

Preventing Migraine Attacks: A Current Perspective

April 2021

Objectives and Methodology

The objective of this research is to characterize the journey of people living with migraine disease and understand the physical and emotional barriers to preventive treatment.

- Experience living with migraine disease
- Burden of migraine disease
- Current treatment approach
- Satisfaction with treatment
- Prior experience with preventive treatment
- Emotional, physical, and financial barriers to preventive treatment

This research was conducted via a 20-minute online survey conducted with patients who suffer migraine attacks.

Data was collected between February – March 2021.

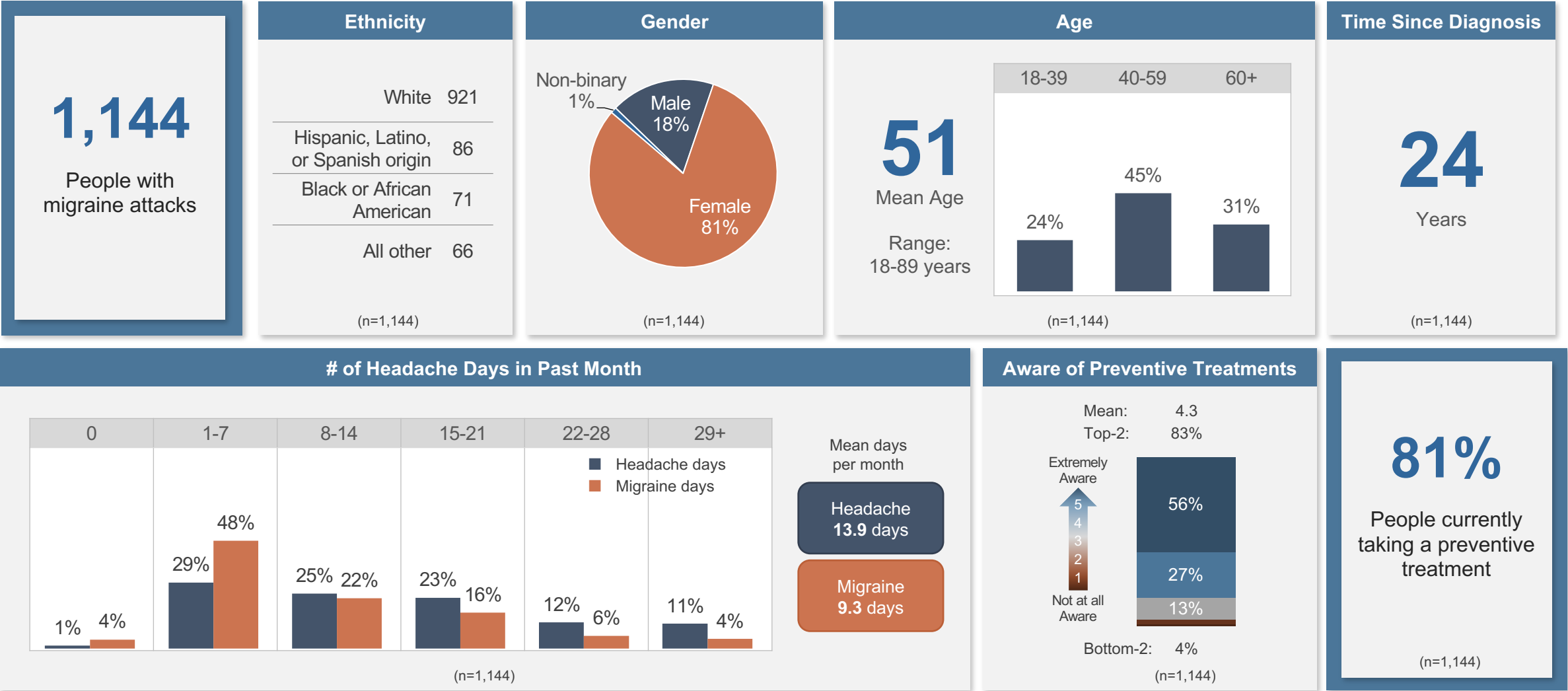
Patients were recruited from both the National Headache Foundation membership and a national panel of people with migraines.

To participate, patients must:

- Have been diagnosed by a healthcare provider with migraine disease for 2 or more years
- Be 18 years or older
- Reside in the U.S.
- Satisfy one of the following criteria:
 - Had at least 8 migraine attacks in the prior month
 - Been prescribed a preventive migraine treatment
 - Currently taking a preventive migraine treatment
 - Previously taken a preventive migraine treatment

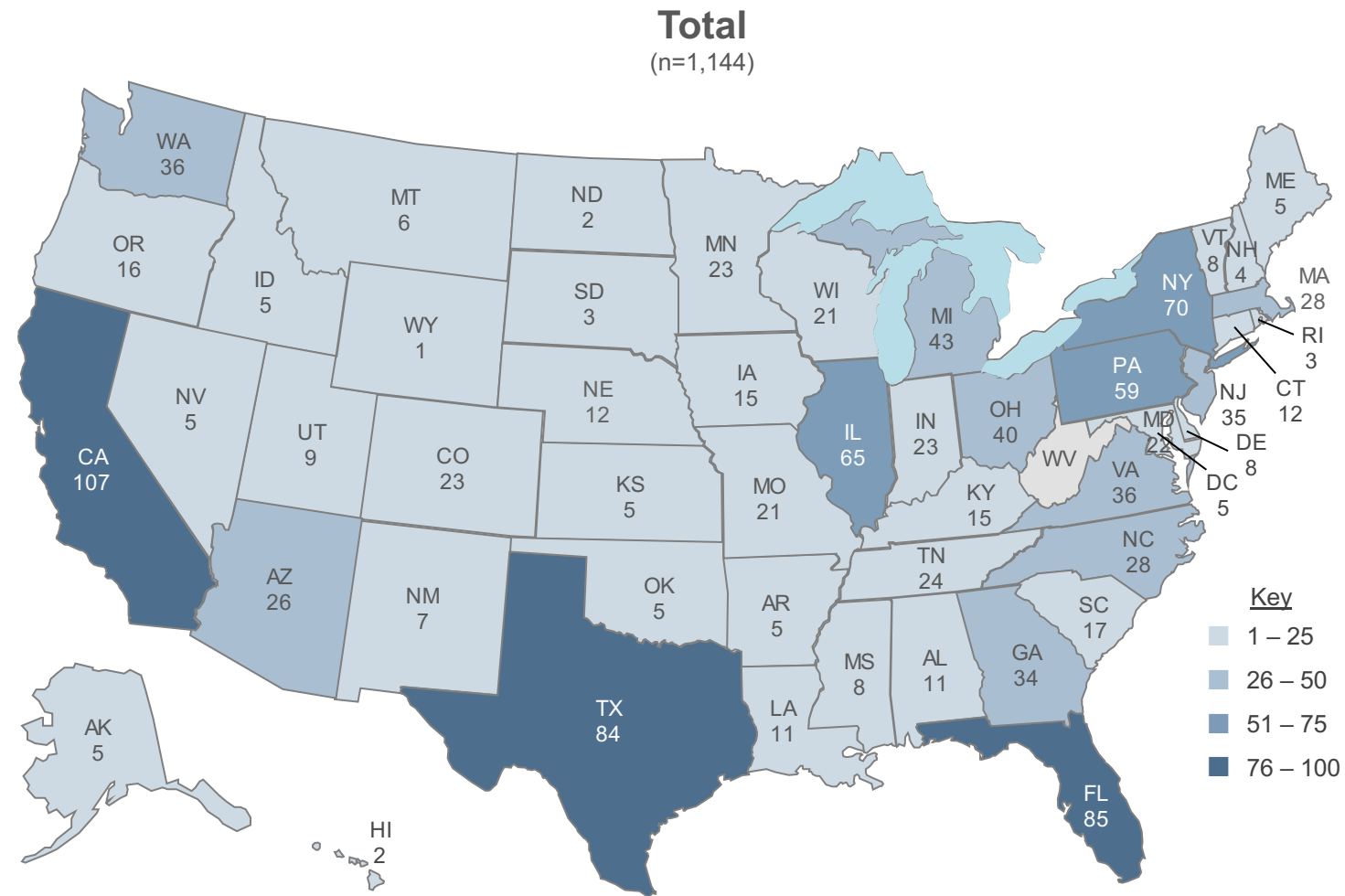
Stat testing where bases are sufficient (n=30+) at 95% confidence level are noted

Profile of Respondents



Stat: A/B/C indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
Q2. What is your age? Q5. How long ago were you first diagnosed with migraine disease by a healthcare provider? Q7. In the last month, approximately how many headache days have you had? A headache day is any day with headache, not limited to a migraine attack. Q8. In the last month, on how many of these [Q7] days did you experience a migraine attack? Q9. How aware are you of prescription treatments that can be taken to prevent migraine attacks? Q11. Which of the following prescription treatments are you currently taking (or using) to prevent migraine attacks? Select all that apply. Q49. What is your gender? Q51. Which of the following best describes you? Select all that apply.

Profile of Respondents



** Puerto Rico – 1





sam brown inc™ ■
Healthcare Communications

Executive Summary

Executive Summary

Profile of Respondents

- This research includes 1,144 people with migraine disease who had at least 8 migraine attacks in the prior month, have been prescribed a preventive migraine treatment, are currently taking or have previously taken a preventive migraine treatment.
- People with migraine were diagnosed with migraine disease 24 years ago, on average, typically by a general neurologist (30%), family practice physician (30%), or headache specialist (23%).

Attitudes About Migraine Disease

- Migraine disease has a broad and negative impact on people's lives, effecting their energy level (64%), mental clarity (57%), productivity (54%), personal relationships (31-50%), and professional success (49%).
- Half of people (50%) are dissatisfied with their ability to control their migraine disease. They are frustrated (39%), exhausted (29%), and stressed (19%) by their disease. For many (67%), having migraine disease under their control feels like an unreachable goal.
- People with migraine disease often feel life is passing them by (65%).
- Black people with migraine disease grapple with negative feelings more frequently than other ethnicities. They often feel a keen sense of frustration in adjusting treatments (mean: 3.9 on 5-pt scale), that life is passing them by (mean: 4.0 on 5-pt scale), and that they are a "guinea pig" as their healthcare provider tries to find the right preventive treatment for them (mean 3.7 on 6-pt scale). They often express anxiety at the thought of trying a new oral preventive treatment (35%).

Executive Summary

Migraine Disease Progression

- Hormone changes were the trigger for worsening disease for approximately half of people (51%). Work-related stress also preceded worsening disease (19%).
- Nearly all (94%) people saw a healthcare provider after noticing an increase in migraine attack frequency/severity, half within the first year. Two-thirds (62%) of all people, and particularly Black (77%) and Hispanic (73%) people, wish they had sought care sooner.
- Once they saw a provider, half of people (47%) recall being told that there were preventive treatments for migraine attacks. Only one-third (30%) were informed that their migraine disease had progressed or become chronic .
- Some (9%) were told there was nothing that could be done. This was more likely to occur with Hispanic people (15%) than other ethnicities.

Preventive Treatment

- Participants in this research are highly aware of preventive treatment for migraine disease (83% very/extremely aware / mean 4.3 on 5-pt scale). Awareness is markedly lower amongst Hispanic (3.9 on 5-pt scale) and Black (4.2 on 5-pt scale) people.
- 81% of people are currently taking a preventive treatment; of those not taking a preventive treatment, most (73%) wish they were.
- People with migraine are not typically proactive in raising the topic of preventive treatment with their healthcare providers. Three-quarters (76%) recall their provider initiating the discussion about preventive treatment.
- Patients are typically prescribed a preventive treatment within 3 months of their initial visit regarding worsening migraine attacks (63%).
- Although people were worried about taking another medication with potential side effects (58%), they were relieved to learn there was a preventive treatment (78%). Younger patients (18-39 yrs) were more likely to be scared that this meant their migraine attacks would be an issue for the rest of their lives (69%).



Executive Summary

- Non-white ethnicities are more likely to feel worried (3.9 on 5-pt scale) at the thought of taking a preventive treatment. They were less aware of preventive treatments prior to being prescribed one and were surprised and scared (3.4 and 4.0 on 5-pt scale) to learn that their migraine attacks would be part of their lives forever and that their disease was serious enough to require prevention) 3.9 and 3.4 on 5-pt scale).
- While newer classes of treatment have made dramatic inroads amongst people with migraine disease, older classes of treatments (e.g., anti-seizure, antidepressants, blood pressure meds) continue to be commonly used.
 - One-third are taking anti-seizure drugs (35%), one-third antidepressants (31%), and one-third blood pressure medication (31%)
 - Nearly half (45%) are currently taking a CGRP inhibitor
 - One-quarter (24%) are currently taking Botox

Future Preventive Treatment

- Overall satisfaction with current preventive treatment is modest. Only 18% are fully satisfied with their current preventive treatment. Nearly all people (84%) currently taking a preventive treatment- and particularly those younger than 60 - wish there was a better option.
- The single most important attribute for a future preventive migraine treatment is to provide more migraine-free days per month (53% selected in top 3). Less frequent and less severe attacks are also important goals (50% and 43% selection in top 3, respectively), but the ultimate goal is more migraine-free days.
- Although people who have taken more than one preventive treatment are exhausted by the cycle of hoping for success followed by the disappointment of failure (76%), they remain hopeful the next preventive treatment may work (82%).
- Nearly all people (98%) are willing to consider a new oral treatment, with half (50%) stating they are extremely willing.

Executive Summary

COVID

- Overall, COVID had a middling impact on people with migraine, but one-third (39%) describe no impact whatsoever. Blacks and Hispanics are more likely to have felt a negative impact than White people (3.1 and 2.9, respectively, versus 2.4 on a 5-pt scale). Those who were impacted struggled to see their healthcare provider in a timely manner (46%). They do not find telemedicine to be of comparable quality to an in-person visit (43%) but are not comfortable going to the office in-person (33%).

Educational Opportunity

- While many people know about the potential for migraine disease to progress, there remains an educational opportunity surrounding many aspects of the condition. One-third (29%) do not clearly understand that migraine disease can be progressive, that the risk of anxiety and depression increases with the number of migraine attacks (33%), and that overuse of acute treatments may lead to more attacks (35%). More than half (58%) do not clearly understand that sub-optimal acute treatment can lead to disease progression.
- Educational gaps are far more pronounced in non-White ethnicities, including Hispanic, Black, and All Other groups. (See slide 19 in report.)
- If they could give advice to their younger selves, people with migraine would stress the validity of their disease (50%) and urge them to seek medical attention for this debilitating disease (34%). They would stress self-advocacy and urge their younger selves to seek new options if they are not satisfied with their care (33%). One in five (22%) wish they could tell their younger selves that there are many treatments for migraine disease.

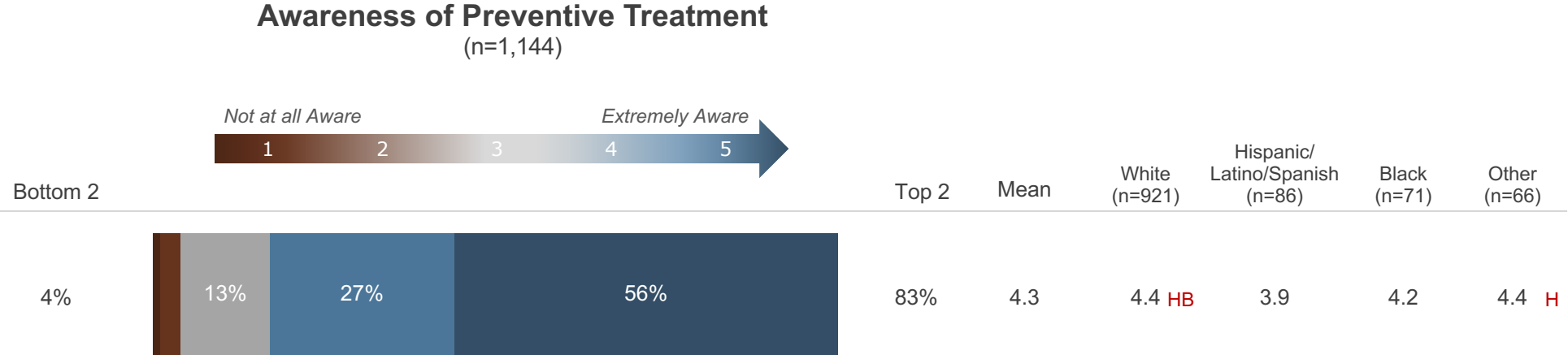


sam brown inc™
Healthcare Communications

Attitudes About Migraine Disease

Awareness of Preventive Treatment

Overall awareness of preventive treatment is very high, with more than half describing themselves as extremely aware. Awareness is markedly lower amongst Hispanic and Black people.

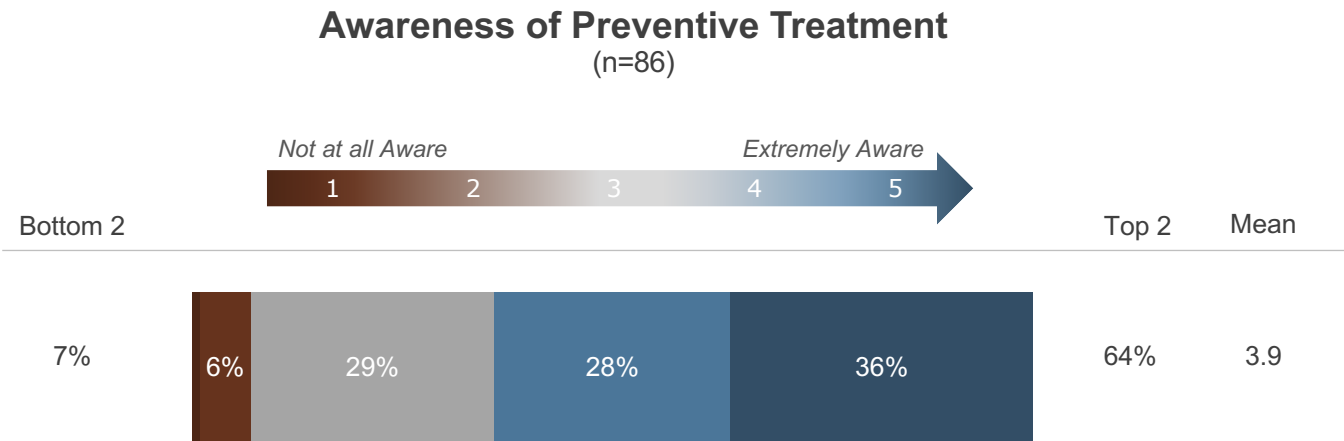


Note: Values < 5% are not labeled
Stat: W/H/B/O indicates significant difference between [W–White, H–Hispanic, B–Black, O–All Other] at 95% confidence level
Q9. How aware are you of prescription treatments that can be taken to prevent migraine attacks?

