

Supplemental Table 1: Prevalence of Anxiety Disorder and Depression by selected characteristics of long stay residents with Chronic Obstructive Pulmonary Disease living in US nursing homes in 2018 (n=239,615).

Characteristics	n	Prevalence of	
		Anxiety	Depression
Co-Morbid Conditions			
Dementia	115,198	38.9	60.6
Coronary Artery Disease	65,207	37.8	60.2
Cerebrovascular Disease	29,009	34.2	60.8
Renal Insufficiency / End Stage Renal Disease	47,378	35.8	57.6
Hypertension	196,152	37.6	58.9
Heart Failure	85,631	37.6	58.6
Hyperlipidemia	123,407	37.9	61.4
Peripheral Vascular Disease	37,669	36.4	60.0
Atrial Fibrillation	62,373	36.2	57.2
Anemia	86,415	38.8	60.0
Pneumonia	7,845	41.2	57.0
Cancer	16,126	37.9	57.2
Cirrhosis	2,295	39.6	60.4
Diabetes mellitus	99,655	36.0	59.5
Gastroesophageal Reflux Disease/ Ulcer	111,167	41.9	63.2
Osteoporosis	28,180	42.4	62.5
Arthritis	74,331	41.7	62.5
Fall history	47,034	41.5	62.7
Urinary incontinence: Always continent	47,003	39.5	54.8
Occasionally	44,315	38.6	58.0
Frequently	64,037	36.7	60.3
Always	69,514	35.6	57.1
Catheter/ no urine output	14,746	35.4	55.7
Bowel incontinence: Always continent	85,461	39.3	56.6
Occasionally	26,561	37.9	59.2
Frequently	52,004	35.8	59.5
Always	70,554	35.3	56.5
Ostomy/ no bowel movement	5,035	38.4	59.7

*Missing Data for 11,127 residents.

Supplemental Table 2: Selected medications used by long stay residents with Chronic Obstructive Pulmonary Disease living in US nursing homes in 2018, stratified by Depression and Anxiety (N = 239,615).

Medications	Anxiety (n=89,083)	Depression (n=137,963)	Total (n=239,615)
Antidepressants			
Used for 1-6 days	3.8	4.5	3.4
Used every day	71.2	82.3	57.4
Anxiolytics			
Used for 1-6 days	7.2	3.9	3.5
Used every day	47.6	25.6	20.7
Hypnotics			
Used for 1-6 days	1.0	0.7	0.7
Used every day	3.8	3.1	2.6
Antipsychotics			
Used for 1-6 days	1.8	1.5	1.4
Used every day	28.3	22.8	20.7
Opioids			
Used for 1-6 days	13.4	12.5	11.3
Used every day	28.9	25.2	21.8

Supplemental Figure 1. Sample selection flow chart of nursing home residents with chronic obstructive pulmonary disease
Non-SNF nursing home residents with Medicare with at least a quarterly assessment and 90+ days in nursing home (n = 1,107,904)

