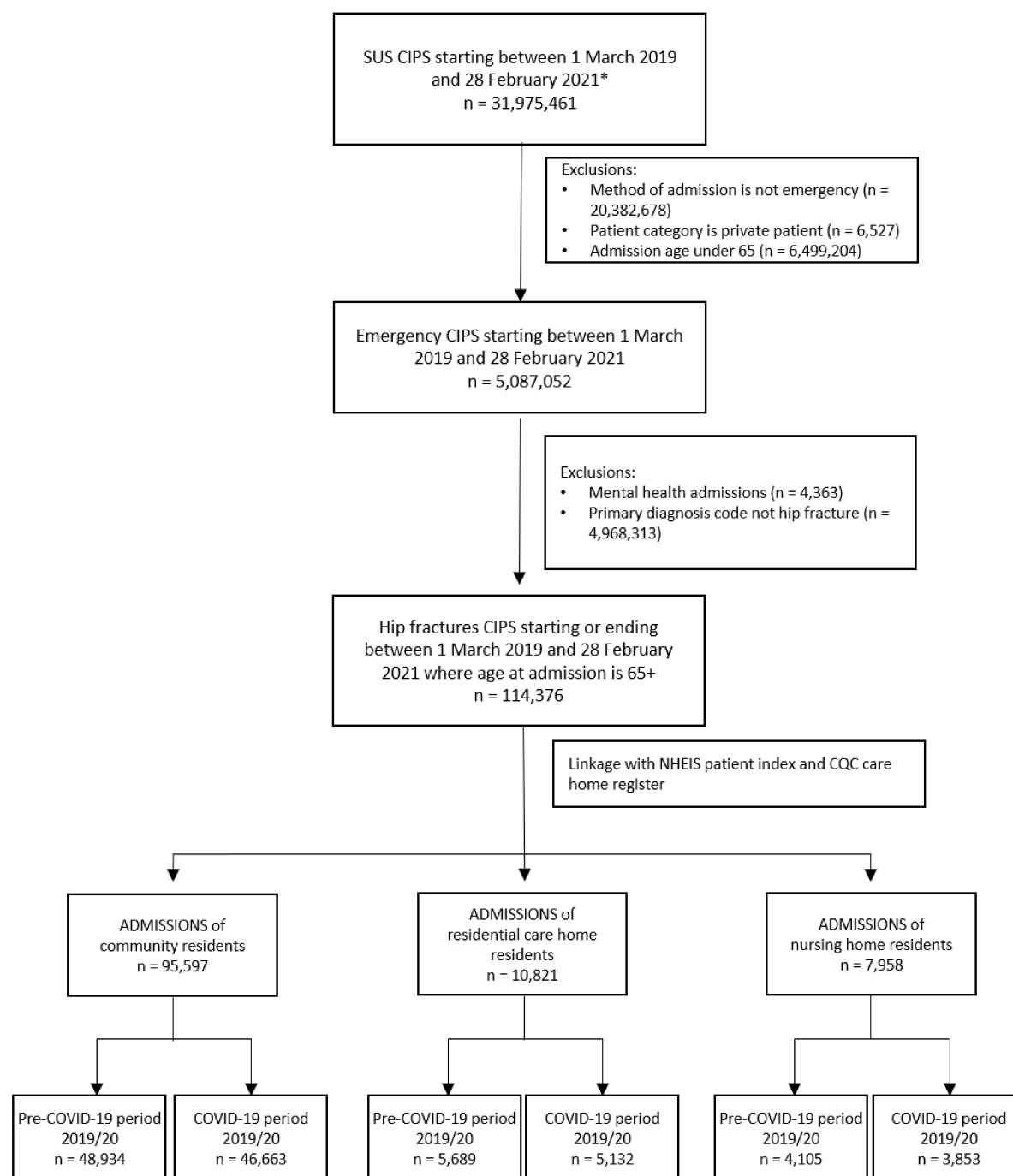


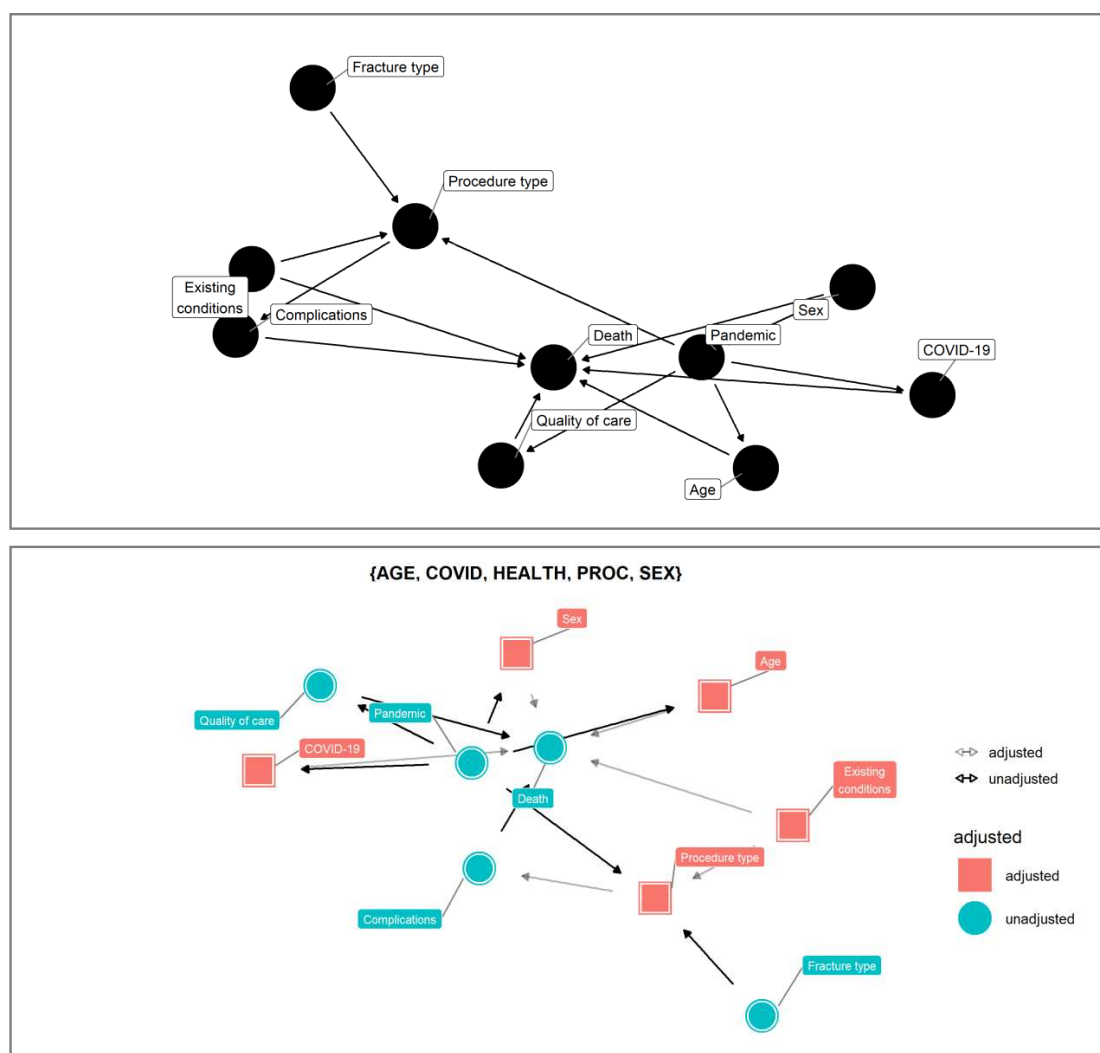
ONLINE SUPPLEMENTARY FILES

Supplementary Figure S1 Data cleaning flowchart and study cohort selection. SUS, secondary uses service; CIPS, continuous inpatient spell.

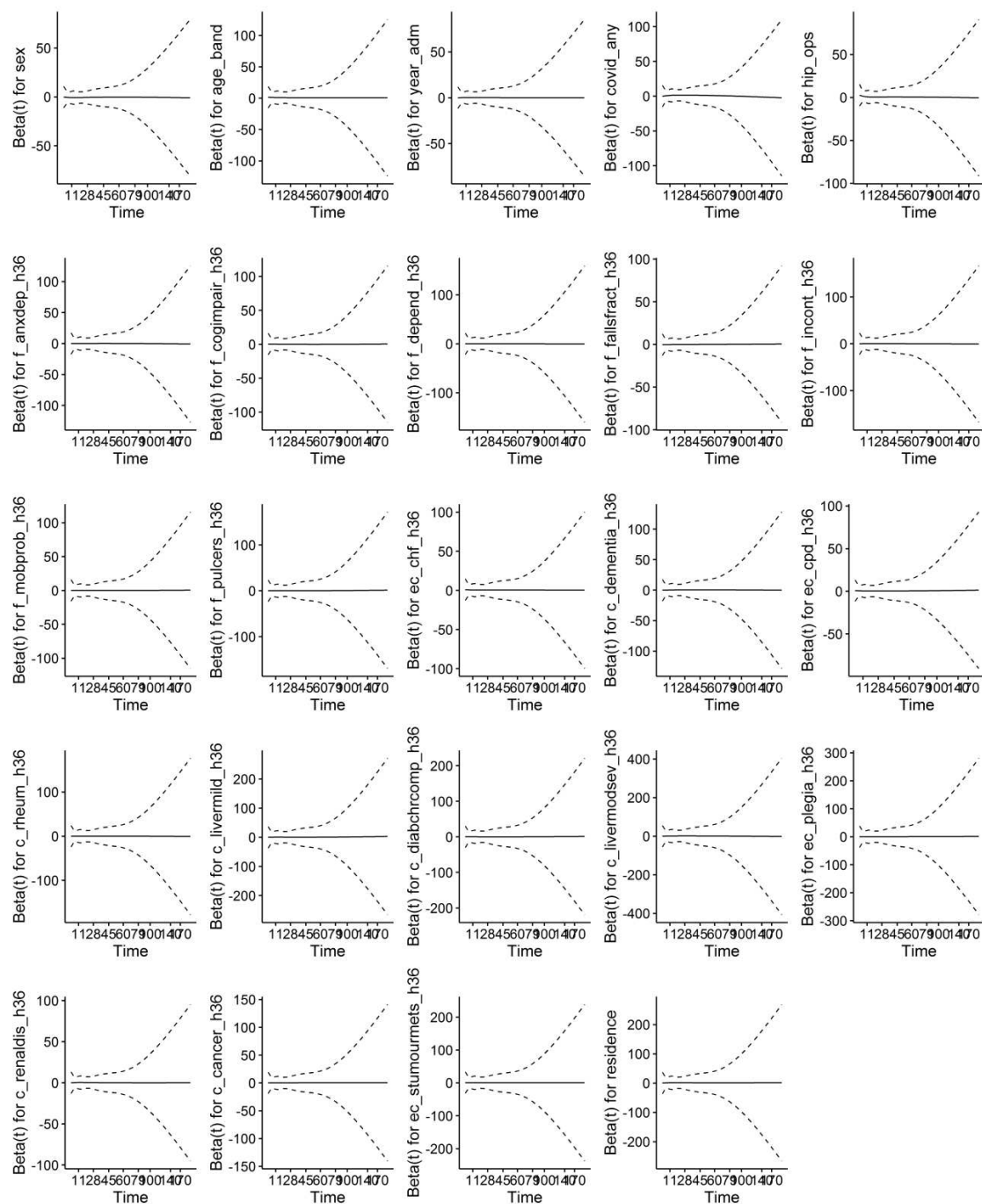


Supplementary Figure S2 Directed acyclic graph (DAG) illustrating known causes of confounding when comparing hospital mortality rates across study populations from before and during the COVID-10 pandemic (top), and minimal sufficient adjustment set (bottom).

