

# NCHS OPIOID QUESTION EVALUATION STUDY

Kristen Miller, Ph.D.

Collaborating Center for Question Design and Evaluation Research,  
National Center for Health Statistics

# OPIOID COMPARATIVE COGNITIVE INTERVIEWING STUDY

- Topics: Opioid Use, Misuse, Impairment, Addiction
- 140 Interviews (Additional 40 Spanish Interviews still to be conducted)
- Regions: DC Metro; Lexington, KY; Mobile, AL; Seattle, WA; Boston, MA; Wichita, KS; El Paso, TX; Chicago, IL
- Languages: Spanish, English

# OPIOID COMPARATIVE COGNITIVE INTERVIEWING STUDY

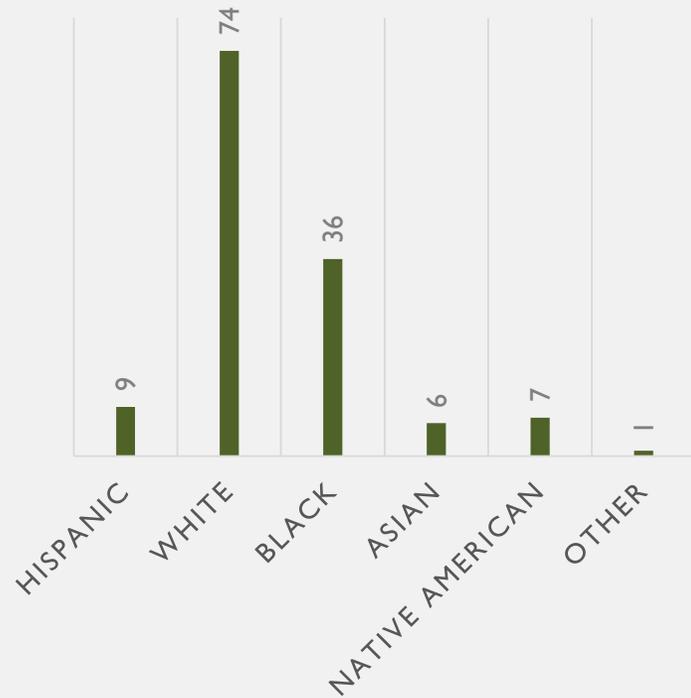
1. What constructs are captured by individual questions?
2. Are they consistently captured across demographic groups in diverse socio-cultural contexts? Or other relevant respondent groups?
3. Assess the feasibility of asking opioid questions for face-to-face population-based household surveys
  - What topics are possible?
  - What are the data quality concerns?

