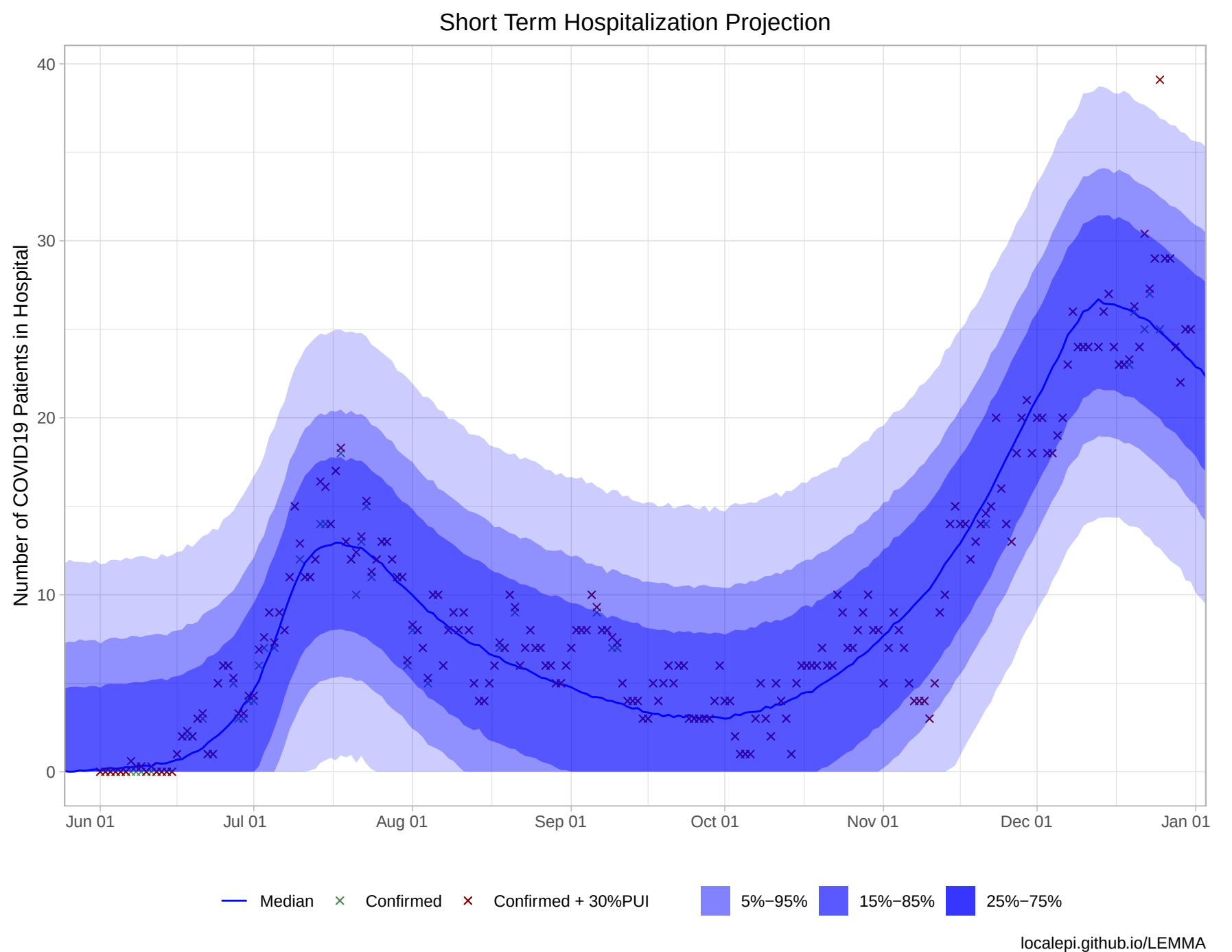
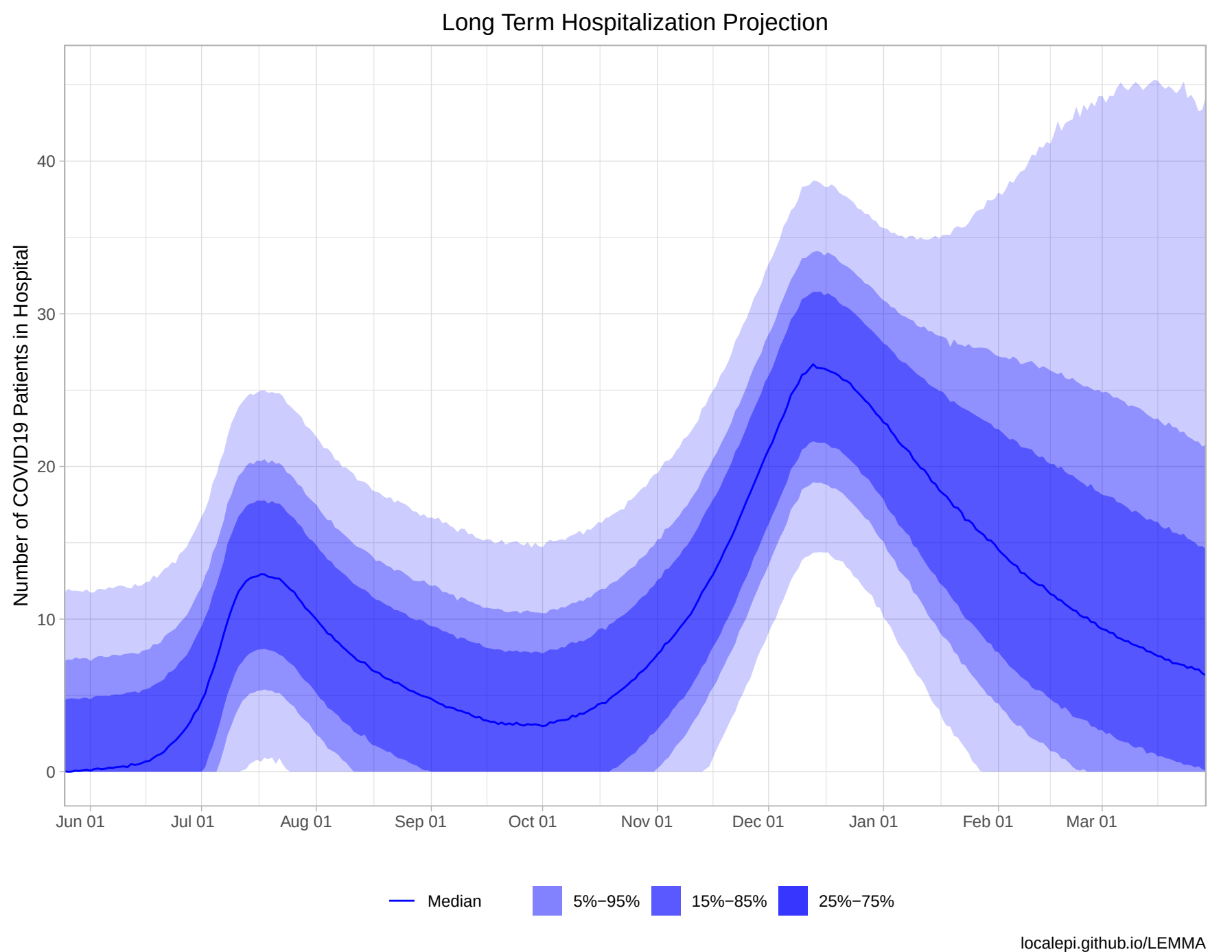
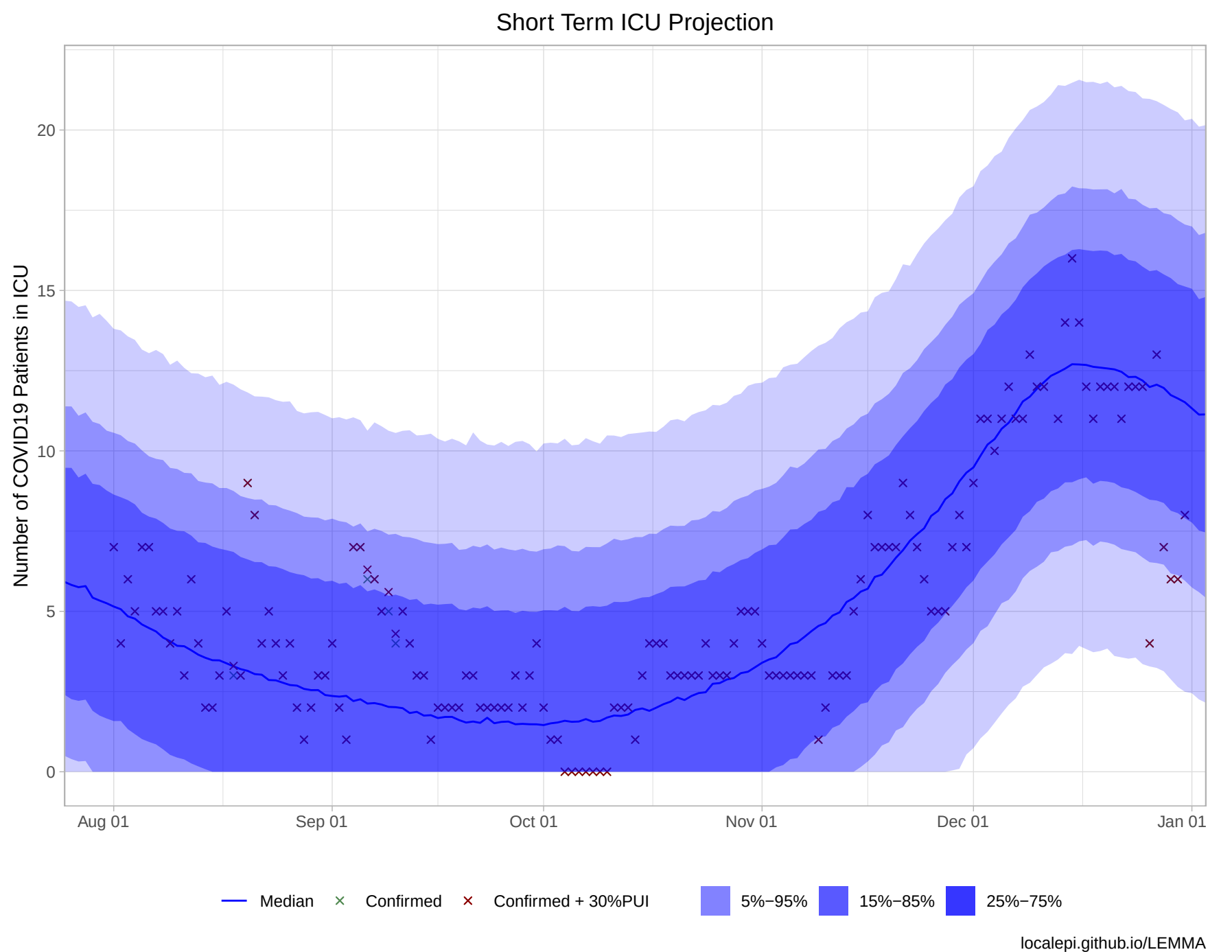