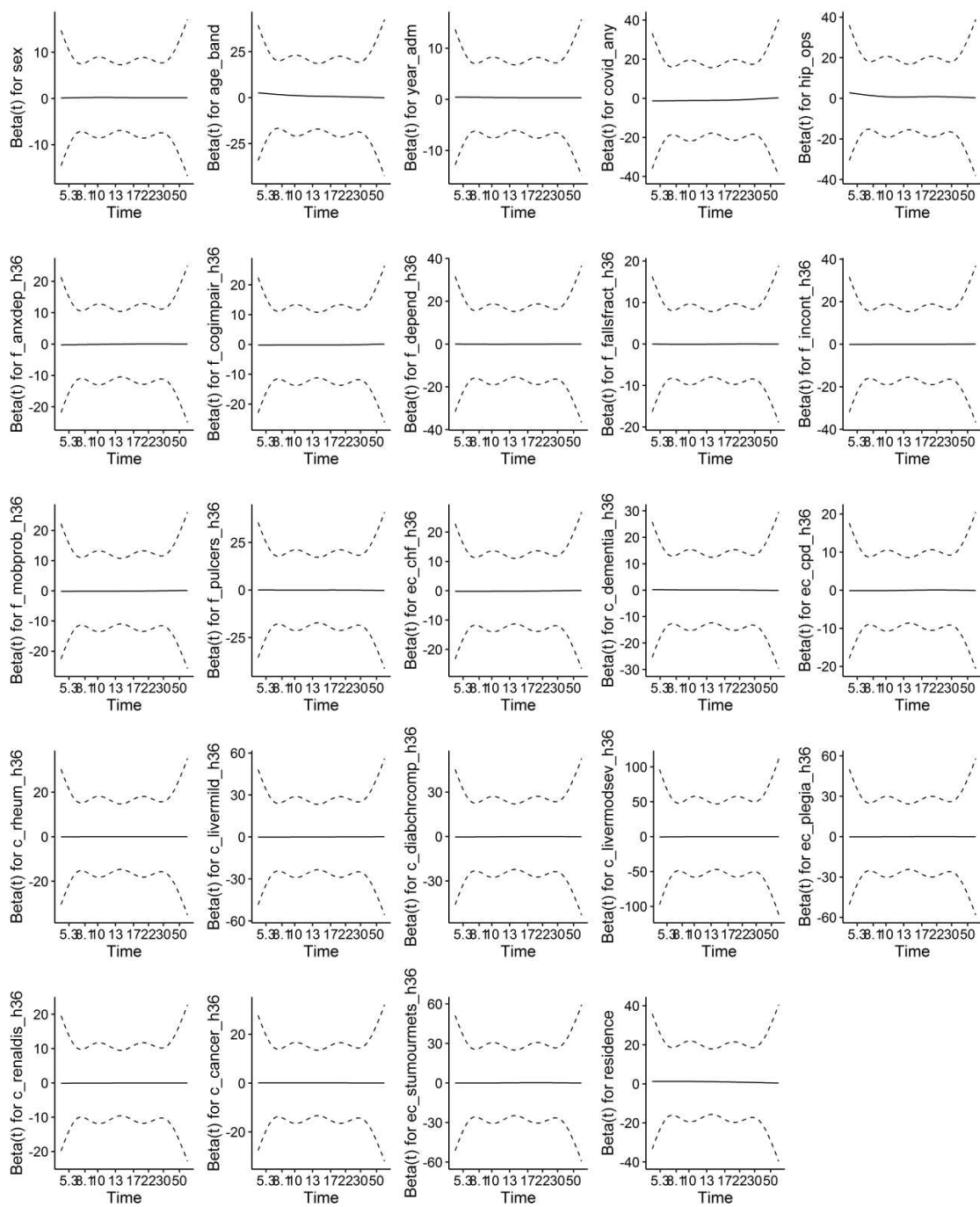
Mortality (or readmission), the **outcome**, is directly influenced by existing health conditions and by complications arising from hip fracture repair procedures, which are unobserved. Procedure type can be dependent on the type of fracture (unobserved) and the patient's general health status. The pandemic caused changes in the frequency of some procedures due to pressures on staff and theatre availability. The pandemic might have also led to changes in age and sex of the admitted patient population (case mix). Additionally, there was a risk of contracting COVID-19, which has an independent effect on mortality. The pandemic might have affected quality of care, which is unobserved. Therefore, we are using the time period of admission as a proxy **exposure**.



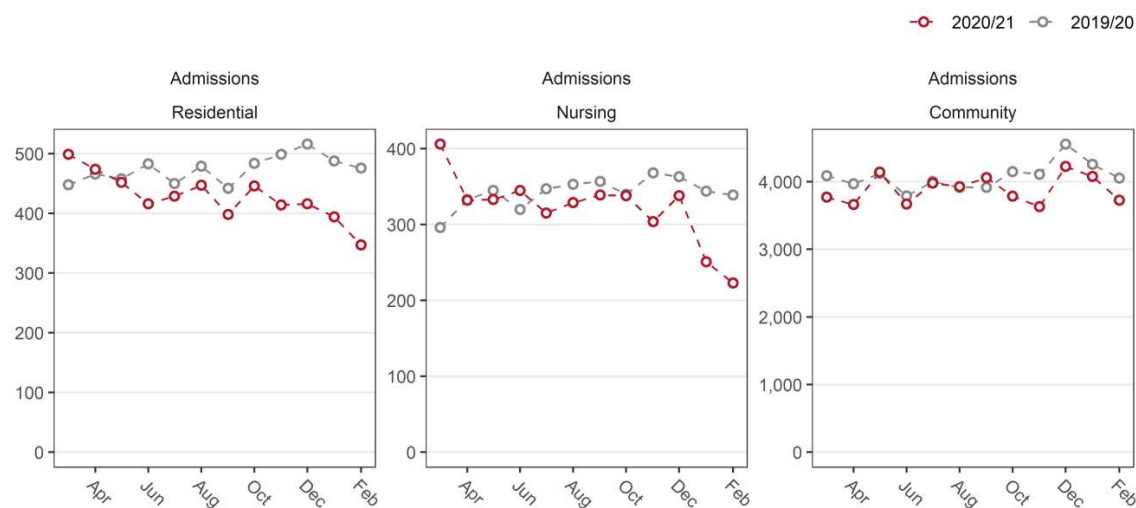
Supplementary Figure S3 Scaled Schoenfeld residuals for the Cox proportional hazard models shown in figure 3 and online supplementary table S4. The plots show the smooth fit and confidence bands at two standard errors.

A Multivariable cause-specific hazard models for death.

