

Online Supplement
Patient Burden and Insights in COPD: A Survey Analysis

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Phreesia PatientInsights COPD survey

Consent

Page exit logic: Skip / Disqualify Logic**IF:** #1 Question "The following questions are being asked to better understand peoples' experiences with chronic obstructive pulmonary disease (COPD). These questions are not being asked by your doctor's office and your responses are anonymous and will not be shared with your doctor. It will take 2-3 minutes to complete. Your feedback is very valuable and you may stop at any time. Do you wish to continue?" is one of the following answers ("No") **THEN:** Jump to [page 24 - Disqualify](#) Flag response as complete

The following questions are being asked to better understand patient experiences and decision-making around chronic obstructive pulmonary disease (COPD). This survey is optional.

Your answers will **not** be shared with your health care provider.

Phreesia will not store your name with your survey responses. Phreesia may use other information you have provided to Phreesia (such as demographic information) to better understand how different people answer the survey questions. Phreesia may publish insights gained from survey responses, but Phreesia will not publish or share your identity or your individual survey responses with third-parties.

This consent is only for this survey. If you'd like to withdraw your consent after completing the survey, please write to privacy@phreesia.com.

These questions will take about 5-7 minutes to complete. Your feedback is very valuable. **Do you wish to continue?**

☐ Yes

☐ No

Diagnosis

Page exit logic: Skip / Disqualify LogicIF: #2 Question "Which of the following conditions have you been diagnosed with? Please check all that apply." is not one of the following answers ("COPD") **THEN:** Jump to [page 24 - Disqualify](#)

1. Which of the following conditions have you been diagnosed with? Please check all that apply.*

- a. COPD
- b. Asthma
- c. Chronic sinusitis
- d. Seasonal allergies
- e. Other
- f. Decline to answer

Symptoms

2. How long have you experienced COPD symptoms?*

- a. Less than 6 months
- b. Between 6-12 months
- c. 1-2 years
- d. 3-5 years
- e. 6-7 years
- f. More than 7 years
- g. Decline to answer

Slider

Validation: Min = 0 Max = 30

3. When experiencing these symptoms, how many days in a typical month do the symptoms impact your daily life?*

0 _____ [] _____ 30

[] Decline to answer

4. Which symptom impacts your daily life the **most**? Please select one.

- a. Dyspnea (shortness of breath)
- b. Fatigue
- c. Cough
- d. Phlegm (excessive mucous production)
- e. Wheezing
- f. Chest tightness
- g. Other (e.g. respiratory or chest infections, swollen ankles etc.)
- h. Decline to answer

Impact on QoL

5. How much does COPD impact your everyday life?*

- a. Great impact
- b. Moderate impact
- c. Little impact
- d. Decline to answer

Emotional Impact

6. How much has COPD impacted your emotional and mental health?*

- a. Great impact
 - b. Moderate impact
 - c. Little impact
 - d. Decline to answer
-

Impact Work

7. Has COPD impacted your ability to work? Please select all that apply. *

- a. Yes, I have lost my job due to COPD
 - b. Yes, I have missed 1-3 days of work a month due to COPD
 - c. Yes, I have missed more than 3 days of work a month due to COPD
 - d. Yes, I have to take frequent breaks at work due to COPD
 - e. No, COPD has not impacted my ability to work
 - f. Decline to answer
-

Slider Discuss

Validation: Min = 0 Max = 100

8. How often do you discuss your COPD with the other doctors who are not the main ones to treat your COPD? Please answer in the percentage of your appointments with other doctors. Your best guess is fine.*

0 _____ [] _____ 100

[] Decline to answer

Detail Discuss

9. With how much detail do you describe your COPD symptoms to your main doctors who treat your COPD?*

- a. With a great level of detail
 - b. With some detail
 - c. With little detail
 - d. With no detail
 - e. Decline to answer
-

Understand COPD

10. How well do you feel you understand COPD?*

- a. Completely
 - b. Quite a bit
 - c. Somewhat
 - d. Just a little bit
 - e. Not at all
 - f. Decline to answer
-

Treatments Discussed

11. What type of COPD treatments have you discussed with your doctor? Please check all that apply.*

- a. Rescue inhalers
- b. Maintenance medications
- c. Pulmonary rehabilitation

- d. Other
 - e. I have not yet discussed treatments with my doctor
 - f. Decline to answer
-

Treatments Tried

Logic: Show/hide trigger exists.

