Supplementary Material

<u>Perception of Symptoms and Quality of Life – comparison of patients' and physicians' views in the COPD</u> MIRROR study

Celli B, Blasi F, Gaga M, Singh D, Vogelmeier C, Pegoraro V, Caputo N, Agusti A.

Panels of patients

The size of the national panels ranges from about 22,000 patients in Germany to 30,000 patients in Italy. Patients undergo rigorous quality controls before being included in any sample. Balancing across all sources is then conducted to ensure proper representation for all target segments. Fundamental psychographic segmentations that had been validated against external sources are used, as well as benchmarks that ensure all inputs to the sampling frame are consistent and reliable over time, regardless of source changes. The highest standards of data integrity is further supported by randomly selecting respondents, who are then presented with unbiased questions about a range of personal intentions, product usage, household characteristics, ailments and medical conditions. Respondents identify their medical conditions from a pre-coded group of conditions — but they never know which one will qualify them for a study. This ensures that honest responses are given about medical conditions. COPD patients' numbers in the panels range from 3,000 in Germany to about 6,000 in Italy (Figure 1S).

Panels of physicians

The panels of physicians correspond to healthcare professionals collaborating with QuintilesIMS in Germany, Spain and Italy. For panel recruitment, a double opt-in process is used: respondents are invited to join the panel and, after proper verifications, they are added to the panel. During recruitment for this specific survey, panellists were selected based on their medical specialization and professional profile, and were subsequently contacted through email. They then voluntarily agreed to participate in the survey. GPs' panels sizes range from about 2,000 in Spain to about 4,500 in Germany (Figure 2S), while pulmonologists panels size goes from about 1,200 in Spain to about 2,000 in Germany (Figure 3S).

Figure 1S. Consort diagram for COPD patients inclusion stratified by Country.

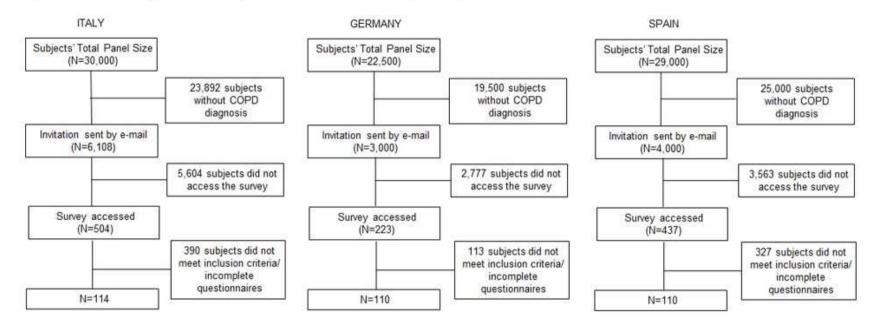


Figure 2S. Consort diagram for General Practitioners (GPs) inclusion stratified by Country.

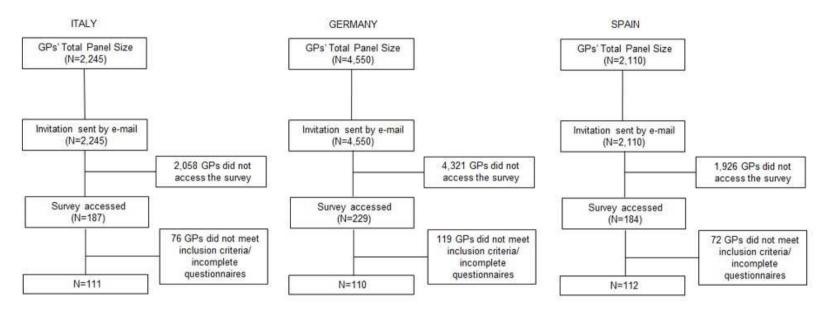
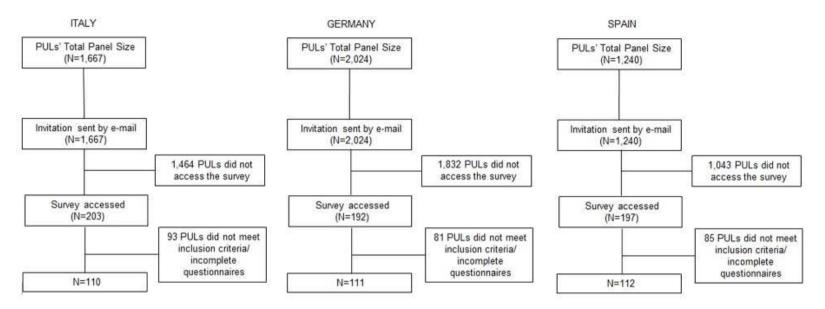


Figure 3S. Consort diagram for Pulmonologists (PULs) inclusion stratified by Country.



MIRROR COPD PROJECT

PATIENT QUESTIONNAIRE

A) DESCRIPTION OF RESPONDENT DEMOGRAPHICS AND COPD CONDITION

During the course of this interview we will ask you a series of questions about your COPD/Chronic bronchitis/Emphysema^a condition and how this affects your life. First some general questions about yourself.

PN: SINGLE RESPONSE

Q1. Gender

Male 1Female 2

PN: SINGLE RESPONSE

Q2. Please indicate your working status

Full-time employee
Part-time employee
Self-employed
Retired
Unemployed
Prefer not to answer
6

PN: SINGLE RESPONSE

Q3. Do you live alone or with other people?

•	Live alone	1
•	Live with own family (spouse and /or children)	2
•	Live with family (parents or relatives)	3
•	Live with spouse only	4
•	Live with spouse and caregiver	5
•	Live with caregiver only	6
•	Live with friend/friends	7
•	Live in a home for the elderly	8

PN: SINGLE RESPONSE

Q4. Which is the highest level of education that you have completed

Elementary 1Middle school 2High school 3University 4

PN: SINGLE RESPONSE

Q5. Which of the following categories do you fall into?

•	I have never smoked	1 SKIP TO Q6.
•	I used to smoke, but quit several years ago	2
•	I used to smoke, and quit only recently	3
•	I used to smoke sometimes, only on special occasions	4
•	I smoke and have never tried to quit	5
•	I smoke after having tried to quit once or more than once	6
•	I used to smoke cigarettes, but now I only smoke electronic cigarettes	7
•	I smoke both electronic/traditional	8

PN: SINGLE RESPONSE, ASK IF CODES 5, 6 OR 8 AT Q5.

Q5a. How many cigarettes do you smoke per day, on average?

