Prevalence of Mammogram & Cervical Cancer Screenings among Adults with Varying Numbers of Disabilities

Behavioral Risk Factor Surveillance System (BRFSS), 2022

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HIGHLIGHTS

- *Individuals with reported disabilities generally had higher rates of screening than individuals without a reported disability.*
- *The number of disabilities had varying impacts on screening rates depending on the screening test in question.*

INTRODUCTION

Screening tests, like mammograms (for breast cancer) and cervical cancer screenings (e.g pap smear), have life saving benefits by helping to identify cancers early (Grimm et al, 2022; Perkins et al, 2023). Simultaneously, physician biases may affect the individuals with disabilities' ability to pursue and receive proper, proactive care (Iezzoni, 2021). While individuals with some disability types are generally more likely to receive proper screening protocols than their non-disabled peers, all individuals with disabilities are negatively affected with regard to screening access when there are stresses on the healthcare system such as the COVID-19 pandemic (Orji et al, 2024; Rolle et al, 2024). Additionally, there are notable disparities in access to cervical cancer screening specifically when comparing individuals with and without disabilities (Orji & Roess, 2023).

There is a gap in research which refers to the combined impact of having multiple disabilities rather than comparing individual disability types in isolation and/or comparing individuals with disabilities to peers without disabilities. The purpose of this statistical brief is to establish the landscape of populations with varying numbers of disabilities and their respective screening rates for mammograms and cervical cancer screenings.

FINDINGS

Survey results identify that 65.51% of eligible individuals have ever had a mammogram and 55.72% of eligible respondents have had a cervical cancer screening. 45.71% of respondents reported having both screening tests.

The majority of respondents in this screening eligible group reported no disabilities (70.68%), with smaller percentages reporting one disability (16.73%) or two or more disabilities (12.59%).

67.64% of individuals with one reported disability reported getting mammograms and 75.49% of individuals with two or more reported disabilities reported getting mammograms, compared to just 62.89% of individuals with no reported disabilities.

The trend was reversed for cervical cancer screenings: 56.92% of individuals who did not report any disabilities reported cervical cancer screenings, whereas 53.34% of individuals with one reported disability and 52.87% of individuals with two or more reported disabilities reported cervical cancer screenings. Of individuals who reported no screenings, the largest group also reported no disability (21.27%) and the smallest group reported two disabilities (15.58%). Of individuals who reported one screening (without a specification of which screening), the largest group reported one disability (36.42%) and the smallest group reported no disabilities (33.15%). Of individuals who reported getting both cervical cancer screenings and mammograms, the largest group reported two or more disabilities (48.17%) and the smallest group reported one disability (44.23%).

Full graphics for each of the above variables can be seen here:

Figure 1. Mammogram and Cervical Cancer Screening Status, BRFSS 2022 (n = 445,132)

