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## Prevalence of Pharmacologic and Nonpharmacologic Pain Management Therapies Among Adults With Chronic Pain—United States, 2020

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### Background:

In 2021, approximately 1 in 5 adults in the United States experienced chronic pain (1). The Centers for Disease Control and Prevention’s “CDC Clinical Practice Guideline for Prescribing Opioids for Pain — United States, 2022” (2) recommends maximizing nonpharmacologic and nonopioid therapies for pain as appropriate for the specific condition and patient. Whereas previous research reported the prevalence of use of nonpharmacologic and opioid therapies for pain (3), this study adds information about prescription nonopioids, over-the-counter pain relievers, and exercise.

### Objective:

To estimate the prevalence of use of pharmacologic and nonpharmacologic therapies among adults with chronic pain in the United States.

### Methods and Findings:

We used the 2020 National Health Interview Survey (NHIS) (31568 total respondents) to identify adults who self-reported pain on most days or every day in the past 3 months (unweighted  $n = 7422$ ) (4). Respondents reported use of pharmacologic (prescription opioids, prescription nonopioids, over-the-counter pain relievers) and nonpharmacologic (physical or occupational therapy [PT/OT], cognitive behavioral therapy [CBT], exercise,

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**Reproducible Research Statement:** *Study protocol:* Not applicable. *Statistical code:* Available from Dr. Rikard (e-mail, ruv4@cdc.gov). *Data set:* Available at [www.cdc.gov/nchs/nhis/2020nhis.htm](http://www.cdc.gov/nchs/nhis/2020nhis.htm).

complementary therapies) pain management therapies in the past 3 months. We report therapy prevalence overall and by demographic characteristics. Adjusted prevalence was estimated using predictive margins from multivariable logistic regression models. All analyses account for the complex NHIS survey design. This study was exempt from institutional review board review.

In 2020, approximately 54 million adults self-reported chronic pain. Among pharmacologic therapies, use of over-the-counter pain relievers in the past 3 months was most prevalent (75.5%), followed by prescription nonopioids (31.3%) and prescription opioids (13.5%) (Table 1). Among nonpharmacologic therapies, exercise was most prevalent (55.0%), followed by complementary therapies (36.7%), PT/OT (17.2%), and CBT (2.6%). Pharmacologic therapy use alone was reported by 26.6% of adults, with most (22.4%) reporting nonopioid use only and 1.0% reporting opioid use only. Most adults (60.2%) reported using both pharmacologic and nonpharmacologic therapies, with 50.9% reporting nonopioid and nonpharmacologic therapy use and 7.7% reporting combined use of opioids, nonopioids, and nonpharmacologic therapy.

After adjustment for multiple factors, persons who were older, had public insurance, or had more severe pain were more likely to use prescription opioids, whereas younger persons, those with higher household incomes, those residing in the Northeast, and those who were uninsured were less likely (Table 2). Persons who were female, were aged 45 to 64 years, were non-Hispanic Black, were Hispanic, had public insurance, or had more severe pain were more likely to use prescription nonopioids, whereas uninsured persons were less likely. Persons who were female, were non-Hispanic White, or had higher education were more likely to use over-the-counter pain relievers, whereas those with public insurance were less likely.

Persons who had higher household incomes, higher education, or more severe pain were more likely to use PT/OT, whereas those residing in the South were less likely. Persons who were female, were bisexual, had higher education, or had public insurance were more likely to use CBT, whereas older adults were less likely. Persons who had higher household incomes or higher education were more likely to use exercise, whereas those aged 45 years or older, those residing in the South, and those who were uninsured were less likely. Persons who were female, had higher household incomes, had higher education, resided in the West, or had more severe pain were more likely to use complementary therapies, whereas older adults and those who resided in the South were less likely.

## Discussion:

Among adults with chronic pain in 2020, over-the-counter pain relievers and exercise were the most prevalent pain management therapies, and prescription nonopioids were used more than twice as often as prescription opioids. Although most adults reported using both pharmacologic and nonpharmacologic therapies, approximately 1 in 4 adults reported using pharmacologic therapies only. These findings highlight opportunities to increase nonpharmacologic therapy use among males, older adults, those with lower household income, those with less educational attainment, those residing in the South, and uninsured

adults. Compared with estimates from the 2019 NHIS, prescription opioid use for chronic pain decreased from 15.2% to 13.5% without a corresponding increase in nonpharmacologic therapies (3) despite current guideline recommendations to maximize use of nonopioid and nonpharmacologic therapies (2).