•	I smoke every now and then, i.e. less than one a day		1
•	I smoke between 1-5 cigarettes a day		2
•	I smoke between 6-10 cigarettes a day		3
•	I smoke between 10-20 cigarettes a day		4
•	I smoke between 1.5-2 packs a day		5
•	I smoke more than 2 packs a day	6	

PN: MULTIPLE RESPONSE

Q6. During the course of the day, when do you take drugs for all of your conditions? (TICK ALL THAT APPLY)

In the morning 1
At lunch 2
In the evening 3
At dinner 4
Before going to sleep 5

B) EXPERIENCE WITH THE ILLNESS

SYMPTOMS

PN: MULTIPLE RESPONSE

QS1. Which of the following symptoms do you suffer from due to your COPD/Chronic bronchitis/Emphysema^a? (TICK ALL THAT APPLY)

Cough
Dyspnea/Shortness of breath
Phlegm/sputum
Chest tightness
Wheezing
Tiredness
6

PN: FOR EACH SYMPTOM SELECTED AT QS1, ASK QS2.-QS4.

PN: SINGLE RESPONSE

QS2. To what extent do you find these bothersome? Please reply using the 5-point scale where 5 = extremely bothersome, 4=very bothersome, 3=somewhat bothersome, 2=only a little bothersome, 1=not at all bothersome

PN: SINGLE RESPONSE

QS3. To what extent do you find them hard to control with medication? Please reply using the 5-point scale where 5 = extremely hard, 4=very hard, 3=somewhat hard, 2=only a little hard, 1=not hard at all

PN: SINGLE RESPONSE

QS4. To what extent do they affect your day-to-day life?

5=completely, 4=very much, 3=somewhat, 2=only a little, 1=not at all

PN: MULTIPLE RESPONSE

QS5. Overall, when are these symptoms most bothersome (TICK ALL THAT APPLY)

When I wake up
Early in the morning
Later in the morning
During the afternoon 4
During the evening
When I go to sleep
During the night
7

OVERALL CONDITION

PN: SINGLE RESPONSE

QC1. Which statement best describes how you consider your COPD/Chronic bronchitis/Emphysema conditiona?

It is a major health problem for me
It is a somewhat of a health problem
It is a minor health problem
It is not a problem at all

PN: SINGLE RESPONSE

QC2. Which describes how you emotionally cope with the condition

- I have an extremely hard time emotionally coping with my condition
 I have a hard time emotionally coping with my condition
 2
- I have only a few problems emotionally coping with my condition 3

C) IMPACT ON QUALITY OF LIFE

DAILY ACTIVITIES

PN: SINGLE RESPONSE

QD1. How do you manage with day-to-day activities

•	I have external help to help me at home	1
•	I have family members/my family help me	2
•	I have had to find other ways to do activities on my own	3
•	I haven't had to do anything or change very much	4
•	I have had to stop doing certain activities	5

PN: SINGLE RESPONSE

QD2. Below is a list of activities that people often do during their day-to-day life. Although for some people with several medical problems it is difficult to determine what it is that limits them, please go over the activities listed below and for each one indicate how limited you have become in doing this activity due to your COPD / chronic bronchitis/ emphysema^a

For each activity use the scale 5=completely limited, 4=very limited, 3=somewhat limited, 2=only slightly limited, 1= not at all OR 9=I HAD TO STOP DOING THIS ACTIVITY

- Self care (e.g. Washing yourself, getting dressed, putting on/ tying shoes)
- Household chores(e.g. cooking, washing dishes, loading/emptying dishwasher/washing machine
- Carry things like grocery / laundry
- Walking up/down stairs
- Taking walks
- Doing small repair work at home / on the car
- Doing grocery shopping
- Sexual Intercourse

QD3. Which of these activities can you do on your own even if with difficulty and/or with shortness of breath, and which do you need someone else to do it for you completely or need complete assistance?

		ON MY OWN	WITH HELP	
•	Self care (e.g. Washing yourself, getting dressed, putting on/ tying shoes)	1	2	
•	Household chores(e.g. cooking, washing dishes, loading/emptying dishwasher/washing machine	1	2	
•	Carry things like grocery / laundry	1	2	
•	Walking up/down stairs	1	2	
•	Taking walks	1	2	
•	Doing small repair work at home / on the car	1	2	
•	Doing grocery shopping	1	2	

PN: ASK ONLY FOR ACTIVITIES AT QD3 DONE ON HIS/HER OWN (CODE 1) AND FOR SEXUAL INTERCOURSE (IF CODE 1, OR 2, OR 3, OR 4, OR 5 AT QD2) PN: SINGLE RESPONSE

QD4. How tiring are these activities?

5=extremely tiring, 4=very tiring, 3=somewhat tiring, 2=only slightly tiring, 1=not at all tiring

PN: ASK ONLY FOR ACTIVITIES AT QD3 DONE ON MY OWN (CODE 1) AND FOR SEXUAL INTERCOURSE (IF CODE 1, OR 2, OR 3, OR 4, OR 5 SELECTED AT QD2)

PN: SINGLE RESPONSE

QD5. To what extent do they leave you out of breath?

5=completely impacts shortness of breath, 4=very much impacts shortness of breath, 3=somewhat impacts shortness of breath, 2=only slightly impacts shortness of breath, 1= at all impacting on shortness of breath

PN: SINGLE RESPONSE

QD6. Think about the impact COPD/Chronic bronchitis/Emphysema^a has/have had on your day-to-day activities, overall, how has this affected your quality of life?

5=completely, 4=very much, 3=somewhat, 2=only a little, 1=not at all

WORK ACTIVITIES

PN: SINGLE RESPONSE

QD7. What kind of impact has/have COPD/Chronic bronchitis/Emphysema^a had on your work/job activities I've had to

change my	y Job / type of work activities	1
•	I've had to reduce the amount of time/ hours I work	2
•	I've had to stop working and quit my job	3

- It hasn't impacted my job/ work activities at all
- I have been unemployed/retired since I began to suffer from the condition
- I was already unemployed/retired when I began to suffer from the condition 6

ASK ONLY FOR CODES 1, 2, 3, 5 AT QD7. PN: SINGLE RESPONSE.

QD7a. How has this change in your work activity impacted your overall quality of life?

5=very positively; 4=positively; 3=no impact at all; 2=negatively; 1=very negatively

LEISURE / ENTERTAINMENT ACTIVITIES

QL1. Below is a list of leisure time activities / entertainment that people often do during their leisure or free time. Please go over the activities listed below and indicate how limited you have become in doing each activity due to your COPD/chronic bronchitis/emphysema^a.

4

5

•	Light leisure time activities/recreation (e.g. walking, playing with the dog, dancing, gardening)	1
•	Playing light sports (e.g. golf, bowling)	2
•	Playing more strenuous sports (e.g. Jogging, swimming, football, tennis)	3
•	Interaction with others (e.g. playing with children/grandchildren, visiting friends / family)	4
•	Traveling	5
•	Going to public places (like movies, concerts, theatre, restaurants)	6

PN: SINGLE RESPONSE

For each activity use the scale 5=completely limited, 4=very limited, 3=somewhat limited, 2=only slightly limited, 1= not at all OR 9=I HAD TO STOP DOING THIS ACTIVITY

PN: SINGLE RESPONSE

QL1a. Think about the impact COPD/Chronic bronchitis/Emphysema^a has/have had on your leisure time activities, overall, how has this affected your quality of life?