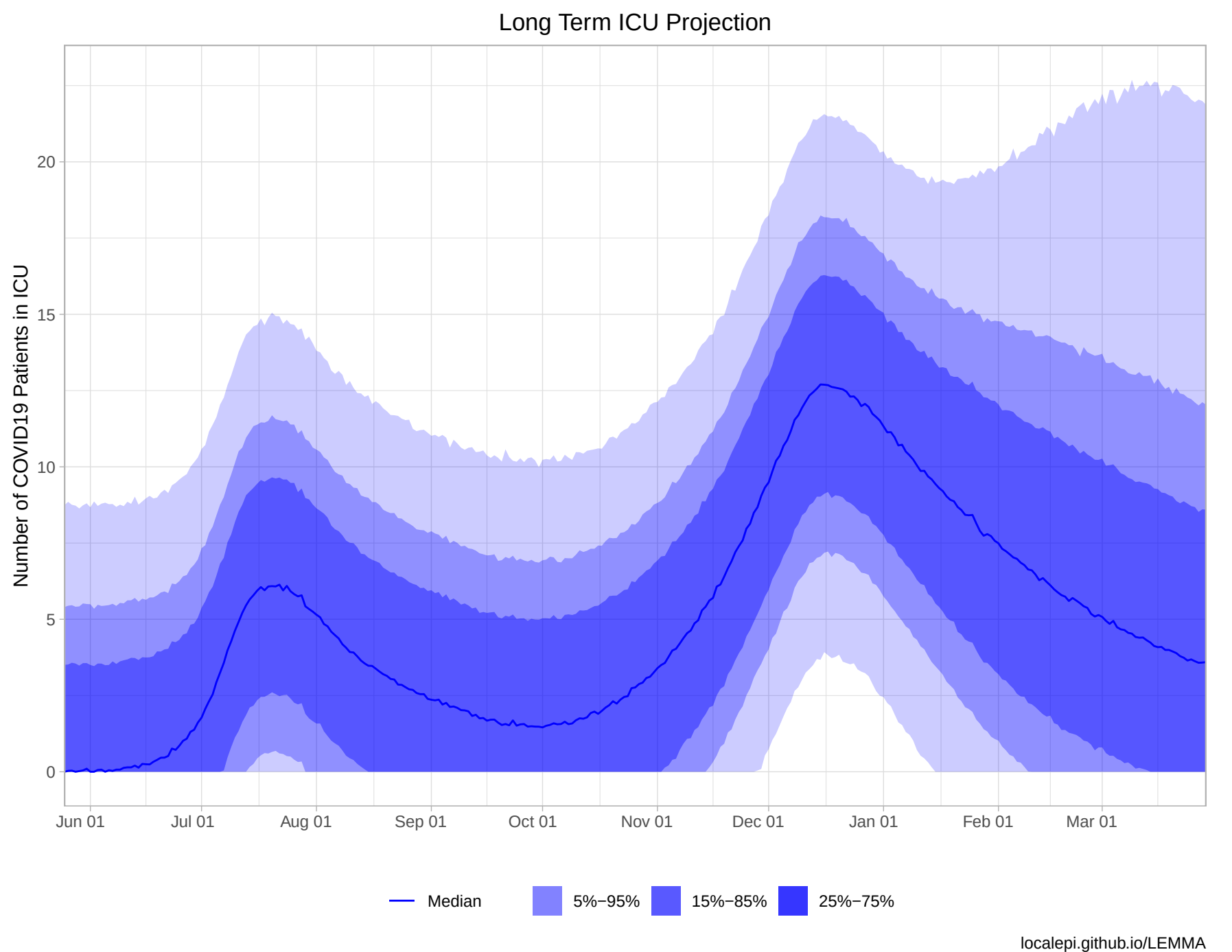
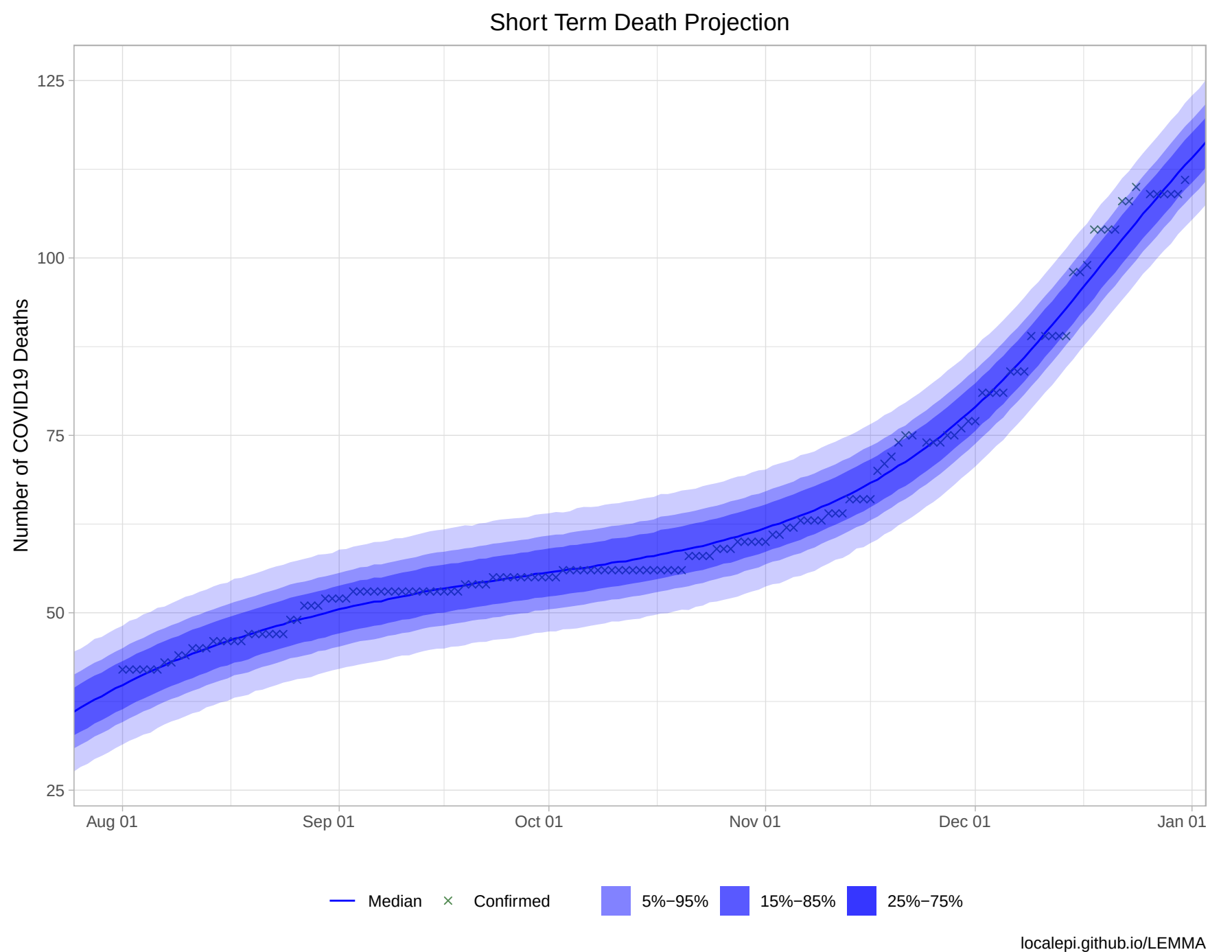
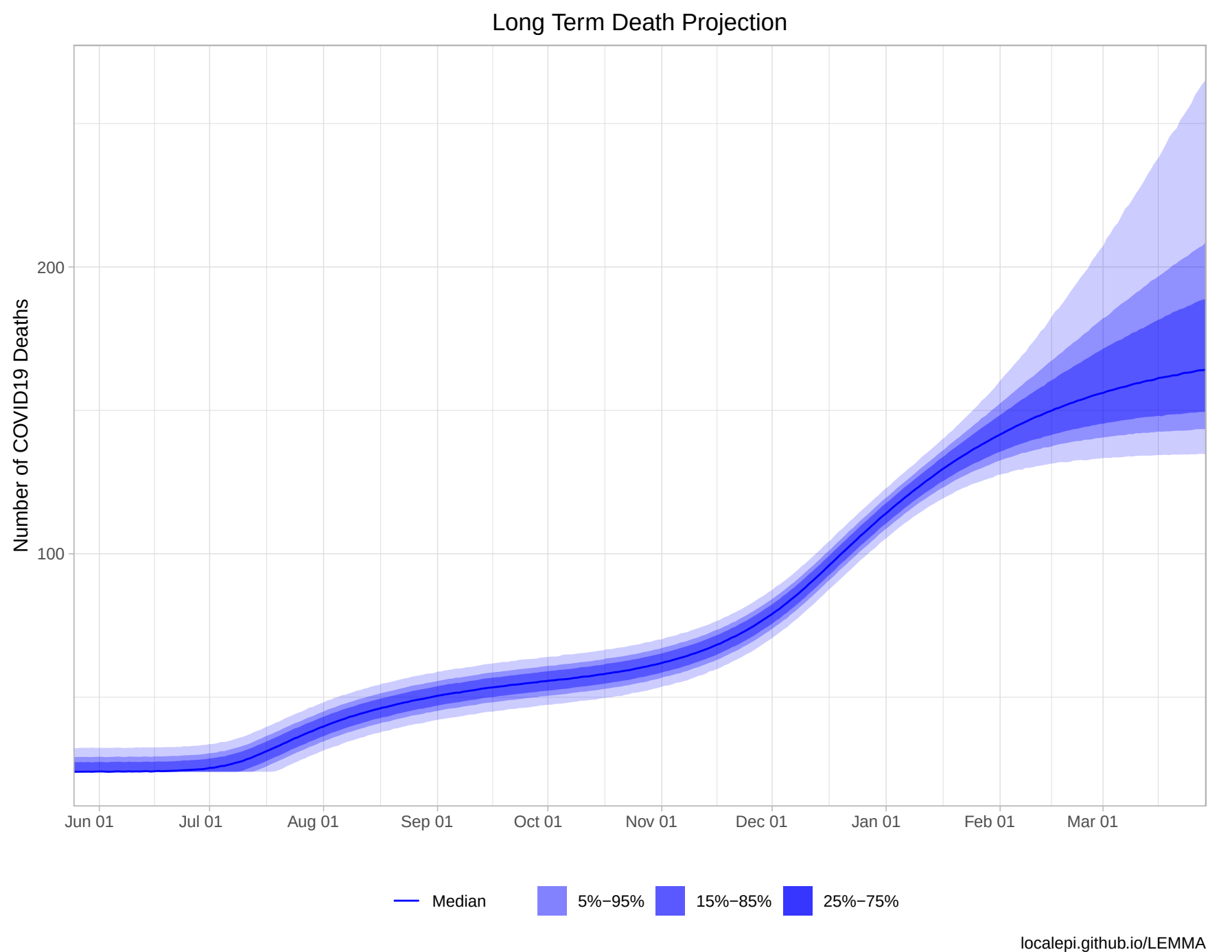

