



## Mixed-Method Assessment of Validity and Cross- Subgroup Comparability

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# Pain Questions

- *In the past 3 months, how often did you have pain? Would you say never, some days, most days or every day?*
- *[If at least some days] Thinking about the last time you had pain, how much pain did you have? Would you say a little, a lot, or somewhere in between?*

# Descriptive Follow-up Questions

*Please tell me which of the following statements, if any, describe your pain.*

- It is constantly present.*
- Sometimes I'm in a lot of pain and sometimes it's not so bad.*
- Sometimes it is unbearable and excruciating.*
- When I get my mind on other things, I am not aware of the pain.*
- Medication can take my pain away completely.*
- My pain is because of work.*
- My pain is because of exercise.*

# Field Interviews

- 2010 National Health Interview Survey
- Subset:  $\frac{1}{4}$  of HIS; N=6775
- Interviewer administered

# Results:

Frequency	Unweighted N	Weighted Percent
Never	2631	38.5%
Some days	2289	34.9
Most days	486	6.8
Every day	709	10.4
Missing	660	9.6
Total	6775	100

Intensity	Unweighted N	Weighted Percent
A little	1691	47.3%
Closer to a little	275	8.3
Exactly in the middle	564	16.8
Closer to a lot	260	8.2
A lot	673	17.7
Missing	76	1.8
Total	3539	100

	Frequency		
Intensity	Some days	Most days	Every day
A little	41.7% (n=1442)	3.8% (n=133)	3.2% (n=112)
Closer to a little	5.8% (n=199)	1.2% (n=40)	1.0% (n=36)
Exactly in the middle	8.8% (n=303)	3.4% (n=118)	4.1% (n=143)
Closer to a lot	3.2% (n=109)	1.6% (n=55)	2.8% (n=96)
A lot	6.4% (n=220)	4.0% (n=139)	9.1% (n=314)

# Descriptive Follow-Up Variables

	Percent of Respondents Describing Pain
<i>Constantly present</i>	31.1
<i>Fluctuating</i>	55.6
<i>Unbearable</i>	25.1
<i>Not always aware</i>	48.3
<i>Medication alleviates</i>	43.4

Problem if:  
Constant or unbearable  
(False Negative)

Intensity	Every day		Every day			
	Percentage	Count (n)	Percentage	Count (n)		
A little	41.7%	(n=1442)	3.8%	(n=133)	3.2%	(n=112)
Closer to a little	5.8%	(n=199)	1.2%	(n=40)	1.0%	(n=36)
Exactly in the middle	8.8%	(n=303)	3.4%	(n=118)	4.1%	(n=143)
Closer to a lot	3.2%	(n=109)	1.6%	(n=55)	2.8%	(n=96)
A lot					9.1%	(n=314)

Problem if:  
Medicine takes away or  
sometimes not aware  
(False Positive)

# Percent of problem cases

Consistent	92.41
False Negative	2.83
False Positive	4.77

# Demographic analysis of problem cases

## Age

	Young	Not Young	Older	Even Older	Oldest
Consistent	93.7	93.5	92.8	92.3	90.7
False Negative	4.6	2.2	2.8	2.4	2.2
False Positive	1.6	4.3	4.4	5.3	7.8

# Demographic analysis of problem cases

## Education

	Least Educated	In-Between Educated	Most Educated
Consistent	88.2	90.7	94.2
False Negative	4.3	3.3	2.3
False Positive	7.6	6.0	3.5

# Demographic analysis of problem cases

## Income

	Poor	Less Poor	Less Wealthy	Wealthiest
Consistent	89.5	93.3	94.2	95.0
False Negative	3.0	3.4	3.5	1.3
False Positive	7.6	3.4	2.3	3.8

SOCIAL CONTEXT

CAUSE

EXPERIENCE

MEASURE

CONSTRUCT