5=completely, 4=very much, 3=somewhat, 2=only a little, 1=not at all

SLEEP

PN: SINGLE RESPONSE

QL2. How would you rate the quality of sleep

5=I don't sleep well at all ...1=I sleep extremely well

PN: SINGLE RESPONSE

QL3. Extent to which COPD/Chronic bronchitis/Emphysema^a night time symptoms (e.g. coughing, dyspnea, shortness of breath, tight chest, etc.) disturb your sleep

5=disturbs it completely, 4=disturbs it a great deal, 3=disturbs it somewhat, 2=disturbs it only slightly...1=doesn't disturb it at all

PN: SINGLE RESPONSE

QL4. Do you currently take medicines or other remedies to help you sleep

Y/N

PN: SINGLE RESPONSE

QL4a. Think about the impact COPD/Chronic bronchitis/Emphysema^a has/have had on your sleep, overall, how has this affected your quality of life?

5=completely, 4=very much, 3=somewhat, 2=only a little, 1=not at all

D) RELATIONSHIP W/ HCPs AND PHYSICIAN

ROLE OF HCPs

PN: MULTIPLE RESPONSE

QR1. Which doctors and/or healthcare professional do you see for your COPD/Chronic bronchitis/Emphysema^a?

- Family doctor or GP 1
 Pulmonologist 2
 Other Specialist (please specify) 3
 Pharmacist 4
- PN: IF MORE THAN ONE CODE SELECTED AT QR1, ASK FOR EACH CODE SELECTED:

PN: SINGLE RESPONSE

QR1a. To what extent would you say that this healthcare has an important role in supporting you in managing your COPD/Chronic bronchitis/Emphysema^a, in particular in terms of ...

5=extremely important, 4=very important, 3=somewhat important, 2=only slightly important, 1=not at all important

- ...information about the illness
- ...information about lifestyle changes that can improve the condition
- ...treatments and strategies to quit smoking (SHOW ONLY CODES 2-8 AT Q5.)
- ...information about available treatment choices or options
- ...the different dosing regimens
- ...the different devices / inhalers available
- ...how to use prescribed devices/inhalers
- ...how and when to take your medicine
- ...risks in relation to not taking your treatment properly
- ...problems you may have with drugs you take for your COPD/Chronic bronchitis/Emphysema^a (e.g. side effects, interactions with food or with other drugs)
 - ...problems you may have with the inhalers you use for your COPD/Chronic bronchitis/Emphysema^a

PN: IF MORE THAN ONE CODE FROM 1, 2, 3 AT QR1. ASK.

SINGLE RESPONSE.

QR1b. Which is the one doctor that you consider your main point of reference for COPD/Chronic bronchitis/Emphysema^a?

Family doctor or GP 1Pulmonologist 2Other Specialist 3

COMMUNICATION & INTERACTION W/PHYSICIAN

PN: NUMERIC. RANGE 1-24

QR2. Thinking of this doctor in particular, on average how often do you visit this doctor in a year specifically for COPD/Chronic bronchitis/Emphysema^a?

n. times/YEAR_____

PN: SINGLE RESPONSE

QR3. Do you consider this number of visits to be ...

too few 1
 too many 2
 Just enough 3

PN: SINGLE RESPONSE

QR4. Thinking of an average visit for COPD/Chronic bronchitis/Emphysema^a, how long does this last on average?

Up to 15 minutes 1
About 20 minutes 2
About 30 minutes 3
More than 30 minutes 4

PN: SINGLE RESPONSE

QR5. Do you feel the amount of time the doctor spends with you on the subject of COPD/Chronic bronchitis/Emphysema^a is...

Much too short
 Almost enough, but I would like visits to last a bit longer
 Just right
 3

PN: SINGLE RESPONSE

QR6. How satisfied are you with the information provided by the doctor during the visits, in particular about...

5=completely satisfied, 4=very satisfied, 3=somewhat satisfied, 2=only slightly satisfied, 1=not at all satisfied

•	the illness		1
•	how changes in life style can help the condition/improve symptoms		2
•	the treatment choices or options that are available		3
•	the different dosing regimens		4
•	the different devices / inhalers		5
•	the follow-up plan		6
•	how and when to take your medicine		7
•	risks in relation to not taking your treatment properly	8	
•	the possible side effects of the medicine		9
•	additional educational or information sources (e.g. web sites, support groups, etc.)		10

...treatments and strategies for quitting smoking (PN: SHOW ONLY IF CODES 2-8 AT Q5)

11

PN: SINGLE RESPONSE FOR EACH ITEM

QR7. To what extent does your doctor ask you questions about the following during a visit...

(ALWAYS, OFTEN, SOMETIMES, RARELY, NEVER)

•	How you feel overall		1
•	Your COPD/Chronic bronchitis/Emphysema symptoms		2
•	Your personal life		3
•	Your fears and doubts	4	
•	Your expectations about treatment		5
•	Any problems with side-effects		6
•	How you cope with treatment		7
•	If you are taking your treatment as prescribed		8
•	How you cope with the device		9
•	If you are using the device correctly		10
•	Smoking (PN: SHOW ONLY IF CODES 2-8 AT Q5.)		11

PN: SINGLE RESPONSE

QR8. Overall, which phrase best describes how you reply to your doctor or provide information when asked about the COPD/Chronic bronchitis/Emphysema^a condition ...

- I am completely frank and open when I answers his/her questions
- I am mostly frank and open with him/her, but I sometimes may hide something, omitting information or even lying about some things
- Most of the time I am not frank and open with the doctor, and I am mostly hiding something/omitting information or even lying

3

PN: MULTIPLE RESPONSE

QR9. During a visit do you feel your doctor

	• • • • • • • • • • • • • • • • • • • •	
•	Takes you seriously	1
•	Is warm and friendly	2
•	Is responsive to your concerns	3
•	Shows interest in what you say	4
•	Is willing to listen	5
•	Gets you involved in any important decisions that need to be made	6
•	Acts professionally	7
•	Takes enough time to do a complete physical examination of you 8	
•	Has your COPD/chronic bronchiis situation under full control	9

PN: SINGLE RESPONSE

QR10. To what extent are your expectations fulfilled with reference to the visits for COPD/Chronic bronchitis/Emphysema^a?

5=completely, 4=very, 3=somewhat, 2=only slightly, 1=not at all

PN: SINGLE RESPONSE

QR11. Overall how satisfied are you with regard to your relationship with this doctor?

5=extremely satisfied; 4=very satisfied; 3= indifferent; 2=somewhat unsatisfied,1= very unsatisfied

PN: SINGLE RESPONSE

QR12. How does the relationship with this doctor impact your overall quality of life?

 $\hbox{5=} \hbox{completely, 4=} \hbox{very much, 3=} \hbox{somewhat, 2=} \hbox{only a little, 1=} \hbox{not at all}$

ADVICE ON SMOKING

PN: SINGLE RESPONSE ASK IF CODES 2-8 AT Q5.

QR13. Has your doctor ever advised you/helped you to quit smoking?

