

Patient characteristics	Overall, development cohort	No delirium	Delirium	<i>p</i> -value
<i>n</i> (%)	12052 (100.0)	10722 (89.0)	1330 (11.0)	
Age, mean years (±SD)	77.56 (7.56)	77.00 (7.40)	82.11 (7.30)	<0.001
Age, <i>n</i> (%)				<0.001
65-80 years	7608 (63.1)	7098 (66.3)	510 (38.3)	
>80 years	4444 (36.9)	3624 (33.8)	820 (61.7)	
Female sex, <i>n</i> (%)	6221 (51.6)	5497 (51.3)	724 (54.4)	0.031
Length of stay, median [IQR]	6.00 [4.00, 10.00]	6.00 [4.00, 9.00]	10.00 [7.00, 15.00]	<0.001
Placement after discharge, <i>n</i> (%)				<0.001
Died	364 (3.0)	211 (2.0)	153 (11.5)	
Home	2991 (24.8)	2841 (26.5)	150 (11.3)	
Ambulatory follow-up treatment	5026 (41.7)	4775 (44.5)	251 (18.9)	
Ambulatory homecare	772 (6.4)	649 (6.1)	123 (9.2)	
Nursing homes	1393 (11.6)	896 (8.4)	497 (37.4)	
Rehabilitation centers	1446 (12.0)	1295 (12.1)	151 (11.4)	
Unknown	60 (0.5)	55 (0.5)	5 (04)	
Departement, <i>n</i> (%)				<0.001
Medical departement	6531 (54.2)	5603 (52.3)	928 (69.8)	
Surgical departement	5521 (45.8)	5119 (47.7)	405 (30.2)	
Hearing device, <i>n</i> (%)				<0.001
None	6962 (57.8)	6291 (58.7)	671 (50.5)	
Hearing device	1134 (9.4)	1009 (9.4)	125 (9.4)	
Missing	3956 (32.8)	3422 (31.9)	534 (40.2)	
Visual aid, <i>n</i> (%)				<0.001
None	2244 (18.6)	1974 (18.4)	270 (20.3)	
Glasses or contacts	5811 (48.2)	5292 (49.4)	519 (39.0)	
Missing	3997 (33.2)	3456 (32.2)	541 (40.7)	
Acute myocardial infarction, <i>n</i> (%)	747 (6.2)	647 (6.0)	100 (7.5)	0.04
Congestive heart failure, <i>n</i> (%)	1967 (16.3)	1633 (15.2)	334 (25.1)	<0.001
Peripheral vascular disease, <i>n</i> (%)	1663 (13.8)	1469 (13.7)	194 (14.6)	0.4
Cerebrovascular disease, <i>n</i> (%)	1495 (12.4)	1230 (11.5)	265 (19.9)	<0.001
Dementia, <i>n</i> (%)	834 (6.9)	395 (3.7)	439 (33.0)	<0.001
COPD, <i>n</i> (%)	1344 (11.2)	1202 (11.2)	142 (10.7)	0.591
Rheumatoid disease, <i>n</i> (%)	362 (3.0)	320 (3.0)	42 (3.2)	0.792
Peptic ulcer disease, <i>n</i> (%)	249 (2.1)	205 (1.9)	44 (3.3)	0.001
Liver disease, <i>n</i> (%)	223 (1.9)	188 (1.8)	35 (2.6)	0.033
Diabetes, <i>n</i> (%)	2555 (21.2)	2214 (20.6)	341 (25.6)	<0.001
Hemiplegia, Paraplegia, <i>n</i> (%)	574 (4.8)	446 (4.2)	128 (9.6)	<0.001
Renal dysfunction, <i>n</i> (%)	2939 (24.4)	2459 (22.9)	480 (36.1)	<0.001
Cancer, <i>n</i> (%)	2126 (17.6)	1917 (17.9)	209 (15.7)	0.055
Self-care Index, <i>n</i> (%)				<0.001
>32 (does not need much assistance)	5294 (43.9)	5034 (47.0)	260 (19.5)	
≤32 (needs assistance)	1076 (8.9)	778 (7.3)	298 (22.4)	
Missing	5682 (47.1)	4910 (45.8)	772 (58.0)	
Risk of falling, <i>n</i> (%)				<0.001
No	2428 (20.1)	2375 (22.2)	53 (4.0)	
Yes	4046 (33.6)	3521 (32.8)	525 (39.5)	
Missing	5578 (46.3)	4826 (45.0)	752 (56.5)	
Risk of pneumonia, <i>n</i> (%)				<0.001
No	4361 (36.2)	4122 (38.4)	239 (18.0)	
Yes	2113 (17.5)	1774 (16.5)	339 (25.5)	
