



MIGRAINE IN AMERICA 2020



October 2020



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Study Overview

WHAT

Migraine In America Survey

85 questions, addressing diagnosis, quality of life and relationships, ongoing symptoms, symptom management and additional health conditions, HCP engagement, along with treatment usage, awareness, and experience

WHO

4,693 respondents recruited from Migraine.com subscribers, Facebook fans, site visitors, as well as other social media users

Patients screened to be diagnosed with migraine and/or cluster headache
Age 18+, living in the U.S.

WHEN

Survey fielded **June 22, 2020 – September 14, 2020**

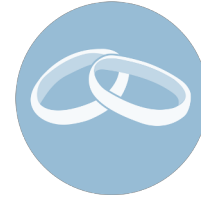
*All data points have been rounded to the nearest whole number
Data analysis used a $p < 0.05$ for determining statistical significance*

SUMMARY

Demographics



Mean age of 48.7; 49% age 50+
93% Female, 6% Male
96% Caucasian



60% Currently married
63% Have children
49% Reside in a suburban area



57% Group coverage
20% Medicare
33% Secondary or supplemental



13% Have also been diagnosed with cancer
(6% Skin cancer)



53% Employed (FT, PT, self-employed)
64% College degree
45% Income <\$55K

96% Have other health conditions, such as:
61% Allergies
49% Depression
46% Anxiety or panic disorders
39% Overweight/Obesity
25% IBS
18% Fibromyalgia
13% Endometriosis

Greater proportion of patients <50, employed, and with group coverage in 2020 than in 2019

Physical, Emotional, and Financial Impact

86% Diagnosed with migraine only
1% Diagnosed with cluster headache only
13% Diagnosed with both

Migraine Classification (Before Treatment):

5% Low-frequency Episodic (<4 migraine days a month)
27% High-frequency Episodic (4-14 migraine days a month)
69% Chronic (15+ migraine days a month)

Top symptoms:

96% Head pain
92% Sensitivity to light
85% Brain fog
85% Sensitivity to sound
84% Difficulty concentrating
83% Fatigue

92% are aware of their migraine triggers



More than 4 in 10*

Have given up trying to explain migraine to those who don't have it
Feel migraine has made them tougher/more resilient
Grieve the life migraine stole from them



Migraine has a negative impact on finances for **40%***
19% Stopped or avoided using a medication due to cost
29% Use a financial support program

**Top 2 box on 7-pt. agreement scale*

Treatment Experience

There is room for improvement in patient satisfaction and trust with their current treatment plan

- Only **16%*** feel their migraine is controlled
- **44%*** are confident they are doing all things necessary to manage their migraine



86% of patients currently use at least one acute prescription treatment

11% currently use an acute CGRP

More than ½ currently use OTC pain medication and more than 4 in 10 an anti-nausea

49% currently use a triptan

73% of patients currently use at least one preventive prescription treatment

26% currently use a preventive CGRP

½ currently use an antidepressant

19% currently use TOPAMAX®/TROKENDI®

16% currently use BOTOX® for Migraine

Top treatment decision factors are **efficacy** (61%) and **insurance coverage** (36%)

- **8 in 10** involve their HCP in their treatment plan decisions

**Top 2 box on 7-pt. scale*

Information and Support

95% use resources to learn about or help manage their migraine

Top resources include:



80% HCP

77% Migraine-specific websites

68% Internet search

37% Facebook

48%* Actively seek out information about the latest migraine treatments

In the past 6 months, **44%** have gone online to read other patients' opinions of a medication and **41%** have visited a prescription medication's website

Content of interest includes:

- Current migraine treatments
- Symptom management
- Treatment side effects
- Triggers
- Long-term effects of medication
- Medications in clinical trials/coming to market
- Scientific research
- Stress management/relaxation techniques
- Complications of migraine



91% Currently see a HCP for their migraine

$\frac{2}{3}$ * of these patients feel their HCP provides excellent overall care

**Top 2 box on 7-pt. agreement scale*

KEY TAKE-AWAYS

Symptoms and Triggers

- **Patients have so many symptoms (a mean of 21), reinforcing the assertion that migraine is “more than just a headache”**
 - They are almost as likely to experience cognitive symptoms (95%) as they are head and neck pain (98%) with migraine
 - Other symptom experiences may be inter-related with other diagnoses, including increased likelihood of mood-related symptoms if also diagnosed with anxiety or depression, and an increased likelihood of touch-related symptoms if also diagnosed with fibromyalgia
- **Patients have so many triggers (a mean of 12)**
 - Only about $\frac{1}{3}$ say they have identified most/all of their triggers – but stacked triggers likely make it nearly impossible to trace triggers for specific migraines (even those who are aware of their triggers say they are only sometimes or less often able to identify specific triggers for any given migraine attack)

HCP Engagement

- **Although less often the primary migraine manager, PCPs are often involved as part of the migraine care team (62% say PCP is involved and 30% identify PCP as primary manager)**
 - In fact, 2 in 10 of those who also see a specialist say their PCP is their primary migraine manager – suggesting that they may see a specialist for less frequent consultations while having more consistent conversations with their PCP about migraine management
 - About 1 in 10 also have a chiropractor, therapist/psychiatrist, or pain specialist also involved in care
- **Female migraine patients are more likely than male migraine patients to be seeing a female HCP – and the relationship and candor may be stronger with this dynamic**
 - Females who see a male HCP are more likely to feel as though they are treated like a drug seeker by their physician and less likely to say their HCP is easy to talk to, a good listener, or agrees with the severity of their pain
- **HCP relationship may also be factor into use (or non-use) of preventive CGRPs**
 - Preventive CGRP-naïve patients are more likely to feel their HCP downplays/dismisses their migraine and/or makes them feel like a drug seeker when asking for pain medication and are less likely to feel their HCP clearly explains treatment options
 - They are more likely than current users to say they use Excedrin® Migraine and OTC NSAIDs – potentially to avoid asking for medication from their HCP but potentially setting them up for medication overuse headache
 - At the same time, they are more likely to say they have not tried a CGRP because their doctor has not recommended it

Impact on Quality of Life

- **Migraine patients may start to internalize their experiences over time**
 - More than 4 in 10* have given up trying to explain migraine to others who don't have it
 - When asked about actions taken to avoid triggers, patients are more likely to say they will maintain a migraine toolkit or modify their diet/activities than they are to say they will ask others to be mindful of their triggers

- **At the same time, migraine patients feel resilient in the face of pain and show a lot of empathy for others also living with migraine**
 - 4 in 10* feel migraine has made them tougher/more resilient in a lot of ways
 - Only 1 in 4** feel they are worse off than others with migraine

Preventive CGRP Experienced

- **Use of preventive CGRPs is generally similar to that seen a year ago (26% currently use and 17% in the past, versus 29% currently use and 12% in the past in *Migraine in America 2019*)**
 - Interestingly, over half (55%) of past users say they discontinued the class after trial of only one CGRP
 - This is in stark contrast to the “cycling” seen with triptans in the acute space (in which half of past triptan users discontinued the class after trial of at least three different triptans)
- **Preventive CGRP users and BOTOX® for Chronic Migraine users report efficacy outpacing typical first-line preventive treatment topiramate**
 - Self-reported efficacy of BOTOX® for Chronic Migraine and preventive CGRPs surpasses that of typical first-line preventive treatment topiramate among current users (27% vs. 35%+ saying highly effective), with AIMOVIG® receiving highest marks for efficacy among current users of preventive treatment (44%)
- **Current preventive CGRP users also report interesting ancillary outcomes of preventive CGRP use**
 - More than 4 in 10 say trigger “thresholds” have increased
 - 3 in 10 say acute treatment seems to work better and/or they have seen increased productivity

Preventive CGRP Naïve

- **Preventive CGRP-naïve patients seem more focused on other types of management, despite many seeming to be good candidates for a preventive CGRP**
 - Even though they report lower use of other preventives than current CGRP users, over ½ have had experience with TROKENDI® or TOPAMAX® – and only 17% feel controlled on their current treatment plan
 - Despite lack of control, they are currently more interested in homeopathic and natural remedies and are more likely to be seeing a chiropractor
- **Compared to preventive CGRP-naïve patients, current CGRP users tend to experience more impact on quality of life and are more likely to be seeing a specialist (neurologist or headache specialist)**
 - Because they are seeing specialists, however, access and appointment availability is more limited, which may make it harder to provide timely feedback on how they are doing with their CGRP

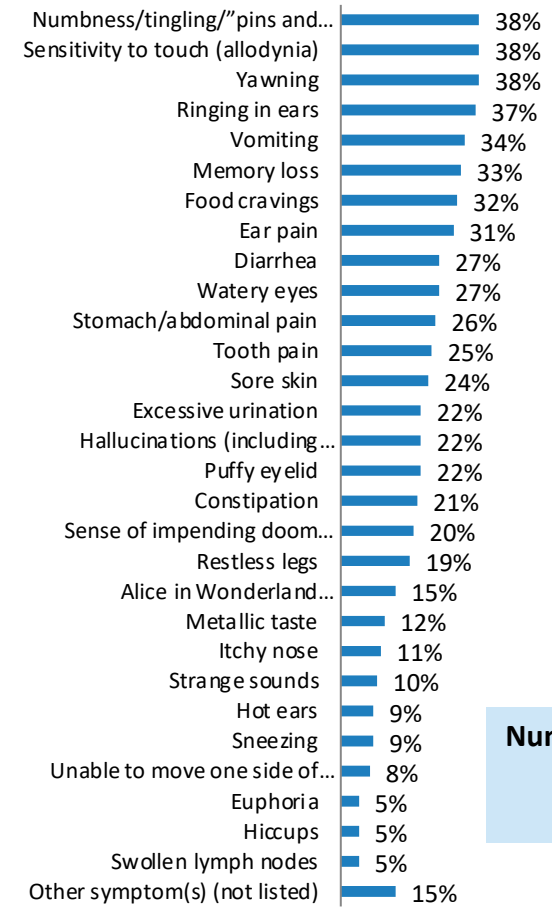
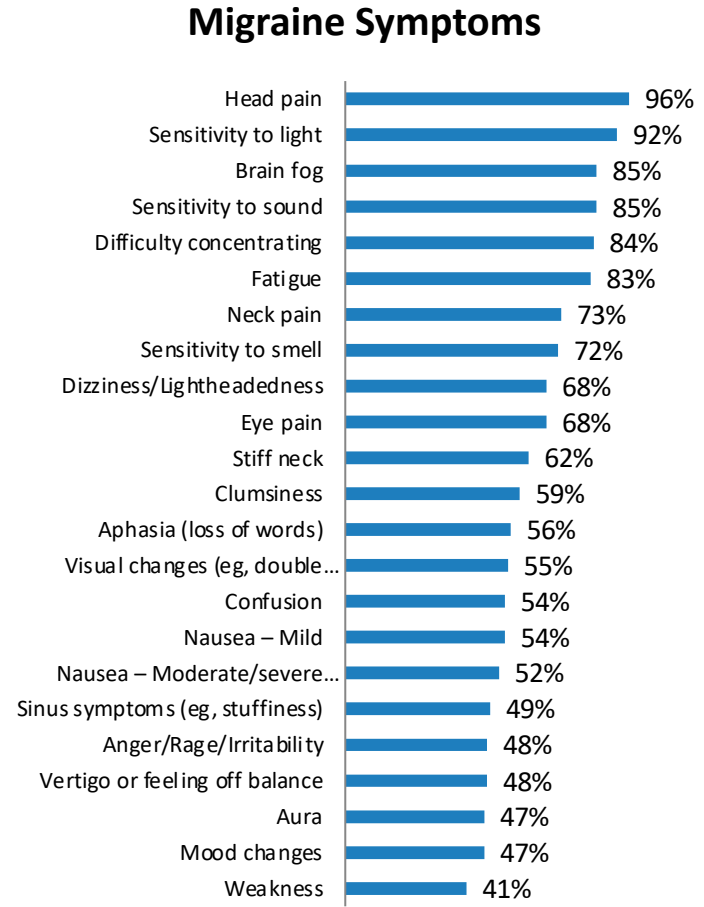
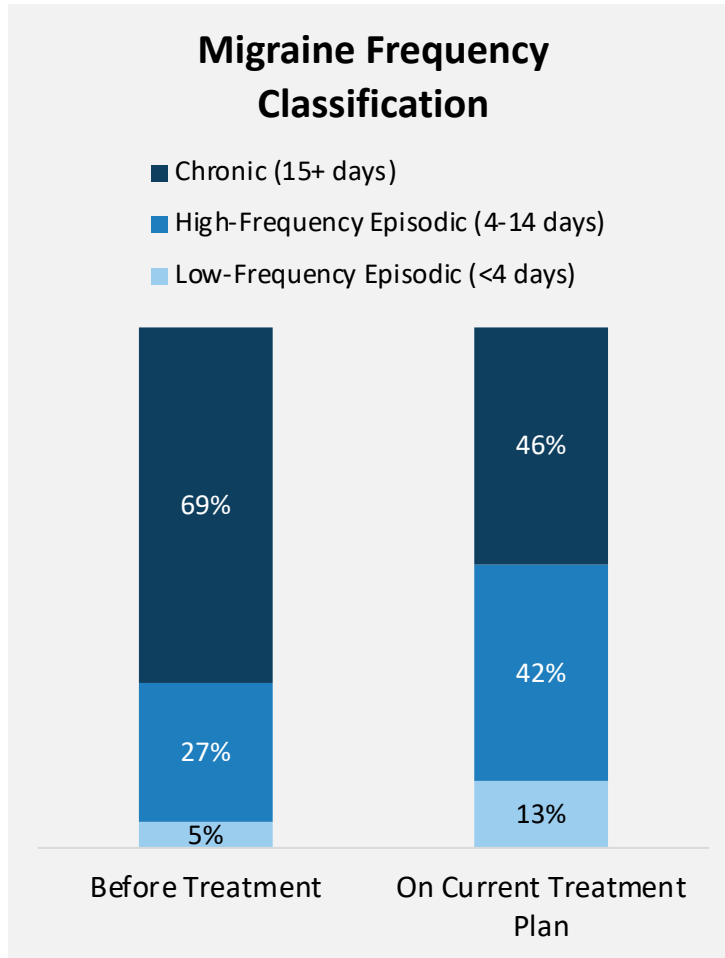
Acute CGRP Experience

- **11% of patients are currently using an acute CGRP (gepant), with 7% using UBRELVY™ and 4% using NURTEC™ ODT**
 - These patients tend to be more severe, uncontrolled on their current treatment, and seeing a specialist; 53% of these patients are also currently on a preventive CGRP
 - Predictably, availability of manufacturer financial support seems to be a key driver of early uptake; over ½ are currently using copay cards or some type of company-sponsored financial assistance
 - Most have used the brands for less than 3 months, limiting ability to generalize from self-reported metrics

TRIGGERS AND SYMPTOMS



Head pain and sensitivity to light are the most common symptoms experienced



Number of symptoms
 Mean = 21.2
 Median = 21.0

Base=All, n=4,693

Q9) Before starting your current migraine treatment plan, how many days a month did you have....

Q10) On your current migraine treatment plan, how many days a month do you have....

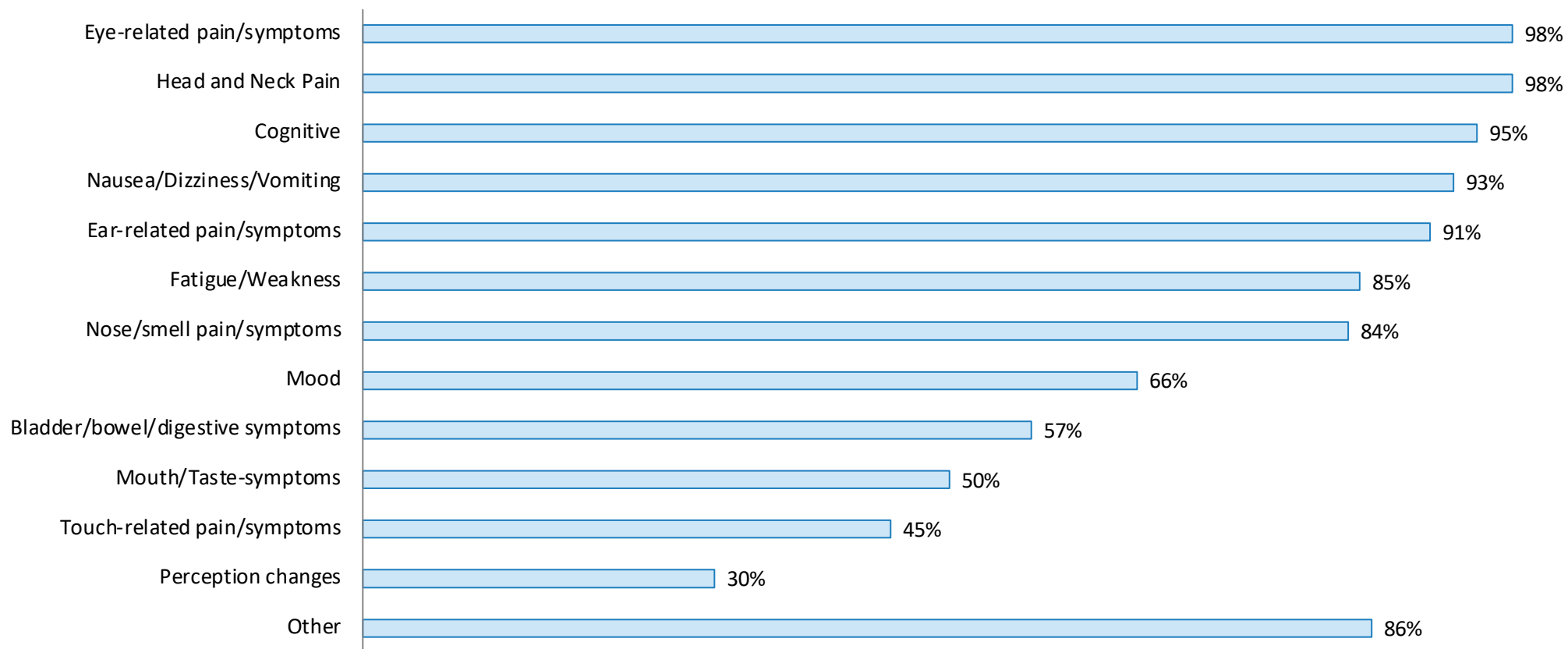
Q12) What symptoms do you typically experience when you have a migraine? (Select all that apply)

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Eye-related pain and symptoms, along with head and neck pain, are the leading types of symptoms experienced

Symptom Groupings

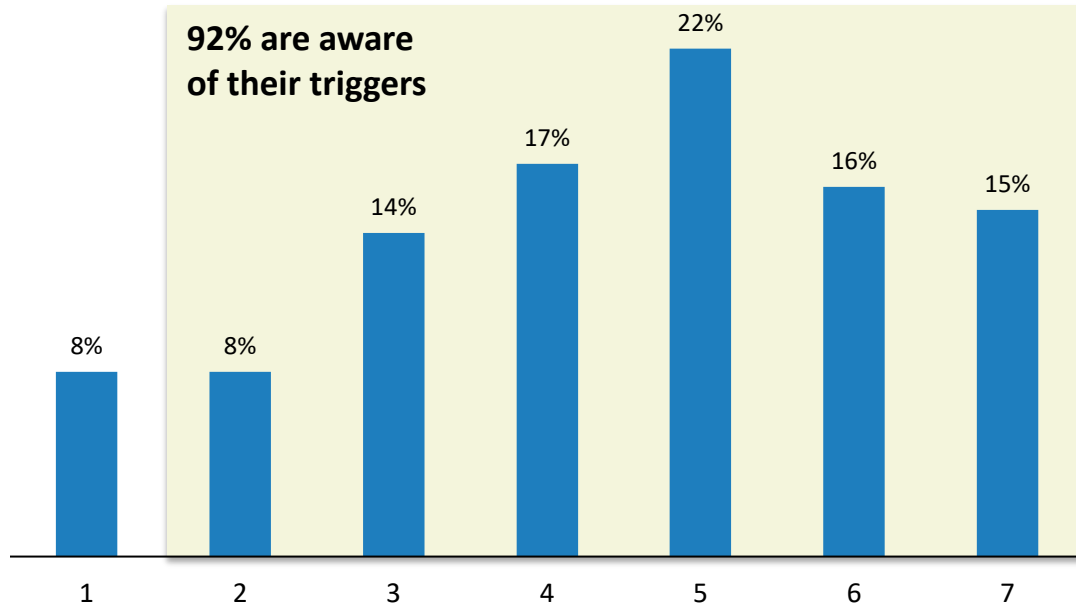


Base=All, n=4,693

Q12) What symptoms do you typically experience when you have a migraine? (Select all that apply)

More than 9 in 10 are aware of their migraine triggers, and more than 8 in 10 of those patients identify the specific triggers

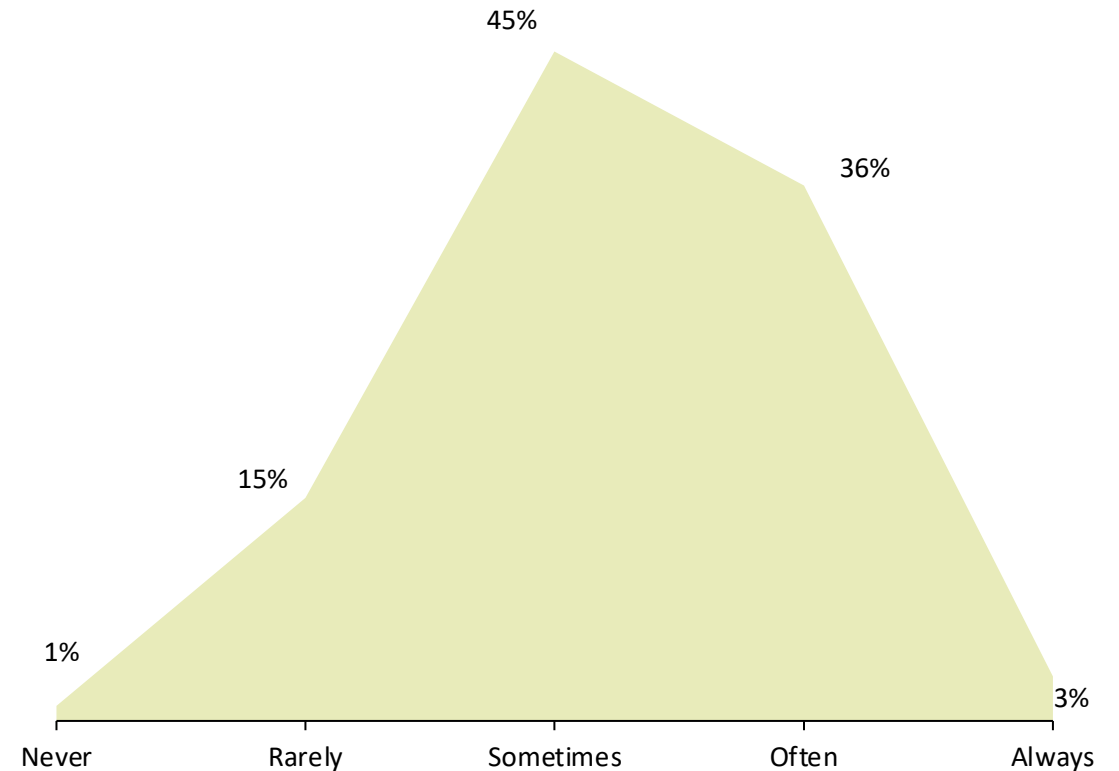
Awareness of Migraine Triggers



*Those aware of their triggers are more likely to see a Neurologist or Headache specialist as their main HCP; however, are similar in their level of control on their current treatment plan to their non-aware counterparts**

Frequency of Identifying Migraine Trigger(s)

Aware of Migraine Triggers



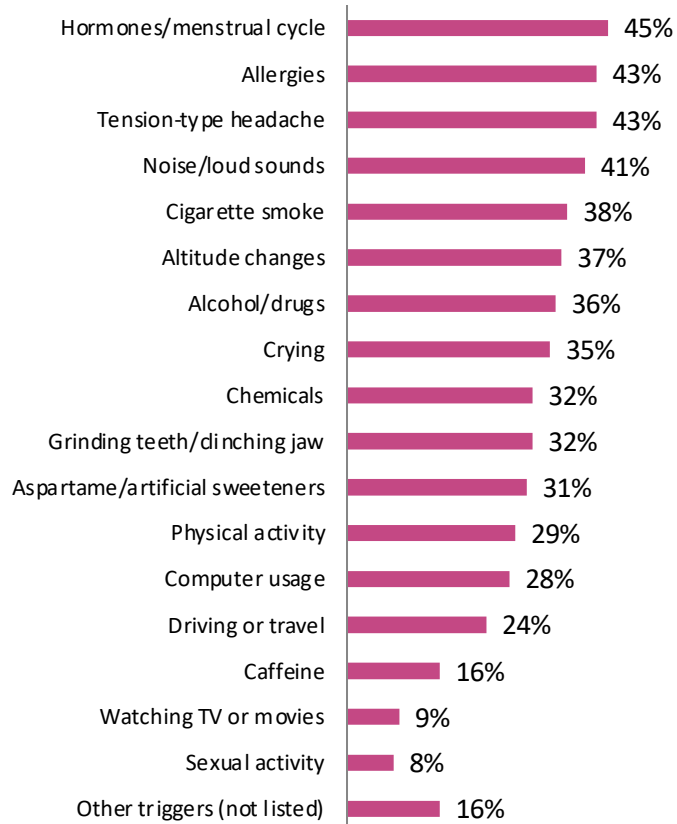
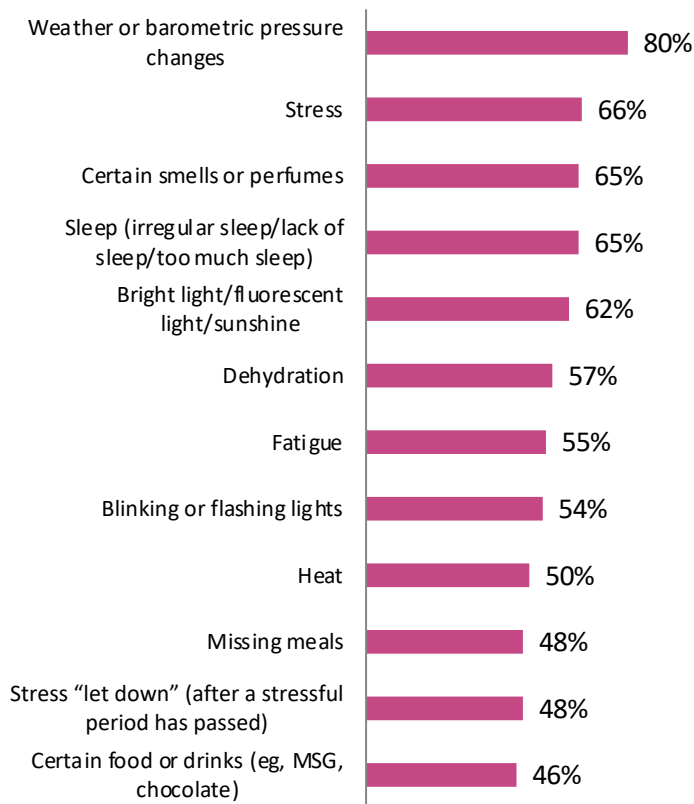
Base=All, n=4,693 | Q14) To what extent have you been able to identify your migraine triggers? (1 = Not at All/Have Not Identified to 7 = Very Well/Have Identified Most Extremely)

Base=Aware of triggers, n=4,330 | Q15) How often are you able to identify the **specific trigger or triggers** of a migraine?