Yes / no / can't remember

PN: SINGLE RESPONSE

QR13_A Overall how has COPD/Chronic bronchitis/Emphysema^a effected your quality of life?

5=completely, 4=very much, 3=somewhat, 2=only a little, 1=not at all

4PA) EXPERIENCE WITH TREATMENT

PN: SINGLE RESPONSE FOR EACH ITEM

QT1. How satisfied are you with the treatment you are currently taking in terms of...

5=completely, 4=very, 3=somewhat, 2=only slightly, 1=not at all

 Keeping your symptoms under control Making you feel better Causing few or no side effects Easy to take the medicine Number of times to take the medicine Number of medications to be taken 					
 Causing few or no side effects Easy to take the medicine Number of times to take the medicine 	•	Keeping your symptoms under control			1
Easy to take the medicineNumber of times to take the medicine	•	Making you feel better			2
Number of times to take the medicine	•	Causing few or no side effects			3
	•	Easy to take the medicine			4
Number of medications to be taken	•	Number of times to take the medicine			5
	•	Number of medications to be taken			6

PN: SINGLE RESPONSE

QT2. How well would you say you follow your doctor's instructions on when and how to take your treatment for COPD/Chronic bronchitis/Emphysema^a [PROGRAMMER: SHOW ANSWERS TICKED AT QUESTION S2]?

5=I follow them completely, 4=I follow them very well, 3=I follow them somewhat, 2=I follow them only slightly, 1=I do not follow them at all

PN: SINGLE RESPONSE FOR EACH ITEM

QT3. How often would you say you...

(ALWAYS, OFTEN, SOMETIMES, RARELY, NEVER)

-take fewer or lower doses (e.g. fewer puffs with inhaler)
 ...take more / higher doses (e.g. more puffs with inhaler)
 ...take your medicine at different times of the day from how prescribed
 ...forget to take your medicine
 4
- ...deliberately decide not take your medication (e.g. during holidays or festivities, when travelling, during the week-end etc.)

5PA) HANDLING OF THE DEVICE

Now we will ask you some questions about each device/inhaler you use to take your treatment.

PN: MULTIPLE RESPONSE

QH3. Who trained you or helped you to learn how to use this device /inhaler

•	My GP	1
•	The Pulmonologist	2
•	The Nurse	3
•	The Pharmacist	4
•	Other healthcare professional (please specify)	5
•	I learned on my own (STAND ALONE)	6

PN: SINGLE RESPONSE

5=completely, 4=very, 3=somewhat, 2=only slightly, 1=not at all

QH3a. How easy is it to use the inhaler?

QH3b. How easy is it to understand if you have taken the right amount of medicine?

QH3c. How self sufficient are you in using the inhaler?

QH3d. How easy/quick was it to learn how to use the inhaler?

PN: SINGLE RESPONSE

QH4. Have you ever experienced any problems with your inhaler? Y/N

PN: IF YES AT QH4, ASK. MULTIPLE RESPONSE

QH4a. Which?

•	the overall lack / absence of feeling of having inhaled the medicine		1
•	uncertainty about the amount of medication left in the inhaler		2
•	the inhaler not working reliably		3
•	difficulty in inhaling a dose from the inhaler	4	
•	difficulty in consulting the instructions for use/unclear/little instructions		5
•	the size of the inhaler, i.e. too big or too small		6
•	difficulty in holding the inhaler during use		7
•	uncomfortable to carry the inhaler around		8
•	the lack/absence/poor feedback (either sonar or visual) informing the patient that the dose has been taken properly		9

IF ITEMS TICKED AT QH4_A, ASK

QH4b. Did you discuss these problems with your doctor?

- Yes, all of the problems
- Yes, but only some of the problems
- No

ASK ALL

PN: SINGLE RESPONSE

QH5. How satisfied are you overall with your inhaler?

5=completely, 4=very, 3=somewhat, 2=only slightly, 1=not at all

E) PATIENT NEEDS IN RELATION TO COPD MANAGEMENT

PN: MULTIPLE RESPONSE

QN1. Which of the following do you feel you need to help you cope with COPD/Chronic bronchitis/Emphysema^a?

•	need for more information on COPD/Chronic bronchitis/Emphysema ^a as a disease	1
•	need for more info on other possible drug therapies	2
•	need for support in taking treatment	3
•	need for support in using device	4
•	need for support from HCP	5
•	need for support from caregivers 6	
•	need for counseling	7
•	need for user friendly information channels 8	
•	need for support to quit smoking (PN: SHOW ONLY IF CODES 5, 6 AND 8 AT Q5.)	9
•	NOTHING (PN: STAND ALONE OPTION)	10

PN: IF MORE THAN 3 ITEMS CHOSEN AT QN1. ASK

QN2. Which are the three most important? Could you please rank them? (PN: SHOW ONLY THE ITEMS TICKED AT QN1)

^a The wording "COPD/Chronic bronchitis/Emphysema" was used in order to help the patients in recognizing the pathology they are affected from.

MIRROR COPD PROJECT

PHYSICIAN QUESTIONNAIRE

A) DESCRIPTION OF RESPONDENT DEMOGRAPHICS / CASELOAD OF COPD TYPES SEEN

Q1. GENDER

Male

Female

Q2. GEOGRAPHIC LOCATION

COUNTRY SPECIFC REGION INSERTED

PN: ASK. GPs ONLY. NUMERIC. RANGE =0-2000 ITALY AND SPAIN ONLY

Q3. What is your total caseload of patients?

PN: ASK. GPs ONLY. ONE RESPONSE ONLY

04. TYPE OF PRACTICE

•	Sole practice without nurse or assistant	1
•	Sole practice with nurse or assistant	2
•	Practice with other doctors (without assistant or nurse)	3
•	Practice with other doctors (with assistant or nurse)	4

PN: IF CODE 3 OR CODE 4 IS SELECTED AT Q4., ASK

Q4a. How many doctors?

B) PHYSICIAN EXPERIENCE WITH CONDITION

QC1. How do you consider COPD from a professional viewpoint <u>compared to ASTHMA for example</u>, do you find COPD...?

- a) 5= VERY DIFFICULT TO MANAGE, 4=DIFFICULT TO MANAGE, 3=NEITHER DIFFICULT NOR EASY, 2=NOT VERY DIFFICULT,1=EASY SINGLE RESPONSE
- b) 5= VERY ROUTINE TO MANAGE, 4=ROUTINE TO MANAGE, 3= NEITHER ROUTINE NOR MOTIVATING, 2=SOMEWHAT MOTIVATING, 1=VERY MOTIVATING TO MANAGE SINGLE RESPONSE
- c) 5=VERY TIME CONSUMING, 4 SOMEWHAT TIME CONSUMING, 3=AMOUNT OF TIME NEEDED IS ENOUGH, 2=NOT VERY TIME CONSUMING, 1= NOT AT ALL TIME CONSUMING SINGLE RESPONSE

PN: MULTIPLE RESPONSE

QC2. What sources of information do you consult to get information and updates about COPD and treatment options?

