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Disability and Telehealth: Healthcare Access and Motivations

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Telehealth: Healthcare Access and Motivations

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BACKGROUND: COVID-19 AND TELEHEALTH

- The COVID-19 pandemic led to a rapid increase of online engagement overall, and for (Anderson et al. 2022)
- Rapid increase in telehealth use since the onset of the COVID-19 pandemic (Haynes et al. 2021)
- Increased telehealth use revealed barriers and facilitators, especially for people with disabilities (Haynes et al. 2021)

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BACKGROUND: DISABILITY AND HEALTHCARE

- People with disabilities experience significant disparities in access to health care (Friedman and VanPuymbrouck 2021; Valdez et al. 2021)
- Healthcare, including communicating with medical staff and therapeutic appointments, is an important factor in reducing adverse health events for people with disabilities (Okoro et al. 2016)
- Telehealth, or telemedicine, is the primary method to communicate health problems and performing health assessments (Okoro et al. 2016)

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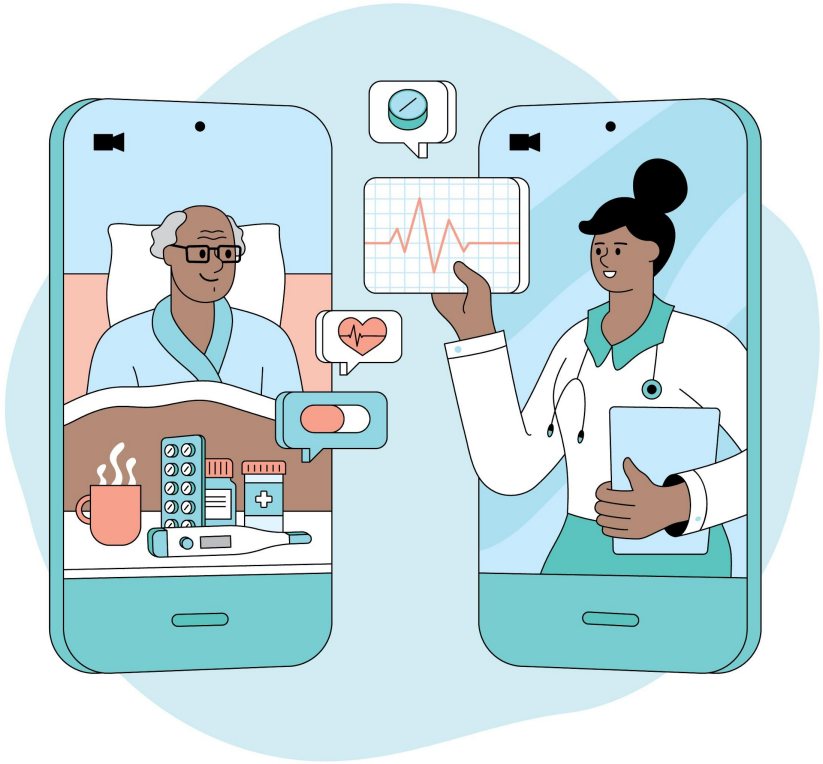
GOALS OF THIS STUDY



Explore the relationship between disability type and other demographic variables and patterns of telehealth use and motivations for telehealth use

Specifically, this study examines …

- Motivators to use telehealth
- Technology devices used during telehealth session
- Types of healthcare received during telehealth session

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AURC
Accessibility User Research Collective

DATA

- Telehealth, Disability, and Identity Survey (2022)
- Convenience sample
  - Accessibility User Research Collective (AURC) & Consumer Advisory Network
  - 1,300+ adults with disabilities across the United States of America
  - 326 AURC members completed the survey (response rate of 31.68%)
- Pairwise deletion was used with a final analytical n= 251 respondents
- Descriptive statistics, measures of association, and logistic regression