Awareness of Preventive Treatment

Hispanic Only

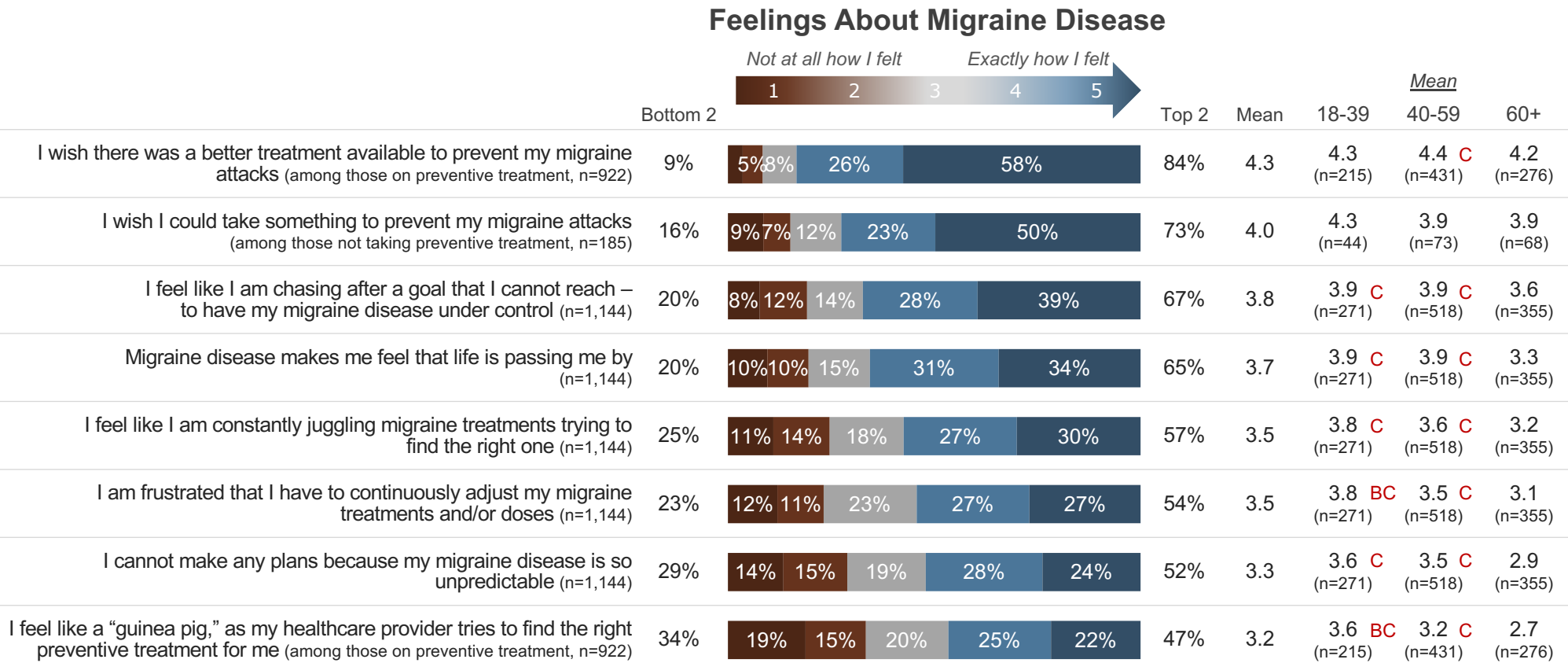
Awareness of preventive treatment is markedly lower amongst Hispanic people (Top 2 box 64% for Hispanic versus 83% for Total).



Note: Values < 5% are not labeled
Q9. How aware are you of prescription treatments that can be taken to prevent migraine attacks?

Feelings about Migraine Disease Treatment and Prevention

Nearly all people currently taking a preventive treatment- and particularly those younger than 60 - wish there was a better treatment. For many, having migraine disease under their control feels like an unreachable goal.

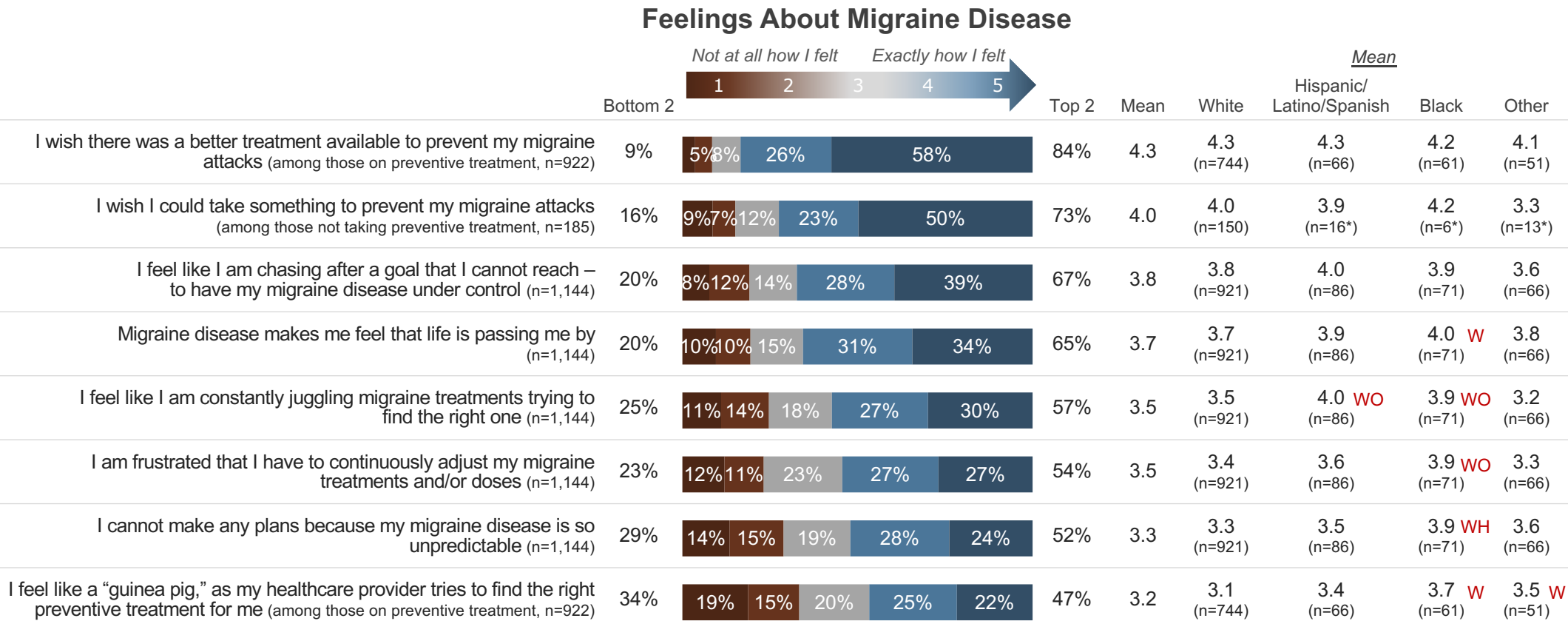


Younger people (< 60 yrs) are most impacted by migraine disease. They describe frustration with juggling and adjusting their treatment and with their inability to make plans.

Note: Values < 5% are not labeled
 Stat: A/B/C indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
 Q16. To what extent do each of the following statements capture how you feel about your migraine disease?

Feelings about Migraine Disease Treatment and Prevention

Black people with migraine disease grapple with negative feelings more frequently than other ethnicities. They often feel a keen sense of frustration, that life is passing them by, and that they are a “guinea pig” as their healthcare provider tries to find the right preventive treatment for them.



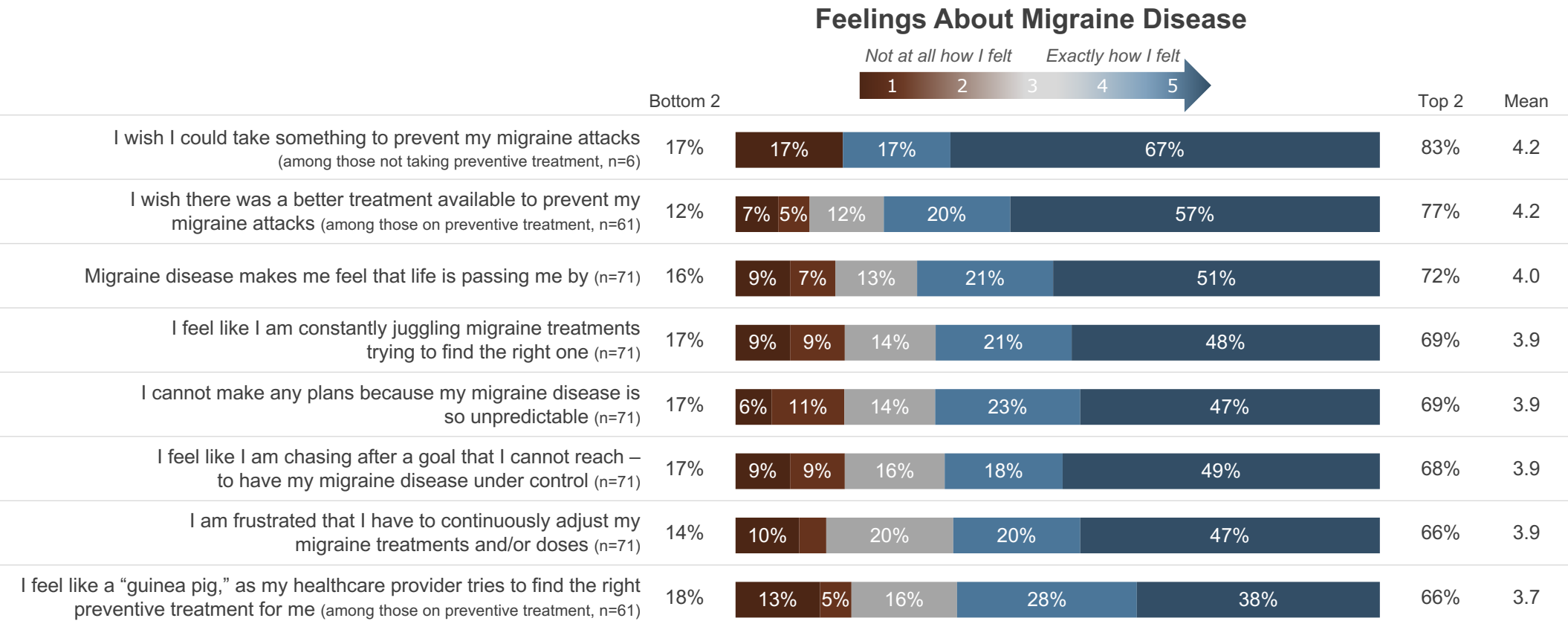
Note: Values < 5% are not labeled
Stat: W/H/B/O indicates significant difference between [W–White, H–Hispanic, B–Black, O–All Other] at 95% confidence level Q16. To what extent do each of the following statements capture how you feel about your migraine disease?



Feelings about Migraine Disease Treatment and Prevention

Black Only

Black people with migraine disease grapple with negative feelings more frequently than other ethnicities. They often feel a keen sense of frustration, that life is passing them by, and that they are a “guinea pig” as their healthcare provider tries to find the right preventive treatment for them.



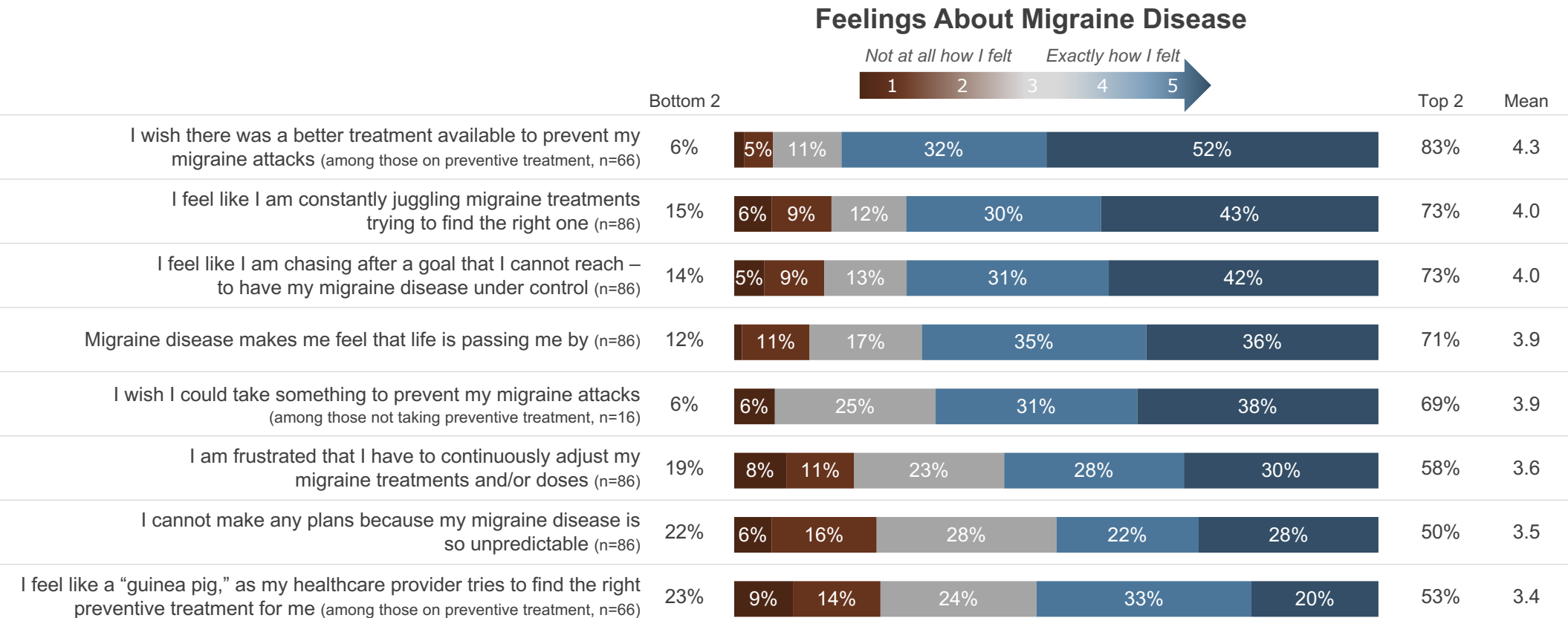
Note: Values < 5% are not labeled
Q16. To what extent do each of the following statements capture how you feel about your migraine disease?



Feelings about Migraine Disease Treatment and Prevention

Hispanic Only

Hispanic people with migraine also wish for better treatment to prevent their migraine attacks and feel they are constantly juggling to find the right treatment.

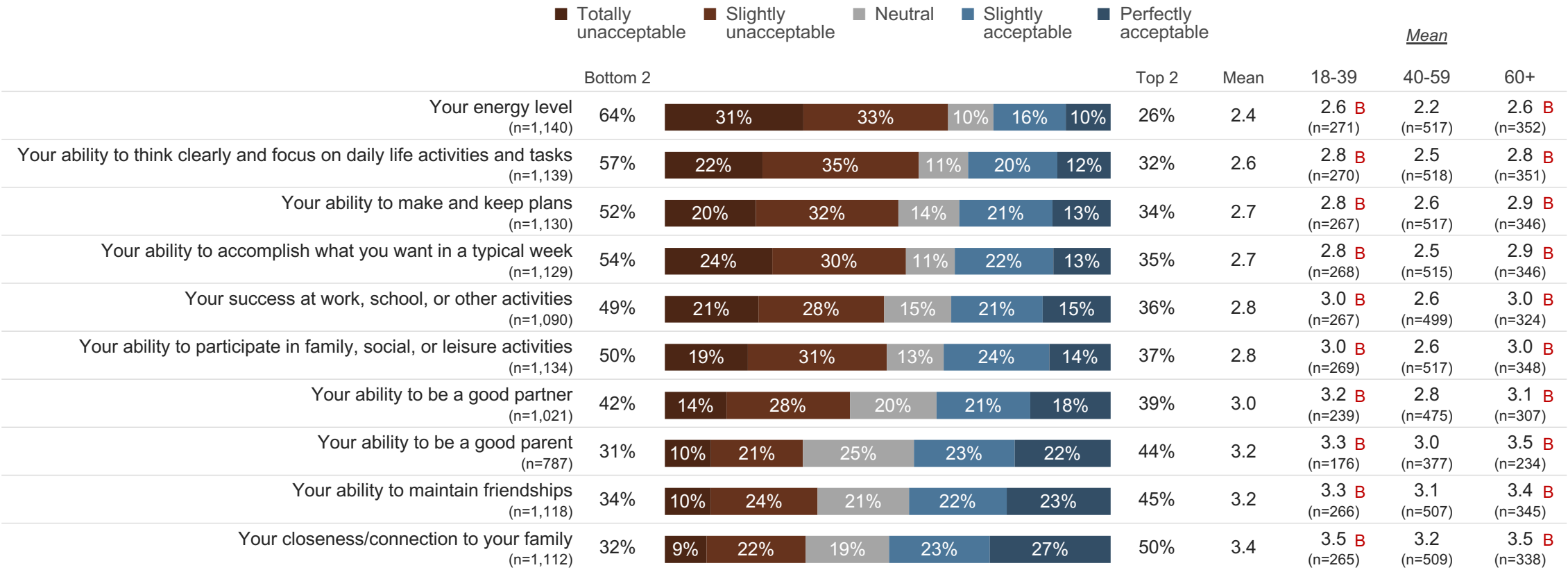


Note: Values < 5% are not labeled
Q16. To what extent do each of the following statements capture how you feel about your migraine disease?

