

# Scaling of Unmet Treatment Needs and Associated Disability among Persons with Migraine: Results from Migraine in America Symptoms and Treatment (MAST) Study

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# Triptan Use and Discontinuation in Persons with Migraine

## ➤ Background

- ❖ Triptans are the mainstay of migraine treatment and are available in oral, injectable, and nasal delivery forms
- ❖ Some patients treated with oral medications experience dissatisfaction with their therapy due to unique nature of migraine symptomatology and varying degrees of treatment effectiveness

## ➤ Objective

- ❖ Given that oral therapy is most commonly used, the objective of this analysis was to characterize the patterns of poorly controlled attacks among persons with migraine using acute oral medications

## ➤ **Migraine in America Symptoms and Treatment (MAST) Study**

- ❖ Baseline Web-based survey conducted between October 2016 – January 2017
- ❖ 18+ years old, recruited from a US nationwide online research panel

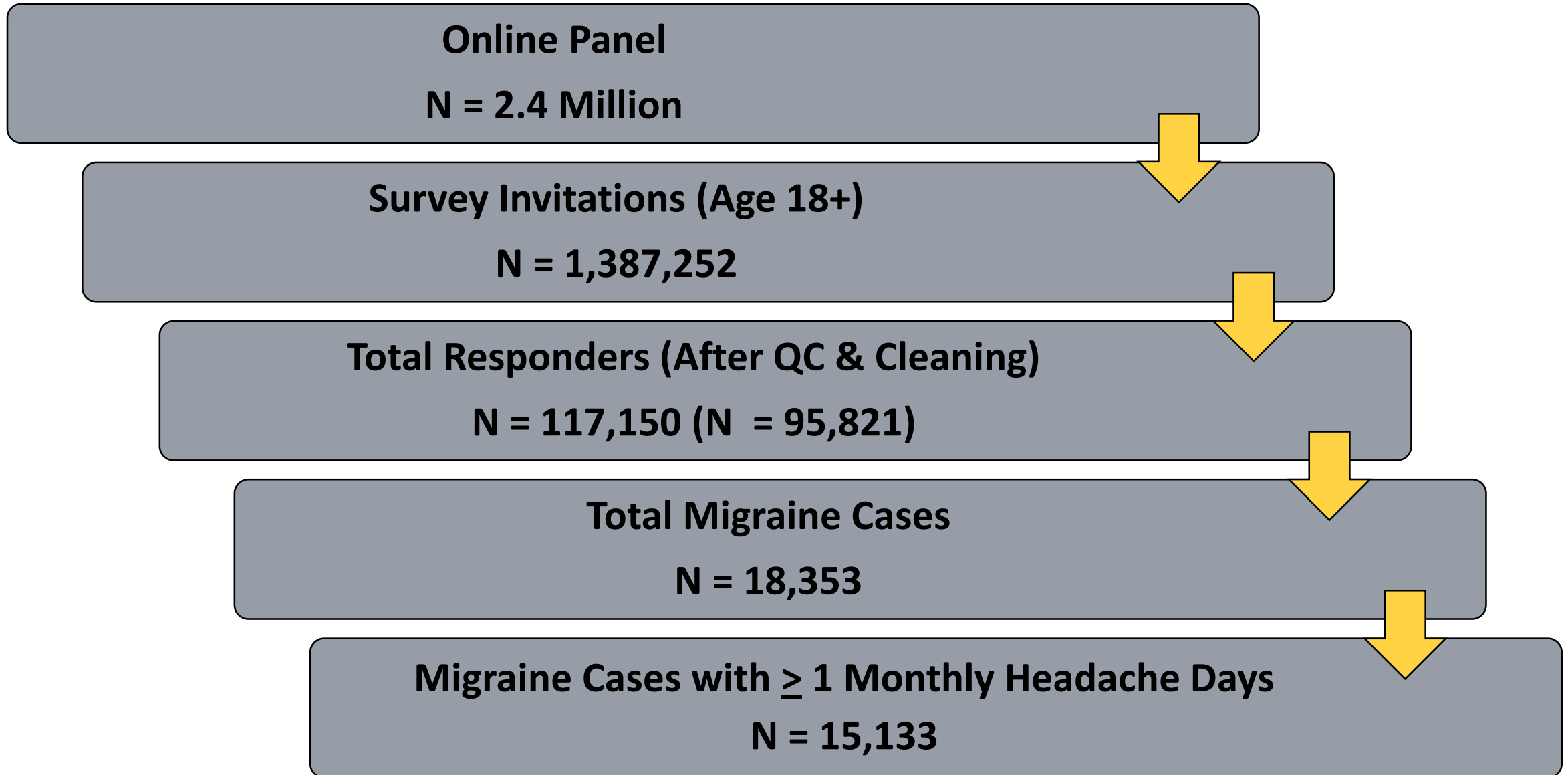
## ➤ **Stratified random sampling to obtain panel representative of US population**

