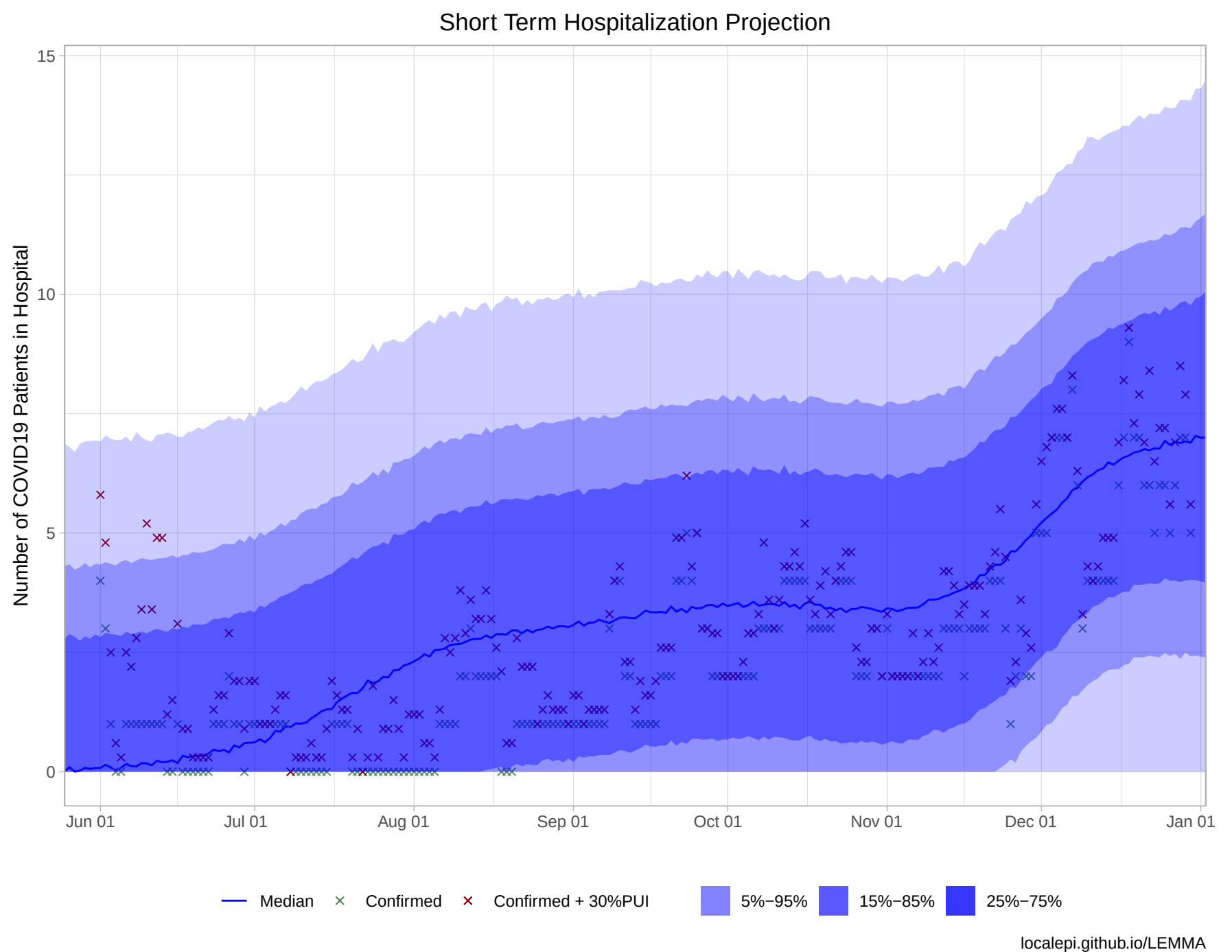
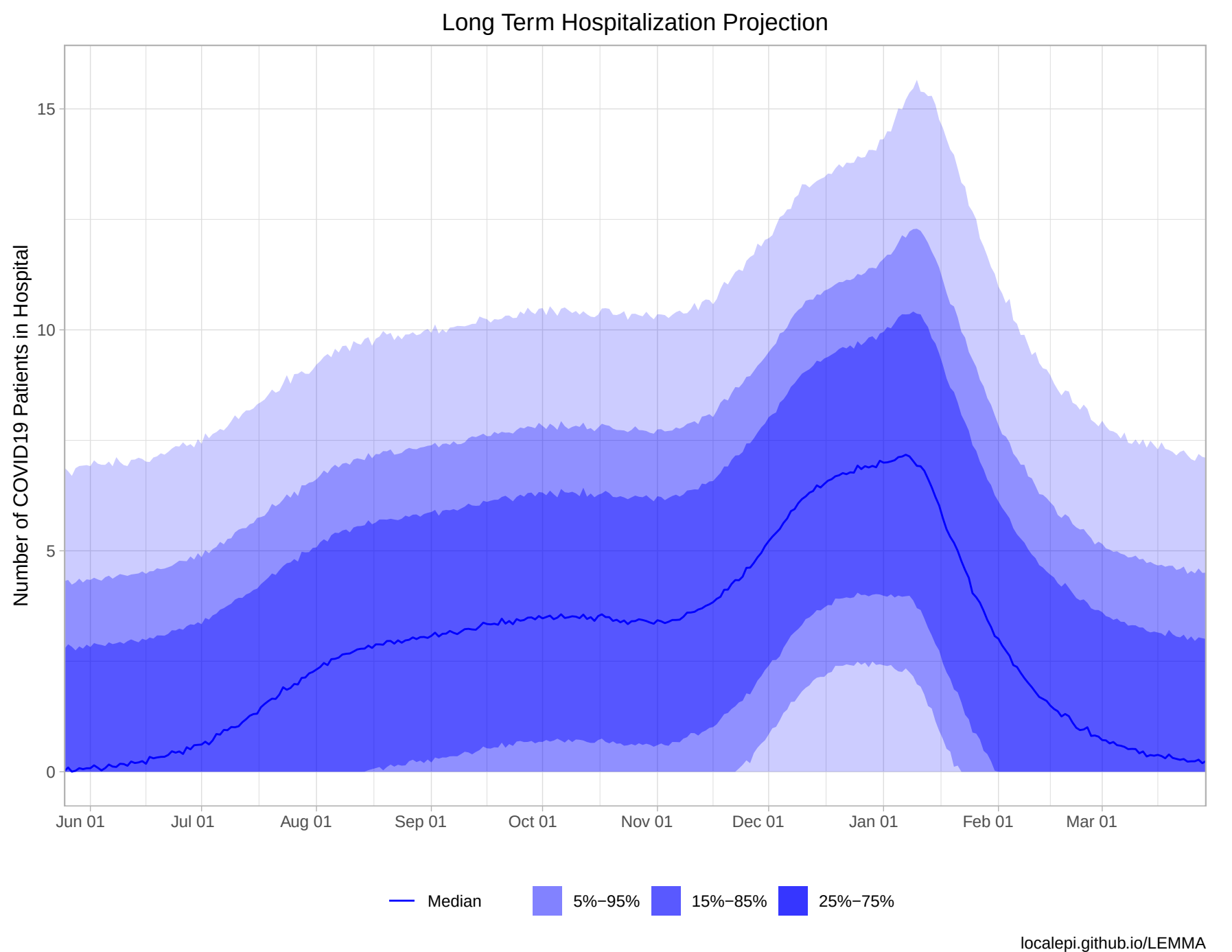
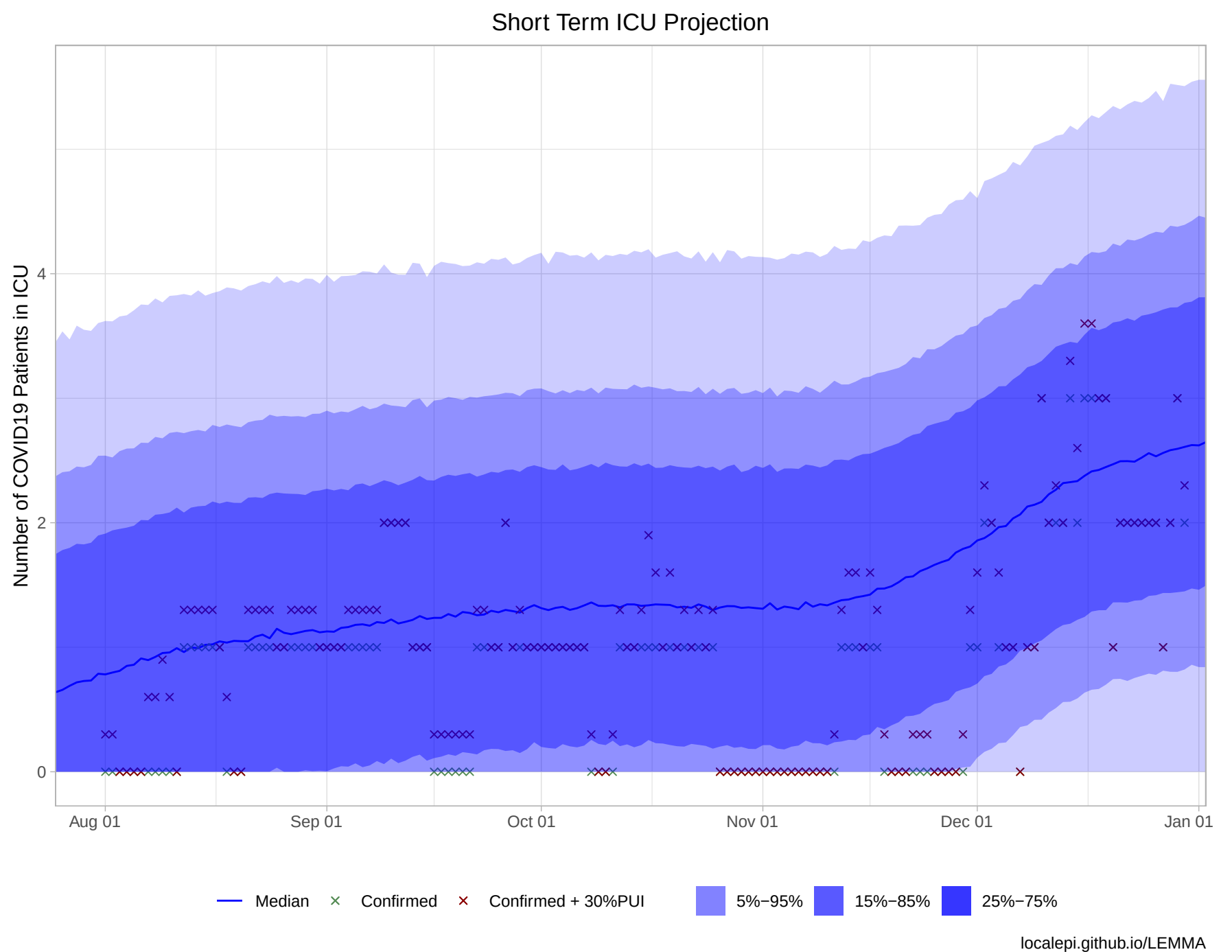