# SAMPLE CHARACTERISTICS

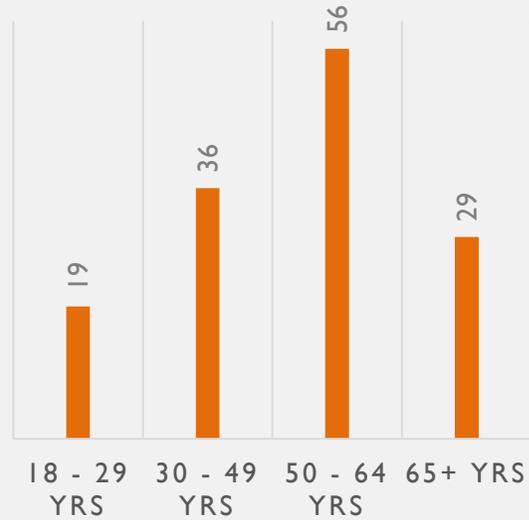
## GENDER



## RACE/ETHNICITY



## AGE

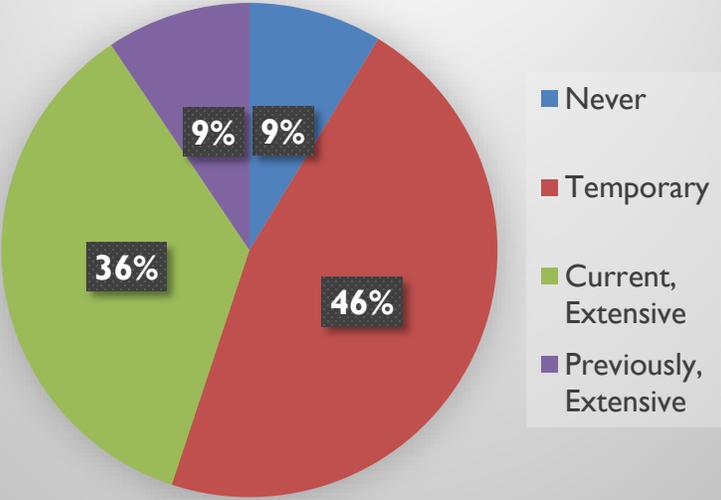


## EDUCATION

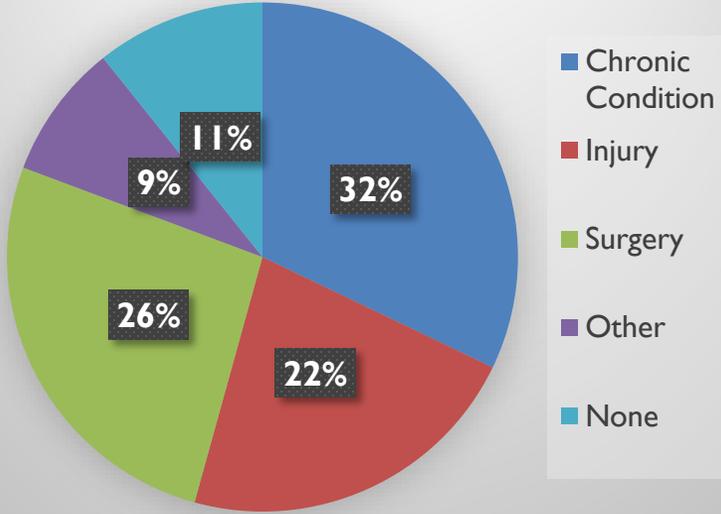


# OPIOID-USE SAMPLE CHARACTERISTICS

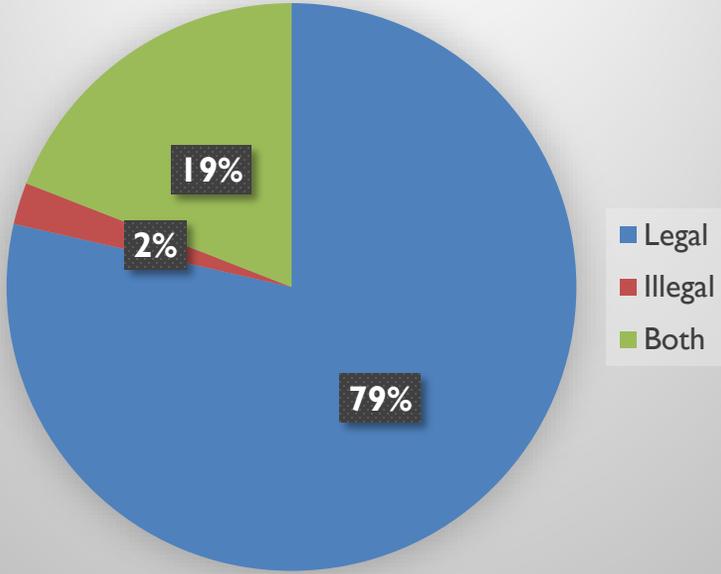
### Usage



### Cause



### Source



## PRIMARY FINDINGS

1. Use
2. Misuse
3. Disorder

## OPIOID-USE SCREENER QUESTIONS

1. These next questions are about the use of prescription pain relievers called opioids. When answering these questions, please do not include over-the-counter pain relievers such as aspirin, Tylenol, Advil, or Aleve. During the past 12 months, have you taken any opioid pain relievers prescribed by a doctor or dentist? Examples include hydrocodone, Vicodin, Norco, Lortab, oxycodone, OxyContin, Percocet and Percodan. (13 errors)
2. Please look at the names and pictures of the pain relievers shown below. In the past 12 months, which, if any, of these pain relievers have you used? (8 errors)

## NHIS ERROR PATTERNS

1. Respondents believed their medication, which is not listed as an example, is an opioid—and it's not. (False positive)
2. Respondents did not realize their medication is an opioid. (False negative)
3. The examples limited respondents' definition of what to include. (False negative)
4. Respondents forgot that they had taken an opioid months earlier. (False negative)