- Congresses 1
 Scientific Journals 2
 Scientific publications 3
 Pharma company reps 4
 Pharma company MSLs 5
 Internet search 6
 Dedicated websites 7
- None of the above (STAND ALONE) 9 PN: CAN ONLY BE CHOSEN ON ITS OWN

C) DESCRIPTION OF PATIENT DEMOGRAPHICS AND COPD CONDITION

The next series of questions focuses on patient experience with COPD and the impact the condition has on their QOL seen from the clinician's point of view. Please think of a real patient you've seen recently with (PN: SHOW LEVEL OF SEVERITY WITH THE HIGHEST % INDICATED DURING SCREENING PHASE) level of severity. Please exclude patients who are required

to take oxygen on a continuous basis or patients with a very mild form of COPD which does not require maintenance therapy. Also consider a patient that ...

- 1. Is 45 years or older
- 2. <u>Is representative of the majority of COPD patients seen in your caseload with this level of severity</u>
- 3. Was diagnosed with COPD at least a year ago and whom you have been managing for at least a year
- 4. Has been on maintenance treatment for COPD for at least a year

Please think about this patient as the rest of the interview will focus on questions about this patient and his/her COPD condition.

PN: ONE RESPONSE ONLY

QP1. Gender of this patient

Male 1Female 2

QP2. Age:

PN: SINGLE RESPONSE

QP3. Please indicate working status of patient

•	Full-time employee	1
•	Part-time employee	2
•	Self-employed	3
•	Retired	4
•	Unemployed	5
•	Occupational disability	6
•	Do not know	7

PN: SINGLE RESPONSE

QP4. Does this patient live alone or with other people?

•	Lives alone	1	
•	Lives with own family (spouse and /or children)		2
•	Lives with family (parents or relatives)		3
•	Lives with spouse only		4
•	Lives with spouse and caregiver		5
•	Lives with caregiver only		6
•	Lives with friend/friends		7
•	Is institutionalized		8
•	Don't know		9

PN: SINGLE RESPONSE

QP5. Which is the highest level of education that this patient has completed

•	Elementary	1
•	Middle school	2
•	High school	3
•	University	4
•	Don't know	5

PN: MULTIPLE RESPONSE, EXCEPT FOR CODE 5 AND CODE 6. CODE 5 AND CODE 6 ARE STAND ALONE RESPONSES.

QP6. Which of these characteristics are present in this patient's COPD (TICK ALL THAT APPLY)

•	Emphysema	1
•	Chronic bronchitis	2
•	Frequent exacerbations (>2 a year)	3
•	Overlap syndrome/mixed COPD-asthma	4
•	None of these	5
•	Don't know	6

QP7. During the course of the year did this patient experience worsening of symptoms, or attacks, or worsening of their COPD condition which ...?

		YES	NO
•	led him/her to make an unscheduled visit with you or with his/her	Υ	N
	GP/pneumologist		
•	led him/her to go to Emergency Room	Υ	N
•	led to a treatment change	Υ	N

PN: FOR EACH OPTION WITH YES AT QP7, ASK QP7a. NUMERIC: RANGE = 1-24. ALLOW "DON'T KNOW"

QP7a. How many times during the course of the year?

PN: SINGLE RESPONSE

QP8. Has this patient ever been hospitalized for COPD during the course of the year? $\ensuremath{\text{Y/N}}$

PN: IF YES. ASK. NUMERIC: RANGE = 1-24. ALLOW "DON'T KNOW"

QP8a. How many times?

PN: SINGLE RESPONSE

QP9. Which of the following categories does this patient fall into? (ONE RESPONSE ONLY)

•	Has never smoked	1
•	Used to smoke, but quit for several years ago	2
•	Used to smoke, and quit only recently	3
•	Used to smoke sometimes, only on special occasions	4
•	Currently smokes and has never tried to quit	5
•	Currently smokes after having tried to quit once or more than once	6
•	Used to smoke traditional cigarettes, but now only smokes electronic cigarettes	7
•	Smokes both traditional and electronic cigarettes	8
•	Don't know	9

PN: IF CODE 5 OR 6 OR 8 AT QP9, ASK. SINGLE RESPONSE.

QP10. How many cigarettes does patient smoke per day, on average?

•	smokes every now and then, i.e. less than one a day	1
•	smokes between 1-5 cigarettes a day	2
•	smokes between 6-10 cigarettes a day	3
•	smokes between 10-20 cigarettes a day	4
•	smokes between 1.5-2 packs a day	5
•	smokes more than 2 packs a day	6
•	Don't know	7

PN: MULTIPLE RESPONSE. "DON'T KNOW" IS A STAND ALONE OPTION

QP11. In addition to COPD which of these conditions does this patient suffer from?

- 1) Arthritis
- 2) Osteoporosis
- 3) Diabetes
- 4) Hypertension
- 5) Heart failure
- 6) Coronary disease
- 7) Other cardiovascular conditions
- 8) Depression
- 9) Anxiety
- 10) Gastrointestinal disorders
- 11) Genito-urinary tract disorders
- 12) Severe visual impairment
- 13) Hypercholesterolaemia
- 14) Cachexia
- 15) Other (PLEASE SPECIFY)
- 16) DON'T KNOW

PN: MULTIPLE RESPONSE. "DON'T KNOW" IS A STAND ALONE OPTION

QP12. During the course of the day, when does the patient take drugs for all of their conditions? (TICK ALL THAT APPLY)

In the morning

•	At lunch	2
•	In the evening	3
•	At dinner	4
•	Before going to sleep	5
•	I DON'T KNOW	6

D) PATIENT EXPERIENCE WITH THE ILLNESS

SYMPTOMS

PN: MULTIPLE RESPONSE

QS1. Which of the following COPD symptoms does the patient suffer from?

•	Cough	1
•	Dyspnea/Shortness of breath	2
•	Phlegm/sputum	3
•	Chest tightness	4
•	Wheezing	5
•	Fatigue	6

PN: FOR EACH SYMPTOM CHOSEN AT QS1, ASK QS2.-QS4.

QS2. To what extent does the patient find these bothersome? Please reply using the 5-point scale where 5 = extremely, 4=very, 3=somewhat, 2=only a little, 1=not at all

QS3. To what extent does this patient find them hard to control with medication? Please reply using the 5-point scale where 5 = extremely, 4=very, 3=somewhat, only a little, 1=not at all

QS4. To what extent do they affect the patient's day to day life?

5=completely, 4=very much, 3=somewhat, 2=only a little, 1=not at all

PN: MULTIPLE RESPONSE

QS5. Overall, when are these symptoms most bothersome (TICK ALL THAT APPLY)

•	When he/she wake up	1
•	Early in the morning	2
•	Later in the morning	3
•	During the afternoon 4	
•	During the evening	5
•	When he/she goes to sleep	6
•	During the night	7
•	Don't know	8

OVERALL CONDITION

PN: SINGLE RESPONSE

QC1. Which statement best describes how the patient considers his/her COPD condition?