- ❖ ICHD-3 beta diagnostic criteria for migraine

## ➤ **Included**

- ❖  $\geq 3$  headache days in past 3 months and  $\geq 1$  headache day in past 30 days
- ❖ Using acute prescription migraine medications

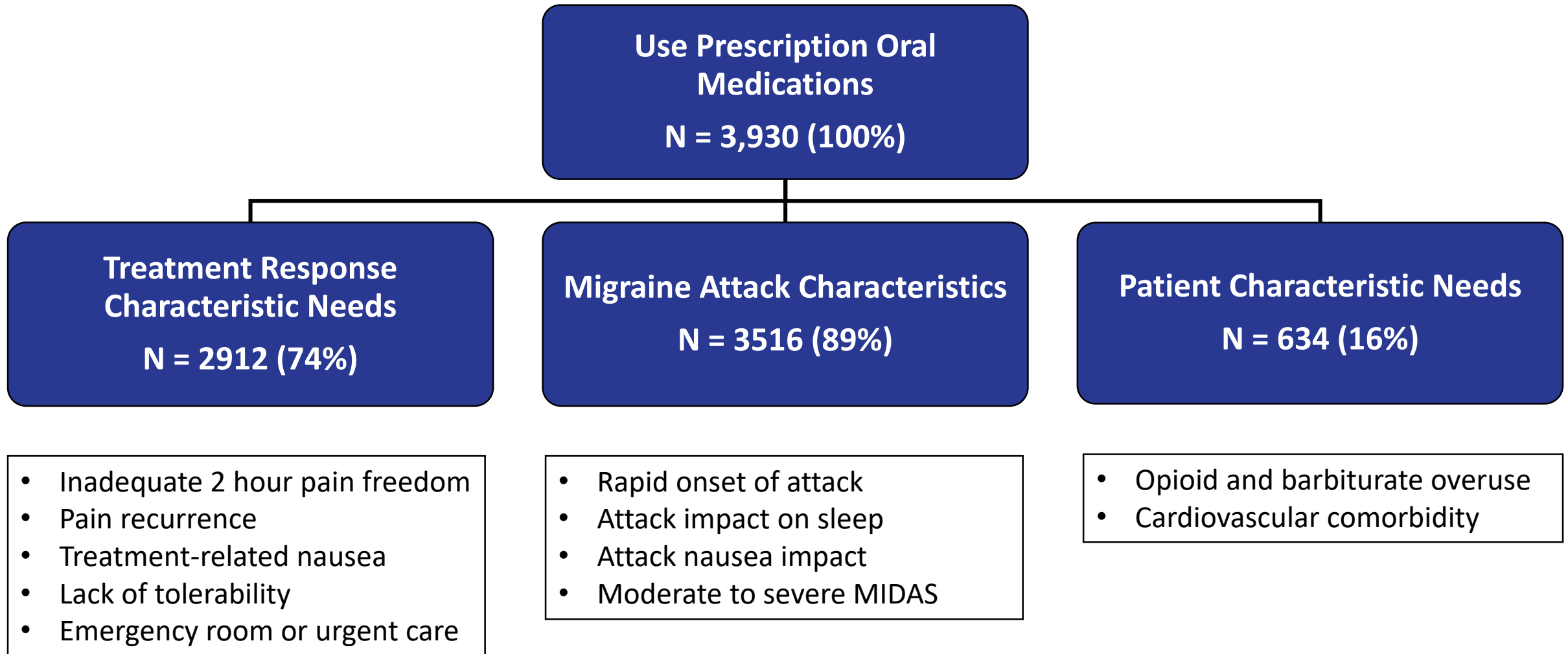
# MAST Study Sample Results



- 11 items covering attack history and treatment response over the prior 3 months were included in survey to measure acute treatment unmet needs
  - ❖ Items were rated on a 5 point scale (Never, Rarely, Less than half the time, Half the time or more, or All or nearly all of the time)
  - ❖ For medication related items, an additional response option “does not apply” was included
  
- Unmet need was also assigned for respondents who reported:
  - ❖ 1 or more emergency room or urgent care visit in the past 3 months
  - ❖ moderate or severe MIDAS disability
  - ❖ opioid or barbiturate use 10 or more days per month
  - ❖ presence of one or more CV risk factors

- Sociodemographic (age, gender, race, income, employment, education, BMI, health insurance, smoking status, marital status)
- Non-oral form of medications were excluded from analysis
- Prior to analysis, the 15 unmet needs variables were grouped into 11 subdomains and further into 3 broad domains based on item face validity and expert clinician judgement
  - ❖ Treatment Response Characteristic Needs
  - ❖ Migraine Attack Characteristic Needs
  - ❖ Patient Characteristic Needs
- For the 11 treatment statements, unmet need was assigned if rated half the time or more or always by the respondents

# Overview of Unmet Need Domains





# Sociodemographics and Headache Characteristics Among Respondents Taking Oral Prescription Acute Treatment, by Category of Unmet Need



	Total N = 3,930* (%)
<b>Sociodemographics</b>	
Female	2892 (73.6)
Household Income ≥\$50,000	2592 (67.7)
White	3186 (81.6)
Married	2240 (57)
Education ≥4-Year Degree	2300 (58.5)
Employed FT/PT	2694 (68.5)
Health Insurance	3706 (96)
Current Smoker	533 (13.6)
PHQ-4 Psychological Sx Present	1011 (25.7)
<b>Headache Characteristics</b>	
Medication Overuse	899 (24.2)
MTOQ Poor to Very Poor	1483 (37.7)
MIDAS Moderate to Severe	2187 (55.6)
Allodynia Present	1827 (46.5)

\*Excludes those taking Intranasal, Injectable or Topical Prescription Acute Treatment  
 Difference between the broad domain groups was not tested