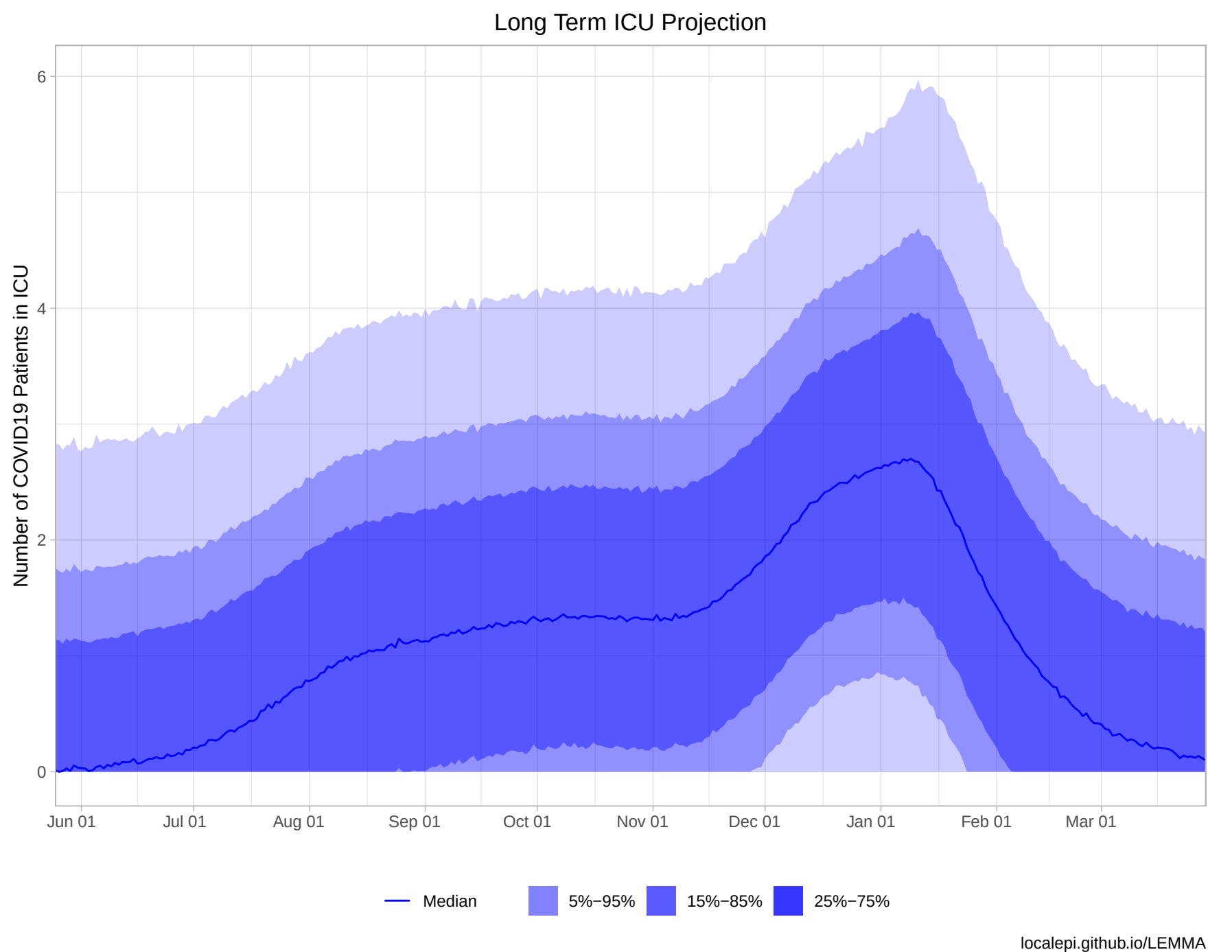
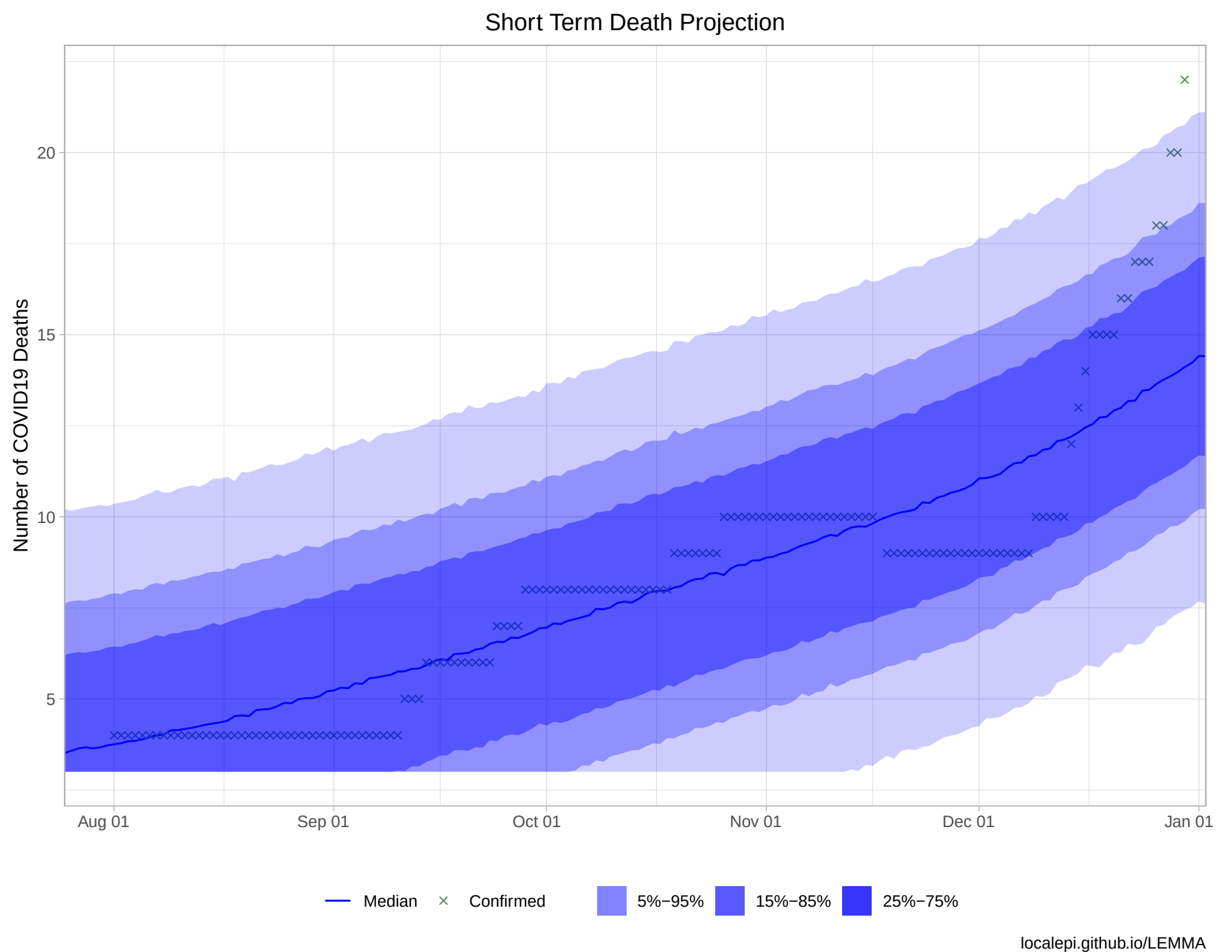
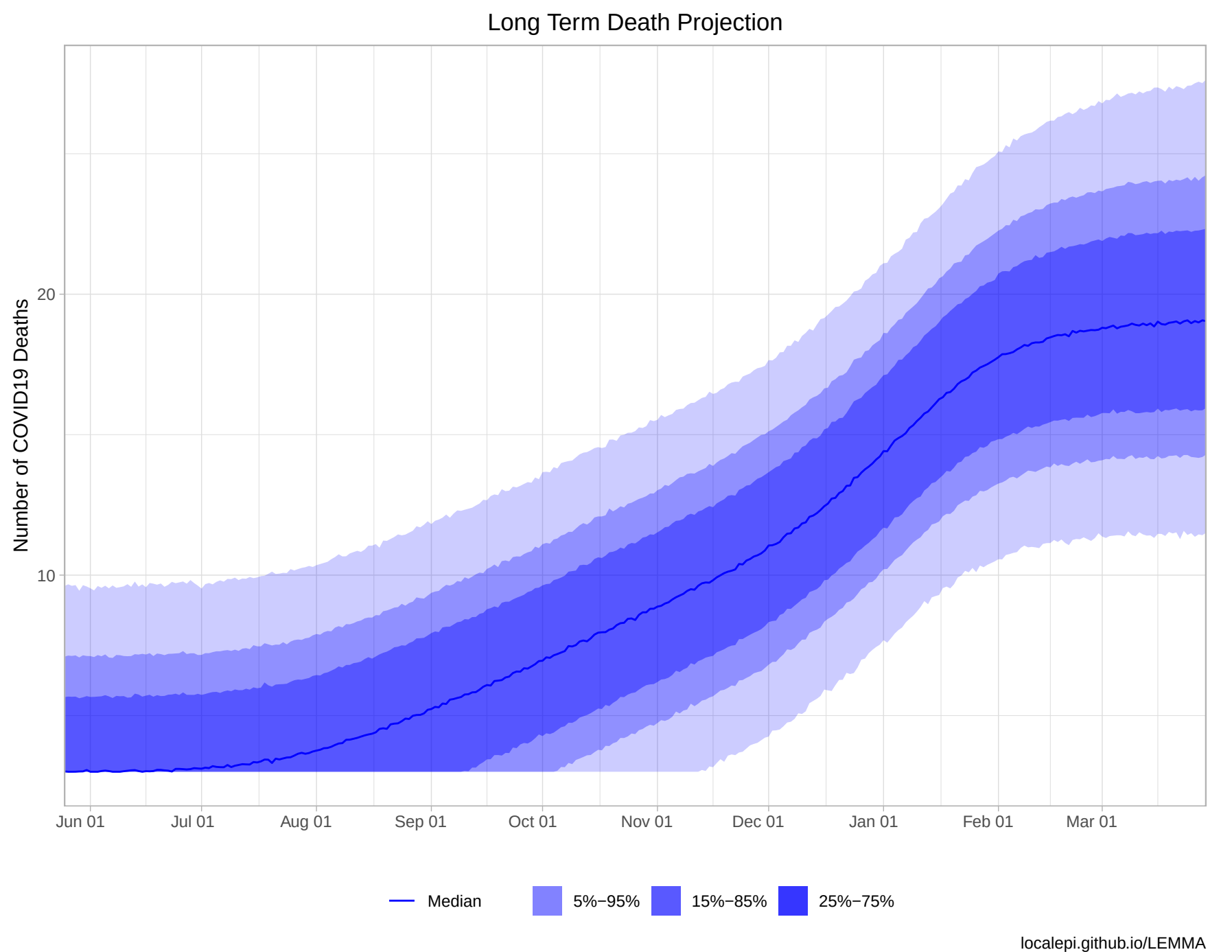

