

# Understanding Why Hereditary Angioedema Patients Often Do Not Carry Their On-Demand Treatment With Them

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## Background

- Hereditary angioedema (HAE) is a rare genetic disease resulting in deficiency (type I) or dysfunction (type II) in the C1-inhibitor protein and subsequent uncontrolled activation of the kallikrein-kinin system
- People living with HAE experience unpredictable, painful and debilitating attacks of tissue swelling in various locations of the body that can be life-threatening depending on the location affected
- WAO/EAACI 2022 updated guidelines recommend that all HAE patients<sup>1</sup>
  - consider treating all attacks as early as possible
  - have access to sufficient medication to treat two attacks
  - carry on-demand treatment at all times, regardless of prophylactic therapy
- Early treatment of attacks with on-demand therapy, currently only available parenterally, is critical to reducing the impact and duration of attacks. Prior studies have shown that treatment delay may be related to not having ready access to on-demand treatment (or not carrying on-demand treatment with them)<sup>2</sup>

## Objective

- The objective of this analysis was to characterize the reasons patients do not carry their on-demand treatment with them when they leave home, as part of their day-to-day lives

## Methods

- The US Hereditary Angioedema Association (HAEA) recruited people living with HAE to complete an online survey
- The survey was self-reported, and took respondents approximately 20 minutes to complete
- The survey was completed by 107 individuals between September 6 and October 19, 2022; response rate 69% (107/155)
- Respondents provided consent for their data to be used anonymously or in aggregate
- Analysis was performed using descriptive statistics

### References

- Maurer M., et al. The international WAO/EAACI guideline for the management of hereditary angioedema - The 2021 revision and update. World Allergy Organ J. 2022 Apr 7;15(3):100627.
- Valerieva A., et al. Patients delay treating hereditary angioedema (HAE) attacks with currently available, injectable, on-demand therapies: associated with on-demand treatment of hereditary angioedema (HAE) attacks. Poster presentation. EAACI 2023

## Results

Table 1. Respondent Characteristics

Characteristic	Total (n=107)
Age, mean	41yrs (Range 16-83 yrs)
Age category, n (%)	
< 40yrs	56 (52.3%)
subset ≤24yrs	14 (13.1%)
≥ 40yrs	51 (47.7%)
Gender, n (%)	
Female	86 (80.4%)
Male	21 (19.6%)
Type of therapy, n (%)	
On-demand only	53 (49.5%)
Prophylaxis with on-demand	54 (50.5%)
On-demand Treatments Used	
Firazyr/Icatibant	84 (78.5%)
Ruconest	13 (12.1%)
Berinert	9 (8.4%)
Kalbitor	1 (0.9%)