Study limitations include generalizability only to noninstitutionalized civilian adults; potential recall bias; cross-sectional results that do not include patient or treatment history; inability to identify cancer-related chronic pain or opioid misuse; and conduct during the COVID-19 pandemic, which potentially affected health care access and limited in-person interviews (4). Despite its limitations, this study identifies opportunities to improve guideline-concordant use of pharmacologic and nonpharmacologic therapies among adults with chronic pain. Public health efforts may reduce health inequities by increasing access to pain management therapies so that all persons with chronic pain can receive safe and effective care.

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**Table 1.** Prevalence of Pharmacologic and Nonpharmacologic Pain Management Therapy Use During the Past 3 Months Among Adults With Chronic Pain—United States, 2020\*

Pain Management Therapies	Respondents, n		Respondents (95% CI), %
	Unweighted	Weighted <sup>†</sup>	
<b>Pharmacologic</b>			
Prescription opioids <sup>‡</sup>	1058	7 294 000	13.5 (12.5–14.5)
Prescription nonopioids <sup>§</sup>	2344	16 919 000	31.3 (30.0–32.7)
Over-the-counter pain relievers <sup>  </sup>	5614	40 789 000	75.5 (74.2–76.9)
<b>Nonpharmacologic</b>			
Physical therapy, rehabilitative therapy, or occupational therapy	1349	9 267 000	17.2 (16.0–18.3)
Talk therapies (e.g., cognitive behavioral therapy)	209	1 425 000	2.6 (2.2–3.1)
Exercise (e.g., walking, swimming, bike riding, stretching, or strength training)	4218	29 707 000	55.0 (53.3–56.7)
Complementary therapies, overall	2739	19 831 000	36.7 (35.2–38.2)
Spinal manipulation or other forms of chiropractic care	869	6 141 000	11.4 (10.4–12.3)
Yoga, tai chi, or qigong	656	4 598 000	8.5 (7.7–9.3)
Massage for pain	1252	9 598 000	17.8 (16.6–19.0)
Meditation, guided imagery, or other relaxation techniques	1258	8 848 000	16.4 (15.2–17.5)
<b>Combinations of therapies</b>			
Pharmacologic only	1869	14 345 000	26.6 (25.2–28.0)
Opioids only	79	528 000	1.0 (0.7–1.3)
Nonopioids only <sup>¶</sup>	1547	12 112 000	22.4 (21.1–23.8)
Opioids and nonopioids <sup>¶¶</sup>	243	1 705 000	3.2 (2.7–3.7)
Nonpharmacologic only <sup>**</sup>	614	4 533 000	8.4 (7.6–9.3)
Pharmacologic and nonpharmacologic	4589	32 524 000	60.2 (58.7–61.8)
Opioids and any nonpharmacologic	139	907 000	1.7 (1.3–2.1)
Nonopioids <sup>¶</sup> and any nonpharmacologic	3853	27 463 000	50.9 (49.3–52.4)
Opioids, nonopioids <sup>¶</sup> , and any nonpharmacologic	597	4 154 000	7.7 (6.9–8.5)
No therapies	350	2 589 000	4.8 (4.2–5.5)

\* Data are from the 2020 National Health Interview Survey ( $n=31\,568$ ; response rate, 48.9%). Responses coded as “refused,” “don’t know,” or “not ascertained” and missing responses were excluded from the analysis. Percentages do not sum to 100% because categories are not mutually exclusive.

<sup>†</sup> Rounded to the nearest 1000.

<sup>‡</sup> Based on the following questions: 1) “During the past 3 months, have you taken any opioid pain relievers prescribed by a doctor, dentist, or other health professional? Examples include hydrocodone, Vicodin, Norco, Lortab, oxycodone, OxyContin, Percocet, and Percodan.” 2) “During the past 3 months, did you take a prescription opioid to treat long-term or chronic pain, such as low back pain or neck pain, frequent headaches or migraines, or joint pain or arthritis?”

<sup>§</sup> Based on the question, “Over the past three months, did you use a pain reliever other than an opioid prescribed by a doctor, dentist, or other health professional?”

<sup>||</sup> Based on the question, “Over the past three months, did you use over-the-counter medications such as aspirin, Tylenol, Advil, or Aleve to manage your pain?”

<sup>¶</sup> Includes prescription nonopioids and over-the-counter-pain relievers.