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
40
30
20
10
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

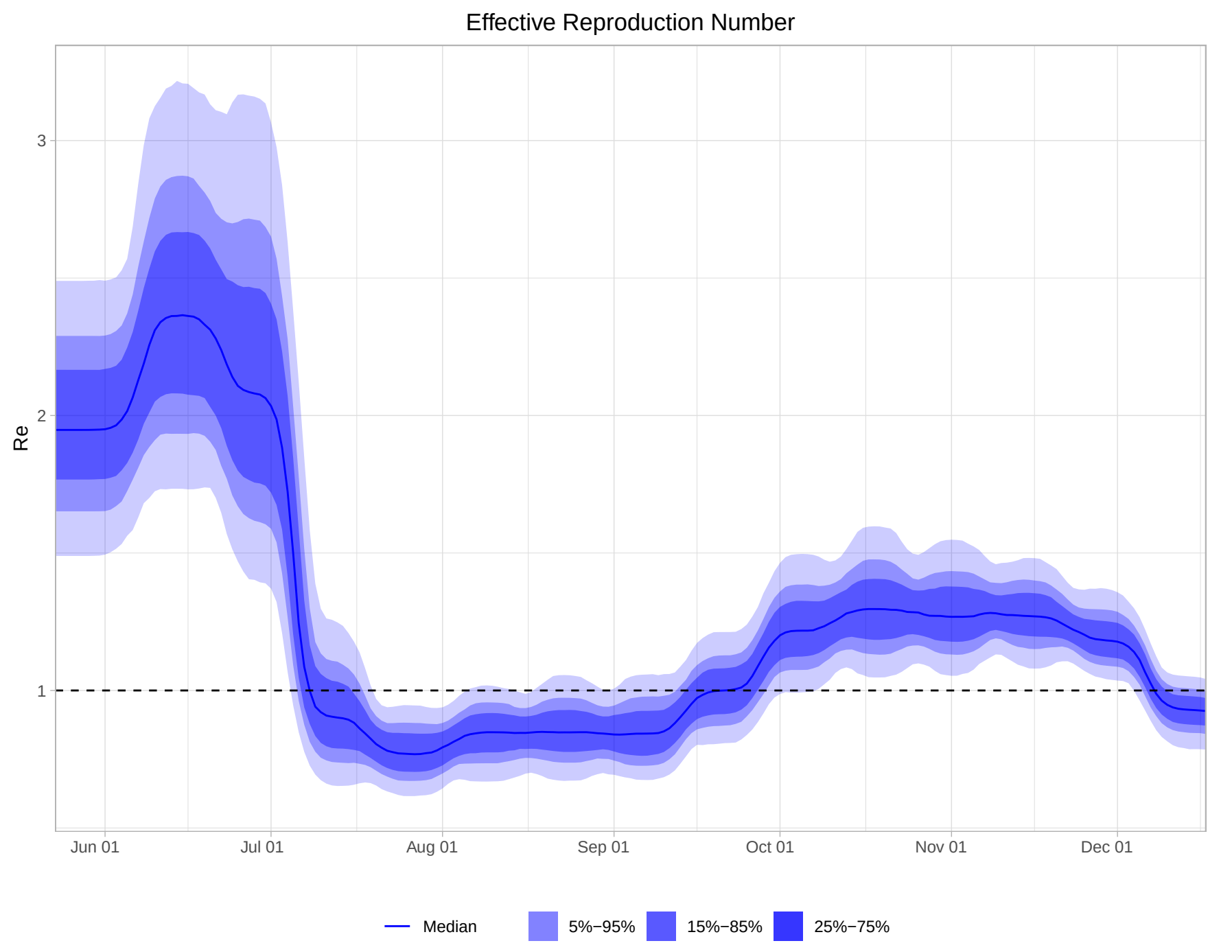

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
0
10
20
30
40
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


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
5
10
15
20
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

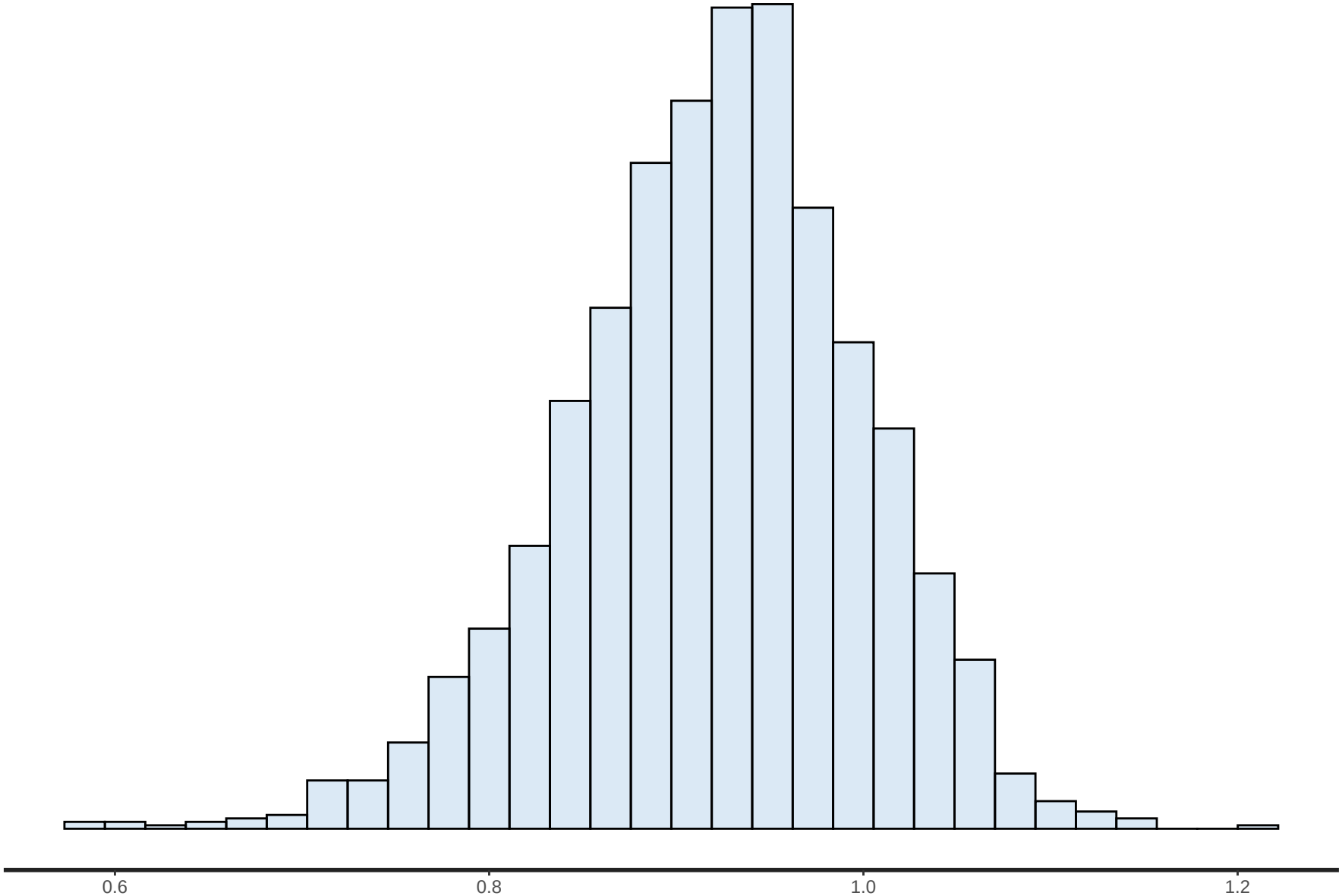

Short Term Death Projection
Number of COVID19 Deaths
125
100
75
50
25
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

