

Post-DCE Qualitative Interviews: A Novel Method to Understand the Rationale for Stated Preferences – An Example Among Patients and Physicians in Severe Asthma

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Background

- Patient preference (PP) methodologies, such as discrete choice experiments (DCEs), help elucidate what is important to patients by quantifying willingness to trade off on treatment attributes such as benefits and risks.
- However, heterogeneity in preferences is common. Current approaches provide insights into the “who” and “what” of preference heterogeneity, but do not provide information on “why”.
- Understanding the rationale behind preference heterogeneity is increasingly valuable as treatment options proliferate and the use of PP information by decision-making concurrently increases.

Objective

- **We present a novel qualitative post-DCE interview method helpful in elucidating individuals’ rationale for stated preferences and deriving rich insights into the drivers of the heterogeneity often observed in stated preference studies.**

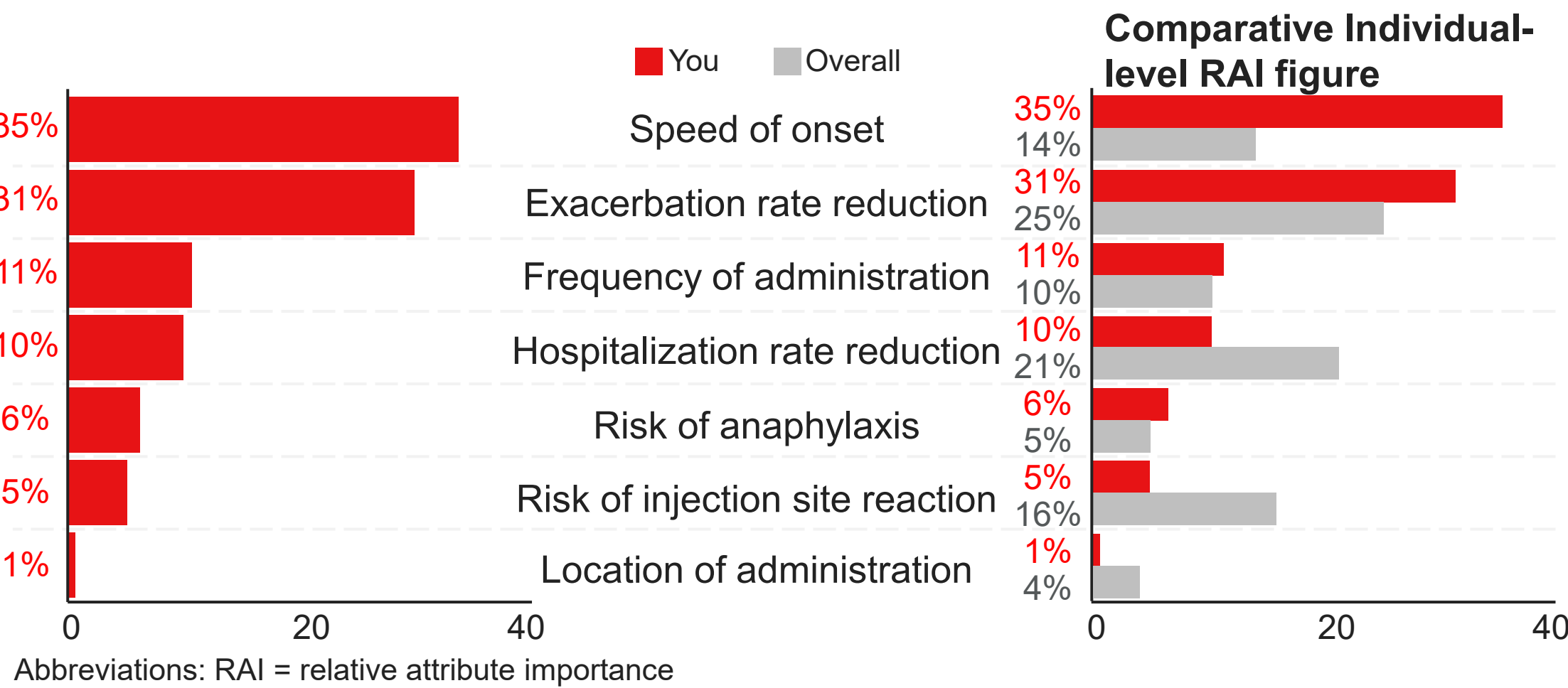
Methods

