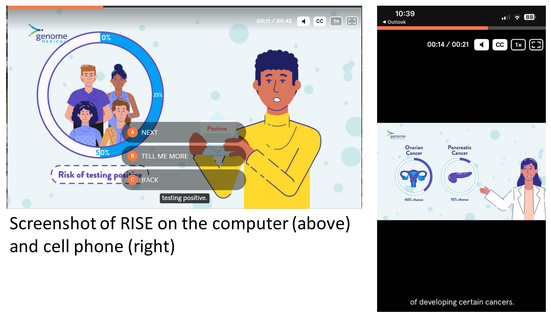
THE OHIO STATE UNIVERSITY

BACKGROUND

- Digital tools are being integrated into the genetic counseling (GC) process and can increase access to genetic services and improve patient outcomes
- As tools are developed, research is needed to determine their impact and how well target populations receive them



Screenshot of RISE on the computer (above) and cell phone (right)

- Genome Medical developed a 5-10 minute, nationally available interactive educational tool (RISE) that describes:
  - Hereditary cancer
  - Genetic testing results and down stream effects
  - What to expect in the GC appointment

Aim

To investigate the impact of a pre-counseling educational digital tool on perceived understanding of genetic testing and patient perceptions of the tool

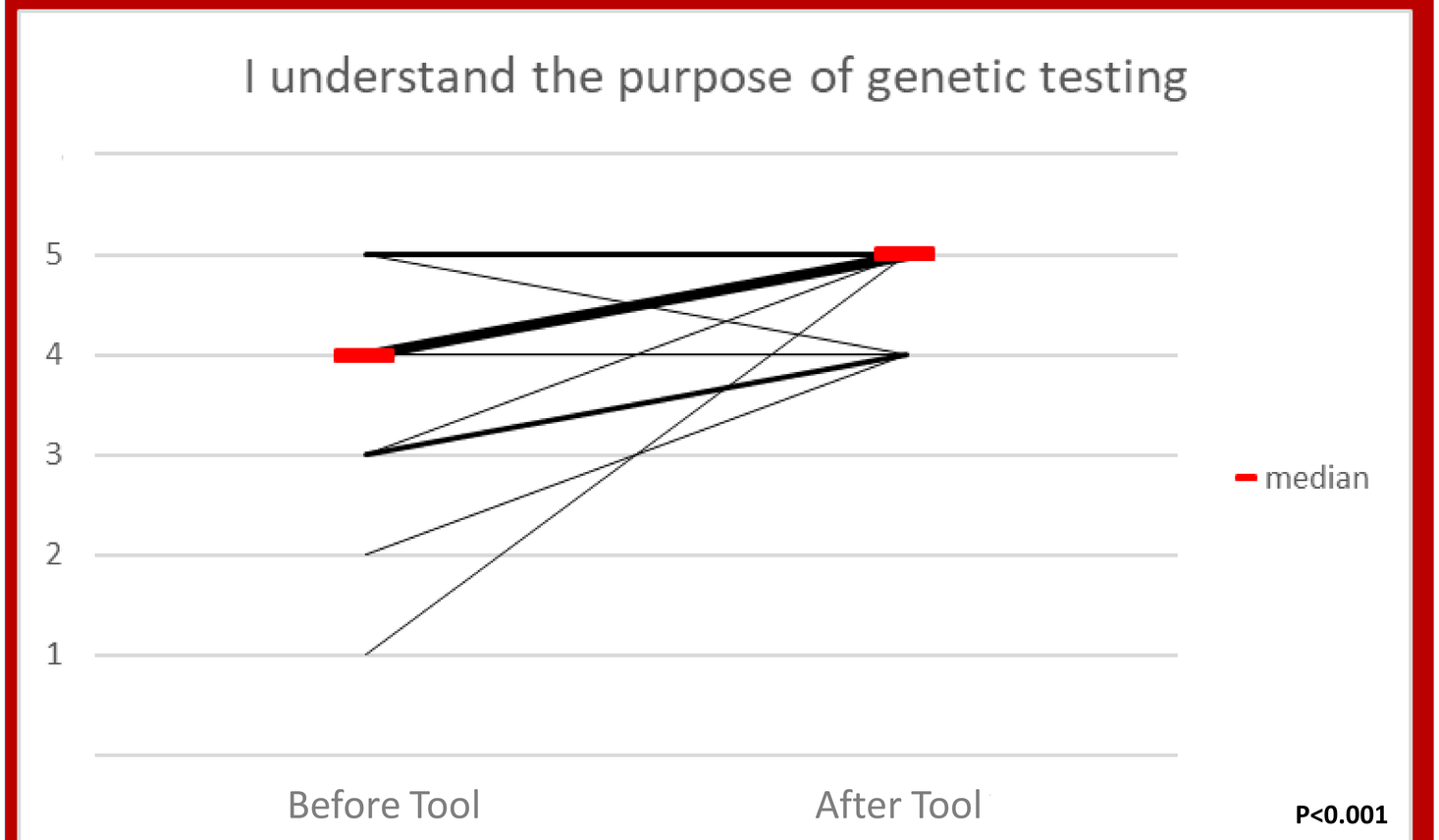
METHODS

- Unaffected patients scheduled for a pre-test cancer GC appointment were invited to participate
- Interested participants completed a pre-survey, viewed the educational digital tool, and completed a post-survey prior to attending their GC appointment

Survey Measures	
Perceived understanding of genetic testing	Investigator developed questions
Health literacy	Newest Vital Sign
Digital health literacy	Digital Healthcare Literacy Scale
Patient perceptions of the digital tool's usability	Modified investigator developed questions from the Cancer Risk Check study

- Wilcoxon signed rank test was used to assess change between pre/post responses regarding perceived understanding of the GC appointment

Patient's understanding of the purpose of genetic testing **significantly improved** after viewing a digital pre-counseling educational tool



1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree, 5=Strongly Agree
Line thickness correlates to the number of participants with the indicated response change

Digital education tool provided before cancer GC visits improves understanding of genetic testing and is perceived favorably by patients

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Additional information on sample characteristics and references

genome MEDICAL

RESULTS

- **36** participants
- **93%** female
- **51 y** median age

Participants were **motivated** and had **high literacy**

- **100%** (30/30) planned to attend their GC appointment
- **3.3%** cancellation rate
- **83%** (25/30) had "adequate" health literacy
- All participants scored in the top **33%** of the digital health literacy scale

Participants **favorably** perceived the tool's usability

97% of participants found the tool trustworthy

90% of participants found the tool easy to understand

90% of participants found the tool applicable to their needs

83% of participants found the tool was not lengthy

CONCLUSION

- The digital education tool was well accepted in a highly motivated and literate population
- The tool improved this population's perceived understanding of testing utility
- Additional studies are needed to generalize the results to a larger, more diverse population, specifically varied health literacy

LIMITATIONS

- Per IRB constraints, we could only recruit unaffected participants with a family history of cancer
- Small homogenous cohort (n=30, 93% female, high health and digital literacy) limited statistical power and ability to generalize results to a larger population