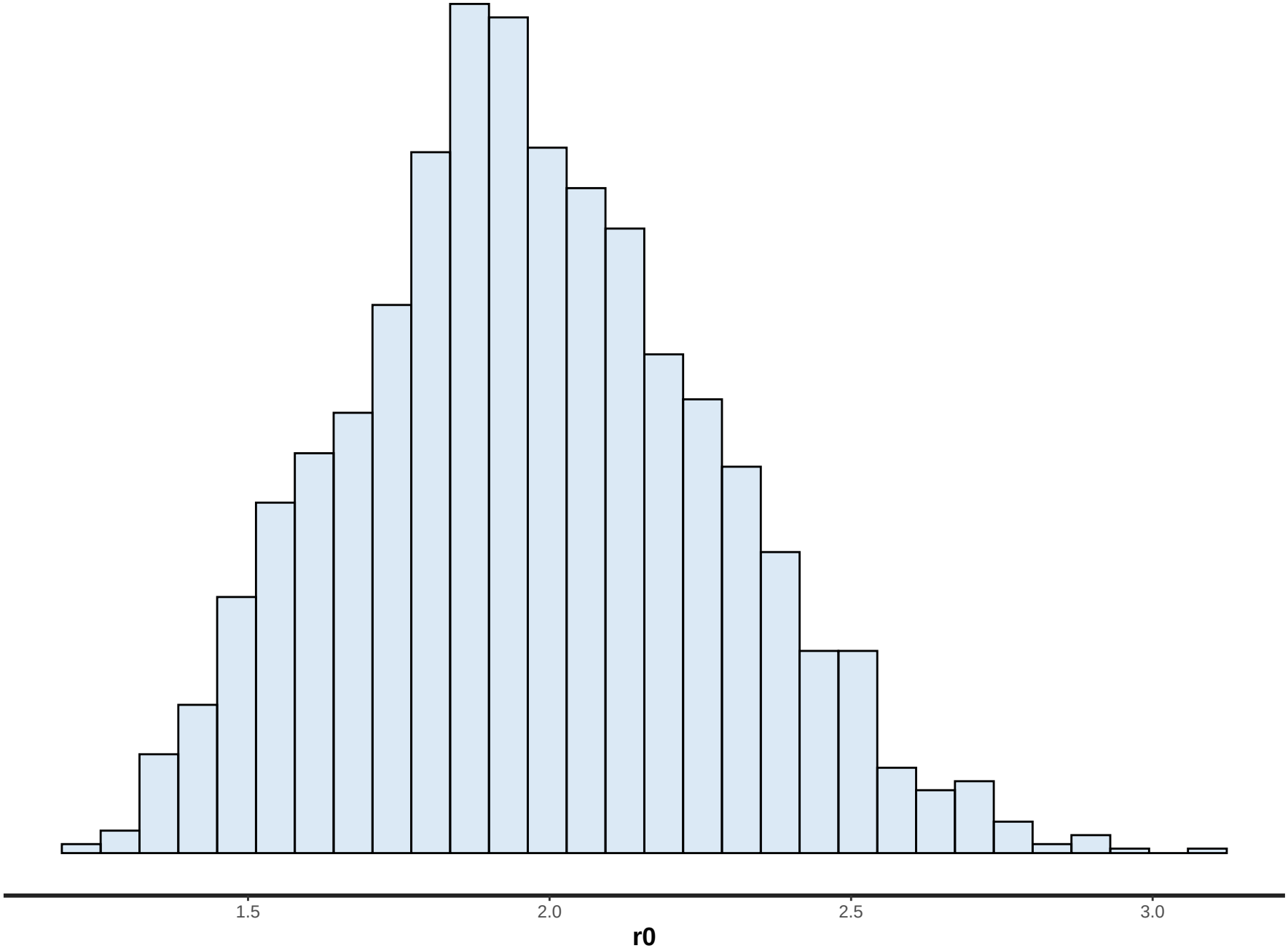

Long Term Death Projection
Number of COVID19 Deaths
200
100
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Effective Reproduction Number
Re
3
2
1
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Median
5%−95%
15%−85%
25%−75%