MEASURES

- **Telehealth Use**

Telehealth Use Motivators	Devices used during telehealth session	Types of healthcare received
• COVID-19	• Laptop Computer	• General Health Check-ups
• Distance	• Desktop Computer	• Specialist Health Check-Ups
• Time	• Basic and Landline Phone	• 24/7 Health Consultation
• Cost	• Smart Phone	• Illness or Injury Evaluation
• Transportation	• Tablet Device	• Physical Therapy
• Preference		• Occupational Therapy
• Access		• Speech Therapy
• Insurance Policy		• Psychological Counseling

SAMPLE

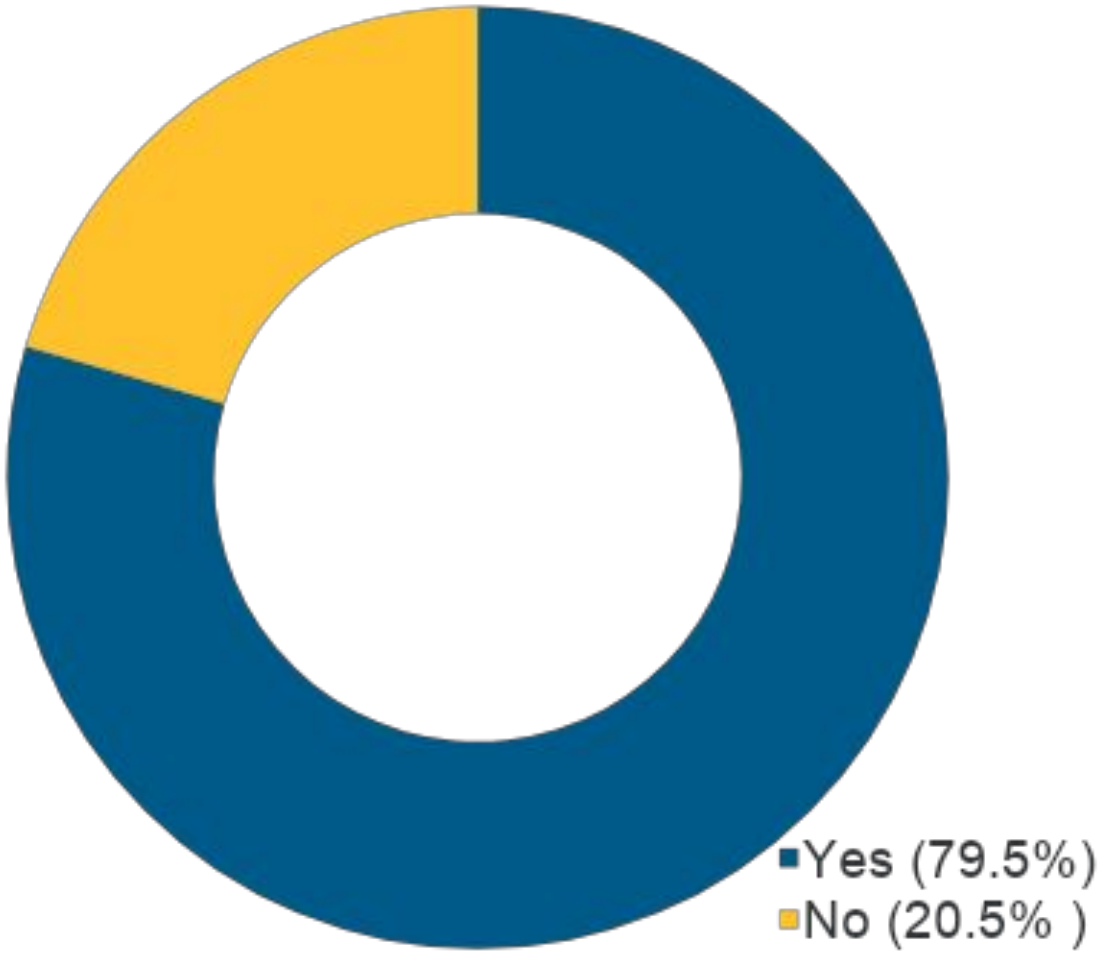
Disability

- Walking: 34.7%
- Anxiety: 27.2%
- Learning Disability: 25.2%
- Upper Extremity limitation: 24.8%
- Fatigue & Limited Stamina: 24.3%
- Blind: 20.5%
- Deaf : 17.8%
- Speaking: 11.9%