\*\* Use of individual nonpharmacologic therapies alone could not be reported due to small sample sizes.

**Table 2.** Prevalence of Pharmacologic and Nonpharmacologic Pain Management Therapy Use During the Past 3 Months Among Adults With Chronic Pain, by Individual Characteristics—United States, 2020\*

Characteristic	Pharmacologic Therapies					
	Prescription Opioids <sup>†</sup>		Prescription Nonopioids <sup>‡</sup>		Over-the-Counter Pain Relievers <sup>§</sup>	
	Unadjusted	Adjusted <sup>¶</sup>	Unadjusted	Adjusted <sup>¶</sup>	Unadjusted	Adjusted <sup>¶</sup>
<b>Sex</b>						
Male (reference)	12.4 (11.1–13.8)	13.4 (11.9–14.8)	27.5 (25.5–29.5)	28.2 (26.3–30.2)	72.8 (70.6–74.9)	72.6 (70.6–74.7)
Female	14.4 (13.1–15.9)	14.0 (12.7–15.3)	34.6 (32.7–36.4)	33.4 <sup>¶</sup> (31.6–35.2)	77.9 (76.2–79.7)	78.1 <sup>¶</sup> (76.4–79.9)
<b>Age group</b>						
18–44 y (reference)	5.9 (4.5–7.5)	6.6 (4.9–8.4)	25.4 (22.5–28.5)	27.1 (24.0–30.1)	76.8 (73.8–79.6)	76.6 (73.5–79.6)
45–64 y	16.4 (14.6–18.4)	16.5 <sup>¶</sup> (14.7–18.4)	34.3 (32.0–36.6)	34.0 <sup>¶</sup> (31.8–26.3)	75.7 (73.6–77.8)	75.7 (73.6–77.7)
65 y	16.3 (14.8–18.0)	15.1 <sup>¶</sup> (13.6–16.7)	32.6 (30.6–34.7)	30.6 (28.3–32.8)	74.2 (72.3–76.1)	74.9 (72.9–76.9)
<b>Race/ethnicity**</b>						
White, non-Hispanic (reference)	13.6 (12.5–14.8)	14.2 (13.0–15.4)	29.0 (27.4–30.6)	29.0 (27.5–30.6)	78.0 (76.6–79.5)	77.9 (76.3–79.4)
AI/AN, non-Hispanic	18.8 (10.8–29.3)	17.9 (10.3–25.5)	33.7 (24.4–43.9)	31.9 (22.7–41.1)	60.6 (50.9–69.7)	62.9 <sup>¶</sup> (53.2–72.6)
Asian, non-Hispanic	NA	NA	30.6 (20.6–42.1)	35.6 (23.8–47.5)	59.4 (47.8–70.3)	60.7 <sup>¶</sup> (49.5–71.9)
Black or African American, non-Hispanic	14.5 (11.6–17.8)	11.6 (9.1–14.0)	40.6 (35.8–45.4)	37.9 <sup>¶</sup> (33.5–42.2)	71.5 (67.2–75.4)	72.1 <sup>¶</sup> (67.9–76.4)
Hispanic	12.9 (9.7–16.5)	13.1 (9.8–16.4)	36.7 (31.8–41.8)	36.3 <sup>¶</sup> (31.3–41.4)	69.2 (64.0–74.1)	71.1 <sup>¶</sup> (66.3–75.9)
<b>Sexual orientation</b>						
Straight (reference)	13.7 (12.7–14.8)	13.7 (12.7–14.8)	31.0 (29.6–32.4)	31.0 (29.6–32.3)	75.3 (73.9–76.7)	75.5 (74.1–76.8)
Gay or lesbian	NA	NA	34.1 (21.6–48.5)	30.1 (20.5–39.8)	78.1 (67.1–86.8)	75.4 (65.9–84.8)
Bisexual	NA	NA	34.0 (24.7–44.3)	38.5 (29.3–47.8)	87.8 (78.3–94.1)	85.1 (76.6–93.6)
<b>Family income</b>						
<200% FPL (reference)	16.1 (14.3–18.0)	14.3 (12.6–16.0)	35.3 (32.8–37.9)	31.3 (28.8–33.7)	72.3 (69.8–74.7)	75.1 (72.7–77.5)
200% to <400% FPL	14.7 (12.8–16.7)	15.4 (13.4–17.3)	30.7 (28.2–33.2)	31.4 (29.0–33.8)	75.1 (72.6–77.6)	74.0 (71.5–76.5)
400% FPL	9.5 (8.1–10.9)	11.1 <sup>¶</sup> (9.4–12.9)	27.5 (25.3–29.8)	30.6 (28.0–33.3)	79.6 (77.4–81.6)	78.0 (75.5–80.5)
<b>Urban-rural classification</b>						

