Using the WG Short Set in the US: Results from the US National Health Interview Survey (NHIS)



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NHIS History and Design

- First fielded in July 1957 and continuously ever since
- Collect and disseminate data on the health status, functioning and health care access of the U.S. noninstitutionalized population
- Address-based, multi-stage, clustered national sample of housing units from every state, to be representative of the civilian noninstitutionalized US population.
- In-person interviews by Census interviewers, with followup by telephone if needed.
- Continuous, with quarterly and annual data files.
- Complete interviews for 35,000+ households annually, about 87,500 persons.

Uses of the NHIS Data

- Primary source for monitoring trends in a range of core topics
 - Health, U.S.
 - Healthy People
 - Dashboards and indicators
- Address specific issues of ongoing and emergent public health concern
- Ability to relate different aspects of health, health care and risk and protective factors including socioeconomic status
- Research
- Policy and program evaluation
- Benchmark

NHIS Redesign

Why redesign?

- Most recent major content redesign occurred in 1997
- Respondent burden increasing and response rates decreasing

Why now?

- Reduce respondent burden
- Improve data quality
- Necessary sampling frame redesign in 2016 introduced additional complexity
- Long-term planning can help sponsors target content

NHIS Disability Content

Before 2019 redesign:

- ADLs
- IADLs
- Basic Actions Difficulties
- Complex Activity Limitations
- Personal Care
- ACS Set
- Age of onset
- WG Short Set
- WG Extended Set
- Work Limitation
- Social Activity Limitation
- Participation Limitation

After 2019 redesign:

- WG Short Set
- WG Extended Set
- Work Limitation
- Social Activity Limitation
- Participation Limitation
- WG-UNICEF Child Module

Basic Actions vs. WG-SS Measures

Basic Actions Difficulties

Vision

Do you have any trouble seeing, even when wearing glasses? (yes / no)

Hearing

Without the use of your hearing aids or other listening devices, <u>is</u> your hearing:

(excellent / good / a little trouble / moderate trouble / a lot of trouble / deaf)

WG Short Set

Vision

Do you have difficulty seeing, even if wearing glasses?

(no / some / a lot / cannot do)

Hearing

Do you have difficulty hearing, even if using a hearing aid? (no / some / a lot / cannot do)

Basic Actions vs. WG-SS Measures

Basic Actions Difficulties

Movement

By yourself, and without equipment, how difficult is it for you to:

- Walk a quarter of a mile?
- Walk up 10 steps without resting?
- Stand or be on your feet for 2 hours?
- Sit for about 2 hours?
- Stoop, bend, or kneel?
- Reach up over your head?
- Use your fingers to grasp or handle small objects?
- Lift or carry something as heavy as 10 pounds?

(not at all difficult / only a little difficult / somewhat difficult / very difficult / can't do at all)

WG Short Set

Mobility

Do you have difficulty walking or climbing steps?

(no / some / a lot / cannot do)

Basic Actions vs. WG-SS Measures

Basic Actions Difficulties

Cognition

Are you limited by difficulty remembering? (yes / no)

Emotional

During the past 30 days, how often did you feel: so sad that nothing could cheer you up? Nervous? Restless or fidgety? Hopeless? That everything was an effort? Worthless? (6 separate questions; scale based on values assigned to responses - all / most / some / a little / none of the time

WG Short Set

Cognition

Do you have difficulty remembering or concentrating? (no / some / a lot / cannot do)

Self-Care

Do you have difficulty (with self-care such as) washing all over or dressing?

Comparison of Prevalence: WG-SS and Basic Actions

The prevalence of disability will vary, depending on the measures used. Differences between the measures account for these variations in prevalence.

Functioning Measure	Prevalence
WG-SS	9.4
Basic actions	
Full set (sensory, cognition, emotional, movement)	24.9
Reduced (<i>minus</i> emotional)	24.0
Reduced (minus emotional & non-matching movement)	19.3

Reference population: U.S. civilian, non-institutionalized population, aged 18 and over.

Source: US National Health Interview Survey, 2013-2016, weighted.

Comparison of Agreement: WG-SS and Basic Actions - Full

Functioning Measure	Basic Actions – Full Set		
	No Disability	Disability	
N = 66,105	Percent	Percent	
WG-SS			
No Disability	73.8	16.8	
Disability	1.2	8.2	

Reference population: U.S. civilian, non-institutionalized population, aged 18 and over. **Source**: US National Health Interview Survey, 2013-2016, weighted.

