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Nonpharmacologic management of chronic pain in the United States' Medicare population: a scoping review protocol

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ABSTRACT

Objective: This objective of this review is to describe the scope of the literature on the access to and use of nonpharmacologic therapies to manage chronic pain among people with disabilities and older adults.

Introduction: Clinical guidelines recommend nonpharmacologic interventions as first-line therapy for chronic pain management. The importance of nonpharmacologic management is magnified in populations with a high pain burden and multiple chronic conditions, such as people living with a disability and/or older adults, many of whom are enrolled in Medicare. Understanding the utilization of nonpharmacologic therapies for pain is critical to guide effective pain management delivery and policy.

Inclusion criteria: This scoping review will consider studies of Medicare beneficiaries and Medicare-eligible individuals who have chronic pain. Noninvasive and nonpharmacologic treatments for pain identified in clinical guidelines will be included. We will exclude studies exclusively focused on acute pain, cancer pain, palliative care and hospice settings, cannabis-based treatment, and pharmacologic therapies. Studies conducted outside the United States will be excluded.

Methods: The proposed scoping review will be conducted in accordance with JBI methodology. The search strategy has been developed in consultation with a public health librarian and will be carried out in MEDLINE, CINAHL, and SocINDEX, Web of Science, and the Cochrane Library. The search will be limited to results published in English since January 1, 1990. Two independent reviewers will screen all titles and abstracts and then full-text articles. Data will be extracted and summarized in diagrammatic, tabular, and narrative formats.

Scoping review registration: Open Science Framework (<https://osf.io/h7bwc/>)

Keywords: chronic pain; evidence synthesis; Medicare; nonpharmacologic; scoping review protocol

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Introduction

The International Association for the Study of Pain defines chronic pain as pain that persists or recurs for longer than three months.¹ Chronic pain can be a symptom of an underlying chronic condition or a disease in its own right. Chronic pain conditions can contribute to poor perceptions of quality of life or health,² impaired daily functioning,³ and increased health care and societal costs.⁴ Nearly 20% (approximately 50 million) of

American adults have chronic pain⁵; however, population-based estimates range from 11% to 40%, with sizable variation in population subgroups. Higher prevalence of chronic pain is associated with advancing age due to chronic diseases and conditions associated with aging.⁴ This is an important consideration for Medicare, the United States' federal health insurance program for adults 65 years and older and people with long-term disabilities. With the rapid growth of the aging US population⁶ and projected increases in Medicare enrollment,⁷ it is important to consider the characteristics of chronic pain management and Medicare's role in delivering comprehensive pain care.

Effective pain management is both a clinical and public health challenge, in part due to over-reliance on opioid therapy. Opioid prescribing to treat chronic non-cancer pain increased substantially from the 1990s.⁸ Despite declines in opioid prescriptions in recent years, opioid-use disorders and overdose deaths continue to worsen in the US.⁹ The questionable long-term effectiveness and poor safety profile of opioids have informed current clinical guidelines on prescribing opioids for chronic pain, which prioritize non-opioid and nonpharmacologic treatment options. For example, the 2016 Centers for Disease Control and Prevention (CDC) guideline recommends that nonpharmacologic therapies be preferred for chronic pain over opioids.¹⁰ Additionally, professional medical societies, such as the American College of Physicians (ACP), recommend nonpharmacologic treatment of chronic low back pain.¹¹

Many nonpharmacologic treatments are available for managing chronic pain, and include a variety of noninvasive or invasive surgical procedures. In this review, we focus on noninvasive nonpharmacologic therapies identified by clinical guidelines as having promise for individuals with chronic pain. Other health care organizations, including the Veterans Health Administration,¹² also recommend nonpharmacologic treatments as first-line therapy for chronic pain. Such therapies, including physical therapy and chiropractic care, have become accepted forms of chronic pain management, with clinical trials showing potential for reducing pain and improving physical function.^{13,14} One systematic review conducted by the Agency for Healthcare Research and Quality found that (despite small and sometimes short-lived effects, such as enhanced physical function) noninvasive, nonpharmacologic treatments for

pain were associated with improvements in pain and function for several chronic pain conditions.¹⁵ Furthermore, other research suggests that nonpharmacologic therapies have the potential to reduce opioid use in people with musculoskeletal pain.¹⁶