Figure 1. Proportion of time on-demand treatment is carried by age group

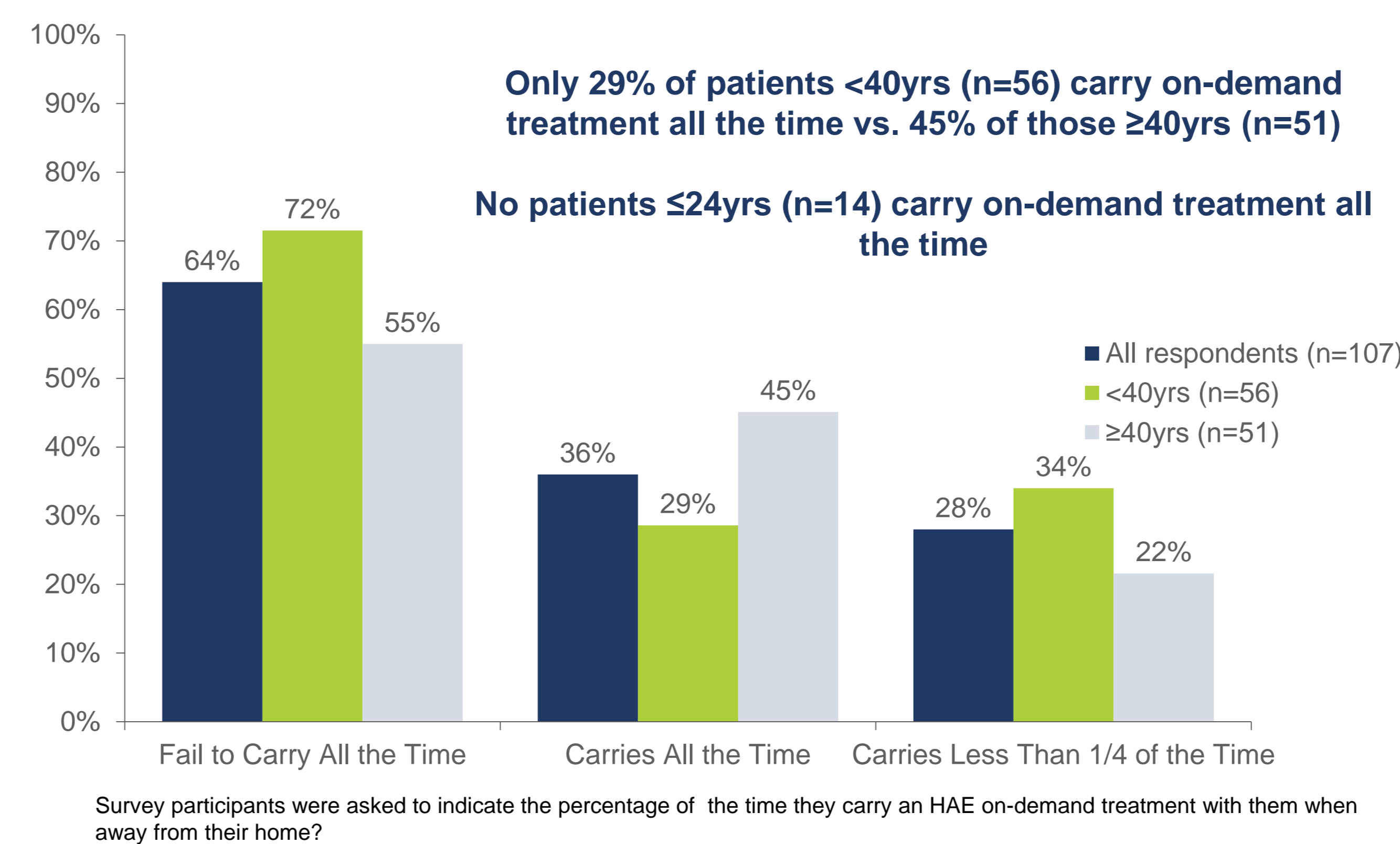


Figure 3. Reasons given for not carrying on-demand treatment at all times, by those that do not always carry (n=68)