Short Term Hospitalization Projection
Number of COVID19 Patients in Hospital
15
10
5
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
Confirmed + 30%PUI
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

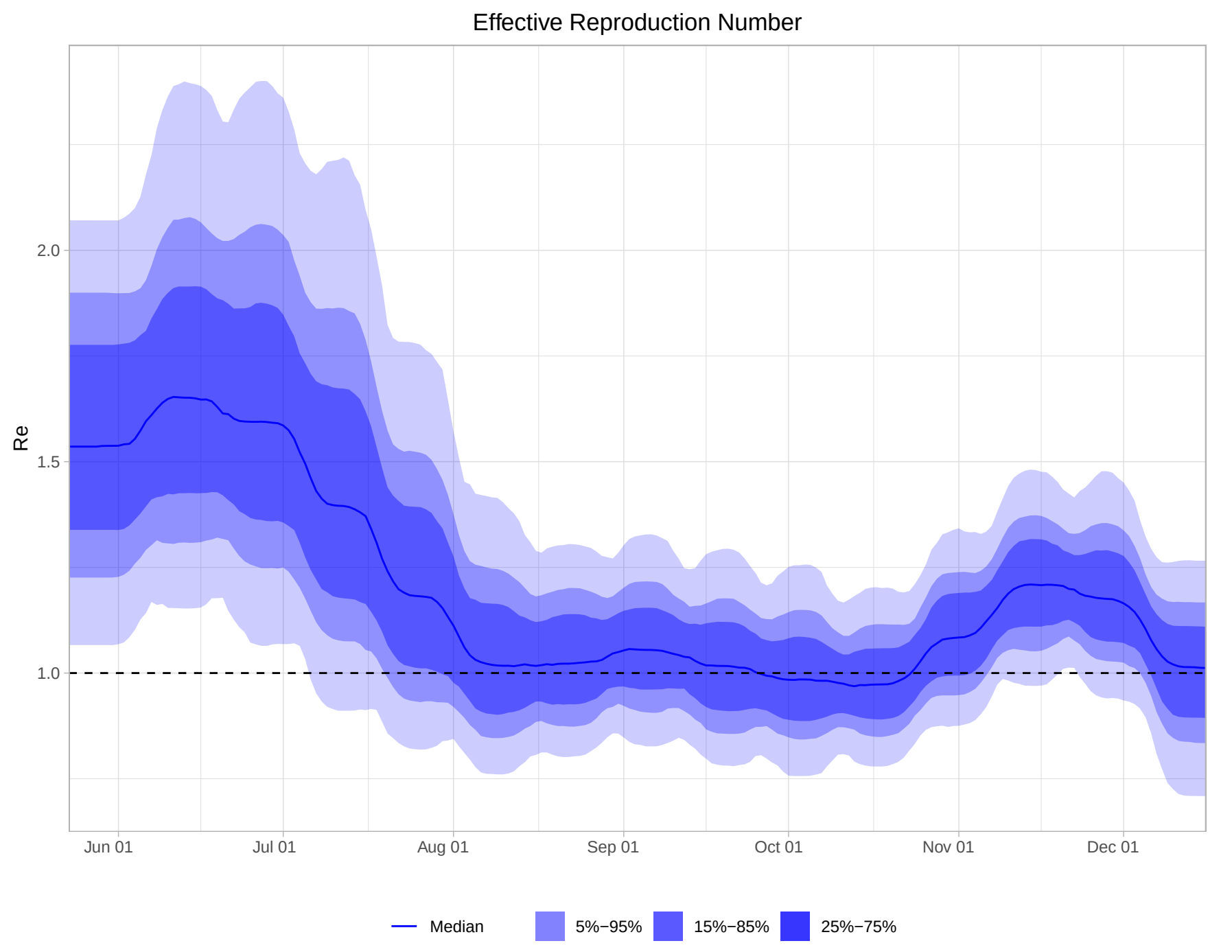

Long Term Hospitalization Projection
Number of COVID19 Patients in Hospital
15
10
5
0
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


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

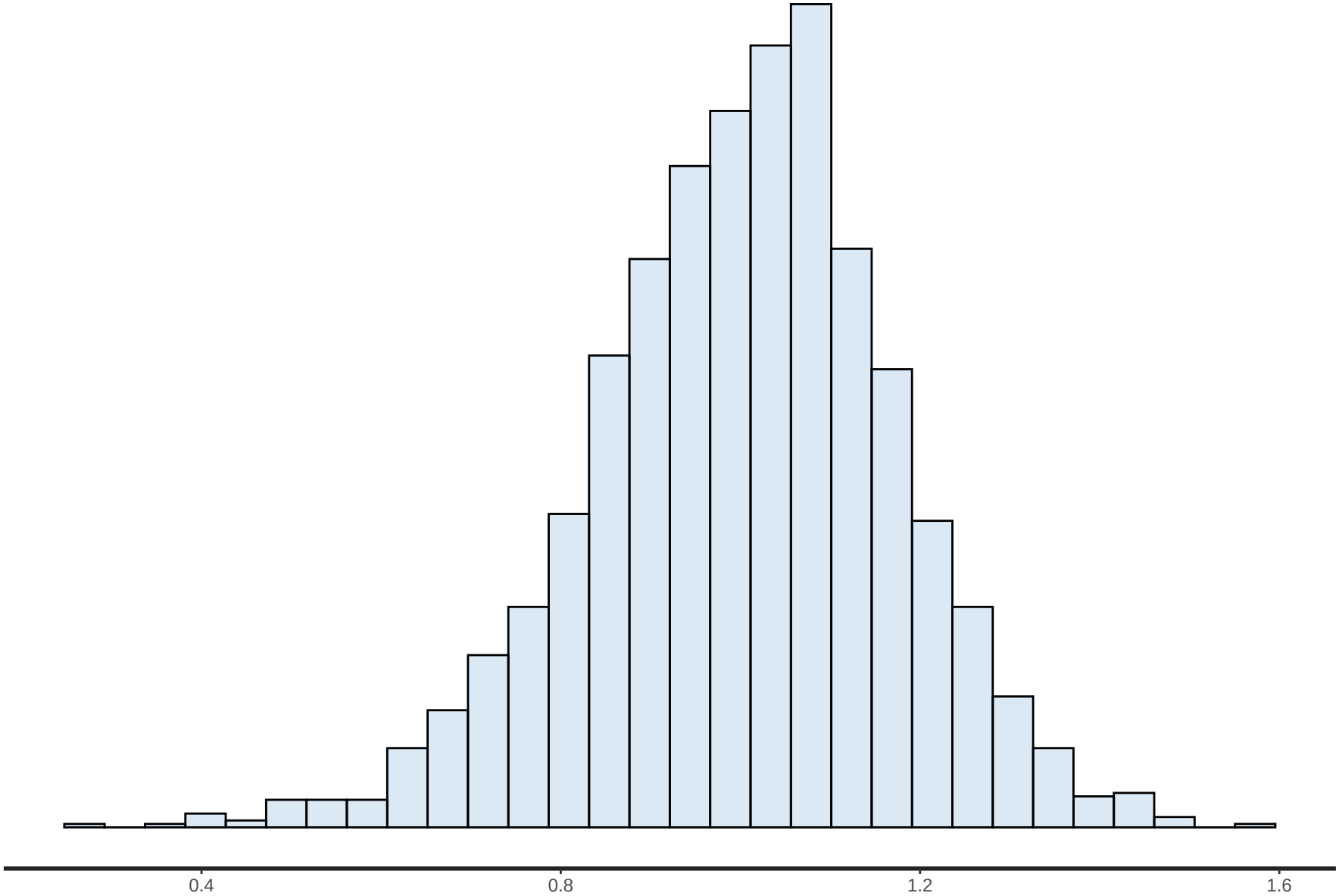

Short Term Death Projection
Number of COVID19 Deaths
20
15
10
5
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Median
Confirmed
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA

