

AUGMENTED REALITY AS A DIGITAL MEDICAL EDUCATION TOOL

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RESEARCH QUESTION

Are augmented reality (AR) educational features for the medical booth of interest to healthcare professionals?

CONCLUSION

Interactive digital educational features are effective ways to engage with healthcare professionals and stimulate interest in disease state education within the medical congress booth.

KEY CONTEXT

- AR is a technology that integrates digital content with the physical environment using a device like an iPad
- AR is an example of a multimodal educational tool that may be used to enhance learning¹⁻³
- Large-format digital educational exhibits, like AR programs, offer unique ways to provide disease state education and engage with audiences at scientific congresses

RESEARCH DESIGN & METHODS

Augmented Reality Program Development

- In 2022, we launched AR programs within our medical booths in three disease areas: cystic fibrosis, hemoglobinopathies, and APOL1-mediated kidney disease (AMKD)
- The objective for each program was to provide disease state medical education for an audience of healthcare professionals
- Each program's digital content was anchored to a physical sculpture of a human torso, which served as the main exhibit within the booth (**Figure 1**)
- Different sets of acrylic organs were displayed within the torso for each program to reflect the organs affected by each disease

FIGURE 1. A sculpture of a human torso served as the physical anchor for the three AR programs.



Depending on the size of the booth, either a large (~9 feet tall; left) or medium (~6 feet tall; right) torso was deployed.