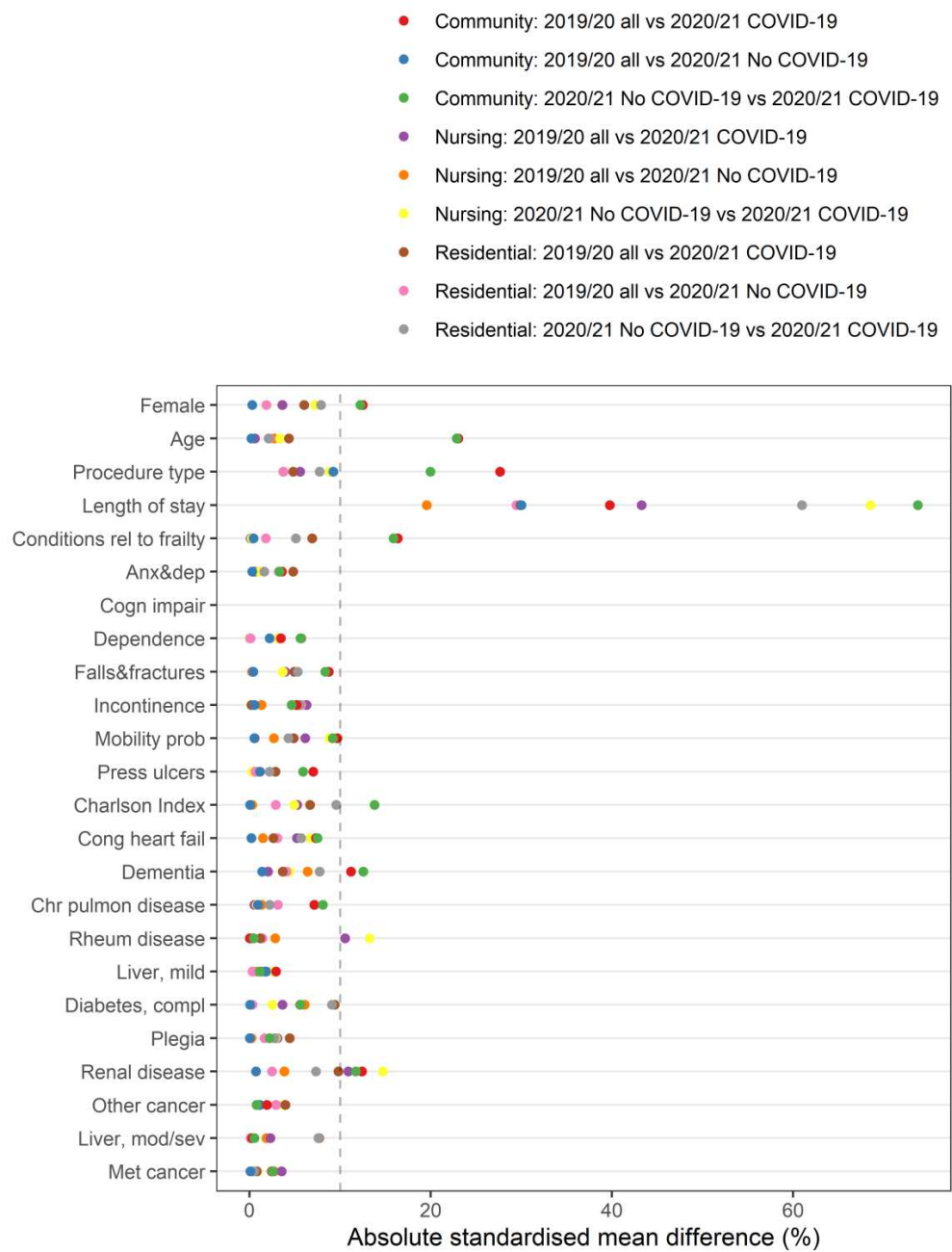
B Multivariable cause-specific hazard models for discharge.



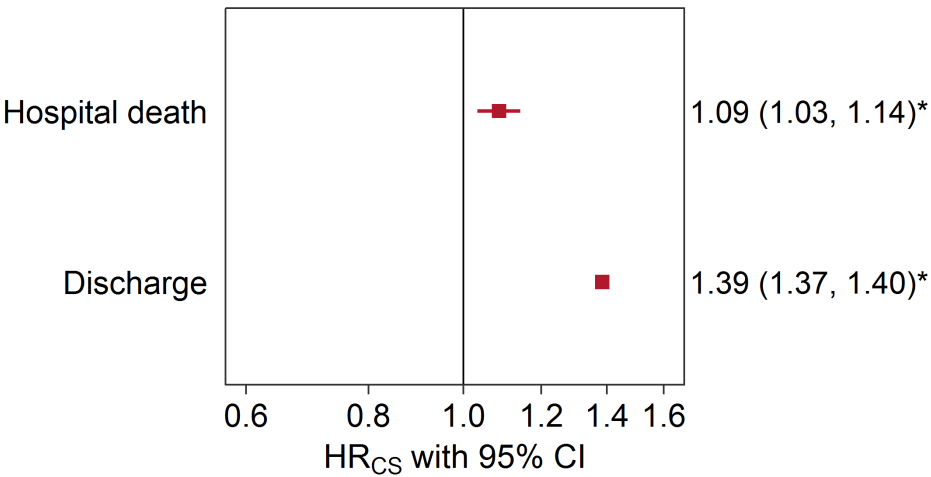
Supplementary Figure S4 Number of hip fracture admissions for people aged 65 years and over to or from National Health Service hospitals in England between 1 March 2019 and 28 February 2020 (2019/20) and 1 March 2020 and 29 February 2021 (2020/21), by month and patient residence.



Supplementary Figure S5 Assessment of similarity of the characteristics between people aged 65 years and over with or without a diagnosis of confirmed or suspected COVID-19 who were admitted to National Health Service hospitals in England for hip fracture during the pandemic (1 March 2020 and 29 February 2021), by patient residence. Age and Charlson Comorbidity index are included as continuous variables.



Supplementary Figure S6 Multivariable-adjusted cause-specific hazard ratios (HR_{CS}) and 95% confidence intervals for the association between admission period (March 2019 – February 2020, or March 2020 – February 2021) and hospital death or live discharge among hip fracture patients aged 65 years and over without a record of confirmed or suspected COVID-19. Hazard ratios are shown on a log scale. *p<0.05



Supplementary Table S1 Office of Population Censuses Surveys Classification of Surgical Operations and Procedures (OPCS4) codes used to categorise hip replacement and repair procedures.