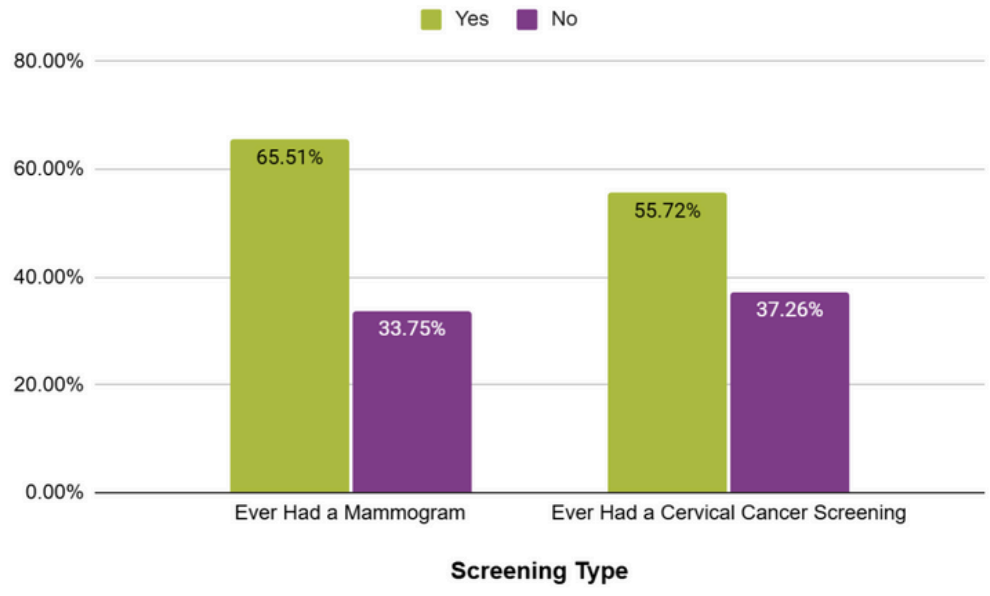


Figure 2. Number of Disabilities Among Sample, BRFSS 2022 (n = 426,488)

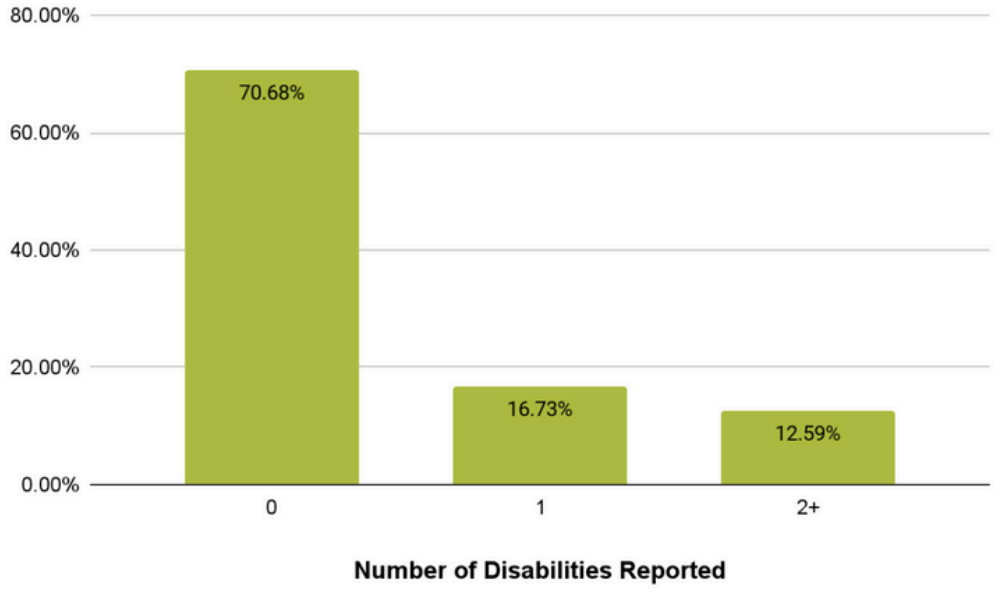


Figure 3. Mammogram Screening Status by Number of Disabilities, BRFSS 2022 (n = 221,813).