## NSDUH

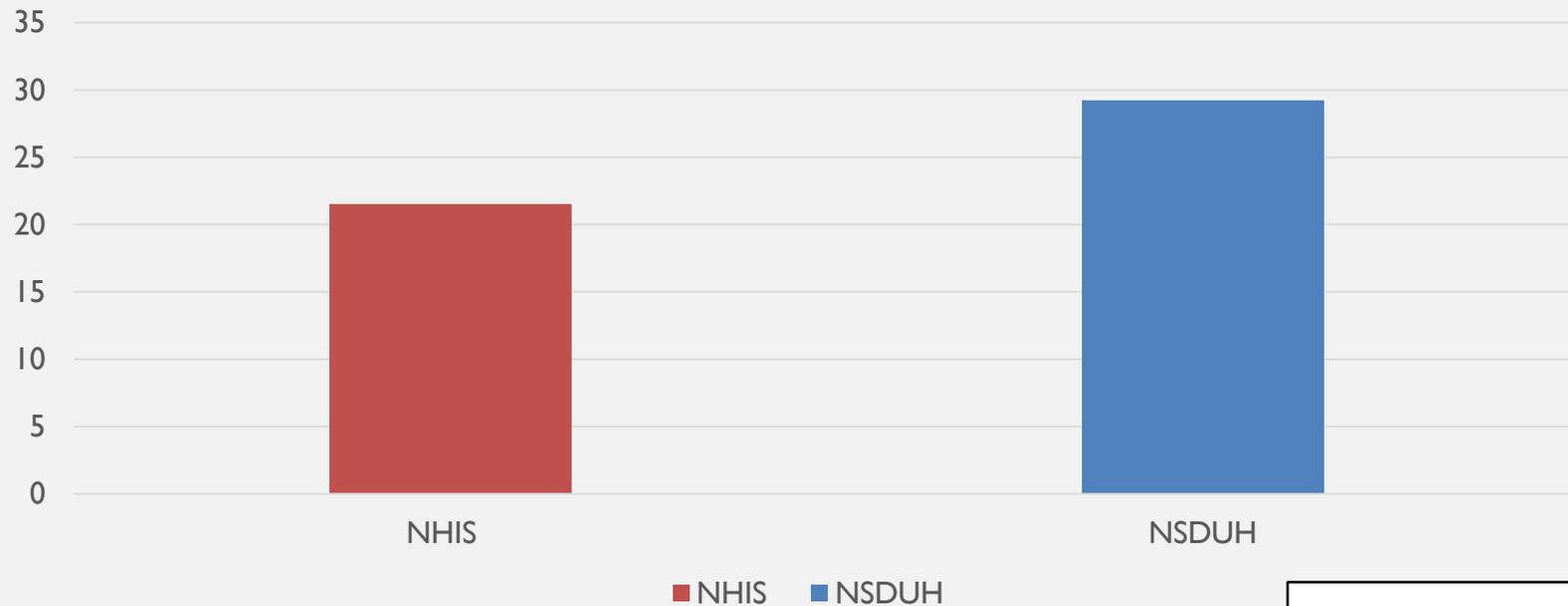
1. Respondents do not know the name of their opioid. (False negative)
2. Respondents mistook Tylenol 3 for regular Tylenol. (False positive)

## CONCLUSIONS

Neither question dramatically outperforms the other

NHIS = more false negative pattern

# RANDS OPIOID USE PREVALENCE RATE



**NSDUH = 37.9%**  
**NHIS = TBD**

*NHIS n=1302; NSDUH n=1344*

*\*\*\*  $p < 0.001$ ; Unweighted; Cohen's  $h = 0.177$*

## OPIOID MISUSE QUESTION

The next question asks about using prescription pain relievers in any way a doctor did not direct you to use them. When you answer these questions, please think only about your use of the drug in any way a doctor did not direct you to use it, including:

- 1) Using it without a prescription of your own,
- 2) Using it in greater amounts, more often, or longer than you were told to take it,
- 3) Using it in any other way a doctor did not direct you to use it.

Have you ever, even once, used any prescription pain reliever in any way a doctor did not direct you to use it?