•	It is a major health problem	1
•	It is a somewhat of a health problem	2
•	It is a minor health problem	3
•	It is not a problem at all	4

PN: SINGLE RESPONSE

QC2. Which statement best describes how the patient copes $\underline{\text{emotionally}}$ with COPD?

•	has an extremely hard time coping with the condition emotionall	y 1	
•	has a hard time coping with the condition emotionally	2	
•	has only a few problems coping with the condition emotionally		3
•	has no problems coping with the condition emotionally	4	

PN: MULTIPLE RESPONSE; ALLOW DON'T KNOW, CODE 14 AS STAND ALONE OPTION

QC3. How does the patient currently feel about having this condition

,	ou aces the p	aciciic co
•	Sad	1
•	Frightened 2	
•	Frustrated	3
•	Anxious	4
•	Limited	5
•	Depressed	6
•	Outcast	7
•	Embarrassed	8
•	Indifferent	9

•	In control	10
•	Optimistic	11
•	Pessimistic 12	
•	Satisfied	13
	DON'T KNOW	14

QC4.Which statement best describes how the patient copes in practical terms with COPD?

•	has an extremely hard time coping with the condition in practical terms	1
•	has a hard time coping with the condition in practical terms	2
•	has only a few problems coping with the condition in practical terms	3
•	has no problems coping with the condition in practical terms	4
•	has no problems coping with the condition in practical terms	

KNOWLEDGE & INFORMATION

PN: SINGLE RESPONSE

QC5. What is this patient's level of knowledge/understanding about COPD

•	Knows enough about the condition, does not need to know more	1	
•	Knows some things about the condition, but still wants/needs to know more	2	
•	Doesn't know enough about the condition and would like to know more		3
•	Doesn't know much about the condition and does not want to know more		4
_	I don't know		

PN: MULTIPLE RESPONSE

QC6. Which would you say are the main sources of information on COPD for this patient?

•	l am	1
•	(Other) Pulmonologist	2
•	Nurse	3
•	Pharmacist	4
•	Internet search engines, e.g. google	5
•	Social networks, e.g. facebook, twitter	6
•	Other websites	7
•	Newspapers / journals	8
•	Television	9
•	Radio	10
•	Other patients	11
•	Friends/relatives	12
•	Patient associations	13
•	Other	14

E) IMPACT ON QUALITY OF LIFE

DAILY ACTIVITIES

PN: SINGLE RESPONSE

QD0. To what extent is this patient self sufficient in dealing with COPD?

•	TOTALLY SELF-SUFFICIENT	1
•	PARTIALLY SELF-SUFFICIENT, NEED SOME HELP FROM CAREGIVER 2	
•	NOT AT ALL SELF-SUFFICIENT	3

PN: SINGLE RESPONSE

QD1. How does this patient manage with day-to-day activities

•	He/she has external help to help him/her at home		1
•	He/she has family members help her/him		2
•	He/she has to find other ways to do activities on his/her own		3
•	He/she hasn't had to do anything or change very much	4	
•	He/she has had to stop doing certain activities		5
	The collection of our dates to the		0
•	The patient has never referred this to me		9
•	This type of information is usually not covered during a visit		10

QD2. The list below is a list of activities that people often do during their day-to-day life. Although for some people with several medical problems it is difficult to determine what it is that limits them, please go over the activities listed below and for each one indicate how limited the patient is in doing this activity due to the COPD

• Self care (e.g. Washing oneself, getting dressed, putting on/ tying shoes)

- Household chores (e.g. cooking, washing dishes, loading/emptying dishwasher/washing machine
- Carry things like grocery / laundry
- Walking up/down stairs
- Taking walks
- Doing small repair work at home / on the car
- Doing grocery shopping
- Sexual Intercourse

PN: FOR EACH ACTIVITY SELECTED, ALLOW ONE RESPONSE FROM SCALE OR ONE OF CODES 8-10

For each activity please respond by choosing a phrase from the following scale 5=completely limited, 4=very limited, 3=somewhat limited, 2=only slightly limited, 1= not at all **OR tick one of the following items if relevant to this patient:** 8=patient decided to stop doing this activity;

9= the patient has never referred this to me;

10=this type of information is usually not covered during a visit

PN: ASK ONLY FOR ACTIVITIES WITH CODE 1, OR 2, OR 3, OR 4, OR 5 AT QD2 PN: SINGLE RESPONSE

QD3. Which of these activities can the patient do on his/her own even if with difficulty and/or with shortness of breath, and which does the patient need someone else to do it for him/her completely or need complete help with? (DO NOT SHOW SEXUAL INTERCOURSE)

	DAY-TO-DAY ACTIVITIES	ON HIS/HER		
		OWN	WITH HE	LP
•	Self care (e.g. Washing oneself, getting dressed, putting on/ tying shoes)		1	2
•	Household chores(e.g. cooking, washing dishes, loading/emptying dishwasher/washing mach	ine	1	2
•	Carry things like grocery / laundry		1	2
•	Walking up/down stairs		1	2
•	Taking walks		1	2
•	Doing small repair work at home / on the car		1	2
•	Doing grocery shopping		1	2
•	Sexual Intercourse (PN: SHOW ONLY FOR QD2, QD4, QD5. DO NOT SHOW FOR QD3)			

PN: ASK ONLY FOR ACTIVITIES AT QD3 DONE ON HIS/HER OWN (CODE 1) AND FOR SEXUAL INTERCOURSE (IF CODE 1, OR 2, OR 3, OR 4, OR 5 AT QD2)

PN: SINGLE RESPONSE

QD4. How tiring is it for the patient to do each activity?

5=extremely tiring, 4=very tiring, 3=somewhat tiring, 2=only slightly tiring, 1=not at all tiring

OR tick one of the following items if relevant to this patient:

9= the patient has never referred this to me;

10=this type of information is usually not covered during a visit

PN: ASK ONLY FOR ACTIVITIES AT QD3 DONE ON HIS/HER OWN (CODE 1) AND FOR SEXUAL INTERCOURSE (IF CODE 1, OR 2, OR 3, OR 4, OR 5 SELECTED AT QD2)

PN: SINGLE RESPONSE

QD5. To what extent does each activity leave this patient out of breath?

5=completely impacts shortness of breath, 4=very much impacts shortness of breath, 3=somewhat impacts shortness of breath, 2=only slightly impacts shortness of breath, 1= at all impacting on shortness of breath

OR tick one of the following items if relevant to this patient:

9= the patient has never referred this to me;

10=this type of information is usually not covered during a visit $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right$

PN: SINGLE RESPONSE

QD5a. Think about the impact COPD has had on this patient's day-to-day activities, overall, how has this affected his/her quality of life?

5=completely, 4=very much, 3=somewhat, 2=only a little, 1=not at all

OR tick one of the following items if relevant to this patient:

9= the patient has never referred this to me;

10=this type of information is usually not covered during a visit

WORK ACTIVITIES

PN: SINGLE RESPONSE

QD6. What kind of impact has COPD had on this patient's employment status/job activities.