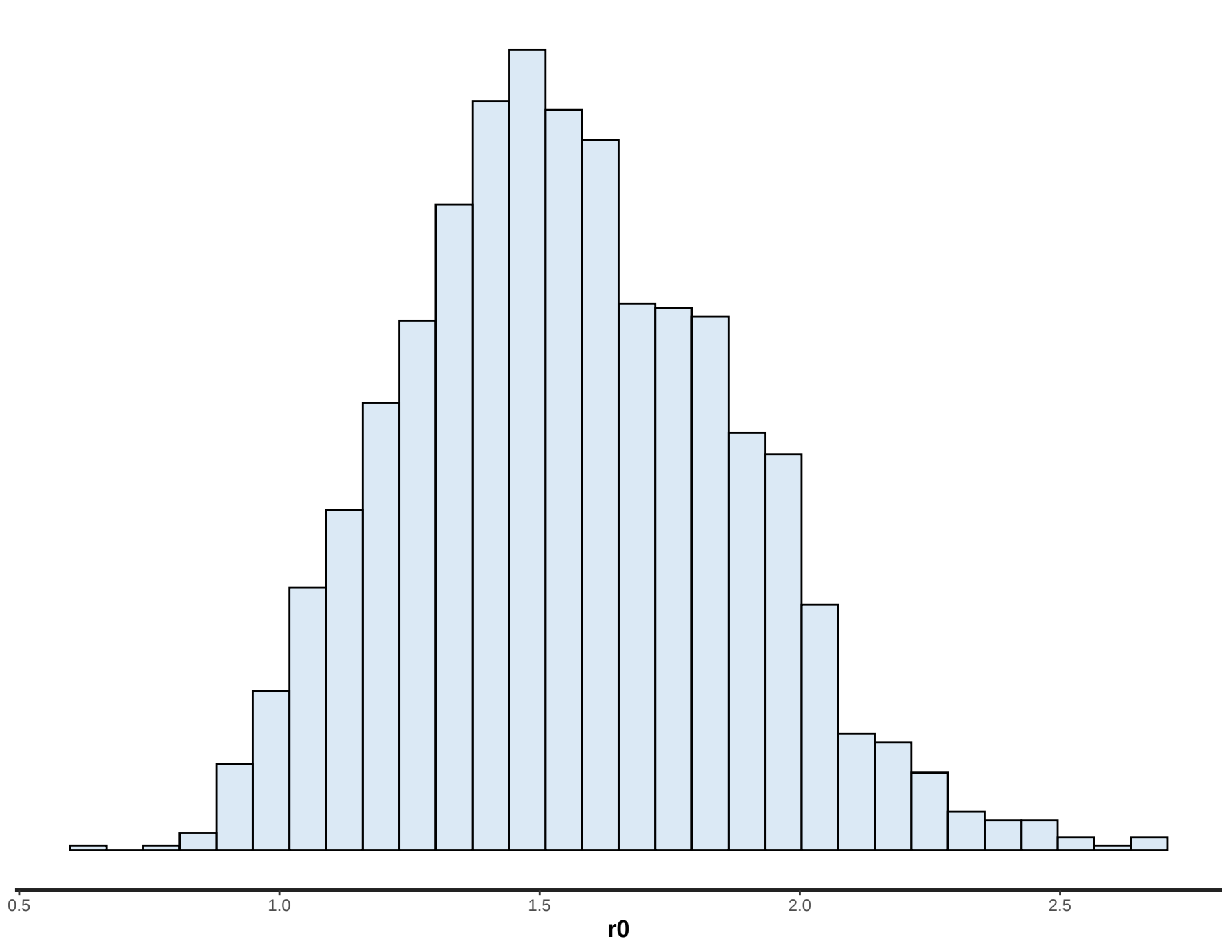

Long Term Death Projection
Number of COVID19 Deaths
20
10
Jun 01
Jul 01
Aug 01
Sep 01
Oct 01
Nov 01
Dec 01
Jan 01
Feb 01
Mar 01
Median
5%−95%
15%−85%
25%−75%
localepi.github.io/LEMMA


Effective Reproduction Number
Re
2.0
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 2020−12−16

