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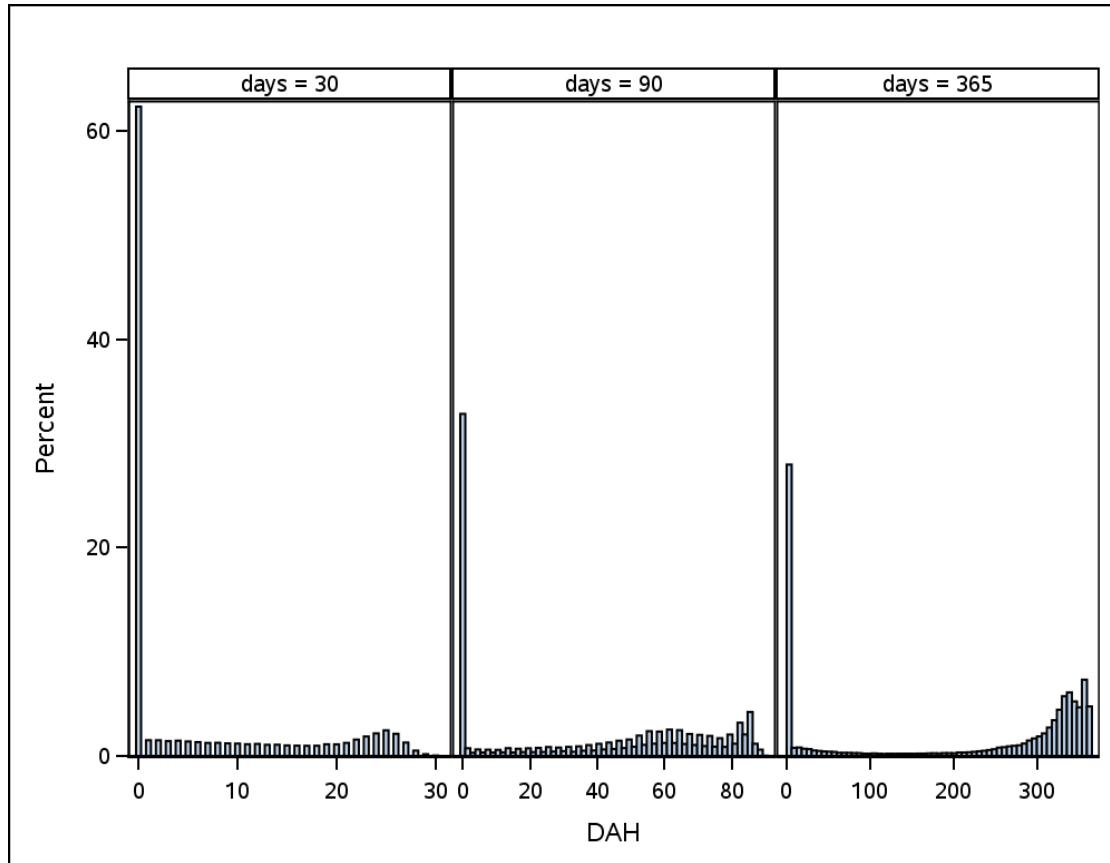
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Appendices

Figure 1 – Histogram of days alive at home (DAH) in the 30, 90 and 365 days after hip fracture admission