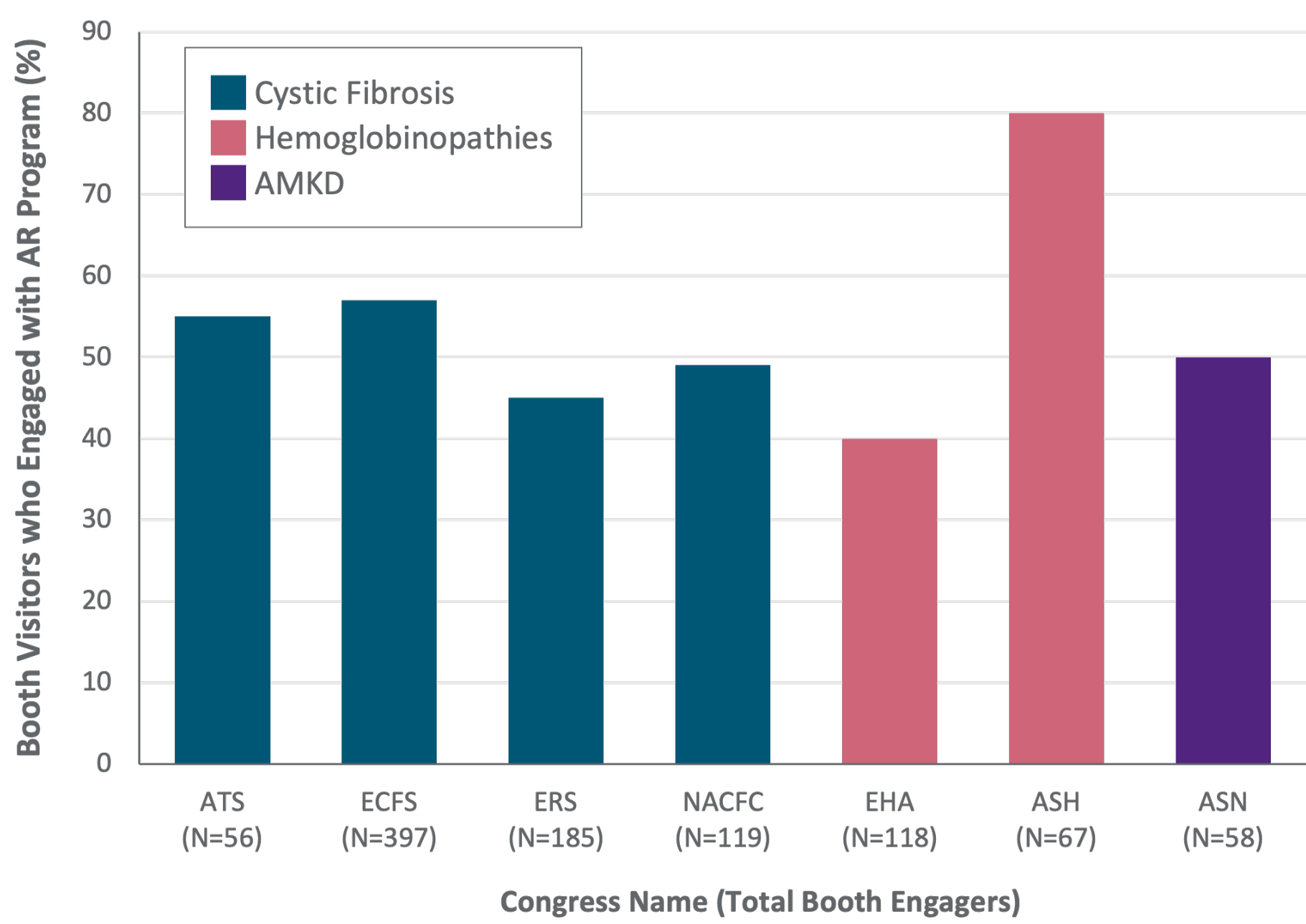
Metrics

- We measured success of the AR programs using:
 - FastSensor heat mapping technology: to map booth visitor traffic patterns and engagement with the AR programs
 - Exit surveys: to record direct user feedback
 - Content engagement rates: to illustrate the most or least viewed content within each program

RESULTS

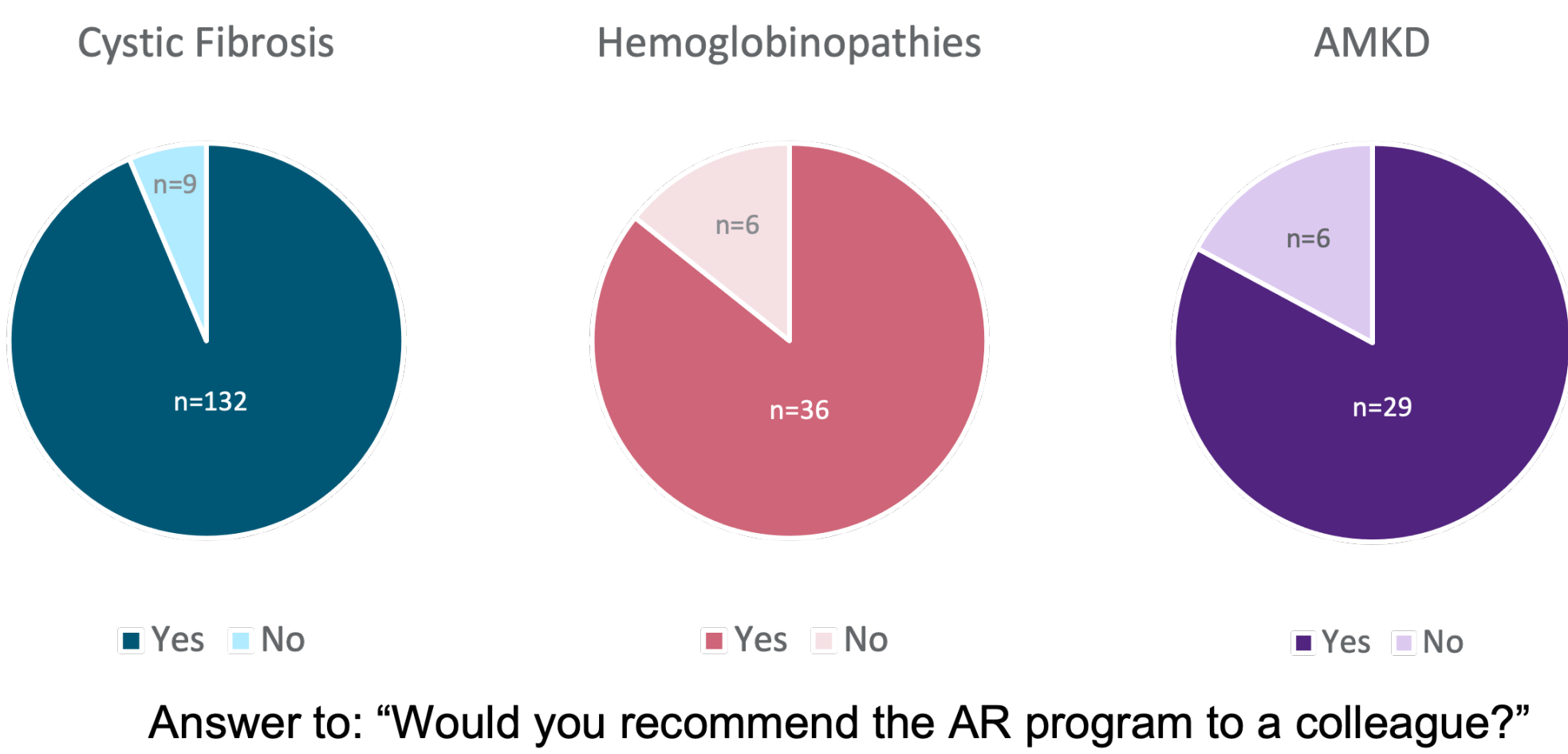
- In 2022, we deployed the cystic fibrosis program at four congress, the hemoglobinopathies program at two congresses, and the AMKD program at one congress
- Overall, 40–80% of booth visitors who engaged with materials engaged with the AR programs (**Figure 2**)
- Engagement rates for the AR programs were consistently greater than for other materials in a given booth
- Most exit survey respondents who used the AR programs indicated that they would recommend the program to a colleague (**Figure 3**)
- When assessing which content was most popular within a respective AR program, we found that the modules listed first tended to be viewed most often (**Figure 4**)

