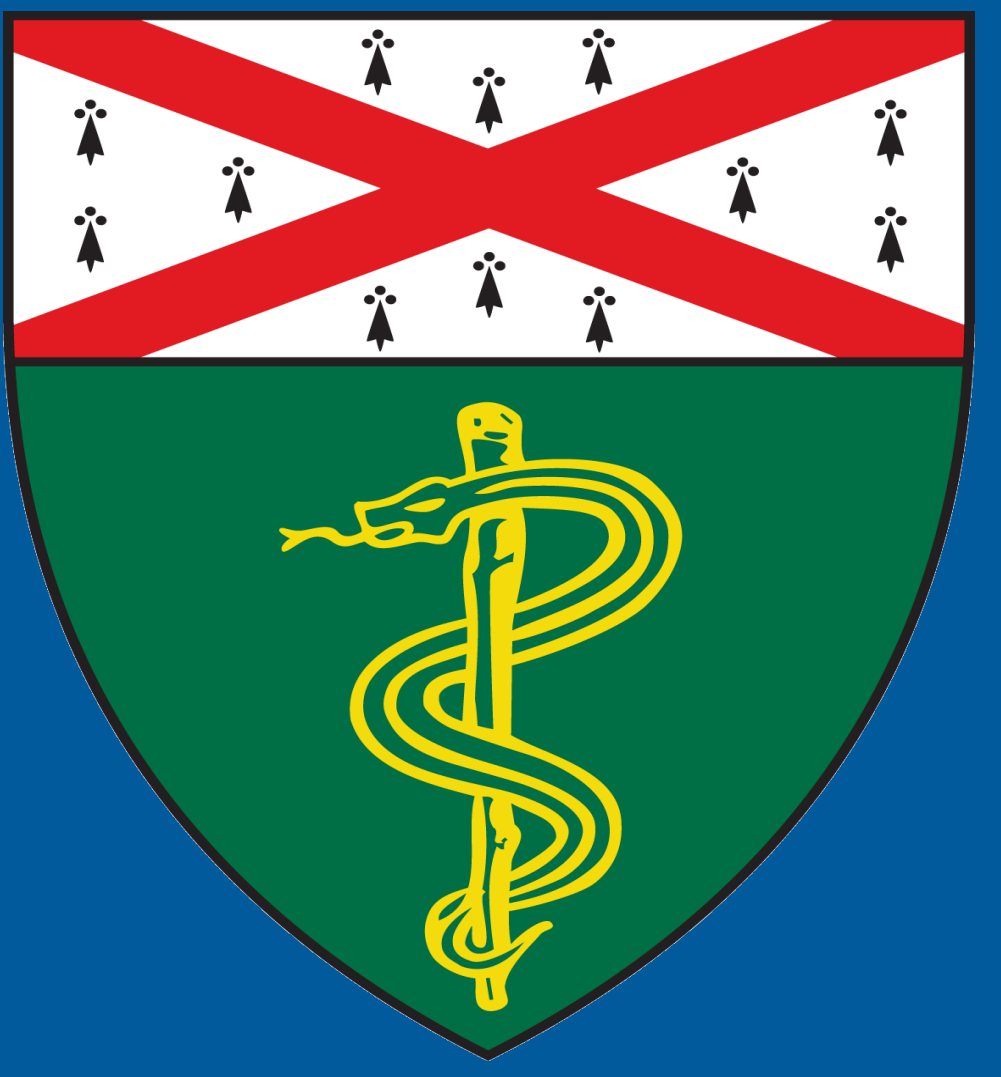




Instruments Assessing Harms and Benefits of Long-term Opioid Therapy For Chronic Pain: A Scoping Review



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INTRODUCTION



In the United States, an estimated 11.2% of adults experience daily, bothersome chronic pain. Approximately 3-4% (9.6 million to 11.5 million persons) are prescribed long term opioid therapy for chronic pain management.



In 2022, the CDC updated its guidelines for clinicians prescribing opioids to patients aged 18 and older for pain management. The recommendations advise clinicians to carefully weigh the benefits and risks and to exercise caution when adjusting opioid dosages.