Missing	5578 (46.3)	4826 (45.0)	752 (56.5)	
Braden, <i>n</i> (%)				<0.001
>16 (low risk for decubitus)	5883 (48.8)	5466 (51.0)	417 (31.4)	
≤16 (high risk for decubitus)	591 (4.9)	430 (4.0)	161 (12.1)	
Missing	5578 (46.3)	4826 (45.0)	752 (56.5)	
Nutrition deficiency score, <i>n</i> (%)				<0.001
≤3 (low risk)	4193 (34.8)	3927 (36.6)	266 (20.0)	
>3 (high risk)	566 (4.7)	495 (4.6)	71 (5.3)	
Missing	7293 (60.5)	6300 (58.8)	993 (74.7)	
Catheterisation, <i>n</i> (%)	3330 (27.6)	2776 (25.9)	554 (41.7)	<0.001
GFR [ml/min], <i>n</i> (%)				<0.001
>45 (no)	7768 (64.5)	6949 (64.8)	819 (61.6)	
≤45 (yes)	2683 (22.3)	2228 (20.8)	455 (34.2)	
Missing	1601 (13.3)	1545 (14.4)	56 (4.2)	
Creatinine [μmol/l], <i>n</i> (%)				<0.001
<133 (no)	8632 (71.6)	7662 (71.5)	970 (72.9)	
≥133 (yes)	1841 (15.3)	1532 (14.3)	309 (23.2)	
Missing	1579 (13.1)	1528 (14.3)	51 (3.8)	
Sodium [mmol/l], <i>n</i> (%)				<0.001
>130 to ≤147 (no)	9679 (80.3)	8535 (79.6)	1144 (86.0)	
≤130 or >147 (yes)	747 (6.2)	617 (5.8)	130 (9.8)	
Missing	1626 (13.5)	1570 (14.6)	56 (4.2)	
Potassium [mmol/l], <i>n</i> (%)				<0.001
>3.5 to ≤4.8 (no)	8664 (71.9)	7675 (71.6)	989 (74.4)	
≤3.5 or >4.8 (yes)	1762 (14.6)	1477 (13.8)	285 (21.4)	
Missing	1626 (13.5)	1570 (14.6)	56 (4.2)	
ALAT [U/l], <i>n</i> (%)				<0.001
≤100 (no)	2961 (24.6)	2579 (24.1)	382 (28.7)	
>100 (yes)	234 (1.9)	199 (1.9)	35 (2.6)	
Missing	8857 (73.5)	7944 (74.1)	913 (68.6)	
ASAT [U/l], <i>n</i> (%)				<0.001
≤100 (no)	8246 (68.4)	7120 (66.4)	1126 (84.7)	
>100 (yes)	335 (2.8)	275 (2.6)	60 (4.5)	
Missing	3471 (28.8)	3327 (31.0)	144 (10.8)	
CRP [mg/l], <i>n</i> (%)				<0.001
≤10 (no)	4806 (39.9)	4330 (40.4)	476 (35.8)	
>10 (yes)	5053 (41.9)	4267 (39.8)	786 (59.1)	
Missing	2193 (18.2)	2125 (19.8)	68 (5.1)	

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Temperature [°C], <i>n</i> (%)				0.004
≤38 (no)	10040 (83.3)	8970 (83.7)	1070 (80.5)	
>38 (yes)	177 (1.5)	148 (1.4)	29 (2.2)	
Missing	1835 (15.2)	1604 (15.0)	231 (17.4)	
Blood sugar [mmol/l], <i>n</i> (%)				0.524
≥2.7 to ≤4.8 (no)	3140 (26.1)	2779 (25.9)	361 (27.1)	
<2.7 or >10 (yes)	517 (4.3)	465 (4.3)	52 (3.9)	
Missing	8395 (69.7)	7478 (69.7)	917 (68.9)	
Polymedication, <i>n</i> (%)				<0.001
≤5 (no)	3751 (31.1)	3420 (31.9)	331 (24.9)	
>5 (yes)	7225 (59.9)	6402 (59.7)	823 (61.9)	
Missing	1076 (8.9)	900 (8.4)	176 (13.2)	
ABC, median [IQR]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	0.001
cumulative ABC ≥3 points, <i>n</i> (%)	834 (6.9)	710 (6.6)	124 (9.3)	<0.001
AEC, median [IQR]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	0.00 [0.00, 1.00]	<0.001
cumulative AEC ≥3 points, <i>n</i> (%)	499 (4.1)	401 (3.7)	98 (7.4)	<0.001
ACB, median [IQR]	0.00 [0.00, 1.00]	0.00 [0.00, 1.00]	0.00 [0.00, 3.00]	<0.001
cumulative ACB ≥3 points, <i>n</i> (%)	2005 (16.6)	1662 (15.5)	343 (25.8)	<0.001