12. What type of COPD treatments have you ever tried? Please check all that apply.*

- a. Rescue inhalers
 - b. Maintenance medications
 - c. Pulmonary rehabilitation
 - d. Other
 - e. I have not yet tried any treatments
 - f. Decline to answer
-

Awareness

13. Which of the following maintenance brands come to mind for COPD? Please check all that apply.*

- a. Incruse® Ellipta®
- b. Spiriva® Respimat®
- c. Seebri™ Neohaler®
- d. Tudorza® Pressair®
- e. Brovana®
- f. Anoro® Ellipta®
- g. Bevespi Aerosphere®
- h. Utibron® Neohaler®
- i. Stiolto® Respimat®

- j. Trelegy®
 - k. Breztri Aerosphere®
 - l. Symbicort Turbuhaler
 - m. Breo®
 - n. Yupelri®
 - o. DuoNeb®
 - p. Pulmicort Respules™
 - q. Other
 - r. I cannot recall any maintenance COPD brands
 - s. Decline to answer
-

Ever Used

Logic: Show/hide trigger exists.

14. What medications have you ever used to treat your COPD? Please check all that apply.*

- a. Incruse® Ellipta®
- b. Spiriva® Respimat®
- c. Seebri™ Neohaler®
- d. Tudorza® Pressair®
- e. Brovana®
- f. Anoro® Ellipta®
- g. Bevespi Aerosphere®
- h. Utibron® Neohaler®
- i. Stiolto® Respimat®
- j. Trelegy®
- k. Breztri Aerosphere®
- l. Symbicort Turbuhaler

- m. Breo®
- n. Yupelri®
- o. DuoNeb®
- p. Pulmicort Respules™
- q. Other
- r. I have not used any maintenance medications
- s. Decline to answer

15. Please rate your agreement on the statements below.

IF EVER USED INHALER MEDICATION [Incruse, Spiriva, Seebri, Tudorza, Anoro, Bevespi, Utibron, Stiolto, Trelegy, Breztri , Symbicort or Breo] I find it hard to coordinate breathing with pushing inhaler button

IF EVER USED INHALER MEDICATION [Incruse, Spiriva, Seebri, Tudorza, Anoro, Bevespi, Utibron, Stiolto, Trelegy, Breztri , Symbicort or Breo] I find it hard to breathe fast/hard enough with some inhaler doses

IF EVER USED INHALER MEDICATION [Incruse, Spiriva, Seebri, Tudorza, Anoro, Bevespi, Utibron, Stiolto, Trelegy, Breztri , Symbicort or Breo] I find the instructions on how to use different inhalers confusing

IF EVER USED NEBULIZER MEDICATION [Brovana, Yupelri, DuoNeb, Pulmicort] I find it time consuming to clean my nebulizer mouthpiece

IF EVER USED NEBULIZER MEDICATION [Brovana, Yupelri, DuoNeb, Pulmicort] When I use a nebulizer, I am confident that the medicine is getting into my lungs

- a. Strongly agree
 - b. Agree
 - c. Neither agree or disagree
 - d. Disagree
 - e. Strongly disagree
 - f. Decline to answer
-

Current Treatment

Logic: Hidden unless: #14 Question "What medications have you ever used to treat your COPD? Please check all that apply." is not one of the following answers ("I have not used any maintenance medications")

Piping: Piped Values From Question 14. (What medications have you **ever used** to treat your COPD? Please check all that apply.)

16. What medications are you currently using to treat your COPD? Please check all that apply.*

- a. I am not currently on any maintenance medications
- b. Decline to answer

17. IF CURRENTLY ON BID MEDICATIONS (Seebri, Tudorza, Brovana, Bevespi, Utibron, Breztri, Symbicort, Pulmicort) Please rate your agreement on the following statement:

The second dose of my medication helps control symptoms during the night until my morning dose.