FIGURE 2. The AR programs were popular exhibits in each booth.



Based on FastSensor heat mapping data.

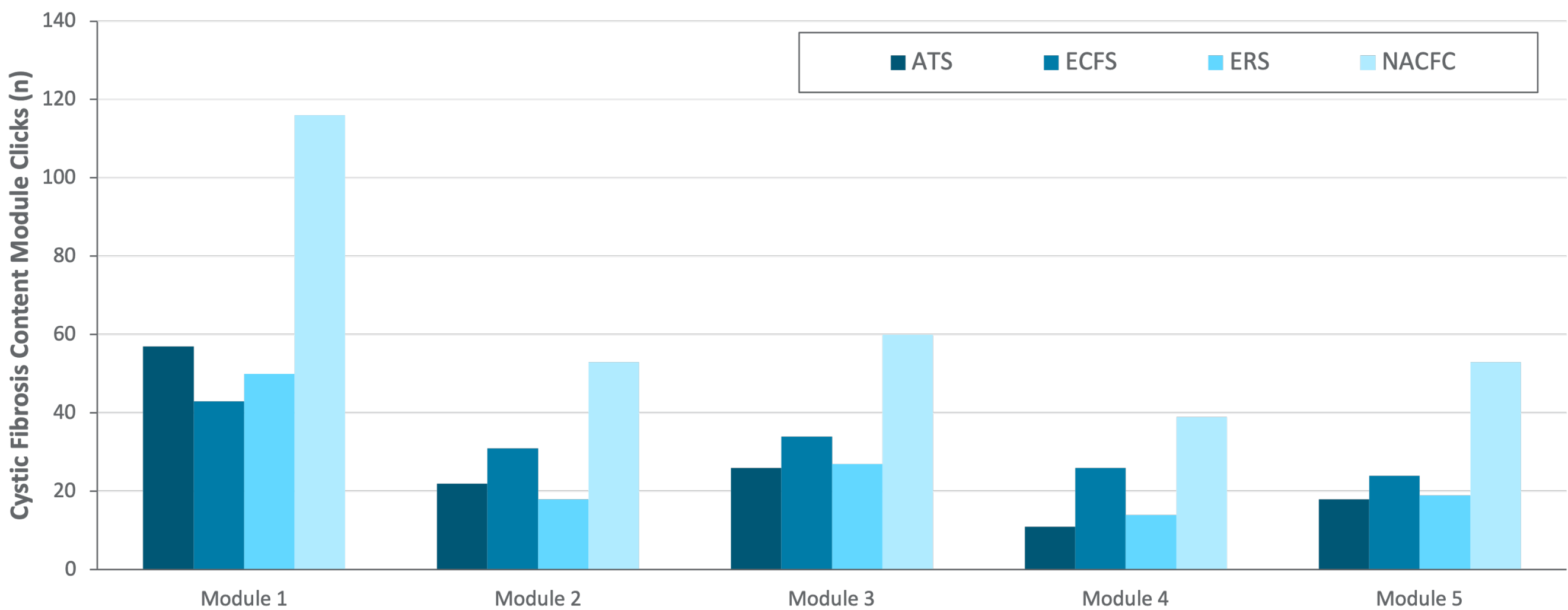
FIGURE 3. Most of AR users would recommend the program to a colleague.



Answer to: "Would you recommend the AR program to a colleague?"

Sum of survey respondents from all congresses per program.

FIGURE 4. The most popular content modules tended to be those listed first in the program menu.



Cystic fibrosis is shown as an example; hemoglobinopathies and AMKD programs followed similar content engagement patterns.

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