Rt as of 2020−12−17

5%	10%	25%	50%	75%	90%	95%
0.79	0.82	0.87	0.93	0.97	1.02	1.04

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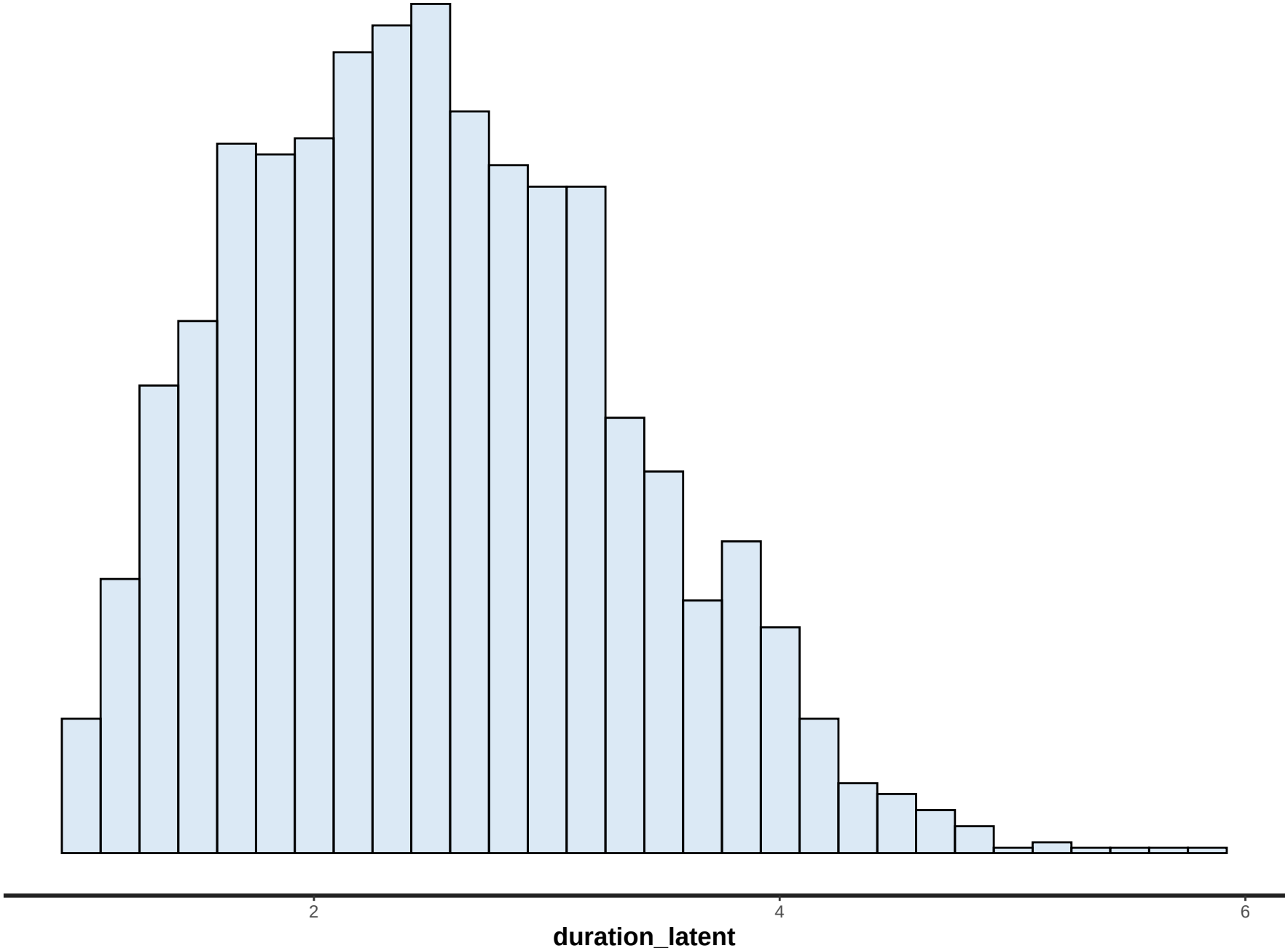
