

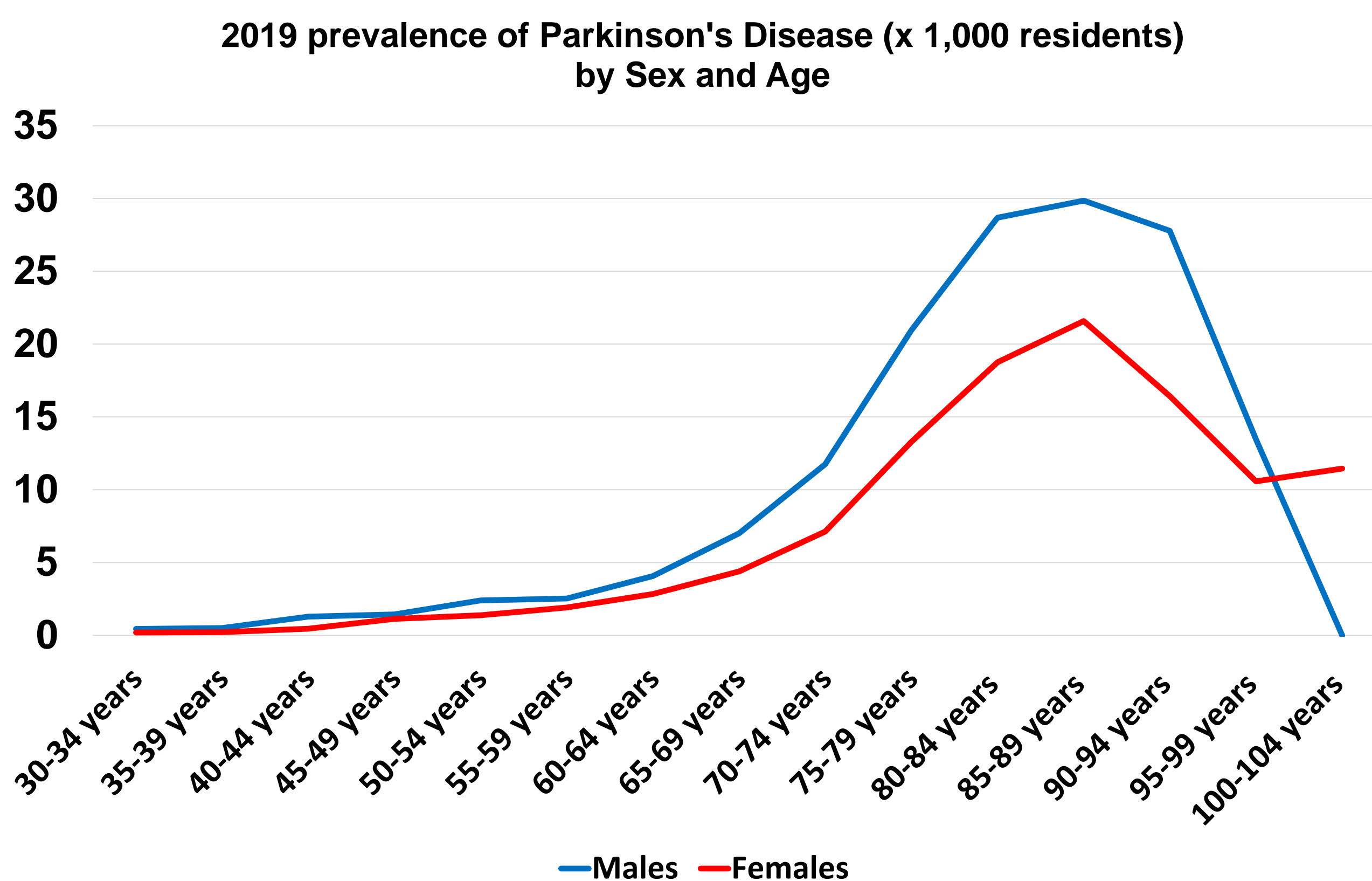
Prevalence of Parkinson's Disease in the Local Health Trust of Bologna

AIM

To estimate the prevalence of Parkinson's Disease in the Local Health Trust of Bologna (886,098 inhabitants) by querying health administrative databases (pharmaceutical, hospital discharge forms and disease exemptions) according to a validated algorithm.

RESULTS

A total of 3,798 people with Parkinson's Disease were identified as prevalent as of 31/12/2019. Relating this absolute number to the population residing in the Local Health Trust of Bologna results in a prevalence of 4.3 per 1,000 inhabitants (95% CI 4.2-4.4). The prevalence is higher for the male sex (4.7, 95% CI 4.5-5.0) than for the female sex (3.8, 95% CI 3.7-4.0) and increases with increasing age until it peaks in the 85-89 year old category, with a prevalence of 30.0 (95% CI 26.4-33.6) for males and 21.6 (95% CI 19.3-24.0) for females.