5%	10%	25%	50%	75%	90%	95%
0.71	0.78	0.89	1.01	1.11	1.21	1.27

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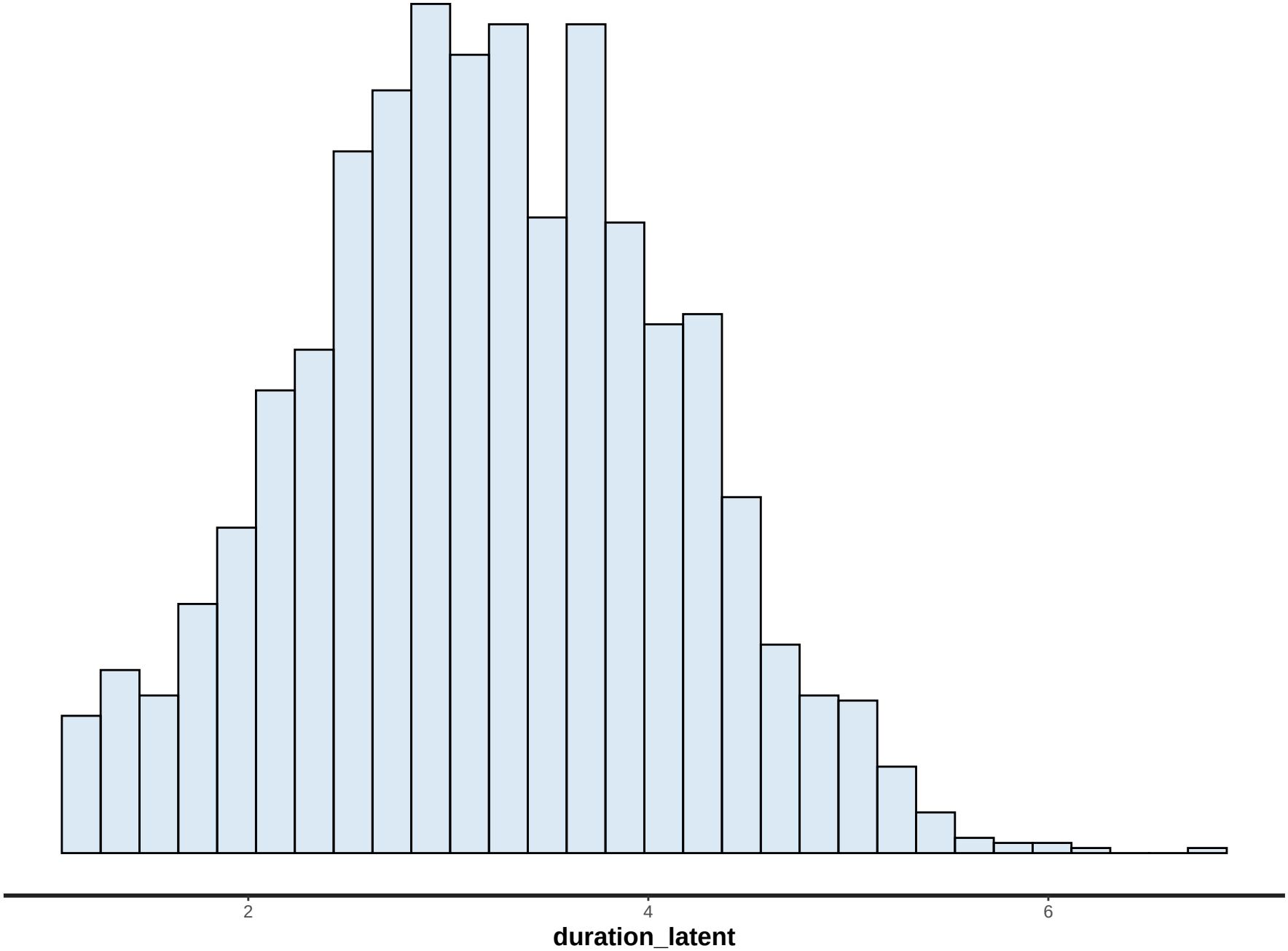
