Supplementary Table S1. Distribution of the extracted shared healthcare service-use trajectories for the case (BCS) and control (NBC) group, according to their length. The latter is defined by the total number of distinct common visited healthcare services, reflected in a trajectory.

Length (L)	Case (BCS)	Control (NBC)
2	75	85
3	300	413
4	1,076	1,309
5	2,011	2,677
6	1,518	2,460
7	159	500
8	21	10

Supplementary Table S2. Ten most frequent shared care trajectories, for all identified lengths L = 2-7 (number of common distinct services), corresponding to the BCS (case) group. The total number of patients (*#pat*) that share each trajectory is also reported. The numerical visit codes correspond to the following services: 1: Family doctor, 2: Nursing Primary Care, 3: Other Primary Care, 4: Emergency Primary Care, 5: Outpatient Care, 6: Hospital Emergency, 7: Hospital Admission, 8: Laboratory, 9: Radiology, 10: Rehabilitation, 11: Psychology, according to Table 1.

$L = 2$		
s_1	s_2	*#pat*
1	2	3,803
1	5	2,997
5	2	2,670
1	4	2,538
1	6	2,491
1	8	2,203
2	4	2,150
1	9	2,099
1	7	1,993
2	1	1,905

$L = 3$			
s_1	s_2	s_3	*#pat*
1	5	6	1,339
1	5	2	1,316
1	2	6	1,311
1	2	4	1,246
1	5	4	1,180
1	5	7	1,091
1	5	8	1,024
1	2	7	1,016
5	1	2	929
1	5	9	926

$L = 4$				
s_1	s_2	s_3	s_4	*#pat*
1	5	2	6	514
1	5	9	6	500
1	5	9	8	417
1	5	2	4	412
1	5	6	7	405
1	5	2	7	395
1	9	6	7	366
2	1	5	6	357
1	5	4	6	356
1	5	2	3	356

$L = 5$					
s_1	s_2	s_3	s_4	s_5	*#pat*
1	5	9	6	7	168
1	5	2	6	7	134
1	5	9	8	6	131
1	5	9	8	7	126
2	1	5	9	6	123
1	5	2	4	6	122
1	2	9	6	7	121
1	5	9	2	8	120
1	5	2	7	6	119
1	5	9	6	4	117

$L = 6$						
s_1	s_2	s_3	s_4	s_5	s_6	*#pat*
2	1	5	9	6	7	46
1	2	5	9	6	7	41
1	5	9	8	6	7	40
1	5	9	2	8	6	37
1	5	9	6	4	7	35
1	5	9	6	8	7	34
2	1	8	9	6	7	34
2	1	5	9	8	7	34
1	2	8	9	6	7	32
1	5	2	9	6	7	32

$L = 7$							
s_1	s_2	s_3	s_4	s_5	s_6	s_7	*#pat*
1	5	2	9	6	4	7	12
1	2	5	9	6	4	7	10
1	5	9	2	8	7	6	10
2	1	5	9	6	8	7	10
2	1	5	9	8	6	7	10
1	2	5	9	8	6	7	9
2	1	9	5	8	6	7	9
2	1	8	5	9	6	7	9
2	1	5	9	6	7	3	8
1	5	9	2	8	6	7	8
1	5	2	9	6	4	7	12

Supplementary Table S3. Ten most frequent shared care trajectories, for lengths $L = 2$-7 (number of common distinct services), corresponding to the NBC (control) group. The total number of patients (*#pat*) that share each trajectory is also reported. The numerical visit codes correspond to the following services: 1: Family doctor, 2: Nursing Primary Care, 3: Other Primary Care, 4: Emergency Primary Care, 5: Outpatient Care, 6: Hospital Emergency, 7: Hospital Admission, 8: Laboratory, 9: Radiology, 10: Rehabilitation, 11: Psychology, according to Table 1.