• had to change job / type of work activities

•	had to reduce the amount of time/ hours he/she works 2	
•	had to stop working and quit job 3	
•	hasn't impacted job/ work activities at all	4
•	has been unemployed/retired	5
•	the patient was already unemployed/retired when he/she began to suffer from the condit	tion 6
•	The patient has never referred this to me	7
•	This type of information is usually not covered during a visit	8

QD7. How has this change in the patient's work activity impacted his/her overall quality of life?

5=very positively; 4=positively; 3=no impact at all; 2=negatively; 1=very negatively; **OR tick one of the following items if relevant to this patient:**

9= the patient has never referred this to me;

10=this type of information is usually not covered during a visit

LEISURE / ENTERTAINMENT ACTIVITIES

PN: SINGLE RESPONSE

QL1. The list below is a list of leisure time activities / entertainment that people often do during their leisure or free time. Please go over the activities listed below and indicate how limited this patient is in carrying out this activity due to his/her COPD.

For each activity use the scale 5=completely limited, 4=very limited, 3=somewhat limited, 2=only slightly limited, 1= not at all Light leisure time activities/recreation (e.g. walking, playing with the dog, dancing, gardening...)

•	Playing light sports (e.g. golf, bowling)	2
•	Playing more strenuous sports (e.g. Jogging, swimming, football, tennis)	3
•	Interaction with others (e.g. playing with children/grandchildren, visiting friends / family)	4
•	Traveling	5
•	Going to public places (like movies, concerts, theatre, restaurants)	6

OR tick one of the following items if relevant to this patient:

8=patient decided to stop doing this activity;

9= the patient has never referred this to me;

10=this type of information is usually not covered during a visit

PN: SINGLE RESPONSE

QL1a. Think about the impact COPD has had on this patient's leisure time activities, overall how has this affected his/her quality of life?

5=completely, 4=very much, 3=somewhat, only a little, 1=not at all: 9=I don't know **OR tick one of the following items if relevant to this patient:**

9= the patient has never referred this to me;

10=this type of information is usually not covered during a visit

SLEEP

PN: SINGLE RESPONSE

QL2. In general terms, how would you rate the quality of sleep of this patient?

5=Doesn't sleep well at all, 4, 3, 2, 1=Sleeps extremely well **OR tick one of the following items if relevant to this patient:**

The patient has never referred this to me 9
This type of information is usually not covered during a visit 10

PN: SINGLE RESPONSE

QL3. Extent to which COPD night time symptoms (e.g. coughing, dyspnea, shortness of breath, tight chest, etc.) disturb this patient's sleep

5=disturb it completely, 4=disturbs it a great deal, 3=disturb it somewhat, 2=disturb it only slightly...1=doesn't disturb it at all **OR tick one of the following items if relevant to this patient:**

The patient has never referred this to me 9
This type of information is usually not covered during a visit 10

PN: SINGLE RESPONSE

QL4. Does this patient currently take medicines or other remedies to help sleep

Y/N

IF CODE 5, OR CODE 4, OR CODE 3 OR CODE 2 IS SELECTED AT QL3, ASK. PN: SINGLE RESPONSE

QL4a. Think about the impact COPD has had on this patient's sleep, overall how has this affected his/her quality of life?

5=completely, 4=very much, 3=somewhat, 2=only a little, 1=not at all **OR tick one of the following items if relevant to this patient:**

10

The patient has never referred this to me
This type of information is usually not covered during a visit

F) RELATIONSHIP W/ PATIENT

COMMUNICATION & INTERACTION W/PATIENT

PN: GPS ONLY.

GPS_QR1. On average how many times a year do you see this patient for any condition?

n. times/YEAR

PN: GPS ONLY. NUMERIC

GPS_QR1a. And of these visits, how many are...

specifically for COPD only

____for other conditions/reasons, excluding COPD

___for both COPD and other conditions/reasons

PN: PULS ONLY.

PUL_QR1. On average how often do you see this patient in a year specifically for COPD?

n. times/YEAR

PN: SINGLE RESPONSE

QR2. On average, how long does a visit with this patient last for COPD?

Up to 15 minutes 1
About 20 minutes 2
About 30 minutes 3
More than 30 minutes 4

PN: SINGLE RESPONSE

QR3. Do you feel the amount of time spent with this patient on the subject of COPD is...

Much too short
 Almost enough, but I would like visits to last a bit longer
 Just right
 3

PN: MULTIPLE RESPONSE

QR4. Other than yourself, are there any other healthcare professionals that see this patient for COPD?

Pulmonologist 1
GP 2
Pharmacist 3
Other specialists 4
Nurse 5
NO OTHER HCP AS FAR AS I KNOW 6

SINGLE RESPONSE:

QR4a. How do you communicate with this other HCP about this patient?

By phone
By email
Through the patient
No communication
4

PN: SINGLE RESPONSE:

QR5. To what extent do you ask the patient the following kinds of questions during these visits for COPD?

(ALWAYS, OFTEN, SOMETIMES, RARELY, NEVER) 9= This type of information is usually not covered during a visit

•	How patient feels overall		1
•	Patient's COPD symptoms		2
•	Patient's personal life	3	
•	Patient's fears and doubts		4
•	Patient's expectations about treatment		5
•	Any problems with side-effects		6
•	How patient copes with treatment		7

- If patient is taking your treatment as prescribed How patient copes with the device If patient is using the device correctly 10 11
- Smoking

QR6. How satisfied are you with the way this patient answers your questions and the information provided? 5=completely satisfied, 4=very satisfied, 3=somewhat satisfied, 2=only slightly satisfied, 1=not at all satisfied

PN: SINGLE RESPONSE

QR7. Overall, which best describes how you feel this patient replies to you or provides information when asked about the COPD condition ...

- I feel the patient is completely frank and open when he/she answers my questions
- I feel that the patient is mostly frank and open with me, but I sometimes feel that he/she may be hiding something / omitting information or even lying about some things
- I feel that most of the time the patient is not frank and open enough with me, and is mostly hiding something/omitting information or even lying

PN: IF CODE 3 AT QR7, ASK. MULTIPLE RESPONSE

QR7a. Why do you think they omit information or are not completely frank during the visit?

- They don't want to hear another quit smoking message.
- For financial reasons they are afraid they will need tests and treatment they cannot afford.
- For some, the symptoms are not something they think of, they have grown used to them, they may believe these issues will go away on their own in time. 3
- They try to avoid hearing they may have a serious health problem.

PN: SINGLE RESPONSE

QR8. To what extent do you feel your patient's expectations are fulfilled with reference to the visits for COPD? 5=completely, 4=very much, 3=somewhat, 2=only a little, 1=not at all; 9= I don't know

PN: SINGLE RESPONSE

QR9. Overall how satisfied are you with the relationship with this patient?

5=extremely satisfied; 4=very satisfied; 3= indifferent; 2=somewhat unsatisfied,1= very unsatisfied

QR10. How do you think this relationship impacts the patient's overall quality of life, if at all?