- A DCE was fielded among a sample of patients with severe uncontrolled asthma (n=300) and asthma-treating clinicians (n=247) in the US. Details on the design and results are reported elsewhere.¹
- Individual 1-hour online qualitative interviews were conducted with a subset of DCE respondents, after survey completion.
 - Individual-level relative attribute importance (RAI) scores were generated for each DCE responded using mixed logit estimates.
 - Interview participants were selected if their individual-level RAI scores were either highly divergent from (target 75%) or characteristic of a typical response pattern (target 25%) compared with the RAI rank and preference directions of the overall sample.
 - Interviews followed a semi structured guide. Participants were shown a figure of their individual-level RAI scores, then a figure comparing their individual-level scores with the median score for each attribute RAI. Participants were probed on the reasons for their preferences (**Figure 1**).

Figure 1. Example Participant Selection and Individual-level RAI Outputs

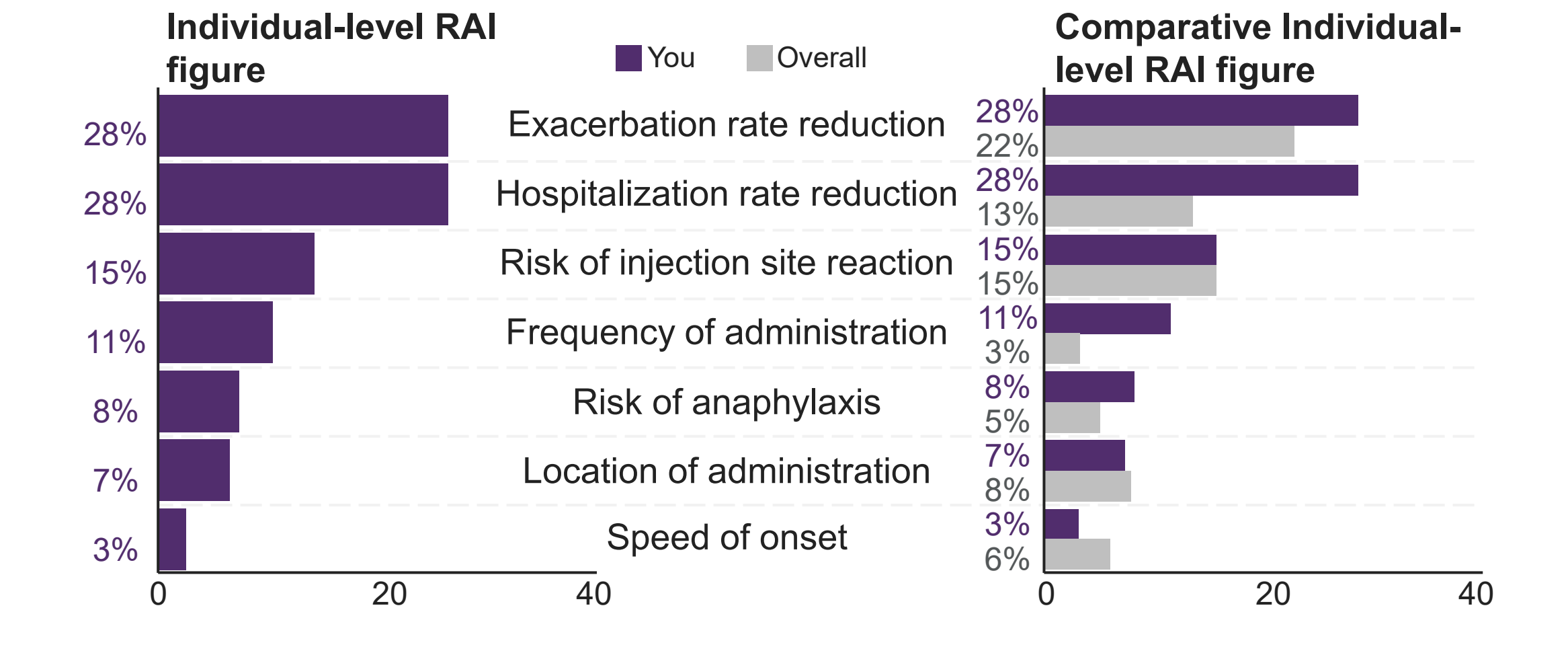
Example patient questions and interview aids: preference similar to sample average