## FINDINGS

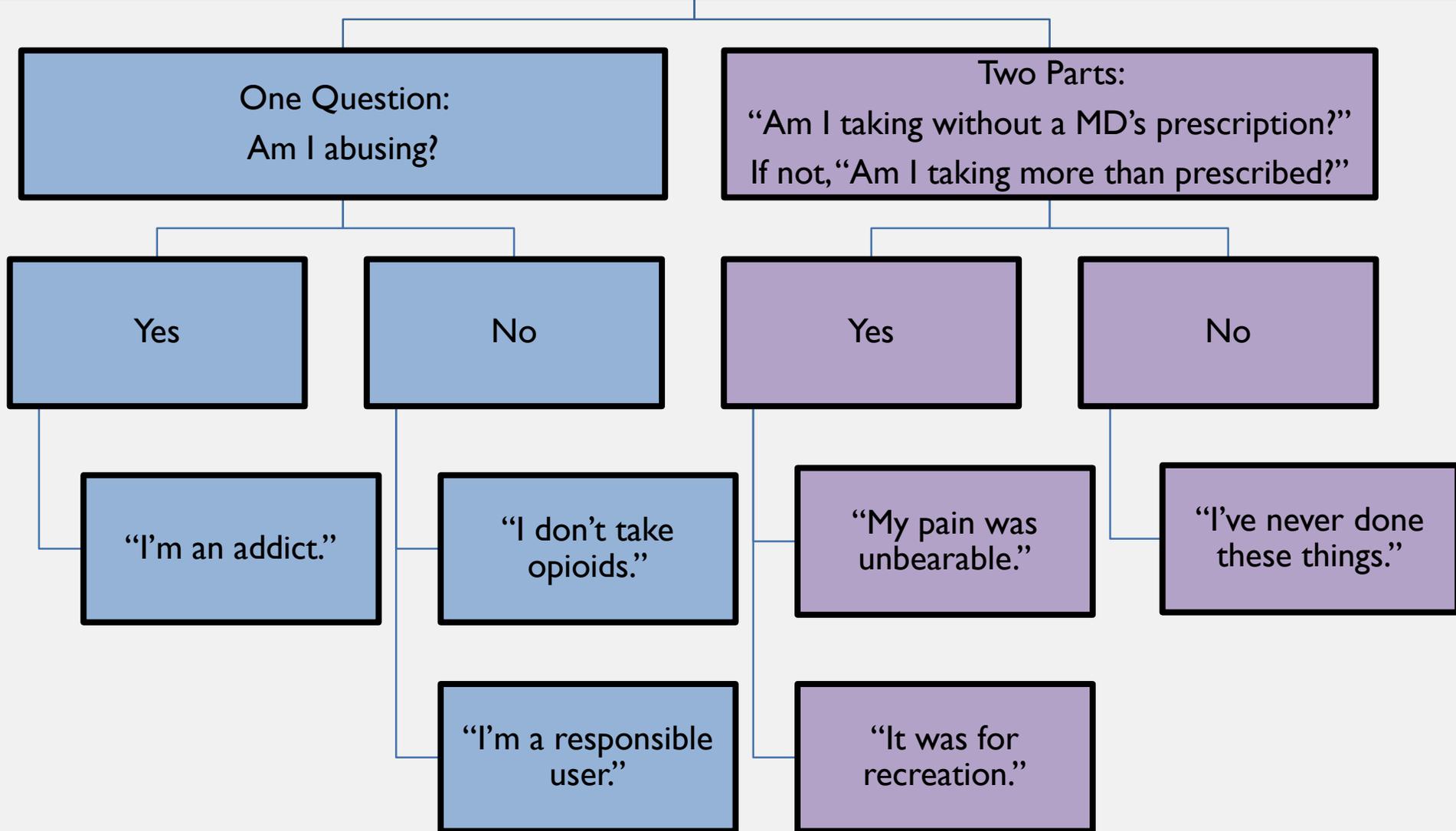
Responses: 46 = 'yes' 72 = 'no'

Of the 72 'no' responses, 13 cases of false-negative reports.

(Likely did not catch all)

Concern of underestimation

When you answer these questions, please think only about your use of the drug in any way a doctor did not direct you to use it, including: • Using it without a prescription of your own • Using it in greater amounts, more often, or longer than you were told to take it • Using it in any other way a doctor did not direct you to use it • Have you ever, even once, used any prescription pain reliever in any way a doctor did not direct you to use it?