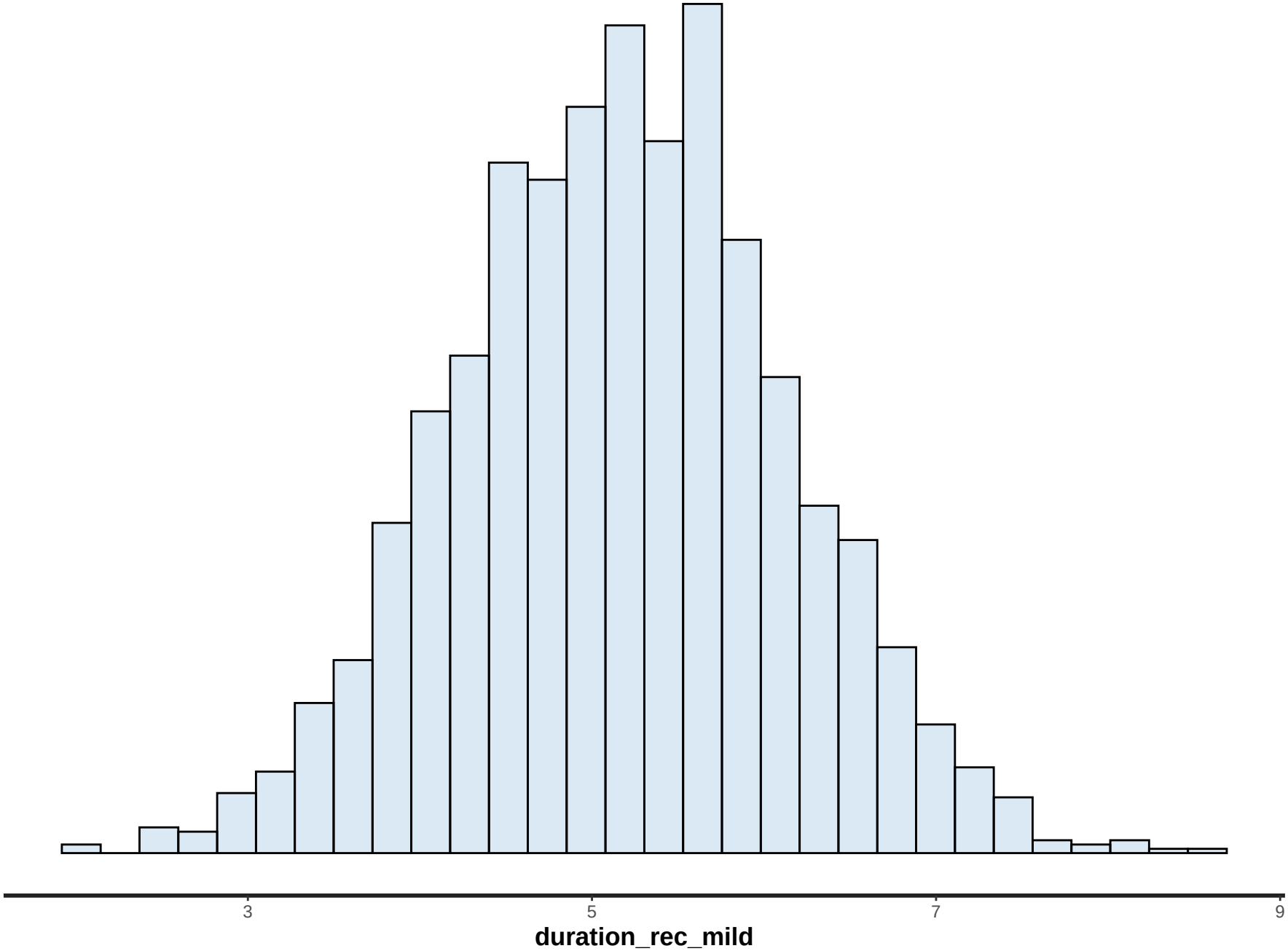
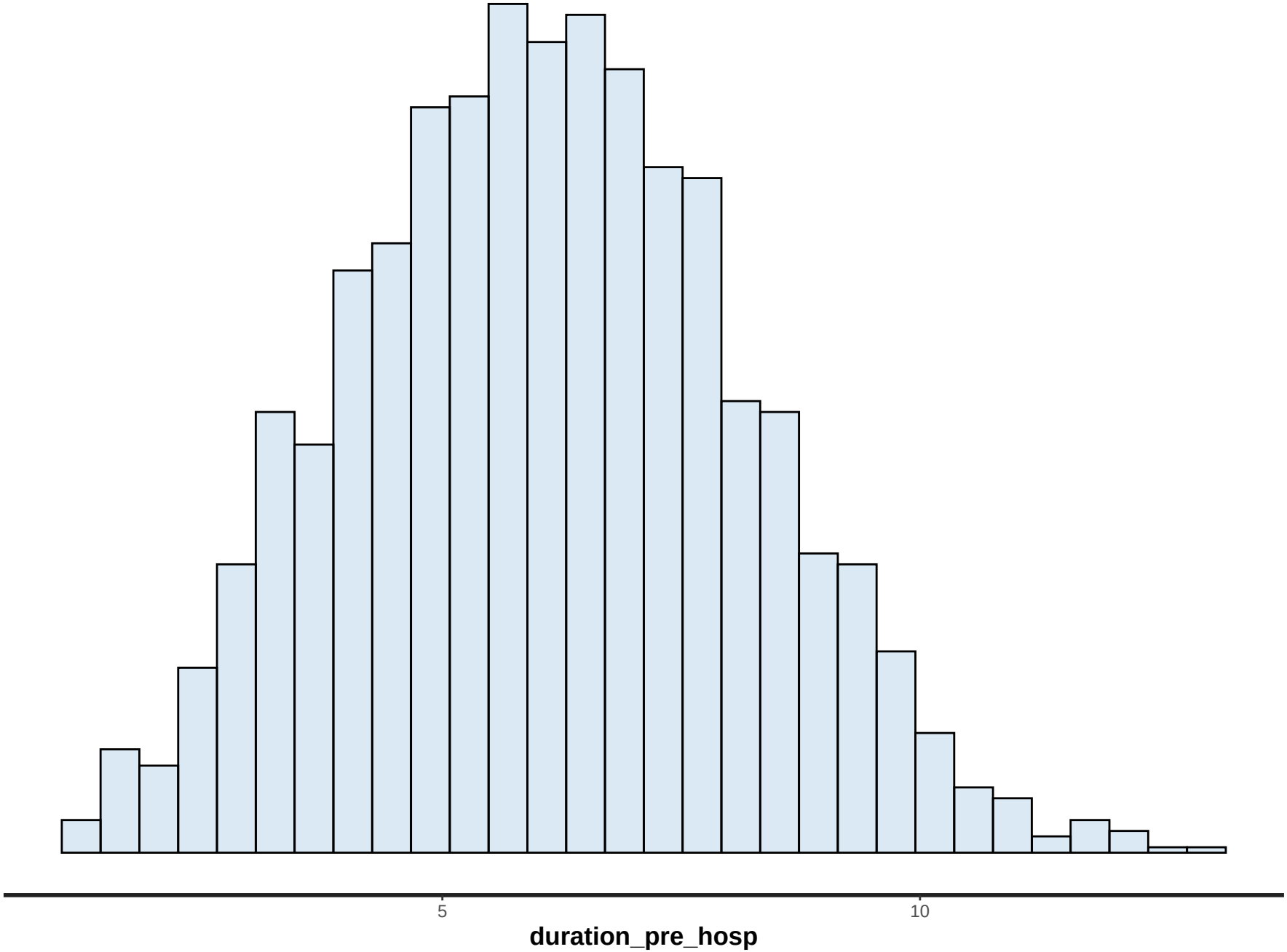
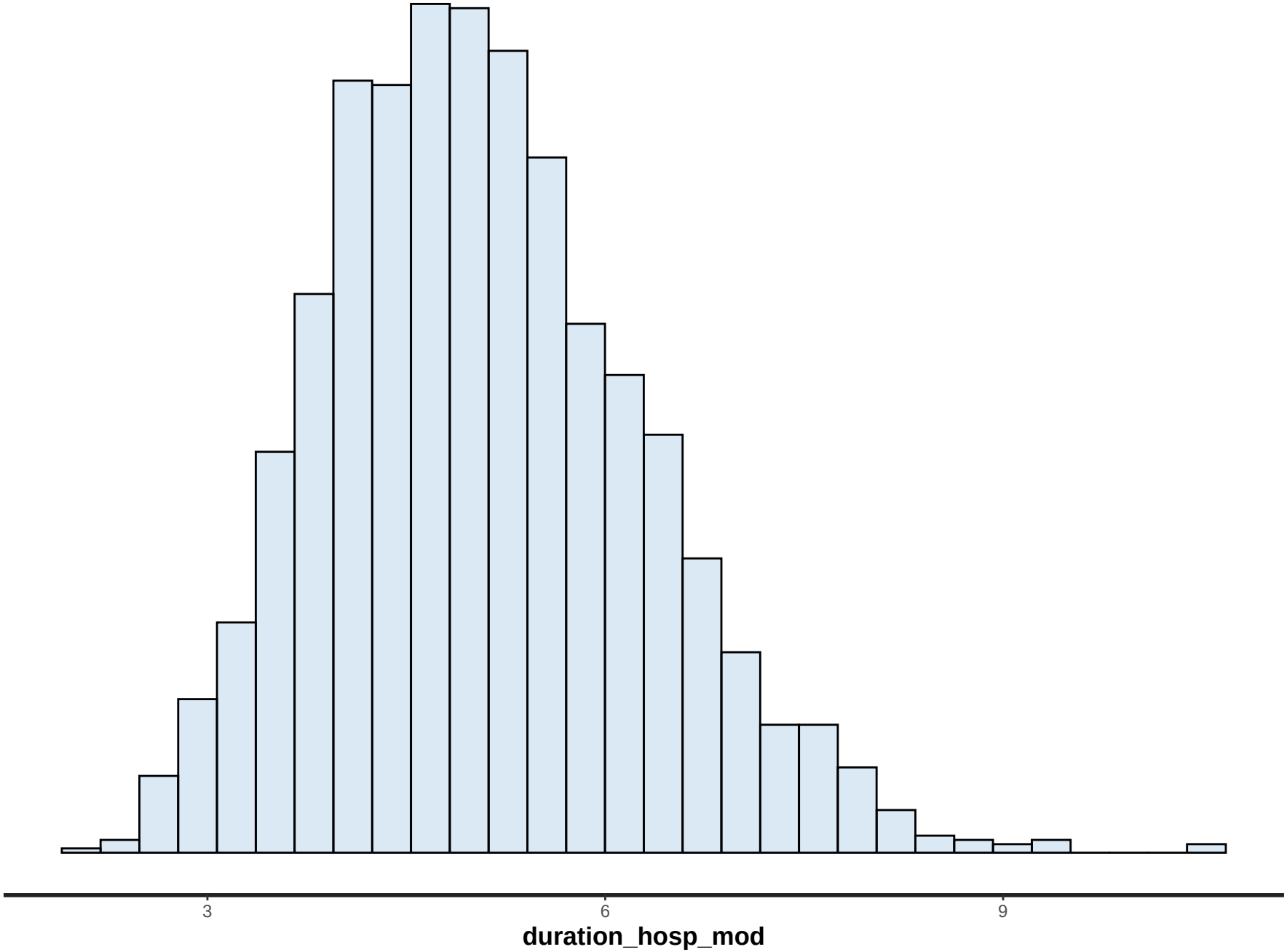
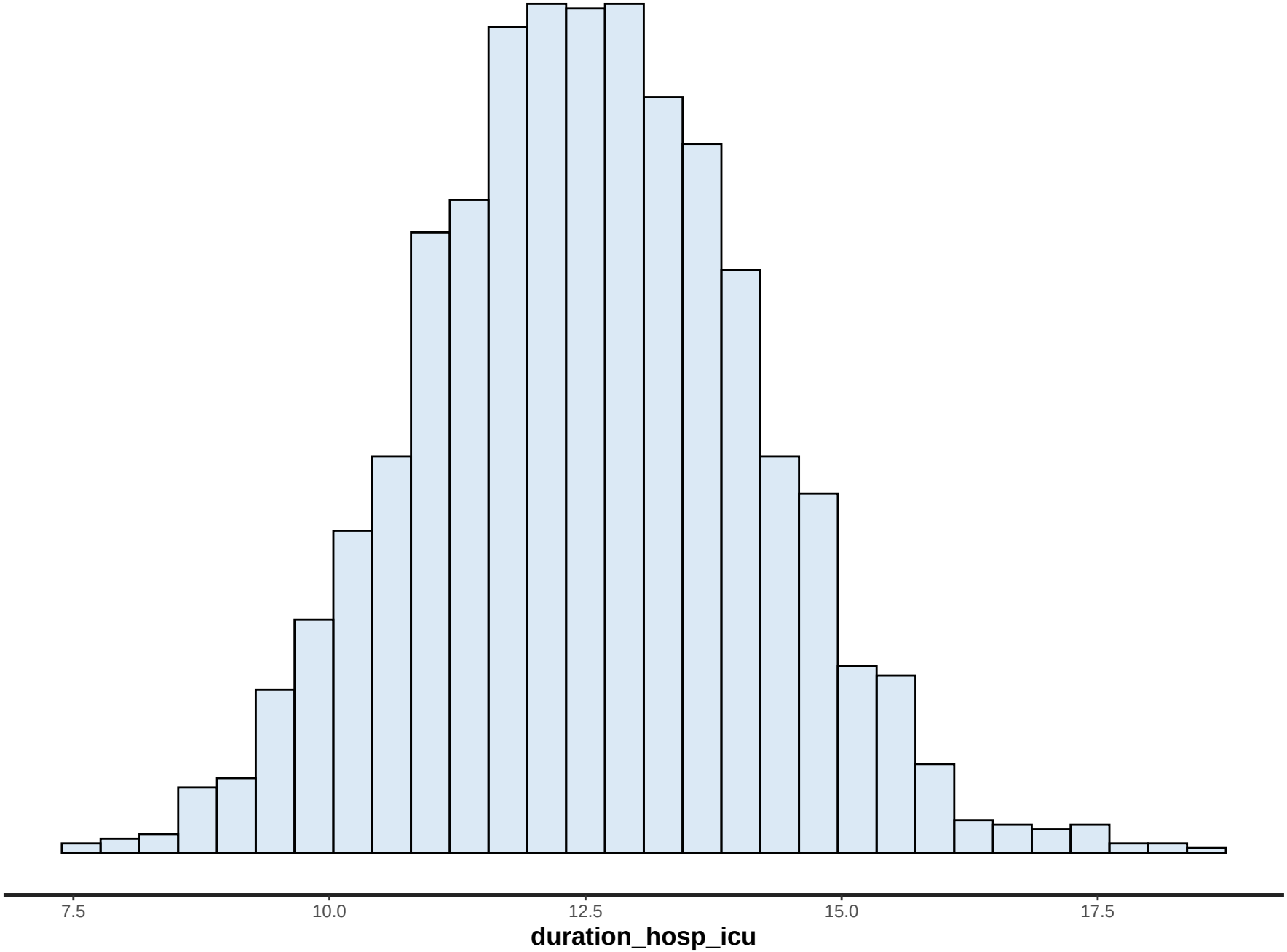
1.0
1.5
2.0
2.5
r0