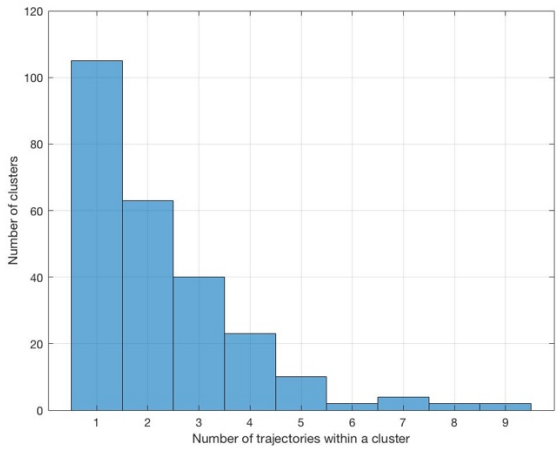
$L = 2$			$L = 3$				$L = 4$				
s_1	s_2	*#pat*	s_1	s_2	s_3	*#pat*	s_1	s_2	s_3	s_4	*#pat*
1	2	7,618	1	2	4	2,482	1	8	9	6	1,045
1	5	5,830	1	5	6	2,299	1	5	9	6	803
1	4	5,043	1	2	6	2,233	1	2	9	6	781
1	8	4,610	1	9	6	2,054	2	1	5	6	693
1	6	4,249	1	2	5	2,033	1	5	2	6	692
2	4	4,210	1	8	9	1,999	1	2	5	6	678
2	5	4,065	1	5	4	1,978	2	1	9	6	633
1	9	3,862	1	5	2	1,869	1	2	8	9	587
2	1	3,650	1	8	6	1,754	1	2	5	4	585
1	3	3,440	1	2	3	1,712	1	9	6	7	585

$L = 5$						$L = 6$						
s_1	s_2	s_3	s_4	s_5	*#pat*	s_1	s_2	s_3	s_4	s_5	s_6	*#pat*
2	1	8	9	6	321	2	1	8	9	6	7	94
1	2	8	9	6	309	1	2	8	9	6	7	80
1	8	9	6	7	272	2	1	5	8	9	6	76
1	8	5	9	6	265	2	1	5	9	6	7	71
1	5	8	9	6	235	1	2	8	5	9	6	70
2	1	5	9	6	231	1	2	8	9	6	4	70
1	8	9	6	4	231	2	1	8	9	6	4	69
1	8	2	9	6	221	2	1	8	5	9	6	68
1	2	9	6	7	218	1	2	8	9	6	3	66
1	5	9	6	7	209	1	5	8	9	6	3	66

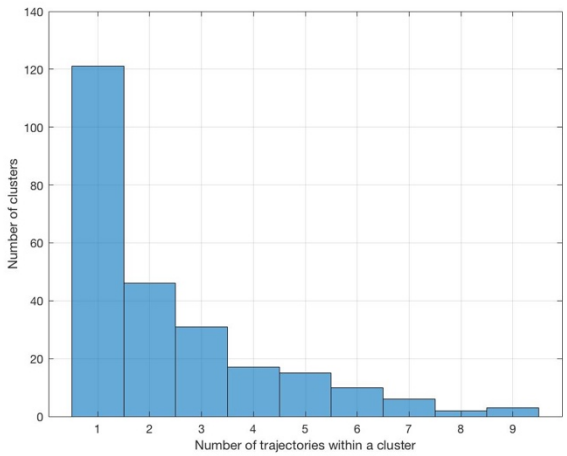
$L = 7$							
s_1	s_2	s_3	s_4	s_5	s_6	s_7	*#pat*
2	1	5	8	9	6	7	26
2	1	5	8	9	6	3	20
2	1	5	8	6	7	3	20
1	2	8	9	6	4	7	19
2	1	5	8	9	6	4	18
2	1	5	9	6	7	3	18
2	1	5	8	9	7	3	17
1	2	8	9	7	6	3	17
2	1	8	9	6	4	7	17
1	5	2	8	9	6	3	16
2	1	5	8	9	6	7	26

Supplementary Table S4. Example of an extracted cluster composed of seven individual care trajectories, after applying the DTW-based unsupervised clustering algorithm to the BCS group. The total number of patients (*#pat*) that share each trajectory is also reported. The numerical visit codes correspond to the following services: 1: Family doctor, 2: Nursing Primary Care, 5: Outpatient Care, 6: Hospital Emergency, 7: Hospital Admission, 8: Laboratory, 9: Radiology, according to Table 1. The basic pattern reflected in the cluster is shown in bold (**5 → 9 → 6**). The last trajectory (in grey) was finally filtered out as it did not fulfil the requirement of at least 60 individuals per shared trajectory.

Shared care trajectory	***#pat***
5 → 9 → 6	598
1 → **5 → 9 → 6**	803
8 → **5 → 9 → 6**	315
5 → 9 → 6 → 7	171
1 → 2 → **5 → 9 → 6**	202
1 → **5 → 9 → 6** → 7	209
1 → **5 → 9** → 8 → **6** → 7	40



(a)



(b)

Supplementary Figure S1. Distribution of the number of extracted clusters based on the number of individual shared service-use trajectories of which they are composed, for the (a) case (BCS) and (b) control (NBC (control) group. A minimum of (a) 60 and (b) 120 individuals (corresponding to ~1% of the total number of patients in each group respectively) was required to share each trajectory in order to be assigned to a cluster.