- Compared with the importance of other features, why do you think reductions in the number of severe asthma attacks and asthma-related hospitalizations were the most important treatment features for you?
- How frequently have you been hospitalized due to asthma over the last year?
- Why was speed of onset the least important treatment feature for you?



Example clinician questions and interview aids: Preference divergent from sample average

- Can you briefly summarize why speed of onset was the most important treatment feature for you?
- Is this something that is important to your patients?
- Compared with the importance of other features, why do you think location of administration was the least important treatment feature for you?



Results

Figure 2. Main Study Overall Sample RAI by Subgroup¹

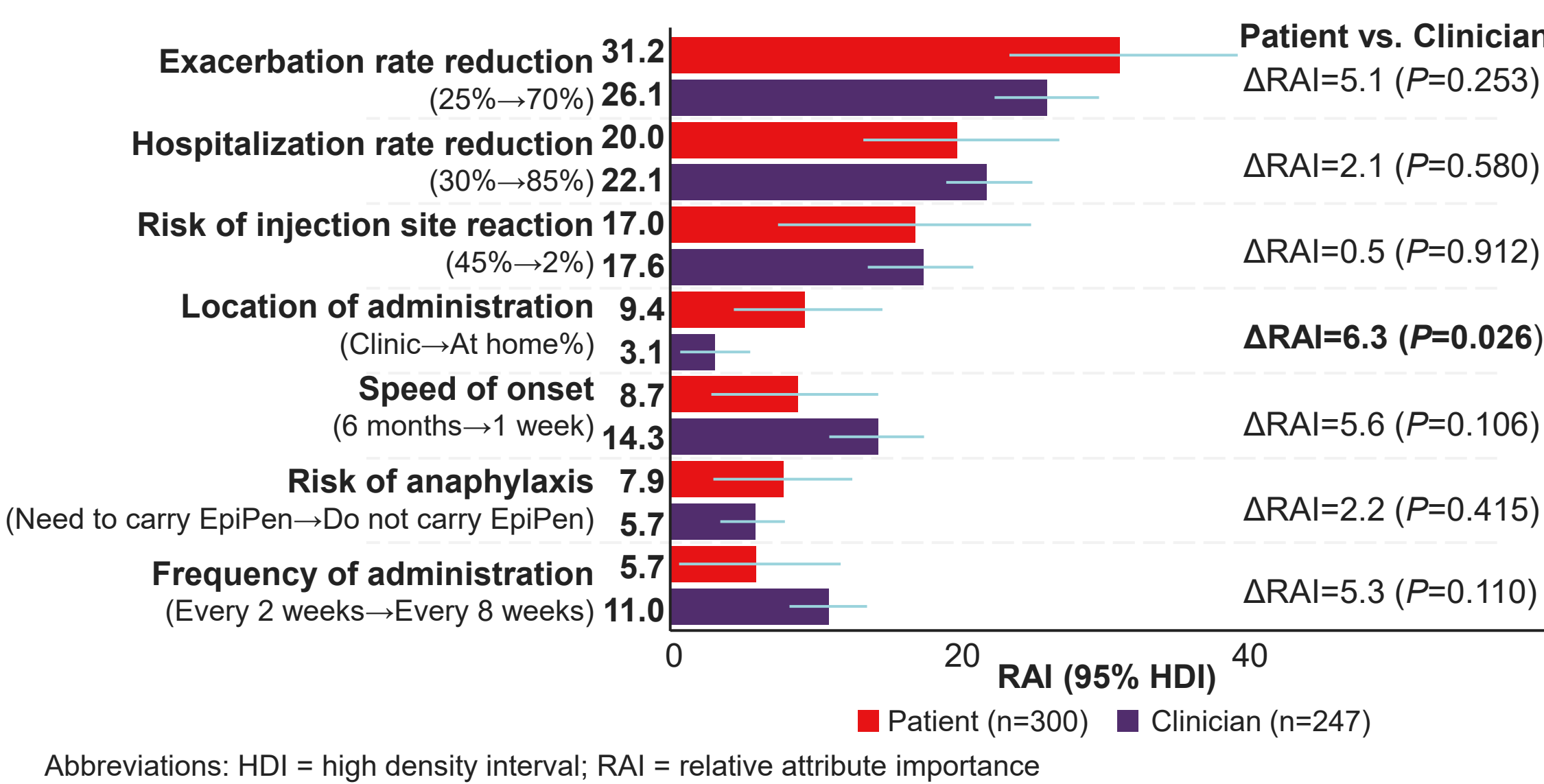
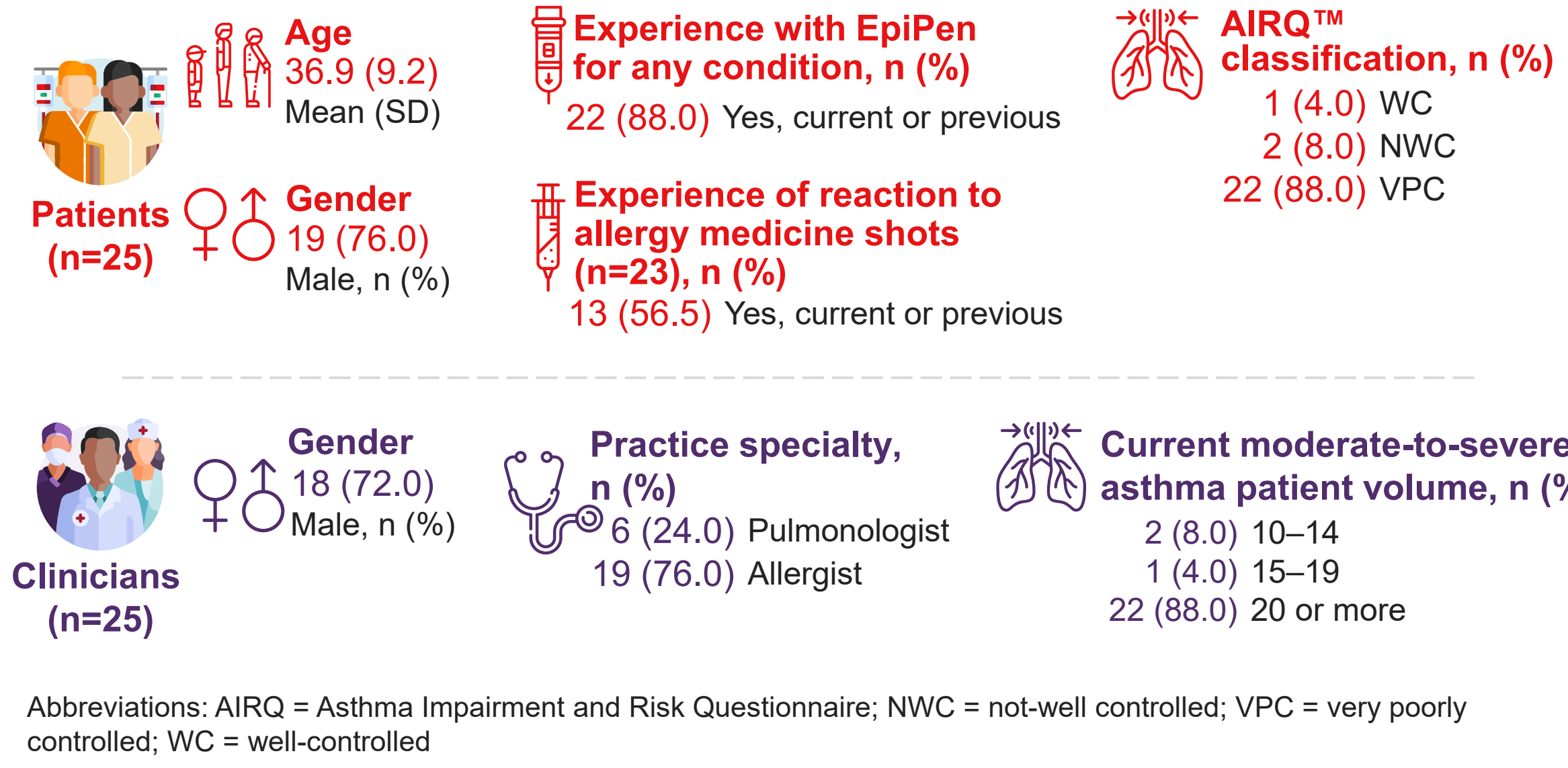