Weather, barometric pressure, foods, and stress are leading migraine triggers

Migraine Triggers

Aware of Migraine Triggers



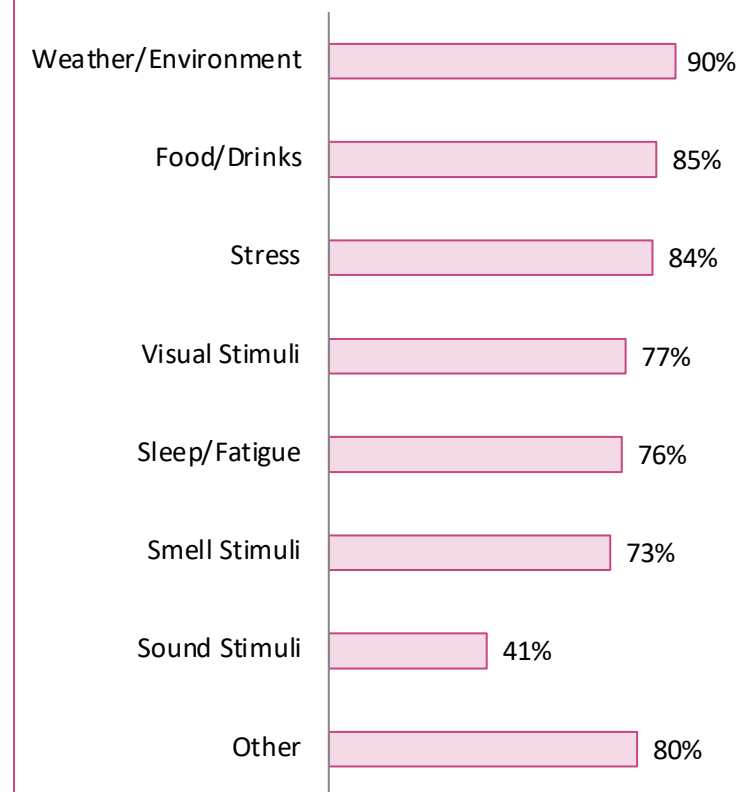
Number of triggers

Mean = 12.4

Median = 12.0

Trigger Groupings

Aware of Migraine Triggers



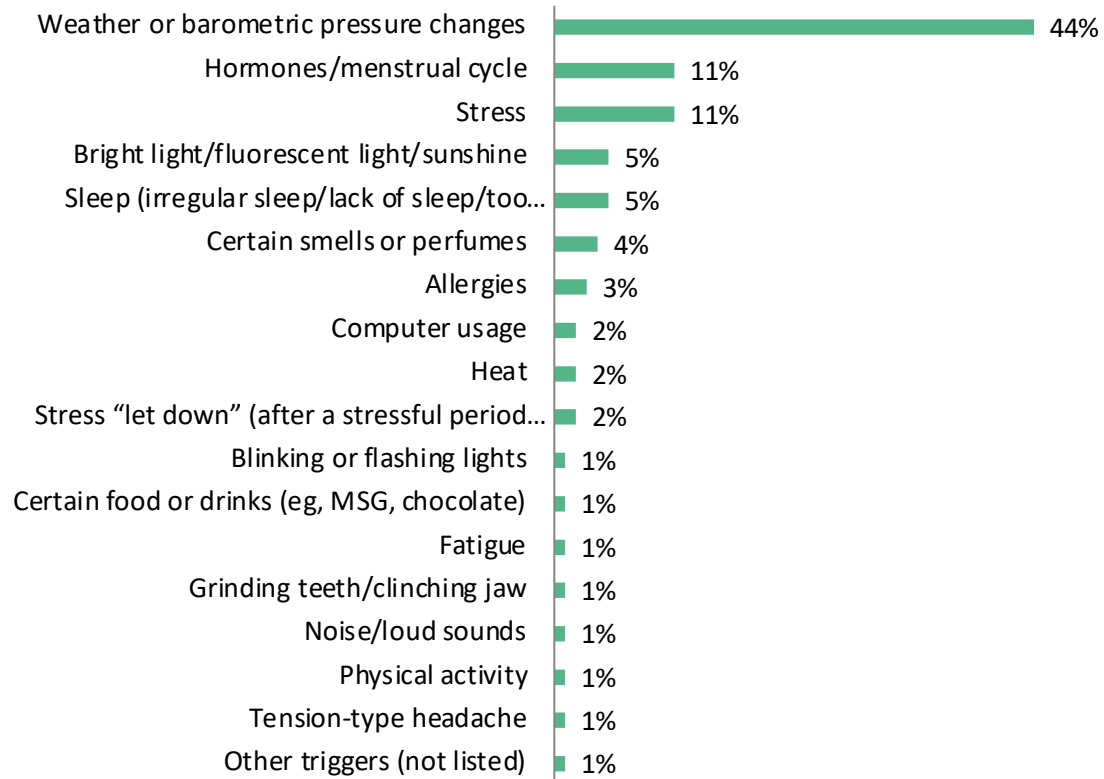
Base=Aware of triggers, n= 4,330

Q16) Which of the following trigger your migraine? (Select all that apply)

Triggers hardest to avoid are those that are out of their control, such as the weather or stress

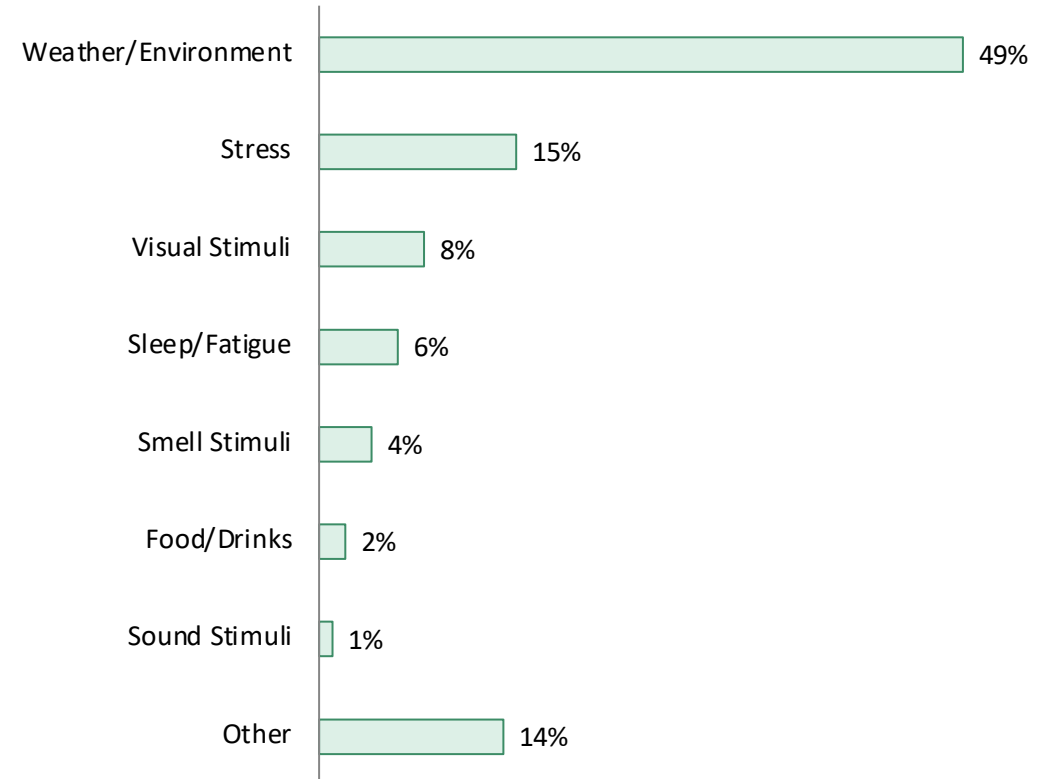
Trigger Hardest to Avoid

Aware of Migraine Triggers (Mentioned by 1% or more)



Trigger Hardest to Avoid Groupings

Aware of Migraine Triggers

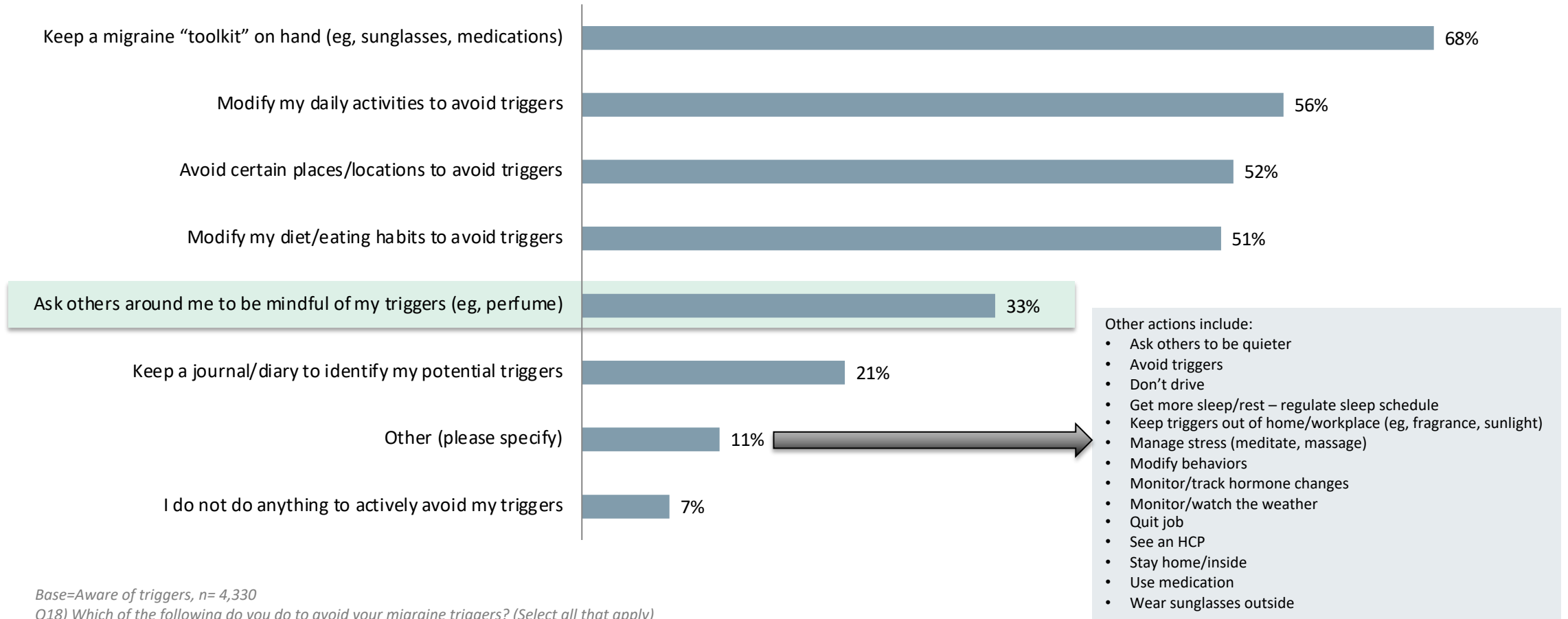


Base=Aware of triggers, n= 4,330

Q17) Which of your triggers is the **hardest to avoid**?

Despite many potential triggers, patients are less likely to ask others to be mindful; rather, they prepare and react themselves

Actions Take to Avoid Triggers *Aware of Migraine Triggers*



Base=Aware of triggers, n= 4,330

Q18) Which of the following do you do to avoid your migraine triggers? (Select all that apply)



Those also suffering from fibromyalgia face more symptoms and triggers

Comorbidity	Allergies n=2,840	Anxiety or panic disorders n=2,150	Depression n=2,307	Endometriosis n=595	Fibromyalgia n=851	IBS n=1,185
Symptoms Mean	22.3	22.7 Higher than allergies and depression*	22.1	23.6 Higher than allergies, anxiety, and depression*	24.4 Highest of all*	23.2 Higher than allergies, anxiety, and depression*
Median	22.0	22.0	21.0	23.0	24.0	23.0
Types		72% experience mood symptoms (>allergies, endometriosis, IBS)*	97% experience cognitive symptoms (>allergies, anxiety, IBS)*		62% experience touch-related symptoms (>all others)*	
Aware of Triggers	93%	92%	92%	92%	93%	93%
Triggers Mean	13.1	13.5 Higher than allergies and depression*	13.2	13.5	14.2 Highest of all*	13.5 Higher than allergies*
Median	13.0	13.0	13.0	13.0	14.0	13.0
Types					95% weather/environment stimuli, 82% smell stimuli, and 53% sound stimuli (> all others)*	

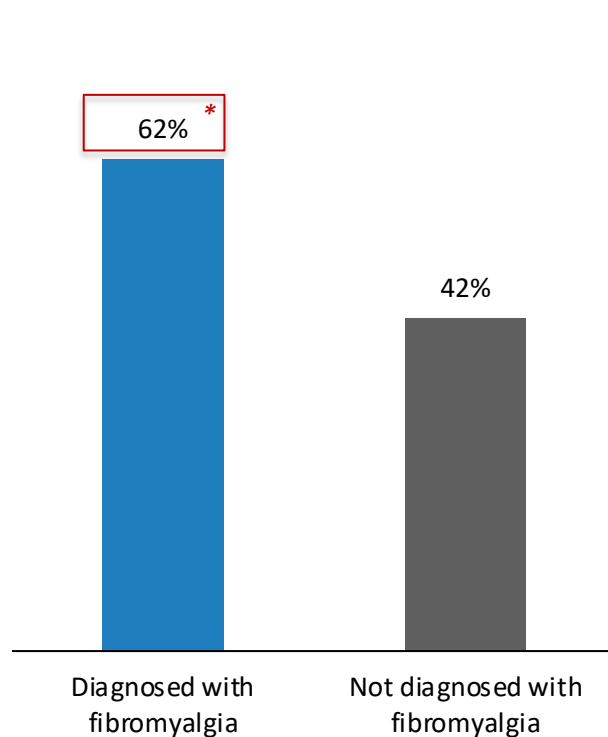
“With three chronic illnesses (Fibromyalgia, EBV, Lyme) it is confusing as to what causes symptoms “

Similarities across these comorbidities are head and neck pain symptoms, awareness of triggers, and having food/drink triggers

Touch and mood-related migraine symptoms show a relationship to other diagnoses

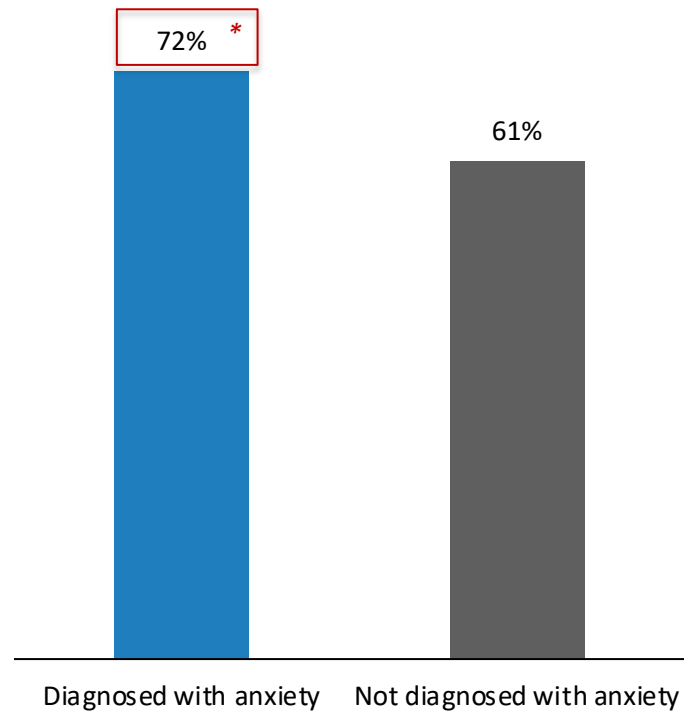
% Experiencing Touch-Related Symptoms

Based on Fibromyalgia Diagnosis



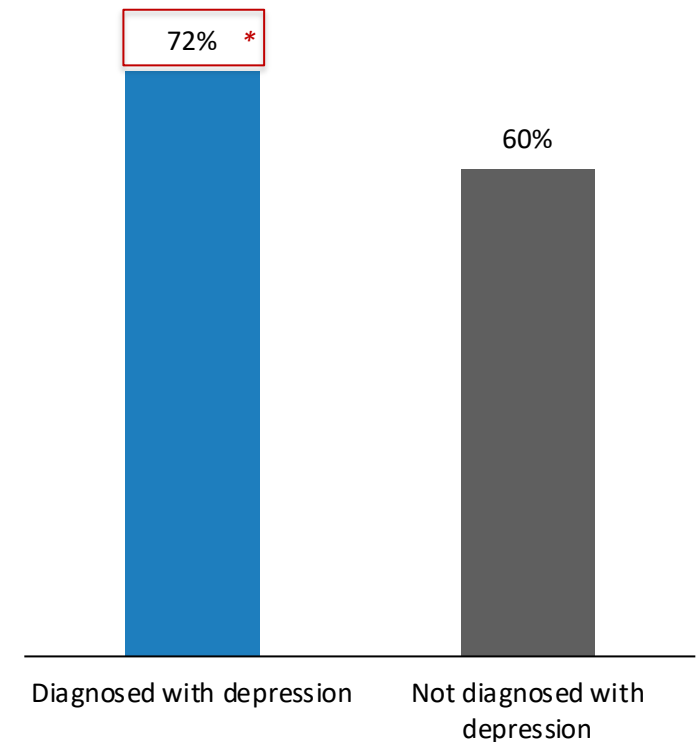
% Experiencing Mood-Related Symptoms

Based on Anxiety Diagnosis



% Experiencing Mood-Related Symptoms

Based on Depression Diagnosis

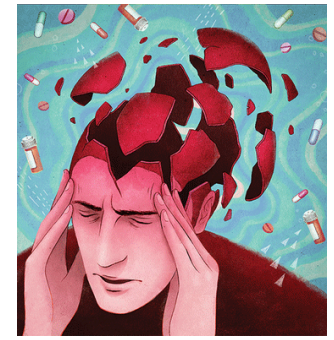
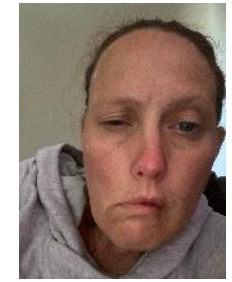
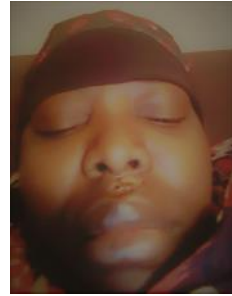
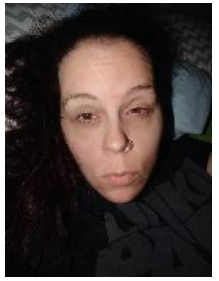


Those diagnosed with fibromyalgia also report higher sensitivity to certain triggers, including weather, smell, and sound-related triggers

QUALITY OF LIFE

Over 1K patients shared an image to represent their migraine

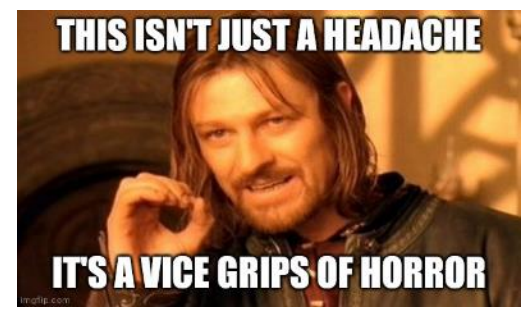
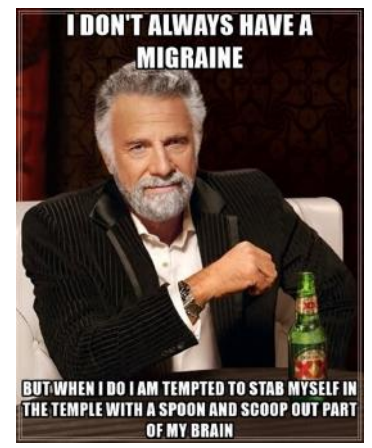
Pictures of themselves during a migraine



Depictions of what their head feels like during a migraine



And a variety of memes that make light of migraine, while shedding the harsh reality



Base=Chose to answer, n=1,096

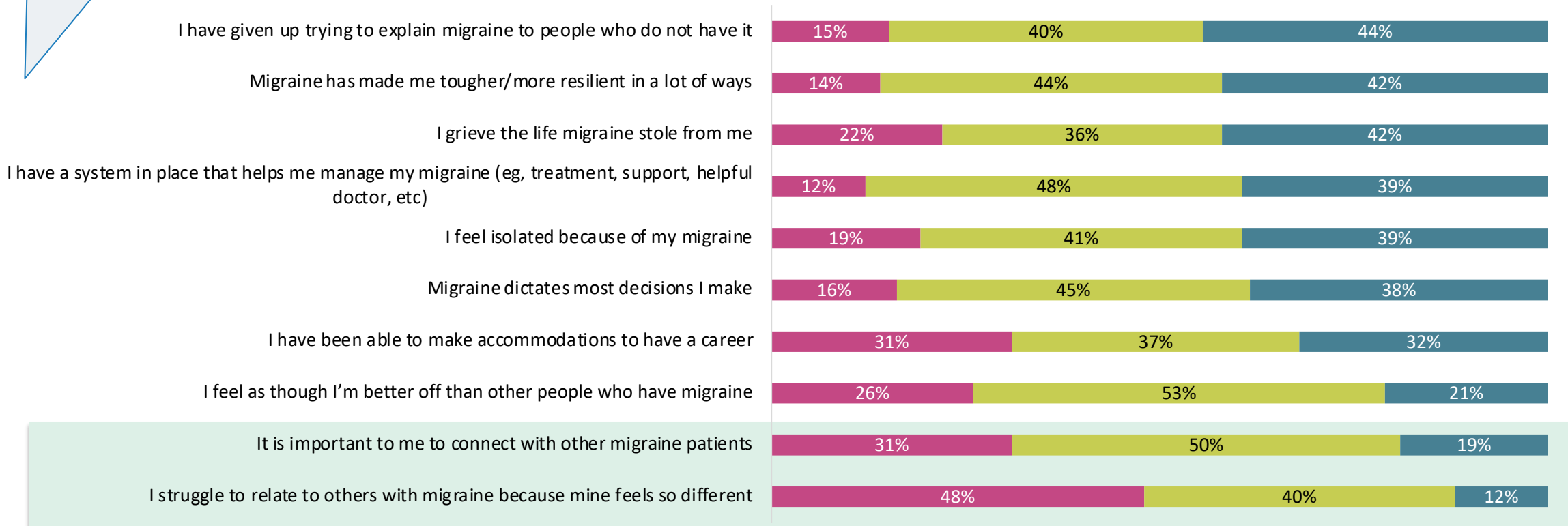
Q13) [OPTIONAL] Post a picture/image/meme that best represents what it feels like when you have a migraine. What about this image represents that feeling?

While patients don't struggle to relate to other patients, it's interesting that most don't feel it is important to connect with other migraine patients

Quality of Life Viewpoints

"Chronic migraine can be very lonely and isolating."