Description	Code range
Total hip replacement	W371, W378-9, W381, W388-9, W391, W398-9, W931, W938-9, W941, W948-9, W951, W958-9
Partial hip replacement	W461, W468-9, W471, W478-9, W481, W488-9
Osteosynthesis	W191-6, W198-9, W241-9

Supplementary Table S2 Characteristics of people aged 65 years and over who were admitted to National Health Service hospitals in England for hip fracture during the COVID-19 pandemic (March 2020 - February 2021), by patient residence and COVID-19 status. The groups Age 65-69 and Age 70-74 were combined due to small group sizes. *Mean (standard deviation), ** Median (IQR)

Residence	Community			Residential care home			Nursing home		
Admission year	2019/20	2020/21		2019/20	2020/21		2019/20	2020/21	
COVID-19 status	All	No record	COVID19	All	No record	COVID19	No record	No record	COVID19
N	48 934	42 370	4 293	5 689	4 578	554	4 105	3 436	417
Female (%)	34476 (70.5)	29 797 (70.3)	2 774 (64.6)	4457 (78.3)	3 621 (79.1)	420 (75.8)	2913 (71.0)	2 494 (72.6)	289 (69.3)
Age (%)									
65-74	8 390 (17.1)	7 183 (17.0)	481 (11.2)	246 (4.3)	202 (4.4)	30 (5.4)	289 (7.0)	250 (7.3)	20 (4.8)
75-79	5 392 (11.0)	6 681 (15.8)	543 (12.6)	172 (3.0)	390 (8.5)	43 (7.8)	219 (5.3)	348 (10.1)	51 (12.2)
80-84	7 420 (15.2)	9 254 (21.8)	902 (21.0)	439 (7.7)	804 (17.6)	92 (16.6)	445 (10.8)	668 (19.4)	83 (19.9)
85-89	10 808 (22.1)	10 193 (24.1)	1 157 (27.0)	971 (17.1)	1 258 (27.5)	157 (28.3)	796 (19.4)	889 (25.9)	122 (29.3)
90-95	12 009 (24.5)	6 768 (16.0)	886 (20.6)	1 614 (28.4)	1 254 (27.4)	148 (26.7)	1 158 (28.2)	875 (25.5)	101 (24.2)
95+	7 736 (15.8)	2 291 (5.4)	324 (7.5)	1 588 (27.9)	670 (14.6)	84 (15.2)	964 (23.5)	406 (11.8)	40 (9.6)
Mean age in years*	83 (8)	83 (8)	85 (7)	88 (7)	87 (7)	87 (7)	86 (7)	86 (7)	86 (7)
Charlson Comorbidity Index (%)									
0	27 894 (57.0)	24 254 (57.2)	2 145 (50.0)	1 764 (31.0)	1 449 (31.7)	163 (29.4)	1 199 (29.2)	1 016 (29.6)	125 (30.0)
1	6 480 (13.2)	5 564 (13.1)	604 (14.1)	312 (5.5)	286 (6.2)	28 (5.1)	194 (4.7)	219 (6.4)	26 (6.2)
2	6 168 (12.6)	5 302 (12.5)	613 (14.3)	1 743 (30.6)	1 356 (29.6)	165 (29.8)	1 268 (30.9)	998 (29.0)	133 (31.9)
3	3 789 (7.7)	3 231 (7.6)	426 (9.9)	931 (16.4)	772 (16.9)	99 (17.9)	681 (16.6)	531 (15.5)	59 (14.1)
4+	4 603 (9.4)	4 019 (9.5)	505 (11.8)	939 (16.5)	715 (15.6)	99 (17.9)	763 (18.6)	672 (19.6)	74 (17.7)
Mean Charlson Comorbidity Index*	1.11 (1.70)	1.11 (1.71)	1.35 (1.85)	1.98 (1.79)	1.93 (1.75)	2.10 (1.85)	2.11 (1.87)	2.10 (1.90)	2.01 (1.83)
Metastatic cancer with solid tumour	872 (1.8)	750 (1.8)	91 (2.1)	45 (0.8)	35 (0.8)	<10 (<1.8)	60 (1.5)	62 (1.8)	<10 (<2.4)
Other malignant cancer	2 977 (6.1)	2 635 (6.4)	275 (6.6)	272 (4.8)	191 (4.2)	22 (4.0)	265 (6.5)	229 (6.7)	24 (5.8)