There is a lack of specific tools to help clinicians determine which patient factors are most relevant and predictive of opioid-related safety, efficacy, and misuse. Additionally, existing resources for monitoring these factors vary widely in their methods for identification and measurement.



This study aimed to review the variables and content domains assessed in clinical instruments that measure the safety, efficacy, and misuse of opioids in the context of long-term opioid therapy for chronic pain. We aim to describe the content of published pain and long-term opioid therapy assessment instruments.

METHODS



The purpose of a scoping review is to map available evidence in a field. This scoping review was carried out according to the framework proposed by Arksey and O'Malley.

Population, Intervention, Comparison/Control, Outcome, Study Design (PICOS) framework was utilized to structure eligibility criteria. There were no restrictions related to publication year or language.

Table 1. PICOS criteria

PICOS category	Inclusion criteria	Exclusion criteria
Population	Adult (18 years and older) Inpatient and outpatient populations Chronic, non-cancer pain diagnoses (or being treated for chronic, non-cancer pain, as many studies define the dx differently) Long-term opioid therapy	Acute pain Pain related to cancer Palliative care Non-patient populations
Intervention	Studies describing a tool assessing opioid-related safety, efficacy, and/or misuse, including both diagnostic tools and risk stratification tools	Tools focused primarily on assessing acute withdrawal, screening approaches involving genetic screening or imaging, tools focused on risk factors associated with subsequent problematic opioid use (e.g., pt demographics, pop. Based studies)
Comparator/Control		None
Outcome	Development and validation of clinical tools assessing opioid-related safety, efficacy, and/or misuse	None
Study Designs	Experimental	None



In collaboration with a research librarian and key stakeholders, a comprehensive search strategy that involved searching bibliographic databases MEDLINE, Embase, Psycinfo, Web of science, and Cochrane.

RESULTS

- Thirty-six articles were included in the review.
- Included studies were published from 1998 through 2023 and described twenty-two unique clinical instruments. (Figure 1)
- A majority of instruments ($n=18/22$) were intended to be patient self-administered
- All instruments included at least some assessment of misuse ($n=22$), while less than half included any assessment of treatment efficacy ($n=9$) or opioid safety ($n=6$).
- The twenty-two unique clinical instruments contained a total of 422 items.
- The average length of instrument was 19 items.
- Most items ($n=385/422$; 91%) assessed domains related to opioid-related harms. Fewer items ($n=37/423$; 9%) assessed opioid treatment benefits/efficacy. (Figure 3)
- 75% ($n= 317/422$) of all items assessed misuse, 34% ($n=147/422$) assessed safety, and 9% ($n= 37/423$) assessed efficacy. (Figure 4)
- Among items assessing misuse ($n=317$), 33% ($n=105$) assessed current misuse and 67% ($n=216$) assessed risk for future misuse. (Figure 2)

Figure 1: Instruments

Addiction Behaviors Checklist (ABC)	Wu 2006
Coping Strategies Questionnaire (CSQ) catastrophizing item ONLY	Lutz 2017
Current Opioid Misuse Measure (COMM 11-PWDA)	MalleryLankford 2022
Current opioid misuse measure (COMM-9)	McCaffrey 2019
Current Opioid Misuse Measure (COMM)	Butler 2007; Barth 2014; Meltzer 2011
Diagnosis, Interactability, Risk, and Efficacy Score (DIRE)	Belgrade 2006
NLP Measure of Problem Opioid Use	Hylan 2015
Opioid Abuse Risk Screener (OARS)	Averill 2017
Opioid Compliance Checklist (OCC)	Jamison 2016
Opioid Risk Tool (ORT)	Webster 2005; Jones 2011
Opioid-Related Behaviors in Treatment (ORBIT)	Larance 2016
Pain Assessment and Documentation Tool (PADT)	Passik 2004
Pain Medication Questionnaire (PMQ)	Adams 2004; Holmes 2006
Patient Reported Indications for Opioid Reassessment (PRIOR)	Becker 2016
Prescribed Opioids Difficulties Scale (PODS)	Sullivan 2010; Banta-Green 2010
Prescription Drug Use Questionnaire (PDUQ)	Compton 1998; Banta-Green 2009
Prescription Drug Use Questionnaire- Patient Version (PDUQp)	Compton 2008
Prescription Opioid Misuse and Abuse Questionnaire (POMAQ)	Coyne 2021; Coyne 2023
Prescription Opioid Misuse Index (POMI)	Coloma-Carmona 2023; Knisely 2008
Revised Opioid Risk Tool (ORT-OD)	Cheatle 2019
Screener and Opioid Assessment for Patients with Pain (SOAPP)	Butler 2004; Akbik 2006
Screener and Opioid Assessment for Patients with Pain-Revised (SOAPP-R)	Black 2018; Butler 2008
Screening Tool for Addiction Risk (STAR)	Friedman 2003
Stratification Tool for Opioid Risk Mitigation (STORM)	Oliva 2017