Strongly Disagree (1,2) Neutral (3,4,5) Strongly Agree (6,7)



Base=All, n=4,693

Q30) Rate your level of agreement with the following statements. (1 = Strongly Disagree to 7 = Strongly Agree)

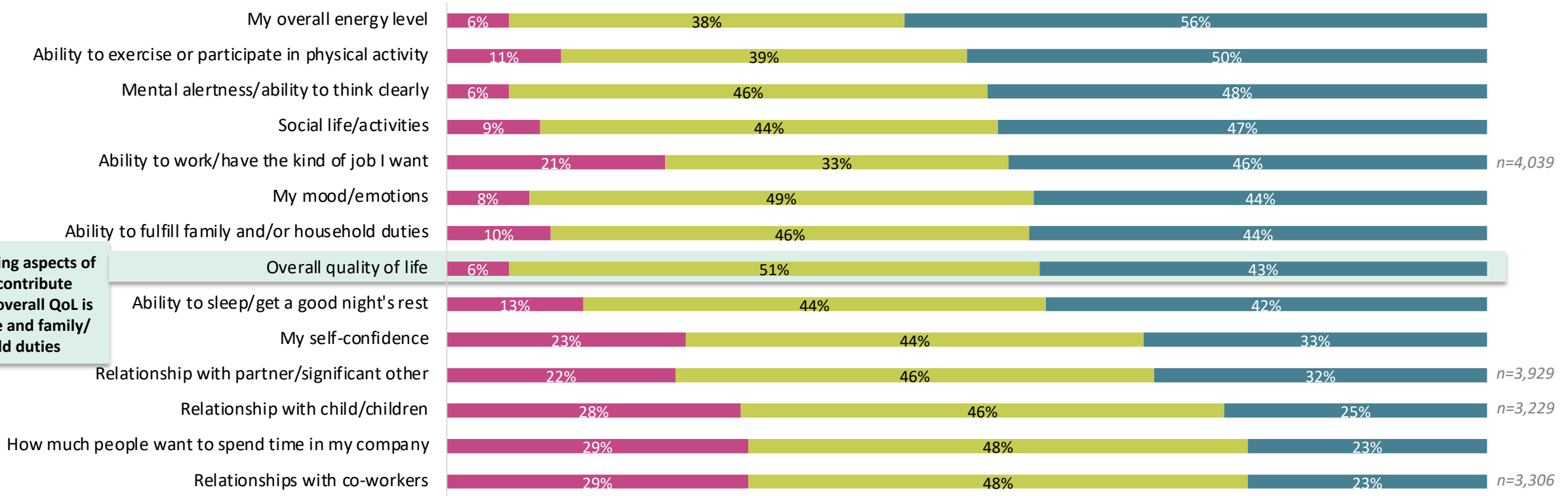
"Feeling sorry for people whose migraines are worse than mine"



There are very few areas of one's life that migraine hasn't negatively impacted

Extent Migraine Impacts Relationships and Quality of Life

■ No Negative Impact (1,2) ■ Moderate Impact (3,4,5) ■ Significant Negative Impact (6,7)



The leading aspects of life that contribute most to overall QoL is social life and family/household duties

Base=All, n=4,693 (unless noted otherwise for N/A)

Q31) To what extent does your migraine impact each of the following? (1 = No Negative Impact to 7 = Significant Negative Impact)

Q32) To what extent does your migraine impact each of the following? (1 = No Negative Impact to 7 = Significant Negative Impact)

"This survey made me really think about how migraine impacts so many other aspects of my life. I hadn't really thought about the impact on my career and financial situation before."

Migraine patients wish others knew about both the physical and quality of life impact that migraine results in

That migraine and its symptoms are real, and more than head pain

“That I’m not faking it.”

“That it's not just a headache.”

“That they are not made up, I am not seeking attention, I am not exaggerating, I’m not faking, and that people with chronic migraine are actually awesome warriors.”

The negative impact migraine has on all aspects of a patient’s life

“How debilitating it really is.”

“That it literally does affect everything I do - even little things like the position that I sit in or the kind of soap I use.”

“The impact on my daily living. Example...When I do have a migraine the next day I have to recover and I am totally useless doing any normal daily activities.”

“That much of my life is controlled by my migraines . . . I feel like a prisoner.”

A patient cannot predict or control migraine

“That it is not something we are in control of, it is in fact a disability.”

“That just because I'm functioning doesn't mean I'm ok. I have lived with disease for so many years I've adapted to a certain level of pain and discomfort and can just deal with it. Other times it takes me completely out. Its unpredictable”

“...That I honestly CANNOT control when my head is going to hurt. And for the love of all that is holy will you please be considerate and not take a bath in cologne/perfume?”

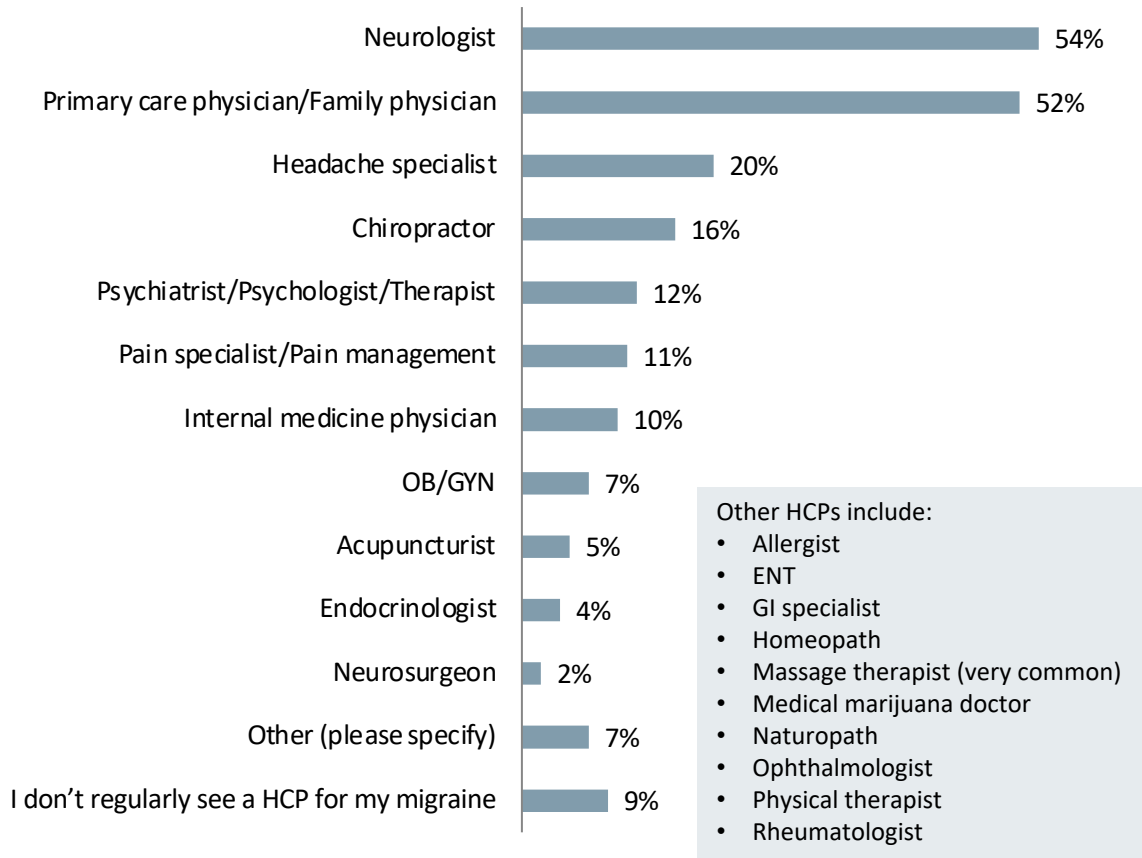
Base=Chose to answer, n=2262

Q35) [OPTIONAL] What do you wish other people in your life knew about what it's like to live with migraine?

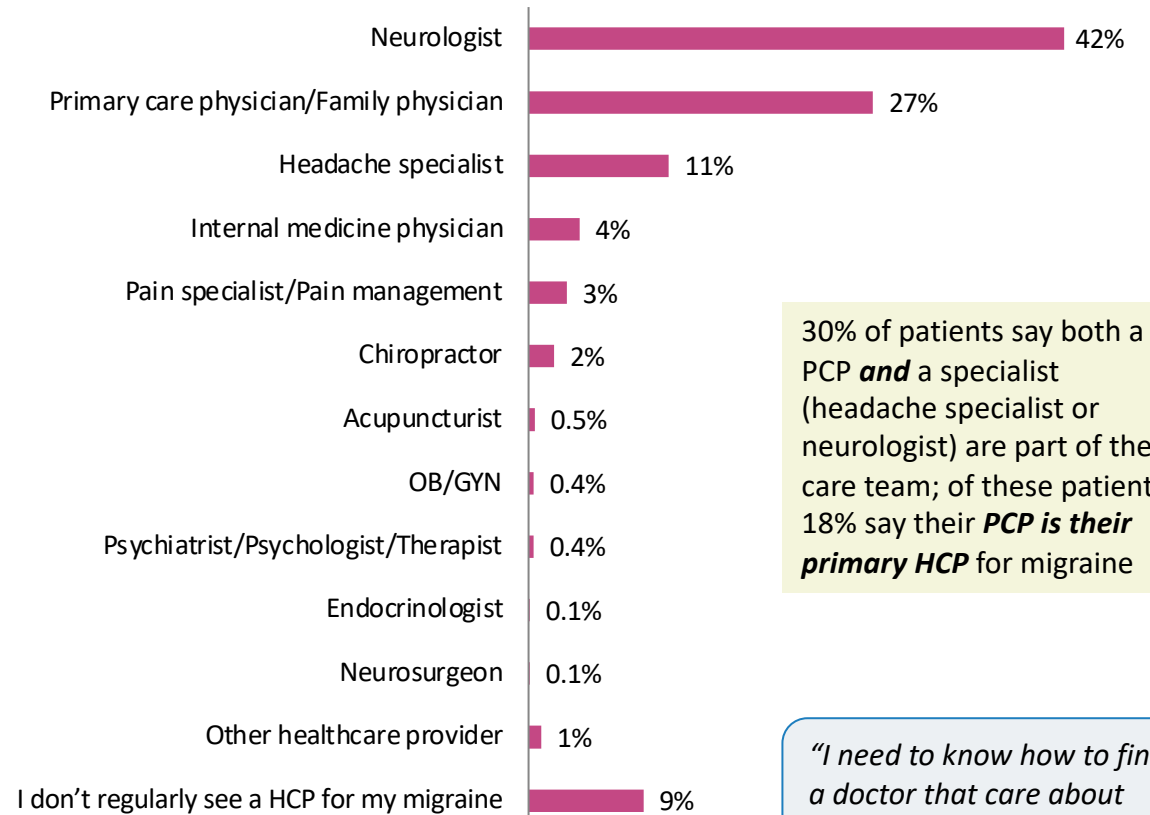
HCP AND ACCESS TO CARE

Neurologists and PCPs are prevalent in a patient's migraine care team

HCPs Currently Seen for Migraine



Main HCP Currently Seen for Migraine



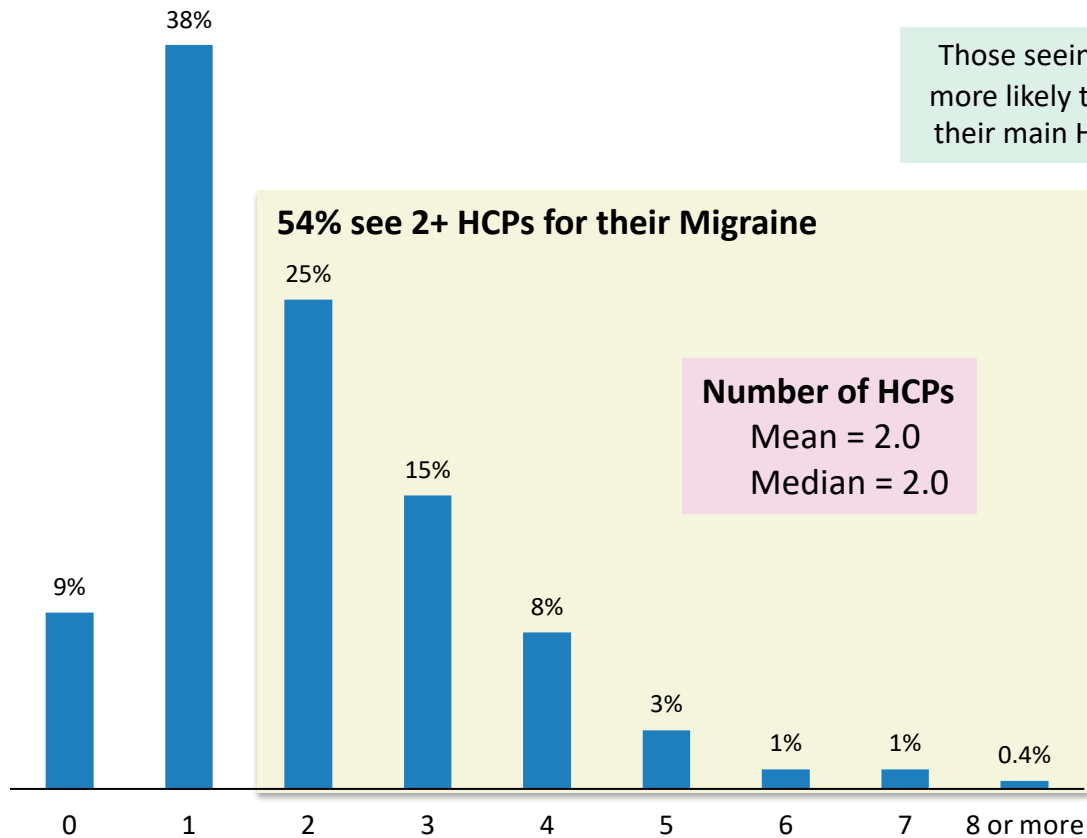
30% of patients say both a PCP **and** a specialist (headache specialist or neurologist) are part of their care team; of these patients, 18% say their **PCP is their primary HCP** for migraine

"I need to know how to find a doctor that care about chronic daily migraines"

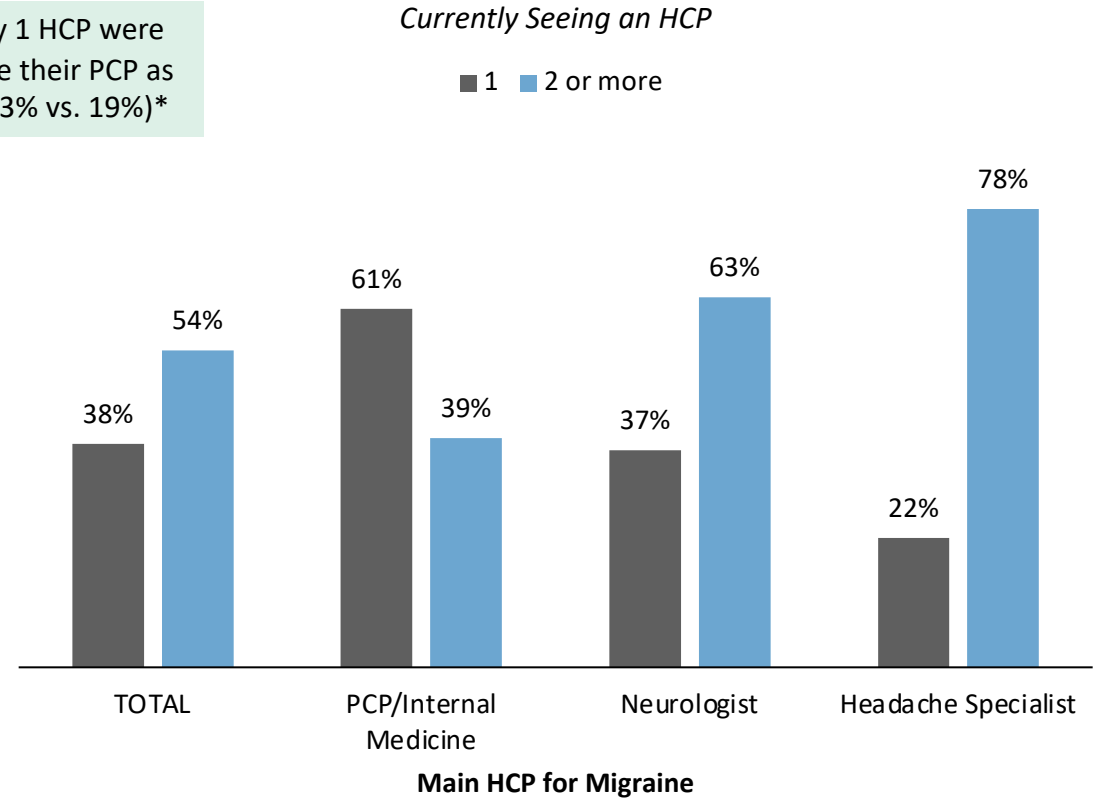
Base=All, n=4,693 | Q21) Which healthcare providers do you **currently** see for managing and/or treating your migraine? (Select all that apply)
 Base=See more than 1 HCP for migraine, n=2,518 | Q22) Who is the **main** healthcare provider that you **currently** see for managing and/or treating your migraine?
 Main HCP Currently Seen was based on Q21 and Q22

More than ½ of patients see 2 or more HCPs for their migraine

Number of HCPs Seen for Migraine



Number of HCPs in Migraine Care Team by Main HCP for Migraine



Base=All, n=4,693

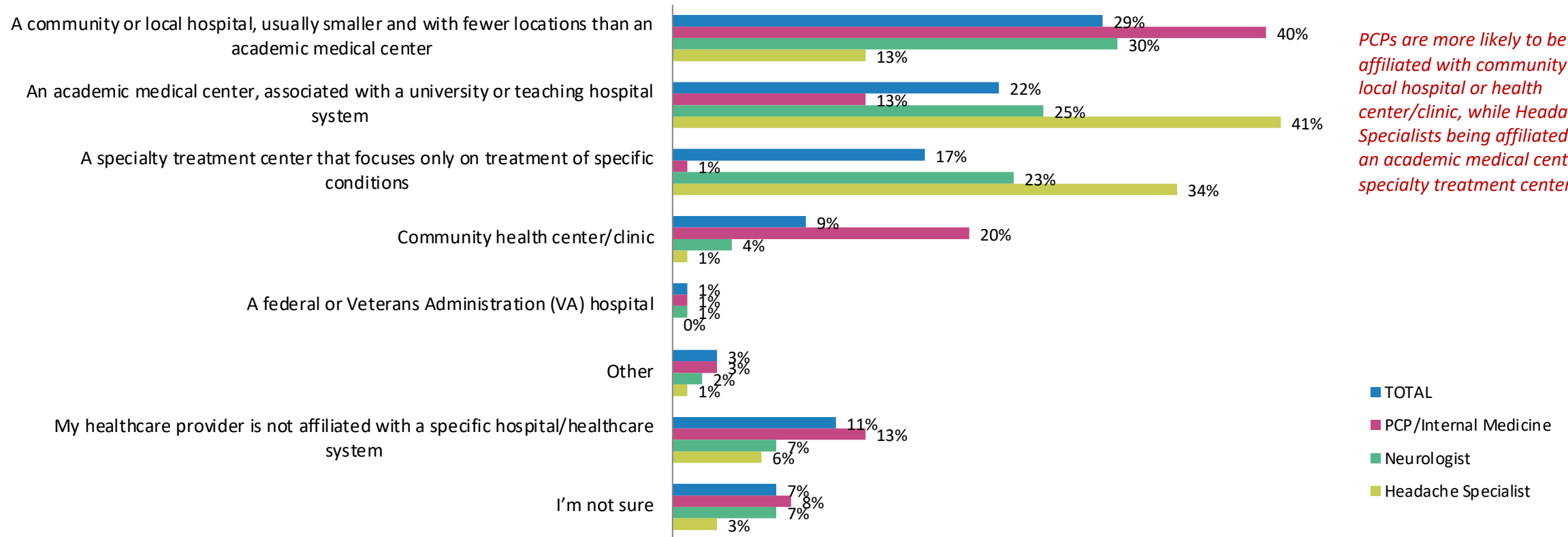
Q21) Which healthcare providers do you **currently** see for managing and/or treating your migraine? (Select all that apply)



Main HCPs are affiliated with a local hospital or academic medical center

Main HCP's Affiliation

Currently Seeing an HCP



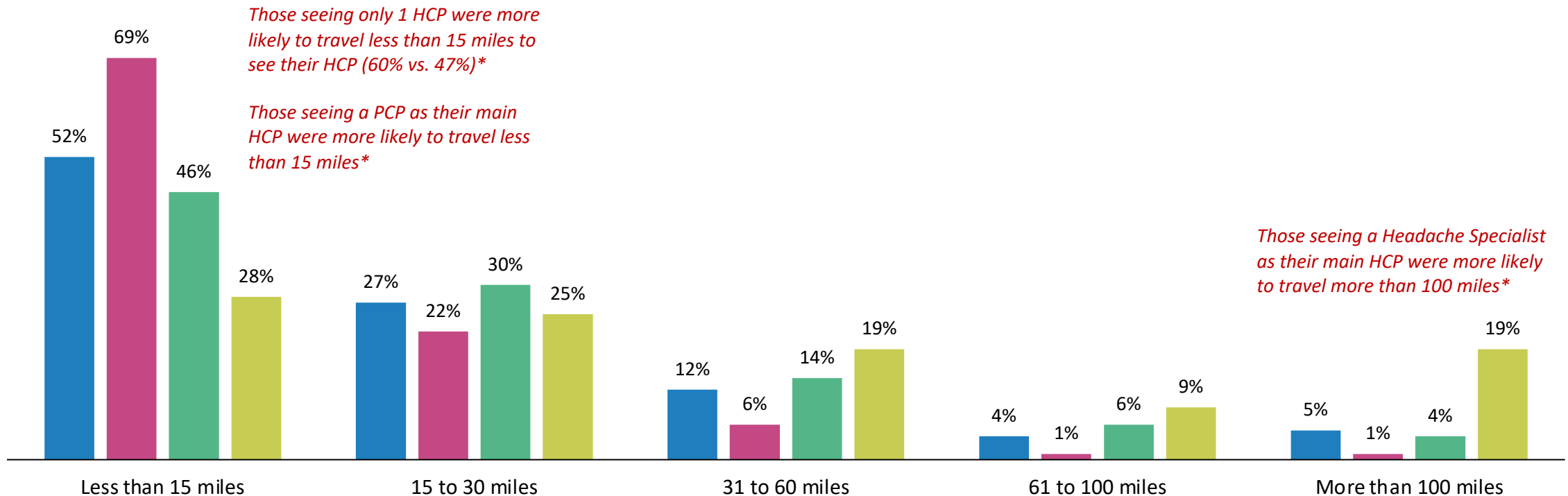
Base=Currently see an HCP for migraine; TOTAL, n=4,289; Main HCP is PCP, n=1,427, Main HCP is Neurologist, n=1,955; Main HCP is Headache Specialist=511
Q23) Which of the following best describes the type of hospital or healthcare system that the healthcare provider who primarily manages your migraine is affiliated with?



Most migraine patients don't travel farther than 30 miles to see their main HCP, although 2 in 10 of those who see a headache specialist travel more than 100 miles

Distance Traveled to See Main HCP
Currently Seeing an HCP

■ TOTAL ■ PCP/Internal Medicine ■ Neurologist ■ Headache Specialist



Base=Currently see an HCP for migraine; TOTAL, n=4,289; Main HCP is PCP, n=1,427, Main HCP is Neurologist, n=1,955; Main HCP is Headache Specialist=511
Q24) About how far do you travel to visit your healthcare provider?



