

## INTRODUCTION

- Previous economic evaluations of chronic obstructive pulmonary disease (COPD) treatments have centered primarily on clinical trial outcomes that are important to both patients and healthcare providers, such as lung function and exacerbations. However, patients with COPD may also prioritize additional aspects of treatment.
- In prior published work, we defined a core set of disease-agnostic patient-informed value elements and then tailored the set to individuals living with COPD by eliciting the elements most important to them in making decisions to manage their condition.<sup>1,2</sup>
- With patient input, we developed a discrete choice experiment (DCE) instrument from the key attributes previously identified.<sup>2</sup>

## STUDY OBJECTIVE

- The objective of this study was to pilot test a patient informed DCE for the treatment of COPD.

**Table 1. Enrollment process**

	n
<b>ResearchMatch outreach</b>	1,000
<b>Email invitation</b>	50
Screening appointment booked	37
Email non-response	13
<b>Screening interview booked</b>	37
Screening phone call completed	30
No show	5
Cancelled by research team	2
<b>Study enrollment</b>	30
<b>Study completion</b>	30

## METHODS

- An outreach message was sent to 1,000 patients with COPD through ResearchMatch, an NIH-sponsored national web-based recruitment tool for research. [Table 1] This research was determined exempt by IRB.
- 50 potential volunteer matches were invited via email to book a screening appointment on a Microsoft Bookings platform. Eligibility was confirmed over a 10-minute phone interview. Screening interviews were carried out from June 28, 2022, to July 14, 2022.
- Eligible individuals were then invited to participate in the study until the target of n=30 study enrollments was reached.
- Enrolled individuals received an anonymous link to a web-based questionnaire (Qualtrics).
- Upon survey completion, study participants were emailed a gift card.
- The questionnaire included eleven demographic-related questions, the COPD Assessment Test (CAT), nine experimentally-derived choice tasks (and two hold-out tasks), and six questions to test the relevance of the attributes included in the DCE.
- Demographic and clinical data were summarized using descriptive statistics.

**Table 2. Duration of and time to questionnaire completion**

<b>Time to complete questionnaire, in minutes (mean (SD))</b>	17.5 (11.6)
<b>Number of days from enrollment until survey was started (n (%))</b>	
Same day	16 (53.3%)
1 or 2 days	12 (40.0%)
Between 3 to 8 days	2 (6.7%)

