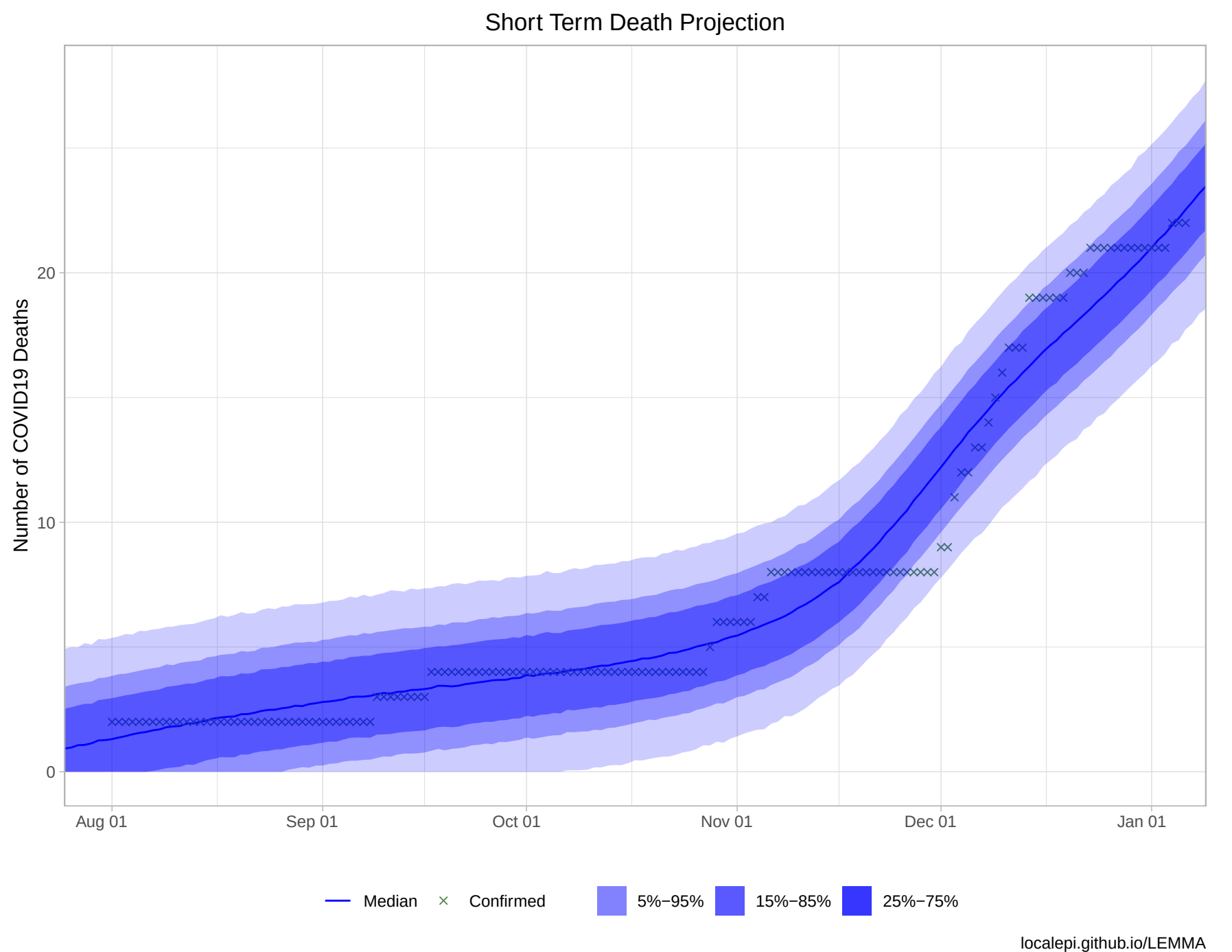
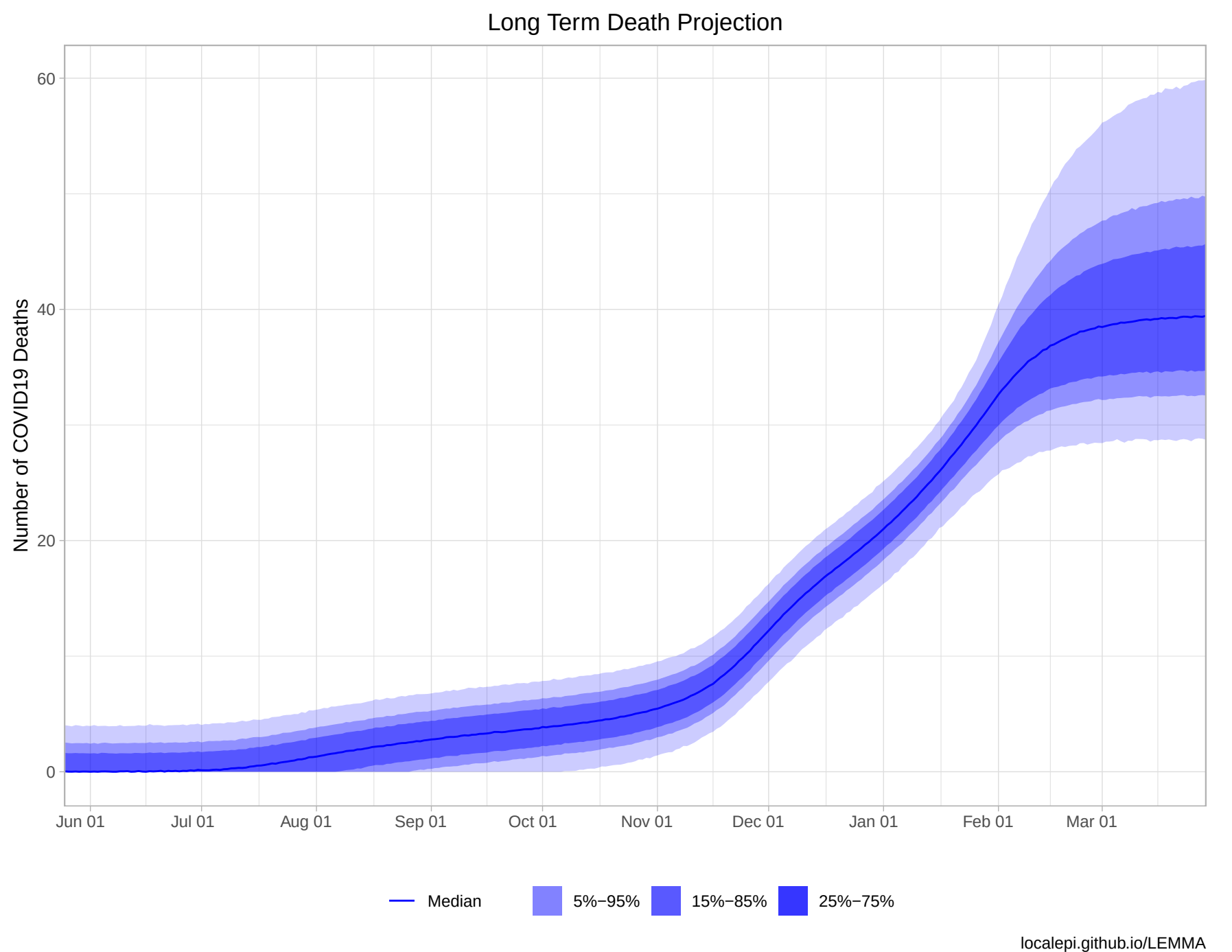

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
5
10
15
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