Demographics

- Woman: 52.8%
- Racial Minority (non-white): 23.9%
- Bachelor's degree or more: 67.3%
- Age: M=51.09 (SD=14.21)

RESULTS: TELEHEALTH USE



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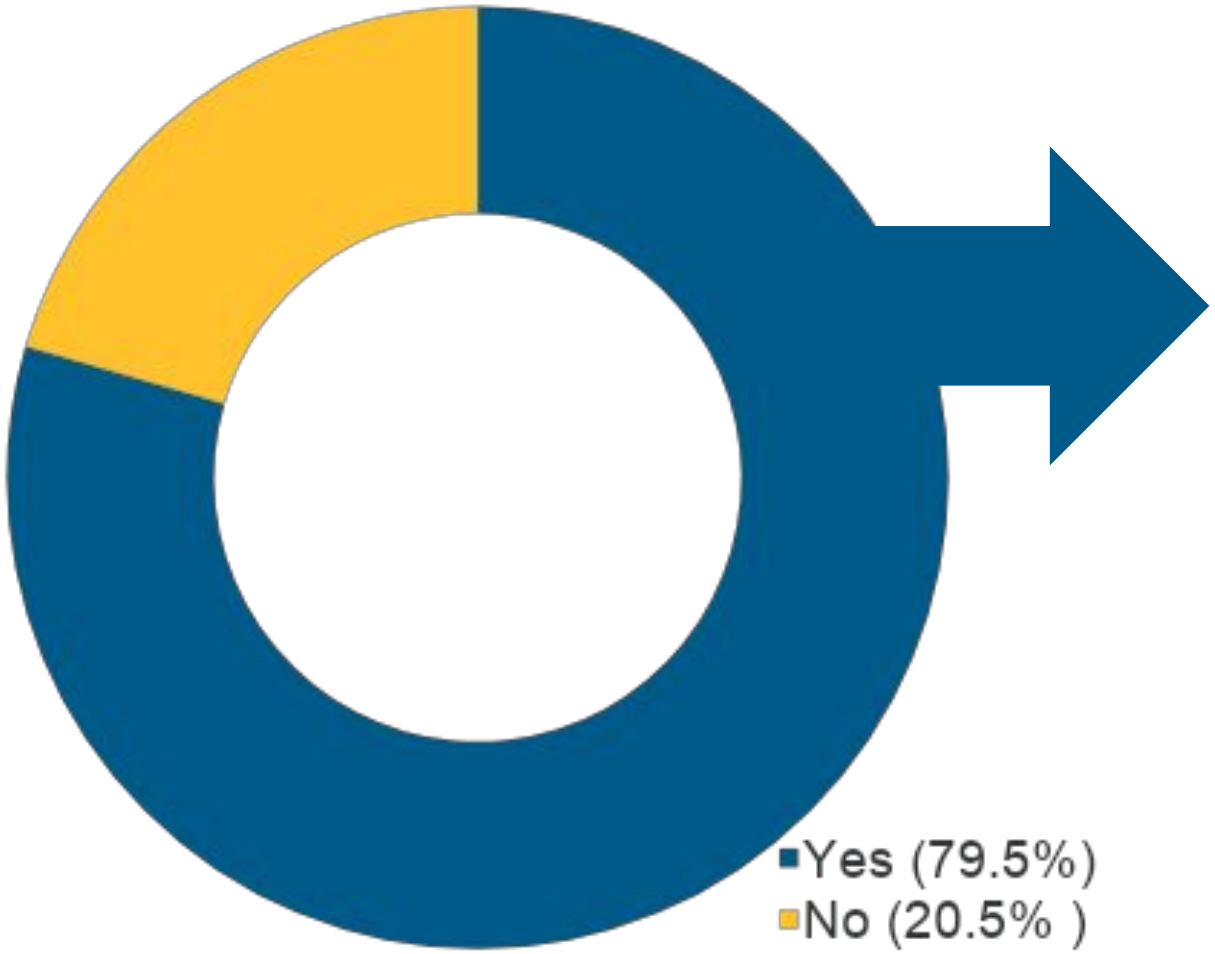
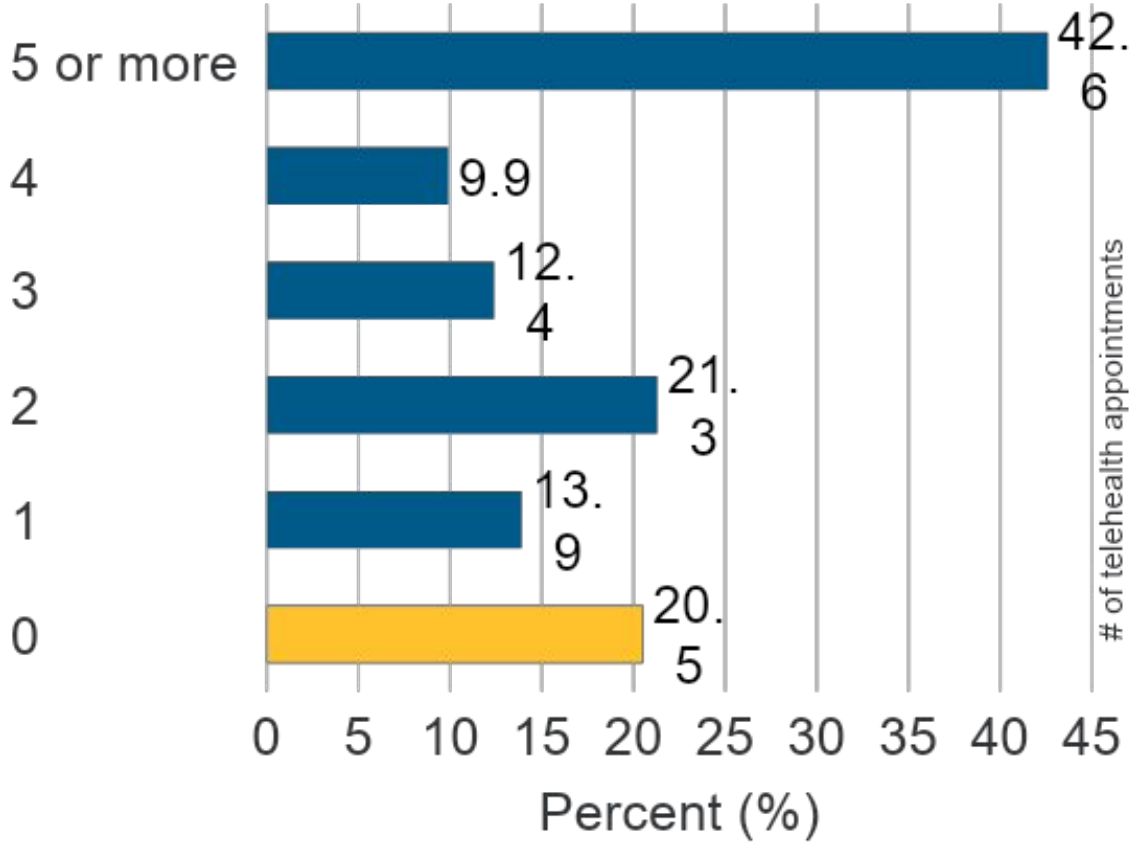
RESULTS: TELEHEALTH USE