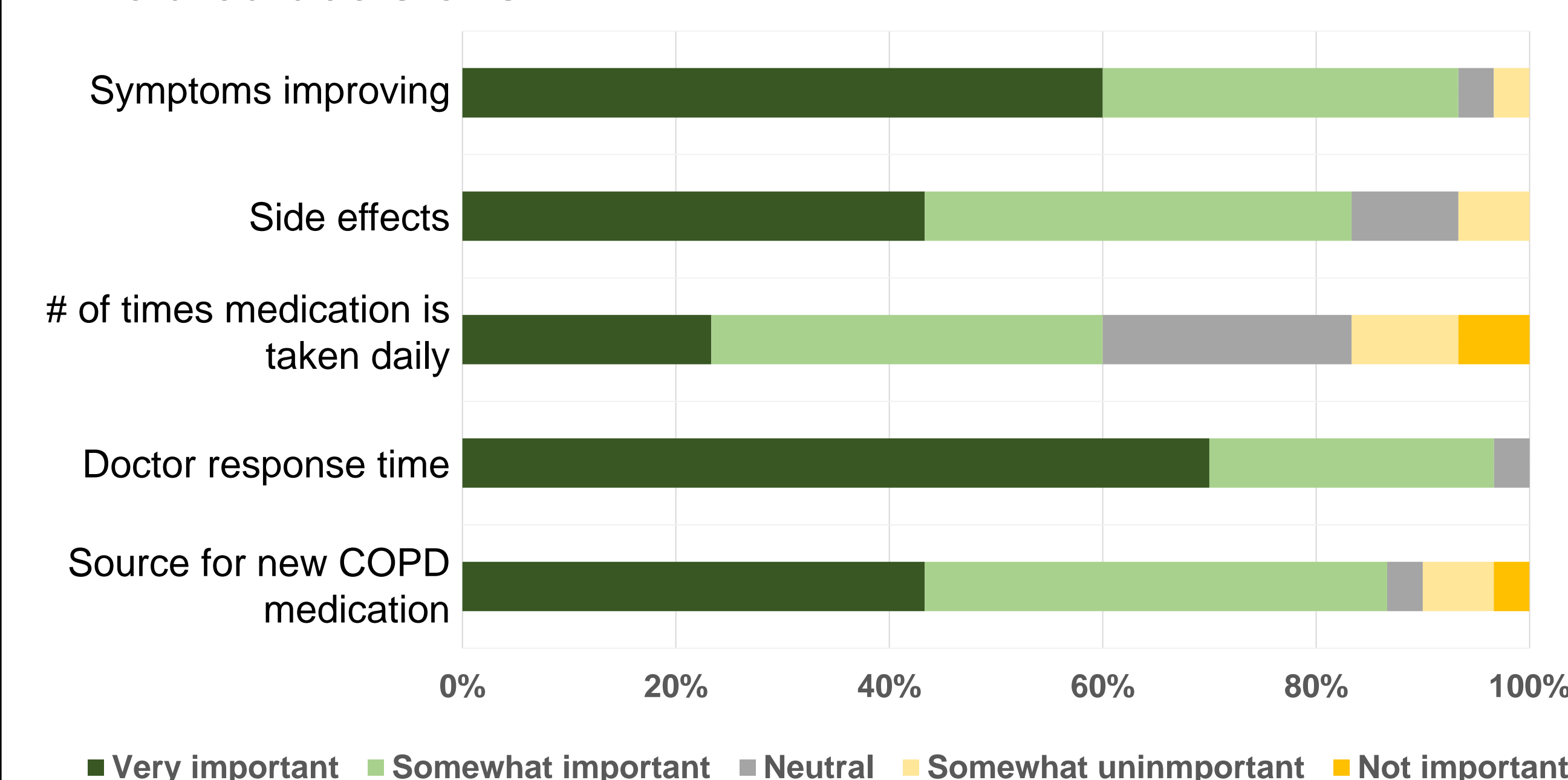
## RESULTS

- Participants completed the questionnaire in an average of 17.5 minutes. 28 participants (93.3%) completed the survey within 2 days of receipt. [Table 2]
- Participant mean age was 66.5 years (SD=9.6), 50% were female (n=15) and 87% were White (n=26). Participants reported a mean of 12 years since COPD diagnosis and a mean CAT score of 20 (SD=7). [Table 3]
- When making treatment-related decisions, participants (>80%) found all attributes to be important, except number of times in day medications taken (60%). The attributes found most important were doctor-response time (97%) and symptoms improvement (93%). [Figure 1] Participants reported an average monthly willingness to pay of \$79 (SD=\$57).

**Table 3. Study participant demographic and clinical characteristics**

<b>Age (mean (SD))</b>	66.5 (9.55)
<b>Sex (n, %)</b>	
Male	15 (50.0)
Female	15 (50.0)
<b>Race (n, %)</b>	
White	26 (86.7)
Black	3 (10.0)
Black & American Indian and Alaska Native	1 (3.3)
<b>Insurance (n, %)</b>	
Public only	15 (50.0)
Private only	4 (13.3)
Other	2 (6.7)
Combination	9 (30.0)
<b>Years since COPD diagnosis (mean (SD))</b>	12.3 (7.2)
<b>CAT score at survey completion (mean (SD))</b>	19.9 (7.1)

**Figure 1. Importance of attribute to make treatment-related decisions**



## CONCLUSION

- The screening and enrollment process was effective in retaining individuals.
- The study validated the importance of key attributes of value-based decision making that underpin benefit-risk trade-offs for patients with COPD.
- This patient-driven stated preferences instrument will allow for incorporation of the patients' voice in economic evaluations in future works.

## REFERENCES

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- J. F. Slejko, Y. D. Hong, J. L. Sullivan, R. M. Reed, and S. dosReis, "Prioritization and Refinement of Patient-Informed Value Elements as Attributes for Chronic Obstructive Pulmonary Disease Treatment Preferences," Patient, vol. 14, no. 5, pp. 569–579, Sep. 2021, doi: 10.1007/s40271-021-00495-2.

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