AIS, median [IQR]	1.00 [0.00, 3.00]	1.00 [0.00, 3.00]	1.00 [0.00, 4.00]	<0.001
cumulative AIS ≥3 points, <i>n</i> (%)	3314 (27.5)	2819 (26.3)	495 (37.2)	<0.001
CABS, median [IQR]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	0.001
cumulative CABS ≥3 points, <i>n</i> (%)	1071 (8.9)	937 (8.7)	134 (10.1)	0.118
Chew, median [IQR]	0.00 [0.00, 1.00]	0.00 [0.00, 1.00]	0.00 [0.00, 1.00]	<0.001
cumulative Chew ≥3 points, <i>n</i> (%)	984 (8.2)	798 (7.4)	186 (14.0)	<0.001
AAS, median [IQR]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	0.00 [0.00, 1.00]	<0.001
cumulative AAS ≥3 points, <i>n</i> (%)	1192 (9.9)	1029 (9.6)	163 (12.3)	0.003
ARS, median [IQR]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	0.00 [0.00, 1.00]	<0.001
cumulative ARS ≥3 points, <i>n</i> (%)	450 (3.7)	340 (3.2)	110 (8.3)	<0.001
ACL, median [IQR]	0.00 [0.00, 1.00]	0.00 [0.00, 1.00]	0.00 [0.00, 1.00]	<0.001
cumulative ACL ≥3 points, <i>n</i> (%)	943 (7.8)	765 (7.1)	178 (13.4)	<0.001
CrAS, median [IQR]	0.00 [0.00, 1.00]	0.00 [0.00, 1.00]	0.00 [0.00, 2.00]	<0.001
cumulative CrAS ≥3 points, <i>n</i> (%)	1476 (12.2)	1187 (11.1)	289 (21.7)	<0.001
ADS, median [IQR]	0.00 [0.00, 1.00]	0.00 [0.00, 1.00]	0.00 [0.00, 2.00]	0.212
cumulative ADS ≥3 points, <i>n</i> (%)	1468 (12.2)	1267 (11.8)	201 (15.1)	0.001
SCDL, median [IQR]	0.00 [0.00, 2.00]	0.00 [0.00, 2.00]	0.00 [0.00, 2.00]	0.236
cumulative SCDL ≥3 points, <i>n</i> (%)	1573 (13.1)	1403 (13.1)	170 (12.8)	0.79
PI, median [IQR]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	<0.001
cumulative PI ≥3 points, <i>n</i> (%)	555 (4.6)	397 (3.7)	158 (11.9)	<0.001
CI, median [IQR]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	<0.001
cumulative CI ≥3 points, <i>n</i> (%)	482 (4.0)	333 (3.1)	149 (11.2)	<0.001
GABS, median [IQR]	1.00 [0.00, 3.00]	1.00 [0.00, 3.00]	2.00 [0.00, 4.00]	<0.001
cumulative GABS ≥3 points, <i>n</i> (%)	3647 (30.3)	3090 (28.8)	557 (41.9)	<0.001
DS, median [IQR]	0.50 [0.00, 3.00]	0.50 [0.00, 3.00]	1.50 [0.00, 4.50]	<0.001
cumulative DS ≥3 points, <i>n</i> (%)	3231 (26.8)	2732 (25.5)	499 (37.5)	<0.001
BAADS, median [IQR]	1.00 [0.00, 3.00]	1.00 [0.00, 3.00]	2.00 [0.00, 4.00]	<0.001
cumulative BAADS ≥3 points, <i>n</i> (%)	3506 (29.1)	2997 (28.0)	509 (38.3)	<0.001
KABS, median [IQR]	0.00 [0.00, 2.00]	0.00 [0.00, 2.00]	1.00 [0.00, 3.00]	<0.001
cumulative KABS ≥3 points, <i>n</i> (%)	2339 (19.4)	1968 (18.4)	371 (27.9)	<0.001
ATS, median [IQR]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	0.00 [0.00, 0.00]	<0.001
cumulative ATS ≥3 points, <i>n</i> (%)	368 (3.1)	233 (2.2)	135 (10.2)	<0.001
DRS, median [IQR]	0.00 [0.00, 2.00]	0.00 [0.00, 2.00]	1.00 [0.00, 3.00]	<0.001
cumulative DRS ≥3 points, <i>n</i> (%)	2340 (19.4)	1958 (18.3)	382 (28.7)	<0.001