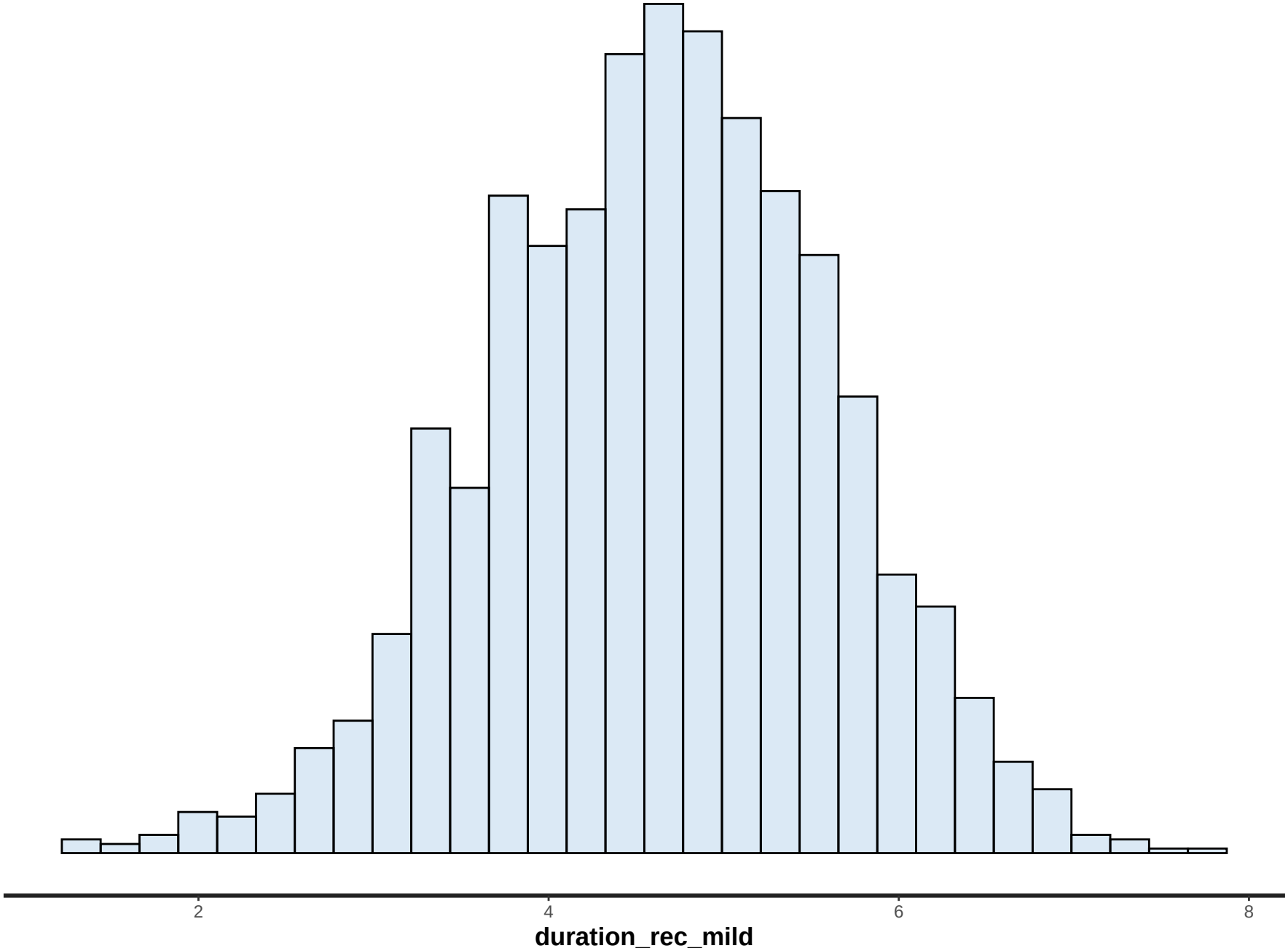
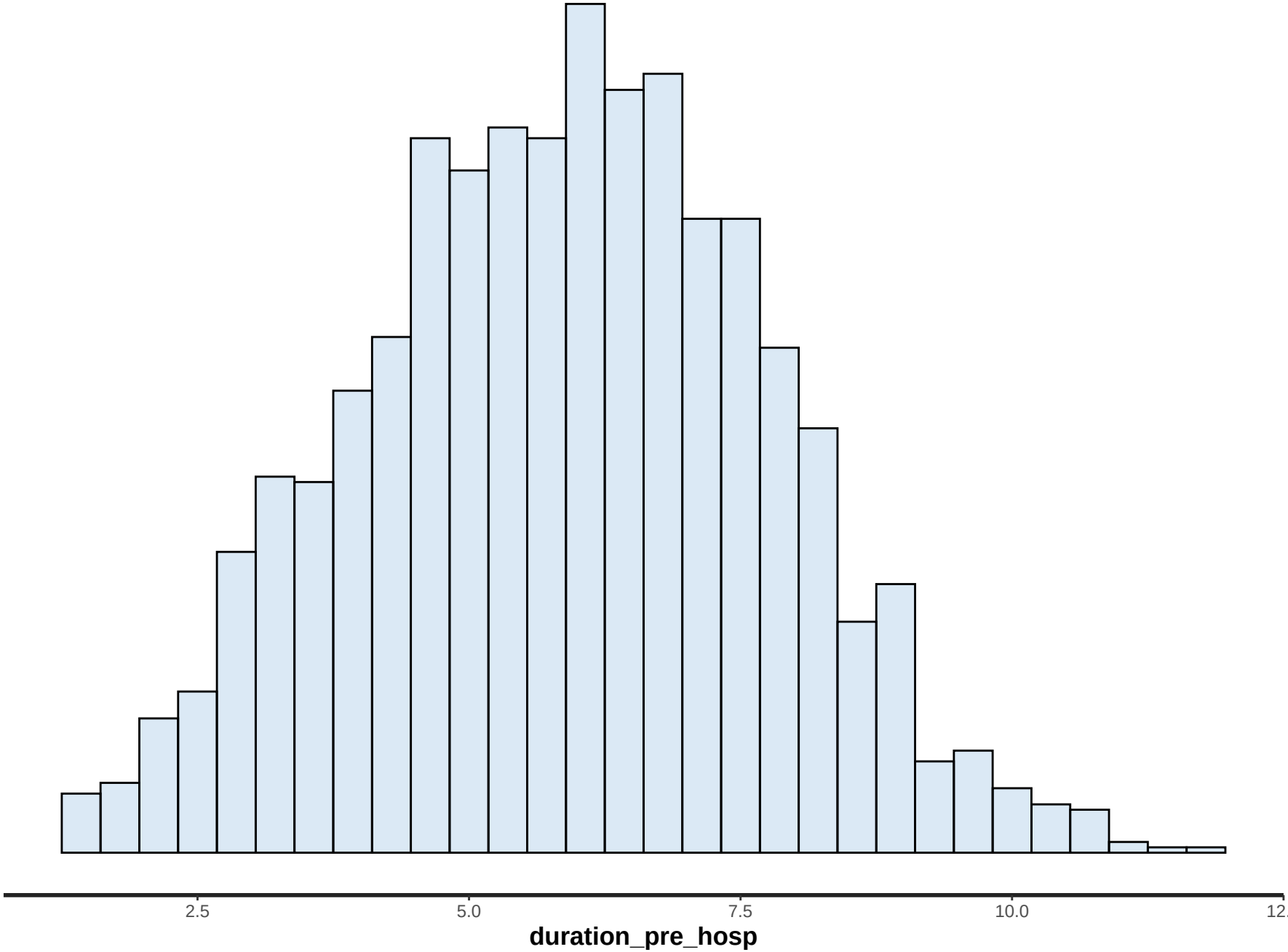
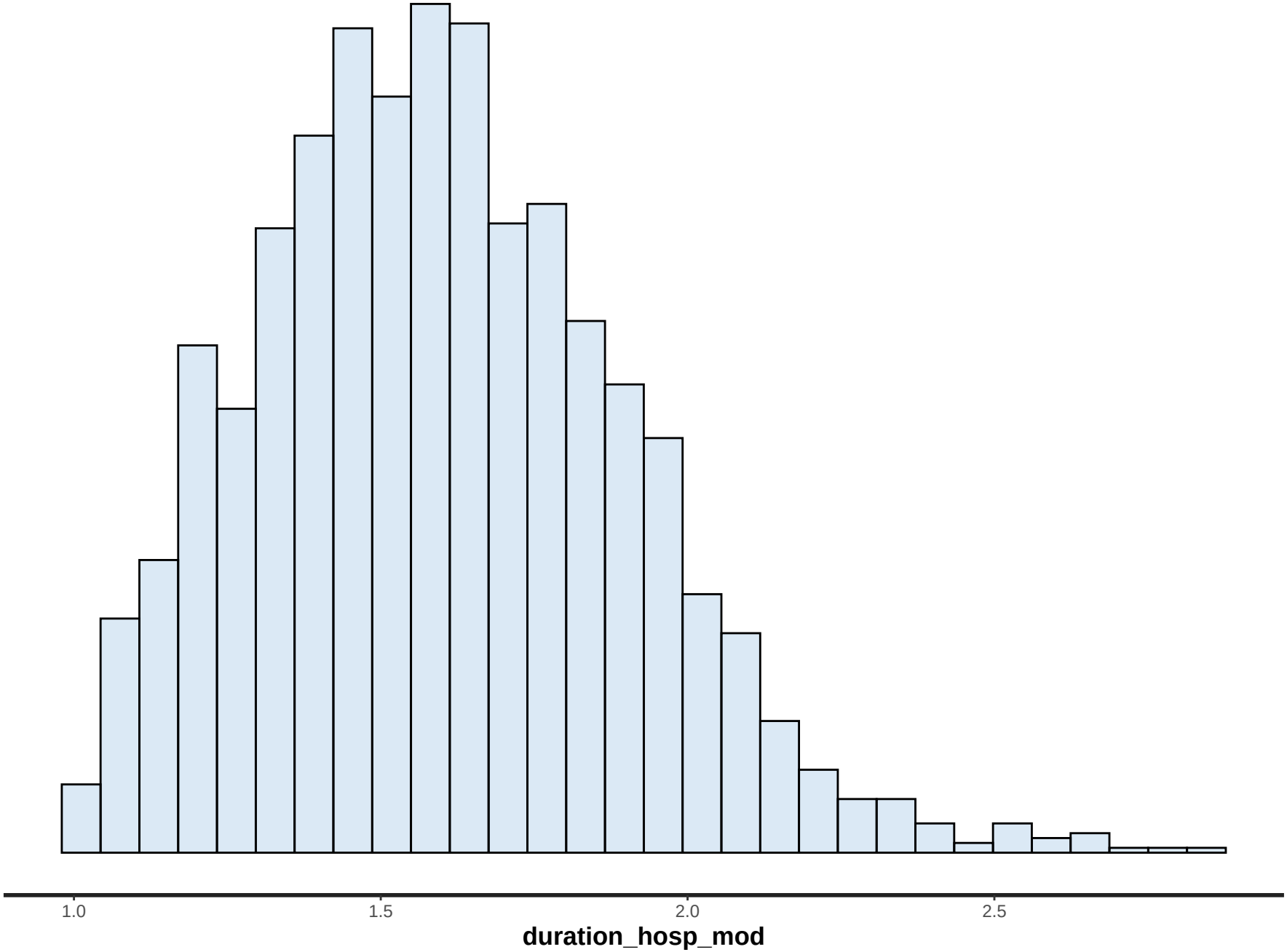
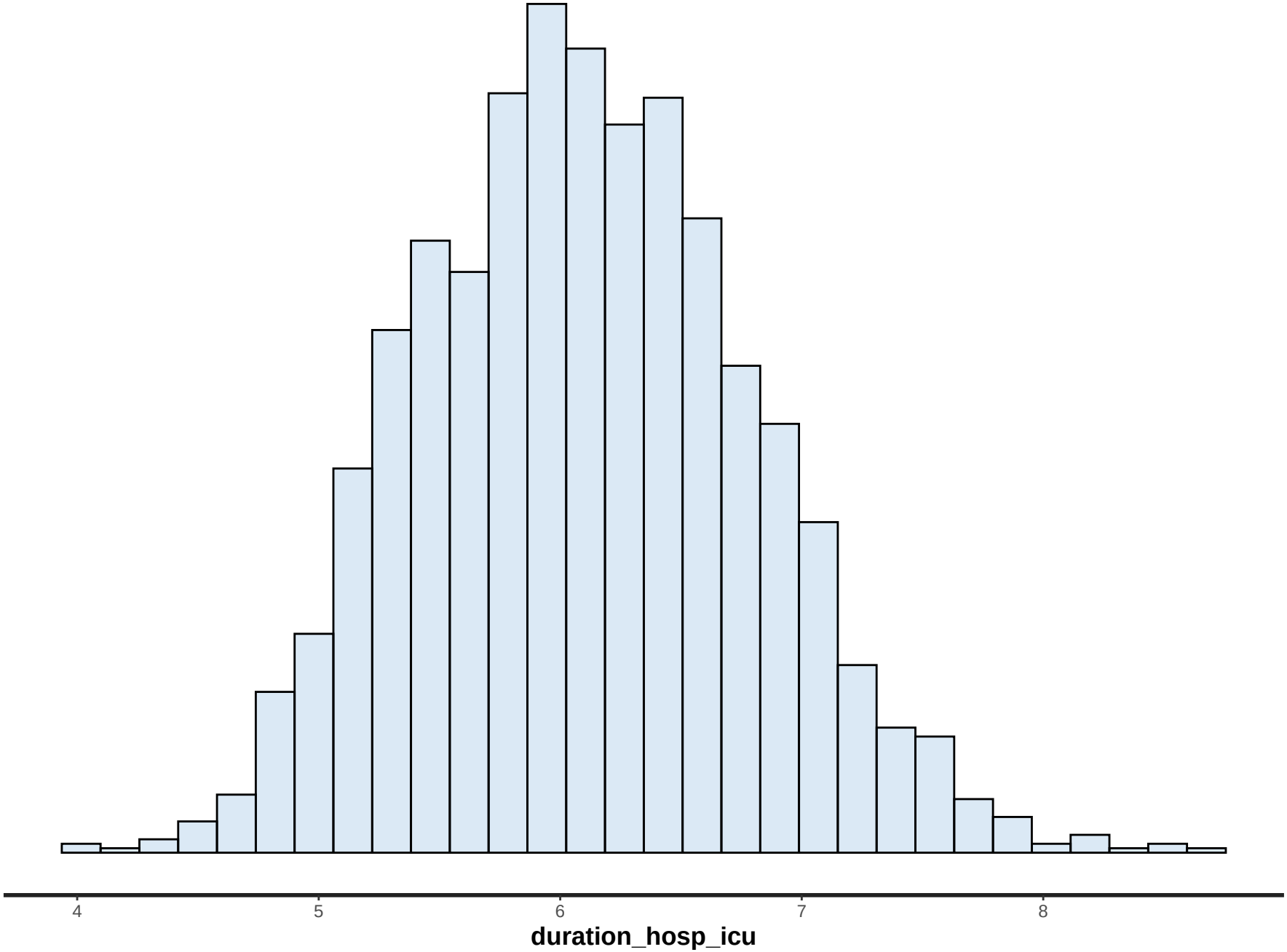
2.0
2.5
3.0
r0