Although nonpharmacologic approaches have promise in managing pain as alternatives or complements to pharmacologic therapies, few of these treatments are covered by Medicare—a large federal health insurance program in the US with over 60 million beneficiaries. Individuals are eligible for Medicare if they are 65 years or older, or if they are living with a disability and are younger than 65 years, and have been entitled to Social Security benefits for at least 24 months.¹⁷ Medicare benefits can be delivered under fee-for-service (traditional Medicare) or capitated models (Medicare Advantage). There are differences in coverage for nonpharmacologic pain therapies between traditional Medicare plans and Medicare Advantage plans (ie, Medicare administered by private insurers). For example, Medicare Advantage plans can offer additional benefits that traditional Medicare does not cover, such as higher payment thresholds or coverage in more settings, and for therapies not included in traditional Medicare, including tai chi and yoga classes.¹⁸

Under traditional Medicare, the level of coverage varies depending on the type of pain being treated and the specific type of nonpharmacologic approach. For example, Medicare most frequently covers outpatient physical therapy services under Part B,¹⁸ whereas chiropractic services, acupuncture, and electrical nerve stimulation are all only partially covered by Medicare, with restrictions on pain location, number of appointments, or a cap on costs.^{19,20} In recent years, there have been changes in traditional Medicare's coverage of nonpharmacologic therapies, including new coverage of acupuncture for chronic low back pain beginning in 2020.²⁰ Notwithstanding these improvements, the complexities of the Medicare reimbursement policy for nonpharmacologic treatment for pain may create barriers to accessing guideline-recommended care for chronic pain.¹⁸ For this reason, our review will extend beyond nonpharmacologic pain therapies covered under Medicare (eg, mindfulness therapies) in order to examine the potential treatments that may be used but for which Medicare reimbursement is currently unavailable. The selection of treatments for the scoping review will be informed by guidelines

advanced by health care agencies and professional associations such as the CDC and the ACP.

Generating a greater understanding of access and utilization of Medicare's coverage of nonpharmacologic therapies is a key step in addressing prevalent chronic pain and prompting changes in coverage policies. Although numerous studies separately address chronic pain, nonpharmacologic therapies, and Medicare coverage, few focus on the intersection of these three topics.²¹

A preliminary literature search was conducted in September 2021 in PROSPERO, *JBI Evidence Synthesis*, and PubMed. The search identified a systematic review on chronic pain management in the nursing home setting.²¹ While that systematic review offers recommendations for providing nonpharmacologic modalities in nursing homes, it does not address the use of these therapies. Our planned scoping review seeks to address these knowledge gaps through its focus on actual utilization patterns. A scoping review methodology was chosen because it enables us to comprehensively and systematically map and summarize the available evidence on this broadly researched topic²² about the characteristics of the utilization of nonpharmacologic therapies for chronic pain in the US Medicare population. This protocol has been registered in Open Science Framework (<https://osf.io/h7bwc/>).

Review questions

- i. What are the characteristics (type, duration, frequency, setting) of nonpharmacologic pain treatment services that are utilized in the Medicare population?
- ii. Which population subgroups are addressed (eg, adults living with a disability, older adults, specific pain conditions, minority populations, people with substance use disorders, long-term care residents) and what outcomes were evaluated?
- iii. Are nonpharmacological pain treatment modalities used as alternatives or complements to medications?

Inclusion criteria

Participants

The scoping review will consider studies that include adults 65 years and older (with unspecified insurance source) and Medicare-enrolled older adults and adults with disabilities (at least 18 years of age) who have chronic non-cancer pain and undergo

noninvasive nonpharmacologic treatments for their pain. Participants will include Medicare fee-for-service and Medicare Advantage beneficiaries who are eligible for Medicare benefits on the basis of disability or age. Given that the Medicare program predominantly provides health insurance to individuals over age 65, articles that include older adults residing in the US without specifying Medicare enrollment status will be included because this population is eligible for Medicare. Adults with a disability enrolled in Medicare will also be included. However, articles that do not specify Medicare enrollment for adults with a disability under age 65 will be excluded. Adults with disabilities are only eligible to enroll in Medicare if they are entitled to Social Security disability benefits for at least 24 months. As such, we will be unable to adequately determine Medicare eligibility of disabled adults in studies that do not specify Medicare enrollment status.