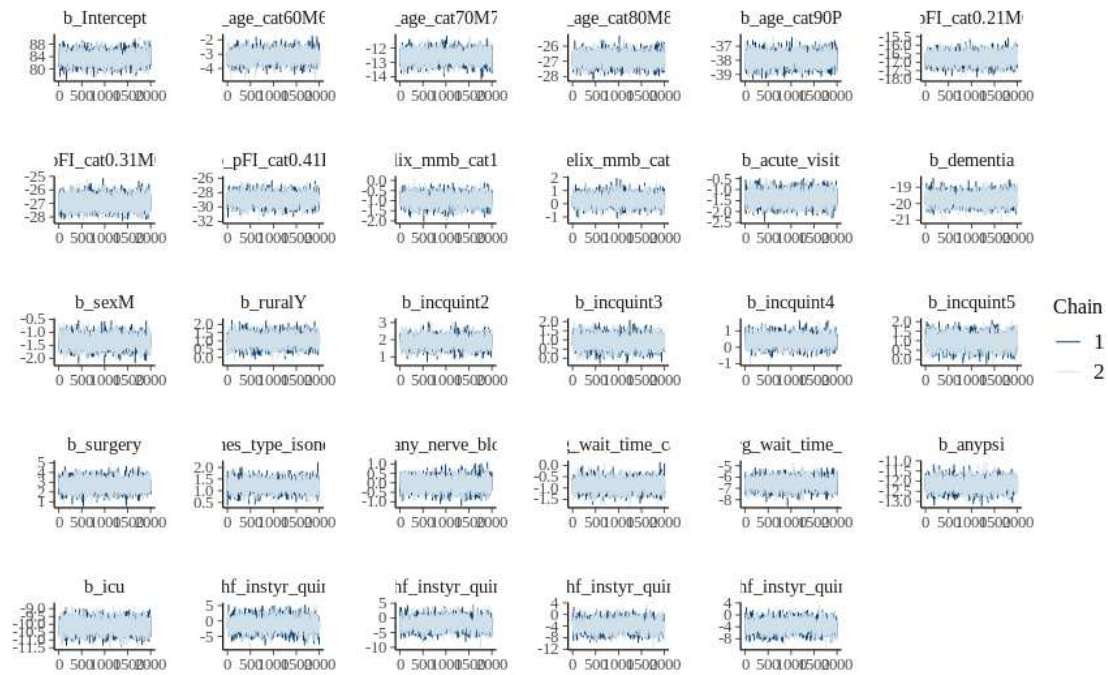**Table 1 –** Unadjusted associations of patient factors with days alive at home within 90 days of admission

	Absolute median difference	LCrL	UCrL
Age 60 to 69	-9.03	-10.20	-7.95
Age 70 to 79	-22.21	-23.36	-21.19
Age 80 to 89	-46.26	-47.40	-45.21
Age 90+	-77.20	-78.49	-75.99
Acute hospitalization in previous year	-24.51	-25.41	-23.65
Dementia	-50.18	-50.67	-49.95
Frailty (mild)	-28.78	-29.38	-28.03
Frailty (moderate)	-61.90	-62.12	-61.57
Frailty (severe)	-61.89	-62.12	-61.54
Income quintile 2	3.68	2.51	4.85
Income quintile 3	4.49	3.31	5.72
Income quintile 4	5.87	4.71	7.11
Income quintile 5	8.10	6.99	9.27
Male	-2.15	-3.04	-1.24
Multimorbidity	-15.90	-16.59	-15.12
Multimorbidity+	-42.47	-43.47	-41.40
Rural residence	8.54	7.56	9.51

