

Patient Perspectives On Early Use Of On-Demand Treatment For Hereditary Angioedema (HAE) Attacks to Reduce Severity and Duration

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Background

- HAE is characterized by recurrent and unpredictable episodes of subcutaneous or submucosal swelling which can affect the abdomen, extremities, genitals, face, and larynx
- WAO/EAACI 2022 updated guidelines recommend that all HAE patients must have access to on-demand treatment at all times, regardless of prophylactic therapy and must treat all attacks as early as possible¹
- Symptoms of an HAE attack can be painful and debilitating, potentially interfering with the ability to conduct daily activities (work, school, social activities)²
- Although self-administration of on-demand parenteral treatments has enhanced overall HAE attack management, the impact of the time from attack recognition to treatment administration on HAE attack burden are unknown

Rationale

- This survey investigated the perspectives of people living with HAE regarding on-demand treatment of attacks and associated outcomes

Methods

- People living with HAE were invited to participate in a focus group discussion in collaboration with US HAE Association (HAEA) and HAE International (HAEi)
- In total, 32 individuals with HAE participated in one of four 2-hour focus groups, held between November 2021 and March 2022
- Focus group attendees were invited to complete a pre- and post-focus group online survey
- Inclusion criteria enriched for patients managing HAE by treating attacks with on-demand treatment only, versus those experiencing attacks while on long-term prophylactic treatment
- Patients provided informed consent
- Patient privacy was protected by use of pseudonyms; patient health records were not accessed

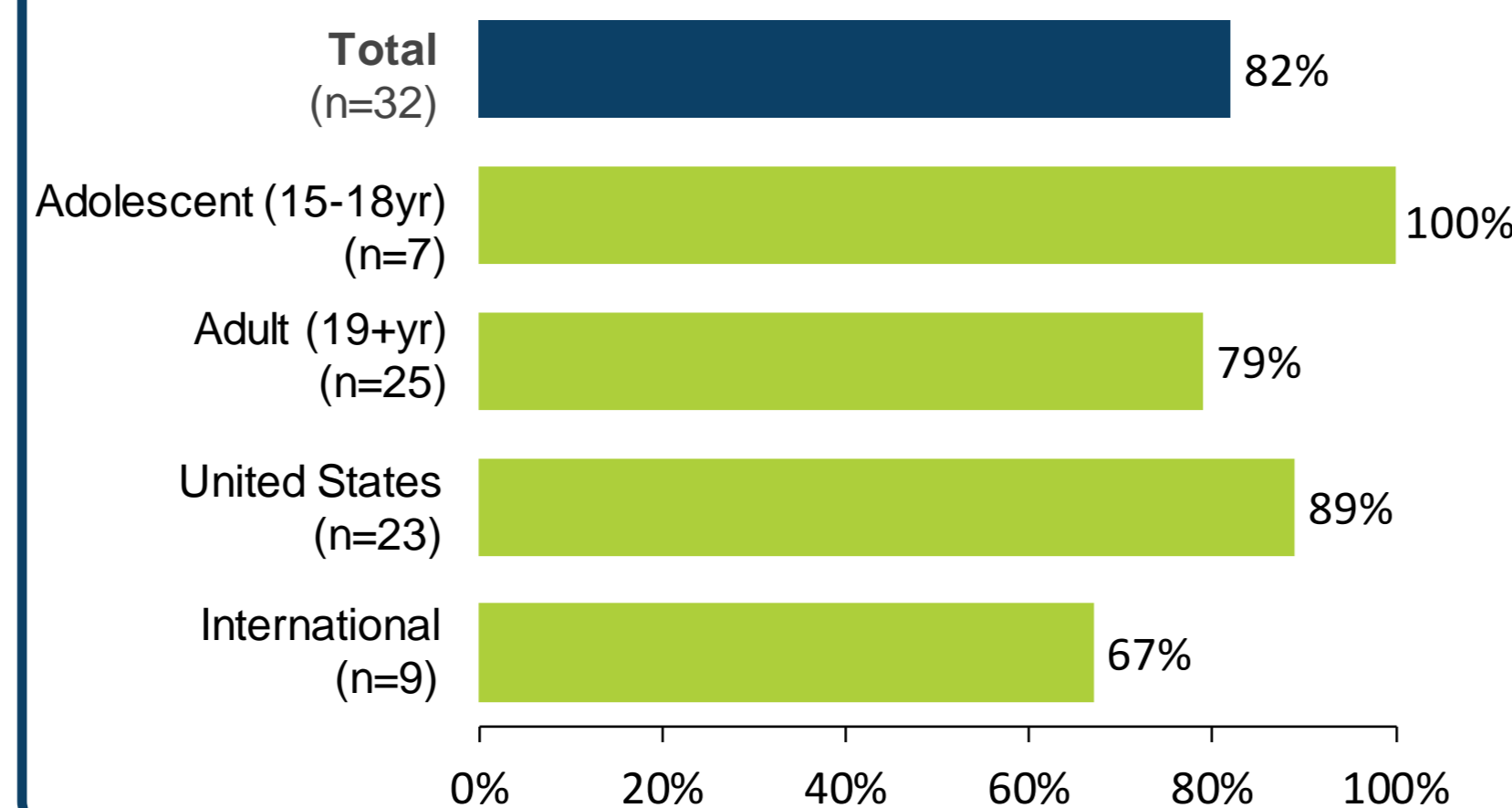
References
 1. Maurer M. et al. The international WAO/EAACI guideline for the management of hereditary angioedema - The 2021 revision and update. World Allergy Organ J. 2022 Apr 7;15(3):100627.
 2. Bygum A. Hereditary angioedema—consequences of a new treatment paradigm in Denmark. Acta Derm Venereol. 2014;94(4):436–41.