- a. Strongly agree
- b. Agree
- c. Neither agree or disagree
- d. Disagree
- e. Strongly disagree
- f. Decline to answer

18. IF CURRENTLY ON BROVANA, YUPELRI, DUONEB, PULMICORT (NEBULIZER) Why are you using a nebulizer? Please select all that apply.

- a. My doctor recommended it
- b. It's the only way my medication is delivered
- c. It's easier to inhale the medication
- d. It's easier to use than a hand held inhaler
- e. I feel better faster than a hand held inhaler
- f. Other
- g. Decline to answer

19. IF CURRENTLY ON BROVANA, YUPELRI, DUONEB, PULMICORT (NEBULIZER) How often do you use a nebulizer? Please select one.

- a. Twice a day
- b. Once a day
- c. Only during my COPD flare ups
- d. Other
- e. Decline to answer

Satisfaction

Piping: Piped From Question 14. (What medications have you **ever used** to treat your COPD? Please check all that apply.)

20. How satisfied are you with these medications for COPD?*

	Complet ely satisfied	Very satisfi ed	Somew hat satisfied	Somewh at unsatisfi ed	Very unsatisfi ed	Comple tely unsatisfi ed	Decli ne to answ er
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Miss Meds

Logic: Show/hide trigger exists. Hidden unless: #12 Question "What type of COPD treatments have you ever tried? Please check all that apply." is not one of the following answers ("I have not yet tried any treatments")

21. Have you missed any doses of your COPD medications in the last 3 months?*

- a. Yes
 - b. No
 - c. I was not on any COPD medications in the past 3 months
 - d. Decline to answer
-

Why Miss Meds

Logic: Hidden unless: #16 Question "Have you missed any doses of your COPD medications in the last 3 months?" is one of the following answers ("Yes")

22. Why did you miss taking your COPD medications in the last 3 months?*Select all that apply.

- a. It did not work well
 - b. It costed too much
 - c. It was too complicated to take
 - d. I typically used medications for short-term relief
 - e. I was concerned about medication side effects
 - f. I simply forgot to take it
 - g. Other
 - h. Decline to answer
-

Intent

Logic: Hidden unless: #14 Question "What medications have you ever used to treat your COPD? Please check all that apply." is not one of the following answers ("I have not used any maintenance medications")

23. How likely are you to try a new maintenance medication for your COPD?*

- a. Extremely likely

- b. Very likely
- c. Somewhat likely
- d. Somewhat unlikely
- e. Very unlikely
- f. Extremely unlikely
- g. Decline to answer

Logic: Hidden unless: #14 Question "What medications have you ever used to treat your COPD? Please check all that apply." is one of the following answers ("I have not used any maintenance medications")

24. How likely are you to try a maintenance medication for your COPD? *

- a. Extremely likely
- b. Very likely
- c. Somewhat likely
- d. Somewhat unlikely
- e. Very unlikely
- f. Extremely unlikely
- g. Decline to answer

Why Not Maintenance

Logic: Hidden unless: (#14 Question "What medications have you ever used to treat your COPD? Please check all that apply." is one of the following answers ("I have not used any maintenance medications", "Decline to answer") OR #15 Question "What medications are you currently using to treat your COPD? Please check all that apply." is one of the following answers ("I am not currently on any maintenance medications", "Decline to answer"))

25. Why aren't you on a maintenance medication now? Please check all that apply.*

- a. My COPD is not severe enough
 - b. COPD attacks are not frequent enough
 - c. I don't want to take a daily medication
 - d. My doctor has not recommended it
 - e. Concerns about side effects
 - f. Concerns about medication cost
 - g. Other
 - h. Decline to answer
-

Why Maintenance Meds

Logic: Hidden unless: #14 Question "What medications have you ever used to treat your COPD? Please check all that apply." is not one of the following answers ("I have not used any maintenance medications")

26. Why did you start maintenance medication? Please check all that apply.*

- a. My COPD was too severe
 - b. COPD attacks were too frequent
 - c. My doctor recommended it
 - d. Rescue inhalers were not working well
 - e. Other
 - f. Decline to answer
-