Impact of Migraine Disease

Migraine disease has a broad and negative impact on people’s lives, effecting their energy level, mental clarity, productivity, personal relationships, and professional success.

Impact of Migraine Disease on Your Life

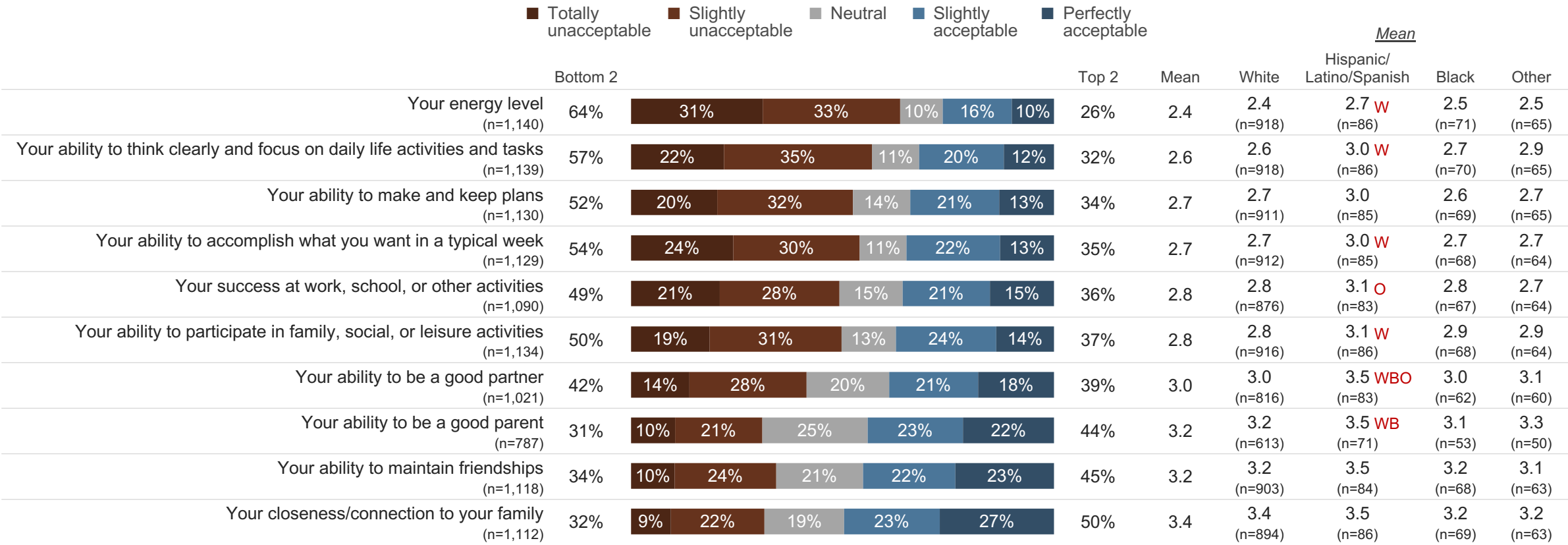


Note: Values < 5% are not labeled || Base does not include those who selected 'NA'
 Stat: A/B/C indicates significant difference between [A-18-39, B-40-59, C-60+] at 95% confidence level
 Q17. In thinking about the impact of migraine disease on your life today, how would you describe ...

Impact of Migraine Disease

Black people with migraine disease are more likely to note negative impacts of migraine disease on their lives versus other ethnicities. They feel migraine disease diminishes their role in their families, as partners and as parents.

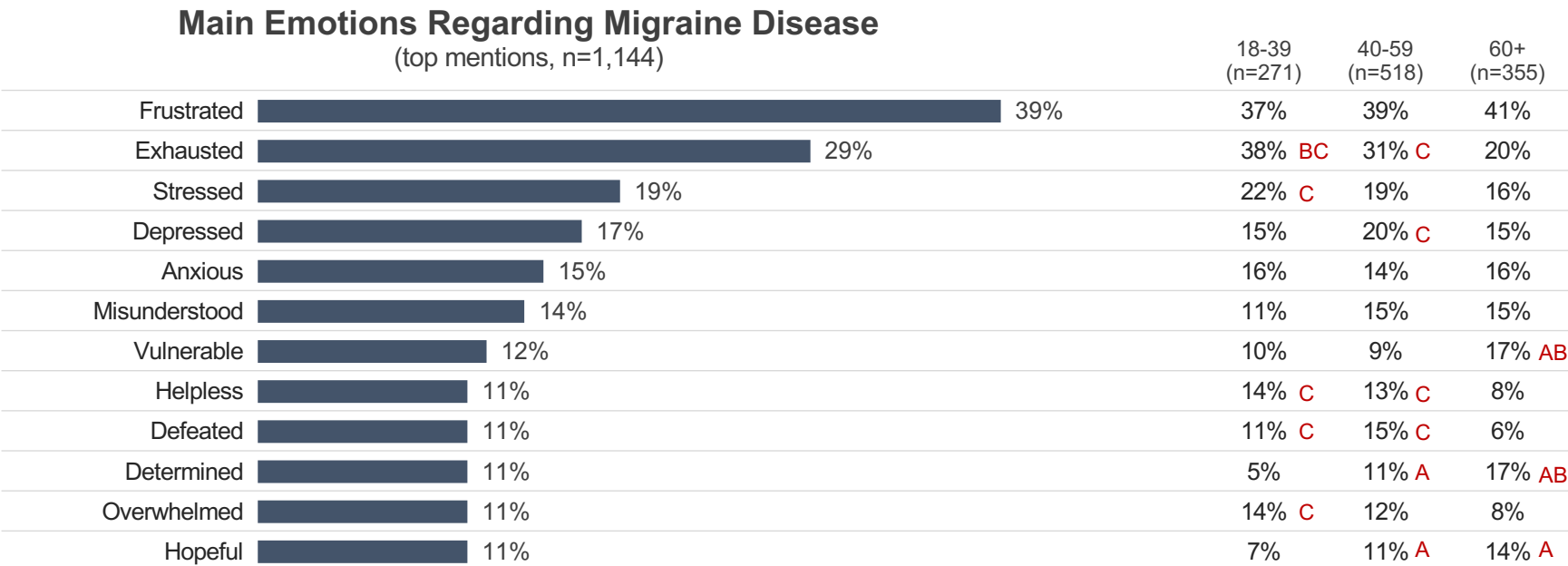
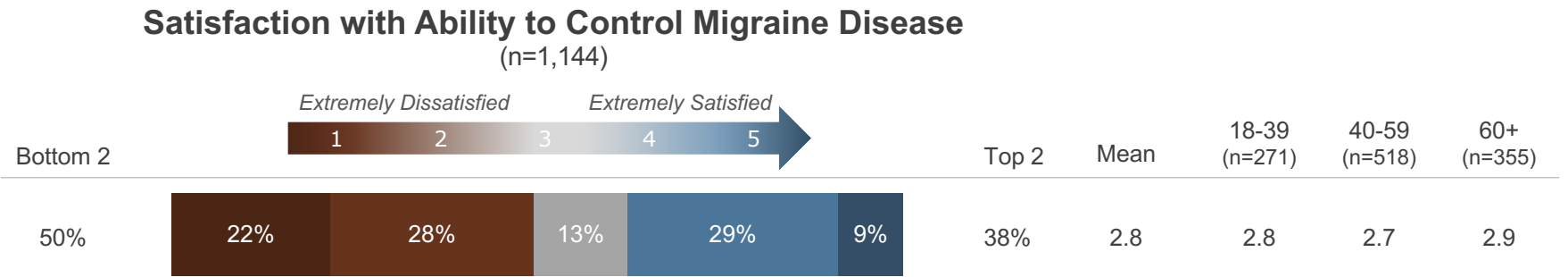
Impact of Migraine Disease on Your Life



Note: Values < 5% are not labeled || Base does not include those who selected 'NA'
 Stat: W/H/B/O indicates significant difference between [W–White, H–Hispanic, B–Black, O–All Other] at 95% confidence level
 Q17. In thinking about the impact of migraine disease on your life today, how would you describe ...

Emotions you Feel

Half of people are very / extremely dissatisfied with their ability to control migraine disease. Less than 10% are fully satisfied. People are left frustrated and exhausted, especially those younger than 60.

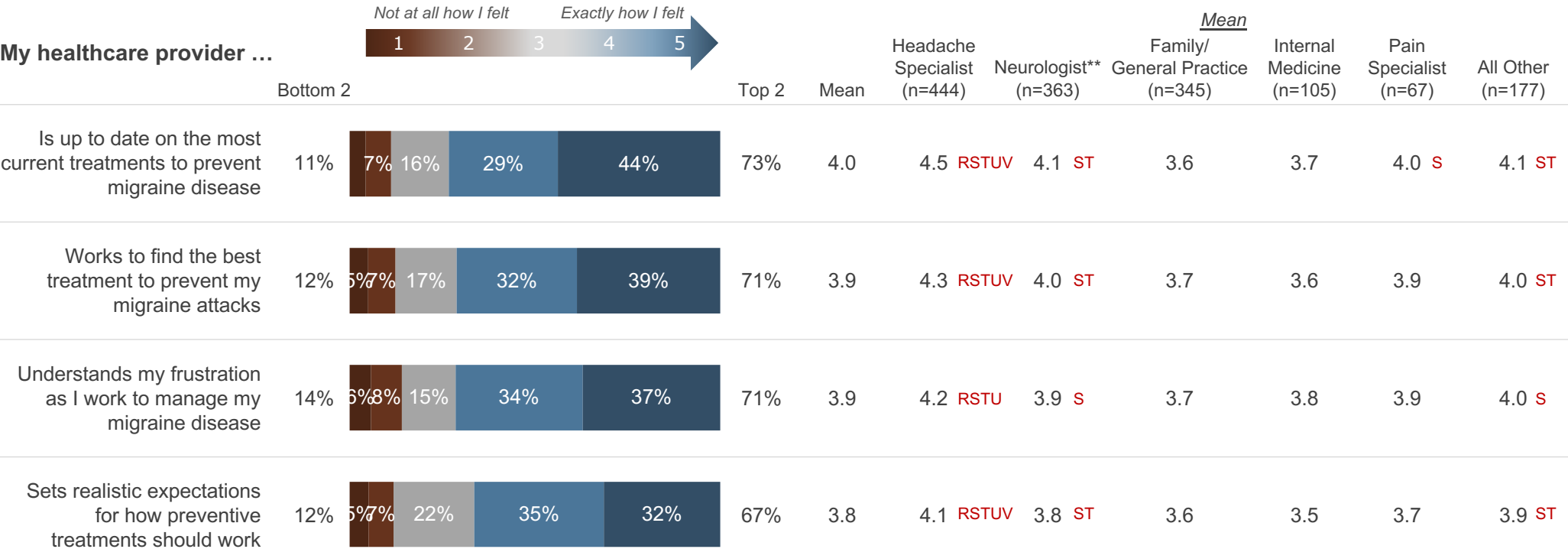


Stat: A/B/C indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
Q18. What are the 3 main emotions you feel today when you think about your migraine disease? (Select up to 3)
Q19. Overall, how satisfied are you with your ability to control your migraine disease today?

Feelings about Healthcare Provider

The frustration associated with having migraine disease does not transfer to people’s feelings about their healthcare provider. The majority feel their provider is up-to-date on preventive migraine treatment, understands their frustration, and works to find the best treatment. Feelings are consistently more positive for those being treated by a headache specialist or neurologist.

Feelings About Current Healthcare Provider
(n=1,144)



46%
of patient's healthcare providers have discussed including mental health support as part of their treatment plan.
(n=1,144)

Note: Values < 5% are not labeled || ** Neurologist (not a headache specialist)
Stat: Q/R/S/T/U/V indicates significant difference between [Q–Headache specialist, R–Neurologist, S–Family/general practice T–Internal medicine, U–Pain specialist, V–All other] at 95% confidence level
Q20. To what extent do each of the following statements capture how you feel? The closer you click to the anchor statement, the more it reflects your agreement
Q21. Has your healthcare provider ever discussed including mental health support (e.g., a psychologist or therapist) as part of migraine treatment plan?

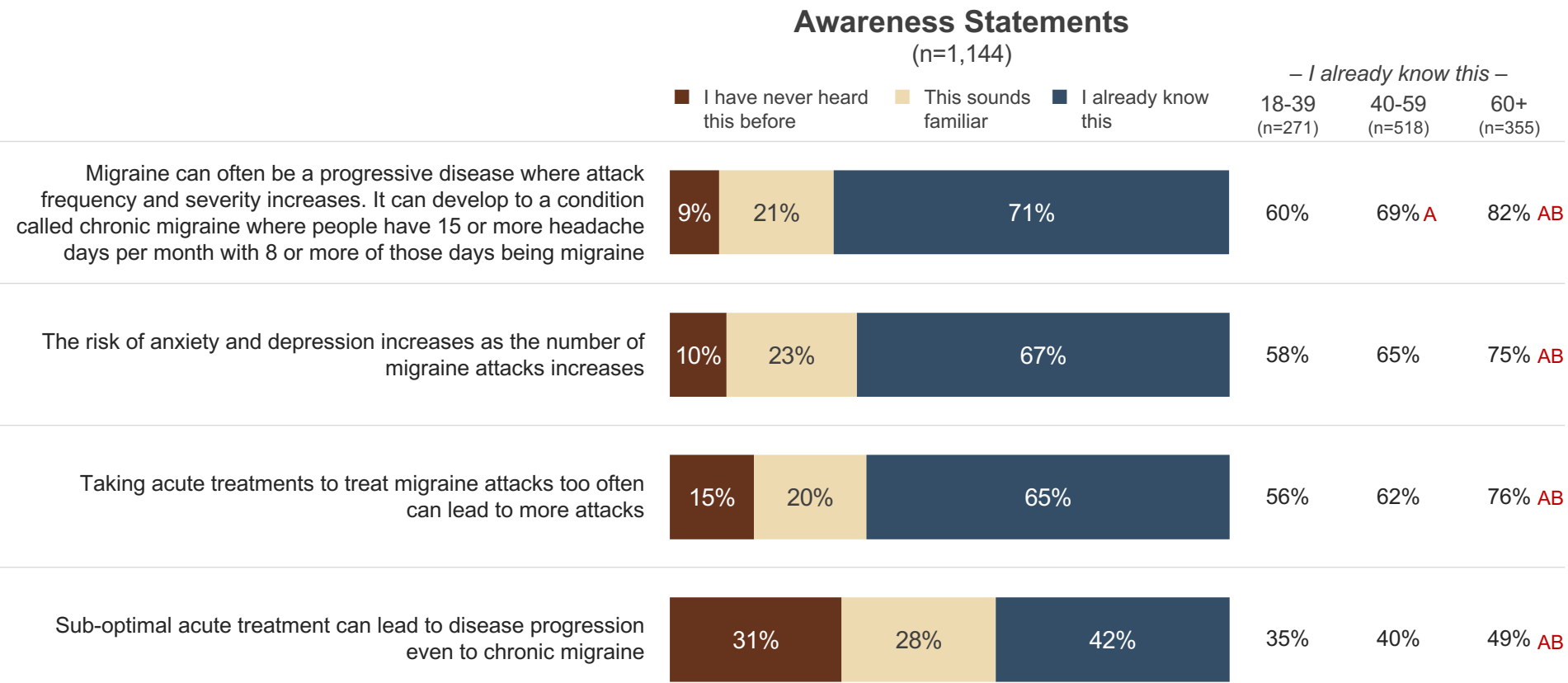


sam brown inc™ ■
Healthcare Communications

Migraine Disease Progression

Awareness of Migraine Disease Progression

While many people know about the potential for migraine disease to progress, there remains an educational opportunity surrounding many aspects of migraine disease. One-third do not clearly understand that migraine disease can be progressive, that the risk of anxiety and depression increases with the number of migraine attacks, and that overuse of acute treatments may lead to more attacks. Almost two-thirds do not clearly understand that sub-optimal acute treatment can lead to disease progression.

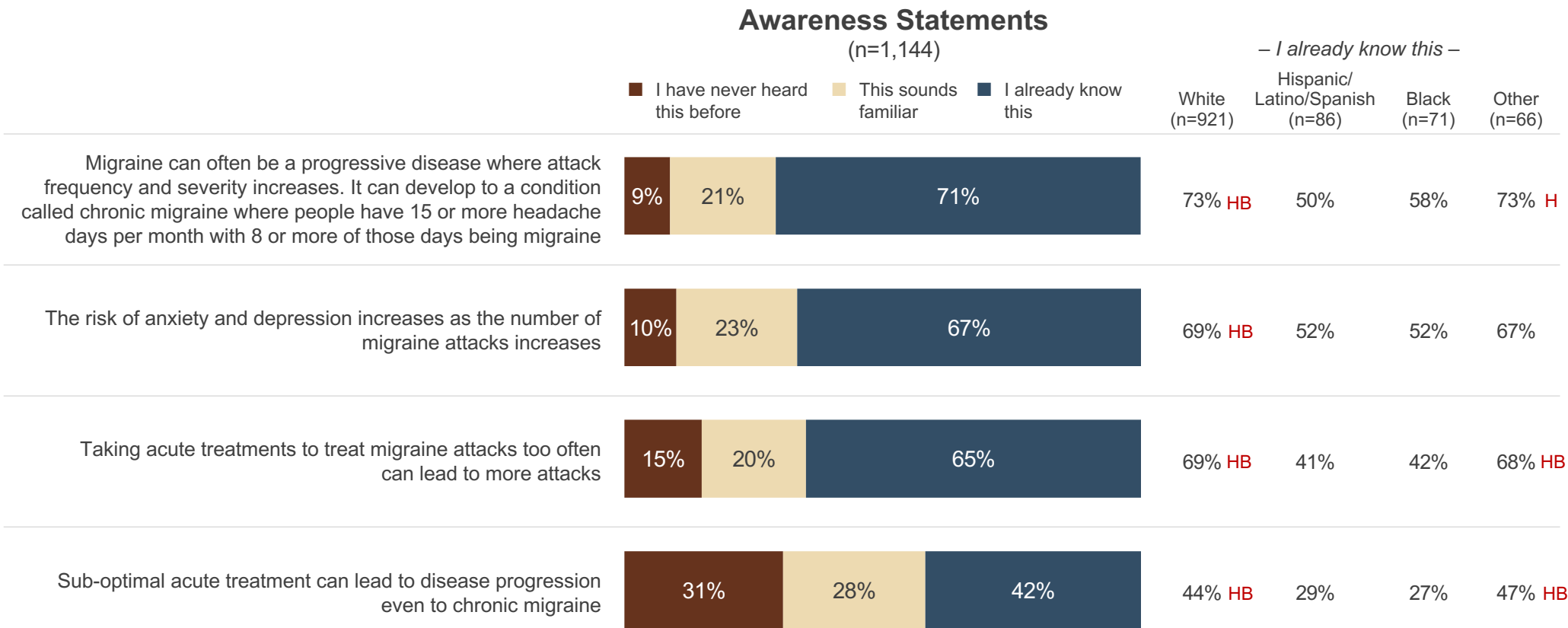


Educational gaps are most pronounced in younger people (18-39 yrs)

Stat: A/B/C indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
Q22. How aware are you of each of the following ...