Comparison of Agreement: WG-SS and Basic Actions - Reduced

Functioning Measure	Basic Actions – Reduced Set		
	No Disability	Disability	
N = 66,105	Percent	Percent	
WG-SS			
No Disability	78.9	11.7	
Disability	1.9	7.5	

Reference population: U.S. civilian, non-institutionalized population, aged 18 and over. **Source**: US National Health Interview Survey, 2013-2016, weighted.

Characteristics by Measure: Disability, by sex

Functioning Measure	Male	Female
Disabled: "yes"	Percent	Percent
WG-SS	43.1	56.9
Basic Actions Reduced	41.6	58.4

Reference population: U.S. civilian, non-institutionalized population, aged 18 and over. **Source**: US National Health Interview Survey, 2013-2016, weighted.

Characteristics by Measure: Disability, by age

Functioning Measure	18-24	25-44	45-64	65-74	75+
Disabled: "yes"			Percent		
WG-SS	5.2	15.9	36.7	18.0	24.1
Basic Actions Reduced	5.7	19.6	38.9	17.3	18.5

Reference population: U.S. civilian, non-institutionalized population, aged 18 and over.

Source: US National Health Interview Survey, 2013-2016, weighted.

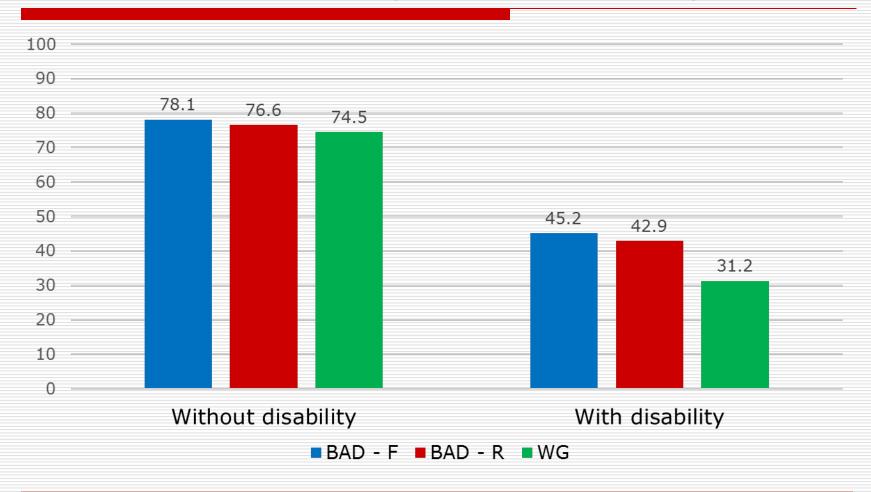
Non-Agreement: Which Basic Actions Domains?

For those who were *not* identified by the WG-SS as disabled, but *were* identified as disabled by Basic Actions:

	any mention	<u>only</u>
Vision:	8.3%	7.0%
Hearing:	1.0%	0.7%
Walking:	3.4%	1.5%
Stairs:	1.7%	0.3%
Cognition:	1.9%	1.0%

Reference population: U.S. civilian, non-institutionalized population, aged 18 and over. **Source:** US National Health Interview Survey, 2013-2016, unweighted.