Concept

The concepts to be studied are access and utilization of nonpharmacological treatments for chronic pain. Chronic pain will be defined as persistent or recurrent pain lasting for three months or more on the basis of self-report or secondary data. We will include studies that focus on pain types that are often chronic (eg, musculoskeletal conditions, such as back pain) if the chronicity of pain is not specified. Studies will be excluded if they exclusively focus on payers other than Medicare (eg, Medicaid, Veteran's Affairs, worker's compensation).

The selection of treatments included in the review will be informed by guidelines promoted by several health care agencies and professional societies, including the ACP, Agency for Healthcare Research and Quality, CDC, Veteran's Health Administration, the Academic Consortium for Integrative Medicine and Health, the American Academy of Family Physicians, the American Society of Anesthesiologists, the Department of Health and Human Services, and the Office of the Army Surgeon General. Nonpharmacologic treatments for chronic pain will be included in the scoping review search terms if recommended by three or more of these organizations (see Table 1).^{10-12,15,23,24} This threshold was chosen because it aligns with criteria recommended for high levels of evidence, as reported by Ackley et al.²⁵ Fourteen nonpharmacologic treatments were ultimately selected for inclusion in this review.

Table 1: Noninvasive nonpharmacologic treatments identified from pain treatment guidelines and recommendations from professional groups

	Noninvasive Treatments of Acute, Subacute and Chronic Low Back Pain: A Clinical Practice Guideline From the American College of Physicians (2017) ¹¹	Noninvasive Nonpharmacologic Treatments for Chronic Pain (Agency for Healthcare Research and Quality) (2020) ¹⁵	Evidence-Based Non-pharmacologic Strategies for Comprehensive Pain Care: The Consortium Pain Task Force White Paper* (2018) ¹¹	Chronic Musculoskeletal Pain: Nonpharmacologic, Noninvasive Treatments (American Academy of Family Physicians) (2020) ²³	CDC Guidelines for Prescribing Opioids for Chronic Pain (2016) ¹⁰	American Society of Anesthesiologists Task Force on Chronic Pain Management (2010) ²⁴	Veterans Health Administration's State-of-the-Art Conference on Non-Pharmacological Approaches to Musculoskeletal Pain (2018) ¹²	Pain Management Best Practices Inter-Agency Task Force Report (HHS) (2019) ¹⁰	The Office of the Army Surgeon General Pain Management Task Force (2010) ¹¹
Exercise	✓	✓			✓	✓	✓	✓	
Massage		✓	✓	✓			✓	✓	✓
Tai chi	✓	✓	✓				✓	✓	✓
Yoga	✓	✓	✓				✓	✓	✓
Mindfulness-based stress reduction (or other mindfulness techniques)	✓	✓	✓	✓			✓	✓	✓
Multidisciplinary rehabilitation	✓	✓		✓	✓	✓			
Progressive relaxation (or other relaxation techniques)	✓		✓			✓		✓	
Acupuncture	✓	✓	✓	✓		✓	✓	✓	✓
Low-level laser therapy	✓	✓		✓					✓
Biofeedback	✓		✓			✓		✓	✓
Psychological therapies (ie, CBT)	✓	✓	✓	✓	✓	✓	✓	✓	
Manipulative therapy	✓	✓	✓	✓			✓	✓	✓
Electrical stimulation (ie, TENS)						✓		✓	✓
Myofascial release		✓		✓				✓	
Energy medicine (ie, qigong)		✓							✓
Hypnosis								✓	
Diet and nutrition			✓				✓		
Alexander technique			✓						
Pilates			✓					✓	
Feldenkrais			✓						
Self-care/self-efficacy strategies			✓						
Occupational therapy								✓	
Ice and heat therapy								✓	
Therapeutic ultrasound								✓	
Traction								✓	
Bracing								✓	

*Academic Consortium for Integrative Medicine and Health
 CBT, cognitive behavioral therapy; CDC, US Centers for Disease Control and Prevention; HHS, US Department of Health and Human Services; TENS, transcutaneous electrical nerve stimulation

These are exercise, massage, tai chi, yoga, mindfulness-based stress reduction and other mindfulness techniques, multidisciplinary rehabilitation, progressive relaxation and other relaxation methods, acupuncture, low-level laser therapy, biofeedback, chiropractic care, psychological therapies, electrical stimulation (ie, transcutaneous electrical nerve stimulation), and myofascial release.

Context

The review will consider studies conducted in any context (eg, hospitals, outpatient, and inpatient rehabilitation settings). Additionally, because Medicare is a health insurance program funded by the Centers for Medicare and Medicaid Services in the United States, only studies conducted in the US will be considered for this review.