Awareness of Migraine Disease Progression

Educational gaps are far more pronounced in non-White ethnicities, including Hispanic, Black, and All Other groups.



Stat: W/H/B/O indicates significant difference between [W–White, H–Hispanic, B–Black, O–All Other] at 95% confidence level
Q22. How aware are you of each of the following ...

Turning Point in Migraine Disease

Hormone changes were the trigger for worsening disease for approximately half of people. Other factors that preceded worsening disease include work-related stress and personal loss or trauma.

Turning Point in Migraine Disease		(n=1,144)	18-39 (n=271)	40-59 (n=518)	60+ (n=355)
When I started menstruating	<div></div>	20%	23%	18%	22%
When I went through menopause/perimenopause	<div></div>	16%	-	16% A	28% AB
When I changed jobs	<div></div>	16%	20% C	15%	12%
When there was a death in my family	<div></div>	14%	12%	16%	12%
When I moved	<div></div>	13%	17% C	13%	9%
When I gave birth/had a baby	<div></div>	12%	11%	14%	10%
When I had an injury	<div></div>	12%	16% C	14% C	7%
When I was diagnosed with an illness (not directly related to migraine disease)	<div></div>	12%	11%	13%	10%
When I experienced a traumatic event	<div></div>	11%	16% C	11% C	7%
When I started a new school or college	<div></div>	11%	22% BC	7%	6%
When the COVID-19 pandemic shut down daily life	<div></div>	9%	14% BC	8%	6%
When an illness occurred in my family	<div></div>	8%	11%	8%	7%
When a divorce occurred in my family	<div></div>	7%	5%	9% AC	5%
No particular event	<div></div>	21%	19%	21%	23%

13 years ago

Noticed change in frequency/severity of migraine attacks
(n=1,144)

Other:

- Professional changes (3%)
- Hormonal changes (3%)
 - Pregnancy, starting/stopping birth control, hysterectomy, fertility treatments

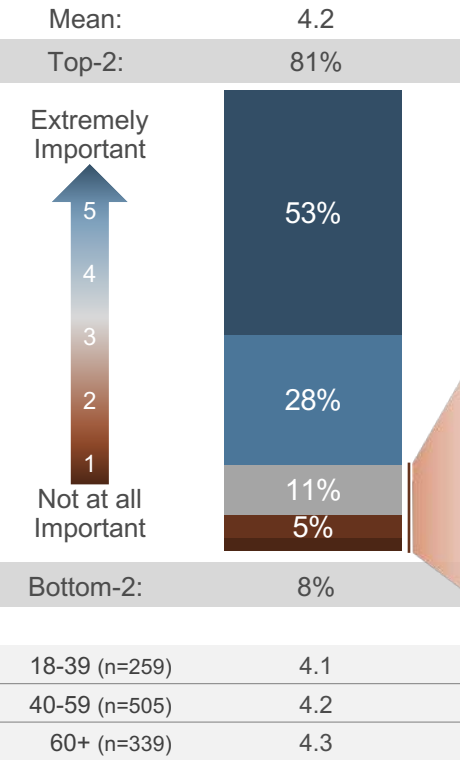
Stat: **A/B/C** indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
 Q23. Looking back, was there a particular time in your life or event when you noticed a turning point in your migraine disease? For example, when the frequency or severity of your migraine attacks changed. What were these events? Select all that apply. Q24. How long ago did you notice that the frequency or severity of your migraine attacks changed?

Urgency in Seeking Healthcare Upon Progression

Upon progression, the majority of people felt it was extremely important to see their healthcare provider. Those who did not feel a sense of urgency thought they could manage it on their own or, in the case of older people (60+ yrs), that there was nothing a healthcare provider could do to help.

Importance of Seeking HCP with Change in Migraine Attack Frequency

(n=1,103)



Reason Less Important to Seek HCP

(among those who felt it was less important, n=215)

Ranked 1st

	Ranked 3 rd	Ranked 2 nd	Ranked 1 st	18-39 (n=63)	40-59 (n=97)	60+ (n=55)
I thought I could manage it on my own	9%	14%	20%	43%	14%	18%
I did not think there was anything a healthcare provider could do about it	8%	7%	18%	34%	11%	19%
I did not think it was bad enough to see a healthcare provider	6%	8%	10%	24%	13%	8%
I had been able to adapt my life to accommodate my migraine attacks	7%	8%	9%	24%	6%	11%
I did not know that I might benefit from other treatment options	7%	7%	6%	19%	3%	7%
I did not realize there was any harm in waiting	7%	6%	6%	18%	11%	2%
I did not have time	7%	7%	7%	17%	11%	8%
I did not want to acknowledge that my migraine disease was changing	5%	5%	12%	11%	8%	3%
I could not afford to see a healthcare provider	5%	5%	10%	3%	5%	—
I did not have insurance or was under-insured	5%	5%	8%	—	—	—
I did not have a healthcare provider near me	6%	6%	6%	—	—	—

Hispanics and Black people are more likely not to have insurance or to be underinsured (18.8% and 10% respectively)

Note: Values < 5% are not labeled || Q25 base does not include those who selected 'NA'

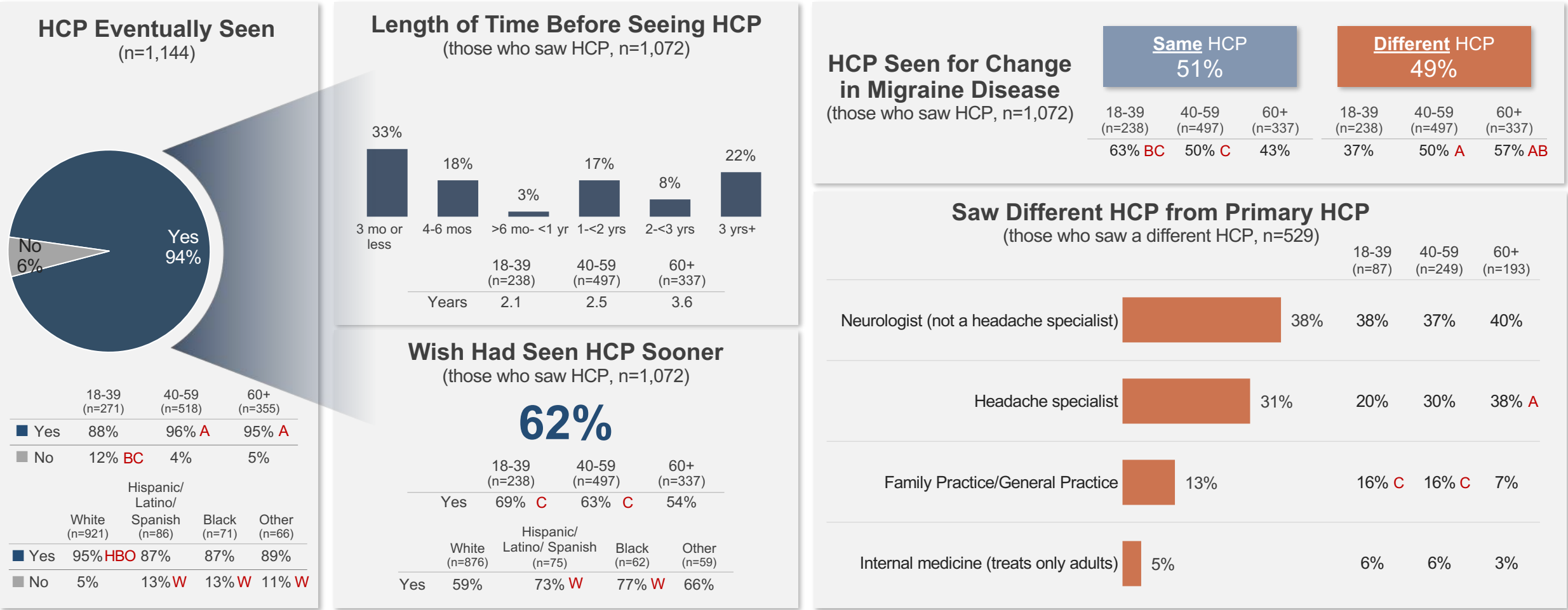
Stat: A/B/C indicates significant difference between [A=18-39, B=40-59, C=60+] at 95% confidence level

Q25. How important was it for you to see your healthcare provider when you noticed the frequency or severity of your migraine attacks was changing?

Q26. [If 1, 2, or 3] Why did you feel this way?

Decision to see Healthcare Provider Upon Progression

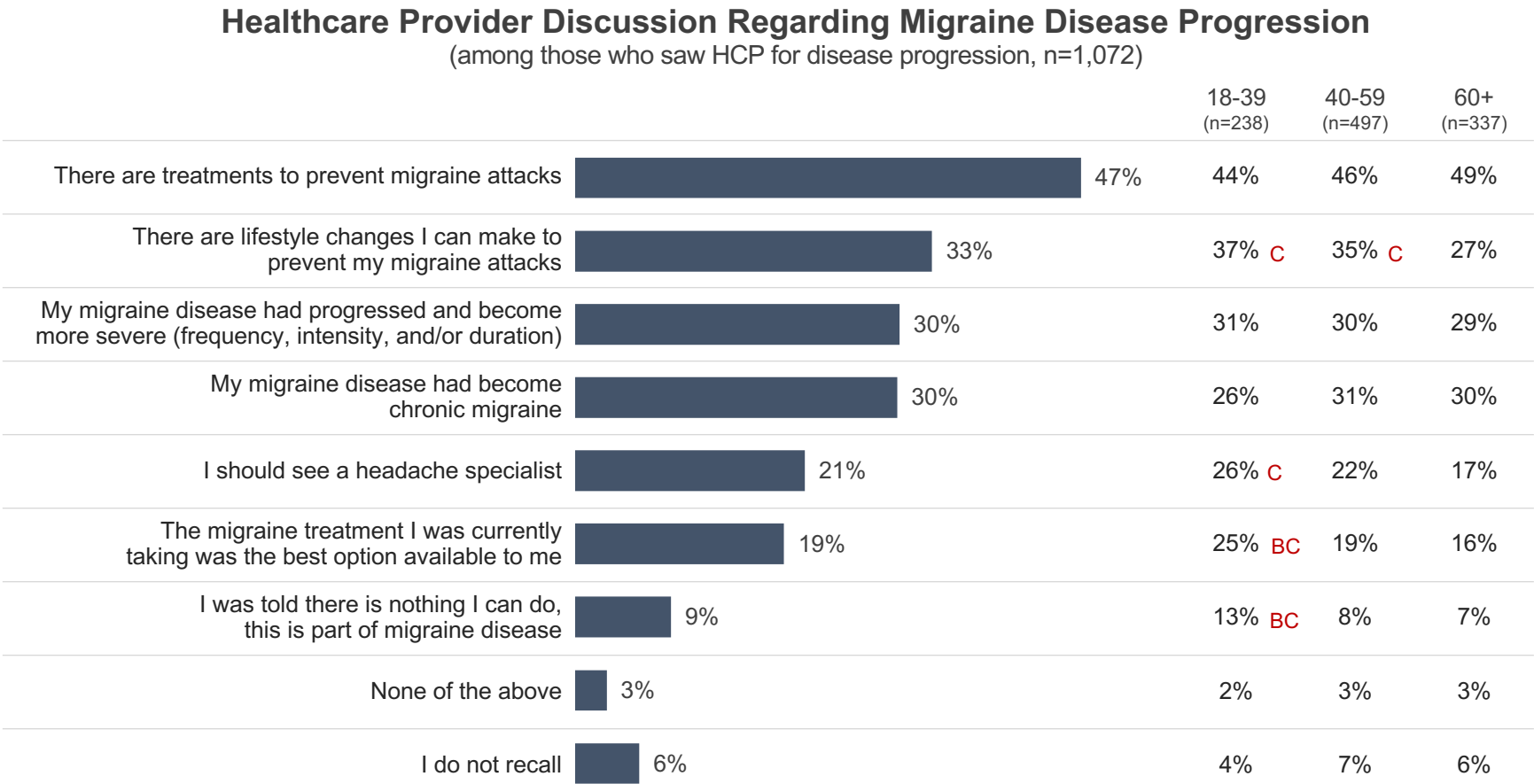
Nearly all people saw a healthcare provider after noticing an increase in migraine attack frequency/severity, half within the first year. Two-thirds of all people, particularly Black and Hispanic people, wish they had sought care sooner.



Stat: [A/B/C] [W/H/B/O] indicates significant difference between [A–18-39, B–40-59, C–60+] [W–White, H–Hispanic, B–Black, O–All Other] at 95% confidence level
Q27. Did you eventually see a healthcare provider? Q28. Approximately how much time passed between the time you noticed the frequency or severity of your migraine attacks was changing and the time you saw a healthcare provider about it? Q29. Do you wish you had seen a healthcare provider sooner? Q30. Did you see the same healthcare provider that had been treating your migraine attacks or a different provider? Q31. When you saw a different provider from your primary healthcare provider, what was the specialty of the provider that you saw?

Healthcare Provider Discussion Regarding Migraine Disease Progression

Only half of people recall being told that there were preventive treatments for migraine attacks. Only one-third were informed that their migraine disease had progressed or become chronic. 1 in 10 were told there is nothing that could be done.



Younger patients (18-39) are more likely to have been told to see a headache specialist.

More Hispanics (15%) were told there is nothing they can do, this is part of their migraine disease

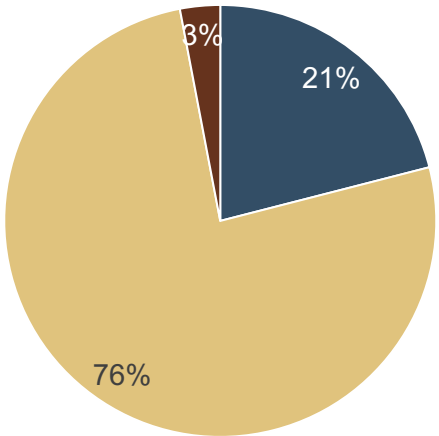
Stat: A/B/C indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
Q32. Please think about the conversations you had with your healthcare provider about the increasing frequency and/or severity of your migraine attacks. During this time, what do you recall your healthcare provider telling you about your migraine disease? Select all that apply.

Starting a Preventive Treatment

Discussion of preventive treatment was ultimately initiated by the healthcare provider. Almost two-thirds of patients were prescribed a preventive treatment within 3 months of their initial visit.

Discussion Initiation for Preventive Treatment

(among those taking preventive treatment, n=1,107)

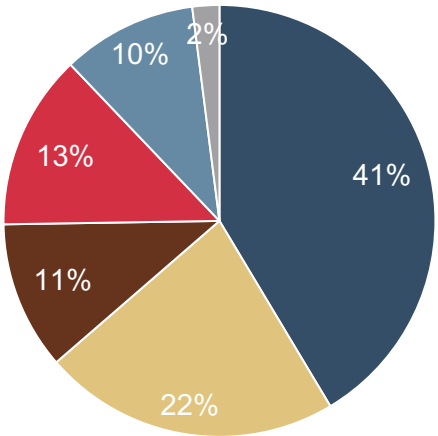


Younger patients (18-39) are more proactive in initiating discussions about preventive treatment

	18-39 (n=259)	40-59 (n=504)	60+ (n=344)
I asked about a preventive treatment	31% BC	19%	17%
My healthcare provider suggested a preventive treatment	67%	79% A	80% A
Other	2%	3%	3%

Time From Initial Appointment to Preventive Treatment Prescription

(among those taking preventive treatment and saw HCP for disease progression, n=1,040)



	18-39 (n=229)	40-59 (n=484)	60+ (n=327)
Initial appointment	38%	42%	46%
1-3 months	31% BC	21%	17%
4-12 months	13% C	13% C	7%
More than 1 year	10%	13%	17% A
Already taking	9%	11%	10%
Other	<1%	1%	4%

Note: Values < 5% are not labeled
Stat: A/B/C indicates significant difference between [A-18-39, B-40-59, C-60+] at 95% confidence level
Q34. Earlier in the survey, you mentioned that you had been prescribed a preventive treatment. When you were first prescribed a preventive treatment, did you ask your healthcare provider about it or did they suggest it? Q33. Earlier in the survey, you mentioned that you had been prescribed a preventive treatment. How much time passed from your initial appointment to discuss the increasing frequency and/or severity of your migraine attacks and the time that you were first prescribed a preventive treatment?