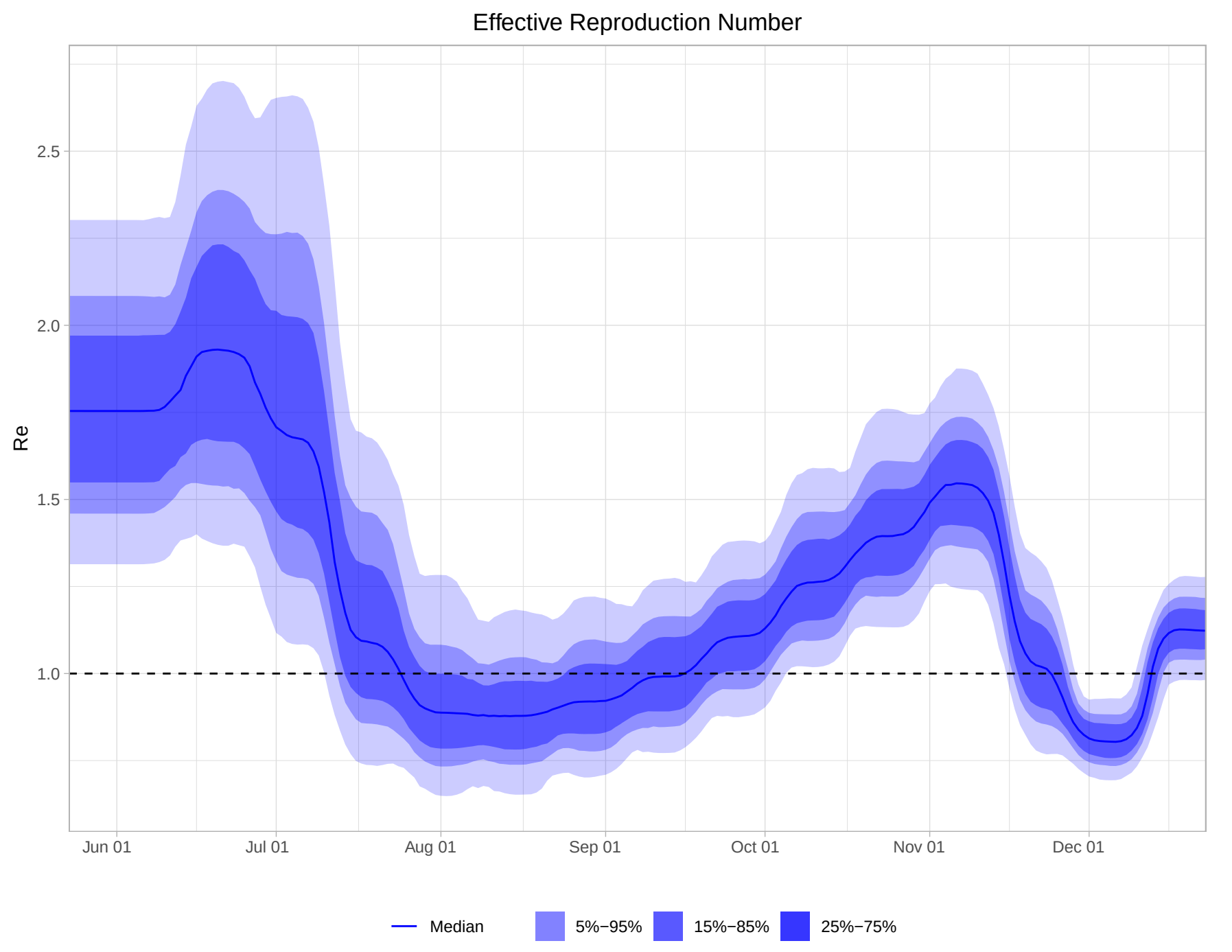

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
30
20
10
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Short Term ICU Projection
Number of COVID19 Patients in ICU
0
2
4
6
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
8
6
4
2
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

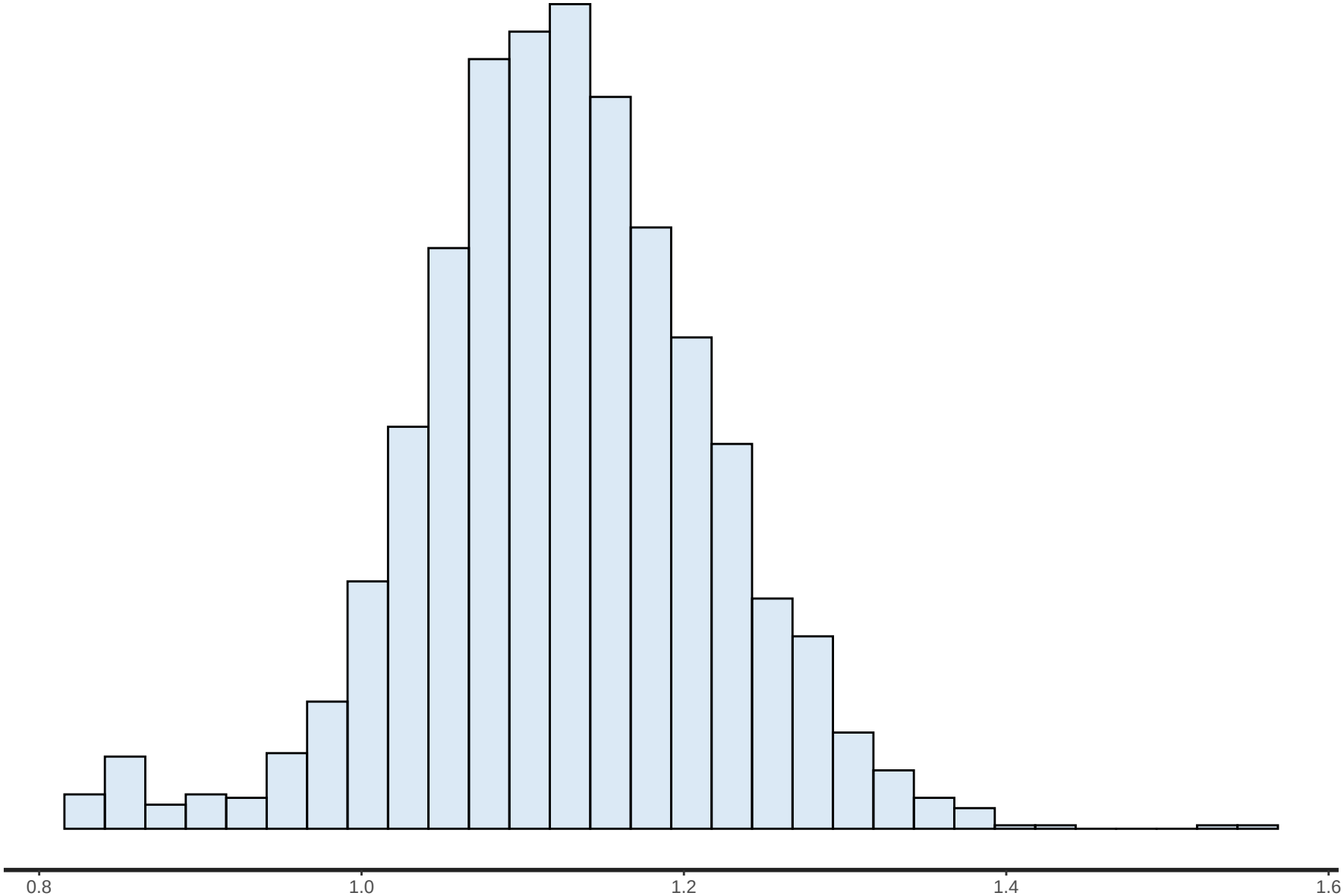

Short Term Death Projection
Number of COVID19 Deaths
0
10
20
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