Types of sources

This scoping review will focus on empirical quantitative and qualitative studies. A variety of study designs will be included; however, randomized controlled trials and non-randomized controlled trials (and their protocols) will be excluded because they do not reflect real-world environments, populations, or health care use patterns. Additionally, systematic and scoping reviews that summarize clinical trials will be excluded, but those that are relevant to our topic will be scanned for relevant references. Quasi-experimental studies, such as before and after studies and interrupted time series analyses, will be included. Analytical observational studies will be considered, including prospective and retrospective cohort studies, case-control studies, and cross-sectional studies. Gray literature, such as dissertations and white papers, will also be considered for inclusion.

Studies that analyze national survey data or large health care databases but do not have subgroup analyses of older adults or Medicare beneficiaries will be excluded. Qualitative study designs, including, but not limited to, designs such as grounded theory, ethnographic research, qualitative description, and action research will also be considered. Single-site case series and individual case reports will be excluded because they contribute little generalizable information. Expert opinion and perspective papers will also be excluded as our focus is on empirical studies. Conference abstracts and newsletters will be excluded as they are unlikely to contain many of the elements required for data extraction.

Methods

The proposed scoping review will be conducted in accordance with JBI methodology for scoping reviews and following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR).^{26,27}

Search strategy

The search strategy will aim to locate both published and unpublished studies. An initial limited search of MEDLINE (PubMed; Appendix I) was undertaken to identify articles on the topic, followed by an analysis of the text words contained in relevant full-text papers, along with the controlled language index terms in the MeSH database used to describe the papers. The reference lists of all studies selected for inclusion will be screened for additional papers. The databases to be searched are MEDLINE (PubMed), CINAHL (EBSCO), SocINDEX (EBSCO), Cochrane Library, and the following citation indices from the Web of Science Core Collection: Science Citation Index Expanded, Social Sciences Citation Index, Arts and Humanities Citation Index, and Emerging Sources Citation index. A separate search of gray literature will be done in ProQuest Dissertations and Theses Global, the OECD iLibrary, and through the Centers for Medicare and Medicaid services website.

The search will be limited to results published since January 1, 1990. This marked the beginning of increased prescribing of opioids to manage pain.⁸ Because we are focusing on nonpharmacologic treatments for chronic pain in the current opioid epidemic, articles published prior to 1990 will be excluded. Only English-language studies will be considered for this review because it is the primary language of the researchers.

Study selection

Following the search, all identified citations will be collected and uploaded into Zotero 5.0.96.3 (Corporation for Digital Scholarship and Roy Rosenzweig Center for History and New Media, VA, USA) and duplicates removed. Potentially relevant studies will be retrieved in full, and their citation details imported into Abstrackr (Association for Computing Machinery, NY, USA). Titles and abstracts will then be screened by two independent reviewers for assessment against the inclusion criteria for the review. The full text of selected citations will be assessed in detail against the inclusion criteria. Reasons for exclusion of full-text studies that do

not meet the inclusion criteria will be recorded and reported in the scoping review. Any disagreements that arise between the reviewers at each stage of the study selection process will be resolved through discussion or with a third reviewer. The results of the search will be reported in full in the final scoping review and presented in a PRISMA flow diagram.²⁸

Data extraction

Data will be extracted from papers included in the scoping review by two independent reviewers using a data extraction tool developed by the reviewers and based upon the research questions. The data extracted will include specific details about author(s), year and type of publication, setting, aims, study design, population demographics (eg, age, race, gender), and key findings relevant to the scoping review questions and objectives. The data extraction tool has been adapted from the guidelines provided by the JBI methodology for scoping reviews format.²⁶ A draft data extraction table is provided in Appendix II. The draft data extraction tool will be modified and revised as necessary during the process of extracting data. Any disagreements that arise between the reviewers will be resolved through discussion or with a third reviewer. Authors of papers will be contacted to request missing or additional data, where required. Modifications will be detailed in the scoping review.

Data analysis and presentation

The extracted data will be presented in diagrammatic or tabular format in a manner that aligns with the review questions. A narrative summary will accompany the tabulated and/or charted results, in line with the review objective of mapping the utilization and access to nonpharmacologic therapies for chronic pain. Data analysis and presentation will be dependent on the evidence gathered in the scoping review and could therefore change.