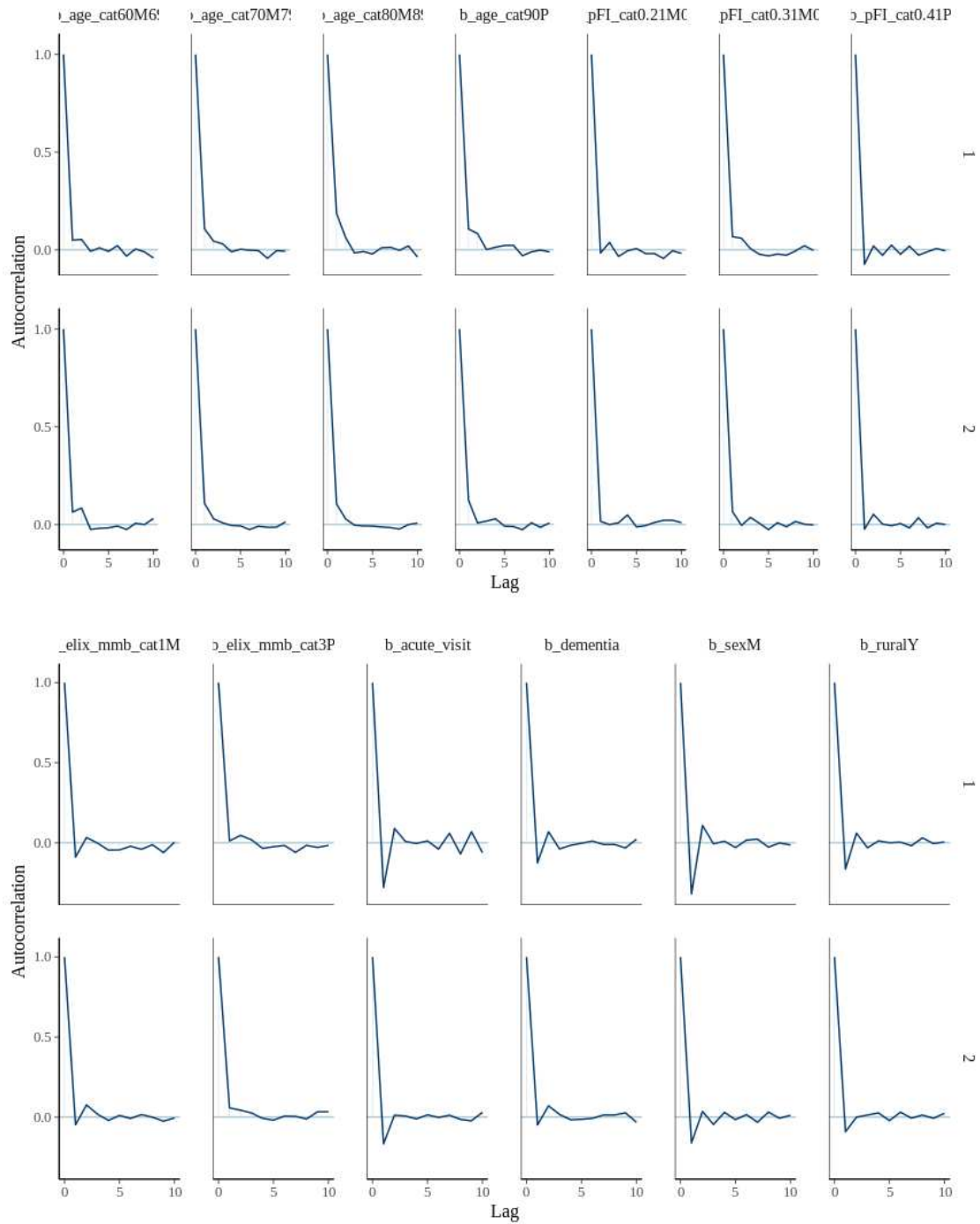**Table 2 -** Adjusted associations of patient factors with days alive at home within 90 days of admission

	Absolute median difference	LCrL	UCrL
Age 60 to 69	-2.98	-3.78	-2.18
Age 70 to 79	-14.58	-15.37	-13.80
Age 80 to 89	-30.19	-30.90	-29.51
Age 90+	-41.81	-42.64	-40.96
Frailty (mild)	-20.44	-21.10	-19.78
Frailty (moderate)	-31.85	-32.72	-30.93
Frailty (severe)	-32.26	-33.32	-31.25
Multimorbidity	-2.42	-3.02	-1.85
Multimorbidity+	-2.53	-3.25	-1.88
Acute hospitalization in previous year	-0.33	-0.73	0.03
Dementia	-19.23	-19.88	-18.59
Male	-0.85	-1.27	-0.47
Rural Residence	1.53	0.91	2.19
Income quintile 2	0.98	0.45	1.54
Income quintile 3	0.31	-0.16	0.84
Income quintile 4	-0.01	-0.46	0.43
Income quintile 5	0.24	-0.25	0.76