Chronic pulmonary disease	8 918 (18.2)	7 568 (17.9)	904 (21.1)	895 (15.7)	773 (16.9)	89 (16.1)	717 (17.5)	583 (17.0)	72 (17.3)
Congestive heart failure	4 976 (10.2)	4 284 (10.1)	536 (12.5)	700 (12.3)	518 (11.3)	73 (13.2)	522 (12.7)	454 (13.2)	46 (11.0)
Dementia	4 782 (9.8)	3 970 (9.4)	573 (13.3)	3 152 (55.4)	2 444 (53.4)	317 (57.2)	2 266 (55.2)	1 787 (52.0)	226 (54.2)
Diabetes with chronic complications	1 078 (2.2)	931 (2.2)	133 (3.1)	86 (1.5)	71 (1.6)	16 (2.9)	77 (1.9)	96 (2.8)	10 (2.4)
Hemiplegia or paraplegia	792 (1.6)	687 (1.6)	82 (1.9)	98 (1.7)	89 (1.9)	13 (2.3)	98 (2.4)	83 (2.4)	12 (2.9)
Moderate or severe liver disease	264 (0.5)	221 (0.5)	24 (0.6)	<10 (<0.2)	<10 (<0.2)	<10 (<1.8)	15 (0.4)	<10 (<0.3)	<10 (<2.4)
Mild liver disease	863 (1.8)	850 (2.0)	93 (2.2)	93 (1.6)	73 (1.6)	10 (1.8)	79 (1.9)	70 (2.0)	<10 (<2.4)
Rheumatologic disease	2 407 (4.9)	2 124 (5.0)	211 (4.9)	260 (4.6)	196 (4.3)	24 (4.3)	163 (4.0)	156 (4.5)	<10 (<2.4)
Renal disease	6 765 (13.8)	5 958 (14.1)	789 (18.4)	1 097 (19.3)	928 (20.3)	129 (23.3)	810 (19.7)	731 (21.3)	65 (15.6)
Frailty									
Number of conditions*	0.71 (1.11)	0.72 (1.12)	0.90 (1.22)	1.72 (1.39)	1.74 (1.43)	1.81 (1.46)	1.85 (1.47)	1.85 (1.48)	1.85 (1.46)
Anxiety or depression	4 771 (9.7)	4 166 (9.8)	465 (10.8)	914 (16.1)	790 (17.3)	99 (17.9)	706 (17.2)	599 (17.4)	71 (17.0)
Cognitive impairment	9 385 (19.2)	8 195 (19.3)	1 177 (27.4)	3 729 (65.5)	2 972 (64.9)	369 (66.6)	2 734 (66.6)	2 256 (65.7)	284 (68.1)
Dependence	1 726 (3.5)	1 328 (3.1)	180 (4.2)	653 (11.5)	527 (11.5)	74 (13.4)	612 (14.9)	513 (14.9)	67 (16.1)
Falls and fractures	11 205 (22.9)	9 771 (23.1)	1 145 (26.7)	2 541 (44.7)	2 036 (44.5)	261 (47.1)	1 901 (46.3)	1 587 (46.2)	185 (44.4)
Incontinence	1 724 (3.5)	1 537 (3.6)	195 (4.5)	531 (9.3)	506 (11.1)	52 (9.4)	503 (12.3)	436 (12.7)	60 (14.4)
Mobility problems	4 580 (9.4)	4 029 (9.5)	531 (12.4)	1 031 (18.1)	840 (18.3)	111 (20.0)	817 (19.9)	721 (21.0)	73 (17.5)
Pressure ulcers	1 485 (3.0)	1 369 (3.2)	187 (4.4)	360 (6.3)	297 (6.5)	39 (7.0)	321 (7.8)	261 (7.6)	32 (7.7)
Procedure (%)									
None	3 381 (6.9)	2 968 (7.0)	252 (5.9)	421 (7.4)	344 (7.5)	<45 (<8.1)	332 (8.1)	271 (7.9)	<35 (<8.4)
Osteosynthesis	21 102 (43.1)	17 868 (42.2)	1 950 (45.4)	2 488 (43.7)	2 053 (44.8)	244 (44.0)	1 833 (44.7)	1 567 (45.6)	177 (42.4)
Partial replacement	19 776 (40.4)	18 439 (43.5)	1 958 (45.6)	2 735 (48.1)	2 156 (47.1)	263 (47.5)	1 896 (46.2)	1 572 (45.8)	201 (48.2)
Total replacement	4 675 (9.6)	3 095 (7.3)	133 (3.1)	45 (0.8)	25 (0.5)	<10 (<1.8)	44 (1.1)	26 (0.8)	<10 (<2.4)
Length of stay in days**	15 (18)	12 (13)	24 (22)	13 (13)	11 (9)	17.5 (15)	11 (9)	10 (7)	16 (14)