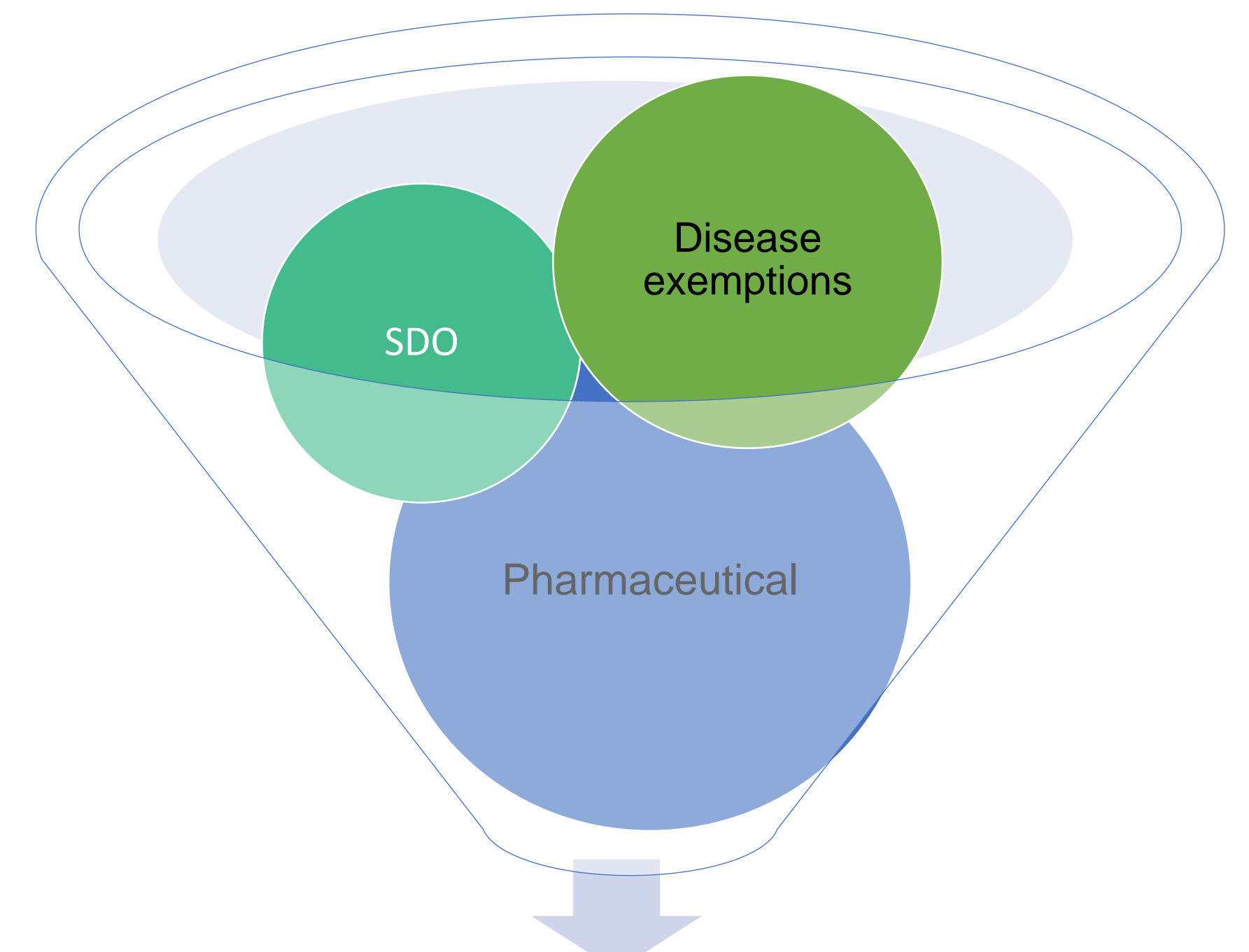


2019 absolute numbers of Parkinson's Disease prevalence by Sex and Age, Local Health Trust of Bologna

Age years	Males	Females	Total
30-34	11	5	16
35-39	14	6	20
40-44	41	15	56
45-49	52	42	94
50-54	85	51	136
55-59	80	65	145
60-64	109	84	193
65-69	159	115	274
70-74	268	191	459
75-79	390	310	700
80-84	443	400	843
85-89	269	322	591
90-94	97	133	230
95-99	10	28	38
100-104	0	3	3
Totale	2028	1770	3798