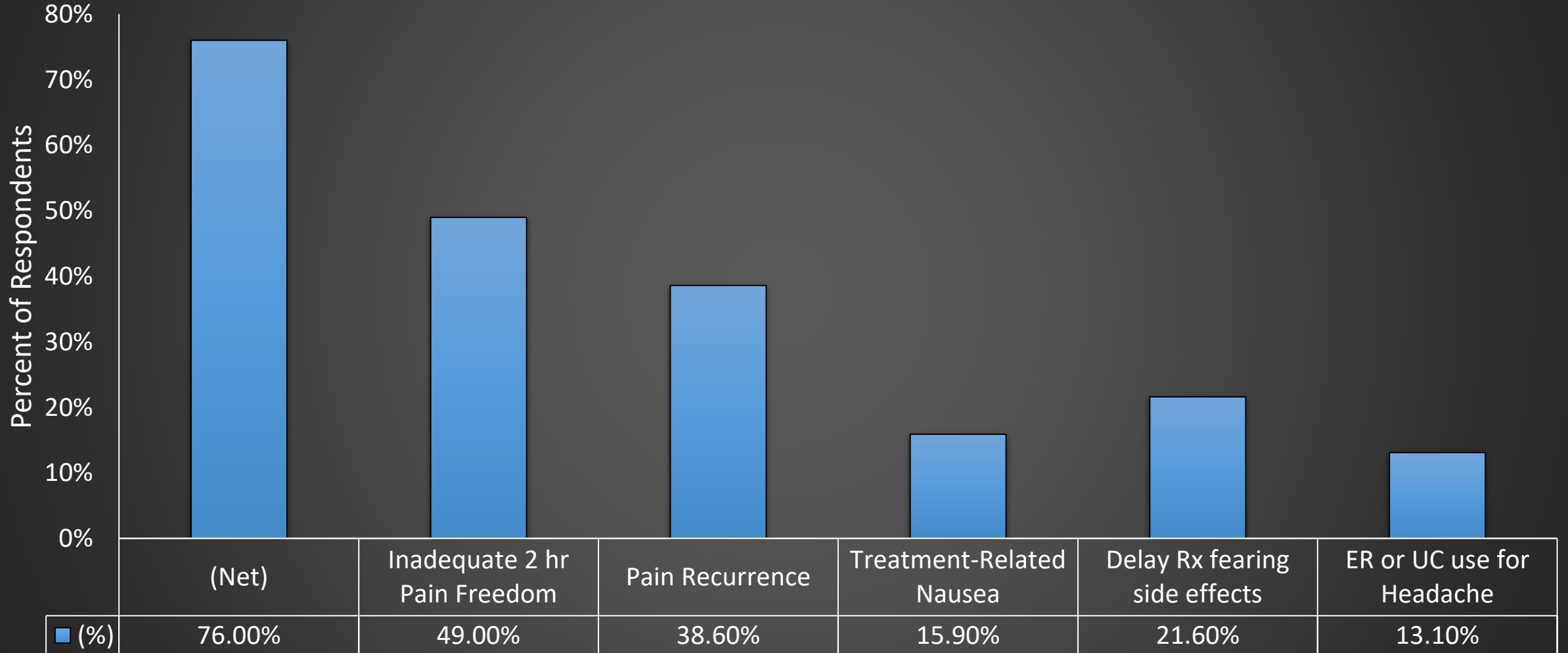
# Acute Medication Usage Among Respondents Taking Oral Prescription Acute Treatment, by Category of Unmet Need

	Total N = 3,930* (%)
<b>Acute Medication Use</b>	
Oral Prescription Triptan	1808 (46)
Oral Prescription NSAID	1439 (36.6)
Oral Prescription Ergotamine	31 (0.8)
Oral Prescription Opioid	1299 (33.1)
Oral Prescription Barbiturate	440 (11.2)
Oral Prescription Isometheptene	89 (2.3)
OTC Headache Medication	2603 (66.2)
<b>Mean [SD]</b>	
Age	45.0 [13.5]
BMI	28.3 [7.8]
MSSS	17.7 [2.7]
Monthly HA Days	6.9 [6.8]

\*Excludes those taking Intranasal, Injectable or Topical Prescription Acute Treatment  
Difference between the broad domain groups was not tested