Table 1. Baseline demographics

Characteristic	Total (n=32)*	Adolescent (15-18yr) (n=7)	Adult (19+yr) (n=25)	On-demand only therapy (n=21)*	Prophylaxis with on-demand (n=10)*
Location					
United States	72%	100%	64%	67%	80%
International**	28%	–	36%	33%	20%
Current Age, yr Mean (Range)	33 (15 - 72)	17 (15 - 18)	37 (19 - 72)	36 (15 - 72)	27 (16 - 51)
Age of Diagnosis, yr, Mean (Range)	16 (0 - 40)	11 (3 - 16)	17 (0 - 40)	17 (0 - 40)	13 (0 - 26)
Type of Therapy					
On-demand only	68%	50%	72%	100%	–
Prophylaxis with on-demand	32%	50%	28%	–	100%
Attacks Per Year, Mean, Median, (Range)	33, 17.5 (0 - 170)	13, 10 (1 - 36)	38, 25 (0 - 170)	42, 30 (4 - 170)	14, 6 (0 - 50)

*A total of n=32 respondents completed either the pre- or post-survey. n=2 respondents only did the pre-survey, n=1 respondent only did the post-survey, n=29 completed both.
 ** Australia (n=1), UAE (n=1), Germany (n=2), Sweden (n=1), Poland (n=2), Saudi Arabia (n=1), UK (n=1)

Figure 1. Does it take longer to recover from an HAE attack when you wait longer to use on-demand treatment? (% responded "Yes")
 (i.e., do you recover faster if you administer on-demand treatment at earliest signs and symptoms)



Results

Figure 2. How often do you carry an HAE on-demand treatment with you when traveling outside your home (0-100% of the time, mean)?
 (patients responded that they were comfortable traveling up to 2 hours (mean) away from their on-demand treatment)