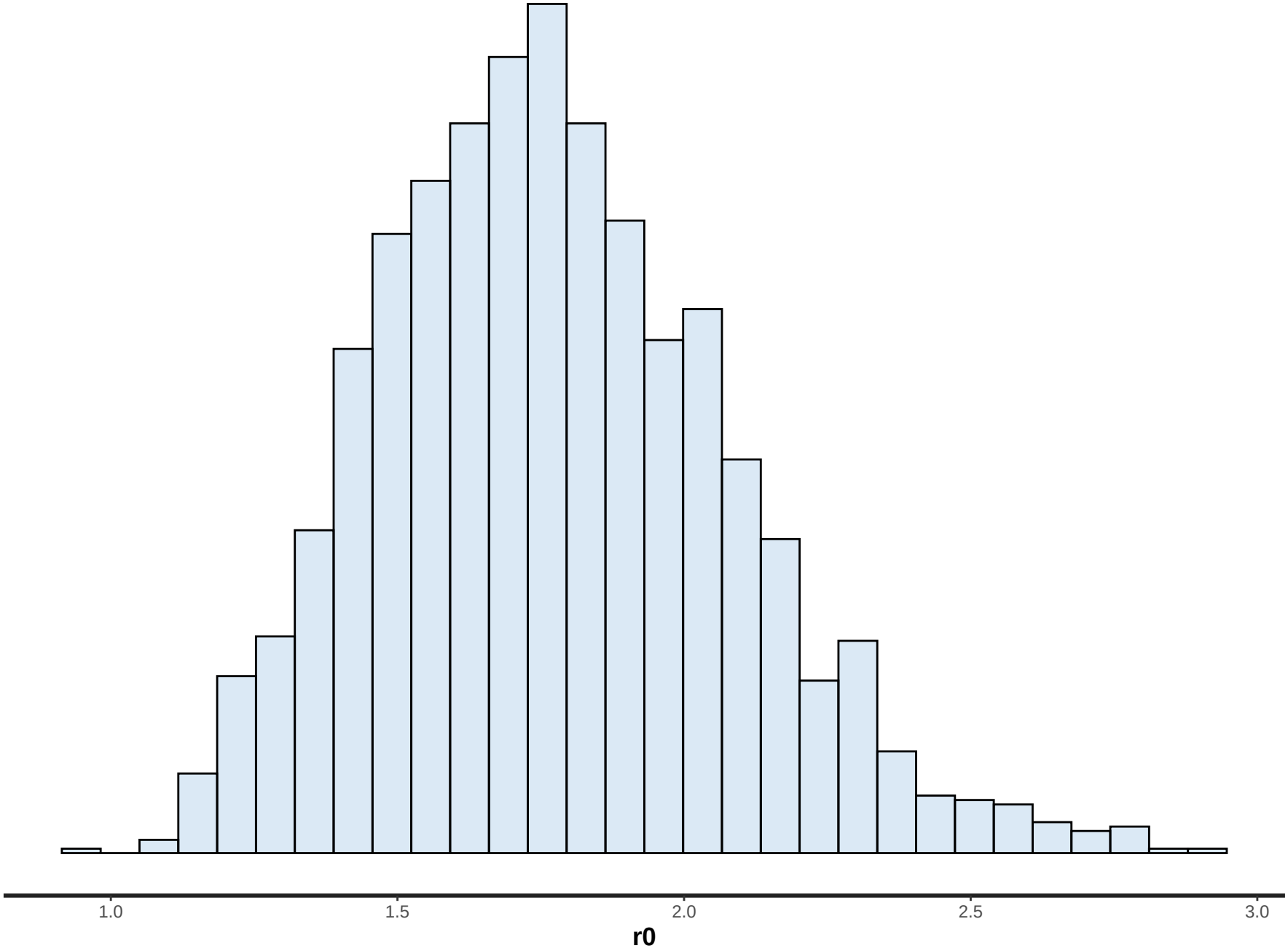

Long Term Death Projection
Number of COVID19 Deaths
60
40
20
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

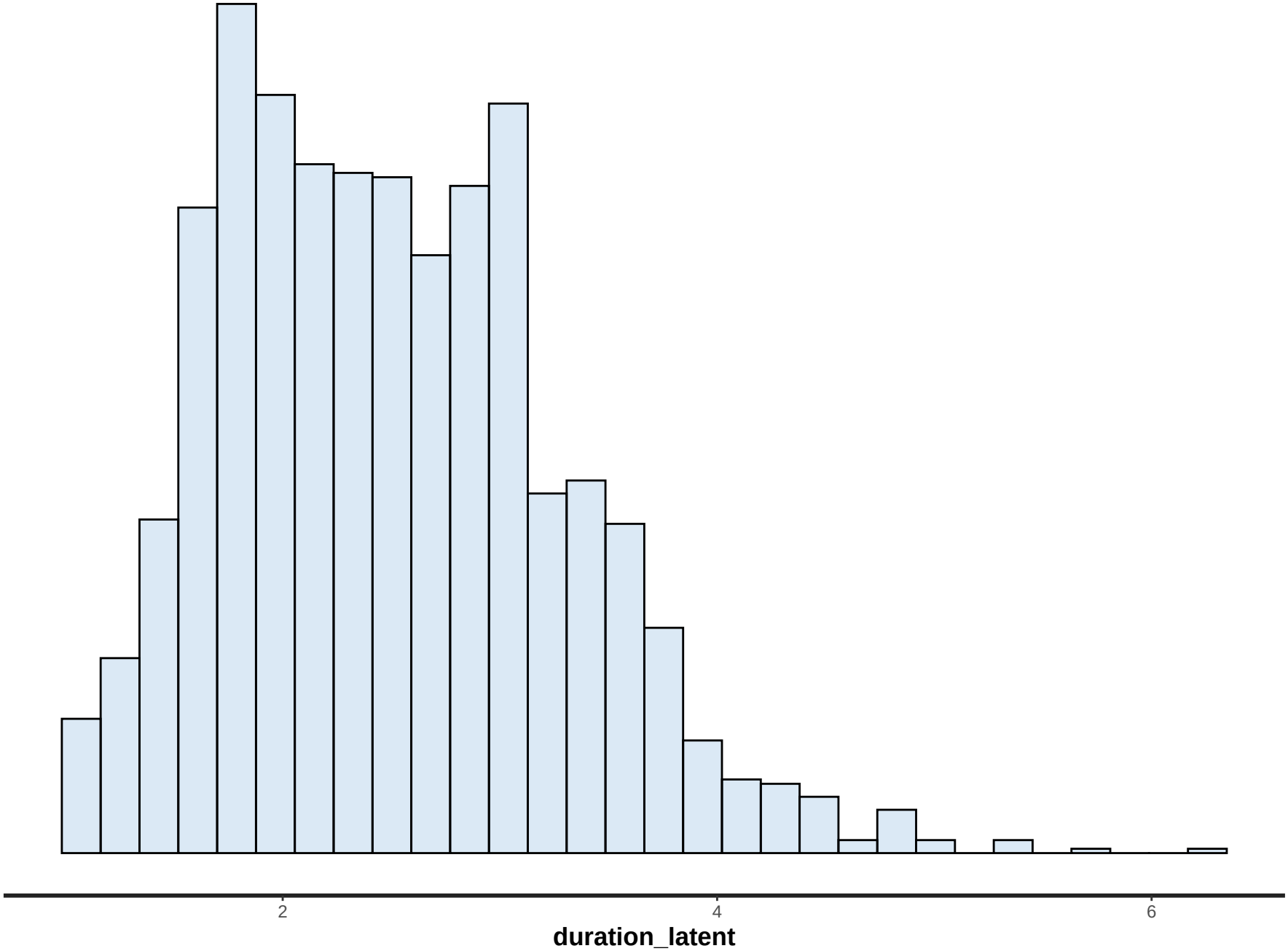

Effective Reproduction Number
Re
2.5
2.0
1.5
1.0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