PCPs are similar to their specialist counterparts for the basics, but when it comes to understanding migraine and explaining treatments – specialists excel

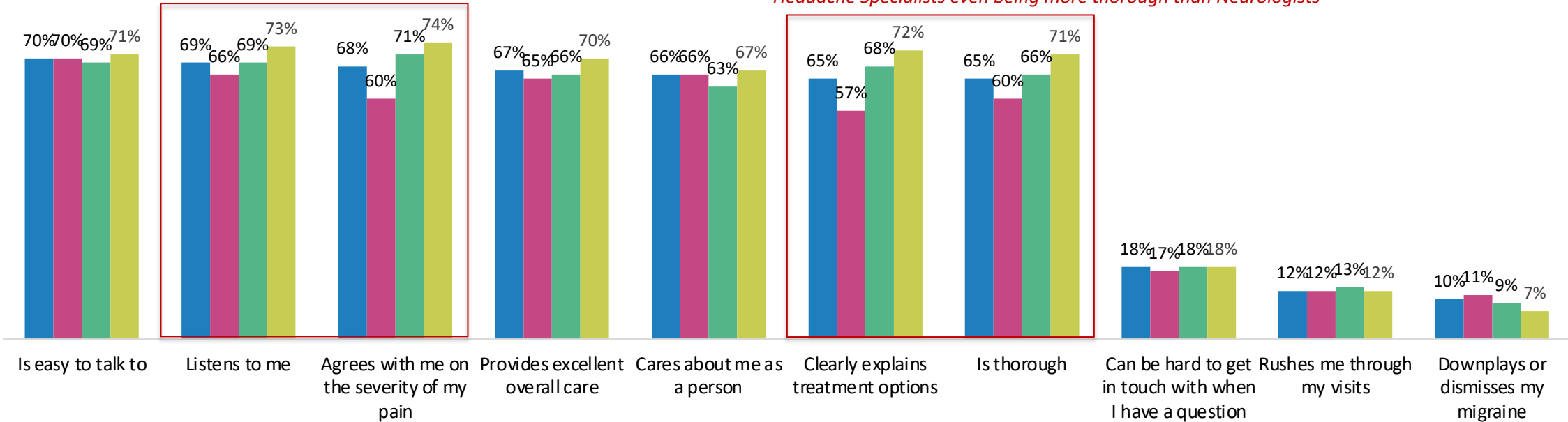
Interpersonal and Professional Skills That Describes Main HCP Very Well

Currently Seeing an HCP – Extremely Well Top 2 Box Ratings (6,7)

■ TOTAL ■ PCP/Internal Medicine ■ Neurologist ■ Headache Specialist

*PCPs need to do a better job of listening and agreeing with patients on their pain severity than their counterparts**

*Neurologists and Headache Specialists are thought to be more thorough and explain treatment options more clearly than PCPs, with Headache Specialists even being more thorough than Neurologists**



Base=Currently see an HCP for migraine; TOTAL, n=4,289; Main HCP is PCP, n=1,427; Main HCP is Neurologist, n=1,955; Main HCP is Headache Specialist=511
 Q25) How well does each of the following describe the healthcare provider who manages your migraine? (1 = Does Not Describe at All to 7 = Describes Very Well)

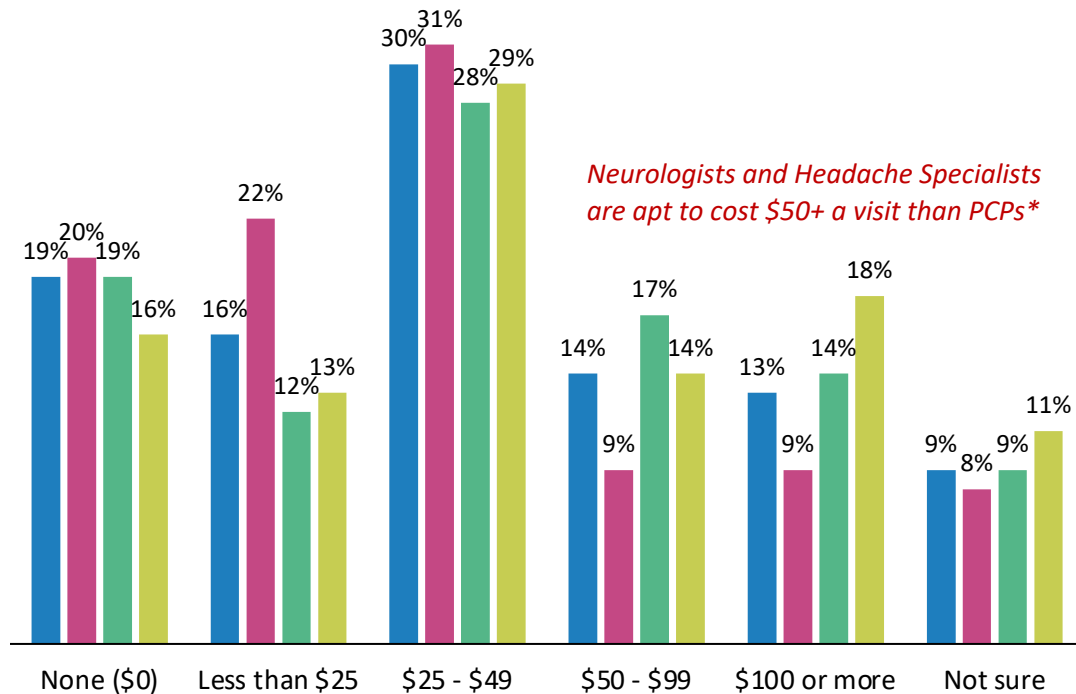


While providing a higher level of care, specialists come with higher out-of-pocket costs and potential delays in accessing patient care

Cost to See Main HCP

Currently Seeing an HCP

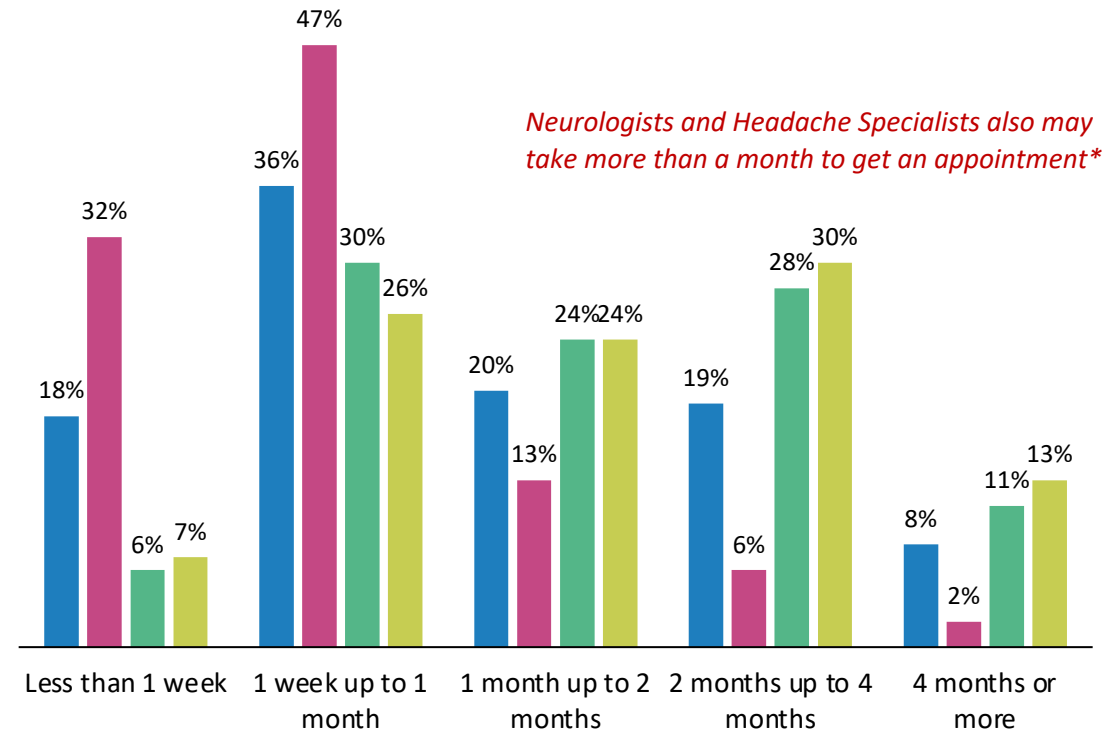
■ TOTAL ■ PCP/Internal Medicine ■ Neurologist ■ Headache Specialist



Time to Get Appointment with HCP

Currently Seeing an HCP

■ TOTAL ■ PCP/Internal Medicine ■ Neurologist ■ Headache Specialist



Base=Currently see an HCP for migraine; TOTAL, n=4,289; Main HCP is PCP, n=1,427; Main HCP is Neurologist, n=1,955; Main HCP is Headache Specialist=511

Q27) About how much do you pay for each visit with your healthcare provider?

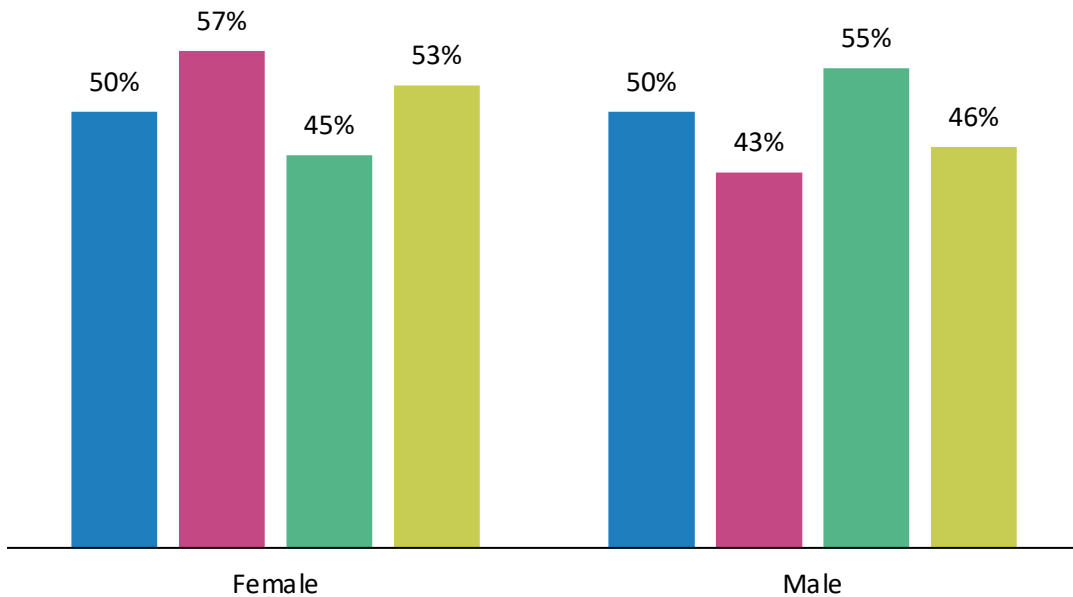
Q28) About how far ahead do you need to schedule an appointment to see your healthcare provider?

PCPs seen for migraine are more likely to be Female, while Neurologists are typically Male*

Main HCP Gender
Currently Seeing an HCP

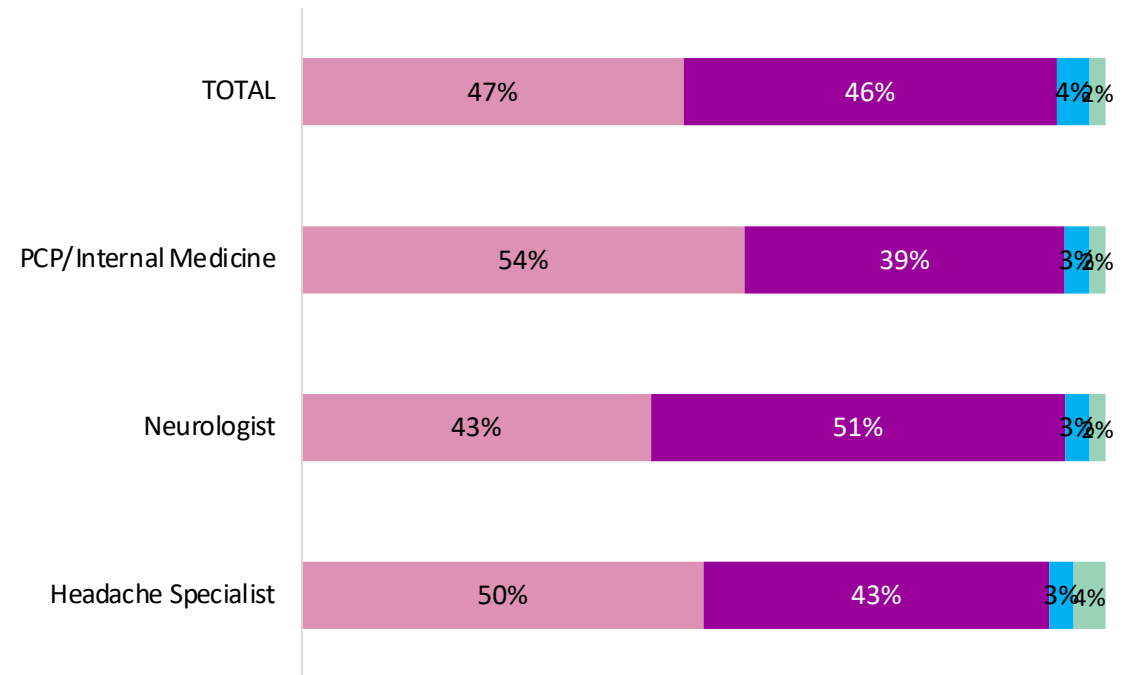
■ TOTAL ■ PCP/Internal Medicine ■ Neurologist ■ Headache Specialist

Those seeing only 1 HCP were more likely to have a Female as their main HCP than those seeing 2+ HCPs (52% vs. 48%)*



Patient and HCP Gender
Currently Seeing an HCP

■ Female Patient-Female HCP ■ Female Patient-Male HCP
■ Male Patient-Male HCP ■ Male Patient - Female HCP



Base=Currently see an HCP for migraine; TOTAL, n=4,289; Main HCP is PCP, n=1,427; Main HCP is Neurologist, n=1,955; Main HCP is Headache Specialist=511
Q26) What is the gender of the healthcare provider who manages your migraine?



Both the HCP's interpersonal skills and an understanding of migraine are crucial in the HCP-migraine patient relationship

"He's amazing because he has never dismissed my pain or questioned my experience."

HCP Strengths

- Listens to patient/attentive
- Willing to try new medications
- Knowledgeable about migraines and/or latest treatments
- Presents several treatment options
- Cares about patient
- Thorough – treats the “whole” patient
- Accessible/able to visit or contact

"Willingness to think outside the box. Regularly asks what my goals for treatment are. Is willing to listen to my thought process about what I'm going through."

"He listens to me thoroughly and values my opinion. I wish he was available more easily"

HCP Weaknesses

- Hard to reach or is not available
- Not up to date on latest treatments (or offer them)
- Does not take pain or symptoms seriously – may attribute to another health condition
- Treats patient like a drug seeker
- Does not care and/or listen

"Be more responsive. I feel she takes a one size fits all approach to medications"

"I don't like, but do not want to try to find another doctor. Anything wrong with me gets blamed on my multiple sclerosis and in my 30's my hormones and endometriosis"

"He is a very talented and knowledgeable Dr but he doesn't take the time to actually listen. My migraines have gotten worse as I have gotten older."

Base=Currently see an HCP for migraine and chose to answer, n=2078
Q29) [OPTIONAL] What do you like about the healthcare provider who manages/treats your migraine? What could he/she do better?

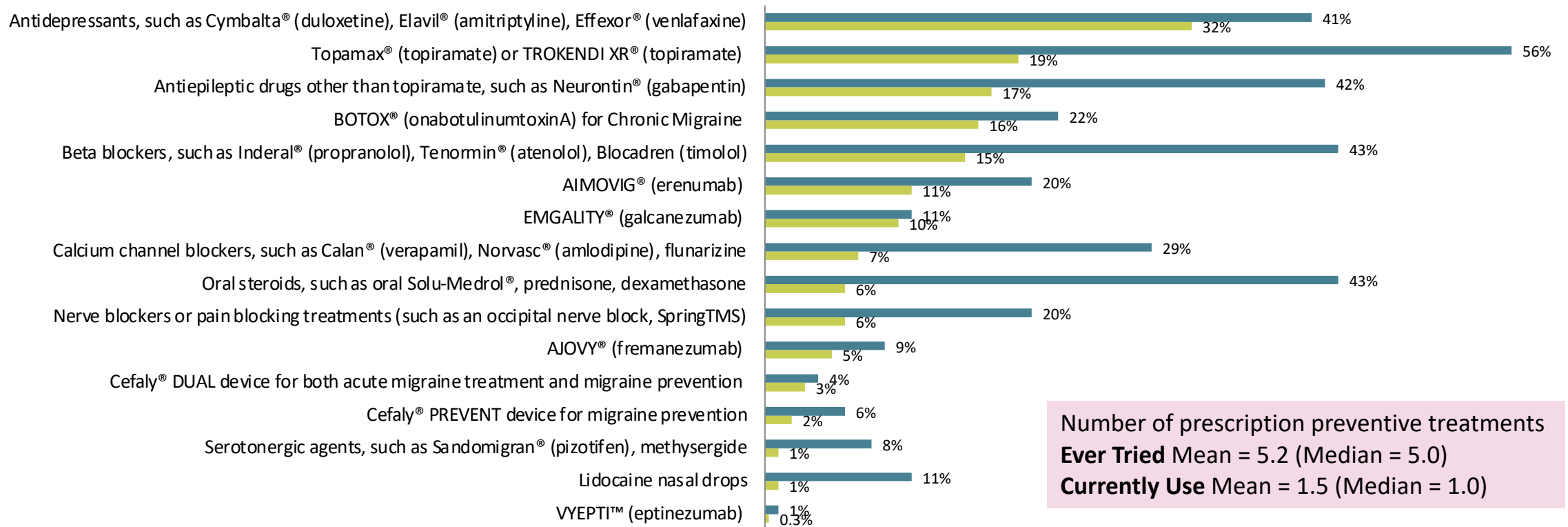
TREATMENT EXPERIENCE



73% of patients currently use a preventive prescription treatment, such as BOTOX®, a CGRP, medication for another health condition, or a device

Preventive Treatment Experience

■ Used in the Past, but No Longer Use ■ Currently Use



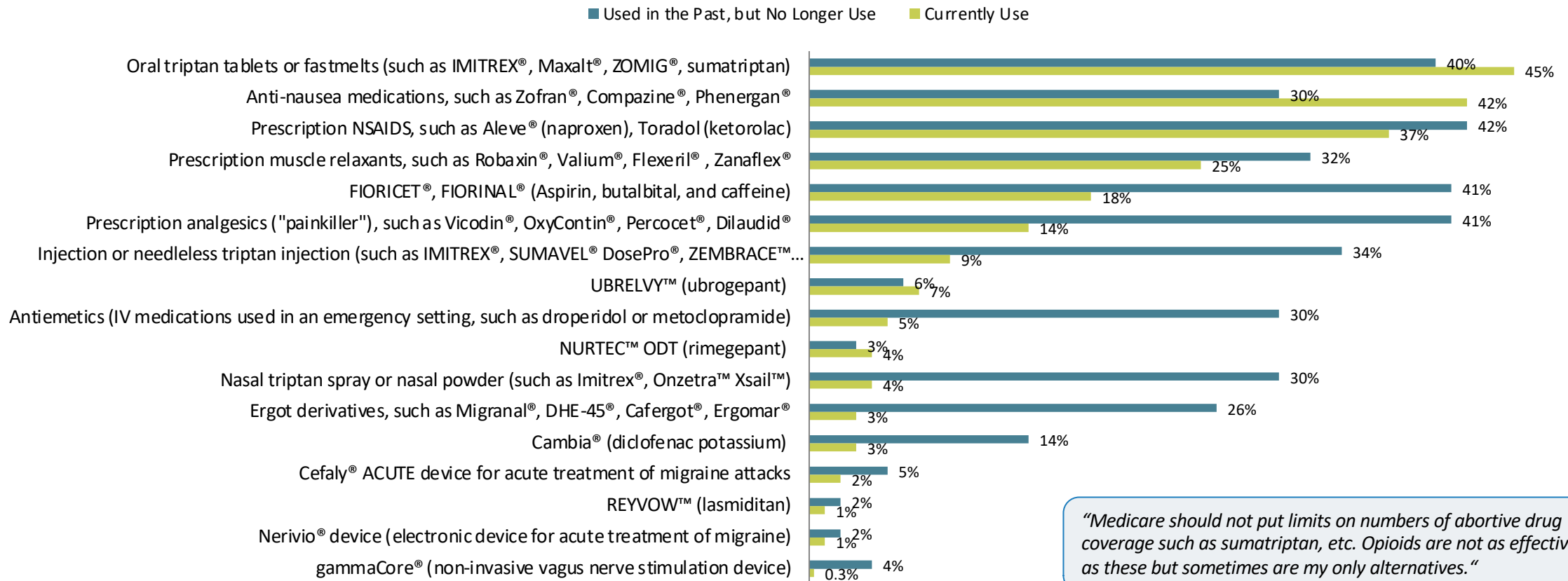
Number of prescription preventive treatments
Ever Tried Mean = 5.2 (Median = 5.0)
Currently Use Mean = 1.5 (Median = 1.0)

Base=All, n=4,693

Q39) Have you ever used any of the following treatments that may be used to help prevent migraine, as well as help with other medical conditions?

86% of patients currently use an acute prescription treatment, most often oral triptans or anti-nausea medications

Acute Treatment Experience



“Medicare should not put limits on numbers of abortive drug coverage such as sumatriptan, etc. Opioids are not as effective as these but sometimes are my only alternatives.”

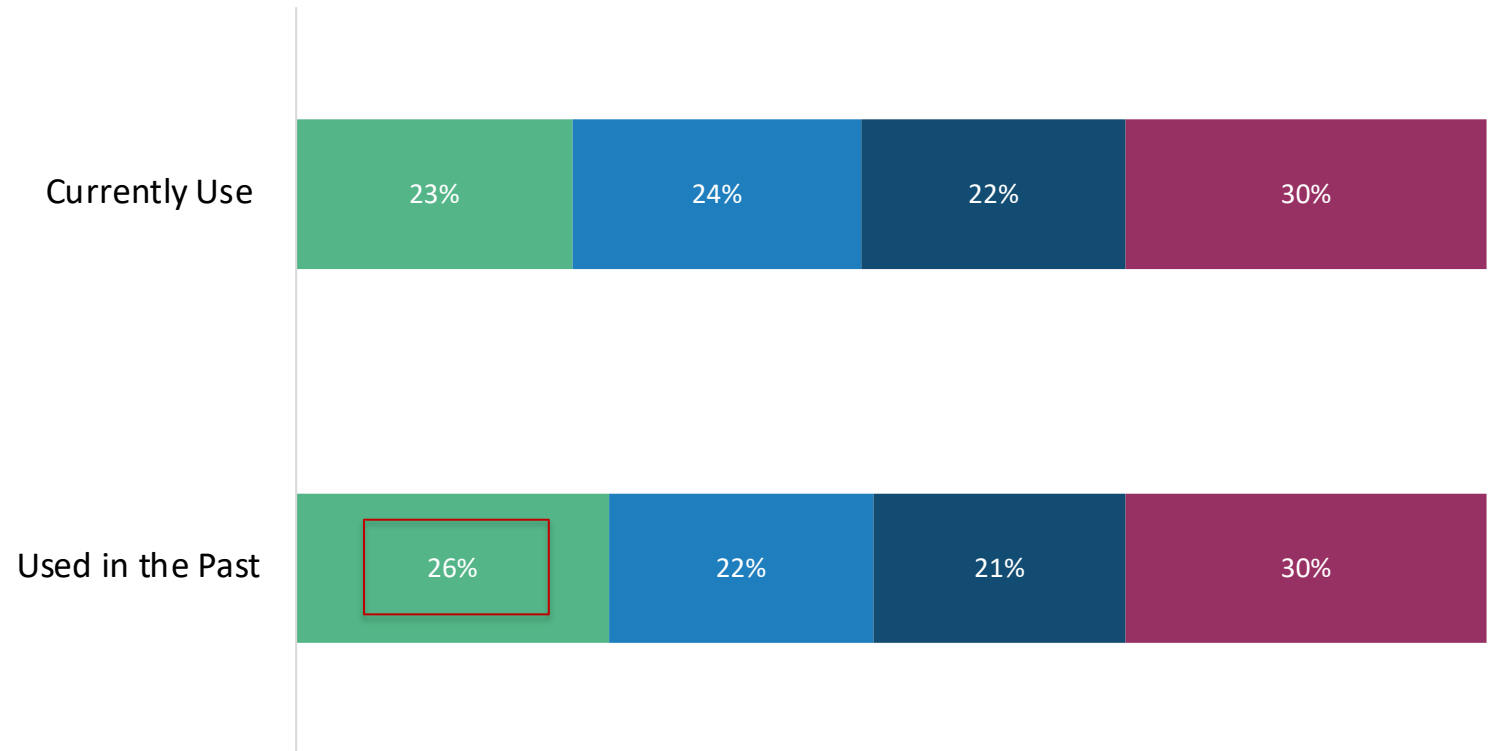
Base=All, n=4,693

Q48) Which of the following types of abortive/acute or rescue prescription migraine treatments have you used to treat your migraine?

Lapsed triptan users are more likely to have only tried 1 brand/type of triptan*

Number of Triptan Brands/Types Tried by Triptan Experience

■ 1 ■ 2 ■ 3 ■ 4+

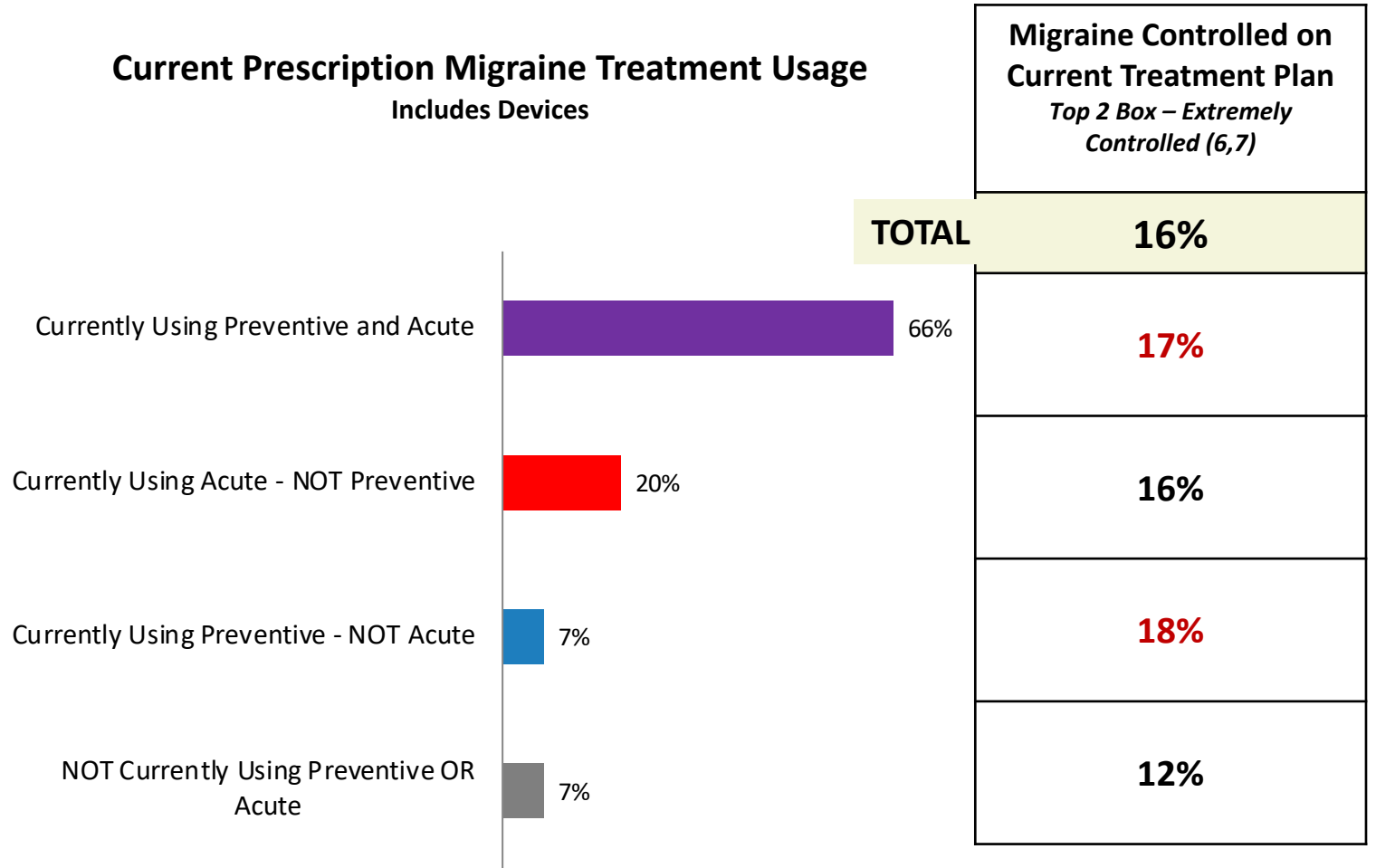


- **49%** currently use a triptan and **39%** in the past
- Among those who have used a triptan, number of brands and/or types used
 - Mean = **3.2**
 - Median = **3.0**

Base=Ever used a Triptan, n=4,153

Q49) You indicated that you have used a triptan medication for abortive/acute treatment of your migraine. In total, how many different brands or types (eg, oral, nasal, injection) of triptans have you tried?