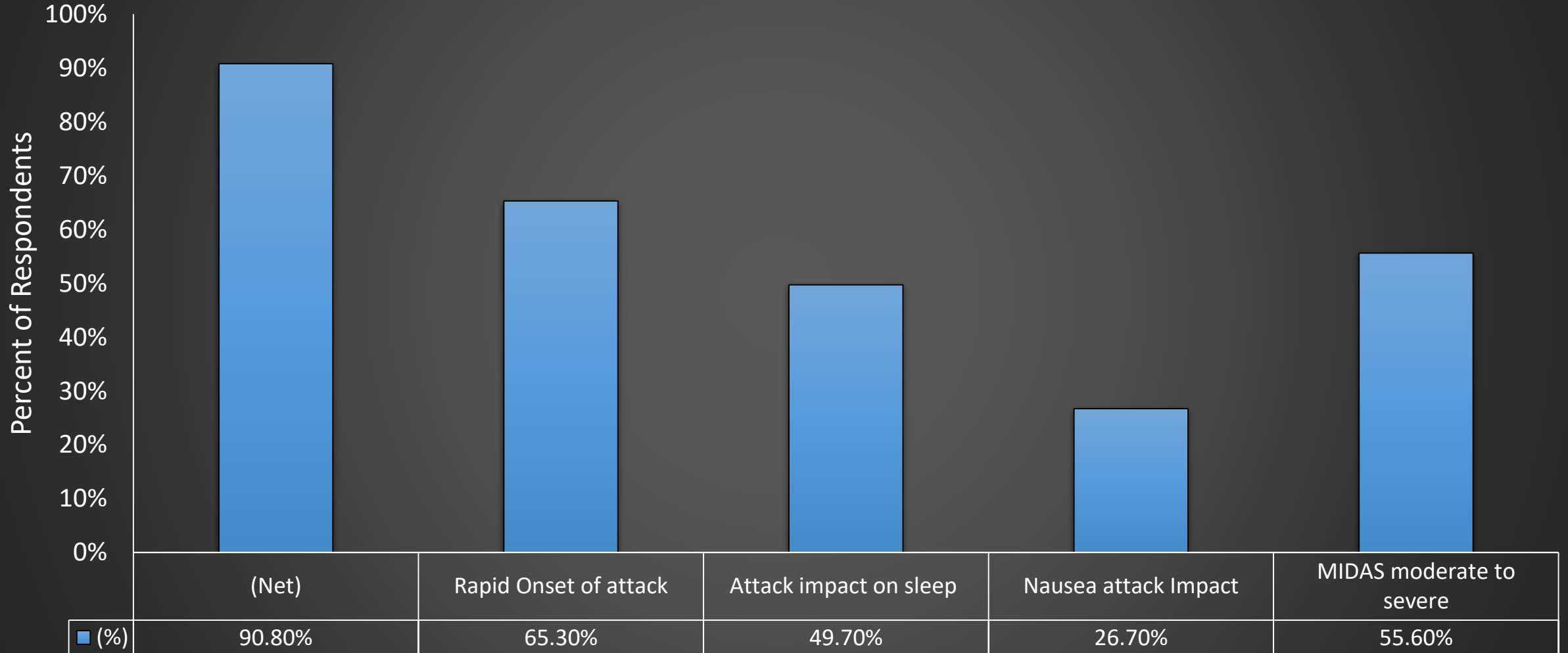
# MAST Results: Unmet Need Categories Among Respondents Taking Oral Acute Prescription Medications

## Treatment Response