When you answer these questions, please think only about your use of the drug in any way a doctor did not direct you to use it, including: • Using it without a prescription of your own • Using it in greater amounts, more often, or longer than you were told to take it • Using it in any other way a doctor did not direct you to use it • Have you ever, even once, used any prescription pain reliever in any way a doctor did not direct you to use it?

One Question:  
Am I abusing?

Two Parts:  
“Am I taking without a MD’s prescription?”  
If not, “Am I taking more than prescribed?”

Justifications:  
“Same manner.”  
“It all evens out.”  
“It says as needed.”  
“My daughter is a nurse practitioner.”  
“It’s essentially the same purpose”

Yes

No

“My pain was unbearable.”

“I’ve never done these things.”

“I’m a responsible user.”

“It was for recreation.”

## CURRENTLY PROPOSING

1. Did you ever take the medication more frequently or in higher doses than was prescribed?
2. Have you ever taken someone else's opioid medication, that is, pain relievers not prescribed to you by your doctor?

## DISORDER QUESTIONS

- During the past 12 months, was there a month or more when you spent a lot of your time getting or using prescription pain relievers?
- During the past 12 months, was there a month or more when you spent a lot of your time getting over the effects of the prescription pain relievers you used?
- During the past 12 months, did you try to set limits on how often or how much prescription pain relievers you would use?  

[If yes] Were you able to keep to the limits you set, or did you often use prescription pain relievers more than you intended to?
- During the past 12 months, did you need to use more prescription pain relievers than you used to in order to get the effect you wanted

## DISORDER FINDINGS

- Questions seen as asking about addiction (i.e., whether they are or not)
- Inability to establish causality

## CURRENTLY PROPOSING

- Reconsider the criteria for identifying 'disorder' in terms of what can be captured in household, population-based surveys
  - Very difficult to ask about opioid disorder
  - Interpretation: "Am I addicted?"
  - Problems with causality
  - Clinical questions do not work in survey setting

## SUMMARY OF FINDINGS

- 1) The ways in which respondents understood themselves in relationship to their use impacts how they interpret, process and ultimately respond to the opioid survey questions—particularly misuse and disorder questions
- 2) And, these understandings are informed by the social context in terms of:
  - a. What they have heard about opioids and the epidemic
  - b. Whether they know people impacted by the epidemic
- 3) These relationships impact the quality of data and can skew our understanding of the opioid epidemic— particularly for current, extensive opioid users

# TYPES OF SELF-UNDERSTANDING

USE	SELF-UNDERSTANDING	CHARACTERISTICS
NEVER	Never-Not-Me	<ul style="list-style-type: none"> <li>Not a “pill person”; Doesn’t fill prescriptions; See addiction in others</li> </ul>
	Uninformed	<ul style="list-style-type: none"> <li>No understanding of “opioid”; Unaware of opioid crisis</li> </ul>
TEMPORARY	Knowledgeable	<ul style="list-style-type: none"> <li>Understands self as being informed; Mindset that opioids are temporary; Does not refill; destroys medicine</li> </ul>
	Avoider	<ul style="list-style-type: none"> <li>Not a “pill person”; Have taken, but decided didn’t like it; See addiction in others</li> </ul>
	Uninformed	<ul style="list-style-type: none"> <li>No understanding of “opioid”; Lack knowledge of their own medicine</li> </ul>
CONTINUING	Addicted	<ul style="list-style-type: none"> <li>Understands themselves as being addicted; “I’m hooked,” “Oh yeah, I’m addicted”</li> </ul>
	Responsible	<ul style="list-style-type: none"> <li>Understands themselves as having chronic, debilitating pain that requires opioids; Understands self as a responsible user; Receives opioids from a medical doctor, follows prescription (or rather, sees themselves as doing so)</li> </ul>
PREVIOUSLY EXTENSIVE	Recovered Addict	<ul style="list-style-type: none"> <li>Understands self as always being an addict</li> </ul>
	Not-Me	<ul style="list-style-type: none"> <li>Views self as being over their addiction</li> </ul>