Those currently using a prescription preventive treatment in their current plan rate a higher level of control than those not using any prescription treatments*



"Insurance is the main reason I cannot get the treatment I need."

"I just want to find a control. I hate missing things my girls do because of migraines. I only have a few more years with them at home before they go to college. I force myself to stay at work when I get migraines and I've done it for years. I train my students at the beginning of each year what we might have to do..."

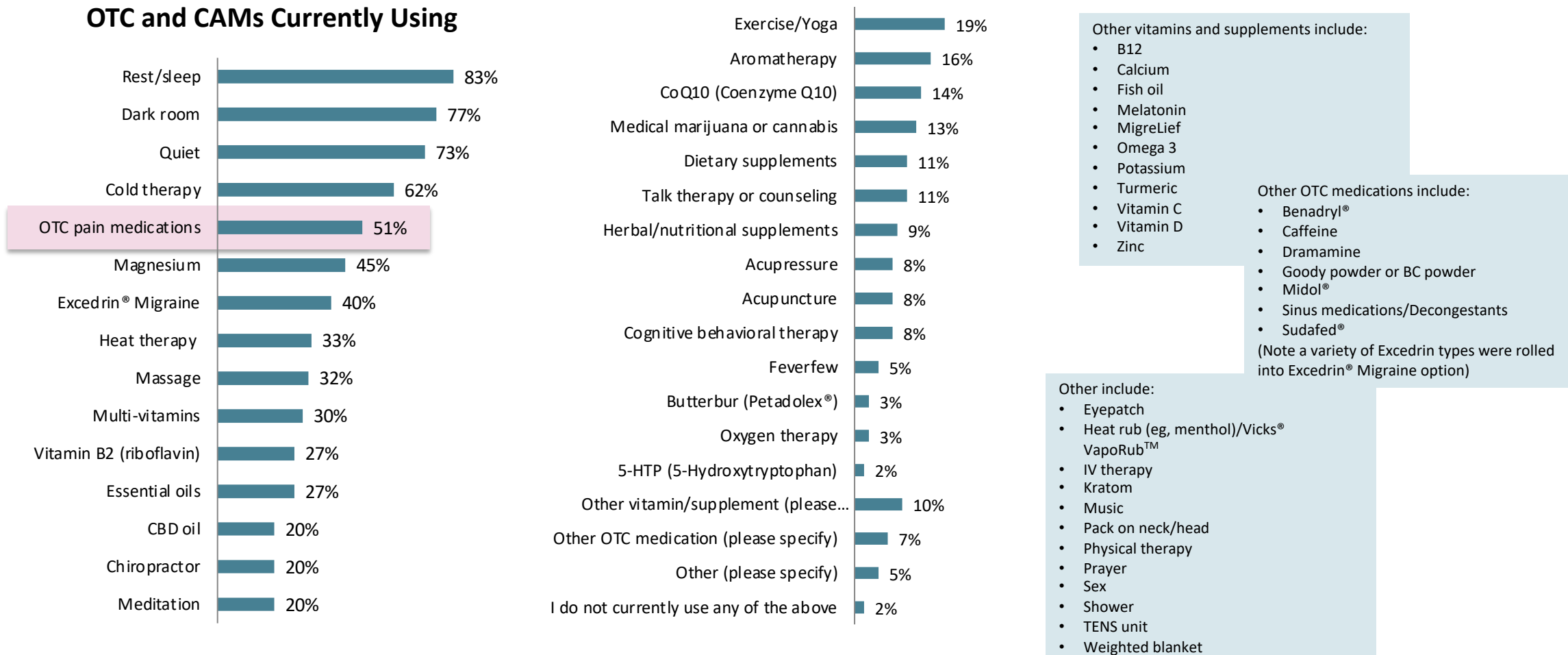
"I wish so badly that medications would be fully covered under insurance and that I could just find something so I can enjoy my life. It's so unfair that I get these and that my hands are tied and I can't even afford or access possible solutions. I have such an unenjoyable life due to migraines...I can't take it anymore, and I feel completely helpless."

Base=All, n=4,693

Q54) How well is your migraine under control with your current treatment plan? Current treatment plan includes both prescription and over-the-counter medications, as well as other therapies for migraine.

Patients employ a variety of OTC and CAMs to help manage their migraine

OTC and CAMs Currently Using



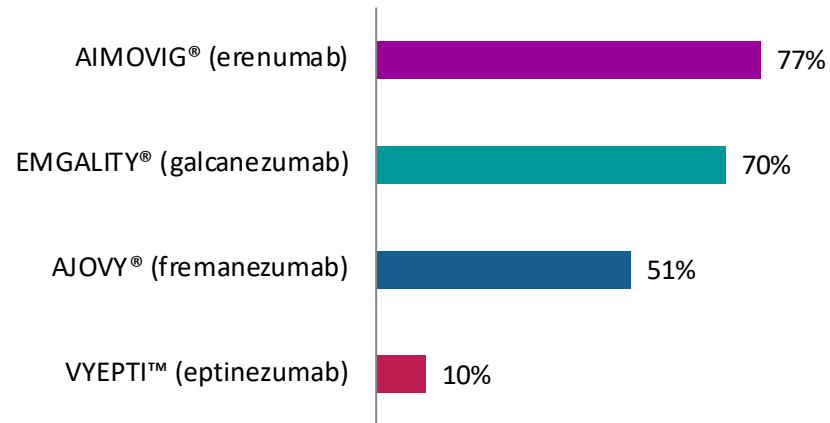
Base=All, n=4,693

Q51) What else, if anything, do you **currently** use on a regular basis to treat migraine? (Select all that apply)

PREVENTIVE CGRP EXPERIENCE

43% of patients have preventive CGRP experience

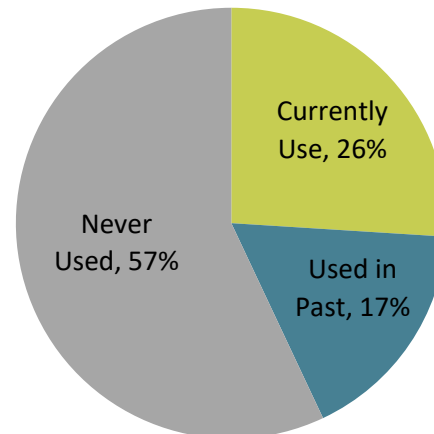
Preventive CGRP Aided Awareness



Of those who have heard of, but never used – HCP discussions:

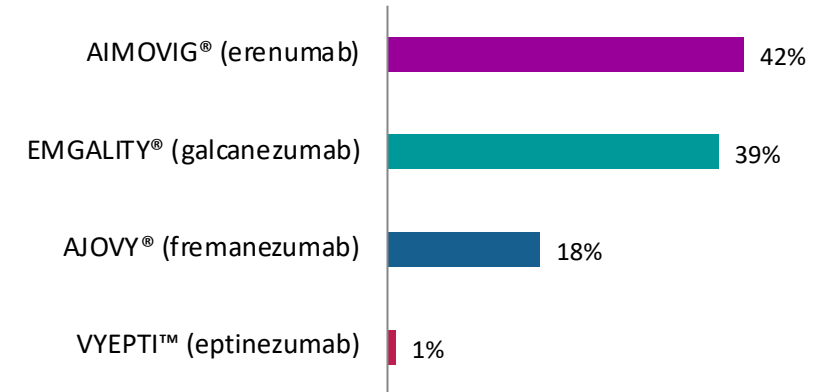
- 30% AIMOVIG®**
- 28% AJOVY®**
- 24% EMGALITY®**
- 24% VYEPTI™**

Preventive CGRP Experience



Current CGRP Brand

Currently Use a CGRP



22% of current preventive CGRP users are also currently using an acute CGRP

*Interesting to note that AIMOVIG® users are **least likely** to be currently using an acute CGRP (18%), while AJOVY® (26%), EMGALITY® (23%), and VYEPTI™ (38%) users are**

Base=All, n=4,693

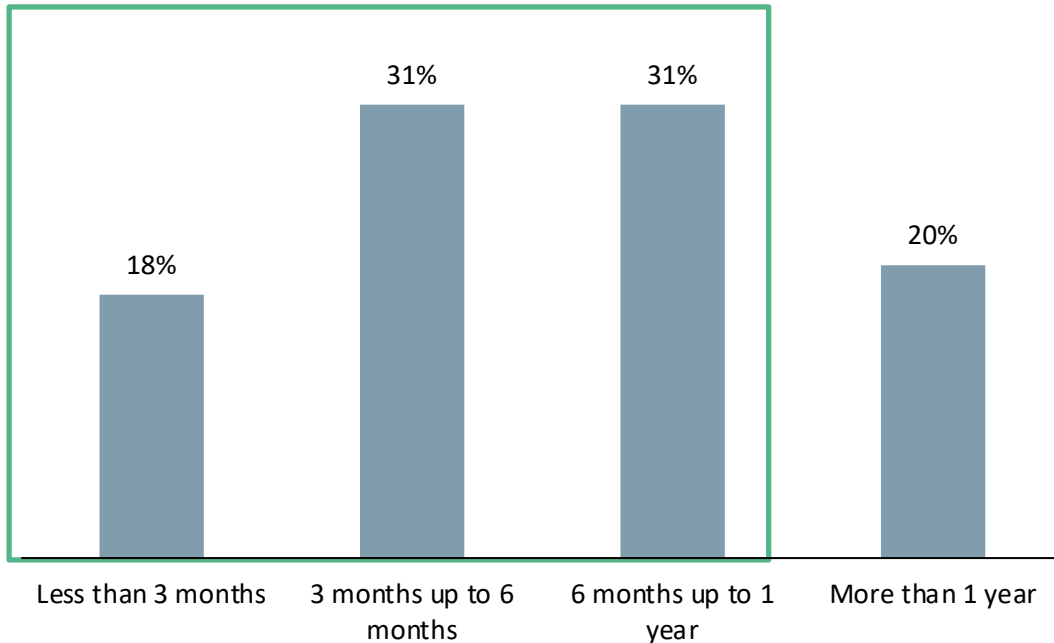
Q38) Which of the following medications or therapies have you heard of? (Select all that apply)

Q39) Have you ever used any of the following treatments that may be used to help prevent migraine, as well as help with other medical conditions?

Switching occurs often within a year of trial, with little wait time before starting on a new brand

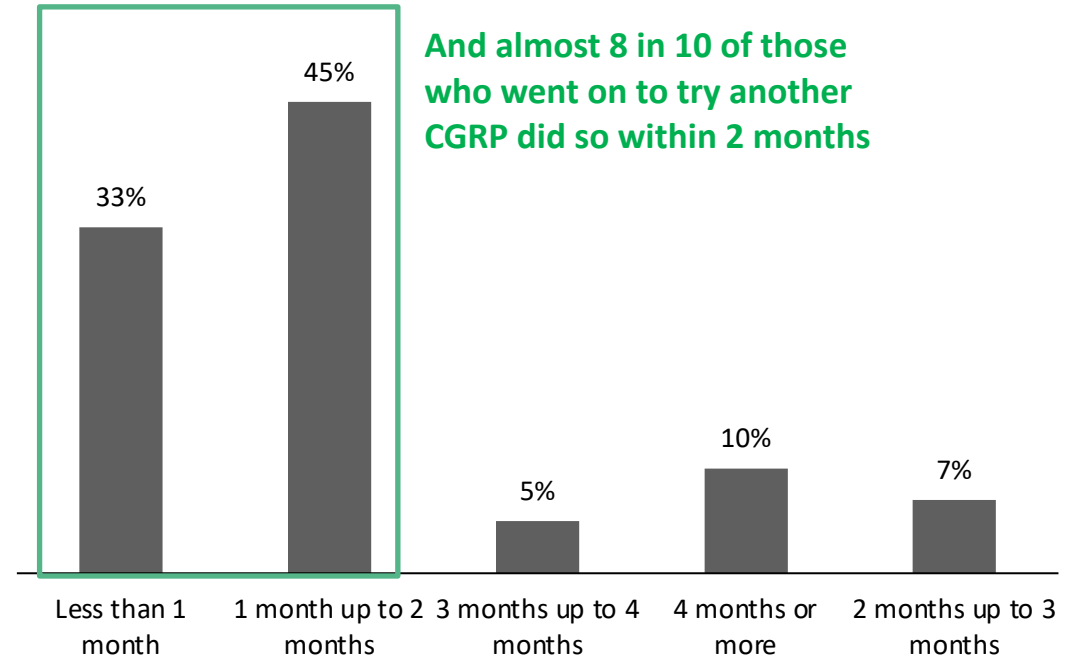
Time Using Previous CGRP Before Switching
Currently Use and Used Another in the Past

80% of past users switched within one year



Time Between Previous CGRP Before Starting Current
Currently Use and Used Another in the Past

And almost 8 in 10 of those who went on to try another CGRP did so within 2 months



Base=Currently use a CGRP and used a different one in the past, n=461 | Q42) How long did you use your previous CGRP medication before switching to [CURRENT CGRP]?

Base=Currently use a CGRP and used a different one in the past, n=461 | Q43) How long did you wait after stopping your previous CGRP medication before starting to use [CURRENT CGRP]?

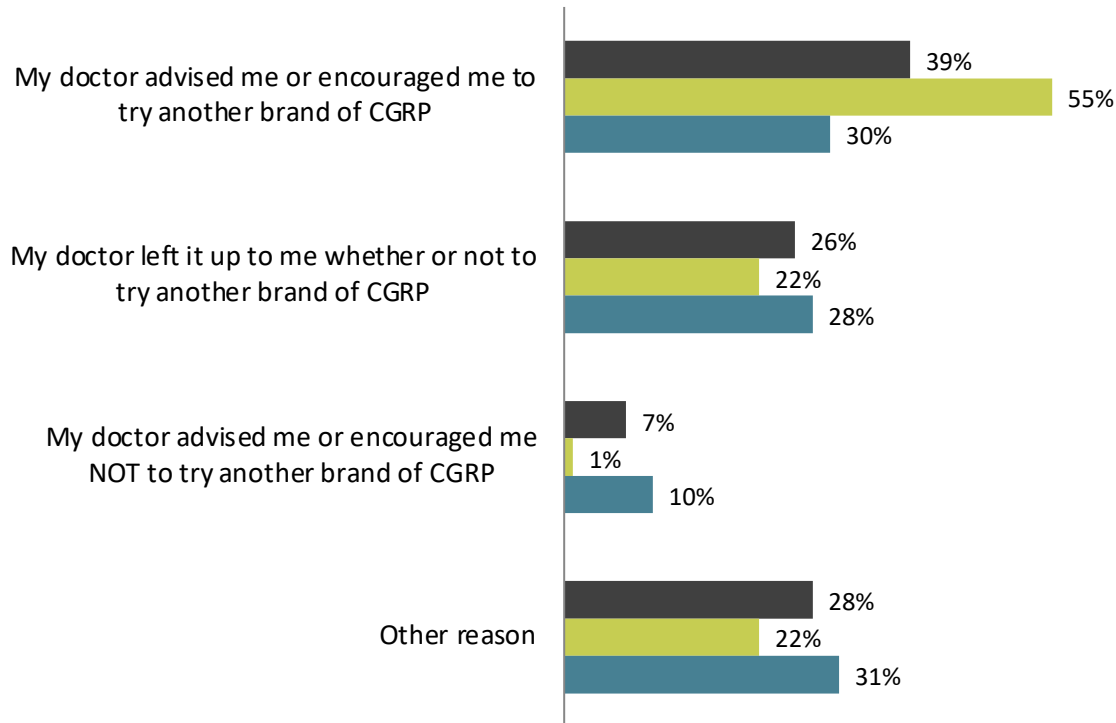


Switchers received HCP encouragement to try another brand, while lapsed users don't receive such support from their HCP*

How Decided to Stop or Switch Previous CGRP

Ever Stopped Using a CGRP

■ TOTAL ■ Currently Still Use CGRP ■ Lapsed CGRP User

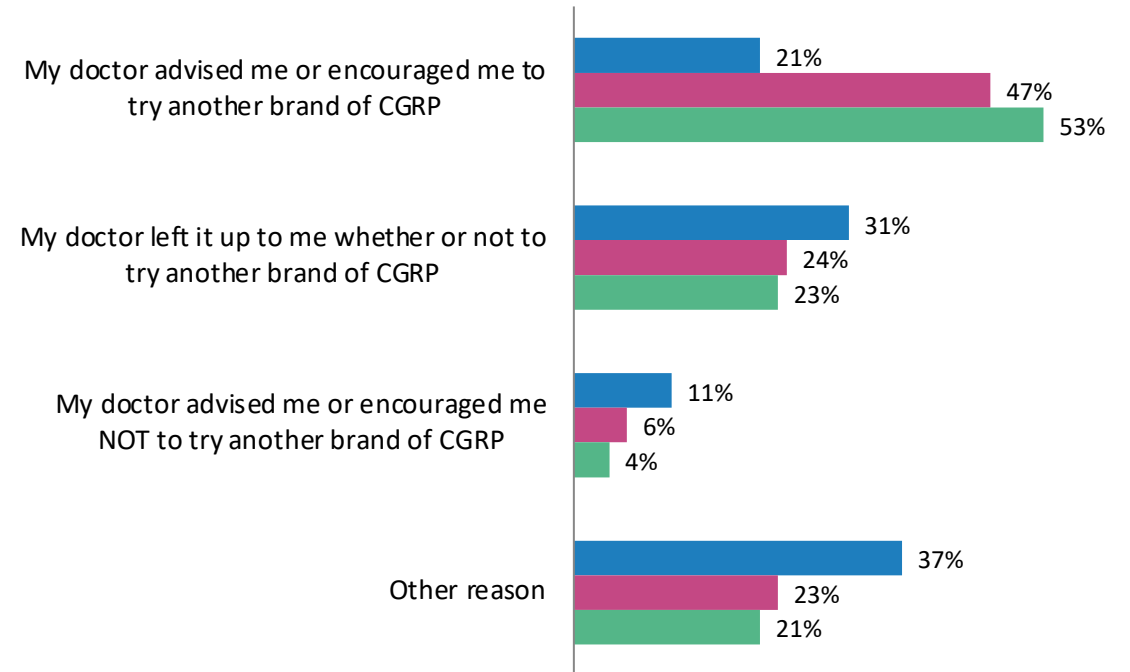


How Decided to Stop or Switch Previous CGRP by

Number Tried

Ever Stopped Using a CGRP

■ 1 ■ 2 ■ 3+



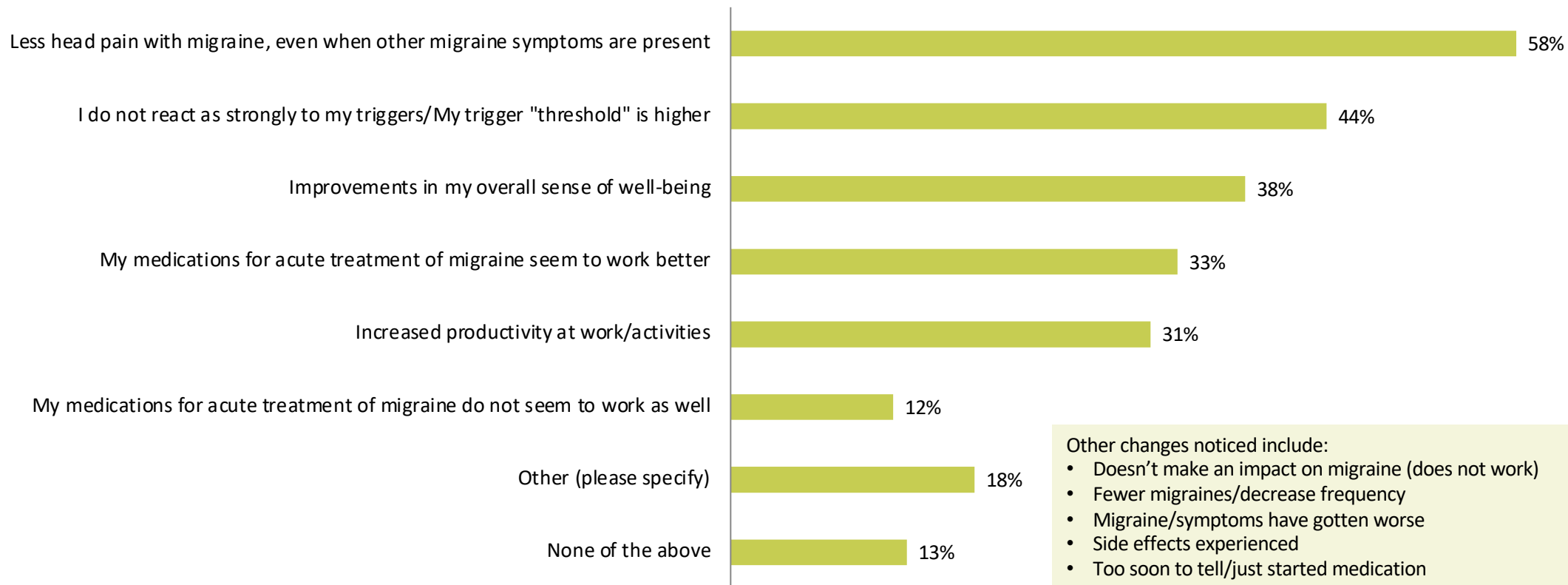
Base=Ever stopped a CGRP, n=1,265

Q44) After you decided to switch from or stop your previous CGRP, which of the following best describes how you decided whether or not to try another/different CGRP?