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Author contributions

KR drafted the manuscript and conducted a preliminary search of the literature. PM acquired financial support for the project leading to this publication. All authors contributed to designing the study, revising it, and approved submission of the final version of the manuscript.

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Appendix I: Search strategy

MEDLINE (PubMed)

Search conducted November 5, 2021 with 291 records retrieved

((“Pain”[MeSH Terms] OR “Chronic Pain”[MeSH Terms] OR “recurrent pain”[All Fields] OR “Low Back Pain”[MeSH Terms] OR “lumbago”[All Fields] OR “chronic low back pain”[All Fields] OR “lower back pain”[All Fields] OR “vertebrogenic pain”[All Fields] OR “persistent pain”[All Fields] OR “Musculoskeletal Pain”[MeSH Terms] OR “Breakthrough Pain”[MeSH Terms] OR “Breakthrough Pain”[All Fields] OR “Nociceptive Pain”[MeSH Terms] OR “tissue pain”[All Fields] OR “Myalgia”[MeSH Terms] OR “muscle pain”[All Fields] OR “Neuralgia”[MeSH Terms] OR “nerve pain”[All Fields] OR “Arthralgia”[MeSH Terms] OR “joint pain”[All Fields] OR “pain, intractable”[MeSH Terms] OR “refractory pain”[All Fields] OR “Neck Pain”[MeSH Terms] OR “cervical pain”[All Fields] OR “thoracic pain”[All Fields] OR “lumbar pain”[All Fields] OR “spine pain”[All Fields] OR “Shoulder Pain”[MeSH Terms] OR “Pelvic Pain”[MeSH Terms] OR “knee pain”[All Fields] OR “Neck Pain”[All Fields] OR “Shoulder Pain”[All Fields] OR “fibromyalgia”[All Fields] OR “arthritis”[All Fields] OR “osteoarthritis”[All Fields] OR “shingles”[All Fields] OR “nerve damage”[All Fields] OR “neuropathy”[All Fields] OR “multiple sclerosis”[All Fields] OR “radicular pain”[All Fields] OR “radiculopathy”[All Fields] OR “referred pain”[All Fields]) AND (“Pain Management”[MeSH Terms] OR “pain treatment”[All Fields] OR “non-drug prescription”[All Fields] OR “non-drug prescriptions”[All Fields] OR “nondrug prescriptions”[All Fields] OR “nonpharmacologic”[All Fields] OR “non-pharmacologic”[All Fields] OR “nonpharmacological”[All Fields] OR “non-pharmacological”[All Fields] OR “Complementary Therapies”[MeSH Terms] OR “Acupuncture”[MeSH Terms] OR “Acupuncture Therapy”[MeSH Terms] OR “acupuncture, ear”[MeSH Terms] OR “Acupuncture Analgesia”[MeSH Terms] OR “Electroacupuncture”[MeSH Terms] OR “Electric Stimulation Therapy”[MeSH Terms] OR “Electric Stimulation”[MeSH Terms] OR “Spinal Cord Stimulation”[MeSH Terms] OR “transcutaneous electrical nerve stimulation”[All Fields] OR “TENS”[All Fields] OR “Dry Needling”[MeSH Terms] OR “Musculoskeletal Manipulations”[MeSH Terms] OR “manipulation, orthopedic”[MeSH Terms] OR “manipulation, chiropractic”[MeSH Terms] OR “Chiropractic”[MeSH Terms] OR “manipulation, spinal”[MeSH Terms] OR “manipulation, osteopathic”[MeSH Terms] OR “manual therapy”[All Fields] OR “manual therapies”[All Fields] OR “mobilization”[All Fields] OR “stretching”[All Fields] OR “ROM”[All Fields] OR “range of motion”[All Fields] OR “active range of motion”[All Fields] OR “AROM”[All Fields] OR “therapy, soft tissue”[MeSH Terms] OR “Acupressure”[MeSH Terms] OR “Massage”[MeSH Terms] OR “therapeutic massage”[All Fields] OR “massage rehabilitation”[All Fields] OR “Exercise Therapy”[MeSH Terms] OR “Physical Therapy Modalities”[MeSH Terms] OR “motion therapy, continuous passive”[MeSH Terms] OR “Muscle Stretching Exercises”[MeSH Terms] OR “physical rehabilitation”[All Fields] OR “Plyometric Exercise”[MeSH Terms] OR “neuromuscular reeducation”[All Fields] OR “neuromuscular re-education”[All Fields] OR “physiotherapy”[All Fields] OR “physical