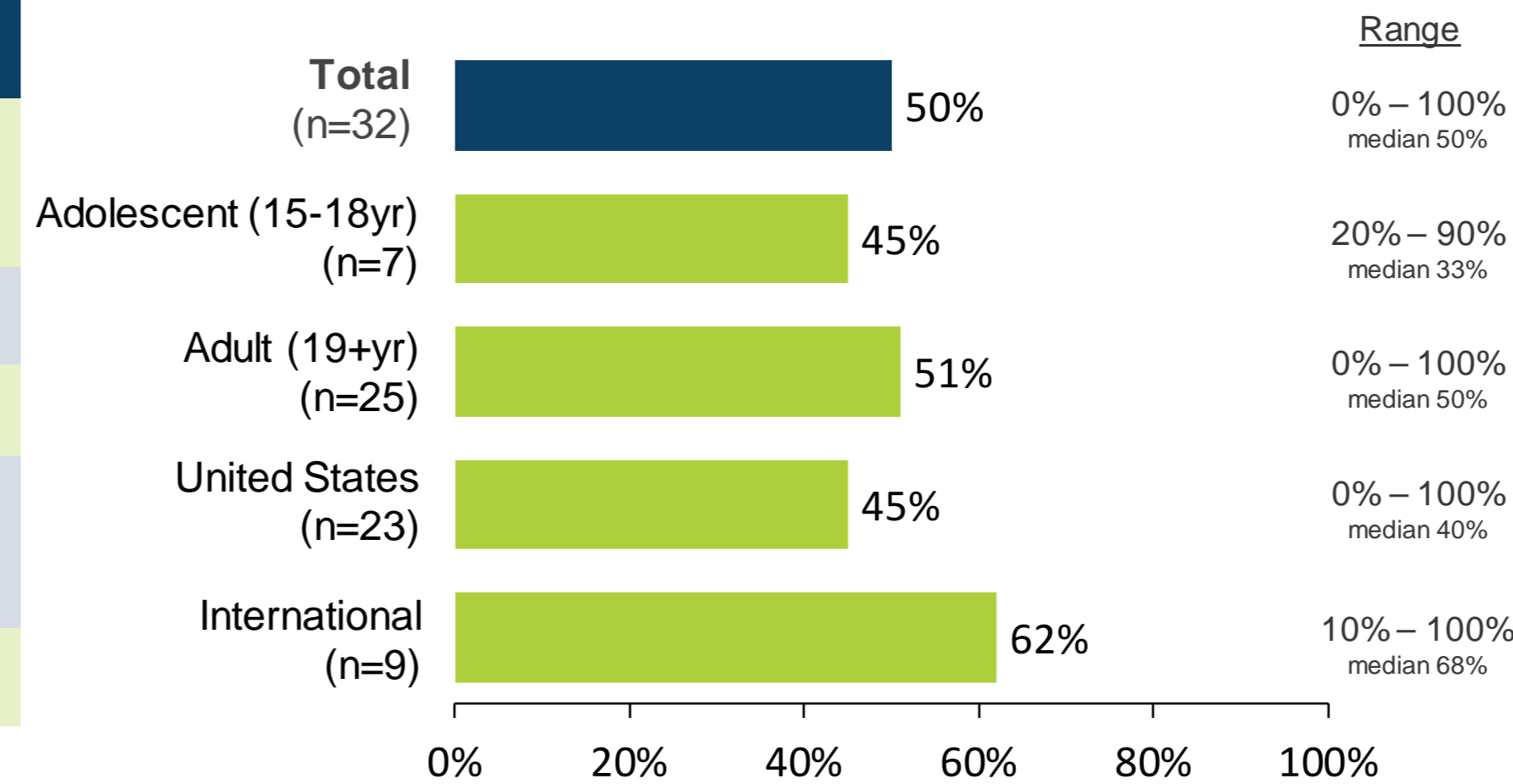


Figure 3. How important is being able to recover quickly from an HAE attack?
 (% "Important" + "Very important")
 (scale-based responses using a 5-point Likert scale of agreement from "Not important" to "Very important")