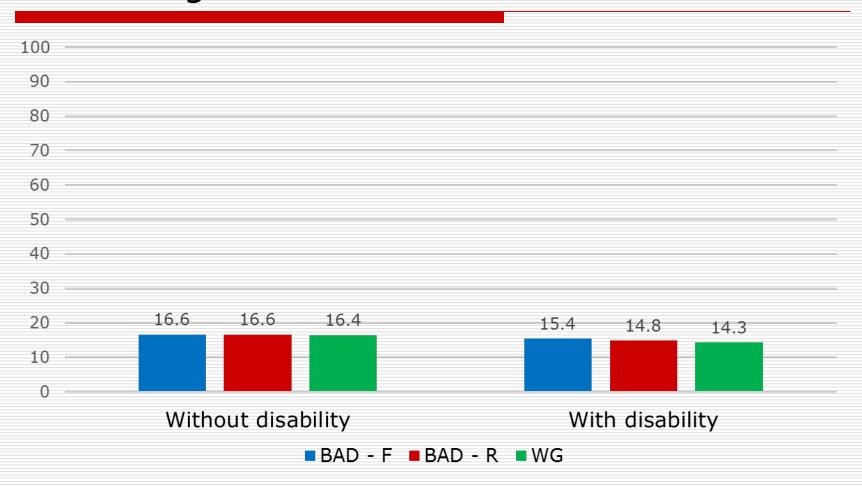
Percent Employed, 18-64 years



Reference population: U.S. civilian, non-institutionalized population.

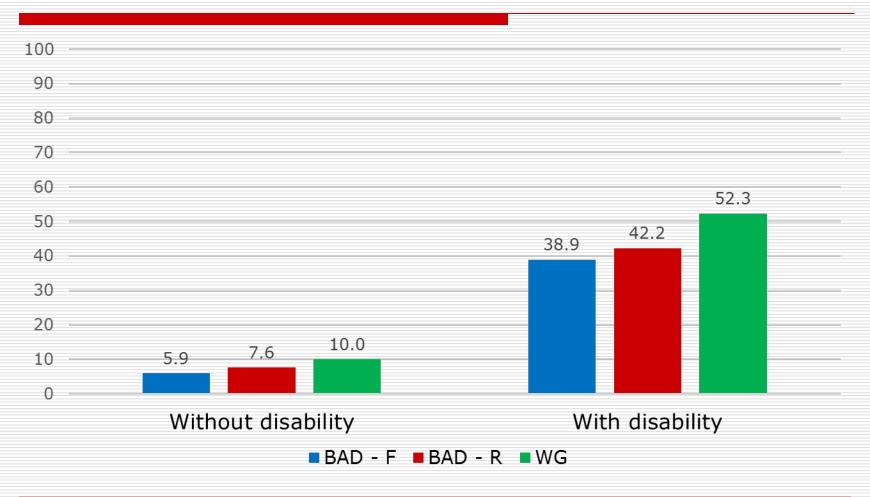
Source: CDC, NCHS, National Health Interview Survey (2013-2016), unweighted.

Percent Not Currently Insured, 18-64 years



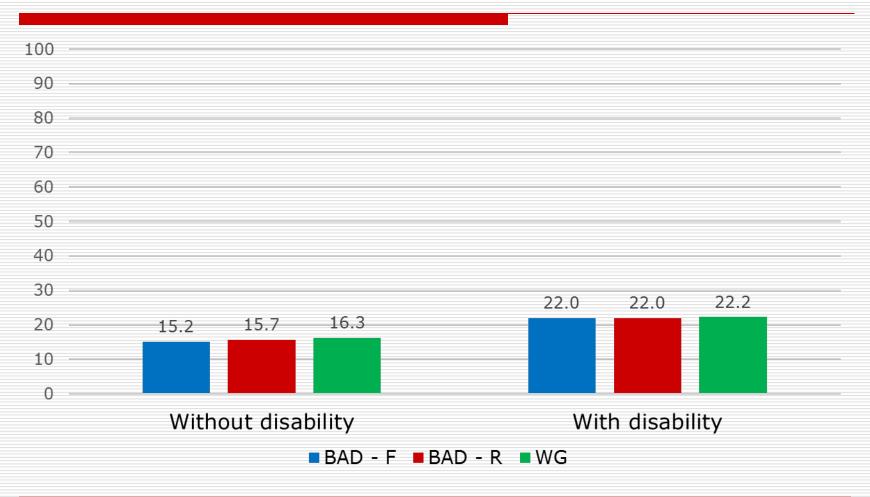
Reference population: These data refer to the civilian, non-institutionalized population. **Source**: CDC, NCHS, National Health Interview Survey (2013-2016), unweighted.

Percent in Fair-Poor Health, 18+



Reference population: These data refer to the civilian, non-institutionalized population. **Source**: CDC, NCHS, National Health Interview Survey (2013-2016), unweighted.

Percent Current Smokers, 18+



Reference population: These data refer to the civilian, non-institutionalized population. **Source**: CDC, NCHS, National Health Interview Survey (2013-2016), unweighted.

Discussion