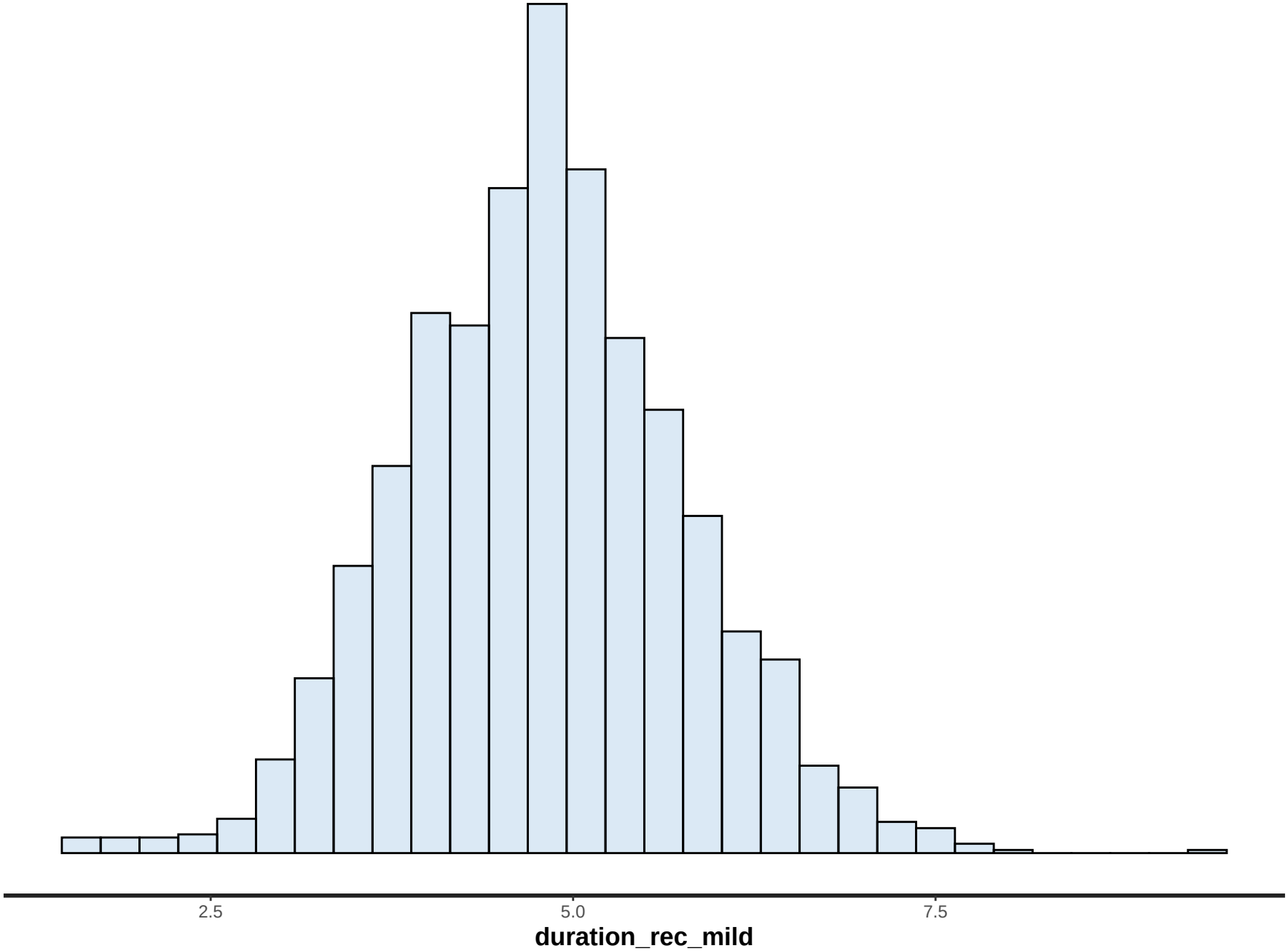
Rt as of 2020−12−23

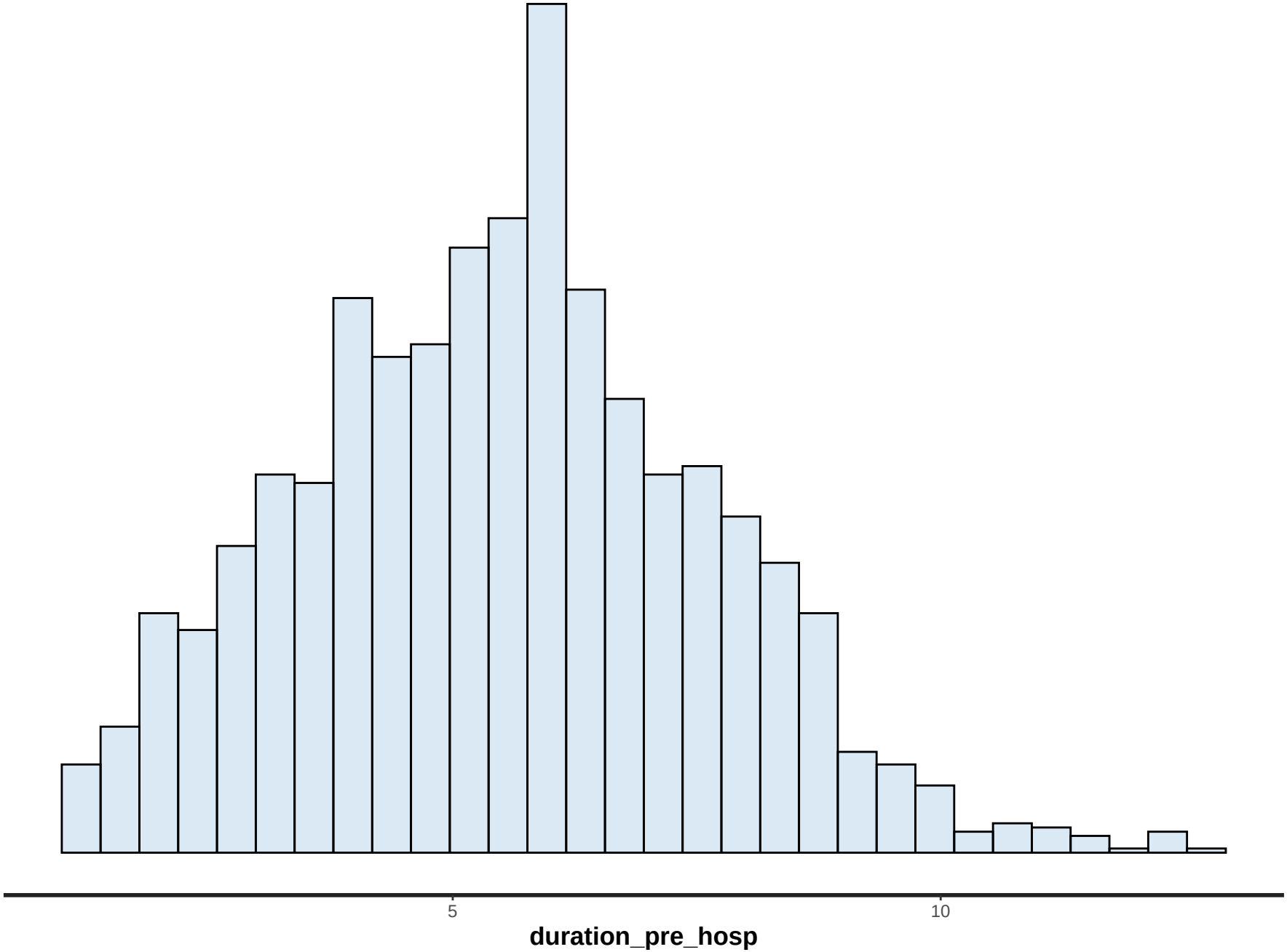
5%	10%	25%	50%	75%	90%	95%
0.98	1.02	1.07	1.12	1.18	1.24	1.28