Table 3 – Markov Chain Monte Carlo diagnostics for fully adjusted model

Trace plots

Autocorrelation plots

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Rhat values (optimal=1.00, which evaluates convergence of Markov Chains by comparing between- and within-chain variances for each parameter; larger values indicate non-convergence)
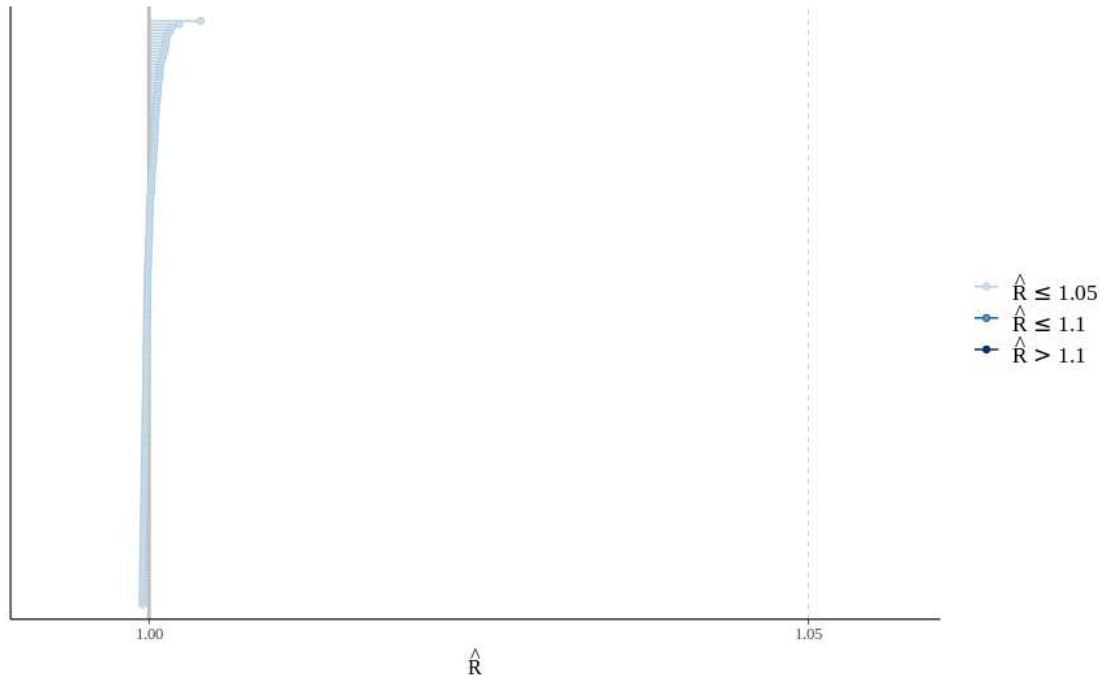
Table 4 – Adjusted associations of patient, admission and process factors with days alive at home within 90 days of admission

	Absolute median difference	LCrL	UCrL
Age 60 to 69	-3.15	-3.95	-2.36
Age 70 to 79	-12.59	-13.40	-11.77
Age 80 to 89	-26.86	-27.65	-26.10
Age 90+	-37.92	-38.81	-37.04
Frailty (mild)	-16.77	-17.43	-16.11
Frailty (moderate)	-26.90	-27.81	-25.98
Frailty (severe)	-28.94	-30.43	-27.38
Multimorbidity	-0.98	-1.54	-0.43
Multimorbidity+	0.29	-0.51	1.09
Acute hospitalization in previous year	-1.38	-1.97	-0.78
Dementia	-19.71	-20.41	-19.02
Male	-1.35	-1.83	-0.88
Rural Residence	1.04	0.34	1.76
Income quintile 2	1.87	1.23	2.49
Income quintile 3	0.88	0.22	1.55
Income quintile 4	0.40	-0.27	1.10
Income quintile 5	0.97	0.28	1.67
Neuraxial anesthesia	1.22	0.77	1.70
Nerve block	-0.06	-0.69	0.56
Surgical wait (1-2 days)	-0.87	-1.37	-0.36
Surgical wait (3+ days)	-6.60	-7.57	-5.62
Complication	-12.16	-12.74	-11.60
ICU Admission	-10.12	-10.96	-9.30
Hospital hip fracture volume quintile 2	-1.11	-5.09	3.02
Hospital hip fracture volume quintile 3	-1.92	-5.63	2.05
Hospital hip fracture volume quintile 4	-3.87	-7.72	0.11
Hospital hip fracture volume quintile 5	-3.67	-7.41	0.34

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Table 5 - Adjusted associations of patient, admission and process factors with days alive at home within 90 days of admission using non-informative prior distributions