CONCLUSIONS

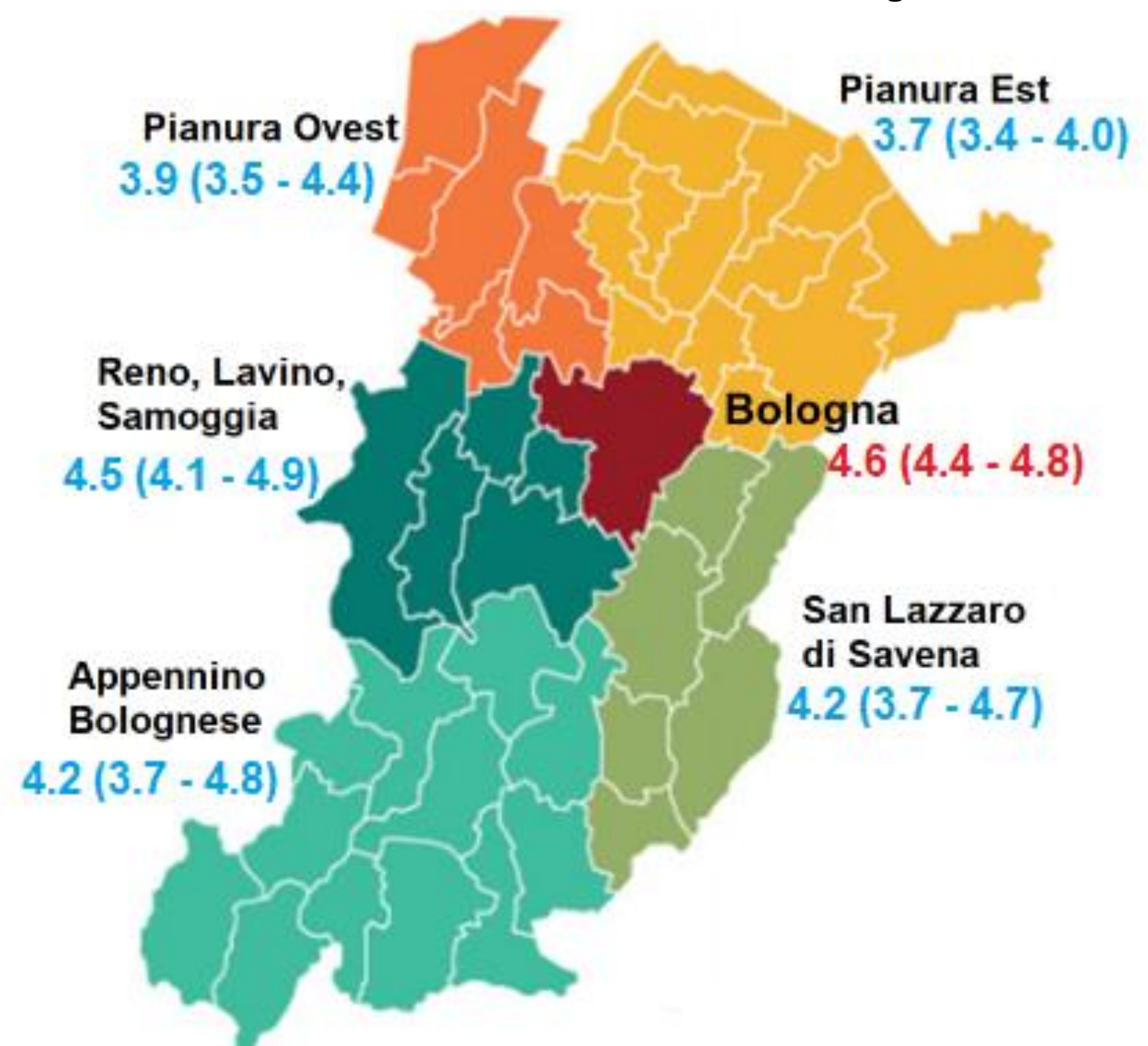
In Italy (1), prevalence estimates of Parkinson's Disease show high variability and range from 0.6 to 6.2 cases per 1,000 inhabitants. The estimate found in the territory of the Local Health Trust of Bologna (4.3 per 1,000 inhabitants, 95% CI 4.2-4.4) is at the higher end of this range. This figure confirms the need to consider this disease, which burdens especially the elderly population, with the utmost attention in order to implement an optimal and equitable organization of health and social services.



Prevalent persons with Parkinson's Disease / Residents Local Health Trust of Bologna as of 31/12/2019 x 1,000 residents

2019 Parkinson's Disease prevalence
4.3 (95% CI 4.2 - 4.4)

2019 prevalence (x 1,000) of Parkinson's Disease by Districts, Local Health Trust of Bologna



METHODS

At least one of the following criteria must be met to identify a person with Parkinson's disease in the year 2019: **Hospital discharge records (SDO)**: primary or secondary diagnosis of Parkinson's disease (ICD-9 332.0) but without a diagnosis of Parkinsonism (ICD-9 332.1).

Exemption by pathology: code 038.332.

Pharmaceutical (territorial and hospital): at least 2 prescriptions at least 6 months apart for the following ATC codes = N04BA02 (Levodopa + Benserazide or Levodopa + carbidopa), N04BA03 (Levodopa + Carbidopa + Entacapone), N04BA05 (Melevodopa + carbidopa), N04BC04 (Ropinirole - tablets ≥ 2 mg or prolonged release ≥ 4 mg), N04BC05 (Pramipexole - tablets ≥ 0.7 mg or prolonged release ≥ 0.52 mg), N04BC07 (Apomorphine), N04BC09 (Rotigotine), N04BD01 (Selegiline), N04BD02 (Rasagiline), N04BX01 (Tolcapone), N04BX02 (Entacapone), N04BX04 (Opicapone), N04BD03 (Safinamide).