Characteristic	Pharmacologic Therapies					
	Prescription Opioids <sup>†</sup>		Prescription Nonopioids <sup>‡</sup>		Over-the-Counter Pain Relievers <sup>§</sup>	
	Unadjusted	Adjusted <sup>†</sup>	Unadjusted	Adjusted <sup>‡</sup>	Unadjusted	Adjusted <sup>§</sup>
Urban (reference)	12.9 (11.8–14.0)	13.5 (12.4–14.6)	31.0 (29.5–32.5)	30.7 (29.2–32.1)	75.8 (74.2–77.3)	75.9 (74.4–77.4)
Rural	16.2 (13.3–19.4)	14.5 (11.8–17.3)	32.9 (29.8–36.1)	33.1 (29.8–36.4)	74.6 (71.5–77.4)	74.5 (71.5–77.6)
<b>Region</b>						
Northeast (reference)	9.4 (7.6–11.5)	9.4 (7.5–11.4)	31.8 (28.6–35.2)	31.9 (28.8–35.0)	74.9 (71.4–78.1)	74.7 (71.7–77.8)
Midwest	12.6 (10.8–14.6)	12.9 <sup>¶</sup> (10.9–14.9)	28.0 (25.5–30.7)	29.7 (26.9–32.6)	76.5 (73.9–78.9)	75.7 (73.0–78.3)
South	16.1 (14.2–18.2)	15.7 <sup>¶</sup> (13.9–17.5)	34.0 (31.7–36.3)	31.8 (29.7–34.0)	76.5 (74.2–78.7)	76.5 (74.3–78.8)
West	12.9 (10.9–15.0)	14.1 <sup>¶</sup> (12.0–16.2)	29.8 (26.7–32.9)	30.6 (27.6–33.7)	73.3 (70.0–76.4)	74.7 (71.7–77.7)
<b>Education</b>						
High school or less (reference)	14.7 (13.1–16.5)	13.2 (11.8–14.7)	32.7 (30.5–34.9)	30.4 (28.3–32.5)	72.3 (70.1–74.5)	74.0 (71.9–76.1)
More than high school	12.5 (11.3–13.8)	14.2 (12.9–15.5)	30.1 (28.4–31.8)	31.8 (30.0–33.5)	78.4 (76.8–80.0)	77.2 <sup>¶</sup> (75.5–78.8)
<b>Health insurance coverage</b>						
Private (reference)	11.1 (9.8–12.4)	12.7 (11.1–14.2)	27.1 (25.3–29.0)	28.8 (26.8–30.8)	78.8 (77.0–80.6)	77.3 (75.4–79.2)
Public	18.1 (16.4–19.8)	16.2 <sup>¶</sup> (14.5–17.8)	38.3 (36.1–40.4)	35.8 <sup>¶</sup> (33.4–38.1)	71.5 (69.3–73.5)	73.2 <sup>¶</sup> (71.1–75.4)
Uninsured	4.3 (2.3–7.2)	4.8 <sup>¶</sup> (2.4–7.3)	20.9 (15.4–27.3)	20.2 <sup>¶</sup> (14.9–25.5)	77.2 (71.2–82.5)	78.9 (73.7–84.2)
<b>Pain intensity<sup>††</sup></b>						
Mild (reference)	3.2 (2.2–4.5)	3.8 (2.5–5.0)	15.2 (13.0–17.7)	16.2 (13.7–18.6)	75.5 (72.4–78.5)	75.0 (71.9–78.0)
Moderate	11.4 (10.1–12.8)	11.6 <sup>¶</sup> (10.3–13.0)	30.0 (28.1–31.9)	30.0 <sup>¶</sup> (28.1–31.9)	78.2 (76.4–80.0)	78.2 (76.4–80.1)
Severe	22.9 (20.7–25.2)	21.9 <sup>¶</sup> (19.7–24.0)	43.0 (40.4–45.7)	41.1 <sup>¶</sup> (38.5–43.7)	71.6 (69.1–73.9)	72.2 (69.8–74.5)
			<b>Nonpharmacologic Therapies</b>			
			<b>Physical/Occupational Therapy</b>		<b>Exercise</b>	
			<b>Cognitive Behavioral Therapy</b>		<b>Complementary Therapies<sup>‡‡</sup></b>	
			Unadjusted	Adjusted <sup>†</sup>	Unadjusted	Adjusted <sup>†</sup>
<b>Sex</b>						
Male (reference)	16.3 (14.7–18.1)	16.8 (15.1–18.5)	1.9 (1.2–2.7)	1.8 (1.1–2.4)	56.3 (53.8–58.7)	55.6 (53.2–58.0)
Female	17.9 (16.4–19.4)	17.6 (16.1–19.1)	3.3 (2.7–4.0)	3.0 <sup>¶</sup> (2.4–3.6)	53.9 (51.8–56.1)	55.1 (53.0–57.2)
					Unadjusted	Adjusted <sup>†</sup>
					33.2 (31.1–35.4)	33.1 (31.1–35.2)
					39.6 (37.5–41.6)	39.8 <sup>¶</sup> (37.7–41.8)