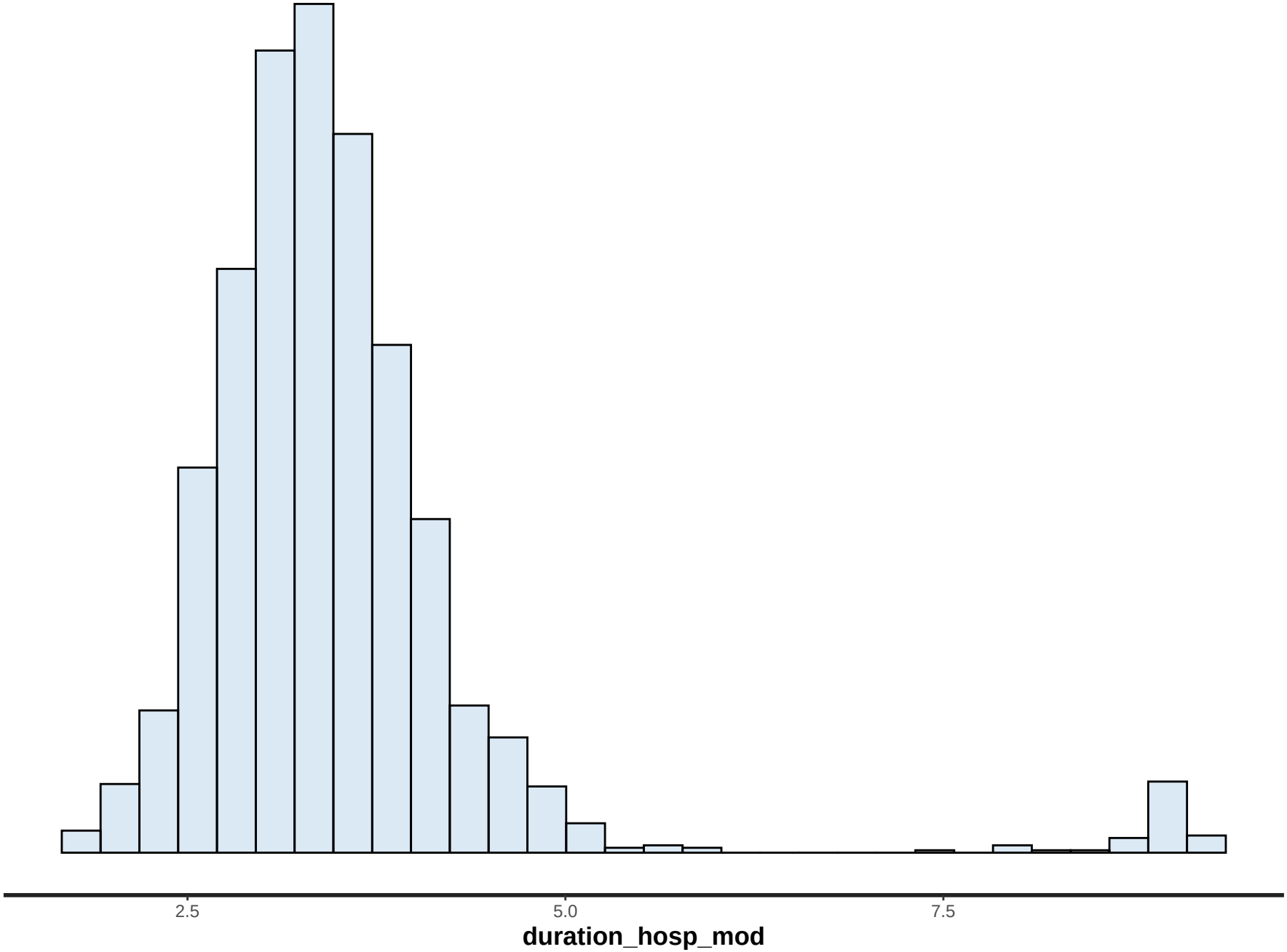


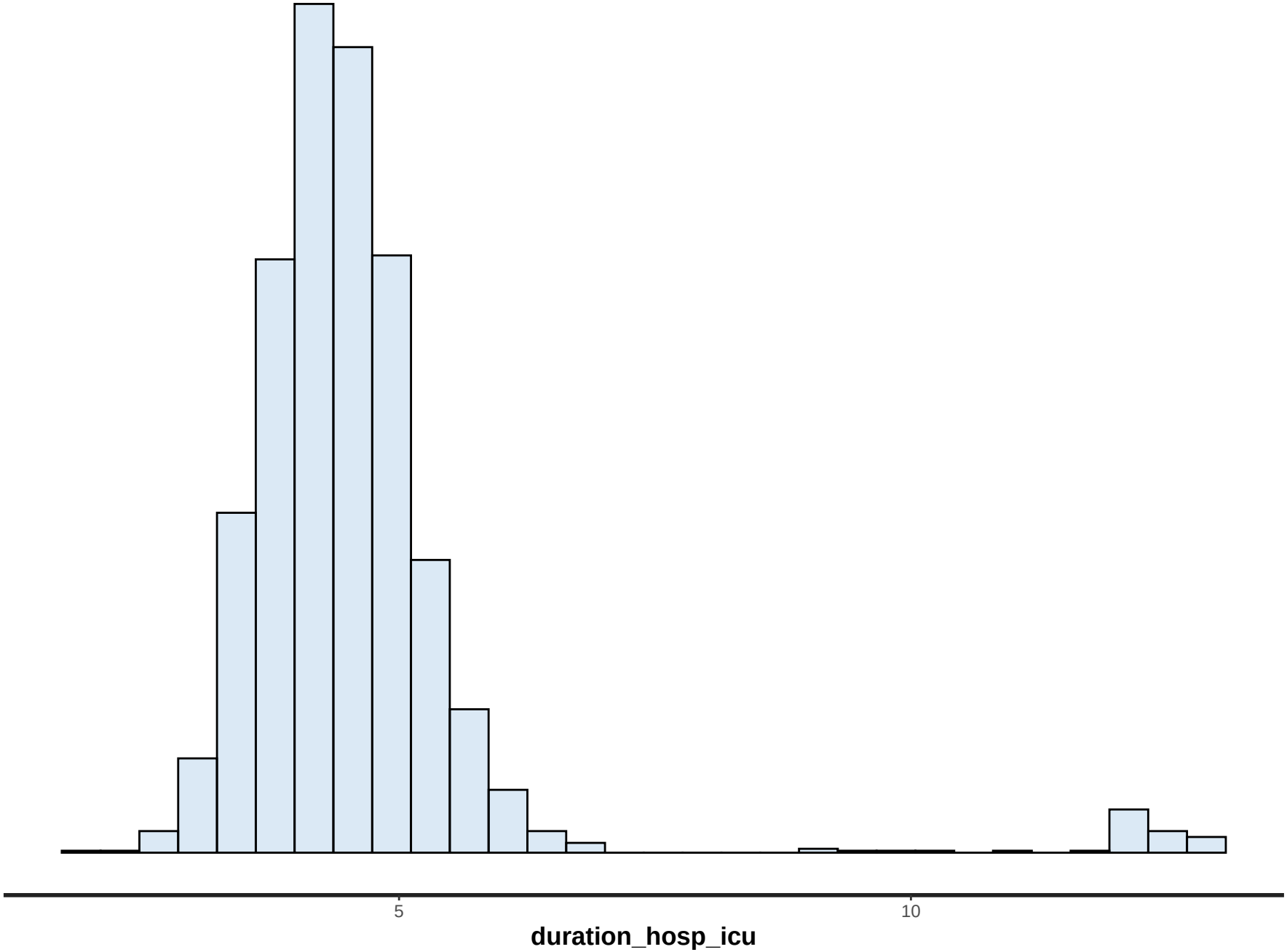

1.0
1.5
2.0
2.5
3.0
r0

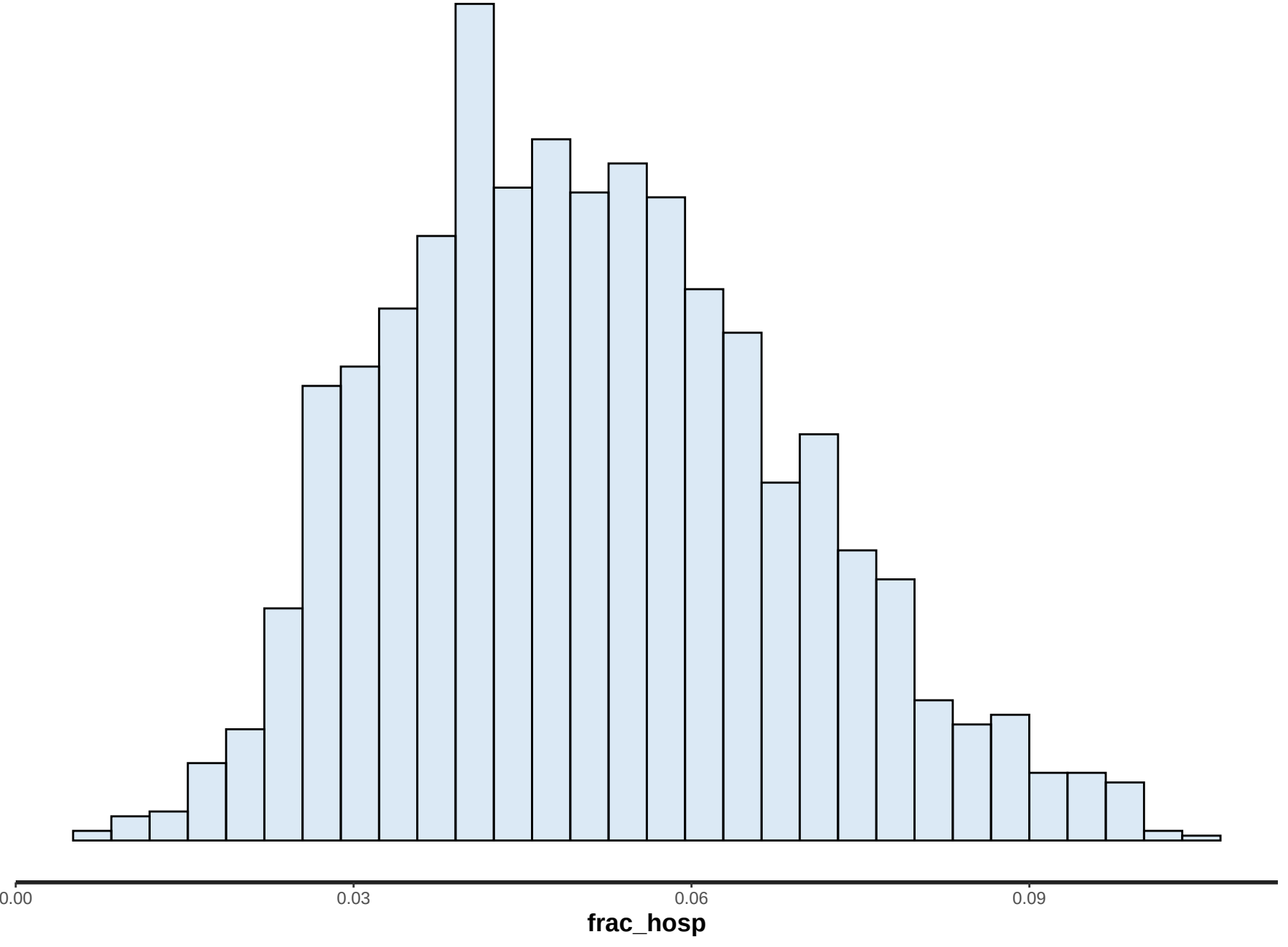

2
4
6
duration_latent

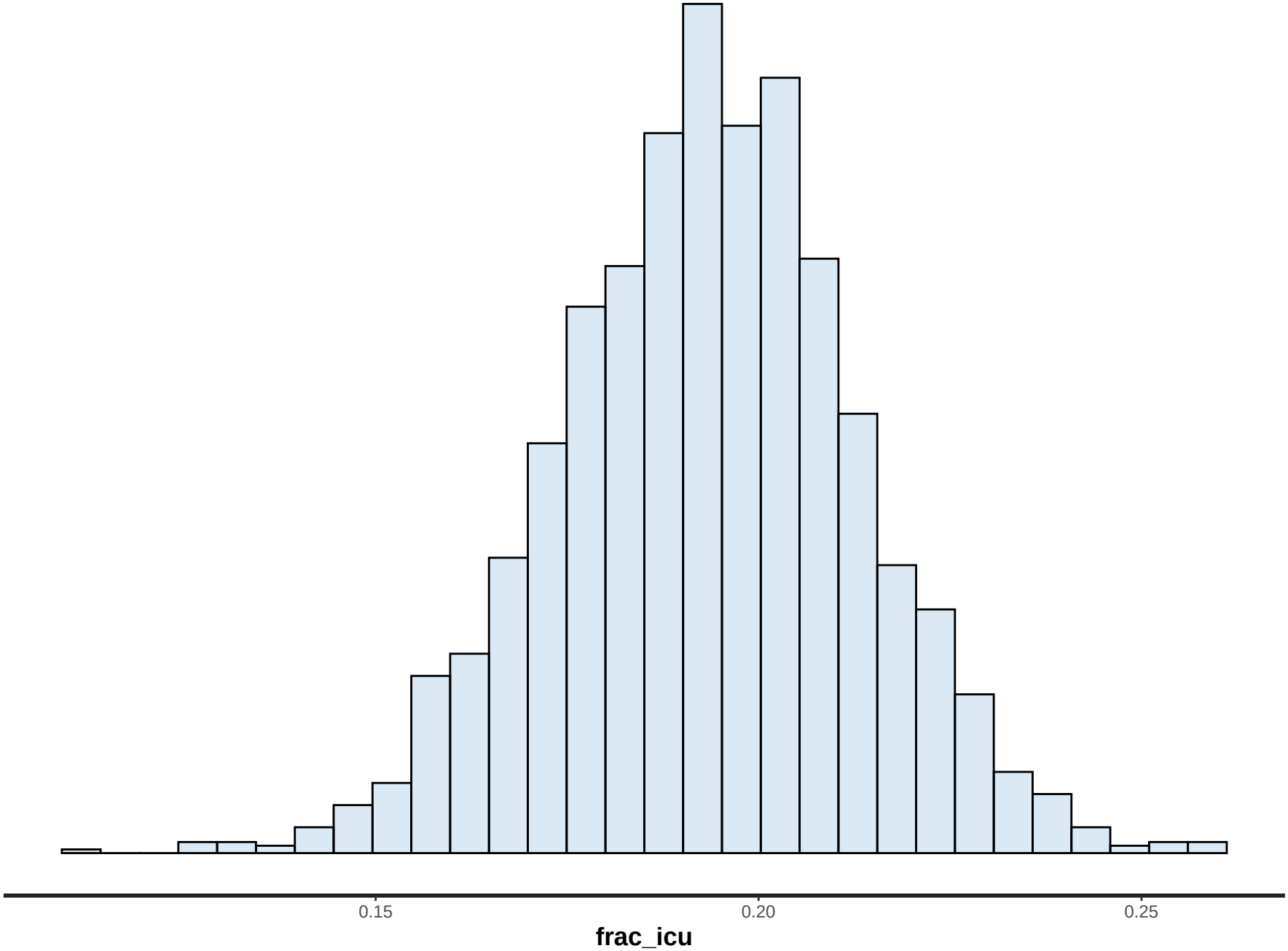

2.5
5.0
7.5
duration_rec_mild

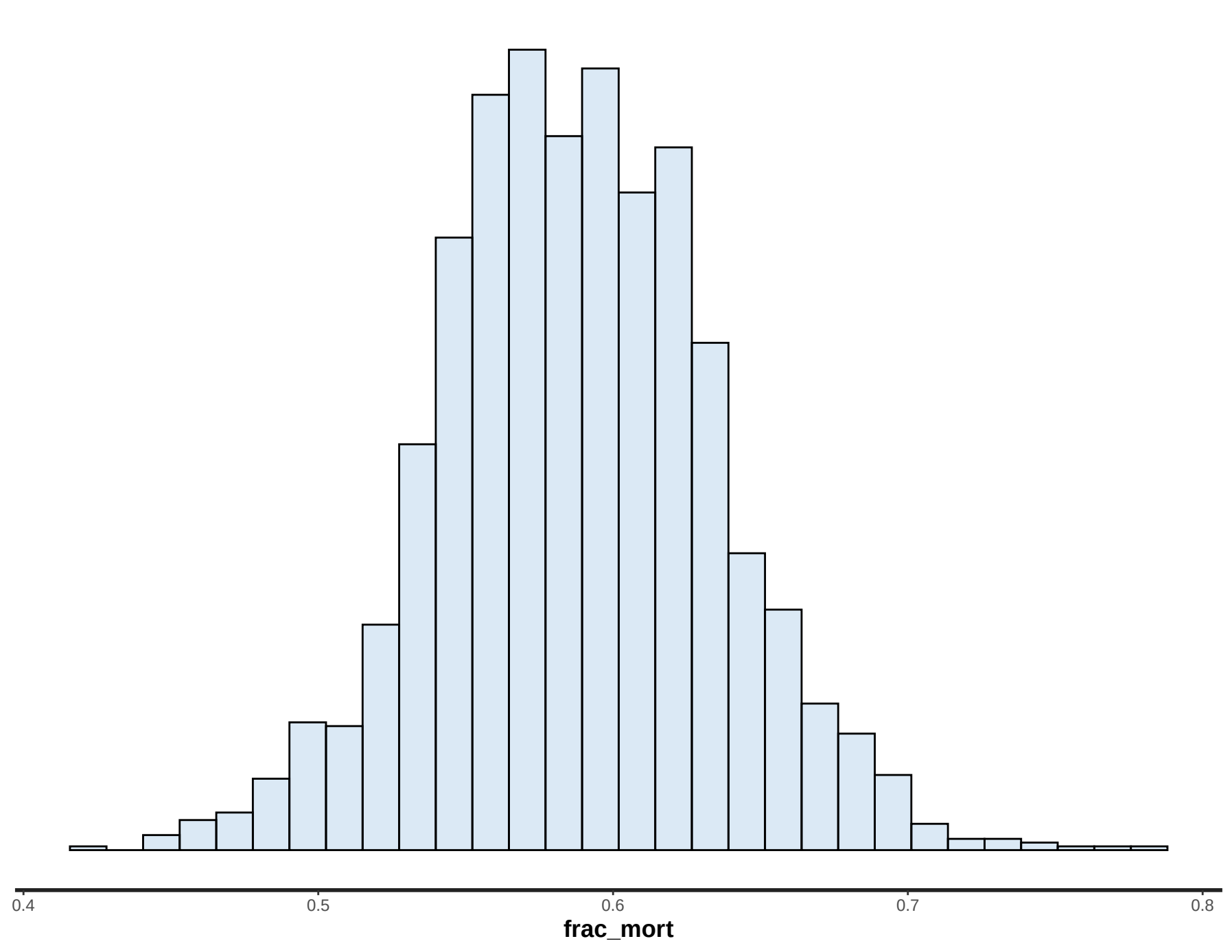

5
10
duration_pre_hosp

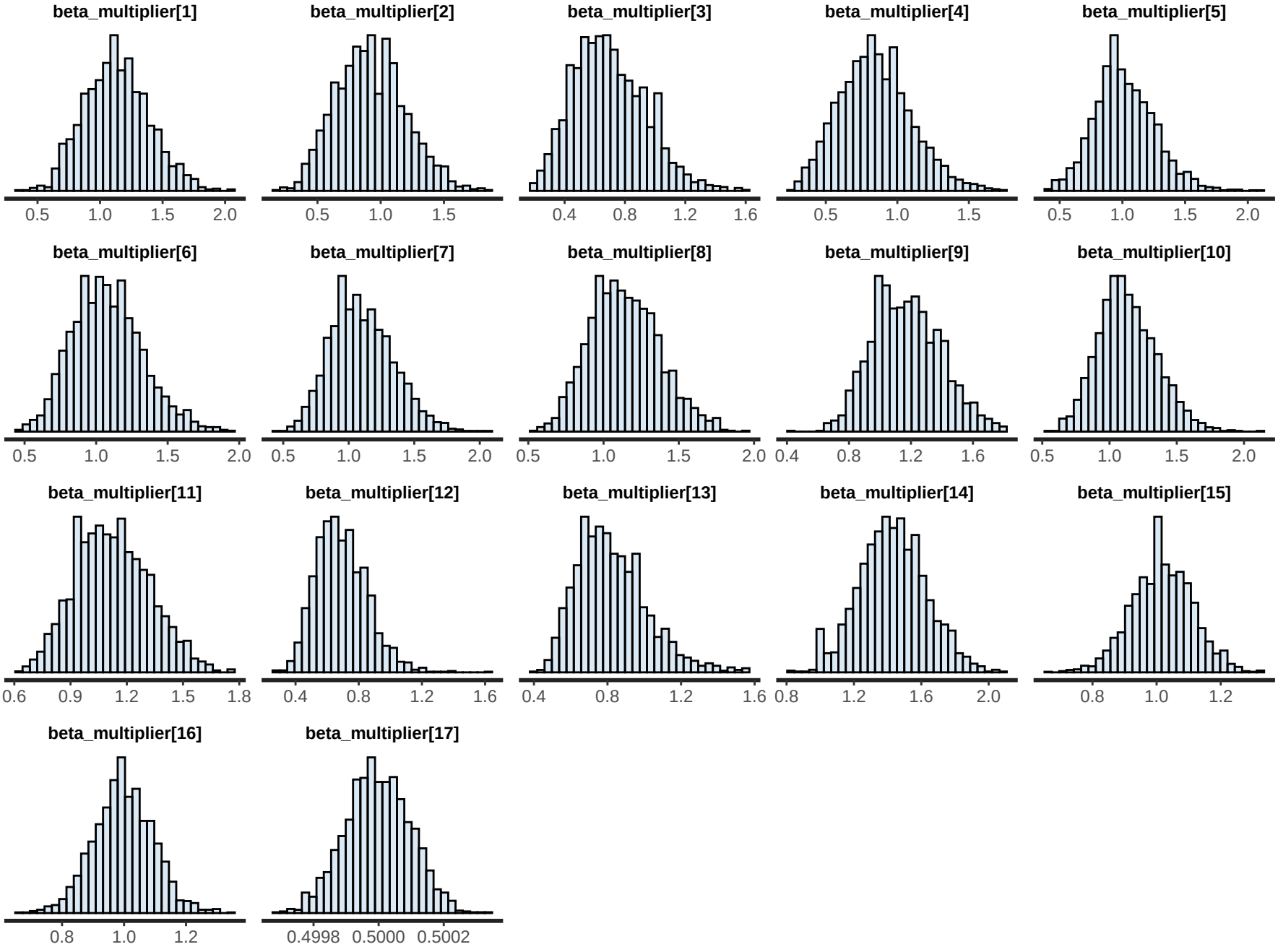

2.5
5.0
7.5
duration_hosp_mod


5
10
duration_hosp_icu


0.00
0.03
0.06
0.09
frac_hosp


0.15
0.20
0.25
frac_icu


0.4
0.5
0.6
0.7
0.8