Preventive CGRPs are reducing head pain for almost 6 in 10 and reaction to triggers for over 4 in 10

Impact of Preventive CGRPs

Currently Use a CGRP



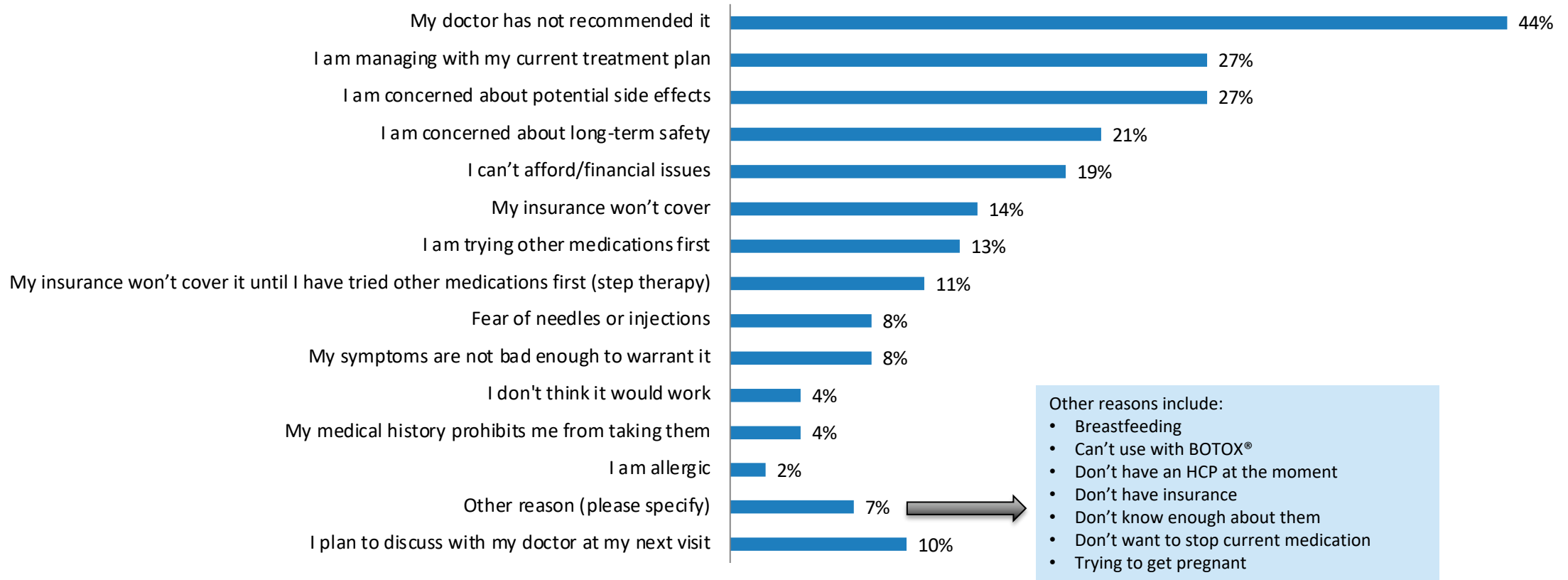
Base=Currently using a CGRP, n=1,212

Q46) Which, if any, of the following have you noticed since you started to use [4,693 CURRENT CGRP]? (Select all that apply)

The leading barrier to starting on a preventive CGRP treatment is the lack of HCP recommendation

Reasons for Not Trying a Preventive CGRP Treatment

Heard of CGRP Brand But Never Used



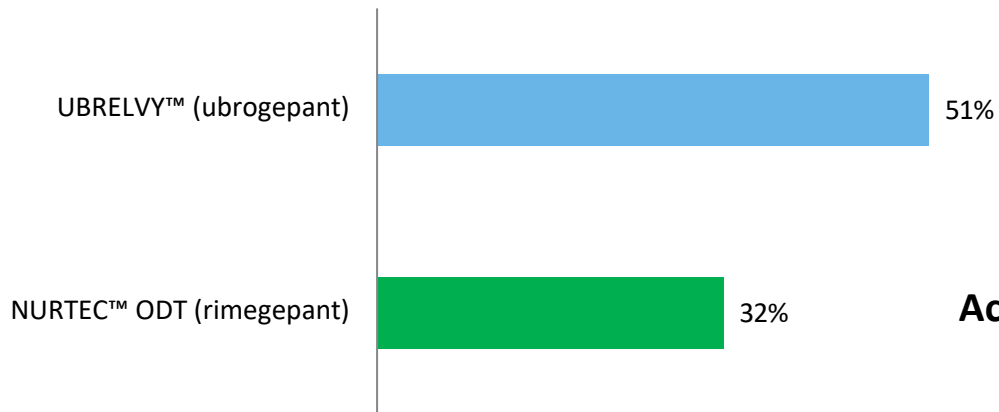
Base=Heard of preventive CGRP brand, but never used, n=1,920

Q65) You indicated that you have never used a preventive anti-CGRP medication (such as AJOVY®, AIMOVIG®, EMGALITY®, and VYEPTI™). Why have you not yet tried such treatments for your migraine? (Select all that apply)

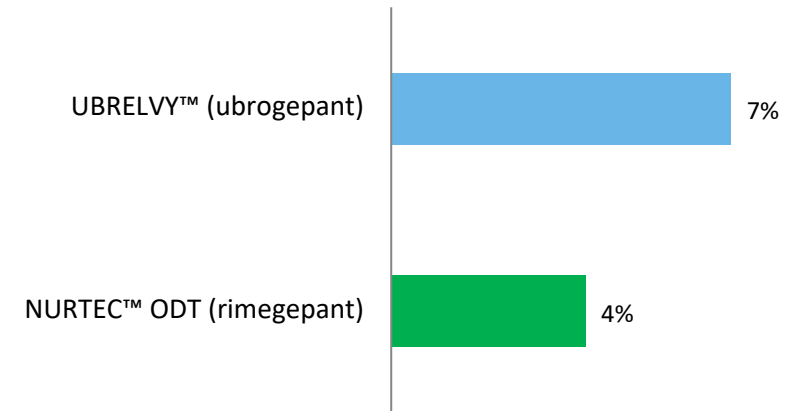
ACUTE CGRP EXPERIENCE

17% of patients have acute CGRP experience

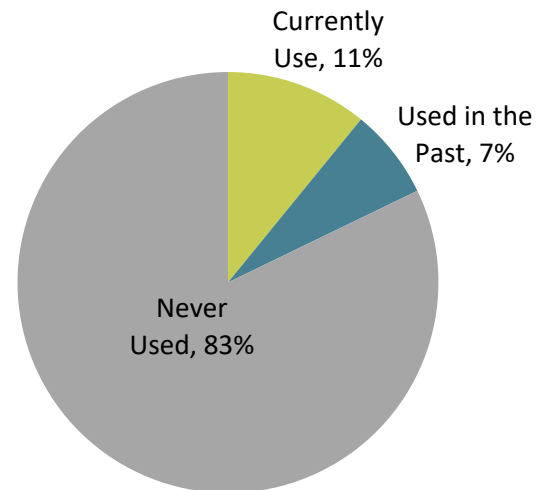
Acute CGRP Aided Awareness



Currently Use Acute CGRP Brand



Acute CGRP Experience



Of those who have heard of, but never used
17% have discussed NURTEC™ ODT with their HCP
19% have discussed UBRELVY™ with their HCP

53% of current acute CGRP users are also currently using a preventive CGRP

Base=All, n=4,693

Q38) Which of the following medications or therapies have you heard of? (Select all that apply)

Q48) Which of the following types of abortive/acute or rescue prescription migraine treatments have you used to treat your migraine?

Early adopters of Acute CGRPs appear to be driven by their migraine severity, lack of control on current treatment, and being in the care of a specialist – along with a tendency to be proactive

Current Acute CGRP Users

Besides being more likely to have chronic migraine, reports a **greater number of symptoms** particularly smell-related, touch-related, bladder/bowel involvement, and nausea/dizziness/vomiting

- Also reports a **great number of triggers** – all types reported with more frequency (except for stress), and takes more **proactive measures to avoid** their triggers

Sees a neurologist or headache specialist, possibly at a specialty treatment center that they travel farther to

- Besides providing excellent overall care, their HCP listens, cares about them as a person, and is thorough
- Leverages their HCP as a resource and relies on their recommendations for treatments, citing they do a good job of explaining treatment options

Their **quality of life and relationships have been impacted negatively** more so by migraine – they grieve the life that migraine has stolen from them

Uses a variety of **online resources to help manage their migraine** (eg, migraine-specific websites, prescription product websites) – **actively seeking out information** about the latest migraine medications, reading others' opinions of medication online, and **keeping an open mind** when trying a variety of treatment options

They have experienced the **negative impact of migraine on their finances** and feel they have tried everything to manage migraine symptoms, but they are **still not controlled**

- Currently uses a prescription preventive treatment (particularly BOTOX® and/or preventive CGRP) and a prescription acute treatment (such as anti-nausea medication, prescription NSAID, and an acute CGRP)
- Leverages financial assistance programs and cites insurance coverage is a factor in treatment decisions



"I thought Migraine was just my lot in life until I found my neurologist. He showed me that I could feel so much better!"

Acute CGRP Naive

Sees a PCP for migraine; however feels they downplay their migraine, does not agree on the severity of their pain, and treats them like a drug seeker when asking for pain medication

Would rather make **changes to lifestyle and/diet** than take a prescription medication

Cite a **greater level of control** on their current treatment plan and feel that they are better off than others who have migraine

Currently uses a triptan, as well as OTC pain medication and Excedrin Migraine



Never used an acute CGRP, n=3,885; Currently use an acute CGRP, n=499

Not all differences are included

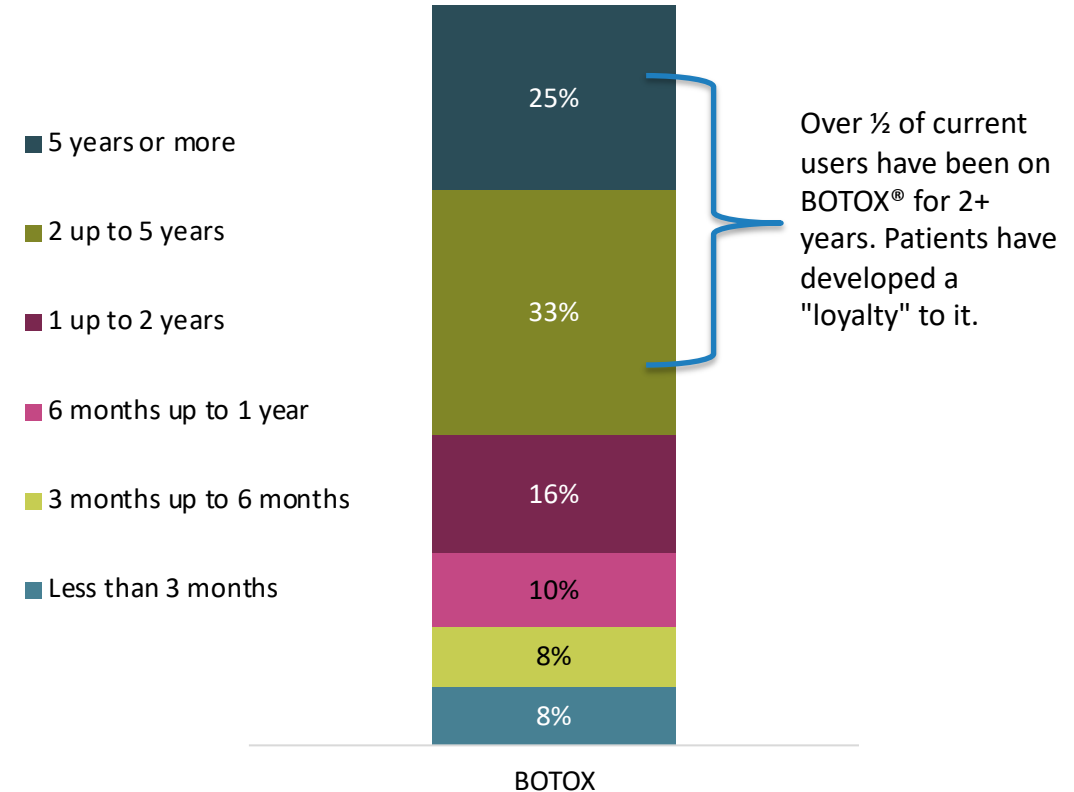
**Statistically significant, p<.05*

BOTOX[®] FOR MIGRAINE EXPERIENCE

BOTOX[®] awareness, trial, and usage

- **92%** of patients have aided awareness of BOTOX[®]
- **16%** currently use BOTOX[®] and **22%** in the past
 - **30%** specifically requested the medication from their HCP and **68%** did not request (HCP recommended or decided together)
 - **12%** are likely to talk to HCP about switching to another medication in next 6 months
- Of those who heard of, but never used, **32%** have discussed with their HCP
- *Interesting finding: Of current BOTOX[®] users, **15%** currently use UBRELVY[™] and **9%** NURTEC[™] ODT*

Time on Brand
Currently Use Brand



Base=Currently use BOTOX, n=772

Q54) Below are some of the migraine medications you are currently using. For each, please indicate whether you specifically requested the medication from your healthcare provider.

Q55) How long have you been using each of the following medications? (Select from the drop-down menu for each medication)

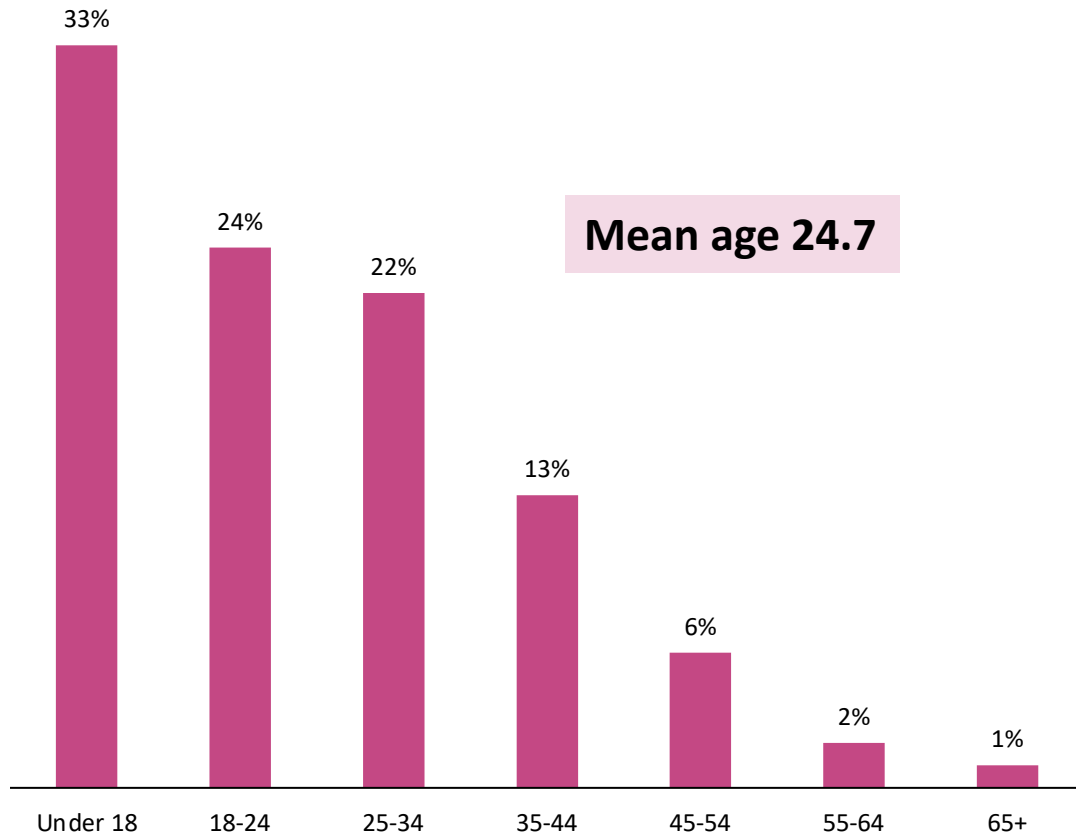
Q57) On a scale of 1 to 7, with 1 being Not at All Likely and 7 being Extremely Likely, how likely are you to talk to your healthcare provider about switching from each of the following medications to another medication within the next 6 months?

APPENDIX: OVERVIEW OF RESPONDENTS

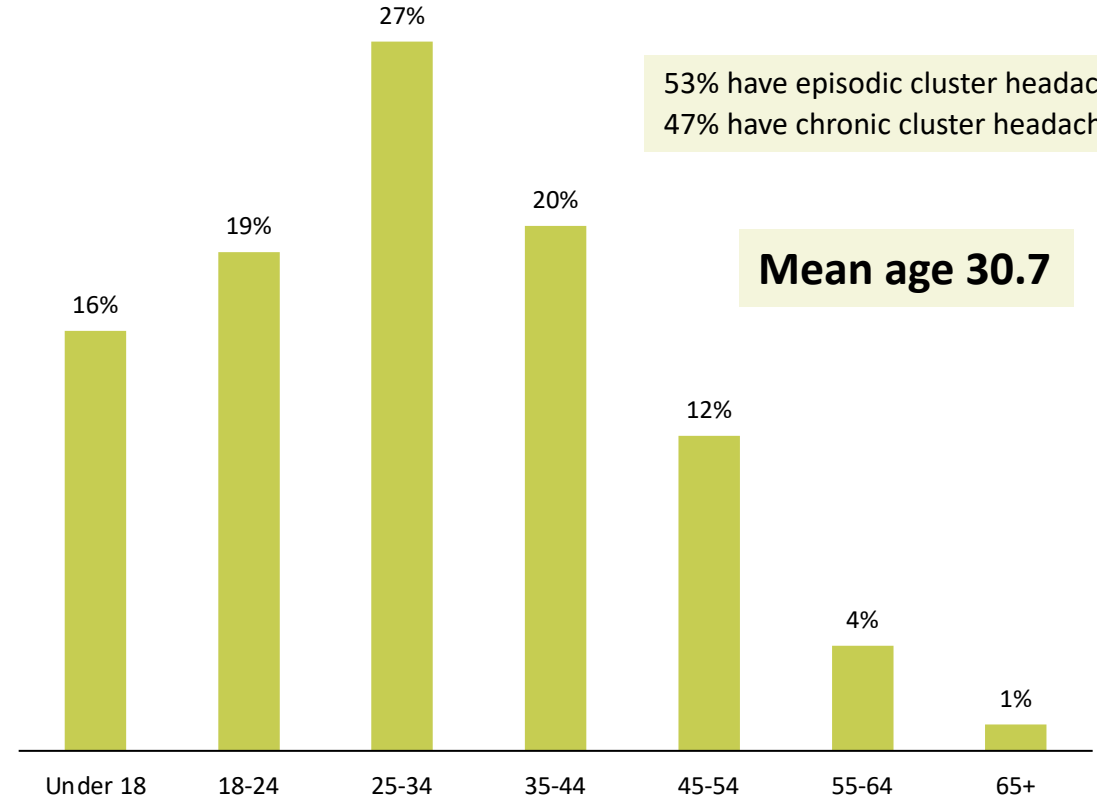


86% have been diagnosed with migraine only, 1% with cluster headache only, and 13% with both

Age at Migraine Diagnosis



Age at Cluster Headache Diagnosis



Base=All, n=4,693 | Q6) Have you been diagnosed by a healthcare professional as having any of the following?

Base=Diagnosed with migraine, n=4,651 | Q7) At what age were you diagnosed with migraine?

Base=Diagnosed with cluster headache, n=649 | Q8) At what age were you diagnosed with cluster headache?

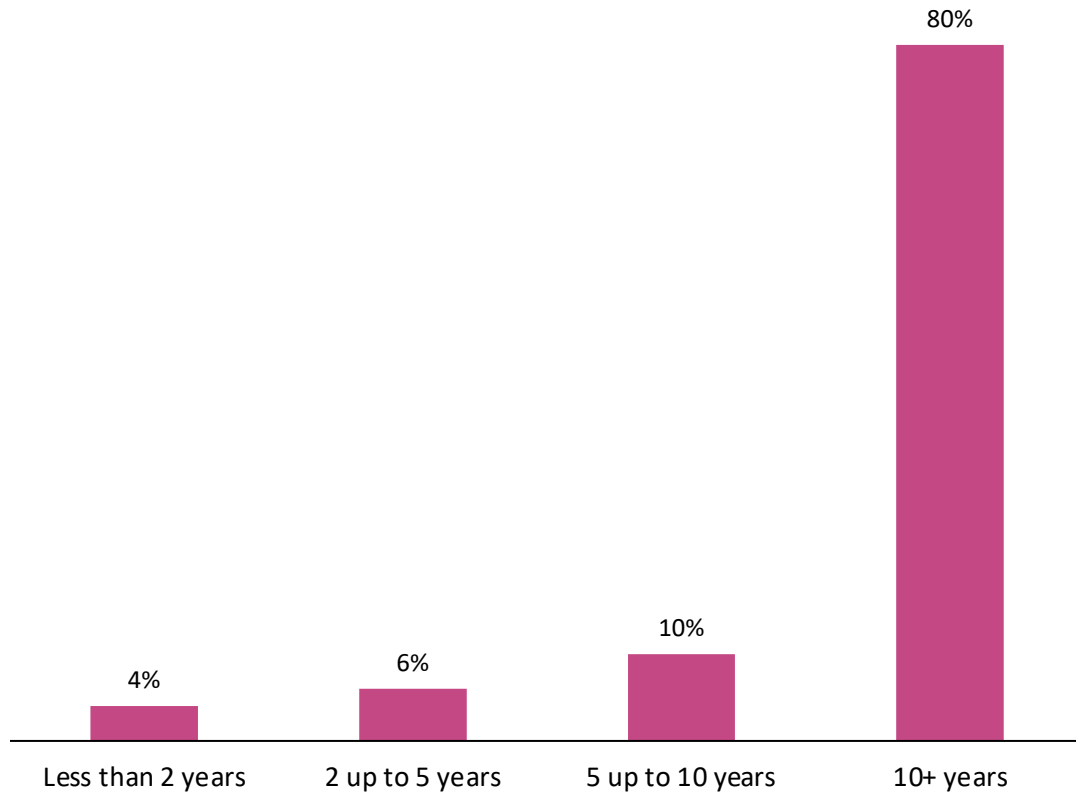
Base=Diagnosed with cluster headache, n=649 | Q11) What type of cluster headache do you have?

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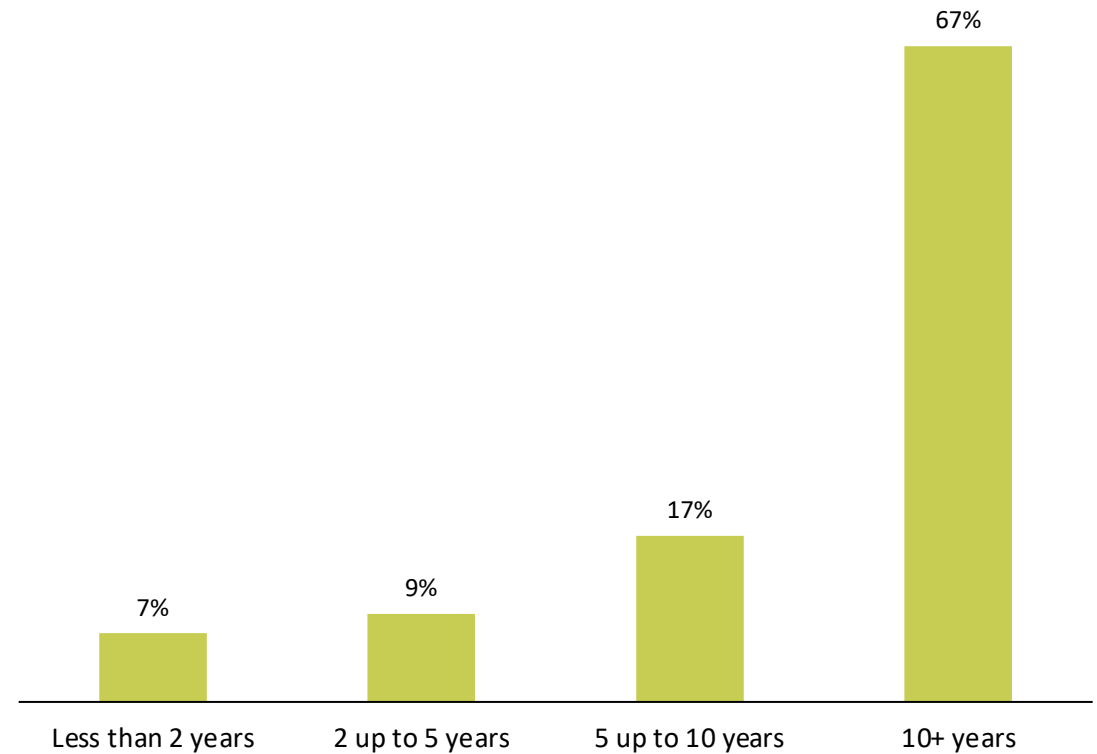


Most were more than 10 years out from diagnosis

Time Since Migraine Diagnosis



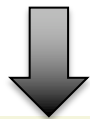
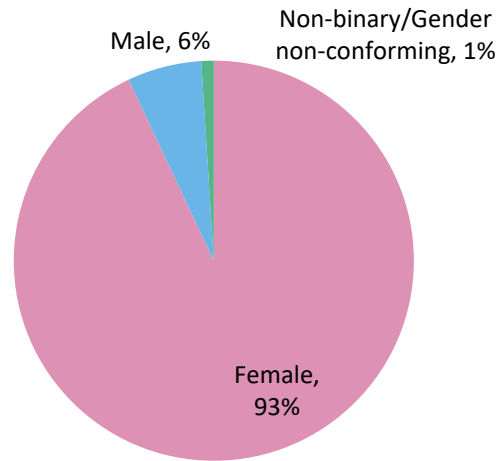
Time Since Cluster Headache Diagnosis



Time Since Diagnosis Calculated from Current Age and Age at Diagnosis

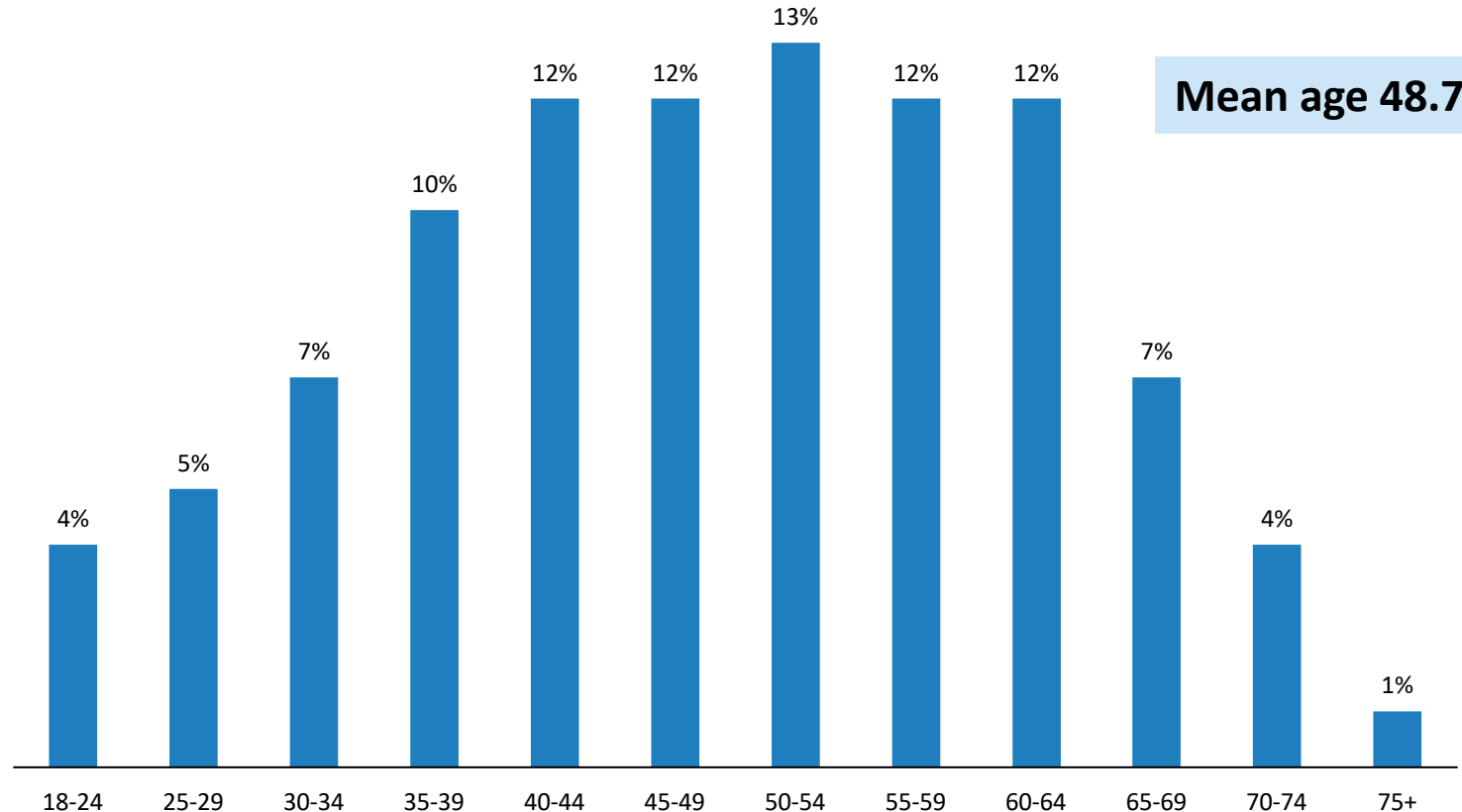
Over 9 in 10 are female, with ½ being postmenopausal