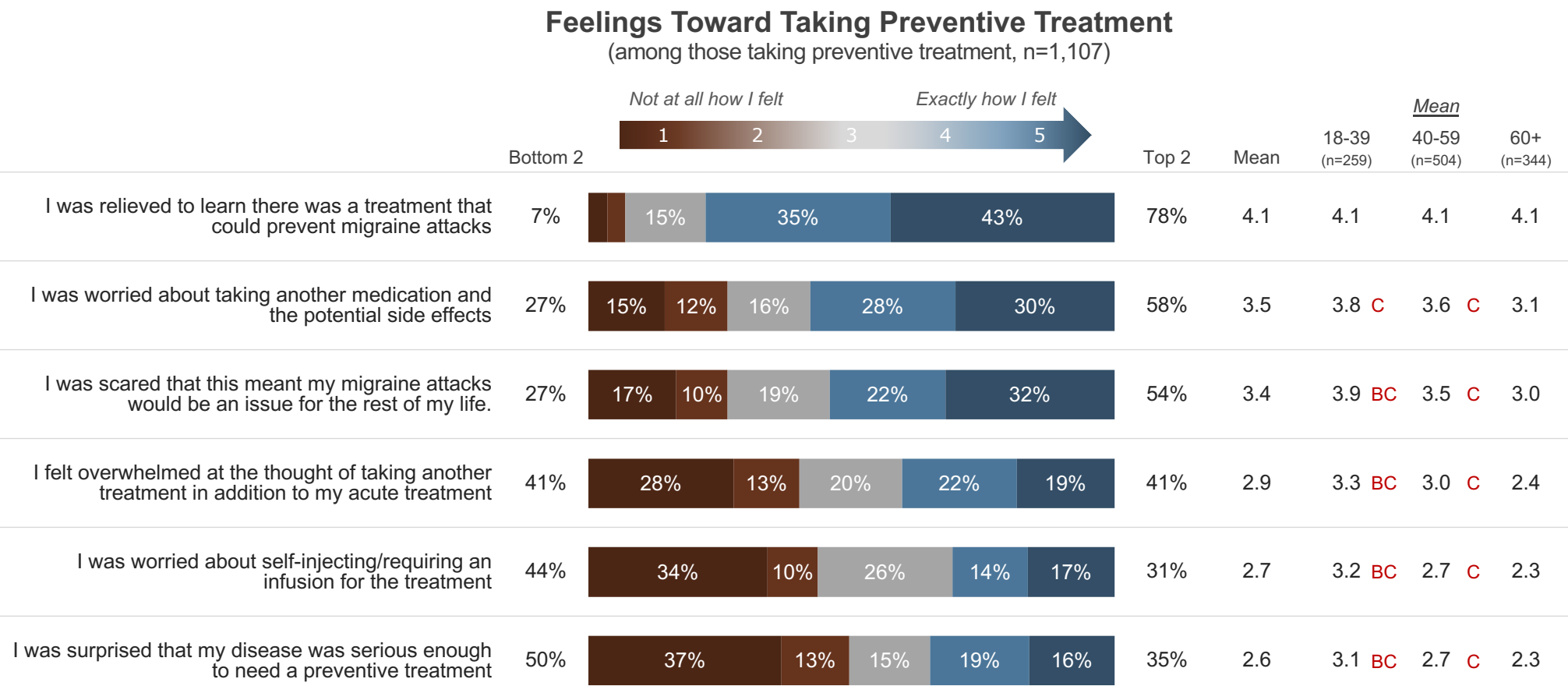


sam brown inc™ ■
Healthcare Communications

Preventive Treatment

Starting a Preventive Treatment

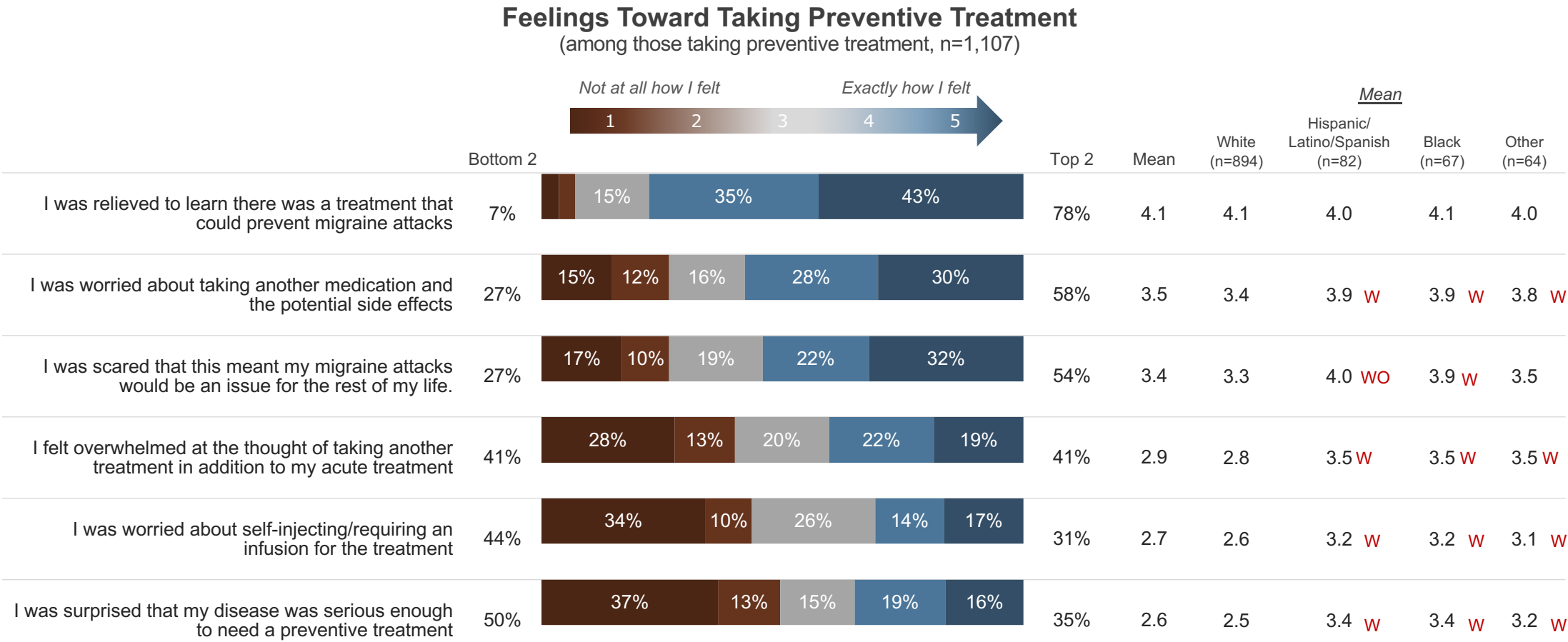
Although people were worried about taking another medication with potential side effects, they were relieved to learn there was a preventive treatment. Younger patients (18-39 yrs) were more likely to be scared that this meant their migraine attacks would be an issue for the rest of their lives.



Note: Values < 5% are not labeled
 Stat: A/B/C indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
 Q36. How did you feel about taking a prescription treatment to prevent migraine attacks? The closer you click to the anchor statement, the more it reflects your agreement.

Starting a Preventive Treatment

Non-white ethnicities are more likely to feel worry, fear, and anxiety at the thought of taking a preventive treatment. They were less aware of preventive treatments prior to being prescribed such a treatment and were surprised and scared to learn that their migraine attacks would be part of their lives forever and that their disease was serious enough to require prevention.



Note: Values < 5% are not labeled
Stat: W/H/B/O indicates significant difference between [W–White, H–Hispanic, B–Black, O–All Other] at 95% confidence level
Q36. How did you feel about taking a prescription treatment to prevent migraine attacks? The closer you click to the anchor statement, the more it reflects your agreement.

Current Preventive Treatment

While newer classes of treatment have made dramatic inroads amongst people with migraine disease, older classes of treatments (e.g., anti-seizure, antidepressants, blood pressure meds) continue to be commonly used. This is likely due to payer requirements coupled with the fact that they are effective for many people.

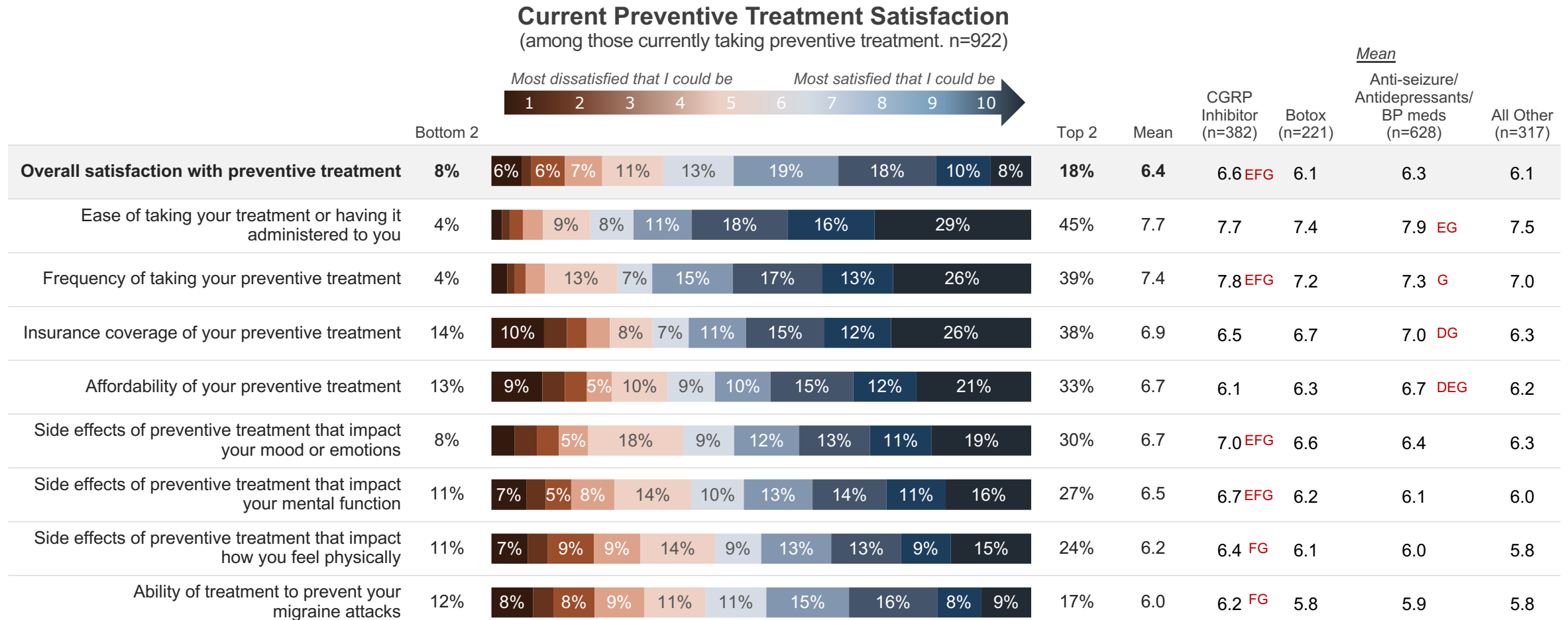
Current preventive Prescription Treatments

(among those currently taking preventive treatment, n=922)

		Years Taken	18-39		40-59		60+	
			Treatment (n=215)	Years Taken	Treatment (n=431)	Years Taken	Treatment (n=276)	Years Taken
81% of people are currently taking a preventive treatment	Anti-seizure drugs	35% 8.9 (n=276)	32%	4.3 (n=50)	35%	9.4 ^A (n=133)	36%	10.7 ^A (n=93)
	Antidepressants	31% 11.8 (n=263)	26%	6.0 (n=52)	31%	11.1 ^A (n=124)	34% ^A	16.2 ^{AB} (n=87)
	Blood pressure medications	31% 11.2 (n=256)	23%	3.7 (n=39)	32% ^A	9.8 ^A (n=128)	34% ^A	16.6 ^{AB} (n=89)
45% of people are currently taking a CGRP inhibitor	Botox (onabotulinum toxin A) injections	24% 4.9 (n=206)	22%	3.4 (n=44)	24%	5.5 ^A (n=98)	25%	5.1 ^A (n=64)
	Emgality (galcanezumab-gnlm) injection	16% 1.3 (n=140)	17%	1.3 (n=36)	16%	1.4 (n=63)	15%	1.2 (n=41)
	Short-term triptan	14% 13.4 (n=107)	12%	4.0 (n=18*)	15%	14.0 ^A (n=55)	15%	17.4 ^A (n=34)
24% of people are currently taking Botox	Aimovig (erenumab-aooe) injection	14% 1.7 (n=120)	12%	1.6 (n=21*)	16% ^C	1.7 (n=69)	11%	1.6 (n=30)
	Nerve blocker	10% 4.4 (n=80)	13% ^C	3.8 (n=23*)	10%	5.2 (n=39)	7%	3.5 (n=18*)
	Ajovy (fremanezumab-vfrm) injection	10% 1.4 (n=85)	9%	1.8 (n=18*)	10%	1.3 (n=39)	10%	1.4 (n=28*)
	Vyepti (eptinezumab-jjmr) injection	5% 1.2 (n=41)	4%	2.1 (n=8*)	5%	1.3 (n=22*)	4%	0.3 (n=11*)

Note: *Caution small base || Q12 excludes 'Don't Recall' responses
 Stat: ^{A/B/C} indicates significant difference between [A-18-39, B-40-59, C-60+] at 95% confidence level
 Q11. Which of the following prescription treatments are you currently taking (or using) to prevent migraine attacks? Select all that apply.
 Q12. How long have you been taking each of these treatments to prevent migraine attacks?

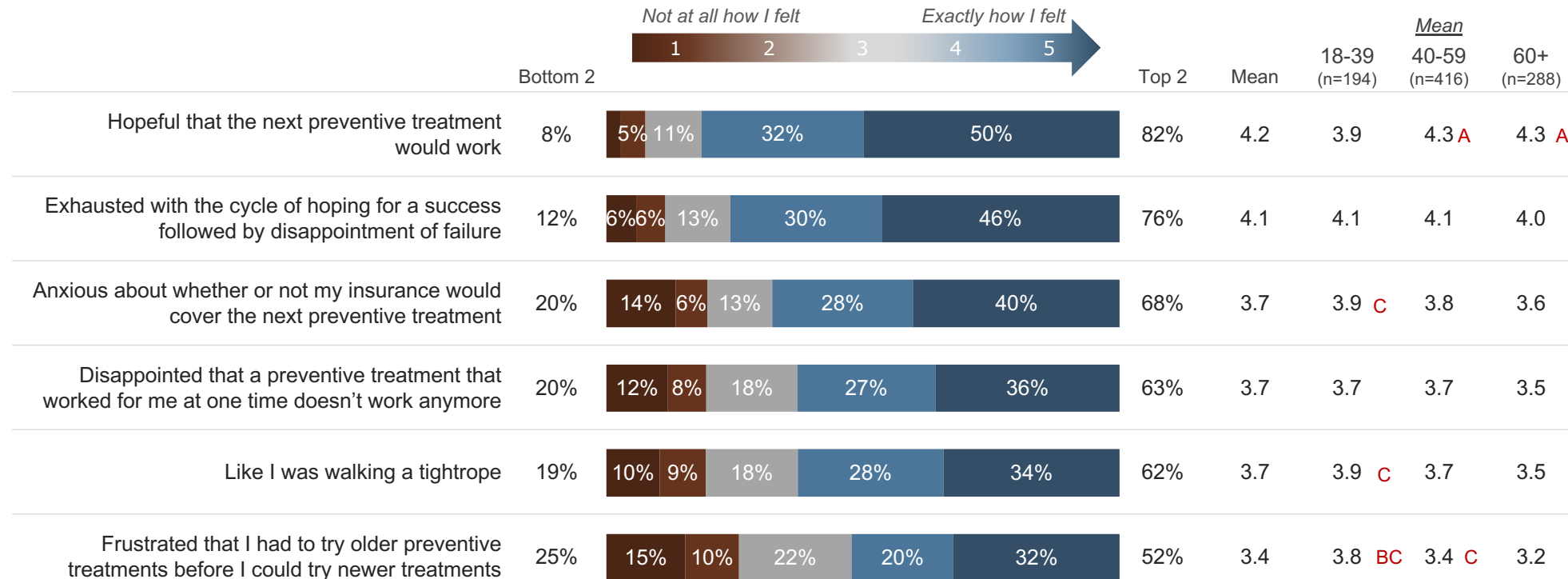
Overall satisfaction with preventive treatment is modest. Those taking a CGRP Inhibitor are far more satisfied than other people as they find the frequency of dosing, side effect profile, and efficacy to be highly satisfactory.



Note: Values < 5% are not labeled
Stat: **D/E/F/G** indicates significant difference between [D-CGRP Inhibitor, E-Botox, F-Anti-seizure/antidepressants/BP meds, F-All Other] at 95% confidence level
Q37. Please think about the preventive treatment you are taking for your migraine disease today. Using the following scale, please rate your satisfaction on each of the following:

Although people who have taken more than one preventive treatment are exhausted by the cycle of hoping for success followed by the disappointment of failure, they remain hopeful the next preventive treatment may work.

(among those who have taken more than one preventive treatment, n=898)



Anxiety about insurance coverage and frustration with having to take older preventive treatments first are more pronounced in younger people (18-39 yrs).