Supplementary Table S3 Multivariable-adjusted cause-specific hazard ratios (HR_{CS}) and 95% confidence intervals for hospital death and live discharge for hip fracture patients aged 65 years and over. The models include an interaction term for admission period and patient residence.

	Hospital death			Live discharge		
	Coefficient (95% CI)	HR _{CS} (95% CI)	p Value	Coefficient (95% CI)	HR _{CS} (95% CI)	p Value
Sex						
Male	-	-	-	-	-	-
Female	-0.526 (-0.572, -0.479)	0.59 (0.56, 0.62)	8.93E-109	0.159 (0.145, 0.173)	1.17 (1.16, 1.19)	1.04E-114
Age						
65-69 (ref)	-	-	-	-	-	-
70-74	0.076 (-0.124, 0.276)	1.08 (0.88, 1.32)	4.55E-01	-0.159 (-0.191, -0.127)	0.85 (0.83, 0.88)	1.77E-22
75-79	0.342 (0.157, 0.526)	1.41 (1.17, 1.69)	2.89E-04	-0.311 (-0.341, -0.281)	0.73 (0.71, 0.76)	2.40E-89
80-84	0.447 (0.268, 0.625)	1.56 (1.31, 1.87)	9.10E-07	-0.443 (-0.473, -0.414)	0.64 (0.62, 0.66)	4.46E-192
85-89	0.691 (0.515, 0.867)	2.00 (1.67, 2.38)	1.39E-14	-0.562 (-0.591, -0.533)	0.57 (0.55, 0.59)	0.00E+00
90-94	0.987 (0.811, 1.164)	2.68 (2.25, 3.20)	6.21E-28	-0.641 (-0.671, -0.61)	0.53 (0.51, 0.54)	0.00E+00
95+	1.233 (1.049, 1.416)	3.43 (2.86, 4.12)	1.16E-39	-0.673 (-0.710, -0.637)	0.51 (0.49, 0.53)	8.73E-291
Year						
2019/20 (ref)	-	-	-	-	-	-
2020/21	0.124 (0.070, 0.178)	1.13 (1.07, 1.19)	7.25E-06	0.339 (0.326, 0.353)	1.40 (1.39, 1.42)	0.00E+00
Residence						
Community (ref)	-	-	-	-	-	-
Residential care home	0.409 (0.307, 0.512)	1.51 (1.36, 1.67)	4.48E-15	0.420 (0.390, 0.450)	1.52 (1.48, 1.57)	6.77E-168
Nursing home	0.541 (0.416, 0.665)	1.72 (1.52, 1.95)	1.68E-17	0.743 (0.708, 0.777)	2.10 (2.03, 2.17)	0.00E+00
Year : Residence						
2020/21: Residential care home	-0.077 (-0.217, 0.062)	0.93 (0.81, 1.06)	2.79E-01	0.005 (-0.037, 0.046)	1.00 (0.96, 1.05)	8.31E-01
2020/21:Nursing home	-0.155 (-0.325, 0.014)	0.86 (0.72, 1.01)	7.25E-02	-0.098 (-0.146, -0.051)	0.91 (0.86, 0.95)	5.20E-05
COVID-19						
No record (ref)	-	-	-	-	-	-
Confirmed or suspected	0.884 (0.819, 0.949)	2.42 (2.27, 2.58)	3.75E-156	-0.908 (-0.940, -0.875)	0.40 (0.39, 0.42)	0.00E+00
Charlson Index						
Metastatic cancer with solid tumour	0.462 (0.324, 0.600)	1.59 (1.38, 1.82)	4.87E-11	0.012 (-0.036, 0.060)	1.01 (0.96, 1.06)	6.29E-01
Other malignant cancer	0.106 (0.024, 0.187)	1.11 (1.02, 1.21)	1.11E-02	0.038 (0.012, 0.064)	1.04 (1.01, 1.07)	4.02E-03
Chronic pulmonary disease	0.368 (0.315, 0.421)	1.44 (1.37, 1.52)	6.06E-42	-0.055 (-0.072, -0.038)	0.95 (0.93, 0.96)	8.08E-11
Congestive heart failure	0.486 (0.428, 0.544)	1.63 (1.53, 1.72)	6.58E-61	-0.137 (-0.158, -0.115)	0.87 (0.85, 0.89)	2.19E-35
Dementia	0.046 (-0.029, 0.120)	1.05 (0.97, 1.13)	2.29E-01	0.042 (0.018, 0.066)	1.04 (1.02, 1.07)	5.93E-04
Diabetes with chronic complications	-0.008 (-0.135, 0.119)	0.99 (0.87, 1.13)	9.03E-01	-0.170 (-0.212, -0.127)	0.84 (0.81, 0.88)	6.46E-15
Hemiplegia or paraplegia	-0.068 (-0.230, 0.094)	0.93 (0.79, 1.10)	4.12E-01	-0.124 (-0.171, -0.077)	0.88 (0.84, 0.93)	2.07E-07
Moderate/severe liver disease	0.688 (0.453, 0.924)	1.99 (1.57, 2.52)	1.01E-08	-0.230 (-0.320, -0.139)	0.79 (0.73, 0.87)	6.61E-07
Mild liver disease	0.037 (-0.118, 0.193)	1.04 (0.89, 1.21)	6.39E-01	-0.057 (-0.102, -0.012)	0.94 (0.90, 0.99)	1.36E-02
Rheumatologic disease	-0.048 (-0.151, 0.054)	0.95 (0.86, 1.06)	3.54E-01	-0.016 (-0.044, 0.012)	0.98 (0.96, 1.01)	2.70E-01
Renal disease	0.234 (0.179, 0.289)	1.26 (1.20, 1.34)	8.41E-17	-0.076 (-0.095, -0.058)	0.93 (0.91, 0.94)	4.21E-16
Conditions related to frailty						
Anxiety & depression	-0.075 (-0.148, -0.002)	0.93 (0.86, 1.00)	4.46E-02	-0.076 (-0.097, -0.056)	0.93 (0.91, 0.95)	1.00E-13
Cognitive impairment	0.112 (0.045, 0.179)	1.12 (1.05, 1.20)	9.95E-04	-0.169 (-0.190, -0.147)	0.84 (0.83, 0.86)	7.28E-55
Dependence	-0.055 (-0.148, 0.037)	0.95 (0.86, 1.04)	2.41E-01	-0.083 (-0.112, -0.053)	0.92 (0.89, 0.95)	4.22E-08
Falls & fractures	-0.215 (-0.268, -0.162)	0.81 (0.76, 0.85)	1.92E-15	-0.053 (-0.068, -0.037)	0.95 (0.93, 0.96)	1.27E-11
Incontinence	-0.095 (-0.192, 0.002)	0.91 (0.83, 1.00)	5.53E-02	-0.067 (-0.096, -0.037)	0.94 (0.91, 0.96)	1.08E-05
Mobility problems	-0.046 (-0.113, 0.021)	0.96 (0.89, 1.02)	1.81E-01	-0.097 (-0.118, -0.076)	0.91 (0.89, 0.93)	1.17E-19
Pressure ulcers	0.032 (-0.067, 0.130)	1.03 (0.94, 1.14)	5.30E-01	-0.068 (-0.101, -0.034)	0.93 (0.90, 0.97)	6.46E-05
Procedure						
None (ref)	-	-	-	-	-	-
Osteosynthesis	-1.159 (-1.226, -1.092)	0.31 (0.29, 0.34)	2.30E-253	-0.393 (-0.419, -0.368)	0.67 (0.66, 0.69)	5.90E-201
Partial replacement	-1.140 (-1.207, -1.073)	0.32 (0.30, 0.34)	9.70E-244	-0.326 (-0.351, -0.300)	0.72 (0.70, 0.74)	3.35E-138
Total replacement	-1.914 (-2.140, -1.689)	0.15 (0.12, 0.18)	4.92E-62	0.337 (0.304, 0.370)	1.40 (1.36, 1.45)	2.00E-88

Supplementary Table S4 Multivariable-adjusted cause-specific hazard ratios (HR_{CS}) and 95% confidence intervals for hospital death and live discharge for hip fracture patients aged 65 years and over.