Gender



35% Premenopause
16% Perimenopause/Menopause transition
49% Postmenopause

Current Age



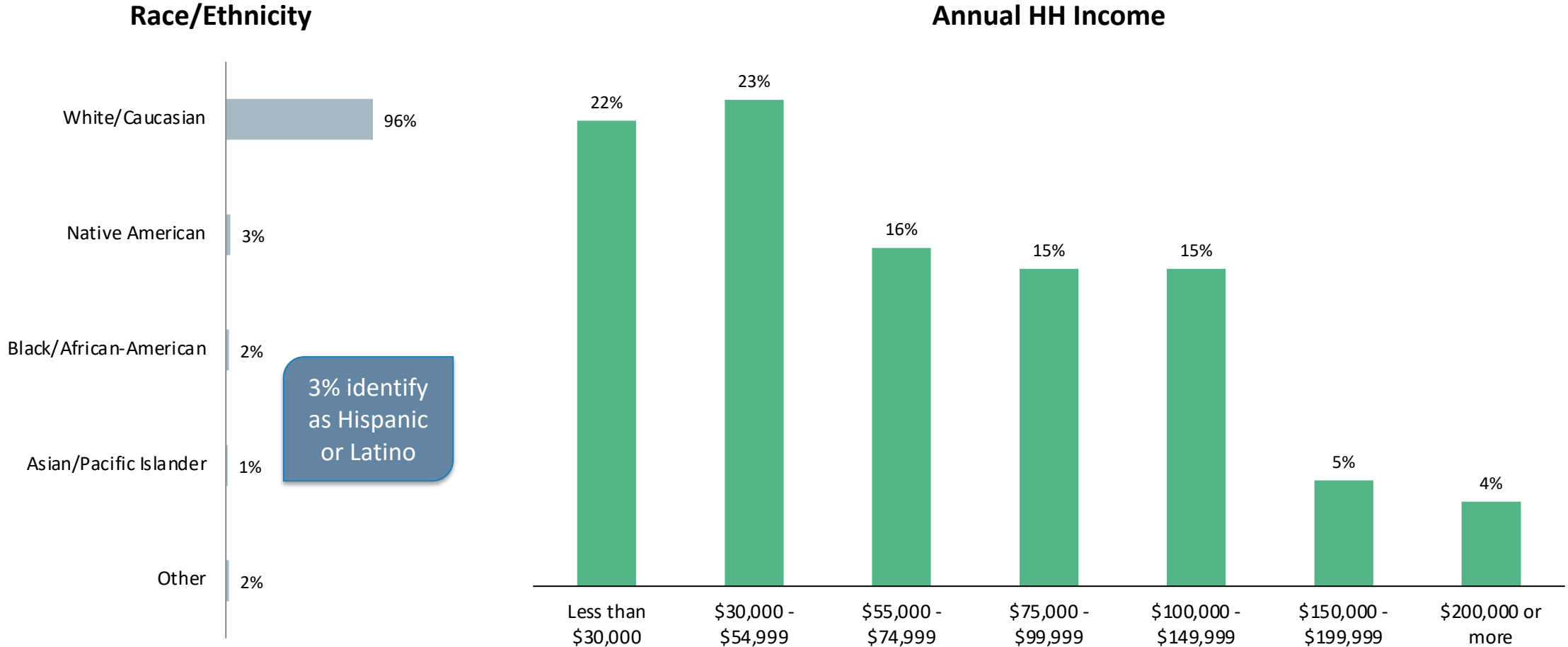
Mean age 48.7

Base=All, n=4,693 | Q4) What is your age?

Base=All, n=4,693 | Q70) Gender:

Base=Female, n=4,368 | Q71) What best describes your current menstrual status?

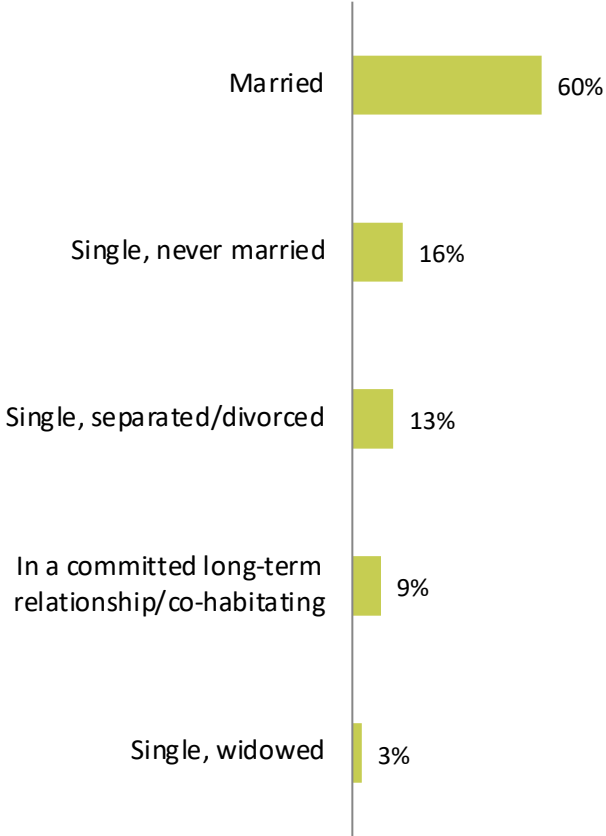
Most are Caucasian, and 45% have a household income of less than \$55k



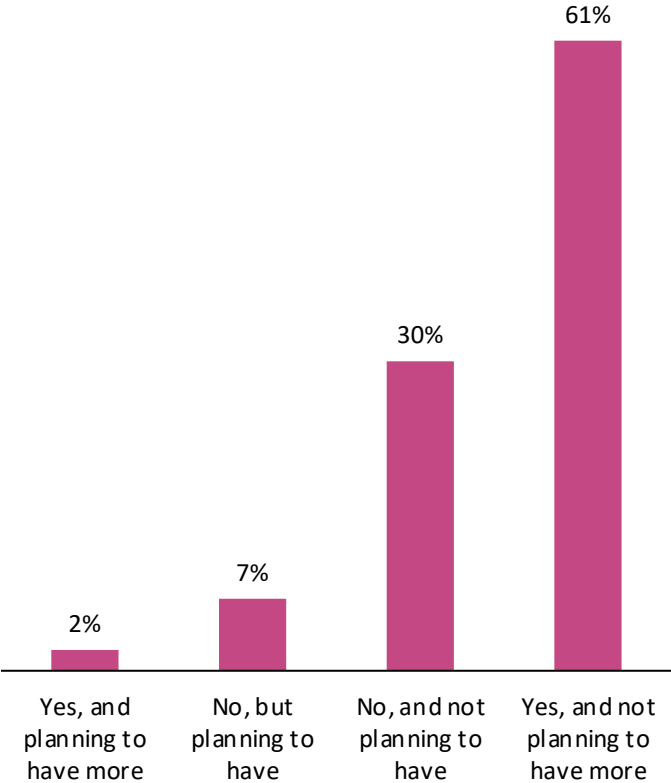
Base=Chose to answer, n=4,556 | Q72) I identify as: (Select all that apply)
 Base=Chose to answer, n=4,548 | Q73) Do you identify as Hispanic or Latino?
 Base=Chose to answer, n=3,928 | Q78) Annual household income:

6 in 10 are married, and almost 2/3 have children

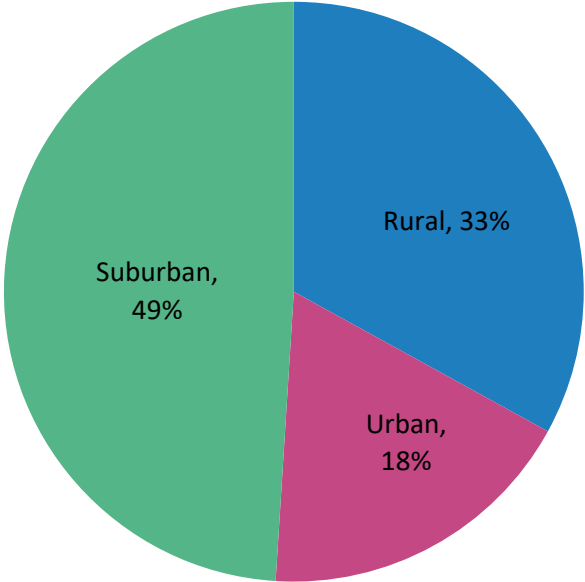
Marital Status



Parental Status



Area of Residence



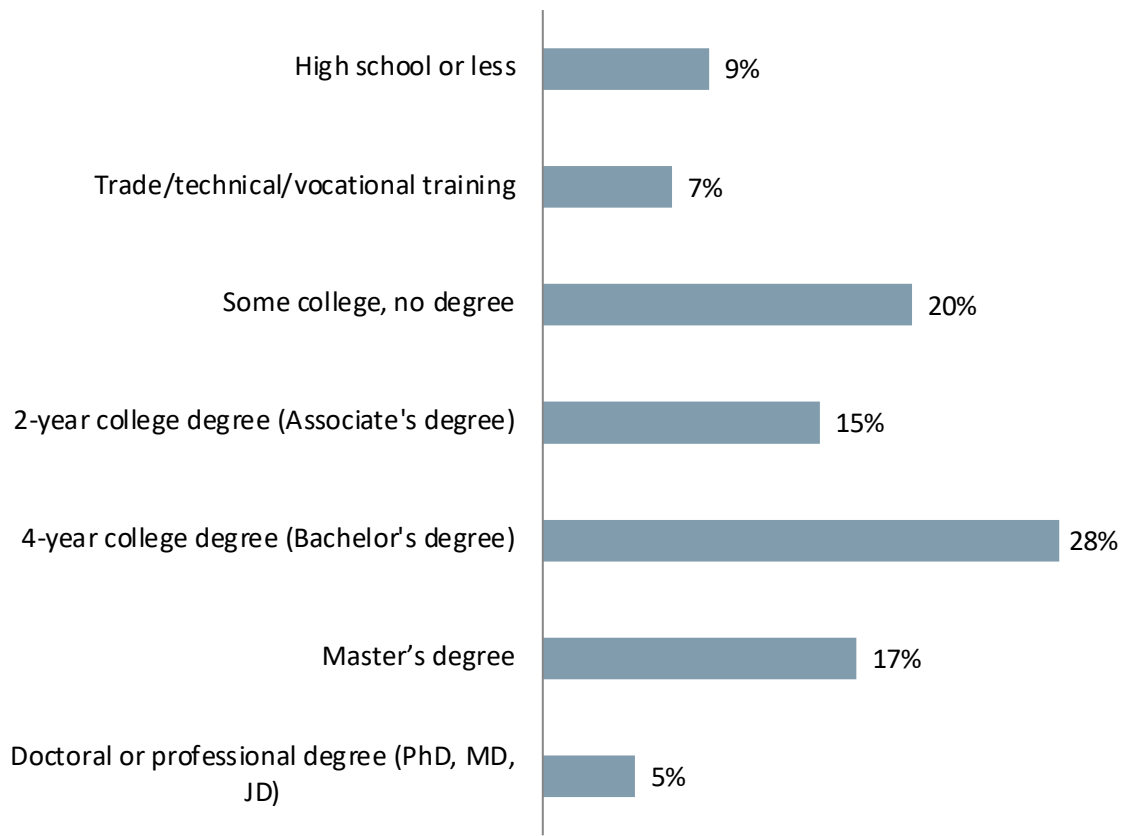
Base=Chose to answer, n=4,604 | Q74) Marital status:

Base=All, n=4,693 | Q75) Have any children?

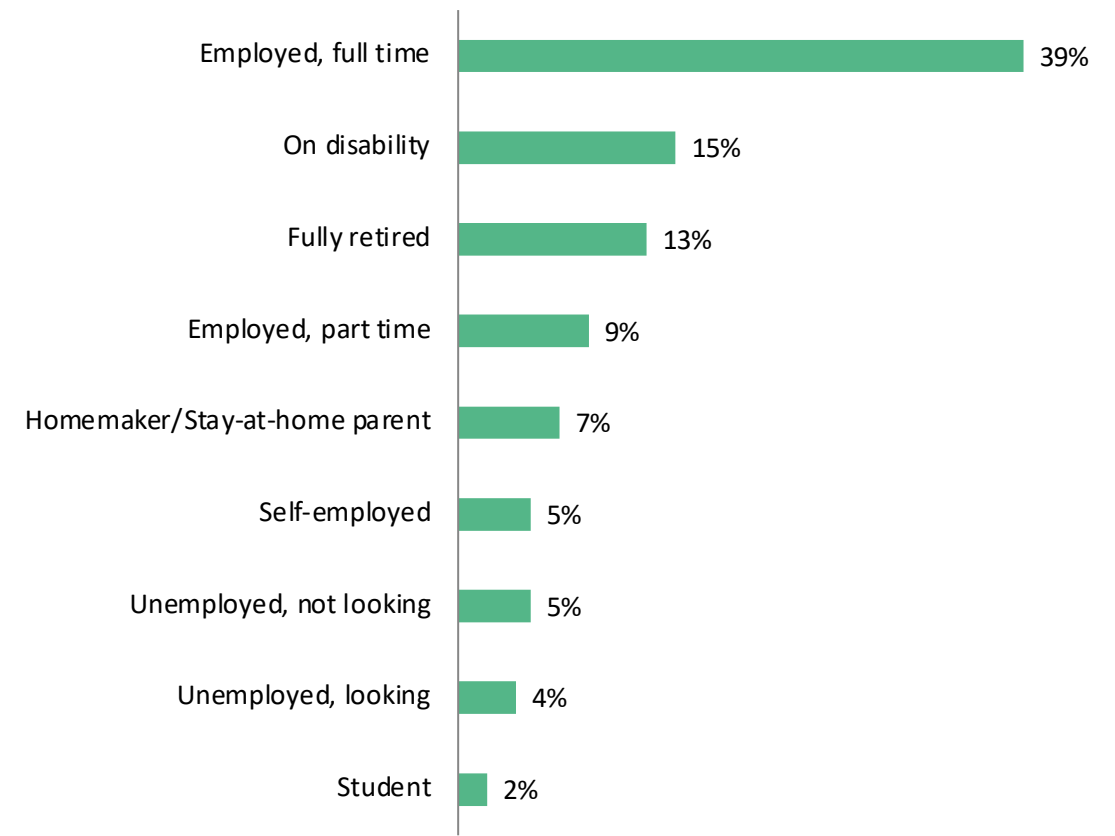
Base=All, n= 4,693 | Q81) Which of the following best describes the type of area in which you live?

64% have a college degree, and 53% are employed in some capacity

Highest Level of Education



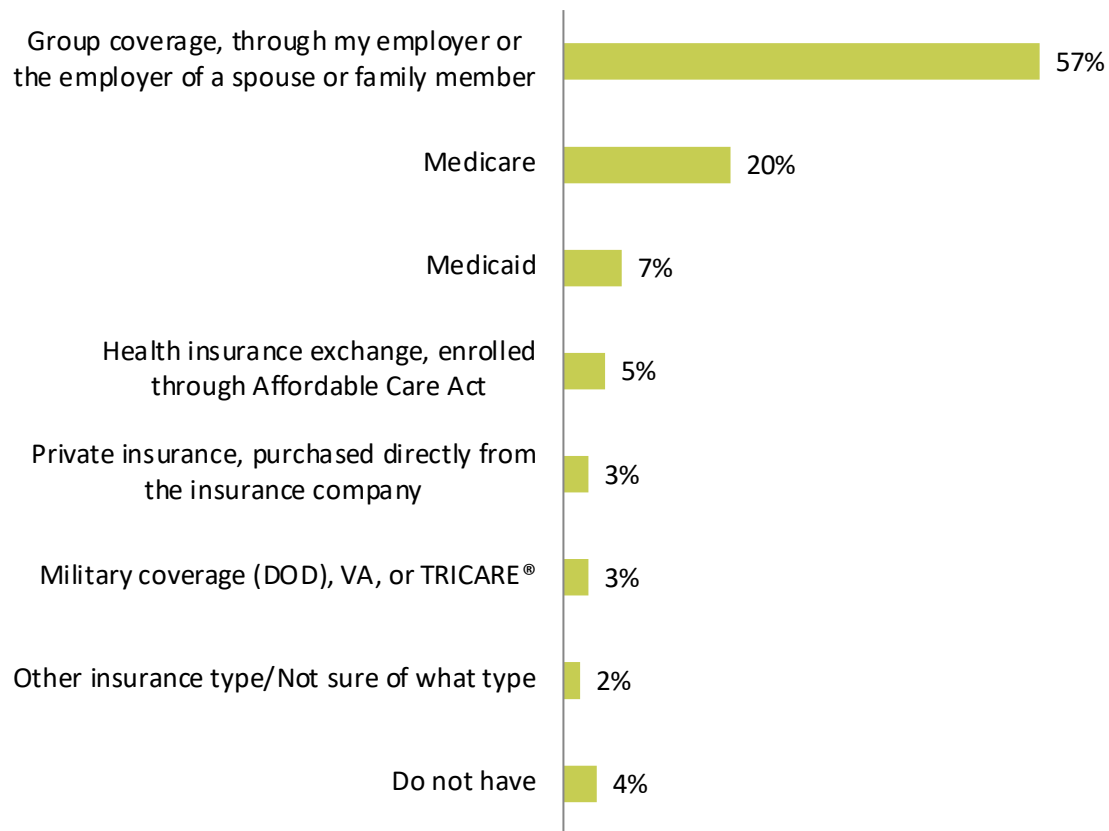
Employment Status



Base=All, n=4,693
 Q76) Highest level of education completed:
 Q77) Employment status:

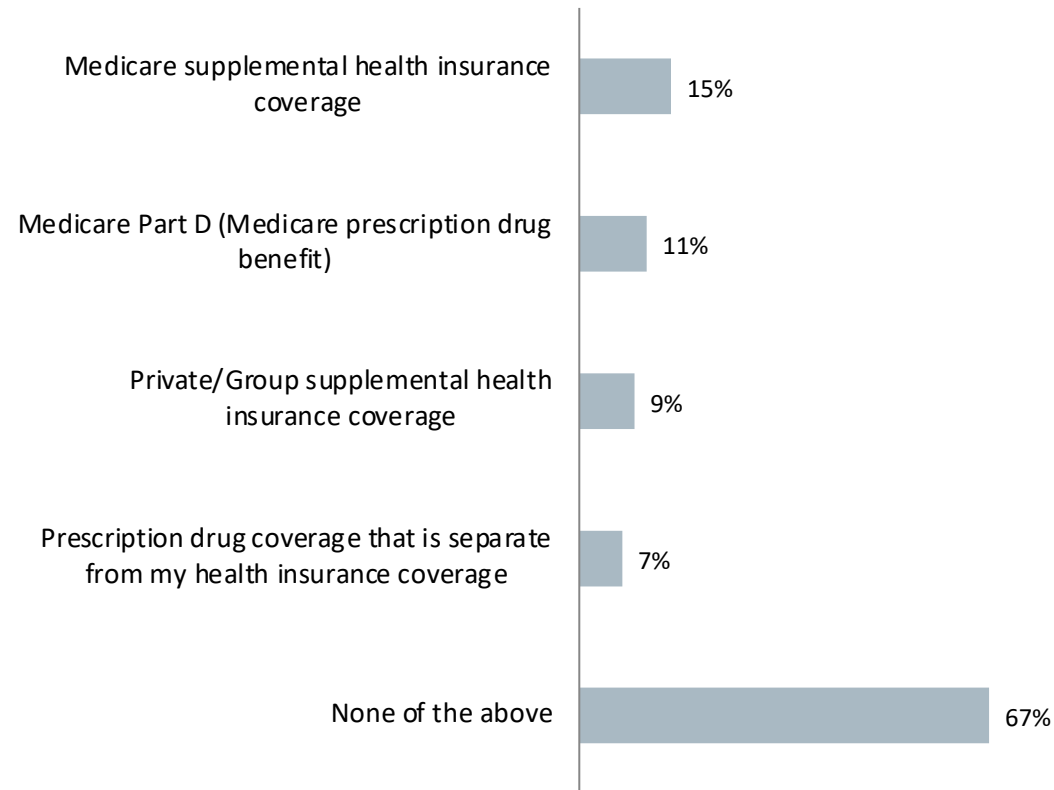
Almost 6 in 10 have group coverage, and 33% have some form of secondary coverage

Primary Health Insurance



Secondary/Supplemental Coverage

Have Health Insurance

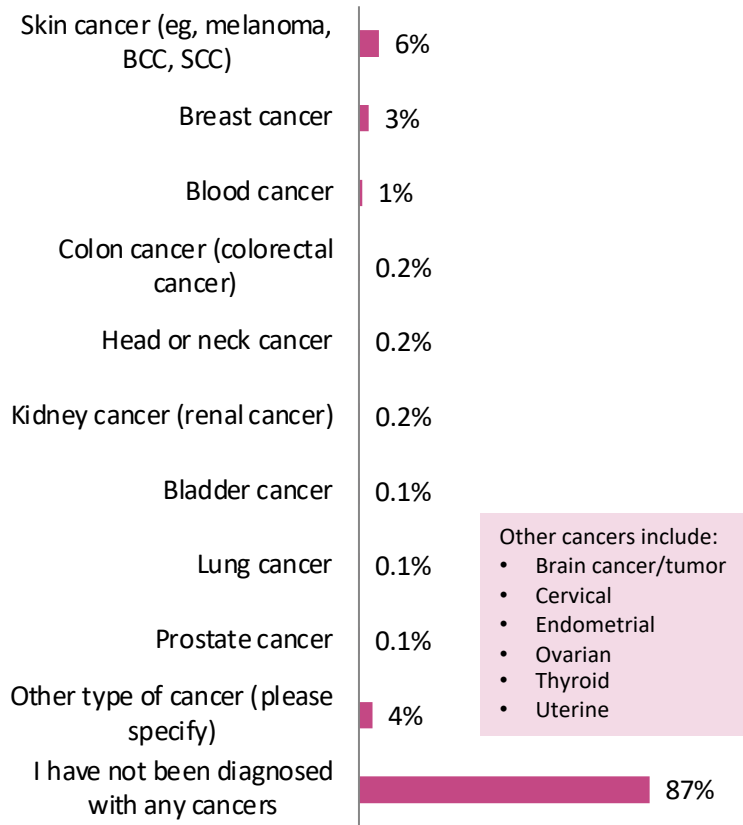


Base=All, n=4,693 | Q79) Primary health Insurance:

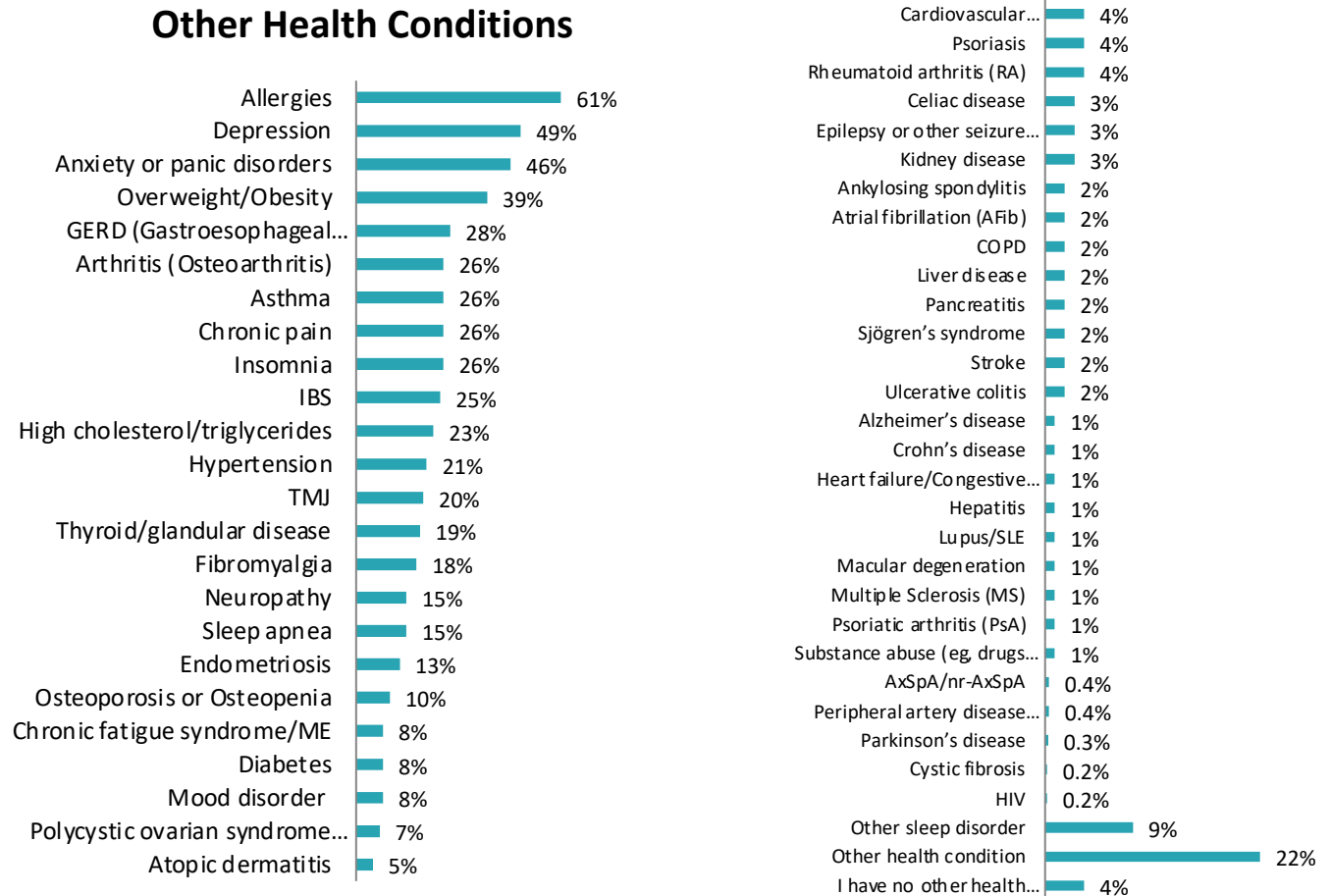
Base=Have health insurance, n=4,498 | Q80) Have any of the following?