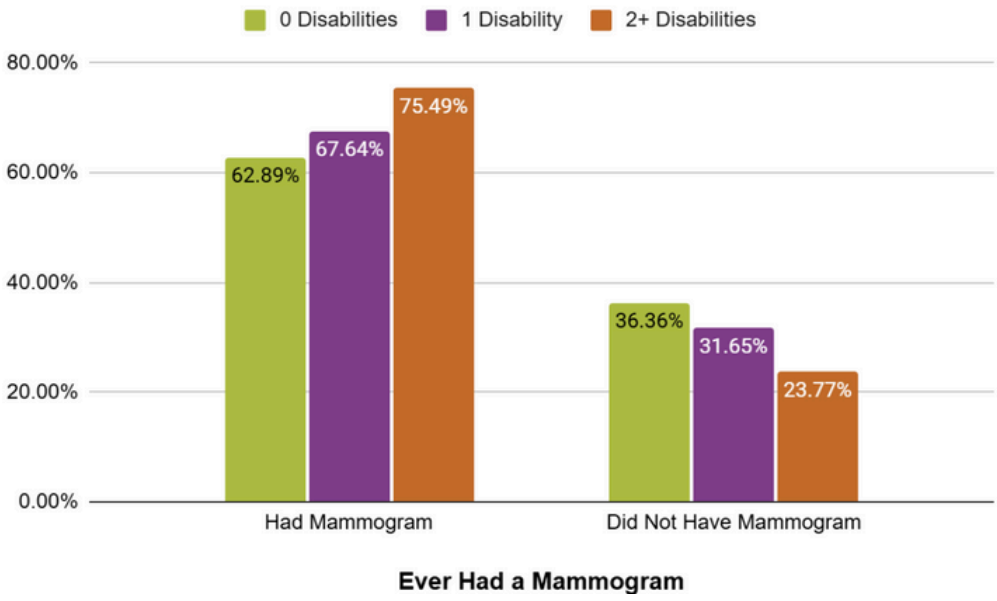


Figure 4. Cervical Cancer Screening Status by Number of Disabilities, BRFSS 2022 (n = 220,814)

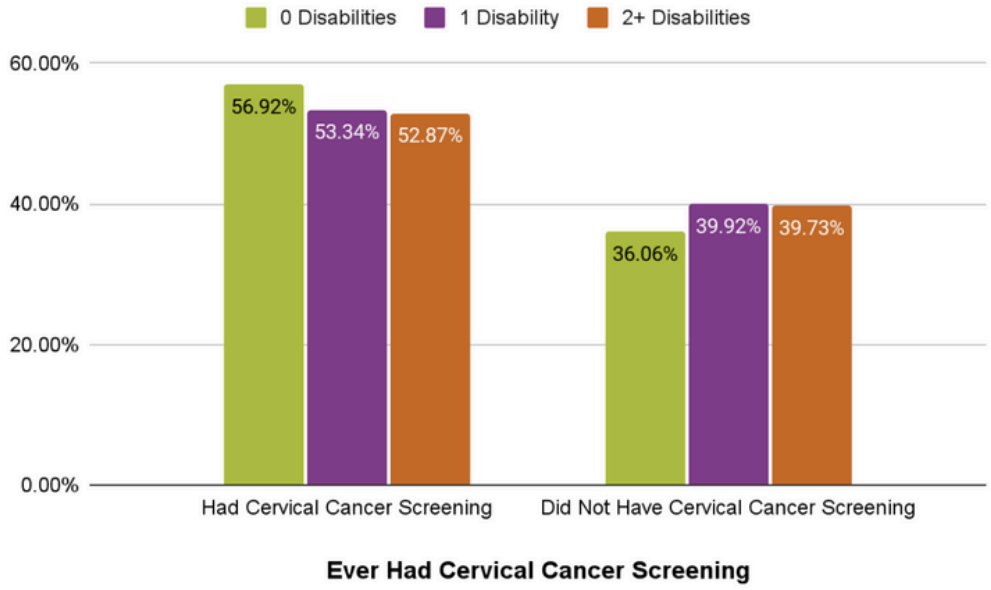
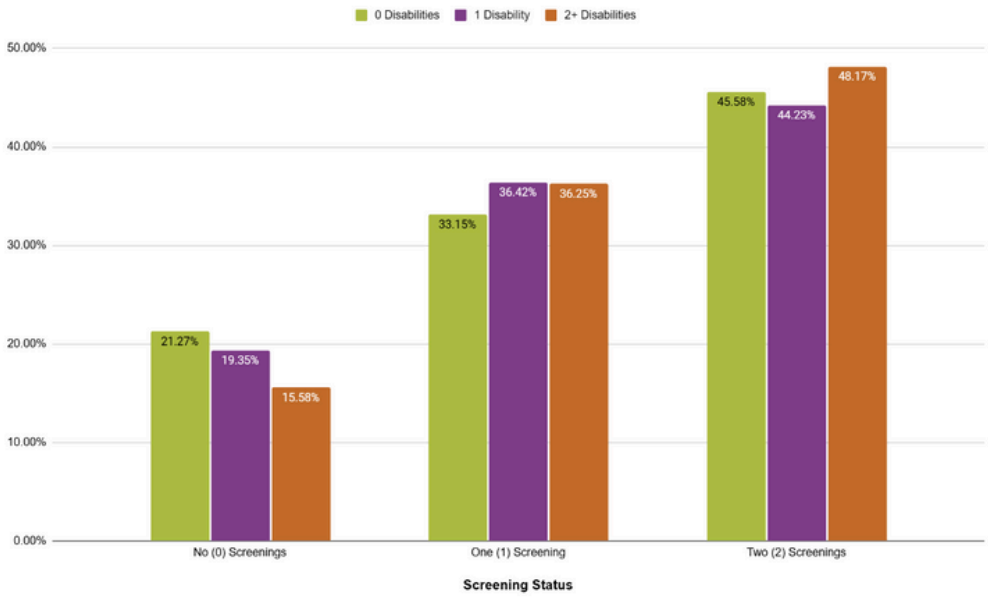