	Hospital death			Live discharge		
	Coefficient (95% CI)	HR _{CS} (95% CI)	p Value	Coefficient (95% CI)	HR _{CS} (95% CI)	p Value
Sex						
Male	-	-	-	-	-	-
Female	0.59 (0.56, 0.62)	-0.526 (-0.572, -0.479)	6.12E-109	1.17 (1.16, 1.19)	0.159 (0.145, 0.173)	1.65E-114
Age						
65-69 (ref)	-	-	-	-	-	-
70-74	1.08 (0.88, 1.32)	0.077 (-0.123, 0.277)	4.49E-01	0.85 (0.83, 0.88)	-0.159 (-0.191, -0.127)	2.22E-22
75-79	1.41 (1.17, 1.69)	0.342 (0.158, 0.527)	2.79E-04	0.73 (0.71, 0.76)	-0.310 (-0.341, -0.280)	4.92E-89
80-84	1.56 (1.31, 1.87)	0.448 (0.269, 0.626)	8.71E-07	0.64 (0.62, 0.66)	-0.443 (-0.472, -0.414)	6.82E-192
85-89	2.00 (1.67, 2.38)	0.692 (0.516, 0.868)	1.32E-14	0.57 (0.55, 0.59)	-0.562 (-0.591, -0.532)	0.00E+00
90-94	2.69 (2.25, 3.20)	0.988 (0.811, 1.165)	5.76E-28	0.53 (0.51, 0.54)	-0.641 (-0.671, -0.610)	0.00E+00
95+	3.43 (2.86, 4.12)	1.233 (1.050, 1.417)	1.05E-39	0.51 (0.49, 0.53)	-0.673 (-0.709, -0.637)	1.69E-290
Year						
2019/20 (ref)	-	-	-	-	-	-
2020/21	1.11 (1.05, 1.16)	0.103 (0.053, 0.152)	4.53E-05	1.40 (1.38, 1.41)	0.333 (0.321, 0.345)	0.00E+00
Residence						
Community (ref)	-	-	-	-	-	-
Residential care home	1.45 (1.34, 1.56)	0.370 (0.295, 0.446)	6.55E-22	1.53 (1.49, 1.56)	0.422 (0.400, 0.444)	1.45E-300
Nursing home	1.58 (1.45, 1.73)	0.459 (0.370, 0.549)	9.45E-24	2.00 (1.95, 2.05)	0.694 (0.669, 0.719)	0.00E+00
COVID-19						
No record (ref)	-	-	-	-	-	-
Confirmed or suspected	2.42 (2.27, 2.58)	0.884 (0.819, 0.949)	3.24E-156	0.40 (0.39, 0.42)	-0.908 (-0.941, -0.876)	0.00E+00
Charlson Index conditions						
Metastatic cancer with solid tumour	1.59 (1.38, 1.82)	0.463 (0.325, 0.601)	4.43E-11	1.01 (0.96, 1.06)	0.011 (-0.037, 0.059)	6.52E-01
Other malignant cancer	1.11 (1.03, 1.21)	0.106 (0.025, 0.188)	1.06E-02	1.04 (1.01, 1.07)	0.038 (0.012, 0.064)	3.86E-03
Chronic pulmonary disease	1.44 (1.37, 1.52)	0.368 (0.315, 0.421)	6.23E-42	0.95 (0.93, 0.96)	-0.055 (-0.072, -0.039)	7.66E-11
Congestive heart failure	1.63 (1.53, 1.72)	0.486 (0.428, 0.544)	7.18E-61	0.87 (0.85, 0.89)	-0.137 (-0.158, -0.115)	1.58E-35
Dementia	1.05 (0.97, 1.13)	0.046 (-0.028, 0.121)	2.22E-01	1.04 (1.02, 1.07)	0.043 (0.019, 0.067)	4.89E-04
Diabetes with chronic complications	0.99 (0.87, 1.13)	-0.008 (-0.136, 0.119)	8.98E-01	0.84 (0.81, 0.88)	-0.170 (-0.213, -0.128)	5.10E-15
Hemiplegia or paraplegia	0.93 (0.80, 1.1)	-0.068 (-0.229, 0.094)	4.14E-01	0.88 (0.84, 0.93)	-0.124 (-0.171, -0.077)	2.46E-07
Moderate/severe liver disease	1.99 (1.57, 2.51)	0.687 (0.451, 0.922)	1.10E-08	0.79 (0.73, 0.87)	-0.230 (-0.321, -0.140)	6.21E-07
Mild liver disease	1.04 (0.89, 1.21)	0.038 (-0.118, 0.194)	6.31E-01	0.94 (0.90, 0.99)	-0.057 (-0.102, -0.012)	1.34E-02
Rheumatologic disease	0.95 (0.86, 1.06)	-0.047 (-0.150, 0.055)	3.65E-01	0.98 (0.96, 1.01)	-0.016 (-0.044, 0.012)	2.65E-01
Renal disease	1.26 (1.20, 1.34)	0.234 (0.179, 0.289)	7.95E-17	0.93 (0.91, 0.94)	-0.076 (-0.095, -0.058)	4.55E-16
Conditions related to frailty						
Anxiety & depression	0.93 (0.86, 1.00)	-0.075 (-0.149, -0.002)	4.37E-02	0.93 (0.91, 0.95)	-0.077 (-0.097, -0.056)	8.93E-14
Cognitive impairment	1.12 (1.05, 1.20)	0.113 (0.046, 0.180)	9.48E-04	0.84 (0.83, 0.86)	-0.169 (-0.190, -0.147)	7.66E-55
Dependence	0.95 (0.86, 1.04)	-0.056 (-0.148, 0.037)	2.38E-01	0.92 (0.89, 0.95)	-0.082 (-0.112, -0.053)	4.94E-08
Falls & fractures	0.81 (0.76, 0.85)	-0.215 (-0.268, -0.162)	1.83E-15	0.95 (0.93, 0.96)	-0.053 (-0.068, -0.038)	1.20E-11
Incontinence	0.91 (0.82, 1.00)	-0.096 (-0.192, 0.001)	5.29E-02	0.94 (0.91, 0.96)	-0.066 (-0.096, -0.037)	1.14E-05
Mobility problems	0.96 (0.89, 1.02)	-0.046 (-0.113, 0.021)	1.78E-01	0.91 (0.89, 0.93)	-0.097 (-0.118, -0.076)	1.02E-19
Pressure ulcers	1.03 (0.94, 1.14)	0.033 (-0.066, 0.131)	5.18E-01	0.93 (0.90, 0.97)	-0.067 (-0.101, -0.034)	6.85E-05
Procedure						
None (ref)	-	-	-	-	-	-
Osteosynthesis	0.31 (0.29, 0.34)	-1.158 (-1.225, -1.092)	3.44E-253	0.68 (0.66, 0.69)	-0.393 (-0.418, -0.367)	9.32E-201
Partial replacement	0.32 (0.30, 0.34)	-1.139 (-1.207, -1.072)	1.89E-243	0.72 (0.70, 0.74)	-0.326 (-0.351, -0.300)	4.61E-138
Total replacement	0.15 (0.12, 0.18)	-1.915 (-2.141, -1.690)	4.12E-62	1.40 (1.36, 1.45)	0.337 (0.304, 0.370)	1.97E-88