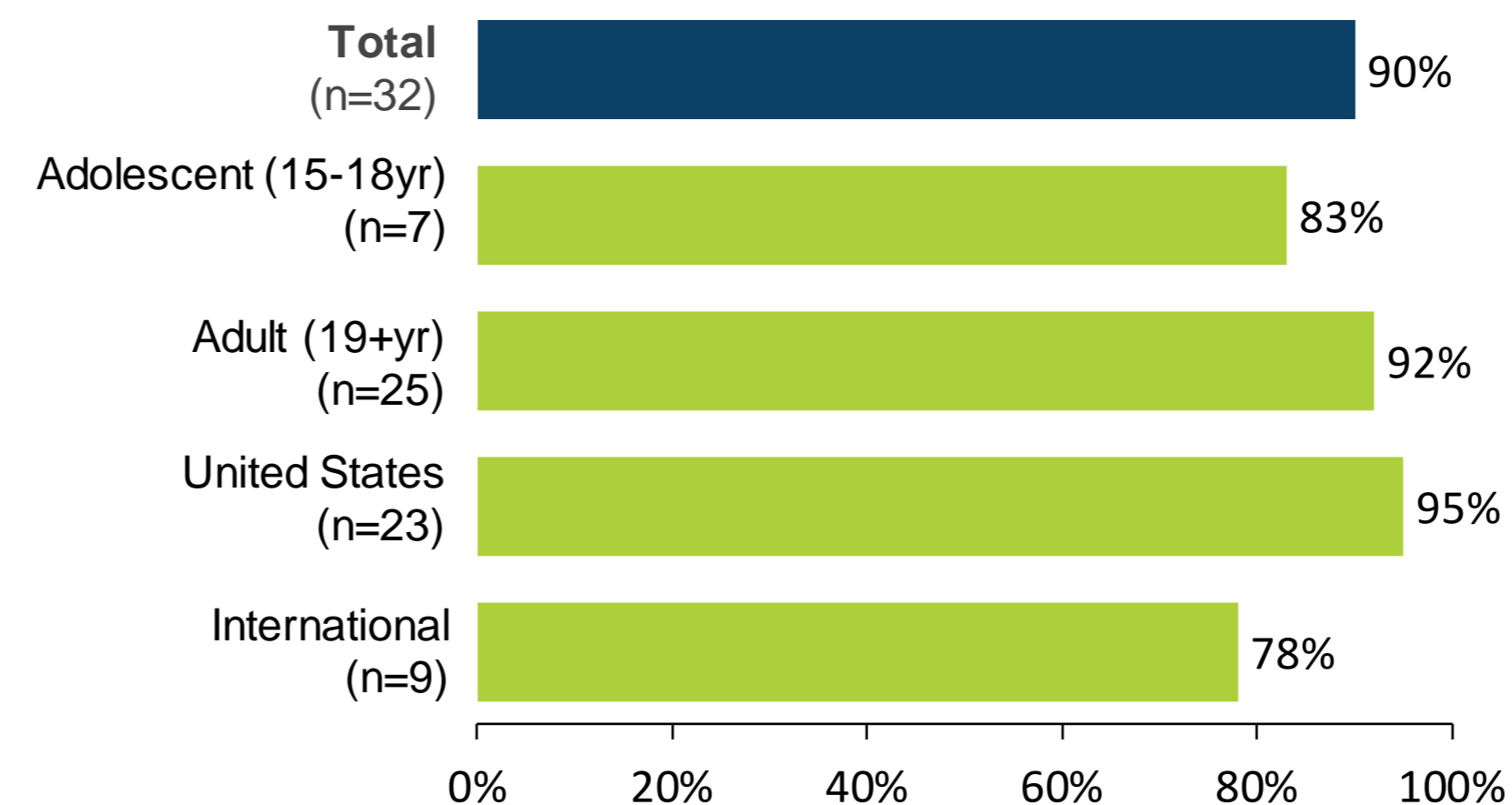


Table 2. Additional feedback

	Total (n=32)	Adolescent (15-18yr) (n=7)	Adult (19+yr) (n=25)	United States (n=23)	International (n=9)
Do attacks last longer if you delay use of on-demand treatment? (% "Yes")	77%	67%	56%	76%	78%
If yes, how much longer do attacks last:					
• Hours (<1 day)	29%	--	33%	38%	17%
• 1 day	14%	--	17%	13%	17%
• 1 - 2 days	29%	50%	25%	25%	33%
• 2-3 days	7%	--	8%	13%	0%
• 3-5 days	7%	--	8%	0%	17%
• 1 week	14%	50%	8%	13%	17%
Are attacks more painful/severe if you delay use of on-demand treatment? (% "Yes")	80%	67%	83%	76%	89%
If yes, how are the attacks more painful/severe:					
• More intense / worsening pain	50%	75%	45%	50%	50%
• Abdominal pain / vomiting	46%	25%	50%	44%	50%
• More swelling/bruising	29%	--	35%	38%	13%
• Longer to recover	17%	25%	15%	13%	25%
Does quick recovery from an attack allow you to resume participation in the day's activities? (% "Yes")	97%	100%	96%	95%	100%
Top two activities impacted by use, or anticipated use, of on-demand treatment	Work, 33% School, 23%	School, 67% Social, 33%	Work, 42% Sports, 17%	School, 33% Work, 29%	Work, 44% Sports, 33%

Conclusions

- People living with HAE only carry on-demand treatment with them half of the time
- Patients acknowledge that delaying attack treatment increases the severity and duration of HAE attacks
- While patients recognize that treating their attacks at the earliest signs and symptoms leads to faster recovery and less impact on daily activities, treatment at the time of attack recognition is often delayed
- Although there have been clear advancements in treatment options, there remains a significant opportunity to improve early attack management for people with HAE
- Further exploration as to why patients do not carry treatment with them all the time will inform a patient-centered approach to HAE attack management. By enabling early treatment there is an opportunity to improve HAE attack management/treatment outcomes

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