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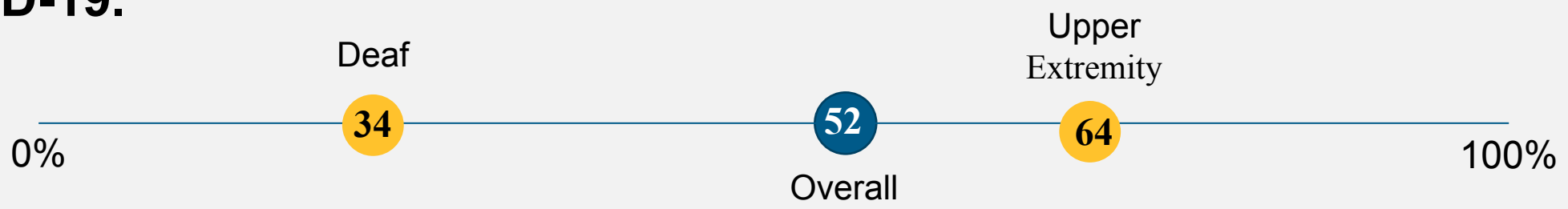
RESULTS: TELEHEALTH MOTIVATORS

COVID-19.



Time.

Transportation. *(expanded on next slide)*

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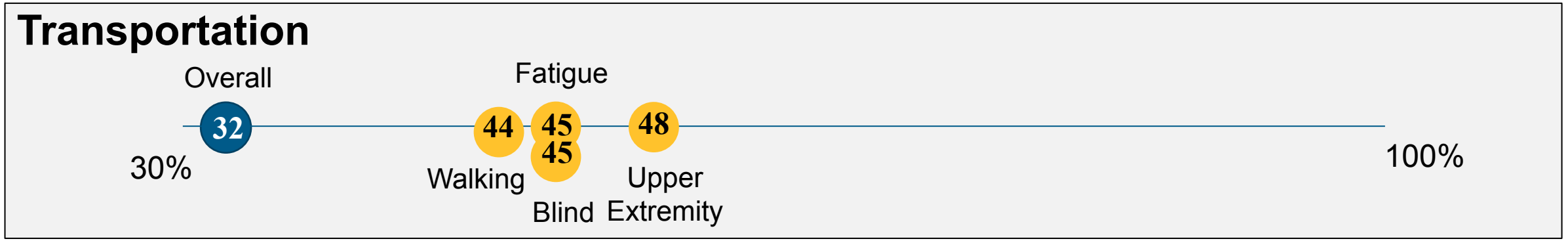
RESULTS: TELEHEALTH MOTIVATORS



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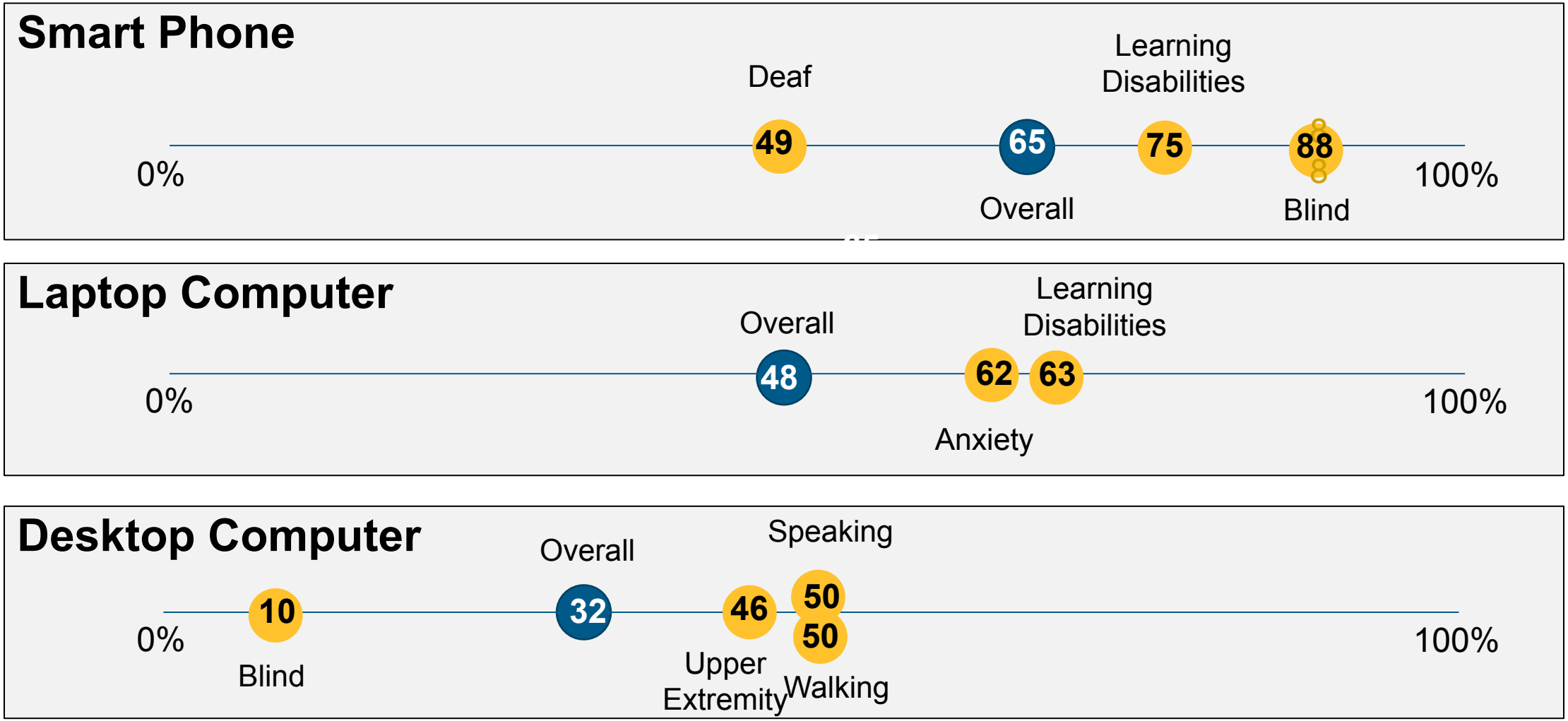
RESULTS: DEVICES USED