Characteristic Needs



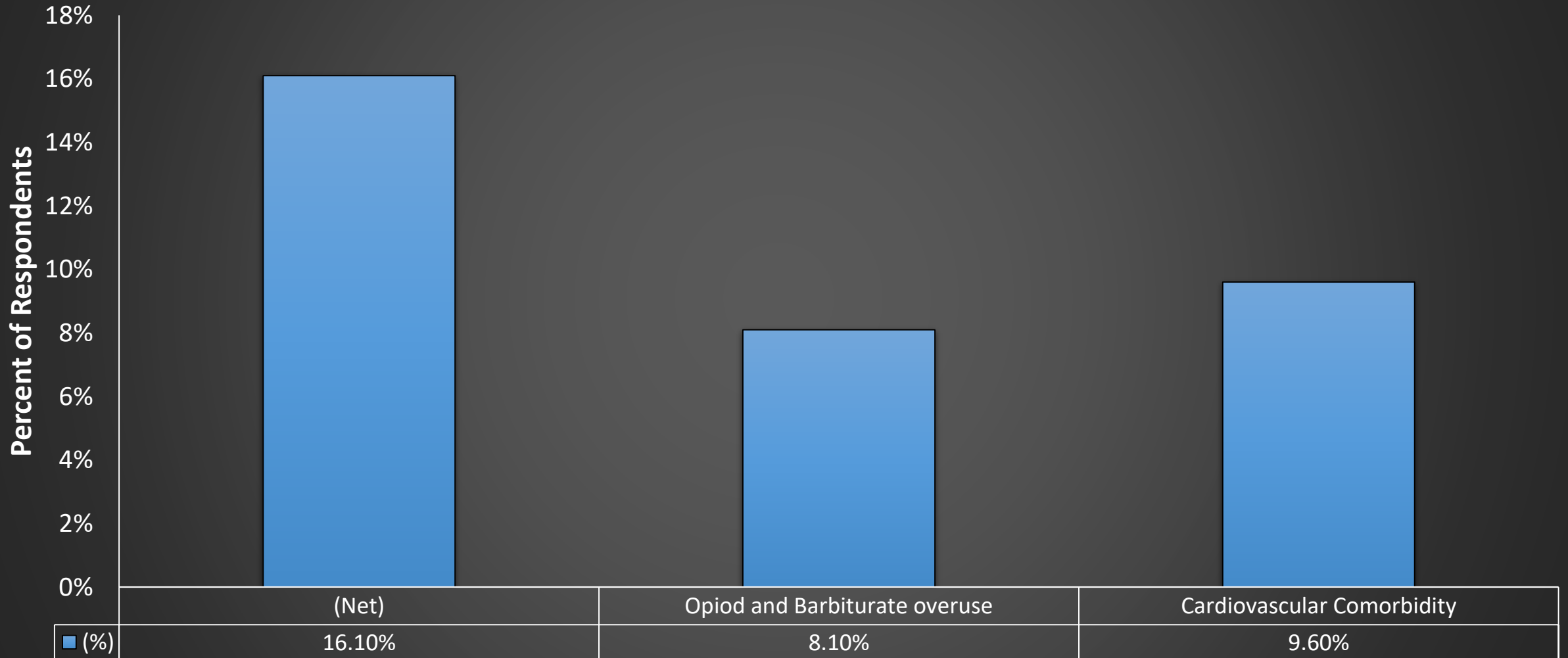
# MAST Results: Unmet Need Categories Among Respondents Taking Oral Acute Prescription Medications