Figure 5. Combined Mammogram and Cervical Cancer Screening Status by Number of Disabilities, BRFSS 2022, (n=204,279).



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DATA SOURCE

This Statistical Brief uses data from the BRFSS 2022 survey. For additional information about the BRFSS data set, see: https://www.cdc.gov/brfss/index.html

POPULATION

This statistical brief included individuals who are eligible to receive a cervical cancer screening and/or mammogram. This includes individuals with vaginas and breasts who, in this study, were categorized as "women." The American Academy of Family Physicians (2024) recommends cervical cancer screenings for individuals with vaginas age 21-65 years. The US Preventive Services Task Force (2024) recommends mammograms for individuals with breasts age 40-75 years. The total number of observations included in this brief is 445,132.

VARIABLES AND DEFINITIONS

Screening Variables

The following variables were used to account for engagement with mammogram and/or cervical cancer screening:

Table 1. Screening Variables

Variable Name	Question	Responses
HADMAM	Have you ever had a mammogram?	1 = Yes 2 = No7 = Don't know 9 = Refused
CERVSCRN	Have you ever had a cervical cancer screening?	1 = Yes 2 = No7 = Don't know 9 = Refused
SCREENING_STATUS	Combined variable which accounts for how many of the two screenings (cervical cancer screening, mammogram) the respondent had	0 = No screening tests1 = 1 screening test2 = both screening tests

VARIABLES AND DEFINITIONS

Disability Variables

The variable NUM_DIS_GROUPED was used to account for the number of disabilities a respondent reported. The variable, full title "Number of Disabilities Grouped," included three categories of disability number: 0 (no disabilities reported), 1 (one disability reported), and 2 (two or more disabilities reported). The variable was composed from respondents' answers to the following questions:

Table 2. Disability Variables

Number (#)	Disability	Question	Variable Name	Responses
1	**Cognitive**	"Because of a physical, mental, or emotional condition, do you have serious difficulty concentrating, remembering, or making decisions?"	DECIDE	1 = Yes 2 = No7 = Don't Know 9 = Refused
2	**Hearing**	"Some people who are deaf or have serious difficulty hearing may or may not use equipment to communicate by phone. Are you deaf or do you have serious difficulty hearing?"	DEAF	1 = Yes 2 = No7 = Don't Know 9 = Refused
3	**Mobility**	"Do you have serious difficulty walking or climbing stairs?"	DIFFWALK	1 = Yes 2 = No7 = Don't Know 9 = Refused
4	**Vision**	"Are you blind or do you have serious difficulty seeing, even when wearing glasses?"	BLIND	1 = Yes 2 = No7 = Don't Know 9 = Refused

Suggested Citation

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CENTER FOR DISABILITY HEALTH AND WELLNESS (CDHW)

The University of Michigan Center for Disability Health and Wellness (U-M CDHW) aims to develop and apply innovative research, clinical, and educational strategies to address inequities in healthcare access, quality, and outcomes experienced by individuals with disabilities across the lifespan. We work in partnership with members of the disability community to ensure that all people, regardless of type or severity of disability, have full access to quality health care and to wellness activities personalized to their background, strengths and needs.

Website: **https://disabilityhealth.medicine.umich.edu/research/ahead-dc-rrtc**