

Table E1- Demographics of individuals categorised according to General Practice COPD diagnostic code, airflow obstruction, and the presence of COPD symptoms. GP, General Practitioner. COPD, Chronic Obstructive Pulmonary Disease. AO, Airflow Obstruction. SD, Standard Deviation. BMI, Body Mass Index. IQR, Interquartile Range. CSE, Certificate of Secondary Education.

	Group 1 GP COPD code, AO		Group 2 No GP COPD code, AO, COPD symptoms		Group 3 No GP COPD code, AO, Asymptomatic		Group 4 GP COPD code, No AO		Group 5 No GP COPD code, No AO	
Number of participants, % of overall spirometry cohort	676	17%	655	17%	305	8%	160	4%	2033	52%
Age, mean, SD	69.1	6.5	68.3	7.1	69.6	6.5	68.6	7.1	67.5	7.1
Male, n, %	334	49.4%	388	59.2%	194	63.6%	78	48.8%	1108	54.5%
Ethnicity, n, %										
Asian	12	1.8%	2	0.3%	1	0.3%	5	3.1%	30	1.5%
Black	2	0.3%	4	0.6%	4	1.3%	0	0.0%	22	1.1%
Other	6	0.9%	6	0.9%	2	0.7%	4	2.5%	4	0.2%
White	653	96.6%	642	98.0%	298	97.7%	149	93.1%	1958	96.3%
Prefer not to say /no data	3	0.4%	1	0.2%	0	0.0%	2	1.3%	19	0.9%
Mean BMI, SD	27.6	5.8	27.6	5.0	26.2	4.2	31.2	6.1	29.5	5.2
IMD decile, IQR (lower= more deprived)	3	1-6	4	2-7	5	2.7	4	1-6	4	1-7
IMD rank, median, IQR (lower=more deprived)	8791	2995-18838	11667	3476-20875	15025	4286- 21414	9864	2279-19515	12497	3546-21237
Education, n, %										
No qualifications, left school at or before 15	463	68.5%	406	62.0%	174	57.0%	111	69.4%	1170	57.6%
O-levels, CSEs or equivalent	98	14.5%	119	18.2%	58	19.0%	20	12.5%	390	19.2%
A-levels or equivalent and above	113	16.7%	127	19.4%	72	23.6%	29	18.1%	463	22.8%
Prefer not to say /no data	2	0.3%	3	0.5%	1	0.3%	0	0.0%	10	0.5%
Smoking status										
Current (within the last month), n, %	259	38.3%	319	48.7%	99	32.5%	50	31.3%	583	28.7%
Former in last year, n, %	33	4.9%	10	1.5%	12	3.9%	3	1.9%	59	2.9%
Former over a year, n, %	384	56.8%	326	49.8%	194	63.6%	107	66.9%	1391	68.4%
Pack years, median, IQR	38	28-50	38	27-48	32	25-43	36	26-48	34	25-42

Table E2- Clinical information of individuals categorised according to General Practice COPD diagnostic code, airflow obstruction, and the presence of COPD symptoms. GP, General Practitioner. COPD, Chronic Obstructive Pulmonary Disease. AO, Airflow Obstruction. TB, Tuberculosis. CAT, COPD Assessment Test. mMRC, Modified Medical Research Council. WHO, World Health Organisation. VAS, Visual Analogue Score. SD, Standard Deviation