frac_mort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0.5 1.0 1.5 2.0
beta_multiplier[2]
0.5 1.0 1.5
beta_multiplier[3]
0.4 0.8 1.2 1.6
beta_multiplier[4]
0.5 1.0 1.5
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]
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beta_multiplier[8]
0.5 1.0 1.5 2.0
beta_multiplier[9]
0.4 0.8 1.2 1.6
beta_multiplier[10]
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beta_multiplier[11]
0.6 0.9 1.2 1.5 1.8
beta_multiplier[12]
0.4 0.8 1.2 1.6
beta_multiplier[13]
0.4 0.8 1.2 1.6
beta_multiplier[14]
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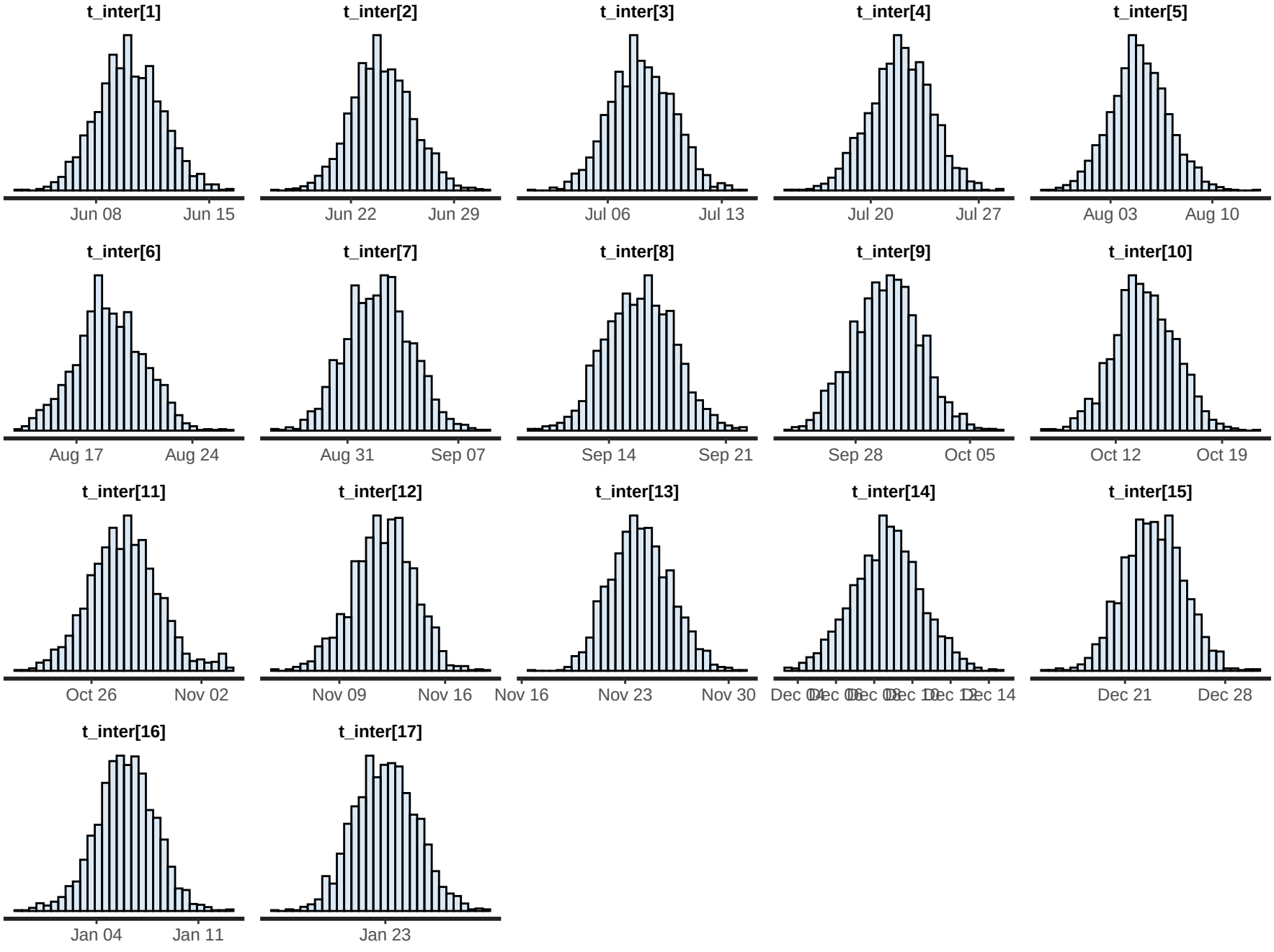
beta_multiplier[15]
0.8 1.0 1.2
beta_multiplier[16]
0.8 1.0 1.2
beta_multiplier[17]
0.4998 0.5000 0.5002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Jun 15
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Jul 13
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Aug 31
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Sep 28
Oct 05