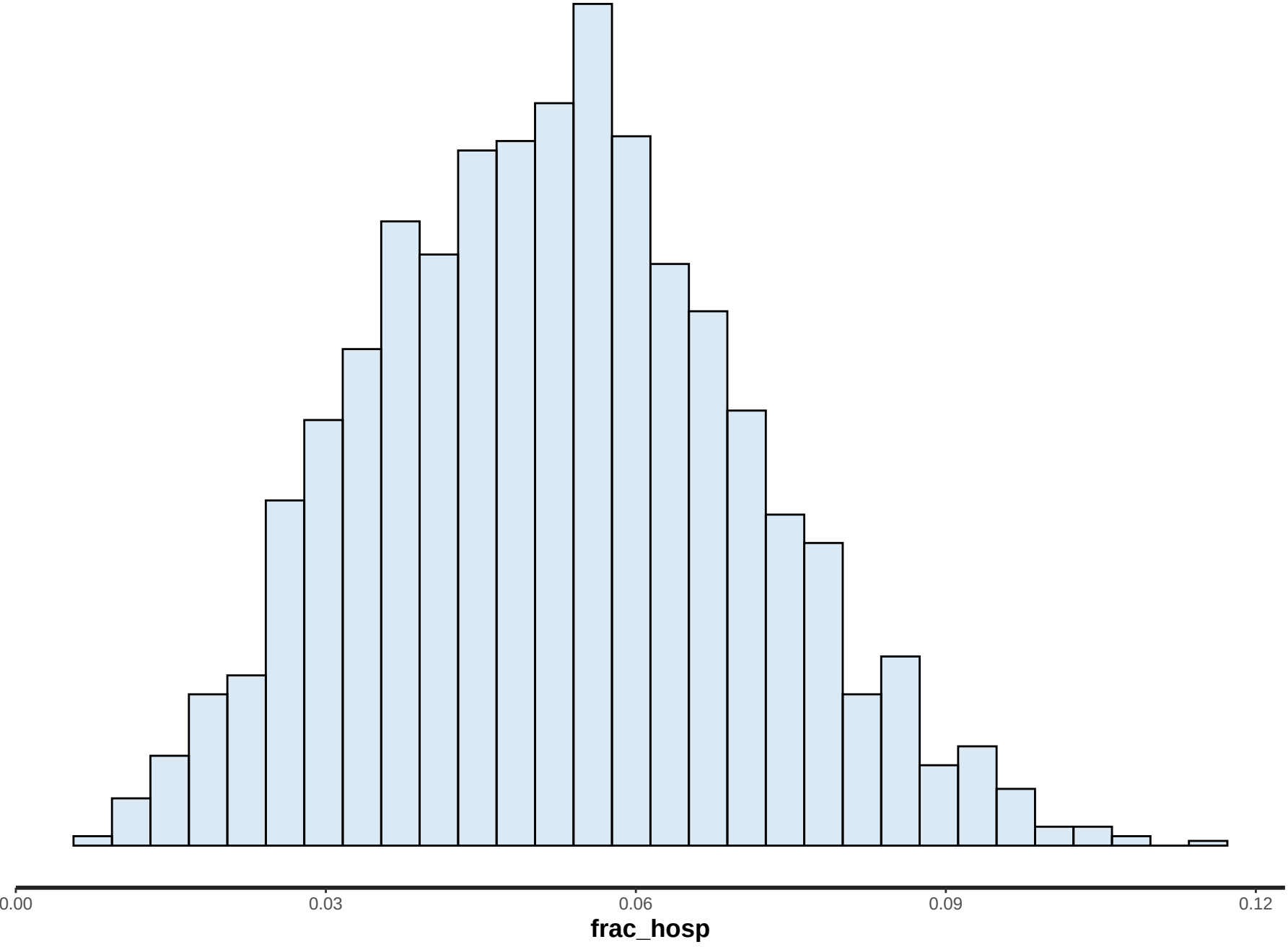

2
4
6
duration_latent

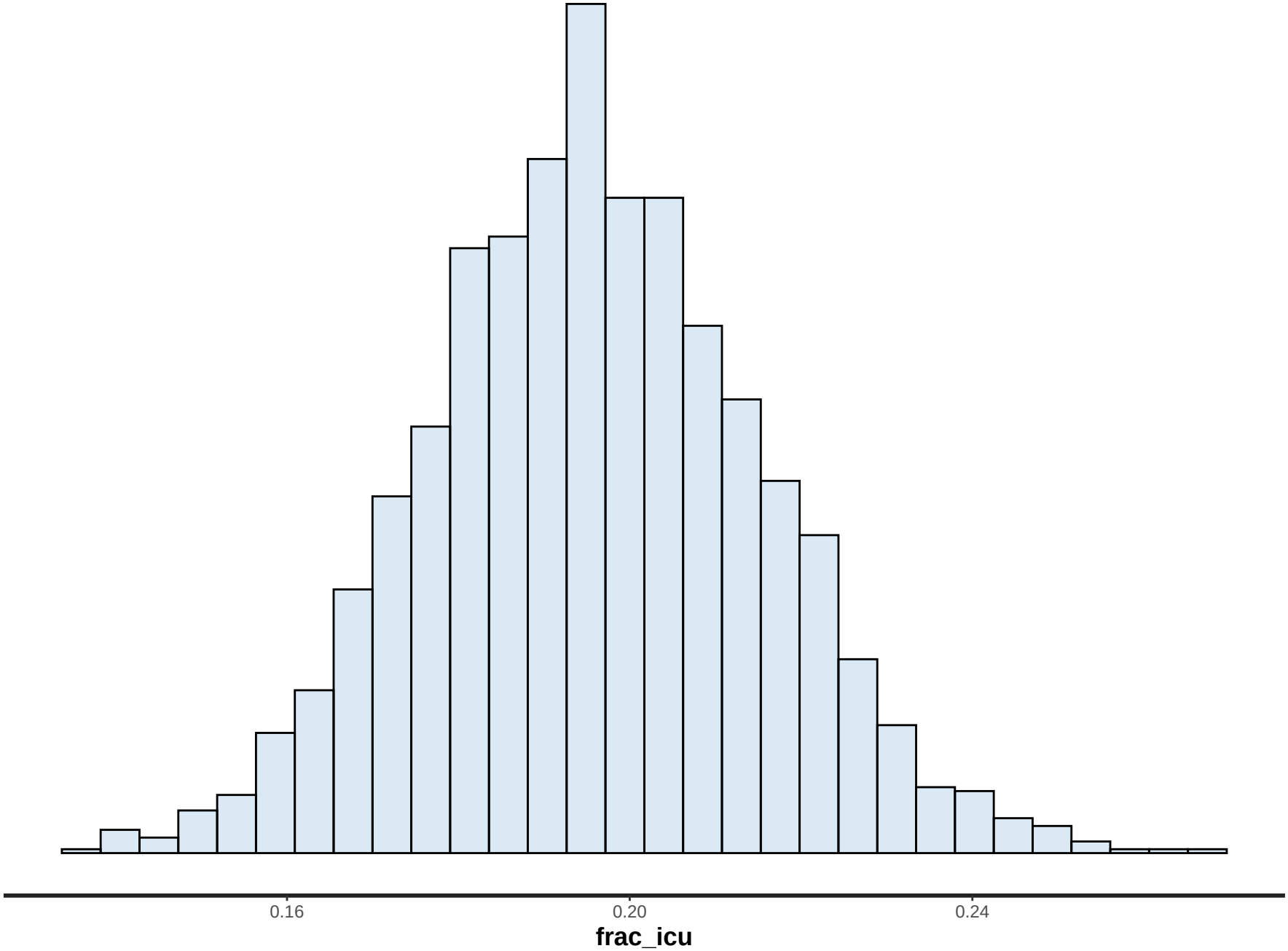

2
4
6
8
duration_rec_mild

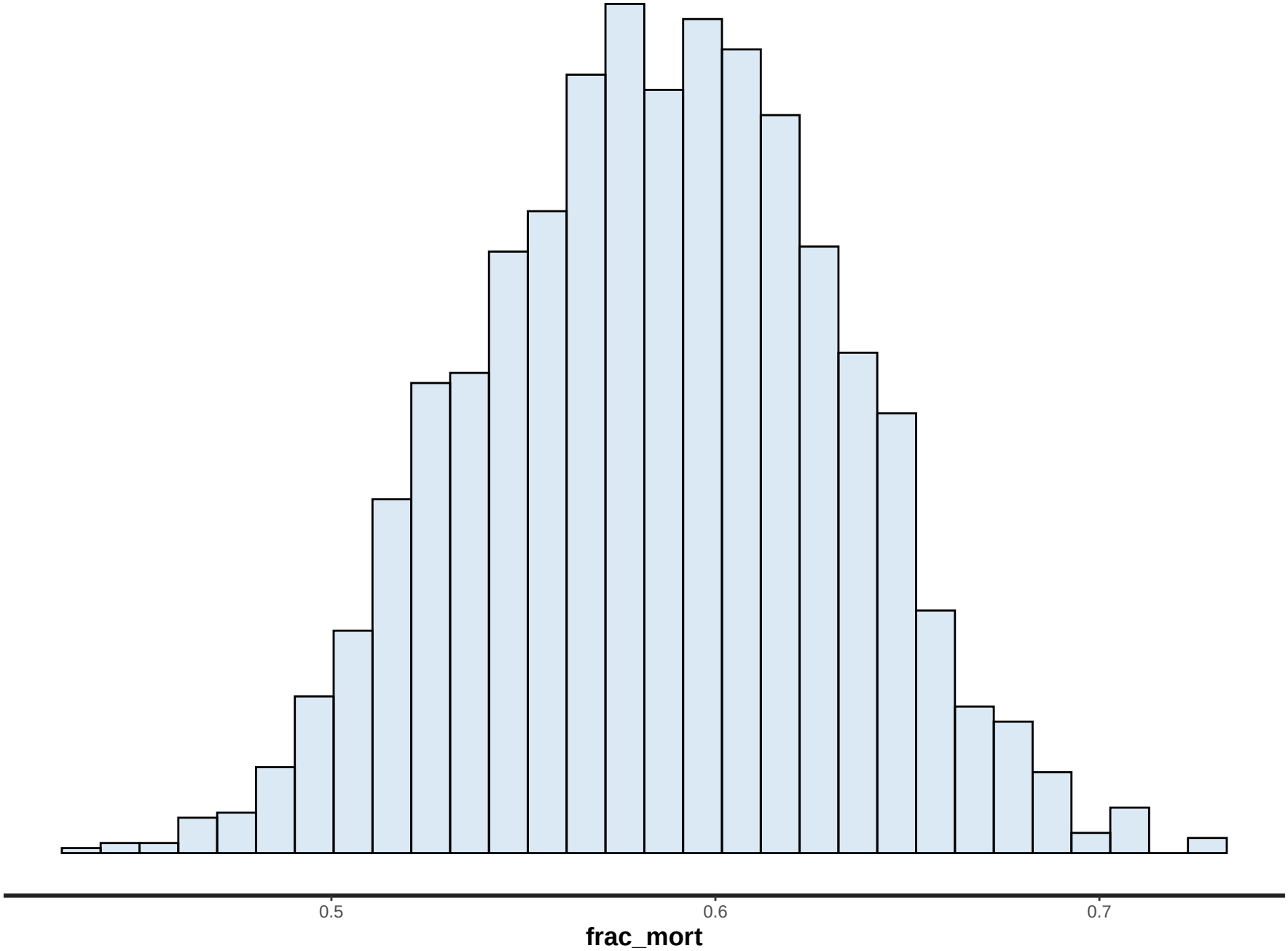

2.5
5.0
7.5
10.0
12.5
duration_pre_hosp

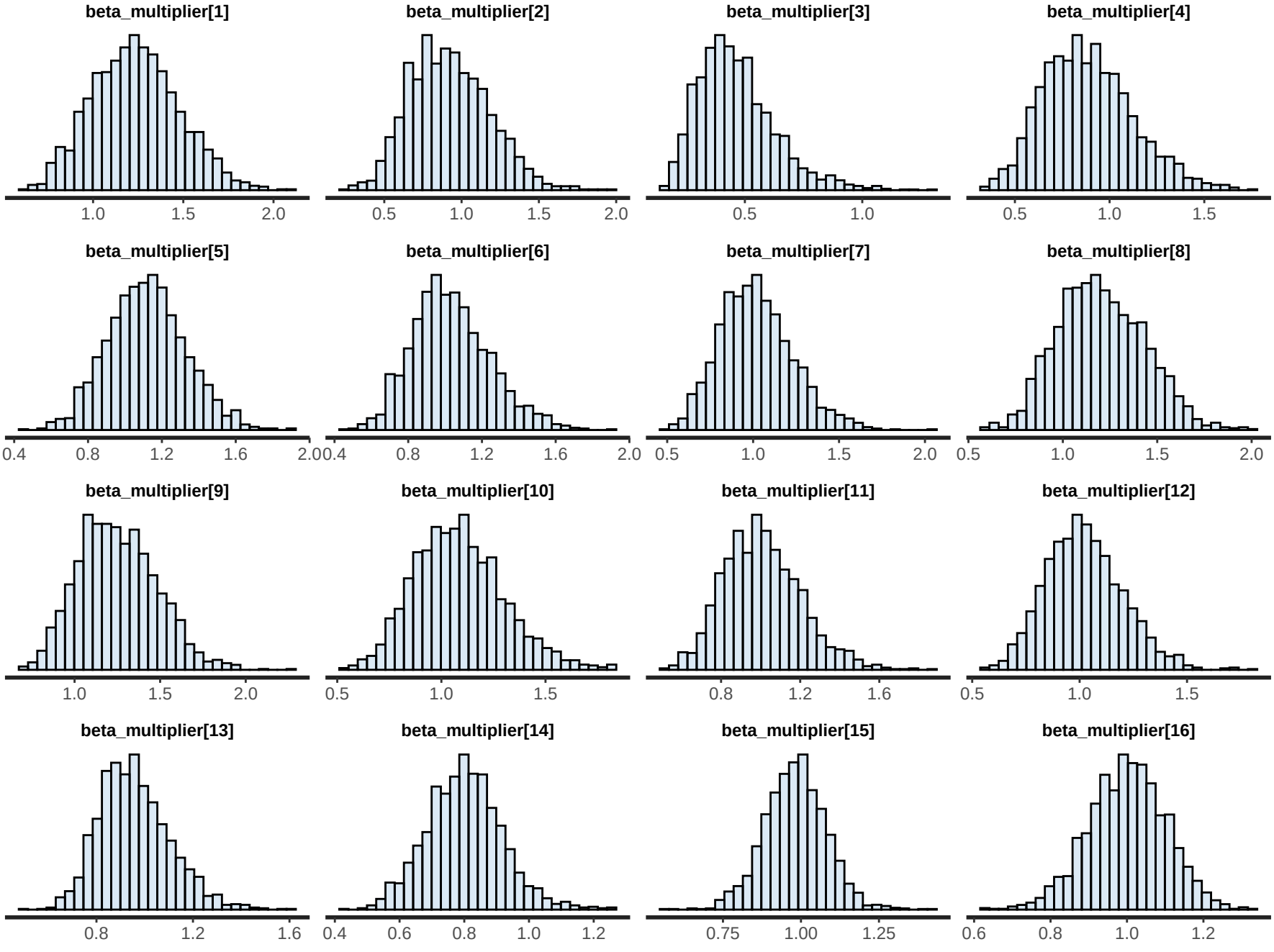

1.0
1.5
2.0
2.5
duration_hosp_mod


4
5
6
7
8
duration_hosp_icu


0.00
0.03
0.06
0.09
0.12
frac_hosp


0.16
0.20
0.24
frac_icu


0.5
0.6
0.7
frac_mort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beta_multiplier[2]
0.5 1.0 1.5 2.0
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0.5 1.0
beta_multiplier[4]
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beta_multiplier[5]
0.4 0.8 1.2 1.6 2.0
beta_multiplier[6]
0.4 0.8 1.2 1.6 2.0
beta_multiplier[7]
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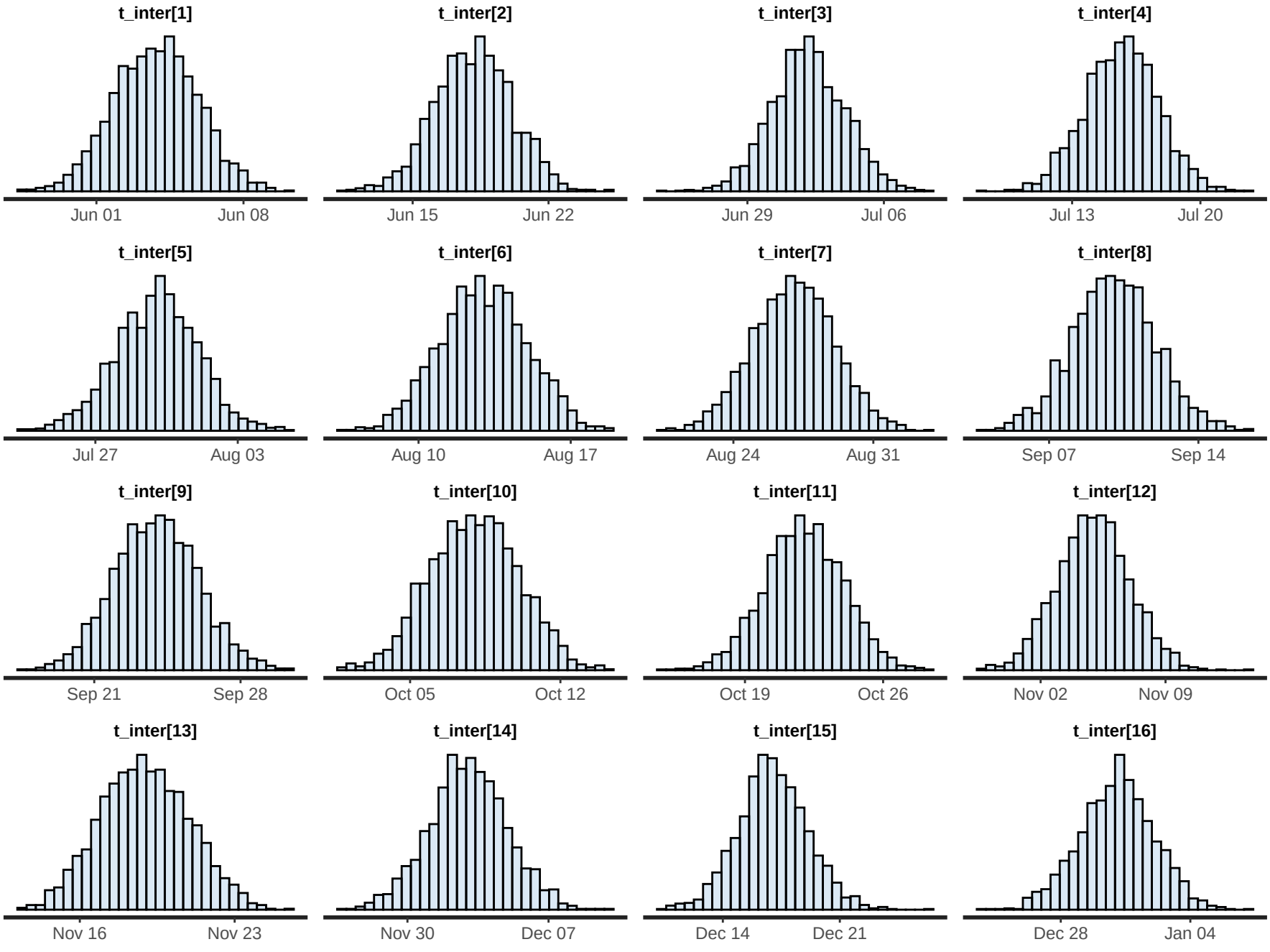
beta_multiplier[8]
0.5 1.0 1.5 2.0
beta_multiplier[9]
1.0 1.5 2.0
beta_multiplier[10]
0.5 1.0 1.5
beta_multiplier[11]
0.8 1.2 1.6
beta_multiplier[12]
0.5 1.0 1.5