	Group 1 GP COPD code, AO	Group 2 No GP COPD code, AO, COPD symptoms	Group 3 No GP COPD code, AO, Asymptomatic	Group 4 GP COPD code, No AO	Group 5 No GP COPD code, No AO
Number participants	676	655	305	160	2033
Self-reported diagnoses, n, %					
None	24 3.6%	447 68.2%	251 82.3%	15 9.4%	1470 72.3%
COPD	632 93.5%	28 4.3%	2 0.7%	134 83.8%	40 2.0%
Emphysema	75 11.1%	7 1.1%	0 0.0%	15 9.4%	8 0.4%
Bronchitis	184 27.2%	120 18.3%	29 9.5%	36 22.5%	355 17.5%
Pneumonia	151 22.3%	88 13.4%	26 8.5%	41 25.6%	245 12.1%
TB	13 1.9%	10 1.5%	4 1.3%	0 0.0%	22 1.1%
Asthma (* excluded)	142 21.0%	0*	0*	25 15.6%	151 7.4%
Symptoms, n, %					
None	56 8.3%	0 0.0%	305 100.0%	11 6.9%	699 34.4%
Wheeze	354 52.4%	252 38.5%	0 0.0%	85 53.1%	474 23.3%
Bronchitis	128 18.9%	37 5.6%	0 0.0%	24 15.0%	134 6.6%
Breathlessness	527 78.0%	477 72.8%	0 0.0%	126 78.8%	982 48.3%
Cough	262 38.8%	247 37.7%	0 0.0%	60 37.5%	401 19.7%
Sputum	327 48.4%	239 36.5%	0 0.0%	69 43.1%	435 21.4%
Missing data	4 0.6%	6 0.9%	0 0.0%	2 1.3%	14 0.7%
COPD CAT score, n, %					
Low (<10)	222 32.8%	329 50.2%	281 92.1%	48 30.0%	1357 66.7%
Medium (10-20)	278 41.1%	284 43.4%	24 7.9%	75 46.9%	553 27.2%
High (>20)	134 19.8%	32 4.9%	0 0.0%	31 19.4%	96 4.7%
Very high (>30)	38 5.6%	4 0.6%	0 0.0%	4 2.5%	13 0.6%
Missing data	4 0.6%	6 0.9%	0 0.0%	2 1.3%	14 0.7%
Median CAT score (IQR)	13 8-21	9 6-14	4 2-6	15 9-20	7 4-11
mMRC dyspnoea score, n, %					
0	128 18.9%	250 38.2%	247 81.0%	22 13.8%	1024 50.4%
1	303 44.8%	308 47.0%	53 17.4%	64 40.0%	778 38.3%
2	113 16.7%	57 8.7%	3 1.0%	34 21.3%	141 6.9%
3	68 10.1%	24 3.7%	1 0.3%	22 13.8%	59 2.9%
4	60 8.9%	10 1.5%	1 0.3%	16 10.0%	17 0.8%
Missing data	4 0.6%	6 0.9%	0 0.0%	2 1.3%	14 0.7%

WHO performance status, n, %					
0	284 42.0%	430 65.6%	265 86.9%	54 33.8%	1479 72.7%
1	278 41.1%	175 26.7%	33 10.8%	67 41.9%	421 20.7%
2	72 10.7%	33 5.0%	7 2.3%	25 15.6%	80 3.9%
3	36 5.3%	9 1.4%	0 0.0%	11 6.9%	39 1.9%
4	2 0.3%	2 0.3%	0 0.0%	1 0.6%	0 0.0%
Missing data	4 0.6%	6 0.9%	0 0.0%	2 1.3%	14 0.7%
Required antibiotics for chest from GP in last year, n, %	302 44.7%	118 18.0%	30 9.8%	60 37.5%	276 13.6%
Required admission to hospital because of chest in last year, n, %	37 5.5%	11 1.7%	3 1.0%	11 6.9%	25 1.2%

Table E3 - Spirometry and CT findings of individuals categorised according to General Practice COPD diagnostic code, airflow obstruction, and the presence of COPD symptoms. GP, General Practitioner. COPD, Chronic Obstructive Pulmonary Disease. AO, Airflow Obstruction. SD, Standard Deviation. FEV1, Forced Expiratory Volume in 1 Second. FVC, Forced Vital Capacity. CT, Computed Tomography.