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Oct 19
t_inter[11]
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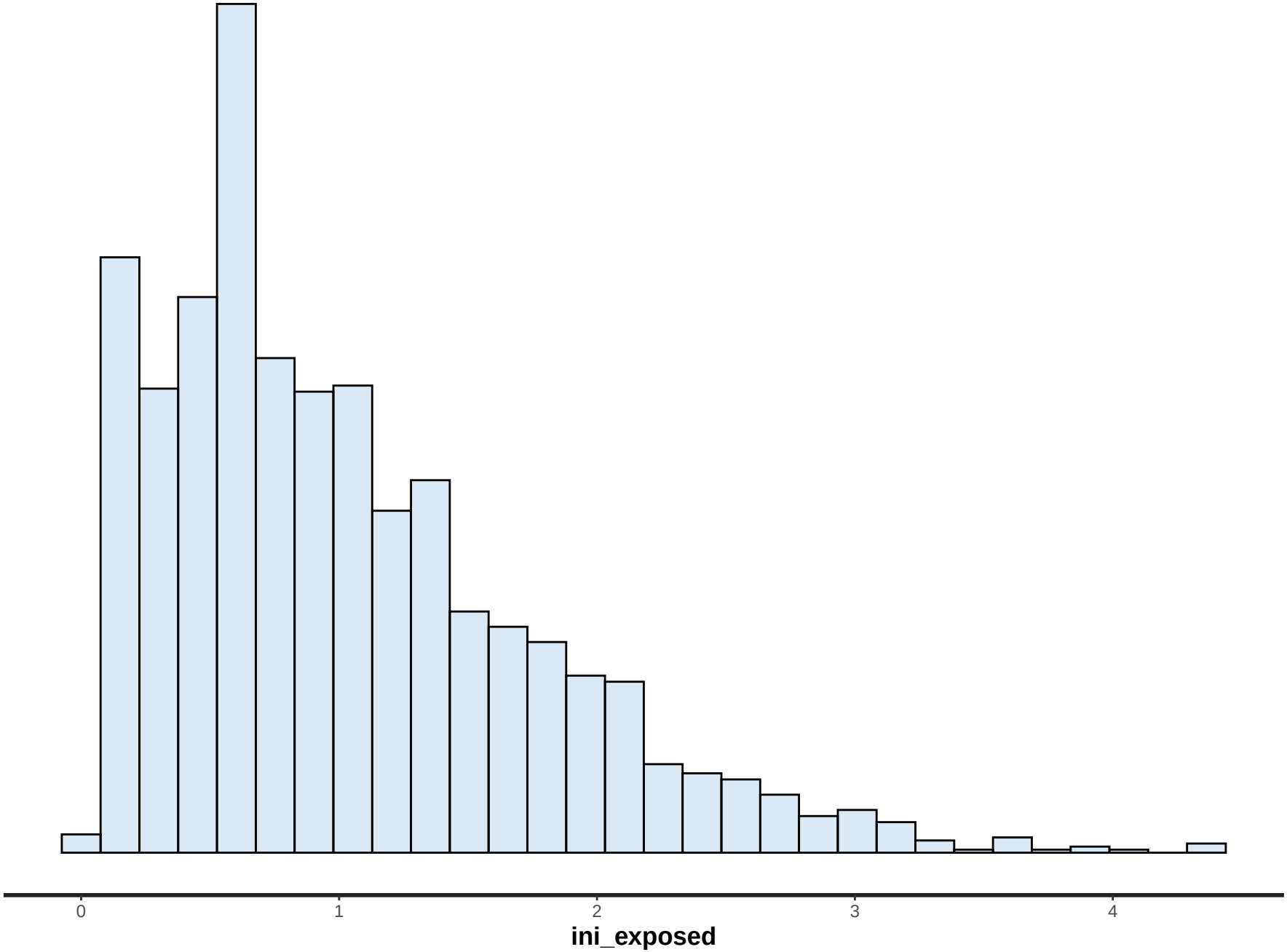
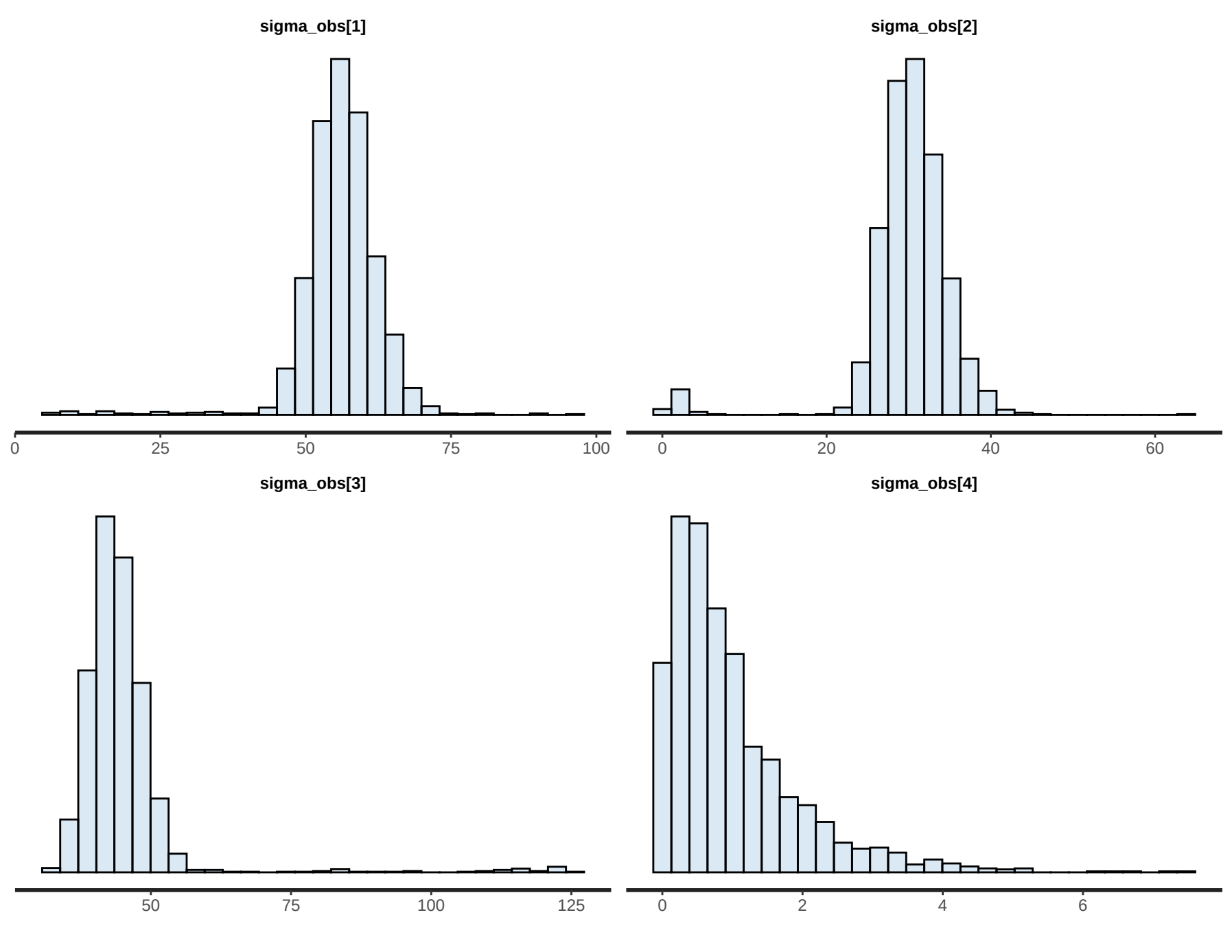
Nov 09
Nov 16
t_inter[13]
Nov 16
Nov 23
Nov 30
t_inter[14]
Dec 14
t_inter[15]
Dec 21
Dec 28
t_inter[16]
Jan 04
Jan 11
t_inter[17]
Jan 23


0
1
2
3
4
ini_exposed


sigma_obs[1]
0
25
50
75
100
sigma_obs[2]
0
20
40
60
sigma_obs[3]
50
75
100
125
sigma_obs[4]
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2
4
6