	Nonpharmacologic Therapies							
	Physical/Occupational Therapy		Cognitive Behavioral Therapy		Exercise		Complementary Therapies <sup>†‡</sup>	
	Unadjusted	Adjusted <sup>†</sup>	Unadjusted	Adjusted <sup>†</sup>	Unadjusted	Adjusted <sup>†</sup>	Unadjusted	Adjusted <sup>†</sup>
<b>Age group</b>								
18–44 y (reference)	15.1 (12.9–17.5)	16.5 (13.9–19.1)	3.6 (2.6–4.8)	3.2 (2.1–4.2)	61.2 (57.6–64.7)	62.4 (58.8–66.0)	49.6 (46.2–53.0)	50.1 (46.4–53.8)
45–64 y	16.8 (15.0–18.7)	16.2 (14.4–18.0)	3.1 (2.3–4.1)	3.1 (2.2–4.0)	55.3 (52.8–57.9)	55.2 <sup>†</sup> (52.6–57.8)	36.4 (34.3–38.6)	35.8 <sup>†</sup> (33.7–37.9)
65 y	19.3 (17.6–21.1)	19.2 (17.4–21.0)	1.2 (0.8–1.7)	1.2 <sup>†</sup> (0.7–1.7)	49.2 (46.9–51.6)	50.0 <sup>†</sup> (47.4–52.2)	26.4 (24.4–28.4)	27.0 <sup>†</sup> (24.9–29.1)
<b>Race/ethnicity<sup>**</sup></b>								
White, non-Hispanic (reference)	17.0 (15.8–18.3)	16.6 (15.4–17.9)	2.7 (2.2–3.3)	2.5 (2.0–3.0)	56.7 (54.7–58.6)	55.6 (53.7–57.5)	36.5 (34.8–38.2)	36.2 (34.5–37.9)
AI/AN, non-Hispanic	9.3 (5.2–15.1)	11.1 (5.7–16.6)	NA	NA	51.3 (40.2–62.2)	55.9 (45.1–66.8)	40.4 (29.9–51.6)	41.6 (30.9–52.2)
Asian, nonHispanic	17.1 (9.4–27.5)	16.5 (8.2–24.9)	NA	NA	58.3 (46.9–69.0)	56.4 (44.9–67.8)	51.2 (40.3–61.9)	46.8 (35.9–57.6)
Black or African American, non-Hispanic	18.5 (15.3–22.0)	19.5 (16.0–23.1)	2.0 (0.9–3.9)	2.0 (0.6–3.5)	51.2 (46.4–56.0)	55.3 (50.3–60.2)	36.0 (31.2–41.0)	39.4 (34.7–44.1)
Hispanic	19.3 (15.0–24.3)	20.6 (15.8–25.3)	2.5 (1.0–5.1)	2.5 (0.9–4.2)	49.2 (43.6–54.9)	53.3 (47.8–58.8)	35.2 (30.1–40.6)	34.8 (29.7–40.0)
<b>Sexual orientation</b>								
Straight (reference)	17.2 (16.0–18.4)	17.2 (16.0–18.4)	2.3 (1.9–2.8)	2.3 (1.8–2.7)	54.8 (53.0–56.6)	55.2 (53.5–56.9)	36.2 (34.6–37.8)	36.5 (35.0–38.0)
Gay or lesbian	19.1 (11.5–28.8)	19.9 (11.7–28.2)	NA	NA	60.3 (45.6–73.8)	61.7 (49.9–73.4)	42.7 (30.1–56.1)	42.4 (30.1–54.7)
Bisexual	15.2 (9.0–23.3)	17.8 (10.2–25.4)	12.4 (7.0–20.0)	9.4 <sup>†</sup> (4.5–14.3)	59.4 (47.4–70.7)	57.6 (46.8–68.4)	54.0 (43.1–64.6)	43.8 (34.3–53.4)
<b>Family income</b>								
<200% FPL (reference)	15.3 (13.4–17.4)	15.6 (13.5–17.8)	2.7 (1.9–3.6)	2.6 (1.7–3.5)	46.5 (43.8–49.2)	51.0 (48.2–53.9)	32.3 (29.9–34.8)	34.0 (31.3–36.7)
200% to <400% FPL	16.0 (14.0–18.1)	16.1 (14.0–18.1)	2.6 (1.9–3.4)	2.4 (1.7–3.1)	52.6 (49.5–55.6)	52.1 (49.0–55.1)	35.7 (32.9–38.5)	35.1 (32.3–37.8)
400% FPL	20.4 (18.7–22.3)	20.1 <sup>†</sup> (18.0–22.3)	2.7 (1.9–3.7)	2.4 (1.6–3.3)	67.0 (64.5–69.4)	63.4 <sup>†</sup> (60.7–66.2)	42.8 (40.3–45.3)	41.2 <sup>†</sup> (38.5–43.8)
<b>Urban-rural classification</b>								
Urban (reference)	17.9 (16.7–19.3)	17.6 (16.3–18.8)	2.7 (2.2–3.3)	2.5 (2.0–2.9)	56.3 (54.4–58.2)	55.6 (53.7–57.4)	38.1 (36.5–39.7)	37.0 (35.5–38.6)
Rural	13.7 (11.4–16.3)	15.6 (12.8–18.4)	2.2 (1.5–3.2)	2.6 (1.5–3.6)	49.5 (45.7–53.3)	54.2 (50.2–58.2)	30.7 (26.9–34.7)	35.4 (31.3–39.5)
<b>Region</b>								
Northeast (reference)	20.2 (17.0–23.6)	19.9 (16.6–23.2)	2.4 (1.6–3.5)	2.5 (1.6–3.5)	58.7 (55.0–62.3)	58.7 (55.2–62.3)	37.0 (33.8–40.2)	37.8 (34.6–41.1)
Midwest	16.2 (14.1–18.5)	17.2 (15.0–19.4)	2.6 (1.8–3.7)	2.3 (1.5–3.1)	56.9 (53.3–60.5)	56.2 (52.7–59.7)	38.0 (34.9–41.2)	37.6 (34.7–40.5)
South	14.8 (13.2–16.6)	14.8 <sup>†</sup> (13.1–16.5)	2.1 (1.5–2.8)	2.1 (1.4–2.7)	50.3 (47.4–53.2)	52.0 <sup>†</sup> (49.1–54.9)	30.7 (28.3–33.2)	31.3 <sup>†</sup> (28.9–33.7)
West	20.2 (17.6–22.9)	19.7 (17.2–22.3)	3.9 (2.6–5.5)	3.4 (2.1–4.6)	58.6 (54.9–62.3)	57.8 (54.4–61.3)	45.8 (42.4–49.3)	44.7 <sup>†</sup> (41.2–48.1)
<b>Education</b>								