	Group 1 GP COPD code, AO		Group 2 No GP COPD code, AO, COPD symptoms		Group 3 No GP COPD code, AO, Asymptomatic		Group 4 GP COPD code, No AO		Group 5 No GP COPD code, No AO	
Number of participants	676		655		305		160		2033	
Spirometry, mean, SD										
FEV1/FVC ratio	56.7	9.1	62.7	6.1	63.7	5.8	73.8	3.4	75.3	3.8
FEV1 (L)	1.61	0.59	2.02	0.61	2.17	0.63	2.06	0.65	2.48	0.65
FEV1 %	69	20	80	19	87	18	87	18	99	17
FVC (L)	2.81	0.85	3.21	0.90	3.40	0.92	2.80	0.89	3.29	0.86
FVC %	94	21	101	22	107	20	94	21	105	19
Emphysema on CT, n, %										
Trivial (<5%)	125	18.5%	189	28.9%	108	35.4%	50	31.3%	713	35.1%
Mild (5-25%)	208	30.8%	187	28.5%	83	27.2%	47	29.4%	377	18.5%
Moderate (25-50%)	139	20.6%	87	13.3%	32	10.5%	12	7.5%	104	5.1%
Severe (50-75%)	78	11.5%	21	3.2%	7	2.3%	5	3.1%	10	0.5%
Very severe (>75%)	11	1.6%	4	0.6%	1	0.3%	0	0.0%	0	0.0%
Mild/Moderate/Severe/Very severe emphysema	436	64.5%	299	45.6%	123	40.3%	64	40.0%	491	24.2%
Trivial/No emphysema	207	30.6%	308	47.0%	164	53.8%	82	51.3%	1262	62.1%
Not reported / missing data/ unclear	33	4.9%	48	7.3%	18	5.9%	14	8.8%	280	13.8%
Emphysema type, n, %										
Centrilobular	427	63.2%	334	51.0%	162	53.1%	84	52.5%	783	38.5%
Panacinar	13	1.9%	3	0.5%	2	0.7%	0	0.0%	4	0.2%
Paraseptal	85	12.6%	97	14.8%	41	13.4%	17	10.6%	233	11.5%
Not reported / missing data/ no emphysema	151	22.3%	221	33.7%	100	32.8%	59	36.9%	1013	49.8%
Emphysema distribution, n, %										
Diffuse	191	28.3%	117	17.9%	76	24.9%	40	25.0%	347	17.1%
Lower lobe	12	1.8%	8	1.2%	5	1.6%	1	0.6%	27	1.3%
Upper lobe	332	49.1%	217	33.1%	126	41.3%	57	35.6%	646	31.8%
Not reported / missing data	141	20.9%	313	47.8%	98	32.1%	62	38.8%	1013	49.8%

Table E4 - Self-reported inhaler use amongst individuals categorised according to General Practice COPD diagnostic code, airflow obstruction, and the presence of COPD symptoms.

GP, General Practitioner. COPD, Chronic Obstructive Pulmonary Disease. AO, Airflow Obstruction. SABA, Short-acting beta-agonist. LABA, Long-acting beta agonist. LAMA, Long-acting muscarinic antagonist. ICS, Inhaled corticosteroid.

	Group 1 GP COPD code, AO		Group 2 No GP COPD code, AO, COPD symptoms		Group 3 No GP COPD code, AO, Asymptomatic		Group 4 GP COPD code, No AO		Group 5 No GP COPD code, No AO	
Total number in group	676		655		305		160		2,033	
Any inhaler, n, %	608	89.9%	57	8.7%	8	2.6%	136	85.0%	216	10.6%
SABA, n, %	555	82.1%	49	7.5%	8	2.6%	115	71.9%	198	9.7%
LABA, n, %	461	68.2%	10	1.5%	1	0.3%	103	64.4%	69	3.4%
LAMA, n, %	373	55.2%	6	0.9%	1	0.3%	77	48.1%	17	0.8%
ICS, n, %	295	43.6%	19	2.9%	2	0.7%	73	45.6%	99	4.9%