## Headache Attack Characteristics Needs



# MAST Results: Unmet Need Categories Among Respondents Taking Oral Acute Prescription Medications

## Patient Characteristic Needs



- 26% (n = 3930) of respondents reported current use of orally administered acute prescription or OTC medications to treat headache.
- The unmet needs sample had a mean (SD) age of 45.0 (13.5) years, and most respondents were women (73.6%) and White (81.6%).
- A total of 95.8% of respondents had at least 1 unmet need; 90.8% reported unmet needs related to headache characteristics, 76% had unmet needs related to acute treatment response, and 16.1% reported unmet needs associated with respondent characteristics.
- Common areas of unmet need included rapid onset of headache (65.3%), headache-related disability (55.6%), inadequate pain relief (49.0%), and recurrence of pain within 24 hours of initial relief (38.6%).

# Treatment Recommendations for Unmet Needs Domains

<b>Response to Acute Treatment</b>	
Inadequate 2 hour pain freedom	Select a fast or more effective agent, a non-oral agent
Pain recurrence	Select long half-life products with low recurrence rates, switch acute drug class or use a combination of acute treatment drug classes
Treatment related nausea	Non-oral therapy, or use a concomitant antiemetic
Delay prescription fearing side effects	Chose a better tolerated acute treatment
Emergency department/urgent care use for headache	Consider prevention. Provide a rescue treatment plan for when initial acute treatment fails, and back up plan for when rescue fails
<b>Headache Attack Characteristics</b>	
Rapid Onset of attack	Treat early with rapid onset oral. Consider non-oral medication
Attack impact on Sleep	Treat early. Use non-oral treatment. Consider prevention
Nausea attack impact	Treat with antiemetic. Use non-oral treatment
MIDAS Moderate or Severe	Treat early. Choose different acute treatment with higher efficacy. Use non-oral treatment. Consider prevention
<b>Patient Characteristics</b>	
≥ 10 days of Opioid or Barbiturate use per month	Withdraw overused medication. Add a preventive. Replace acute treatment with another class of acute treatment,
Cardiovascular comorbidity	Select drugs with minimal or no known CV effects

- Unmet needs among MAST Study respondents using prescription drugs as acute migraine treatments were near universal.
- There was considerable overlap of unmet needs among MAST study respondents.
- Common areas of unmet need, such as acute treatment response and headache characteristics, may respond to a range of ameliorative measures and should be high-priority targets for improving the medical care of people with migraine.



# Thank You!



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