	Nonpharmacologic Therapies							
	Physical/Occupational Therapy		Cognitive Behavioral Therapy		Exercise		Complementary Therapies <sup>††</sup>	
	Unadjusted	Adjusted <sup>†</sup>	Unadjusted	Adjusted <sup>†</sup>	Unadjusted	Adjusted <sup>†</sup>	Unadjusted	Adjusted <sup>†</sup>
High school or less (reference)	14.0 (12.3–15.8)	14.3 (12.5–16.0)	1.5 (0.9–2.2)	1.4 (0.9–2.0)	45.3 (42.7–47.8)	48.5 (45.8–51.1)	28.6 (26.5–30.8)	30.5 (28.2–32.7)
More than high school	19.9 (18.5–21.3)	19.8 <sup>†</sup> (18.3–21.3)	3.5 (2.9–4.2)	3.4 <sup>†</sup> (2.8–4.1)	63.9 (62.0–65.8)	61.4 <sup>†</sup> (59.4–63.3)	43.9 (42.0–45.9)	41.9 <sup>†</sup> (40.0–43.8)
<b>Health insurance coverage</b>								
Private (reference)	17.6 (16.2–19.1)	17.1 (15.5–18.6)	2.4 (1.9–3.0)	1.9 (1.4–2.3)	61.7 (59.4–63.9)	57.2 (54.8–59.6)	41.2 (39.1–43.3)	37.6 (35.6–39.7)
Public	17.9 (16.2–19.8)	18.3 (16.3–20.3)	2.8 (2.1–3.6)	3.4 <sup>†</sup> (2.3–4.4)	48.9 (46.6–51.3)	54.4 (51.8–57.0)	31.0 (29.0–33.0)	35.6 (33.1–38.1)
Uninsured	9.9 (6.3–14.7)	12.5 (7.7–17.3)	NA	NA	45.9 (39.5–52.3)	48.5 <sup>†</sup> (42.4–54.6)	39.1 (32.8–45.7)	36.7 (30.6–42.8)
<b>Pain intensity<sup>†††</sup></b>								
Mild (reference)	11.4 (9.5–13.5)	10.8 (8.8–12.8)	1.9 (1.2–3.1)	2.2 (1.2–3.1)	59.1 (55.6–62.5)	55.7 (52.3–59.2)	33.1 (30.0–36.3)	31.1 (28.0–34.1)
Moderate	16.7 (15.2–18.4)	16.5 <sup>†</sup> (14.9–18.2)	2.9 (2.2–3.8)	2.6 (1.9–3.3)	57.9 (55.4–60.3)	57.6 (55.3–59.9)	38.7 (36.6–40.9)	38.5 <sup>†</sup> (36.3–40.4)
Severe	21.3 (19.2–23.6)	22.5 <sup>†</sup> (20.2–24.8)	2.7 (2.0–3.5)	2.5 (1.7–3.2)	48.4 (45.6–51.2)	51.6 (48.9–54.2)	35.8 (33.4–38.3)	37.8 <sup>†</sup> (35.2–40.3)