	Absolute median difference	LCrL	UCrL
Age 60 to 69	-2.92	-3.71	-2.15
Age 70 to 79	-12.30	-13.14	-11.53
Age 80 to 89	-26.52	-27.26	-25.78
Age 90+	-37.50	-38.35	-36.64
Frailty (mild)	-16.79	-17.44	-16.15
Frailty (moderate)	-26.96	-27.87	-26.03
Frailty (severe)	-28.83	-30.40	-27.30
Multimorbidity	-1.04	-1.61	-0.50
Multimorbidity+	0.11	-0.75	0.94
Acute hospitalization in previous year	-1.35	-1.95	-0.76
Dementia	-19.73	-20.43	-19.03
Male	-0.85	-1.27	-0.49
Rural Residence	1.02	0.31	1.72
Income quintile 2	1.87	1.26	2.48
Income quintile 3	0.90	0.25	1.54
Income quintile 4	0.45	-0.25	1.13
Income quintile 5	0.98	0.30	1.64
Neuraxial anesthesia	1.24	0.78	1.70
Nerve block	-0.03	-0.64	0.56
Surgical wait (1-2 days)	-0.89	-1.39	-0.38
Surgical wait (3+ days)	-6.70	-7.67	-5.74
Complication	-12.19	-12.76	-11.59
ICU Admission	-10.23	-11.04	-9.40
Hospital hip fracture volume quintile 2	-1.23	-5.31	2.82
Hospital hip fracture volume quintile 3	-1.99	-5.87	1.95
Hospital hip fracture volume quintile 4	-3.98	-7.81	-0.04
Hospital hip fracture volume quintile 5	-3.84	-7.72	0.10

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Table 6 - Adjusted associations of patient, admission and process factors with days alive at home within 90 days of admission where days in institution are counted as home for individuals institutionalized pre-fracture

	Absolute median difference	LCrL	UCrL
Age 60 to 69	-3.15	-3.93	-2.39
Age 70 to 79	-9.70	-10.44	-8.93
Age 80 to 89	-17.59	-18.32	-16.90
Age 90+	-24.24	-25.06	-23.42
Frailty (mild)	-1.70	-2.18	-1.21
Frailty (moderate)	-1.14	-1.97	-0.32
Frailty (severe)	-2.36	-4.27	-0.52
Multimorbidity	-2.71	-3.21	-2.23
Multimorbidity+	-9.26	-10.02	-8.51
Acute hospitalization in previous year	-3.64	-4.23	-3.05
Dementia	8.86	8.18	9.53
Male	-1.44	-1.98	-0.97
Rural Residence	1.63	0.95	2.30
Income quintile 2	0.62	0.01	1.20
Income quintile 3	0.58	-0.03	1.19
Income quintile 4	1.52	0.89	2.17
Income quintile 5	1.78	1.14	2.43
Neuraxial anesthesia	0.99	0.55	1.43
Nerve block	-0.66	-1.22	-0.09
Surgical wait (1-2 days)	-2.07	-2.56	-1.61
Surgical wait (3+ days)	-10.07	-11.02	-9.12
Complication	-20.00	-20.63	-19.38
ICU Admission	-16.24	-17.21	-15.26
Hospital hip fracture volume quintile 2	-0.36	-3.90	3.24
Hospital hip fracture volume quintile 3	-2.54	-5.99	1.09
Hospital hip fracture volume quintile 4	-3.99	-7.49	-0.40
Hospital hip fracture volume quintile 5	-3.92	-7.39	-0.37

Table 7 - Minimally important difference estimates for days alive at home within 90 days of admission using the 5% range criterion as a distribution-based input

Group	Distribution estimates		Anchor estimates		Average
	SD x 0.3	Range x 0.05	ICU Admission	Complication	
Overall	11	4	10	12	9
Subgroups					
Males	10	4	10	14	10
Females	11	4	10	11	9
No frailty	10	4	17	18	12
With Frailty	10	4	10	9	8
Pre-fracture institutionalization	6	4	1	1	3
No pre-fracture institutionalization	10	4	13	20	12
Surgical fixation	11	4	16	14	11
No surgical fixation	10	4	10	12	9

Frailty: frailty index >0.21; ICU: intensive care unit; SD: standard deviation

Table 8 – Minimally important difference estimates for days alive at home within 90 days of admission where days in institution are counted as home for individuals institutionalized pre-fracture

Distribution estimates		Anchor estimates		Average
SD x 0.3	Range x 0.05	ICU Admission	Complication	
10	9	16	20	14