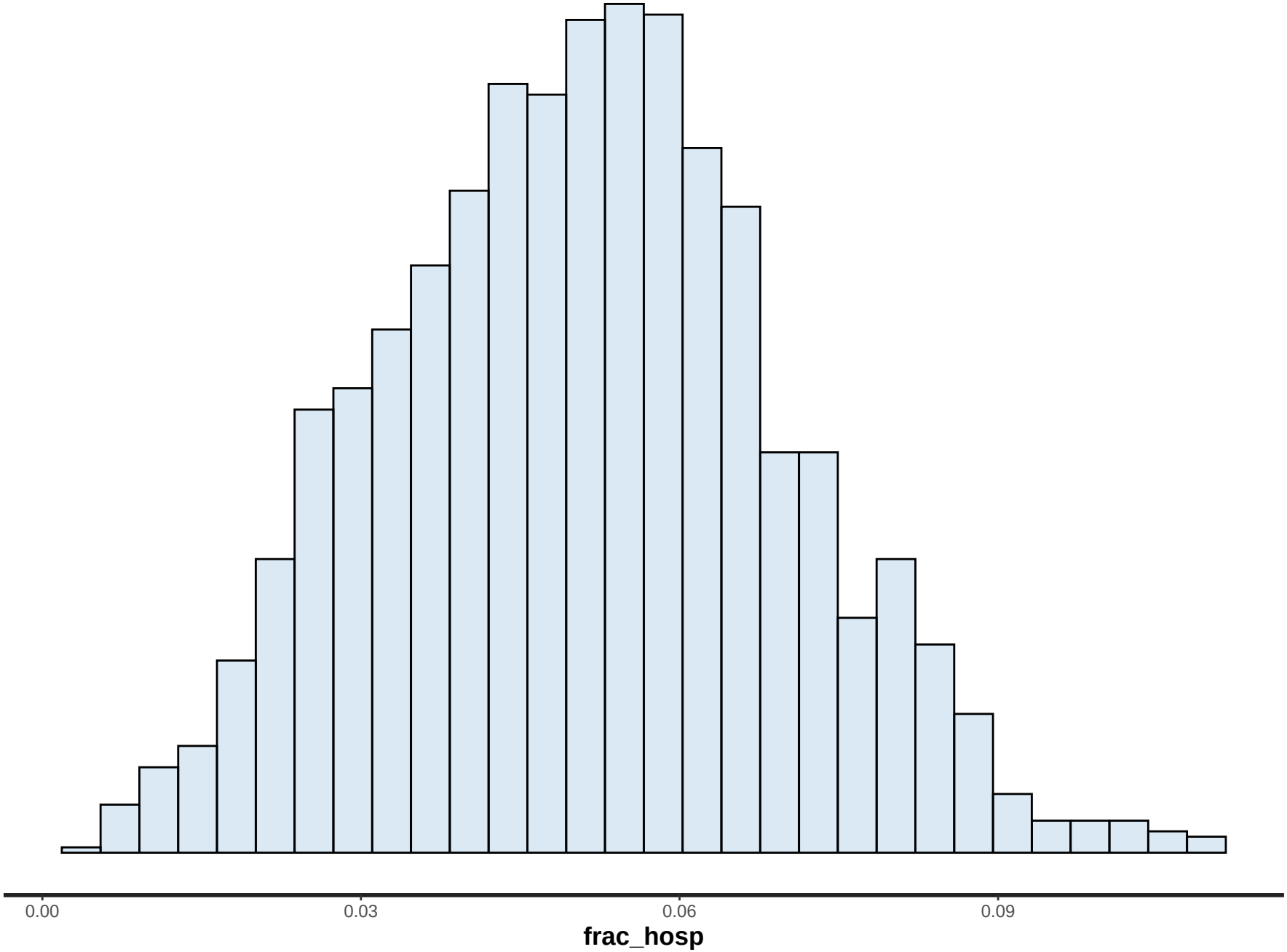

2
4
6
duration_latent


3
5
7
9
duration_rec_mild


5
10
duration_pre_hosp


3
6
9
duration_hosp_mod


7.5
10.0
12.5
15.0
17.5
duration_hosp_icu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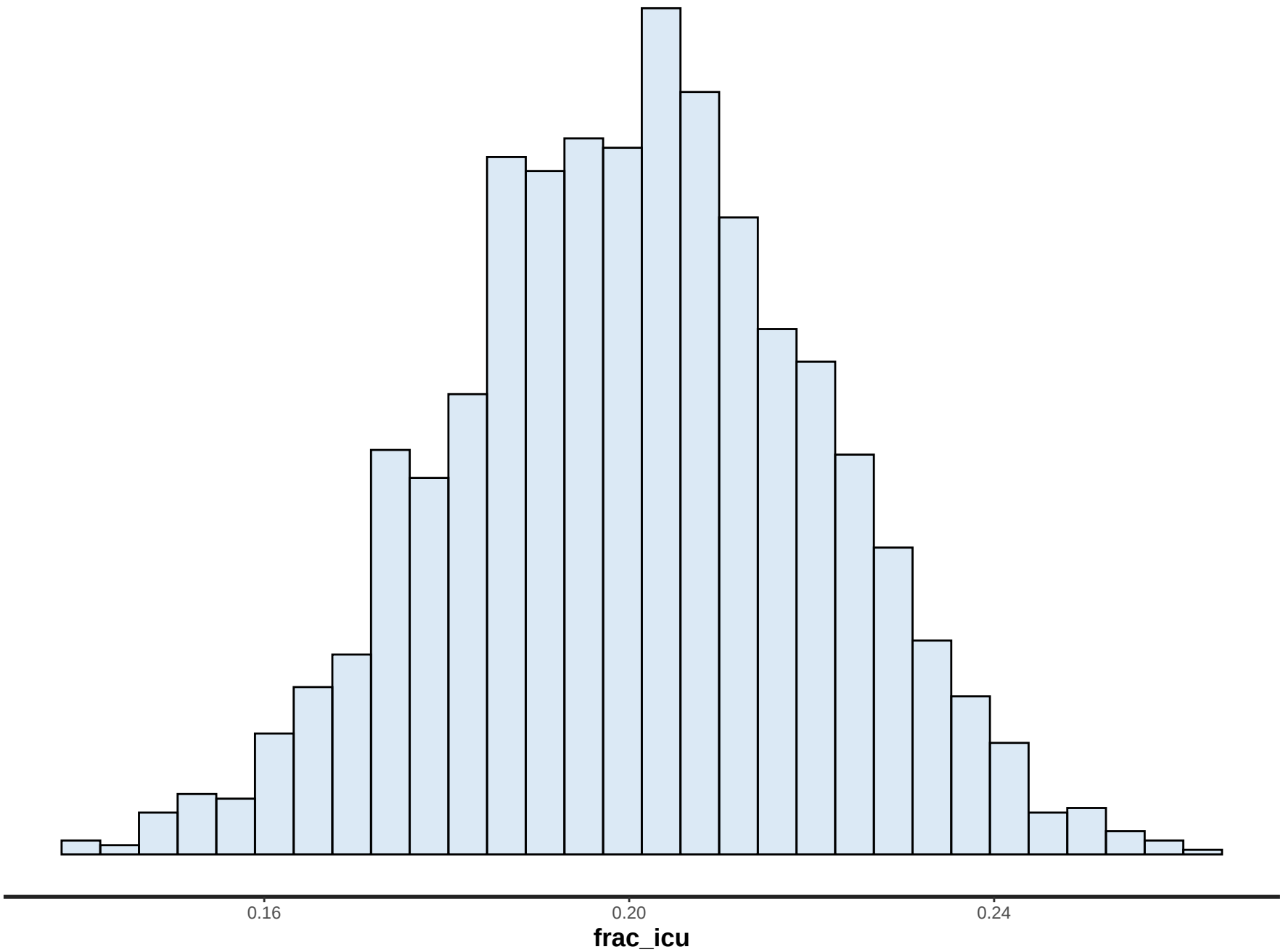
0.03
0.06
0.09
frac_hosp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0.20
0.24
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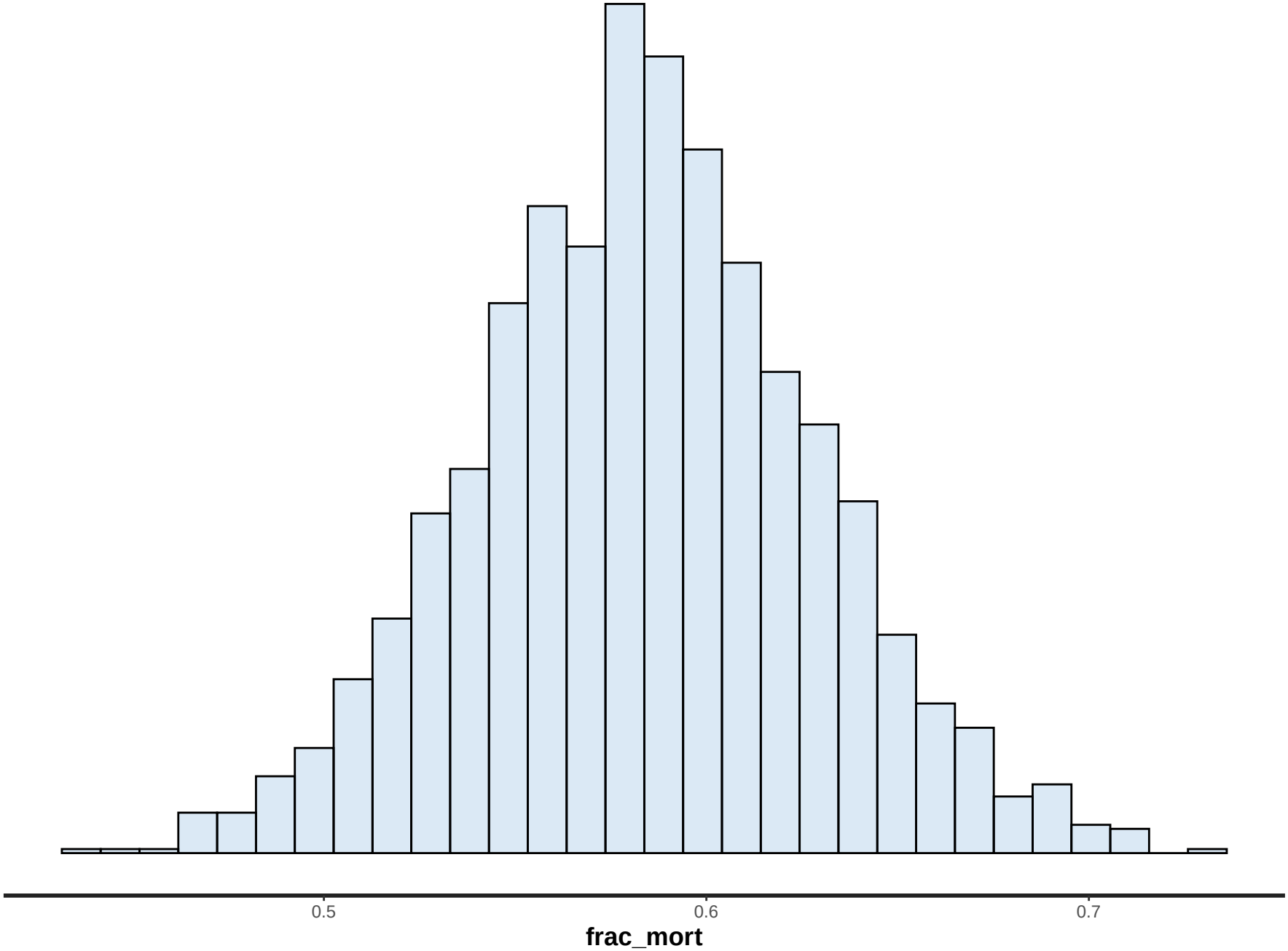
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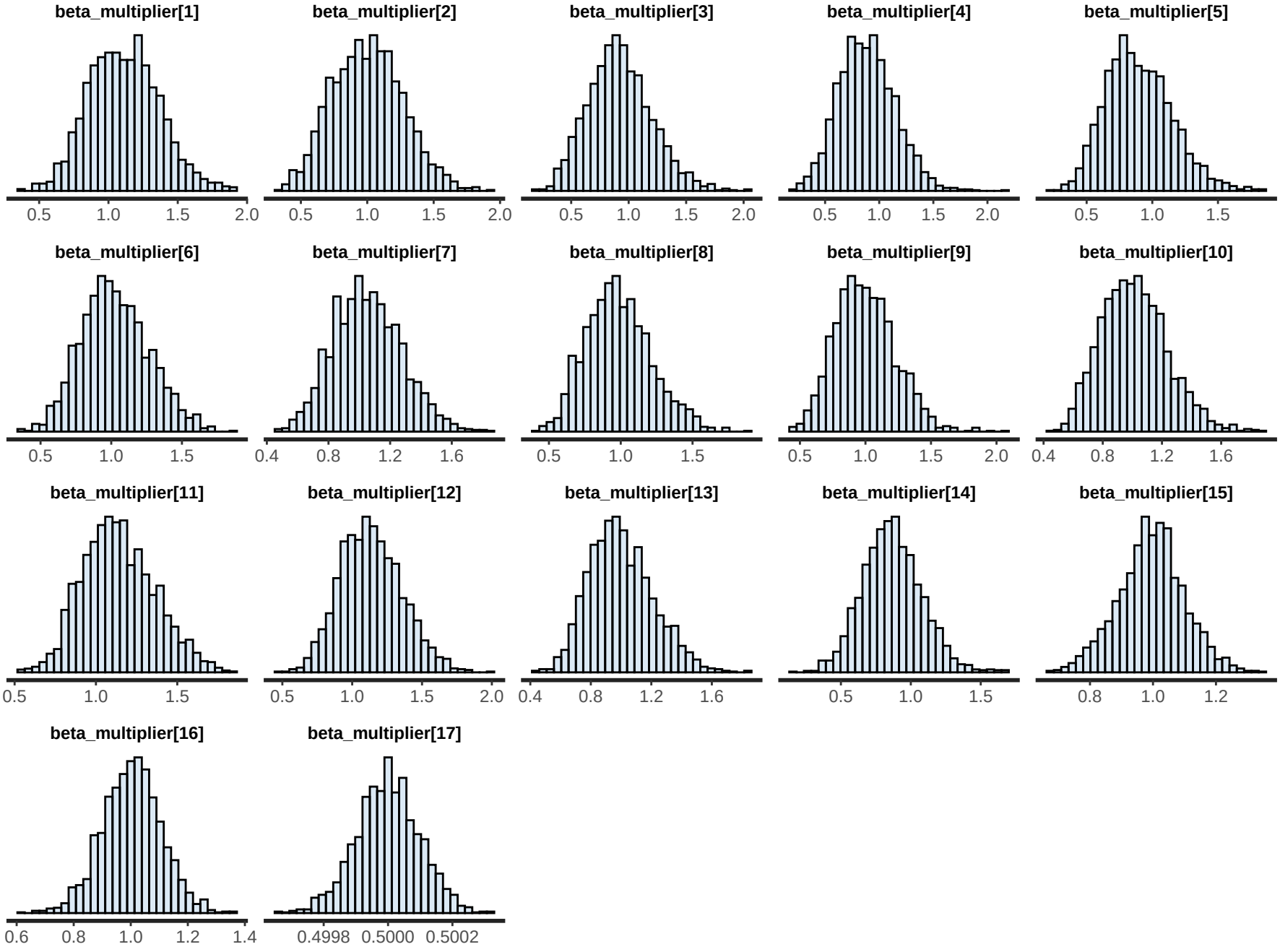
0.6
0.7
frac_mort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beta_multiplier[6]
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beta_multiplier[7]
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beta_multiplier[8]
0.5 1.0 1.5
beta_multiplier[9]
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beta_multiplier[10]
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beta_multiplier[11]
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beta_multiplier[12]
0.5 1.0 1.5 2.0
beta_multiplier[13]