5=completely, 4=very much, 3=somewhat, 2=only a little, 1=not at all; 9= I don't know

ADVICE ON SMOKING

PN: IF CODES 2-8 AT QP9. SINGLE RESPONSE

QR11. Have you ever advised/helped this patient to guit smoking?

Yes / no / can't remember

PN: SINGLE RESPONSE

QR11a. Overall how has COPD affected this patient's quality of life?

5=completely, 4=very much, 3=somewhat, 2=only a little, 1=not at all; 9= I don't know

G) PATIENT EXPERIENCE WITH TREATMENT

MAXIMUM 5 DRUGS. LIST IN ALPHABETICAL ORDER

QT1. What is the COPD therapy this patient is currently taking? [PROGRAMMER: DROPDOWN MENU WITH COUNTRY-SPECIFIC DRUG LIST] Please selects all the drugs making up this patient's COPD treatment.

PN: SINGLE RESPONSE FOR EACH ITEM

QT2. How satisfied would you say the patient is with the treatment he/she is currently taking for COPD in terms of... 5=completely satisfied, 4=very satisfied, 3=somewhat satisfied, 2=only slightly satisfied, 1=not at all satisfied

- Keeping symptoms under control
- Making the patient feel better
- Causing few or no side effects
- Easy to take the medicine
- Number of times to take the medicine
- Number of medications to be taken

QT3. How well would you say this patient follows your instructions on when and how to take the treatment for COPD?

5=completely follows instructions, 4=follows most of my instructions, 3=follows only to a certain extent, 2=follows very few of my instruction, 1=doesn't follow any of my instructions

PN: SINGLE RESPONS FOR EACH ITEM

QT4. How often would you say this patient...

(5= ALWAYS, 4= OFTEN, 3= SOMETIMES, 2= RARELY, 1= NEVER) or The patient has never referred this to me

-takes fewer or lower doses (e.g. fewer puffs with inhaler)
- ...takes more / higher doses (e.g. more puffs with inhaler)
- ...takes his/her medicine at different times of the day from how prescribed
- ...forgets to take his/her medicine
- ...deliberately decides not take his/her medication (e.g. during holidays or festivities, when travelling, during the week-end etc.)

PN: SINGLE RESPONSE

QT5. In your opinion, how would you rate the level of control of the COPD in this patient? (ONE RESPONSE ONLY)

- Good
- Fair
- None/poor

H) PATIENT HANDLING OF THE DEVICE

PN: ASK THE FOLLOWING QUESTIONS (QH1. → QH8.) FOR EACH INHALER AT QT1, ONE BY ONE. ONLY DRUGS WITH INHALERS PN: MULTIPLE RESPONSE

Let's now briefly discuss the inhaler or inhalers this patient uses with for the COPD treatment.

QH1. Who actually showed the patient how to use the inhaler?

•	I did	1
•	The GP	2
•	(Other) Pulmonologist	3
•	The Nurse	4
•	The Pharmacist	5
•	Other healthcare professional (please specify)	6
•	Patient learned on his/her own (STAND ALONE)	7

PN: IF TRAINING PROVIDED BY PHYSICIAN OR NURSE (CODES 1, 2, 3 OR 4 AT QH1), ASK

PN: SINGLE RESPONSE

QH2. Did this patient have difficulties in understanding how to use the devices/inhalers?

•	Yes to a large extent, the patient had to be shown how to use the inhaler several times	1
•	Yes, but only to a certain extent, the patient had to be shown how to use the device only a couple of times	2
•	No, the patient understood how to use the device after the first demonstration	3
•	DON'T KNOW	4

PN: SINGLE RESPONSE

5=completely, 4=very, 3=somewhat, 2=only slightly, 1=not at all

QH3. How easy is it for the patient to use this inhaler

QH4. How easy is it for the patient to understand if he/she has taken the right amount of medicine with this inhaler QH5. How self sufficient is this patient in using this inhaler

PN: SINGLE RESPONSE

QH6. Has the patient ever complained about having problems with the inhaler? Y/N

IF YES AT OH6, ASK

PN: MULTIPLE RESPONSE

QH6a. If yes, which?

	1		
•	the overall lack / absence of feeling of having inhaled the medicine	1	
•	not certain the amount of medication left in the inhaler	2	
•	the inhaler not working reliably	3	
•	the difficulty in inhaling a dose from the inhaler	4	
•	the difficulty in consulting the instructions for use/unclear/little instructions	5	
•	the size of the inhaler	6	

•	the difficulty in holding the inhaler during use	7
•	the convenience of carrying the inhaler	8
•	the lack/absence/poor feedback (either sonar or visual) informing the patient that the dose has been taken properly	9

QH7. As far as you know, does this patient use the device properly when taking his/her COPD maintenance medication?

5= ALWAYS, 4= MOST OF THE TIMES, 3= SOMETIMES, 2= RARELY, 1= NEVER 9= I DON'T KNOW

PN: SINGLE RESPONSE.

QH8. As far as you know, how satisfied is this patient overall with this inhaler?

5=completely, 4=very, 3=somewhat, 2=only slightly, 1=not at all

I) PHYSICIAN & PATIENT NEEDS IN RELATION TO COPD MANAGEMENT

PN: MULTIPLE RESPONSE

QN1. Which of the following do you feel you need to support you in the management of COPD in general? more information on country specific epidemiological data for COPD as a disease

ле ш	formation on country specific epidemiological data for COPD as a disease	1	
•	more information on future developments in treatment options		2
•	more well-tolerated drugs for maintenance treatment		3
•	more efficacious drugs for maintenance treatment		4
•	more robust clinical trial data on current treatment options		5
•	material/support (e.g. pamphlets, posters,) to help train patients on how to use their devices		6
•	material/support to give to caregivers to help manage patients		7
•	need for more information channels (websites, congresses, forums,) to help doctors manage COPD patients	8	
•	more information on guidelines		9
•	NOTHING (STAND ALONE OPTION)		10

PN: IF MORE THAN 3 ITEMS CHOSEN AT QN1. ASK

QN2. Which are the three most important? Could you please rank them?

PN: MULTIPLE RESPONSE

QN3. Which of the following do you feel you need to support you in the management of COPD in <u>this patient in particular</u>?

•	need for more information on COPD as a disease		1
•	need for more info on other possible drug therapies		2
•	need for support in helping patient to take treatment	3	
•	need for support in helping on how to use device		4
•	need for support from the other HCP treating the patient for COPD		5
•	need for support from family/caregivers		6
•	need for information on counseling		7
•	need for information on patient user friendly information channels		8
•	need for information on support to quit smoking (SHOW ONLY IF CODES 5, 6 AT QP9)		9
•	NOTHING (STAND ALONE OPTION)		10

PN: IF MORE THAN 3 ITEMS CHOSEN AT QN3. ASK

QN4. Which are the three most important? Could you please rank them?

Figure 4S. Extent of bothersome of symptoms as perceived by patients directly answering the questionnaire and according to GPs and PULs answering about patients' perception.