Hispanics are more frustrated than Whites that they had to try older preventive treatments (mean 3.9)

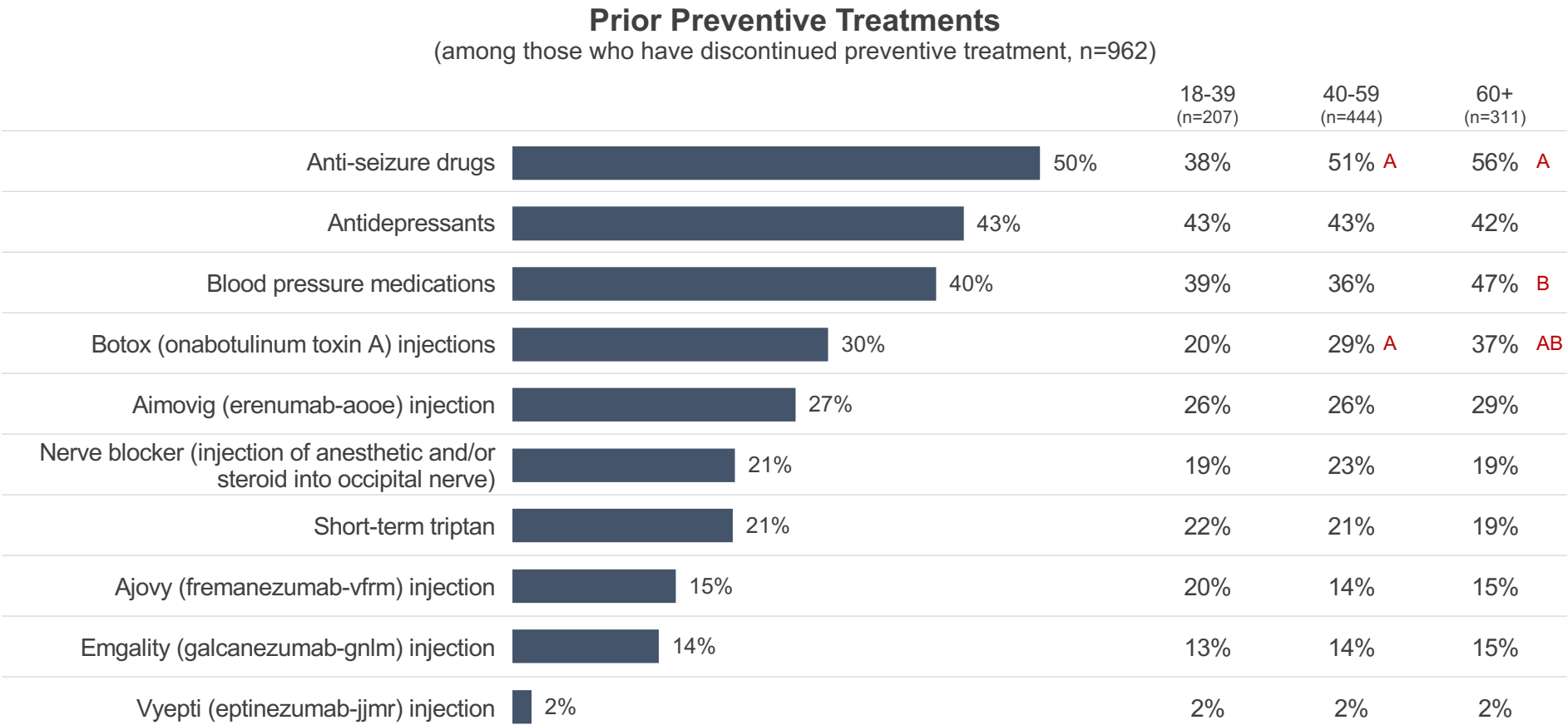
Note: Values < 5% are not labeled

Stat: **A/B/C** indicates significant difference between [A-18-39, B-40-59, C-60+] at 95% confidence level

Q38. Please think about the different treatments you have taken to control your migraine attacks. To what extent do each of the following statements capture how you felt as you tried different preventive treatments?

Discontinued Preventive Treatment

Given that older medication classes must be tried before moving to newer classes, it is not surprising that their discontinuation rates are high. The discontinuation rate for Aimovig, the market leading CGRP inhibitors, is notable, with 1 in 4 people stopping treatment.



Stat: A/B/C indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
 Q13. Are there any prescription treatments that you took previously to prevent migraine attacks but are no longer taking? Select all that apply.

Attitudes about Decision to Discontinue Preventive Treatment

The most common reasons for discontinuation are lack of efficacy and intolerable side effects.

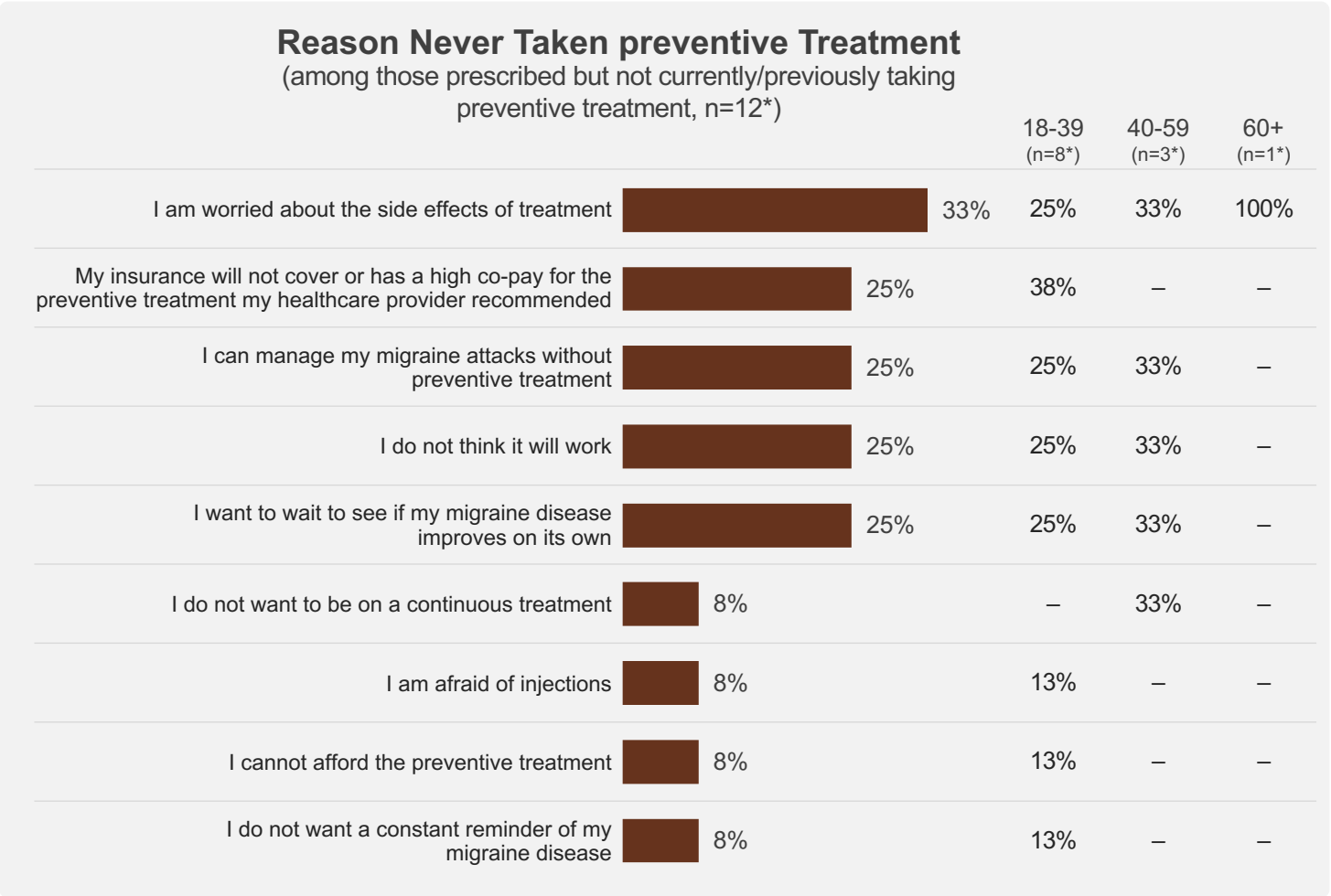
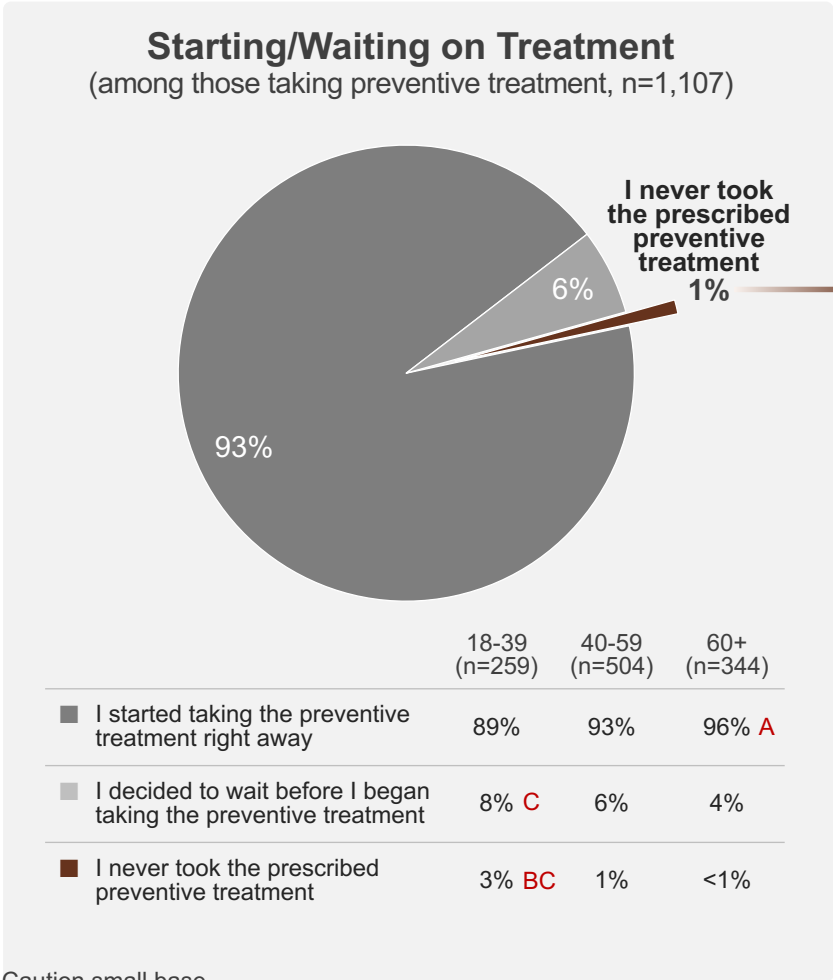
Reason to Discontinue preventive Treatment
(among those who have previously taken preventive treatment but are not currently taking, n=173)

		18-39 (n=36)	40-59 (n=70)	60+ (n=67)
It never worked	46%	33%	43%	57% A
I could not tolerate the side effects of treatment	44%	39%	43%	48%
It stopped working	20%	31% B	10%	24% B
I was tired of trying	16%	22%	16%	13%
I thought I could manage my migraine attacks without preventive treatment	16%	22%	14%	13%
I did not think I needed a preventive treatment anymore	10%	14%	11%	8%
My insurance did not cover the preventive treatment my doctor recommended	10%	11%	14%	5%
I did not want to take a medication that required injections/infusions	8%	11% C	11% C	2%
I wanted to see if my migraine disease would improve on its own	7%	17% C	7%	2%
I could not afford the preventive treatment despite insurance coverage	7%	3%	10%	6%
I lost my insurance coverage for the preventive treatment	5%	3%	7%	3%
I was/am trying to get pregnant, or am pregnant or nursing	4%	11% C	3%	—
Preventive treatment was a constant reminder of my migraine disease	2%	6%	1%	—

Stat: **A/B/C** indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
Q39. Why are you no longer taking a preventive treatment for your migraine disease? Select all that apply.

Barriers to Taking preventive Treatment

The small number of people who were prescribed *but did not take* a preventive treatment were often worried about the side effects of treatment.



Note: * Caution small base
Stat: **A/B/C** indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
Q35. Did you start taking the preventive treatment when it was first prescribed, or did you wait? Q40. Why have you never taken a preventive treatment for your migraine disease? Select all that apply.

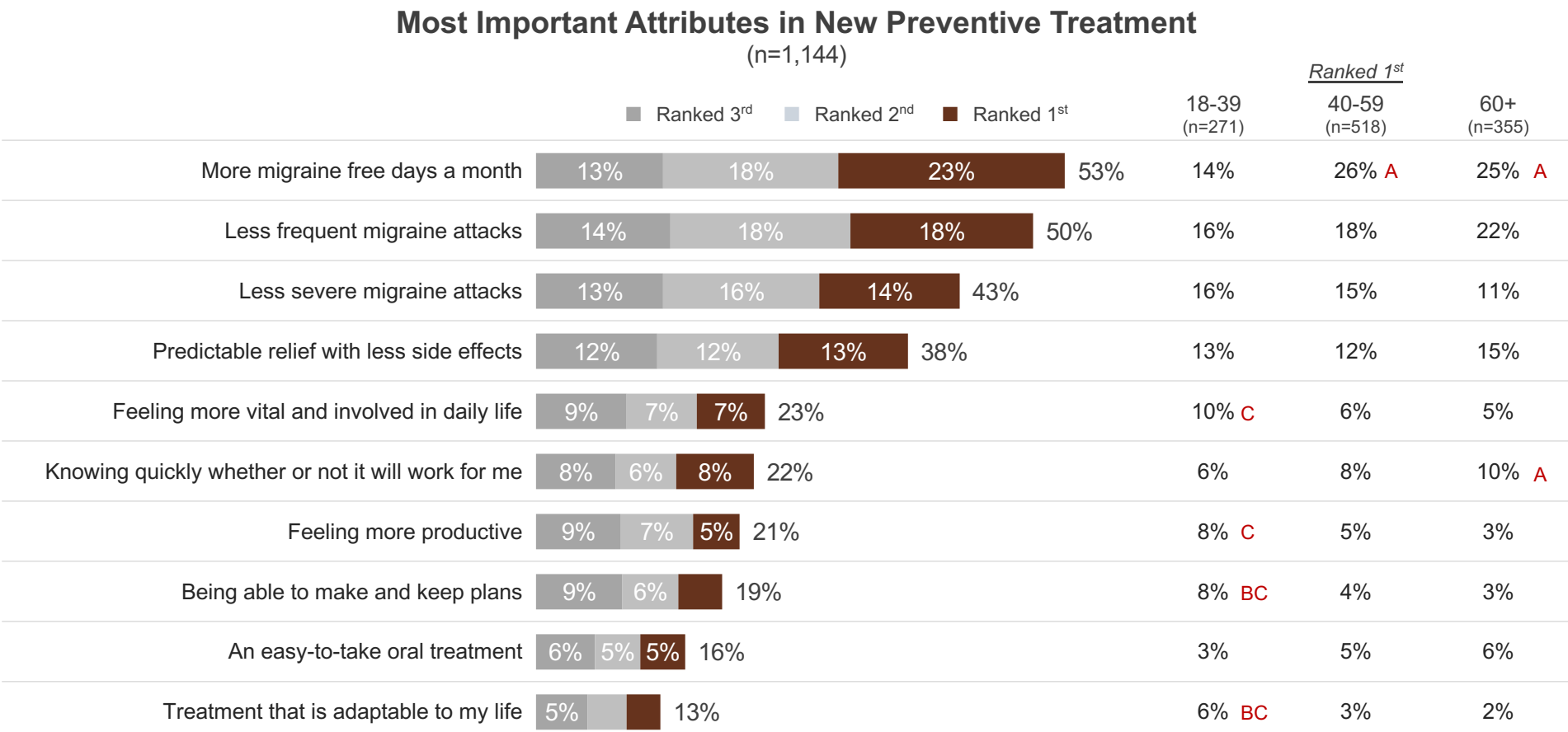


sam brown inc™ ■
Healthcare Communications

Vision for New Preventive Treatment

Driving Attributes For Future Preventive Migraine Treatments

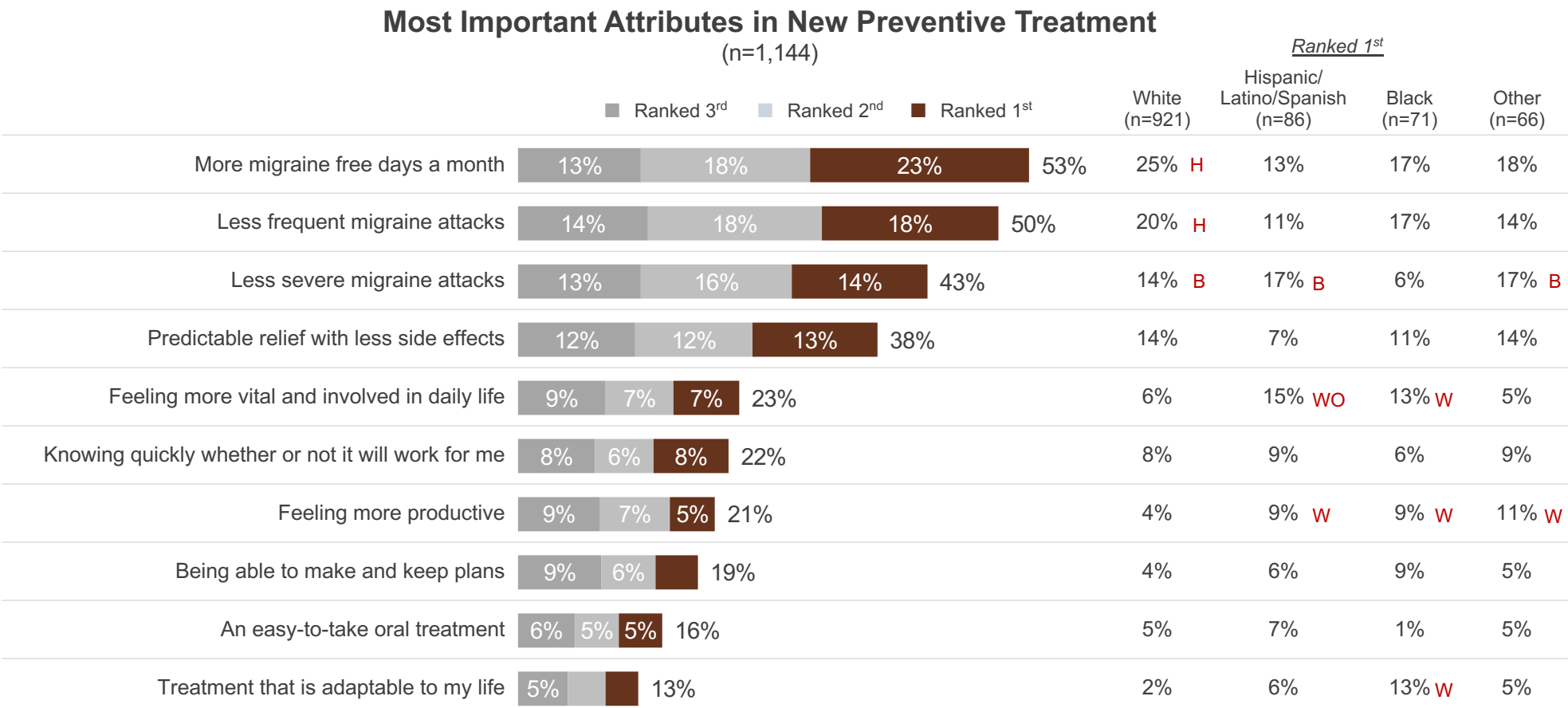
The single most important attribute for a future preventive migraine treatment is to provide more migraine-free days per month. Less frequent and less severe attacks are also important goals, but the ultimate goal is more migraine-free days.