# NEVER USED

SELF-UNDERSTANDING	CHARACTERISTICS	QUESTION RESPONSE	
		USEAGE	MISUSE, IMPAIR, DISORDER
Not-Me	<ul style="list-style-type: none"><li>• Not a “pill person”</li><li>• Doesn’t fill prescriptions</li><li>• See addiction in others</li></ul>	<ul style="list-style-type: none"><li>• Accurate</li></ul>	<ul style="list-style-type: none"><li>• NA</li></ul>
Uninformed	<ul style="list-style-type: none"><li>• No understanding of “opioid”</li><li>• Unaware of opioid crisis</li></ul>	<ul style="list-style-type: none"><li>• False “yes” to NSDUH after seeing Tylenol 3</li></ul>	<ul style="list-style-type: none"><li>• NA</li></ul>

# PREVIOUSLY, EXTENSIVELY USED

SELF-UNDERSTANDING	CHARACTERISTICS	QUESTION RESPONSE	
		USEAGE	MISUSE, IMPAIR, DISORDER
Addict	<ul style="list-style-type: none"> <li>• Personally understands opioid addiction</li> <li>• Understands self as always being an addict</li> </ul>	<ul style="list-style-type: none"> <li>• Accurate</li> </ul>	<ul style="list-style-type: none"> <li>• Accurate</li> </ul>
Recovered Addict	<ul style="list-style-type: none"> <li>• Personally understands opioid addiction</li> <li>• Views self as being over their addiction</li> </ul>	<ul style="list-style-type: none"> <li>• Thinks of methadone as a treatment, not an opioid.</li> </ul>	<ul style="list-style-type: none"> <li>• Accurate</li> </ul>

# TEMPORARY USER

SELF	CHARACTERISTICS	QUESTION RESPONSE	
		USEAGE	MISUSE, IMPAIR, DISORDER
Knowledgeable	<ul style="list-style-type: none"> <li>• Understands self as being informed</li> <li>• Mindset that opioids are temporary</li> <li>• Does not finish or refill prescription</li> <li>• Destroys medicine</li> </ul>	<ul style="list-style-type: none"> <li>• Accurate</li> </ul>	<ul style="list-style-type: none"> <li>• False Positives (Some Rs overly literal; paranoid about addiction)</li> </ul>
Avoider	<ul style="list-style-type: none"> <li>• Not a “pill person”</li> <li>• Have taken, but decided didn’t like it</li> <li>• See addiction in others</li> </ul>	<ul style="list-style-type: none"> <li>• False “no” to NHIS; did not know medicine was an opioid</li> </ul>	<ul style="list-style-type: none"> <li>• False Negatives (Some Rs “I don’t abuse”; justifications for misuse)</li> </ul>
Uninformed	<ul style="list-style-type: none"> <li>• No understanding of “opioid”</li> <li>• Lack knowledge of their own medicine</li> </ul>	<ul style="list-style-type: none"> <li>• False “yes” to NSDUH after seeing Tylenol 3</li> </ul>	

# CURRENT, EXTENSIVE

SELF	CHARACTERISTICS	QUESTION RESPONSE	
		USEAGE	MISUSE, IMPAIR, DISORDER
Addicted	<ul style="list-style-type: none"> <li>• Understands themselves as being addicted</li> <li>• “I’m hooked,” “Oh yeah, I’m addicted”</li> </ul>	Accurate	Accurate
Responsible	<ul style="list-style-type: none"> <li>• Understands themselves as having chronic, debilitating pain that requires opioids</li> <li>• Understands self as a responsible user</li> <li>• Receives opioids from a medical doctor, follows prescription (or rather, sees themselves as doing so)</li> <li>• Recognizes addiction in others</li> </ul>	Accurate	<p>Misuse: Not always accurate= Strategies for understanding their misuse as “not misuse”</p> <p>Impairment: Ability to distinguish “pain” from “opioid side effects” is difficult</p> <p>Disorder: Not Accurate: = Interprets question as “Are you addicted?”</p>

## NEXT STEPS

1. Conduct Spanish interviews
2. Continue analysis, complete report, write papers
3. Cognitive interviewing work with revised questions
4. More work with RANDS; looking at validity, adding misuse
5. Develop standardized, validated set of opioid-related survey questions