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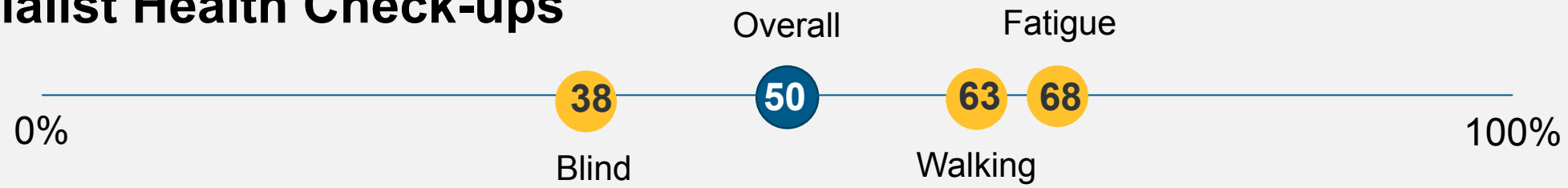
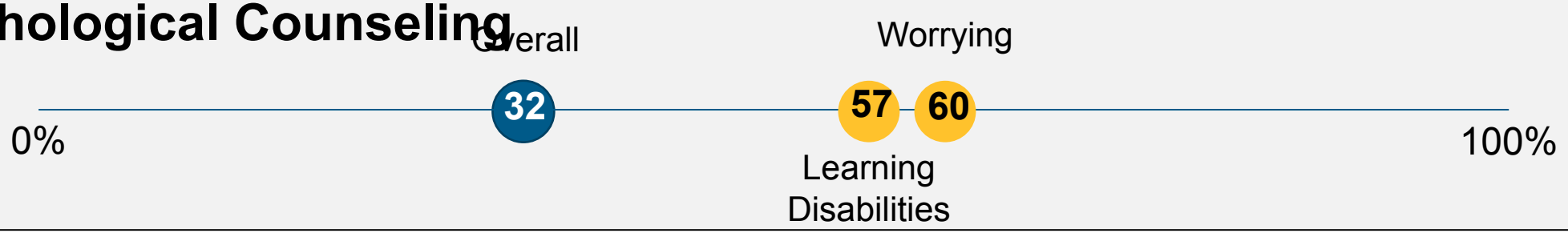
RESULTS: HEALTHCARE RECEIVED