Note: Values < 5% are not labeled
Stat: **A/B/C** indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
Q41. When considering a new treatment to prevent migraine attacks, what is most important to you? Select top 3 in order of importance.

Driving Attributes For Future Preventive Migraine Treatments

Moreover, Black and Hispanic people also wish to feel more vital in their daily life and to feel more productive.

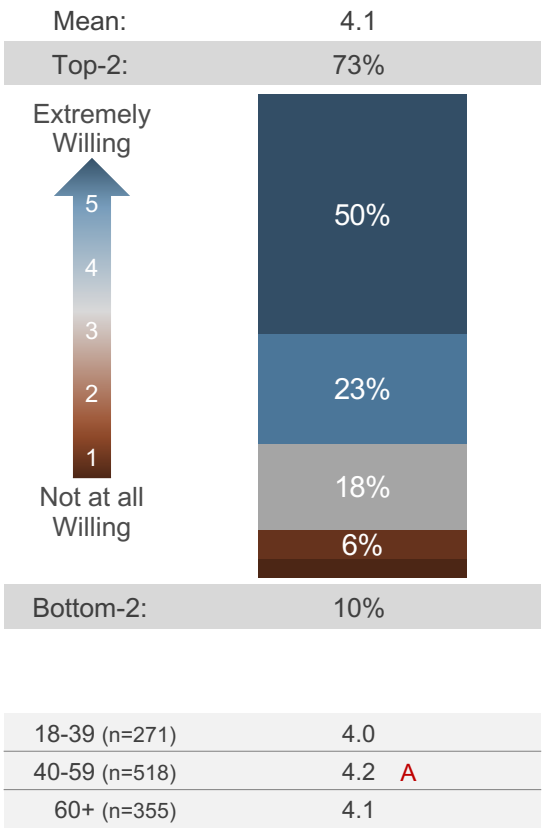


Note: Values < 5% are not labeled
Stat: **W/H/B/O** indicates significant difference between [W–White, H–Hispanic, B–Black, O–All Other] at 95% confidence level
Q41. When considering a new treatment to prevent migraine attacks, what is most important to you? Select top 3 in order of importance.

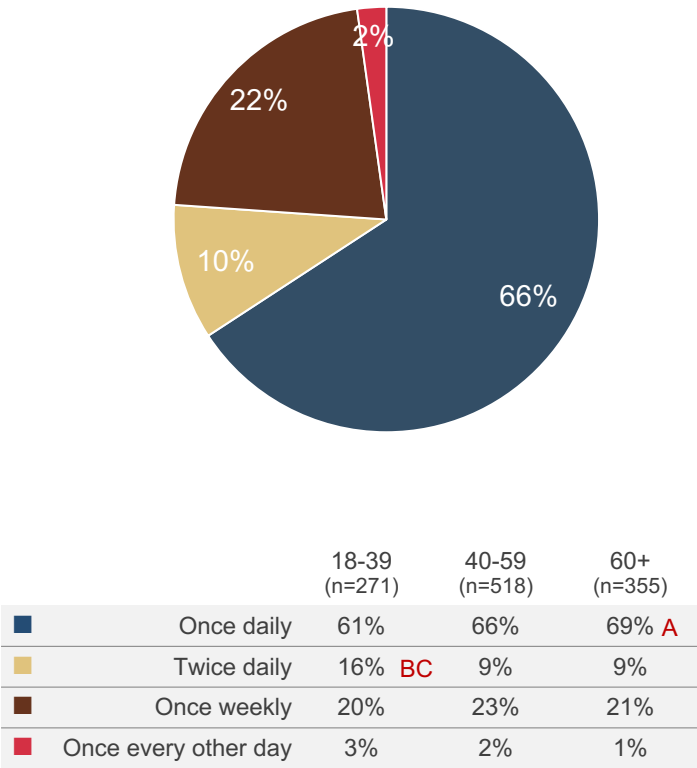
New Oral Preventive Treatment

Nearly all people are willing to consider a new oral treatment, with half stating they are extremely willing. They feel hopeful and optimistic albeit uncertain and skeptical.

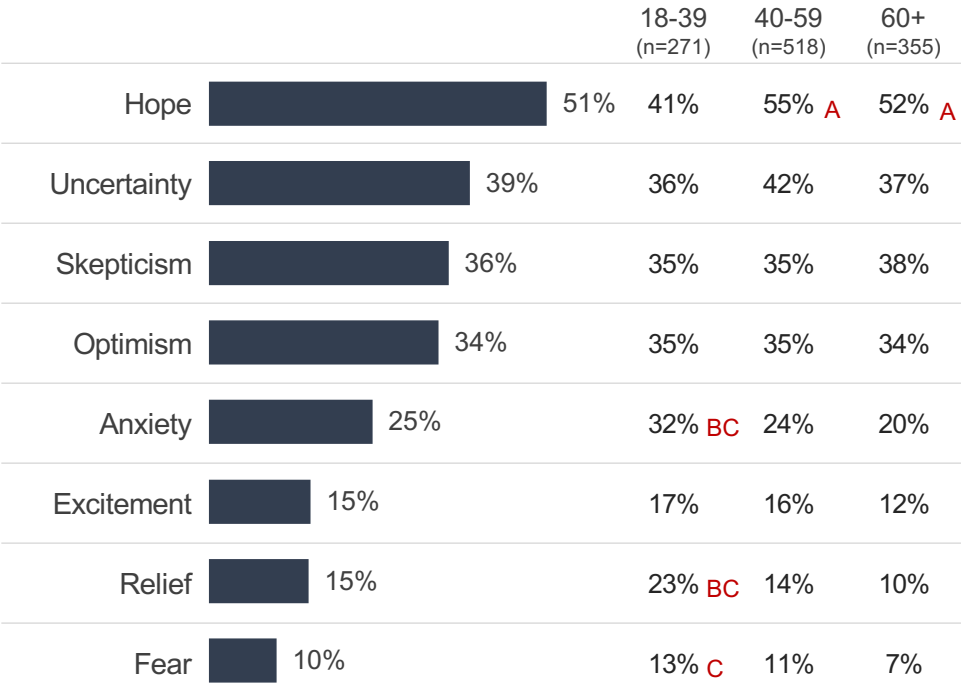
Willing to Consider Oral Treatment
(n=1,144)



Preferred Dosing Schedule
(n=1,144)



Emotions About Trying New Oral Treatment
(n=1,144)

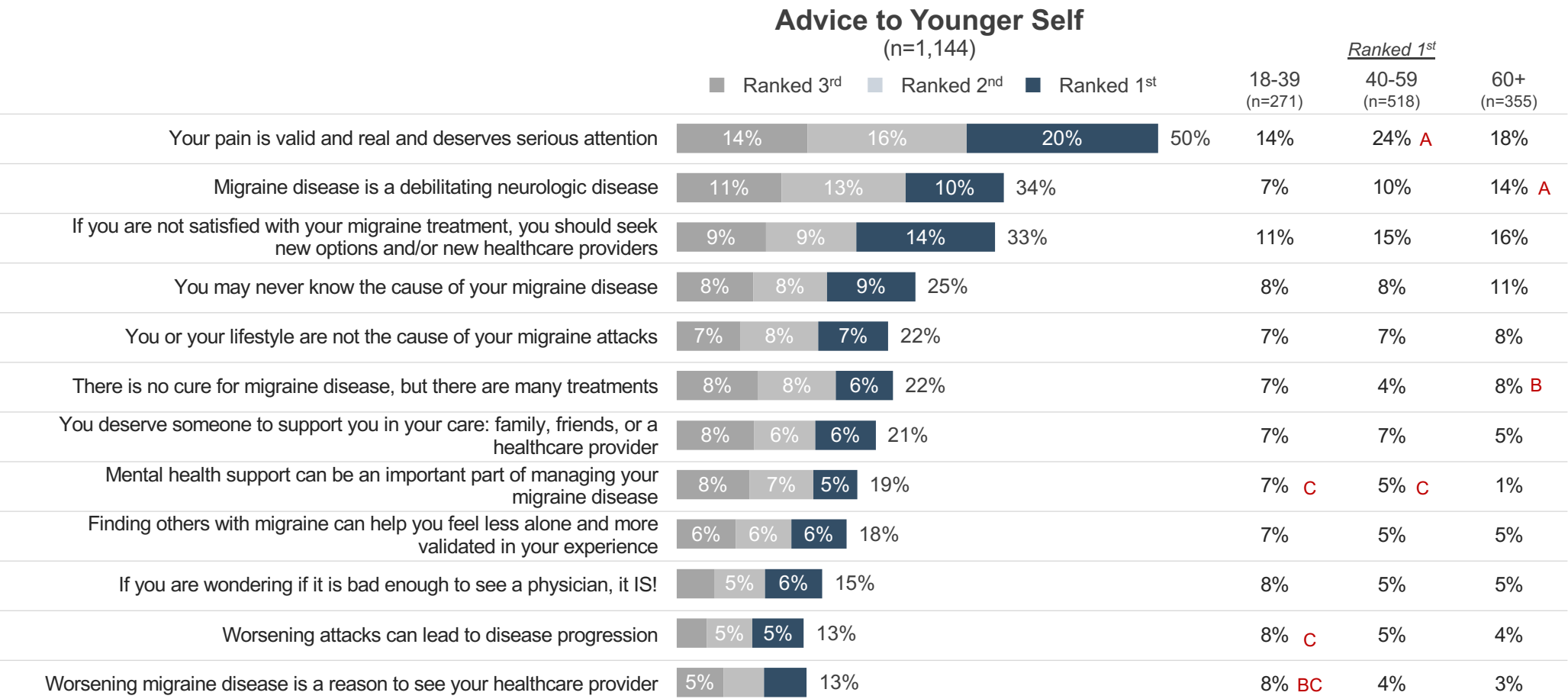


Blacks are also more anxious than whites (35%)

Note: Values < 5% are not labeled
Stat: **A/B/C** indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
Q42. How willing are you to consider trying a new oral treatment (taken by mouth) to prevent migraine attacks? Q43. What is your preferred dosing schedule for a new oral treatment to prevent migraine attacks? Q44. What emotions do you feel when you think about trying a new oral treatment to prevent migraine attacks? (Select up to 3)

Advice to Younger Self

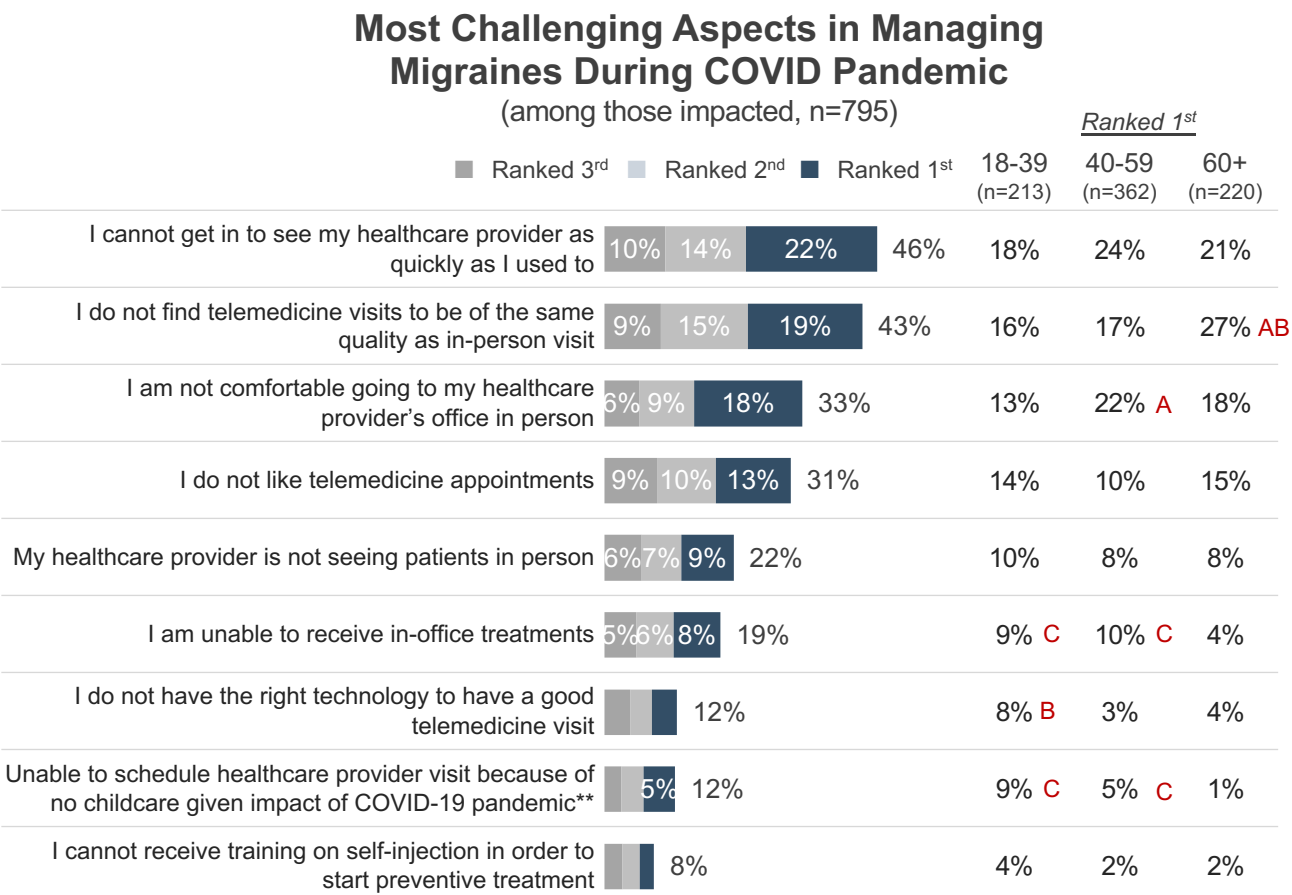
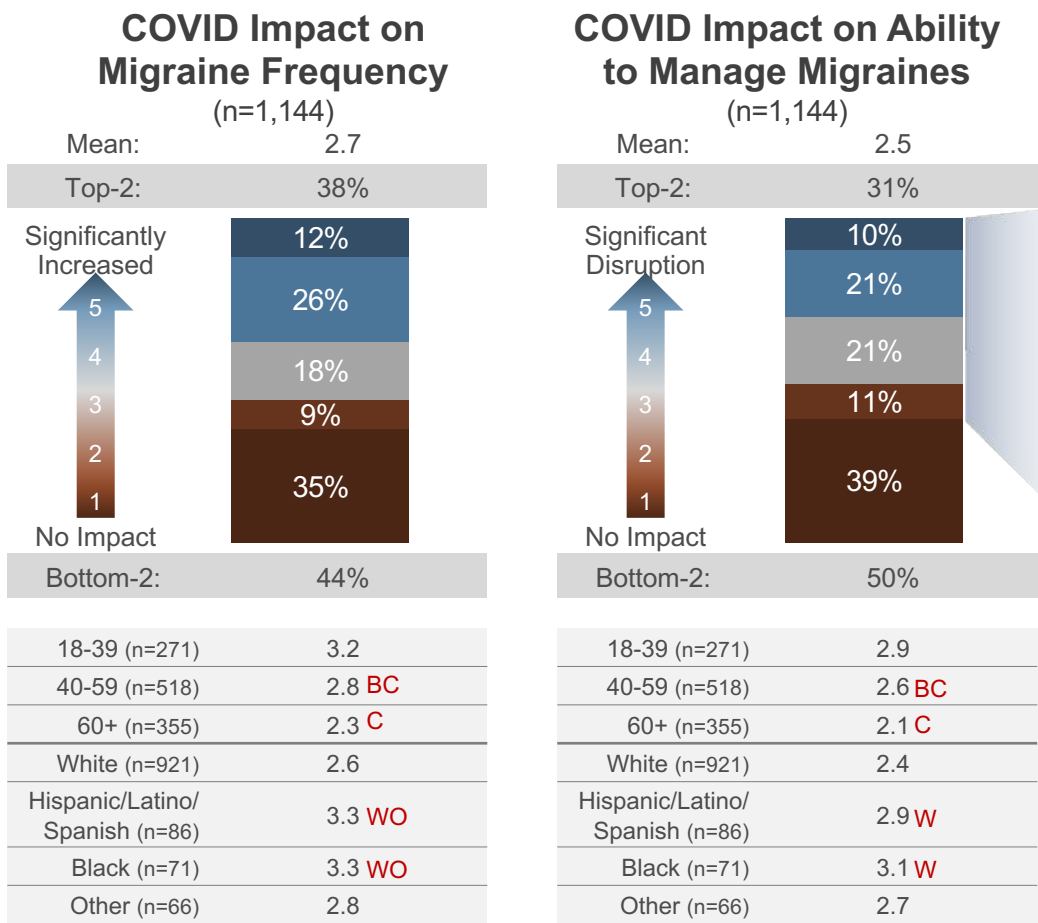
If they could give advice to their younger selves, people with migraine would stress the validity of their disease and urge them to seek medical attention for this debilitating disease. They would stress self-advocacy and urge their younger selves to seek new options if they are not satisfied with their care.



Note: Values < 5% are not labeled
 Stat: A/B/C indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
 Q45. What do you wish you could tell your younger self about migraine disease? Select top 3 in order of importance.

Impact of COVID on Migraine Disease Management

Overall, COVID had a middling impact on people with migraine, but one-third describe no impact whatsoever. Blacks and Hispanics are more likely to have felt a negative impact than White people. Those who were impacted struggled to see their healthcare provider in a timely manner. They do not find telemedicine to be of comparable quality to an in-person visit but are not comfortable going to the office in-person.