beta_multiplier[13]
0.8 1.2 1.6
beta_multiplier[14]
0.4 0.6 0.8 1.0 1.2
beta_multiplier[15]
0.75 1.00 1.25
beta_multiplier[16]
0.6 0.8 1.0 1.2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Jun 01
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Jun 15
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Jul 13
Jul 20
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Oct 19
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Nov 02
Nov 09
t_inter[13]
Nov 16
Nov 23
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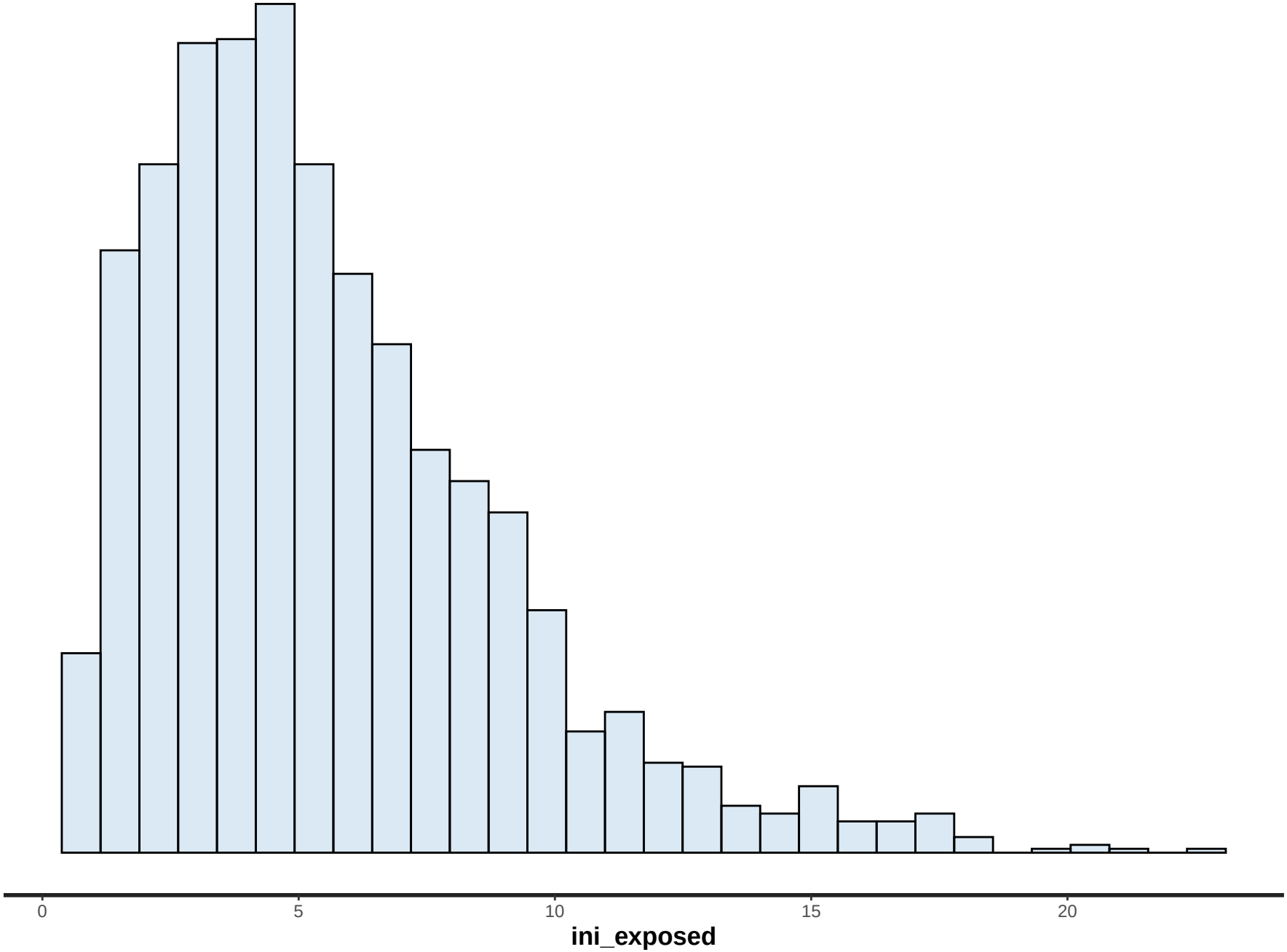
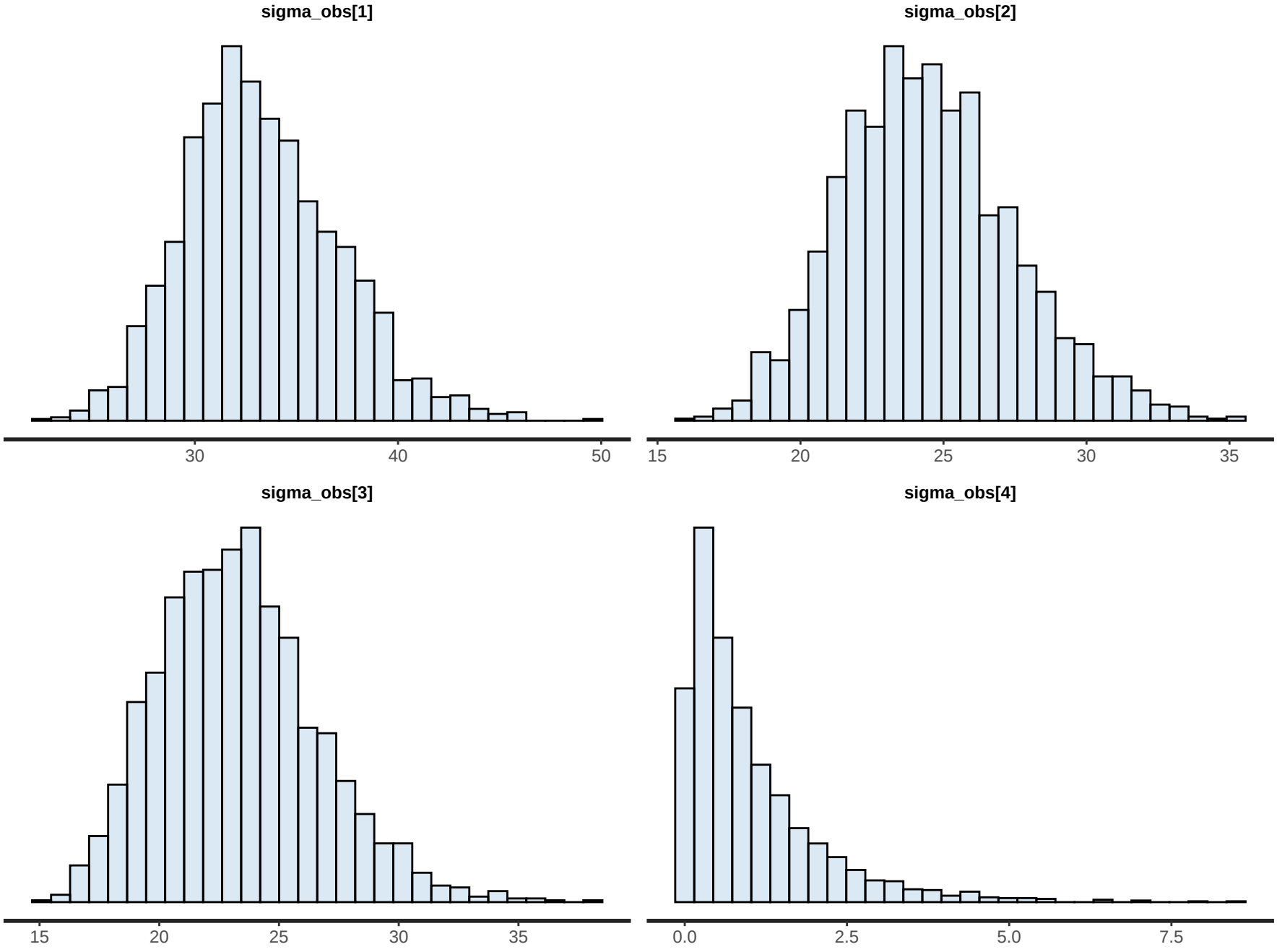
Nov 30
Dec 07
t_inter[15]
Dec 14
Dec 21
t_inter[16]
Dec 28
Jan 04


0
5
10
15
20
ini_exposed


sigma_obs[1]
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50
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sigma_obs[3]
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sigma_obs[4]
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2.5
5.0
7.5