medicine”[All Fields] OR “hot and cold therapy”[All Fields] OR “superficial heat”[All Fields] OR “Therex”[All Fields] OR “PNF”[All Fields] OR “therapeutic activities”[All Fields] OR “therapeutic activity”[All Fields] OR “therapeutic exercise”[All Fields] OR “therapeutic exercises”[All Fields] OR “gait training”[All Fields] OR “balance training”[All Fields] OR “coordination training”[All Fields] OR “complementary and alternative medicines”[All Fields] OR “complementary and alternative medicine”[All Fields] OR “complementary and alternative therapies”[All Fields] OR “complementary and alternative therapy”[All Fields] OR “complementary and integrative medicine”[All Fields] OR “CAM”[All Fields] OR “integrative approach”[All Fields] OR “Complementary Therapies”[All Fields] OR “combined modality therapy”[All Fields] OR “combined modality therapies”[All Fields] OR “supervised exercise therapy”[All Fields] OR “pain rehabilitation”[All Fields] OR “physical therapist”[All Fields] OR “acupuncturist”[All Fields] OR “chiropractor”[All Fields] OR “movement therapy”[All Fields] OR “movement therapies”[All Fields] OR “Exercise”[All Fields] OR “Exercise”[MeSH Terms] OR “Exercise Therapy”[MeSH Terms] OR “Exercise Movement Techniques”[MeSH Terms] OR “Mind-Body Therapies”[MeSH Terms] OR “Tai Ji”[MeSH Terms] OR “tai chi”[All Fields] OR “mindfulness-based stress reduction”[All Fields] OR “Mindfulness”[MeSH Terms] OR “multidisciplinary rehabilitation”[All Fields] OR “progressive relaxation”[All Fields] OR “Relaxation Therapy”[MeSH Terms] OR “Low-Level Light Therapy”[MeSH Terms] OR “biofeedback, psychology”[MeSH Terms] OR “Psychotherapy”[MeSH Terms] OR “mental health counseling”[All Fields] OR “Cognitive Behavioral Therapy”[MeSH Terms] OR “CBT”[All Fields] OR “Acceptance and Commitment Therapy”[MeSH Terms] OR “myofascial release”[All Fields] OR “Electric Stimulation Therapy”[MeSH Terms] OR “Electric Stimulation”[MeSH Terms]) AND (“Medicare”[MeSH Terms] OR “centers for medicare and medicaid services, u s”[MeSH Terms] OR “CMS”[All Fields] OR “medicare advantage”[All Fields] OR “dual eligibility”[All Fields] OR “dual eligibles”[All Fields] OR “Original Medicare”[All Fields] OR “Traditional Medicare”[All Fields] OR “Medicare Fee-for-Service”[All Fields] OR “Medicare Part A”[All Fields] OR “Medicare Part B”[All Fields] OR “Medicare Part C”[All Fields] OR “Medicare Part D”[All Fields] OR “federal health insurance”[All Fields] OR “public health insurance”[All Fields] OR “Programs of All-inclusive Care for the Elderly”[All Fields] OR “Medicare coverage”[All Fields] OR “Medicare reimbursement”[All Fields] OR “Medicare insurance”[All Fields] OR “Medicare supplement insurance”[All Fields] OR “Medigap”[All Fields])) AND ((1990/1/1:3000/12/12[pdat]) AND (english[Filter]))

Appendix II: Draft data extraction tool

Author(s), publication year, country	
City, state	
Study aim	
Setting	
Study design	
Population (sample size, age range, male/female, race/ethnicity)	
Medicare (enrolled, eligible, unknown)	
Medicare Advantage (yes, no)	
Special population (older adults, disabled, SUD, racial/ethnic minorities)	
Chronic pain location	
Pharmacologic treatment use (opioids, anticonvulsants etc)	
Nonpharmacologic treatment type	
Nonpharmacologic treatment frequency and duration	
Health care professionals administering treatment	
Changes in nonpharmacologic treatment use over time	
Barriers to nonpharmacologic treatment use	
Facilitators of nonpharmacologic treatment use	
Outcomes (pain, function, harms, medication use)	
Conclusion	
Policy and clinical recommendations/implications	

SUD, substance use disorder