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beta_multiplier[14]
0.5 1.0 1.5
beta_multiplier[15]
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beta_multiplier[16]
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beta_multiplier[17]
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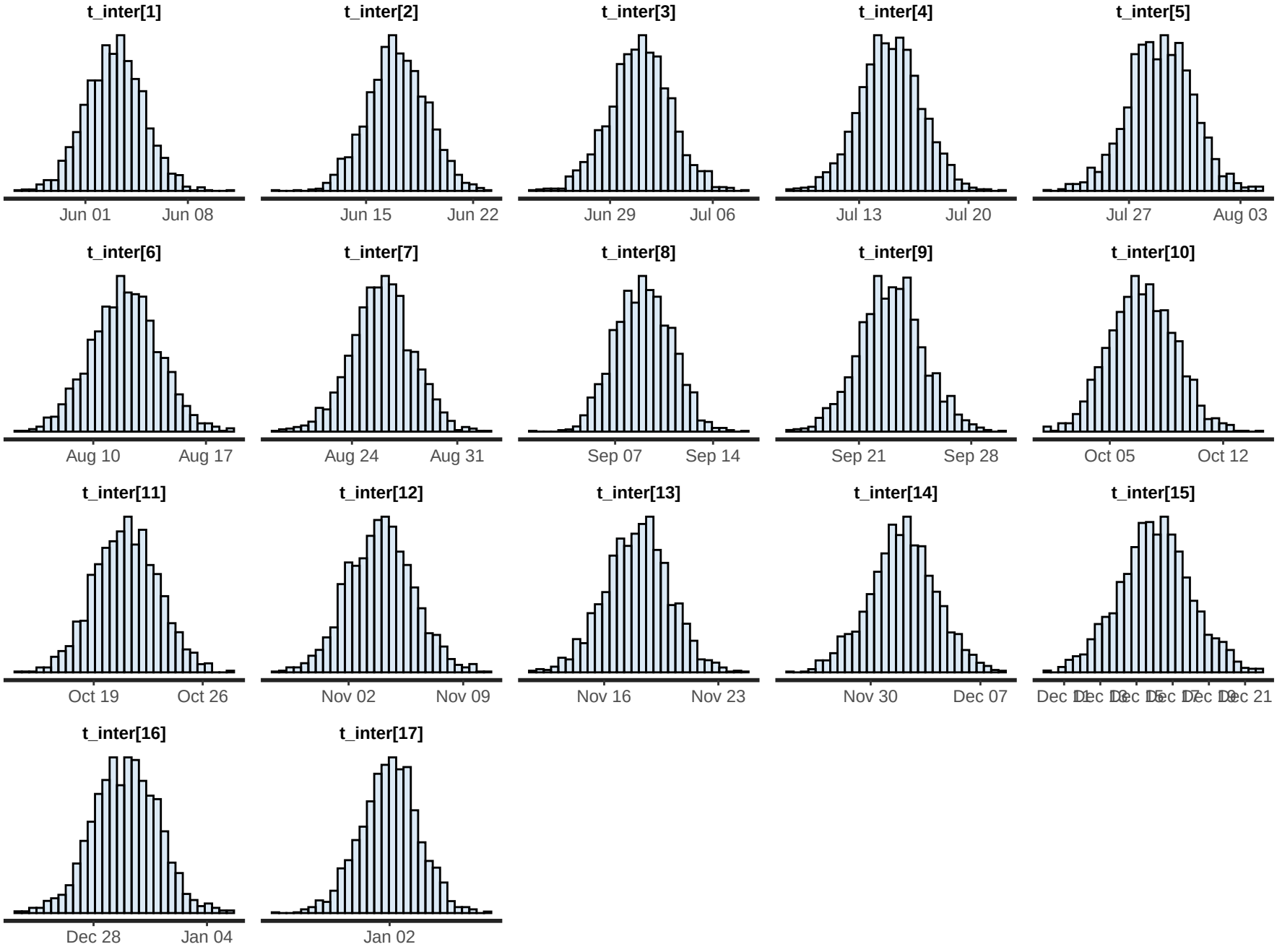
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Jun 01
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Jul 27
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Nov 02
Nov 09
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Nov 16
Nov 23
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Nov 30
Dec 07
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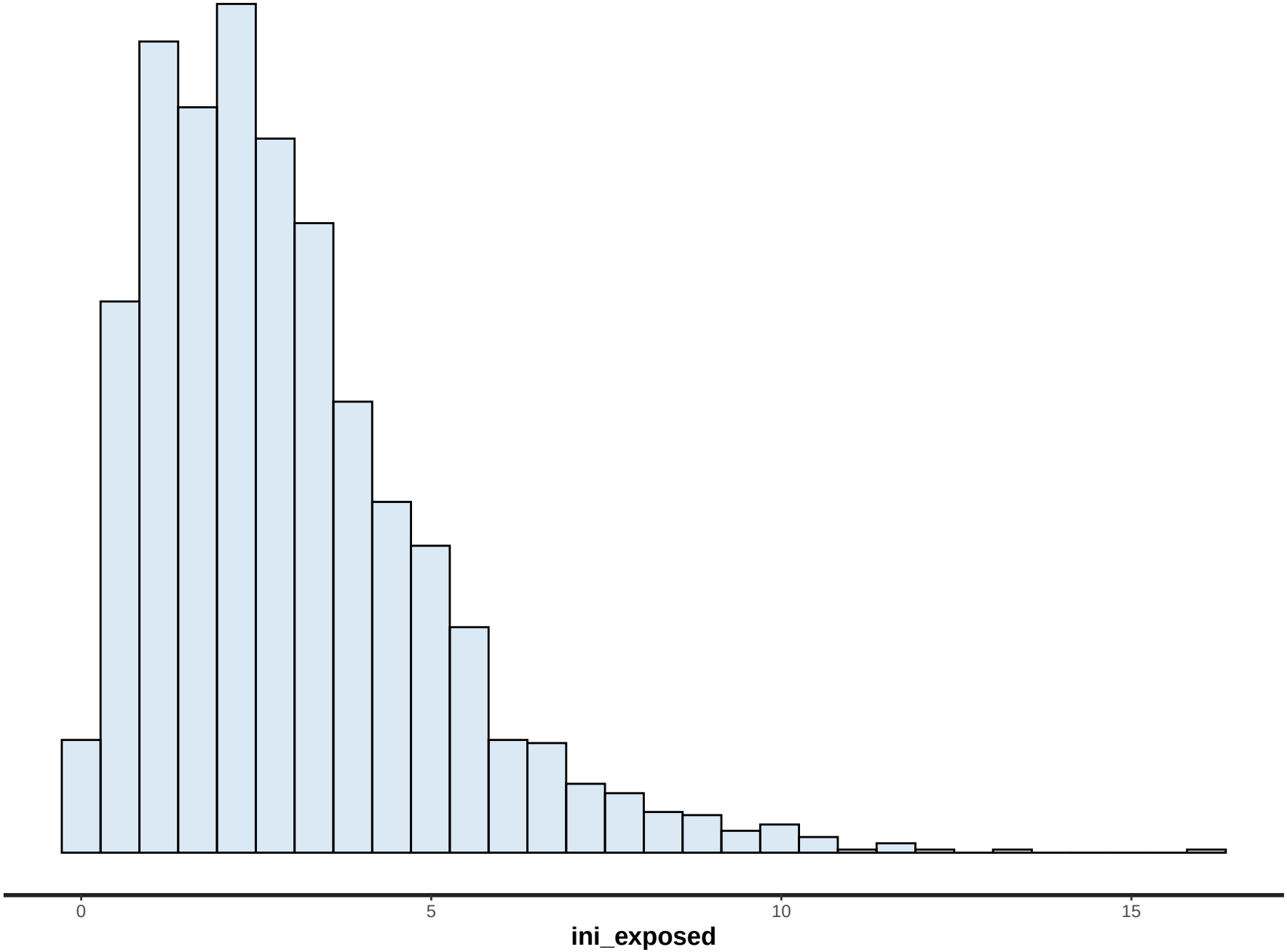
Dec 21
t_inter[16]
Dec 28
Jan 04
t_inter[17]
Jan 02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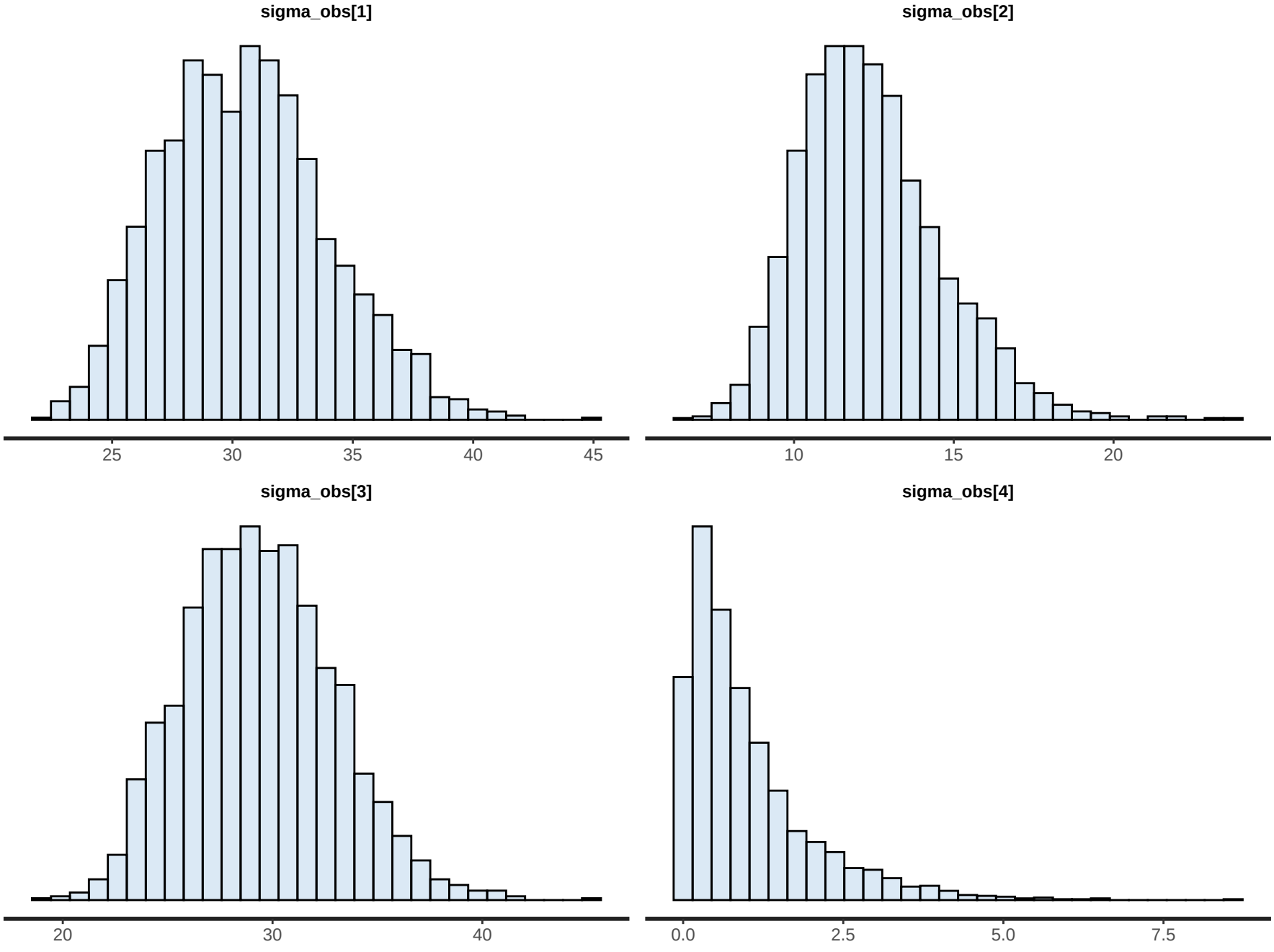
5
10
15
ini_exposed


sigma_obs[1]
25
30
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15
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30
40
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2.5
5.0
7.5