Figure 3. Descriptive Characteristics



Results (cont.)

Figure 4. Key Rationale for Asthma Treatment Preferences

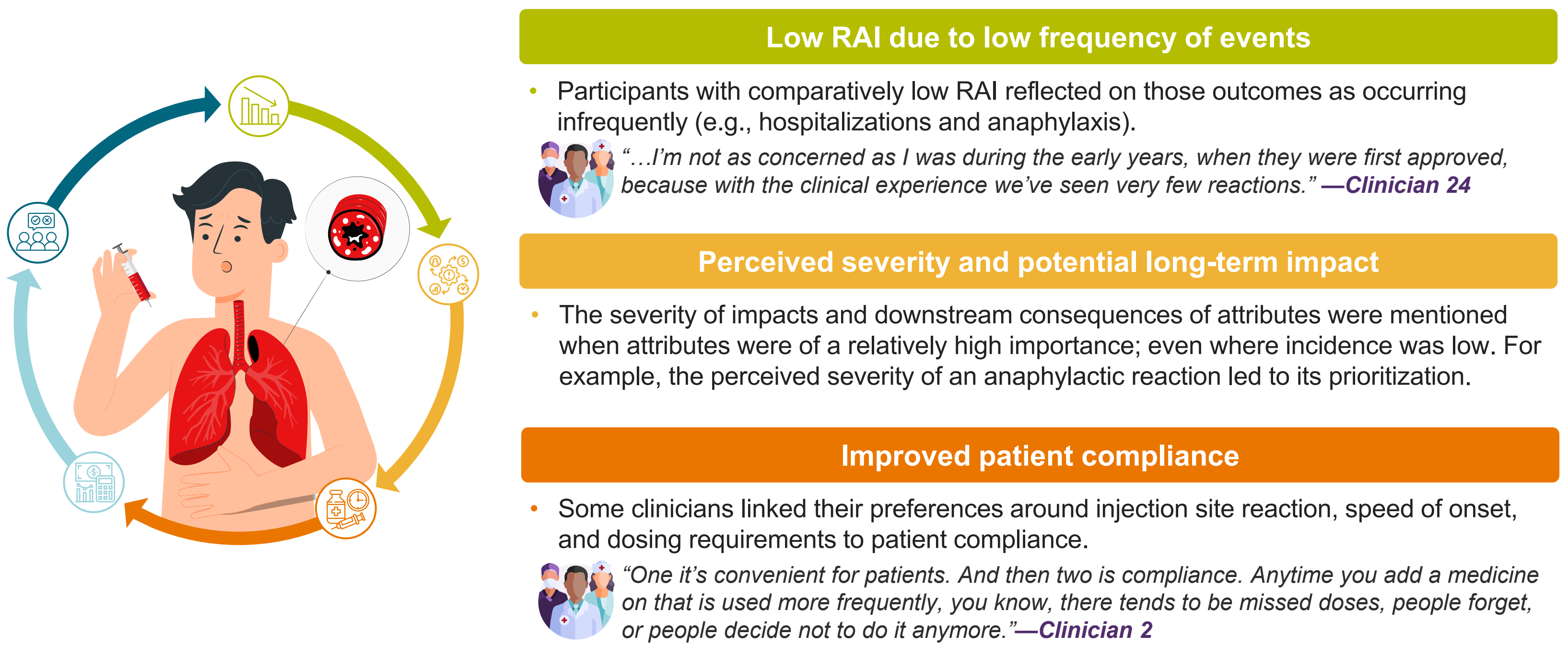
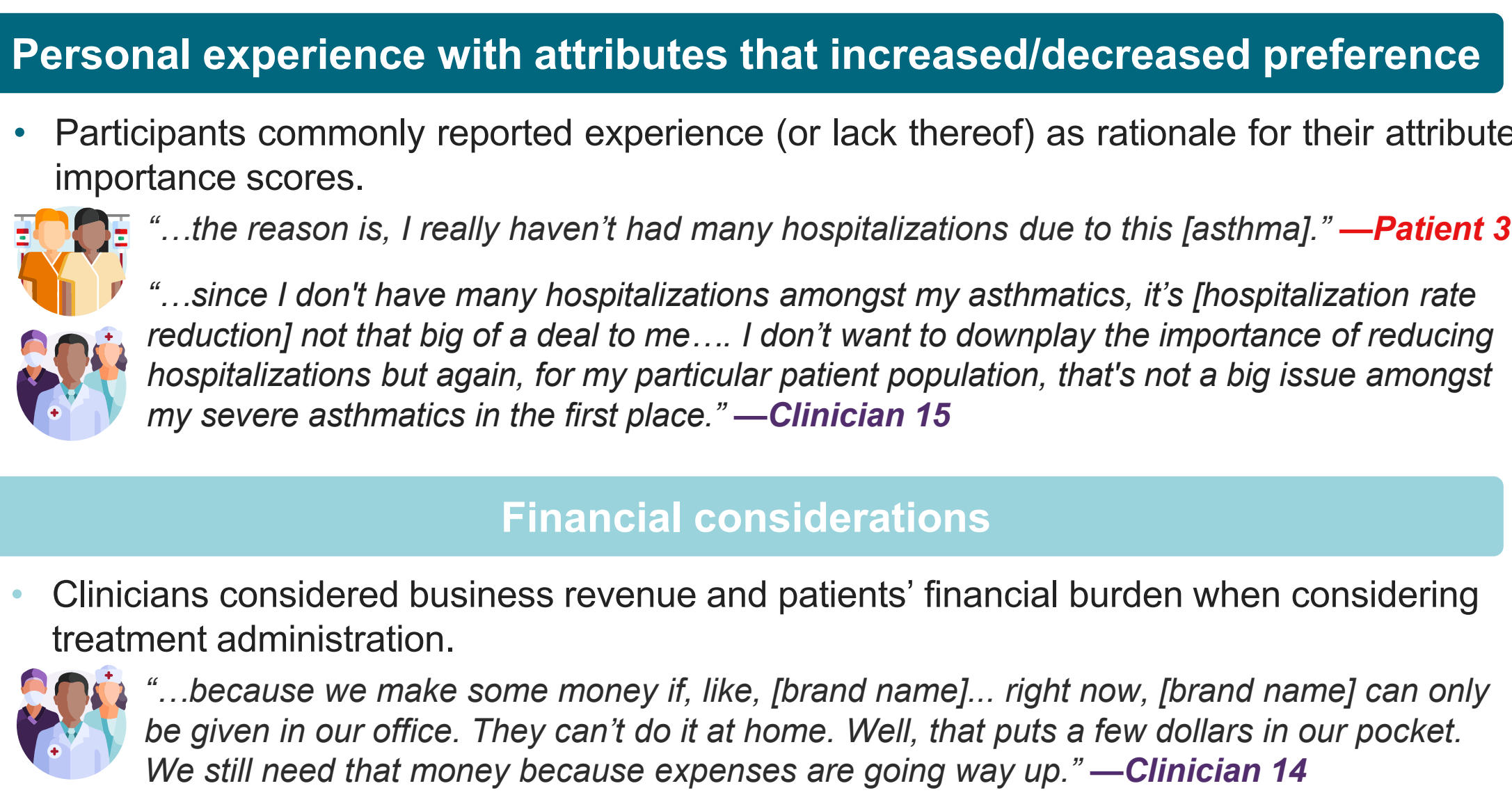
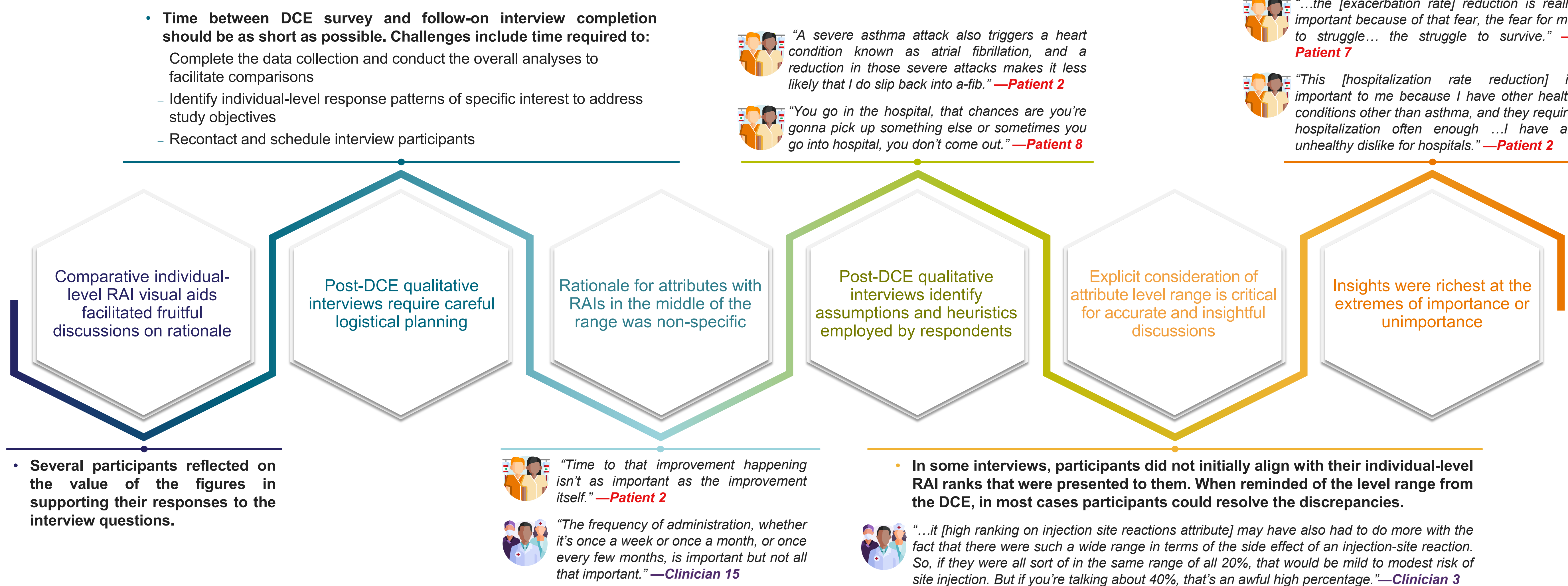


Figure 5. Post-DCE Qualitative Interviews: Methodological Learnings



Limitations

- Participants' opt-out behaviors were not analyzed or considered, future studies might probe the rationale behind opt-out behaviors.
- The post-DCE interviews took place several months after completion of the DCE survey, ideally the interviews would be conducted within a few days to weeks of completion of the DCE.

Conclusions

- Post-DCE qualitative interviews provide valuable insights into the rationale behind treatment preferences estimated using quantitative approaches.
- These data may be particularly valuable when preferences are highly heterogenous and/or the rationale for specific preferences is poorly understood.
- The results may help explain heterogeneity and/or identify relevant covariates that may be evaluated in quantitative models exploring heterogeneity.

References

1. Ross et al. *J Asthma*. 2024;61(12):1746-58.

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