General Health Check-ups

Specialist Health Check-ups



Psychological Counseling



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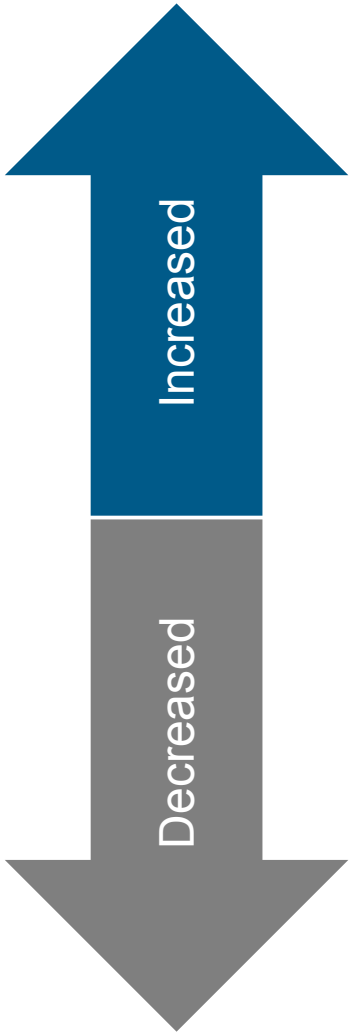
LIKELIHOOD OF USING TELEHEALTH BY DISABILITY TYPE



Upper Extremity Limitations (5.50)

Walking (3.85)

Fatigue (2.22)

Blind (0.42)

Deaf (0.87)

Analysis: Odds Ratio logistic regression

DV: Telehealth Use

IV: Disability Type

Control variables: rurality**, language spoken in home**, education, income, **disability duration**, and **age**

Only reporting statistically significant disability types

CONCLUSIONS

- **Major findings:**
  - Telehealth use differs across disability types.
  - People with mobility disabilities are more likely to use telehealth.
  - People who are blind, deaf, or have a speaking disability are less likely to use telehealth.
- **Policy implications:**

CONCLUSIONS

- **Major findings:**
  - Telehealth use differs across disability types.
  - People with mobility disabilities are more likely to use telehealth.
  - People who are blind, deaf, or have a speaking disability are less likely to use telehealth.
- **Policy implications:**
  - Based on the findings that people who have a speaking disability are less likely to use telehealth, there should be more resources allocated to improve accessibility needs for people with speaking disabilities.
  - Increased integration of assistive technology into telehealth services for people who are blind, deaf, or have a speaking disability.

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JOIN THE AURC

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Accessibility User Research Collective

https://accessibilityuserresearchcollective.org/

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WORKS CITED

Friedman, Carli, and Laura VanPuymbrouck. “Telehealth Use by Persons with Disabilities During the COVID-19 Pandemic.” International Journal of Telerehabilitation vol. 13, no. 2, 2021, pp. 1-14.

Haynes, Norrisa, Agnes Ezekwesili, Kathryn Nunes, Edvard Gumbs, Monique Haynes & JaBaris Swain. “Can You See My Screen? Addressing Racial and Ethnic Disparities in Telehealth.” Current Cardiovascular Risk Reports, vol. 15, no. 12, 2021, pp. 15-23.

Lee, Nicol Turner, Jack Karsten, and Jordan Roberts. “Removing Regulatory Barriers to Telehealth Before and After COVID-19.” Brookings Institution, 2020, pp. 1-23.

Mitchell, Uchechi A., Perla G. Chebli, Laurie Ruggiero, and Naoko Muramatsu. “The Digital Divide in Health-Related Technology Use: The Significance of Race/Ethnicity.” The Gerontologist vol. 59, no. 1, 2019, pp. 6-14.

Sechrist, Samantha, Sarah Lavoie, Cria-May Khong, Benjamin Dirlikov, and Kazuko Shem the COVID-19 Pandemic.” International Journal of Telerehabilitation vol. 13, no. 2, 2021, pp. 1-14.

Valdez, Rupa S, Courtney C Rogers, Henry Claypool, Lucy Trieshmann, Olivia Frye, Claire Wellbeloved-Stone, Poorna Kushalnagar. “Ensuring Full Participation of People with Disabilities in an Era of Telehealth.” Journal of the American Medical Informatics Association, vol. 28., no. 2, 2021, pp. 389-392.

Paper published in the Journal on Technology and Persons with Disabilities