Increase Med Trust

27. What kind of resources about COPD care would be helpful to you? Please select all that apply. *

- a. A nursing line to answer questions about medication use
- b. Tips for better handling side effects

- c. Questions to prepare my discussion with my doctor
 - d. Resources to better understand how my medication works
 - e. Financial support on medication cost
 - f. Connecting me to other patients on my medication
 - g. Phone apps to manage your symptoms
 - h. Other
 - i. Decline to answer
-

Lifestyle Changes

Page exit logic: Skip / Disqualify LogicIF: #23 Question "Which of the following lifestyle changes do you plan on making in the next 6-months? Please check all that apply." **THEN:** Jump to [page 25 - Complete](#) Flag response as complete

**28. Which of the following lifestyle changes do you plan on making in the next 6-months?
Please check all that apply.***

- a. Quit smoking
- b. Exercise regularly
- c. Eat a healthy diet
- d. Avoid close contact with people who have respiratory infections
- e. Avoid excessive heat, cold, and very high altitudes
- f. Avoid exposure to environmental irritants
- g. Learn breathing techniques
- h. Learn relaxation techniques
- i. Other
- j. I do not plan on making any lifestyle changes
- k. Decline to answer

TABLES

Table S1. Impact of COPD by maintenance medication status

Proportion, %	Currently on maintenance medication	Currently <u>not</u> on any maintenance medication but have tried in the past
How much does COPD impact your everyday life?		
Great/moderate [NET]	68*	53*
Great impact	29	22
Moderate impact	39	31
Little impact	32*	47*
Base, n	1188	118
How much has COPD impacted your emotional and mental health?		
Great/moderate [NET]	52*	39*
Great impact	19	18
Moderate impact	33*	21*
Little impact	48*	61*
Base, n	1163	119

*Statistical significance determined at P<0.05 (chi-square test).

Table S2. Associations between demographic variables and key survey responses

Proportion, %	Overall	Gender		Age			Race		Ethnicity		Location Setting		
		Female	Male	18-44	45-64	65+	Black	White	Hispanic	Not Hispanic	Rural	Suburban	Urban
How much does COPD impact your everyday life?													
Great/moderate [NET]	64	63	66	76	72*	59*	64	64	51	64	73*	71*	62*
Great impact	26	24*	29*	24	34*	22*	29	26	32	26	29	29	26
Moderate impact	38	39	37	52	38	38	35	38	19*	38*	45	43	37
Little impact	36	37	34	24	28*	41*	36	36	49	36	27*	29*	38*
Base, n	1841	1089	750	29	653	1159	152	1486	37	1525	112	195	1508
How much has COPD impacted your emotional and mental health?													
Great/moderate [NET]	50	52*	47*	50	63*	43*	51	50	52	50	61*	55*	49*
Great impact	18	19	17	29	26*	13*	20	17	30	18	18	22	17
Moderate impact	32	33	31	21	37*	30*	31	32	21	32	43*	33*	31*
Little impact	50	48*	53*	50	37*	57*	49	50	48	50	39*	45*	51*
Base, n	1792	1057	733	28	642	1122	144	1449	33	1490	109	189	1468
With how much detail do you describe your COPD symptoms to your main doctors who treat your COPD?													
With a great level of detail	45	42*	48*	65	49*	42*	48	44	47	45	44	39	45
With some detail	33	34	33	12	32	34	28	34	30	33	35	36	33
With little detail	15	16	14	8	12*	17*	14	15	10	15	16	17	14
With no detail	7	8	6	15	7	7	11	7	13	7	5	8	7
Base, n	1671	990	679	26	579	1066	130	1367	30	1402	96	179	1370