Note: Values < 5% are not labeled || ** Question text truncated for spacing
Stat: [A/B/C] [W/H/B/O] indicates significant difference between [A-18-39, B-40-59, C-60+] [W-White, H-Hispanic, B-Black, O-All Other] at 95% confidence level
Q46. How has the COVID pandemic impacted the frequency of your migraine attacks? Q47. How has the COVID pandemic impacted your ability to manage your migraine disease?
Q48. What are the top 3 most challenging aspects of managing your migraine disease during the COVID pandemic? Select top 3 in order of importance.



sam brown inc™ ■
Healthcare Communications

Appendix

Profile of Respondents

			Age Groups			Ethnicity			
		Total (n=1,144)	18-39 (n=271)	40-59 (n=518)	60+ (n=355)	White (n=921)	Hispanic (n=86)	Black (n=71)	All Other (n=66)
Gender	Male	18%	24% BC	15%	16%	15%	34% W	28% W	20%
	Female	81%	73%	84% A	83% A	84% HBO	66%	72%	73%
	Non-binary	1%	2% BC	—	—	1%	—	—	2%
	Prefer not to respond	<1%	<1%	<1%	<1%	—	—	—	6% WHB
Time Since Diagnosis	Mean years	24	13	22 A	35 AB	25 HB	18	15	24 HB
Age Group	Mean age	51	31	50 A	68 AB	53 HB	41	43	50 HB
Highest Level of Education	Less than high school	1%	1% C	1% C	—	1%	1%	1%	—
	High school graduate or GED	7%	10% C	8% C	4%	7%	9%	10%	8%
	Technical school or trade school	3%	3%	4% C	1%	2%	6%	6%	2%
	Some college but no degree	16%	19%	16%	15%	16%	15%	20%	21%
	Associate degree	10%	11%	10%	9%	9%	12%	13%	8%
	Bachelor's degree	32%	35%	31%	31%	32%	37%	30%	26%
	Master's degree	23%	16%	22% A	28% A	24%	15%	20%	21%
	Doctorate degree	7%	4%	6%	11% AB	8% B	4%	1%	11% B
	Other post-baccalaureate degree	1%	<1%	1%	1%	1%	—	—	2%
	Prefer not to respond	<1%	1%	<1%	<1%	<1%	1% W	—	3% W

Note: Reference note section for full question text from survey
 Stat: **[A/B/C]** **[W/H/B/O]** indicates significant difference between [A–18-39, B–40-59, C–60+] [W–White, H–Hispanic, B–Black, O–All Other] at 95% confidence level
 Q2 / Q5 / Q49 / Q52

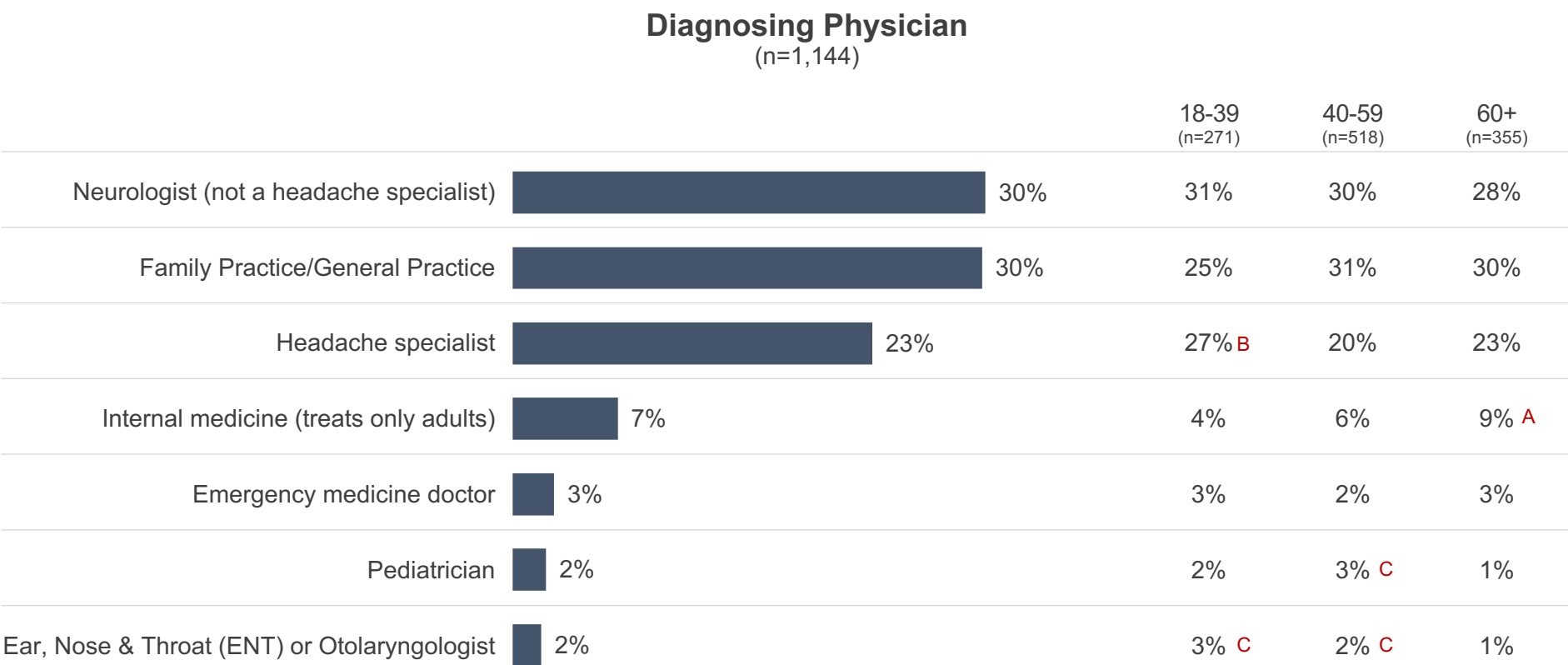
Profile of Respondents

			Age Groups		
			18-39 (n=271)	40-59 (n=518)	60+ (n=355)
Employment Status	Total	(n=1,144)			
	Employed full-time	37%	54% BC	44% C	13%
	Employed part-time	11%	16% BC	10%	7%
	Full-/part-time student	2%	9% BC	<1%	—
	Long-term disability	10%	6%	15% AC	7%
	Short-term disability	<1%	1% C	<1%	—
	Retired	23%	1%	6% A	66% AB
	Unemployed	7%	7% C	11% C	3%
	Homemaker	6%	6% C	8% C	1%
	Other	3%	2%	5% AC	2%
Insurance Provider	Prefer not to respond	1%	1%	<1%	1%
	Medicaid	11%	21% BC	13% C	2%
	Medicare	33%	14%	20% A	67% AB
	Private or commercial health insurance	56%	60% C	65% C	41%
	Uninsured, by choice	<1%	<1%	<1%	—
	Uninsured, unable to acquire/afford insurance	3%	4% C	3% C	1%
	Military/VA/DoD (Tricare)	4%	3%	4%	4%
	Other	4%	2%	2%	8% AB
Annual Household Income	Prefer not to respond	2%	2%	1%	2%
	Less than \$25,000	13%	15% C	16% C	7%
	\$25,000 to \$34,999	8%	10%	7%	6%
	\$35,000 to \$49,999	9%	13%	8%	8%
	\$50,000 to \$74,999	13%	18% B	11%	12%
	\$75,000 to \$99,999	13%	13%	12%	14%
	\$100,000 to \$149,999	15%	12%	18% A	13%
	\$150,000 to \$199,999	6%	6%	6%	6%
	\$200,000 or more	6%	3%	7% A	8% A
	Prefer not to respond	18%	11%	15%	27% AB

Note: Reference note section for full question text from survey
 Stat: **A/B/C** indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
 Q53 / Q54 / Q55

Diagnosing Physician

People with migraines were typically diagnosed by a general neurologist or family practice physician.

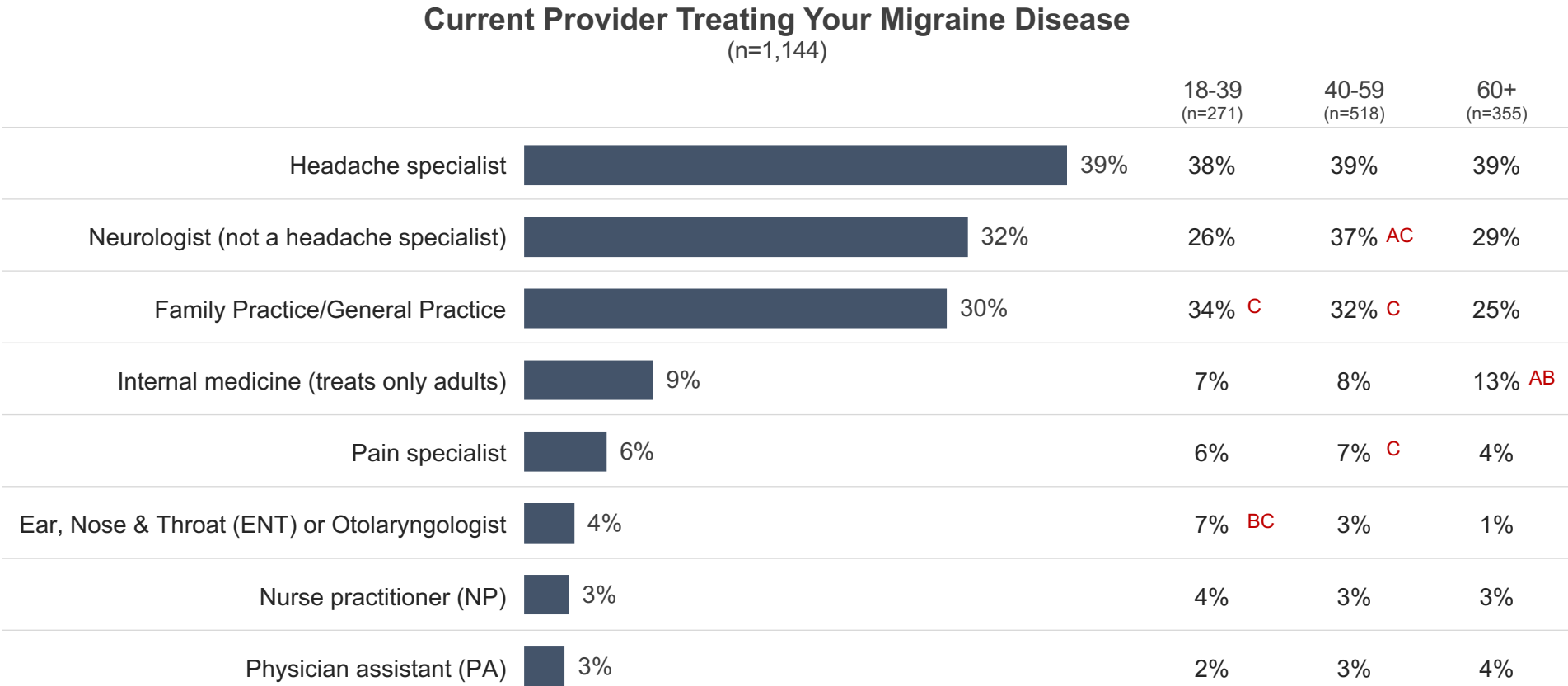


Younger patients (18-39 yrs) are more likely to be diagnosed by a headache specialist

Stat: A/B/C indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
Q6. What type of healthcare provider diagnosed you with migraine disease? This may or may not be the same healthcare provider who is treating you today.

Treating Physician

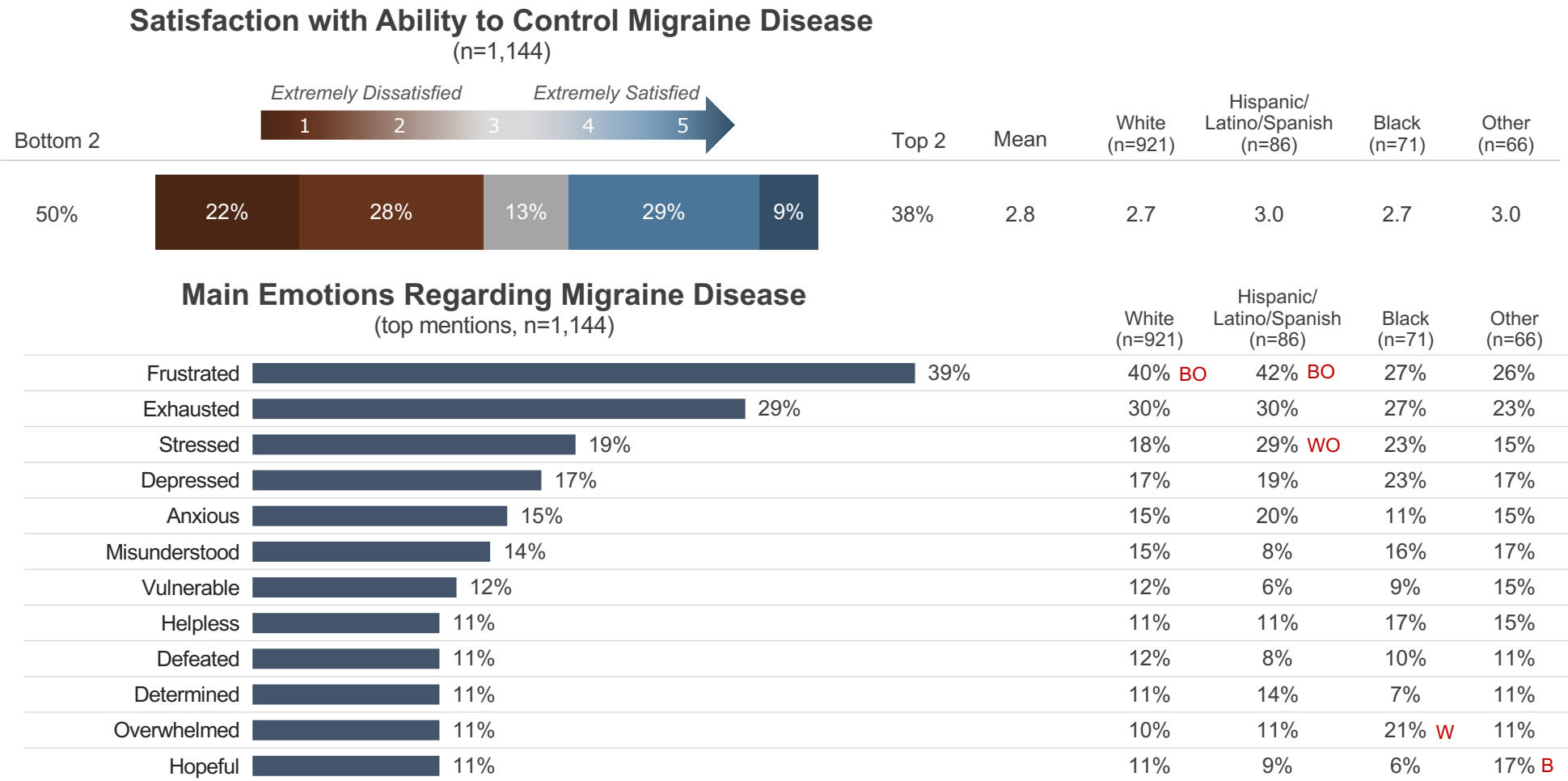
People with migraine disease in this research are most commonly treated by headache specialists followed by general neurologists or family practice physicians.



Stat: **A/B/C** indicates significant difference between [A–18-39, B–40-59, C–60+] at 95% confidence level
 Q14. Currently, what type of healthcare provider(s) are primarily treating your migraine disease? Select all that apply.

Emotions you Feel

Relative to other ethnicities, Hispanic people with migraine disease more often report feeling stressed and Black people more often feel overwhelmed.

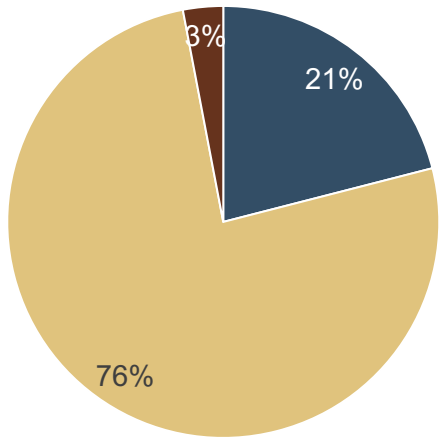


Starting a Preventive Treatment

Hispanic and Black people are more proactive in initiating discussions about preventive treatment.

Discussion Initiation for Preventive Treatment

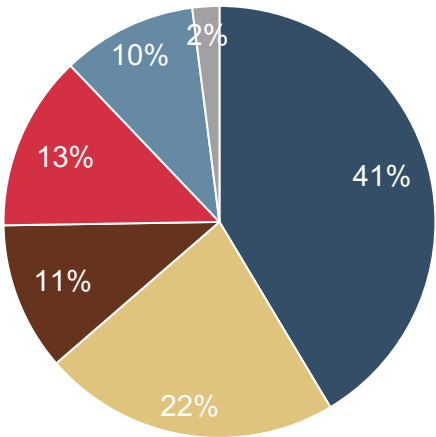
(among those taking preventive treatment, n=1,107)



	White (n=894)	Hispanic/ Latino/Spanish (n=82)	Black (n=67)	Other (n=64)
I asked about a preventive treatment	18%	34% W	34% W	30% W
My healthcare provider suggested a preventive treatment	79% HBO	65%	64%	66%
Other	3%	1%	2%	5%

Time From Initial Appointment to Preventive Treatment Prescription

(among those taking preventive treatment and saw HCP for disease progression, n=1,040)



	White (n=852)	Hispanic/ Latino/Spanish (n=71)	Black (n=59)	Other (n=58)
Initial appointment	43%	35%	32%	43%
1-3 months	20%	38% WO	34% W	19%
4-12 months	10%	19%	12%	8%
More than 1 year	14% H	6%	12%	14%
Already taking	11% H	3%	9%	14% H
Other	2%	—	2%	2%

Note: Values < 5% are not labeled
Stat: W/H/B/O indicates significant difference between [W–White, H–Hispanic, B–Black, O–All Other] at 95% confidence level
Q34. Earlier in the survey, you mentioned that you had been prescribed a preventive treatment. When you were first prescribed a preventive treatment, did you ask your healthcare provider about it or did they suggest it? Q33. Earlier in the survey, you mentioned that you had been prescribed a preventive treatment. How much time passed from your initial appointment to discuss the increasing frequency and/or severity of your migraine attacks and the time that you were first prescribed a preventive treatment?