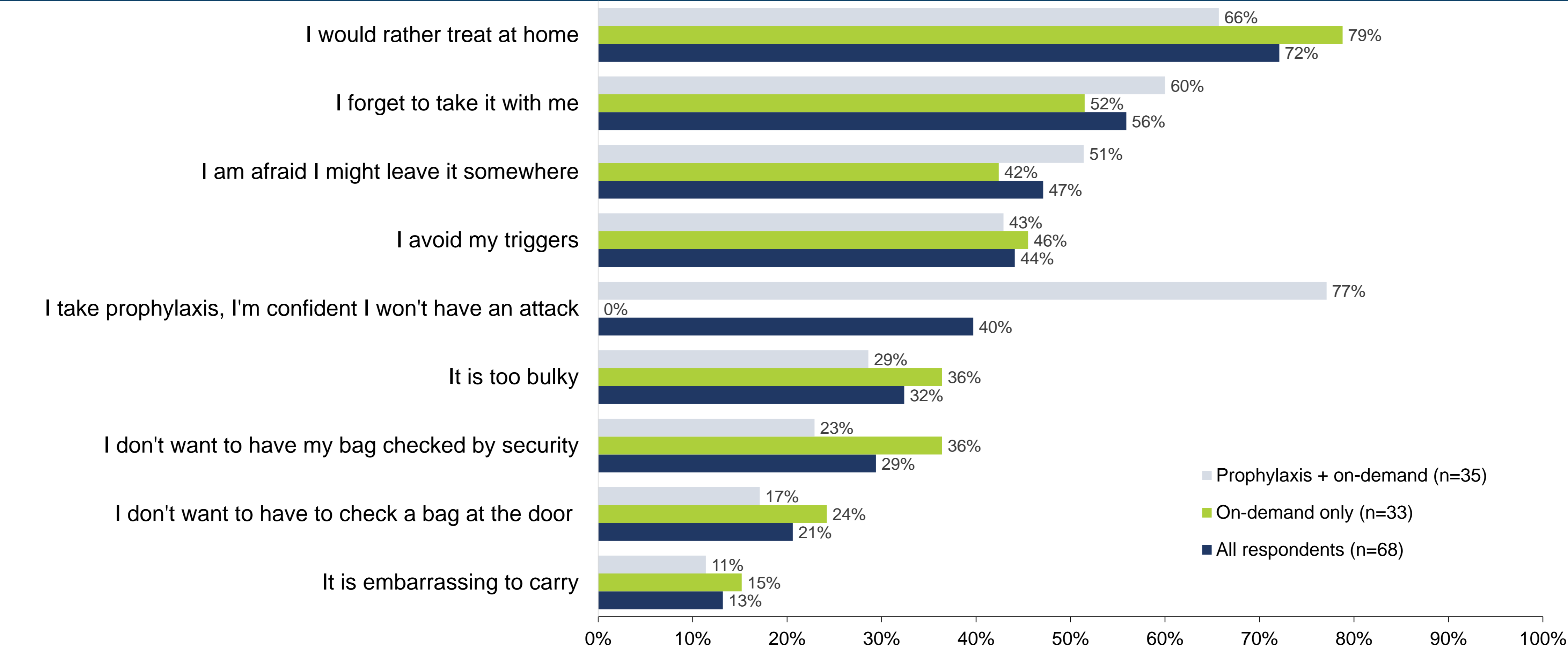
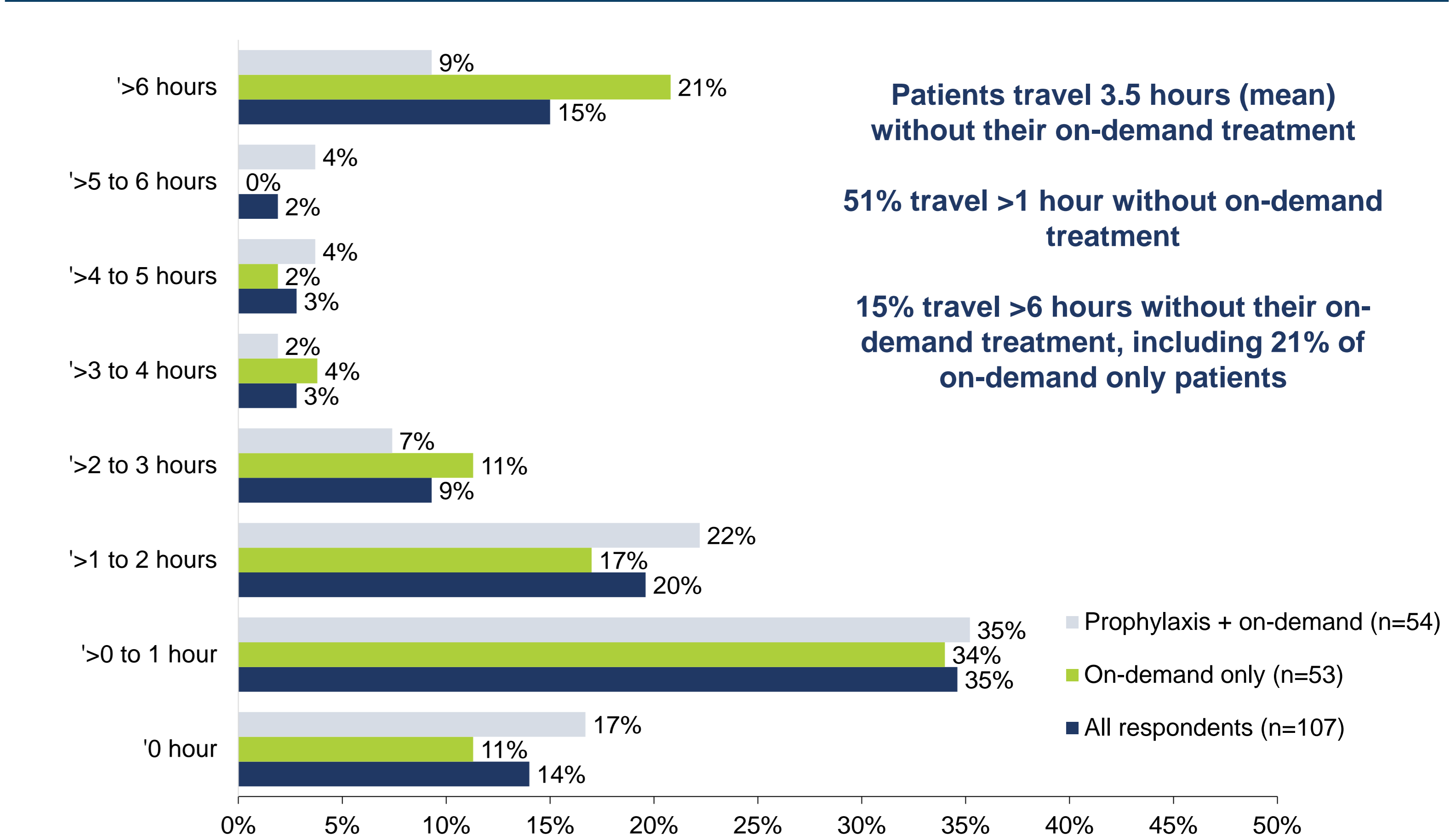


Figure 2. Number of hours people travel away from home without on-demand treatment, by treatment group



## Conclusions

- Survey results highlight that a large proportion of people with HAE do not carry on-demand treatment when leaving home as part of their day-to-day lives, despite guideline recommendations
- More than half the people with HAE in the survey will travel more than one hour away from home without their on-demand treatment and one in five people that only use on-demand treatment (no prophylaxis) will travel more than six hours without their treatment
- These results reflect a significant need to improve patient education related to the importance of carrying on-demand treatment, enabling patients to treat HAE attacks early after attack onset

### Presented:

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To view this poster after the presentation, visit KalVista Virtual Medical Booth.



### Disclosures

This study was sponsored by KalVista Pharmaceuticals, Inc. All authors met the ICMJE authorship criteria and had full access to relevant data. The authors had full editorial control of the data presented and provided final approval of all content. Neither honoraria nor payments were made for authorship.

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\*Employee of KalVista Pharmaceuticals at the time the study was conducted.