How well do you feel you understand COPD?													
Completely	24	27*	20*	38	24	24	33*	23*	29	24	21	27	24
Quite a bit	40	40	40	27	35*	43*	21*	42*	41	40	44	39	40
Somewhat	26	24*	29*	19	28	25	29	26	15	26	27	27	26
Just a little bit	7	7	8	12	10	6	11	7	9	8	8	7	7
Not at all	2	2	2	4	3	2	6	2	6	2	0	0	2
Somewhat/a little bit/not at all [NET]	36	33*	39*	35	41*	33*	46*	35*	29	36	35	34	36
Base, n	1718	1018	698	26	596	1096	136	1397	34	1438	102	180	1410
What type of COPD treatments have you discussed with your doctor? Please check all that apply.													
Rescue inhalers	75	78*	71*	78	79*	73*	77	75	69	76	79	76	75
Maintenance medications	67	66	69	48	65	69	55*	69*	63	69	80*	59*	67*
Pulmonary rehabilitation	16	15	17	19	14	17	16	15	16	16	22*	11*	16*
Other	7	8	7	11	9	6	8	7	3	7	8	10	7
I have not discussed any treatments	6	6	6	15	7	6	4	7	9	6	3	7	7
Base, n	1672	985	685	27	587	1058	130	1362	32	1400	101	175	1373

* Statistical significance determined at P<0.05 (chi-square test).

SUPPLEMENTAL FIGURE TITLES AND LEGENDS

Figure S1. Reasons patients did not try maintenance medications

Among patients who have not tried maintenance medications
or are not currently on maintenance medications

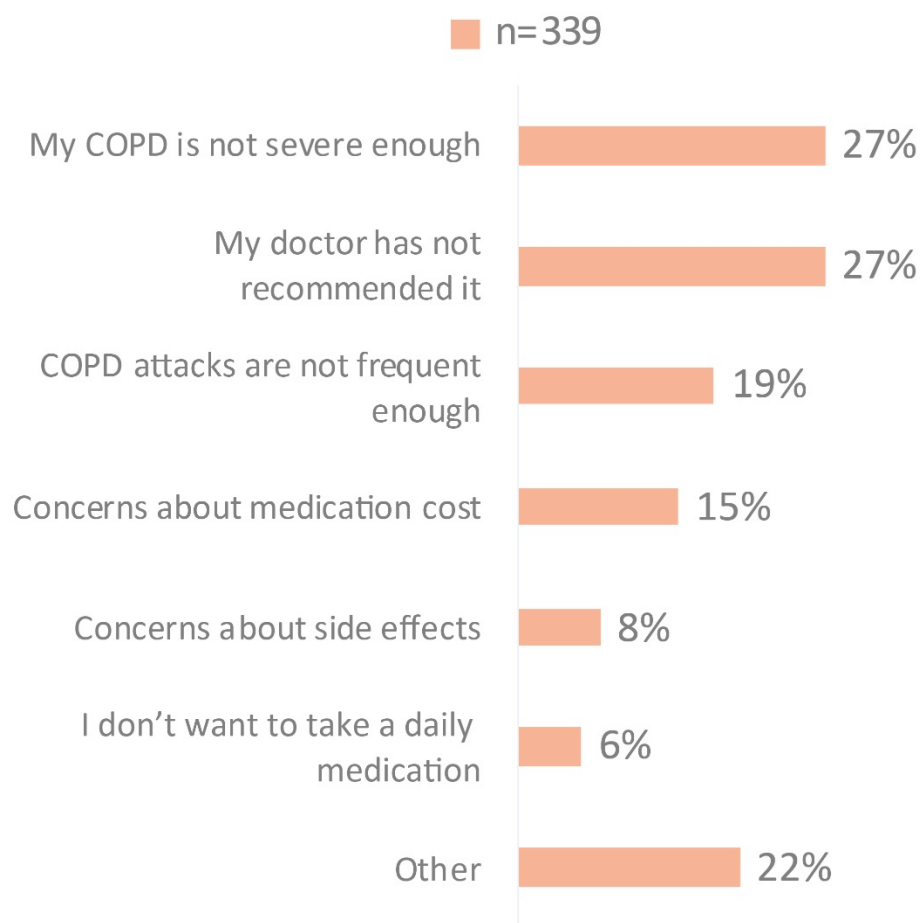


Figure S2. Types of COPD treatments discussed with HCPs or tried

Discussed with HCP (n=1,672)

Tried treatment

(among patients who discussed with HCP; n=1,622)