96% also manage other health conditions, such as allergies, depression, anxiety or panic disorders, and being overweight or obese

Cancer Diagnosis



Other Health Conditions



Base=All, n=4,693

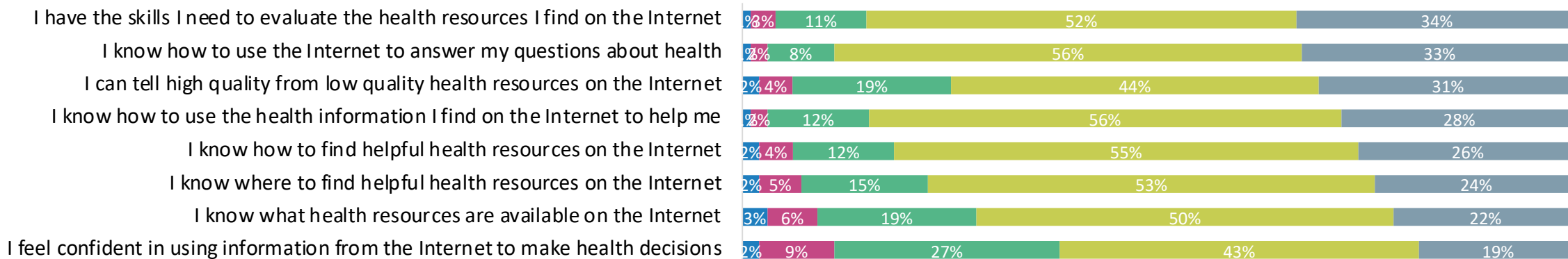
Q19) Have you been diagnosed with any of the following cancers? (Select all that apply)

Q20) Have you been diagnosed with any of the following health conditions in addition to migraine? (Select all that apply)

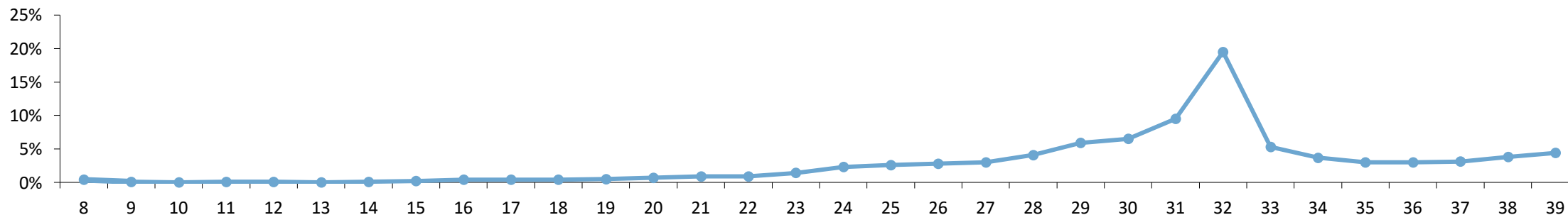
Migraine patients have moderate to high eHealth literacy

eHealth Literacy (eHEALS)

■ Strongly Disagree
 ■ Disagree
 ■ Undecided
 ■ Agree
 ■ Strongly Agree



Distribution of eHealth Literacy Scores



Base=All, n=4,661

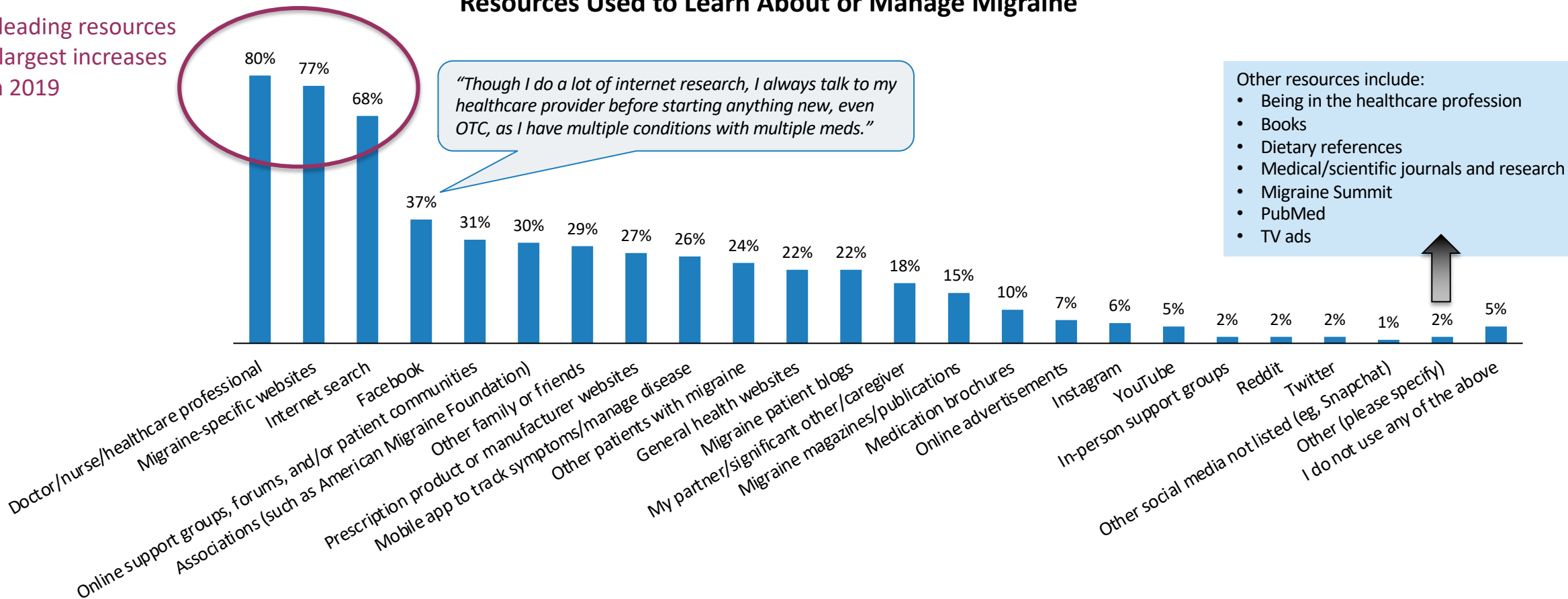
Q83) For each statement, tell me which response best reflects your opinion and experience right now.

APPENDIX: RESOURCES AND INFORMATION SEEKING

HCPs are the leading resource for learning about or managing migraine, followed by migraine-specific websites

The leading resources had largest increases from 2019

Resources Used to Learn About or Manage Migraine

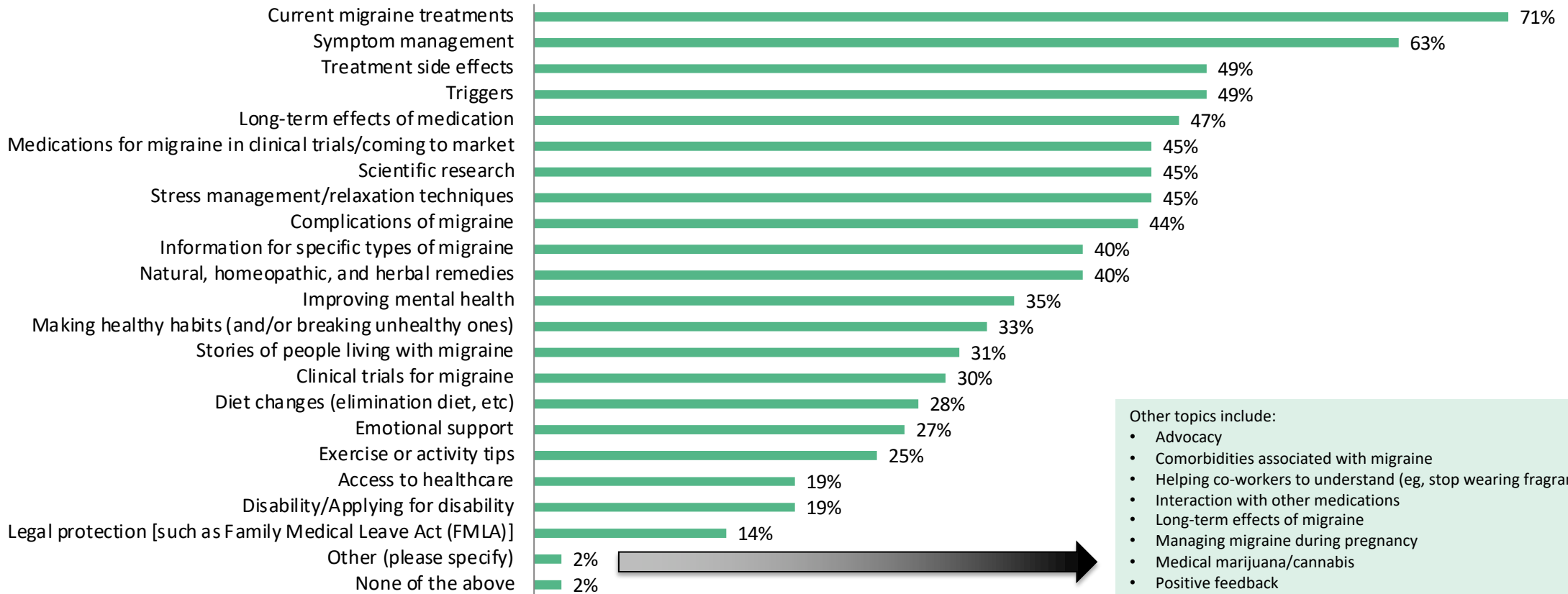


Base=All, n=4,693

Q33) Which of the following do you currently use to learn about or manage migraine? (Select all that apply)

7 in 10 are interested in learning more about migraine treatments on market

Topics of Interest



- Other topics include:
- Advocacy
 - Comorbidities associated with migraine
 - Helping co-workers to understand (eg, stop wearing fragrance)
 - Interaction with other medications
 - Long-term effects of migraine
 - Managing migraine during pregnancy
 - Medical marijuana/cannabis
 - Positive feedback
 - Stroke risk
 - Treatment costs/financial help for treatment/insurance coverage
 - Understanding migraine

Base=All, n=4,693

Q34) At this point in time, if/when you seek information about migraine, what type of content most interests you? (Select all that apply)

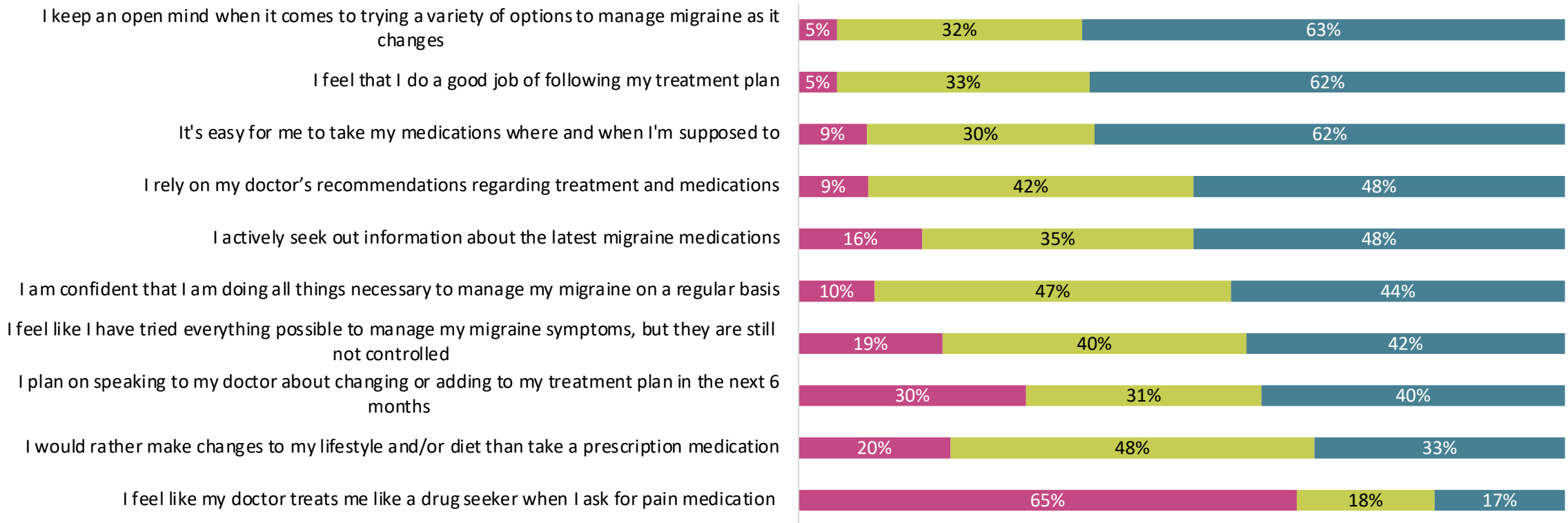
APPENDIX: TREATMENT VIEWPOINTS AND BEHAVIORS



Patients feel they are receptive to trying new migraine treatments, as well as being adherent to their current plan

Treatment Viewpoints

Strongly Disagree (1,2) Neutral (3,4,5) Strongly Agree (6,7)

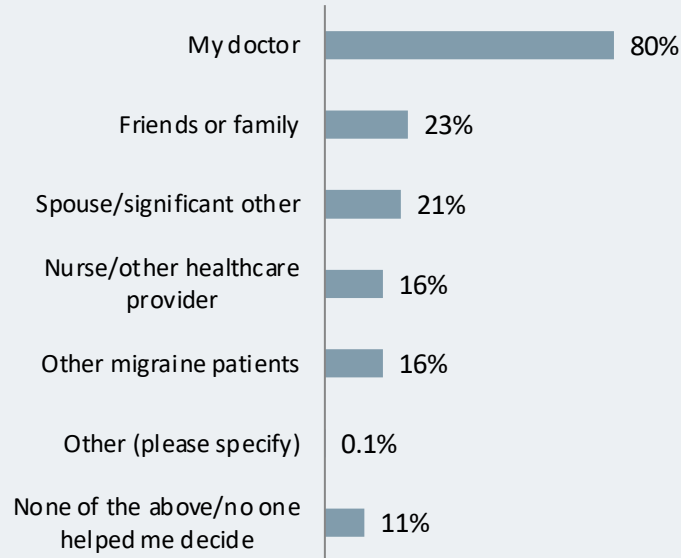


Base=All, n=4,693

Q36) The following statements seek to gain a better understanding of your opinions regarding migraine treatment. Rate your level of agreement with each. (1 = Strongly Disagree to 7 = Strongly Agree)

It's not uncommon for patients to involve others in their treatment decisions, with efficacy being the leading factor in that decision

Other Involved in Treatment Plan Decisions

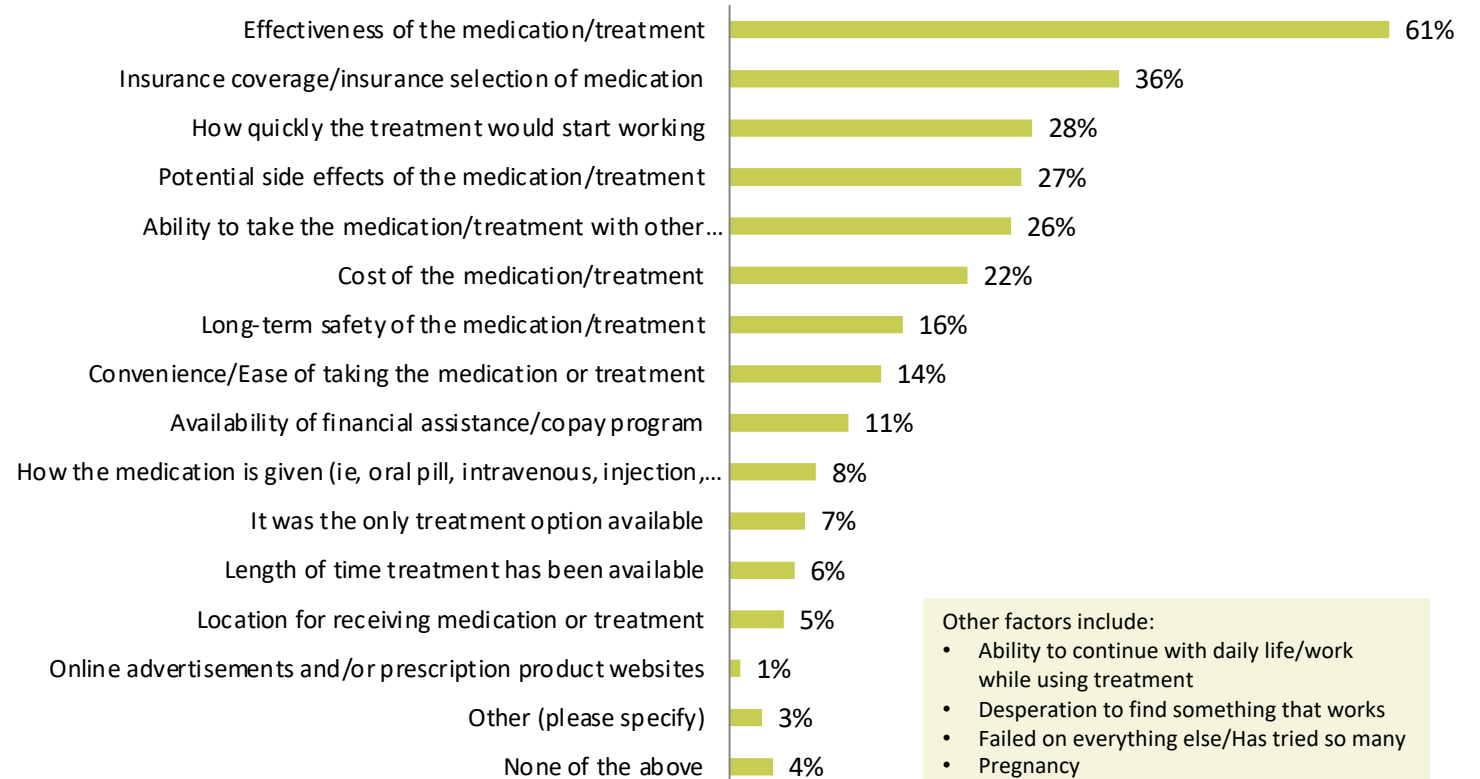


Other includes Insurance

Many noted they did their own research or learned from trial and error – these options were not included in the “Other please specify” final data counts (back-coded out)

Most Important Factors in Deciding Current Treatment Plan

Select Up to 3



Other factors include:

- Ability to continue with daily life/work while using treatment
- Desperation to find something that works
- Failed on everything else/Has tried so many
- Pregnancy
- New to market

Base=All, n=4,693

Q52) Who else, if anyone, helped you decide on your current treatment plan? (Select up to three who influenced your treatment plan decision)

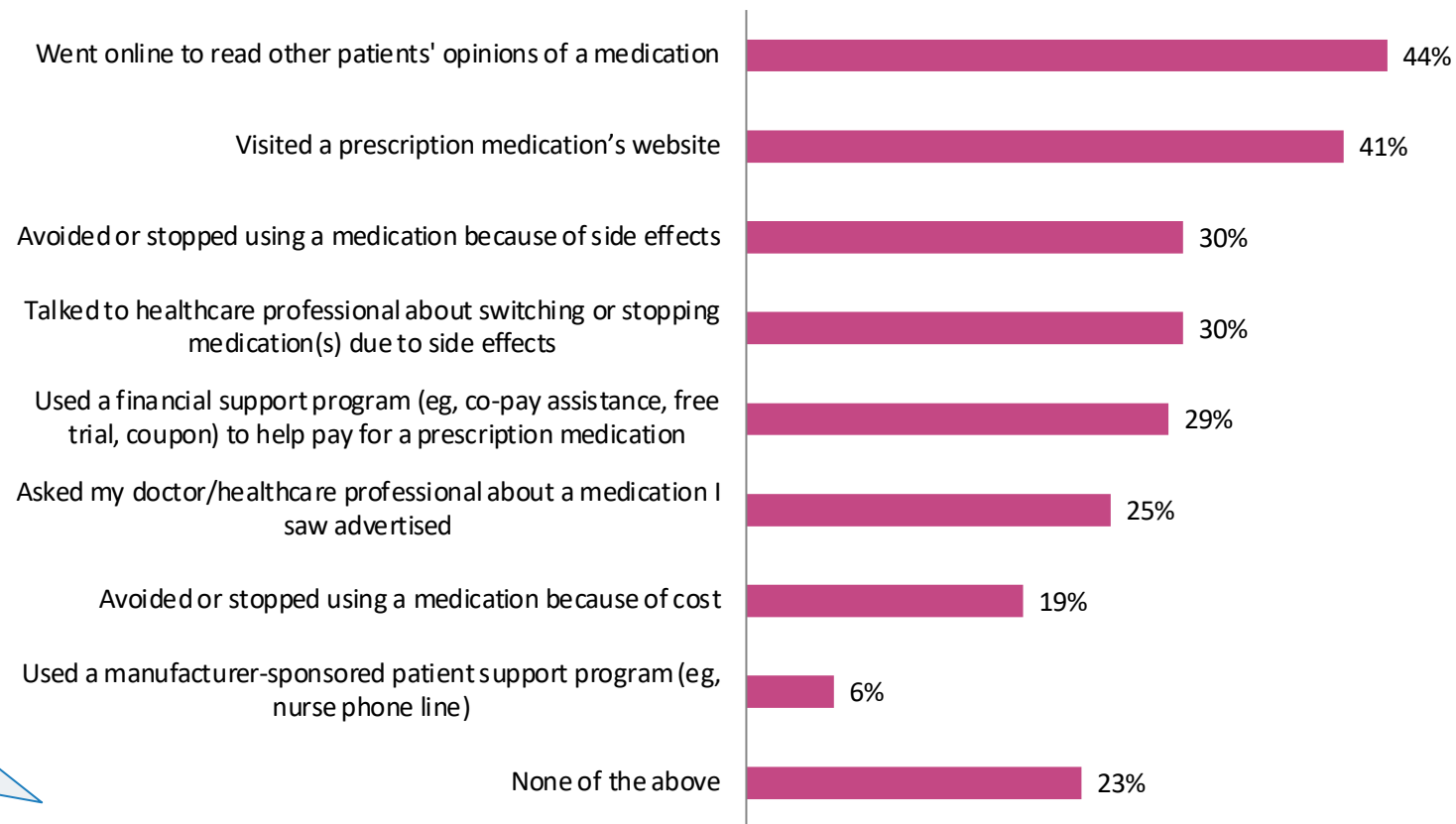
Q53) Select below the **three most important factors** in your decision to start your current treatment plan.

It is not uncommon for patients to go online to read others' opinions of a medication or to seek out information on a pharmaceutical website

- **40%*** cite that migraine has had a negative impact on their household finances
- **57%** are interested in participating in a migraine clinical trial
- **5%** have or are participating in a migraine clinical trial

“When there are coupons offered to help with the high co-pays for new med's it seems they always eliminate Medicare from participating. Seems unfair to do that. Since Medicare has been paid for over the 42 years I have worked it isn't a free situation that we don't deserve that extra help from the coupon.”

Treatment Related Behaviors in Past 6 Months



Base=All, n=4,693

Q66) Across the migraine journey, how much of a negative impact has migraine had on your household finances, savings, and living expenses? (1=No negative impact to 7=Significant negative impact) *Top 2 Box on 7 pt. scale

Q67) Over the past 6 months, have you done any of the following? (Select all that apply)

Q68) Would you be interested in participating in current or future migraine clinical trials?

Q69) Have you ever participated in a clinical trial?