AI/AN = American Indian or Alaska Native; FPL = federal poverty level; NA = not available; NHIS = National Health Interview Survey.

\* Data are from the 2020 NHIS ( $n = 31\ 568$ ; response rate, 48.9%). Data are percentages (95% CIs). All percentages are row percentages. Percentages across rows do not sum to 100% because categories are not mutually exclusive. Responses coded as “refused,” “don’t know,” or “not ascertained” and missing responses were excluded from the analysis. Estimates listed as “NA” are considered unreliable according to the National Center for Health Statistics’ standards of reliability.

<sup>†</sup> Based on the following questions: 1) “During the past 3 months, have you taken any opioid pain relievers prescribed by a doctor, dentist, or other health professional? Examples include hydrocodone, Vicodin, Norco, Lortab, oxycodone, OxyContin, Percocet, and Percodan.” 2) “During the past 3 months, did you take a prescription opioid to treat long-term or chronic pain, such as low back pain or neck pain, frequent headaches or migraines, or joint pain or arthritis?”

<sup>‡</sup> Based on the question, “Over the past three months, did you use a pain reliever other than an opioid prescribed by a doctor, dentist, or other health professional?”

<sup>§</sup> Based on the question, “Over the past three months, did you use over-the-counter medications such as aspirin, Tylenol, Advil, or Aleve to manage your pain?”

<sup>¶</sup> Adjusted prevalence was estimated using predictive margins from a logistic regression model that controlled for sex, age, race/ethnicity, family income, urban-rural classification, U.S. census region, education, health insurance, and pain intensity.

<sup>||</sup> The adjusted prevalence differs significantly from that in the reference group ( $P < 0.05$ ).

<sup>\*\*</sup> Race/ethnicity is reported as single and multiple race groups combined with Hispanic origin as reported by NHIS. AI/AN only or in combination with another race group is included in the “AI/AN, non-Hispanic” category. More information about Hispanic origin and race is available in the 2020 NHIS Survey Description document.

<sup>††</sup> Based on the question, “Thinking about the last time you had pain, how much pain did you have? Would you say a little, a lot, or somewhere in between?”

<sup>†††</sup> Complementary therapies include use of any of the following over the past 3 months: spinal manipulation or other forms of chiropractic care; yoga, tai chi, or qigong; massage for pain; or meditation, guided imagery, or another relaxation technique.