Figure 2: Current Misuse and Risk for Misuse Items

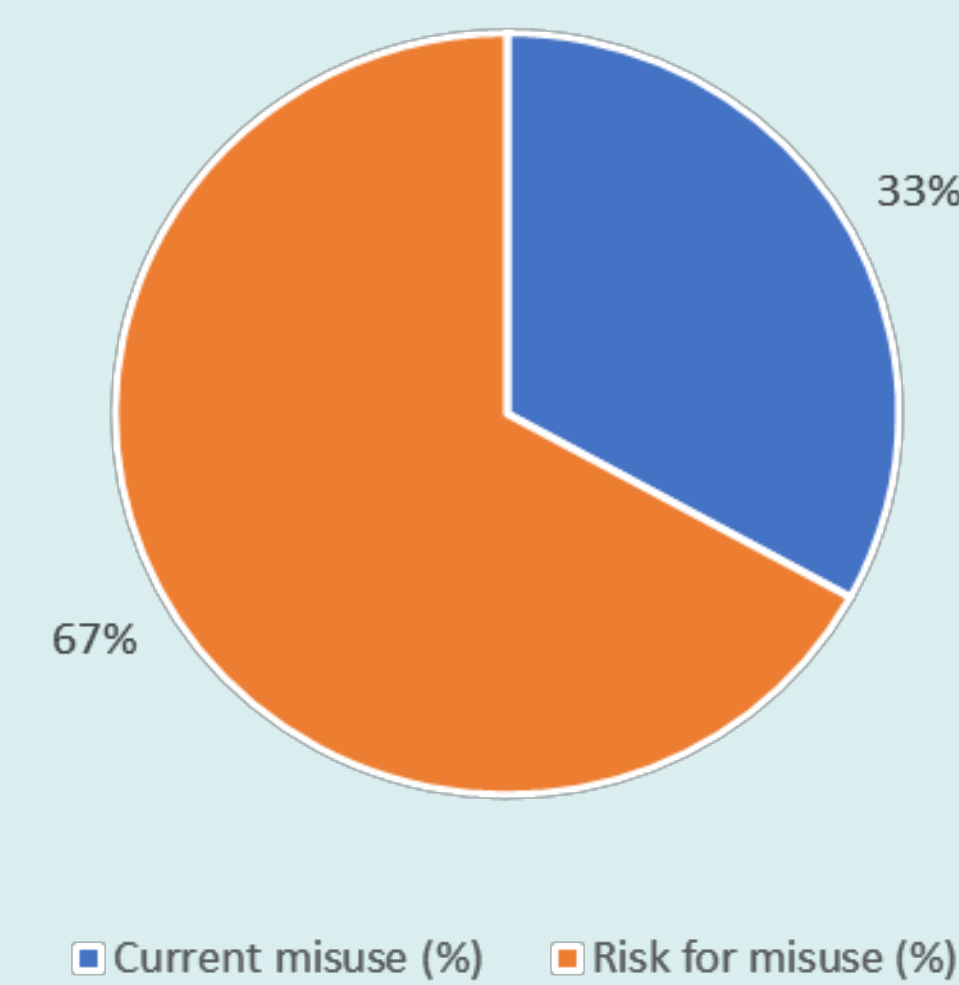


Figure 3: Harm and Benefit Items

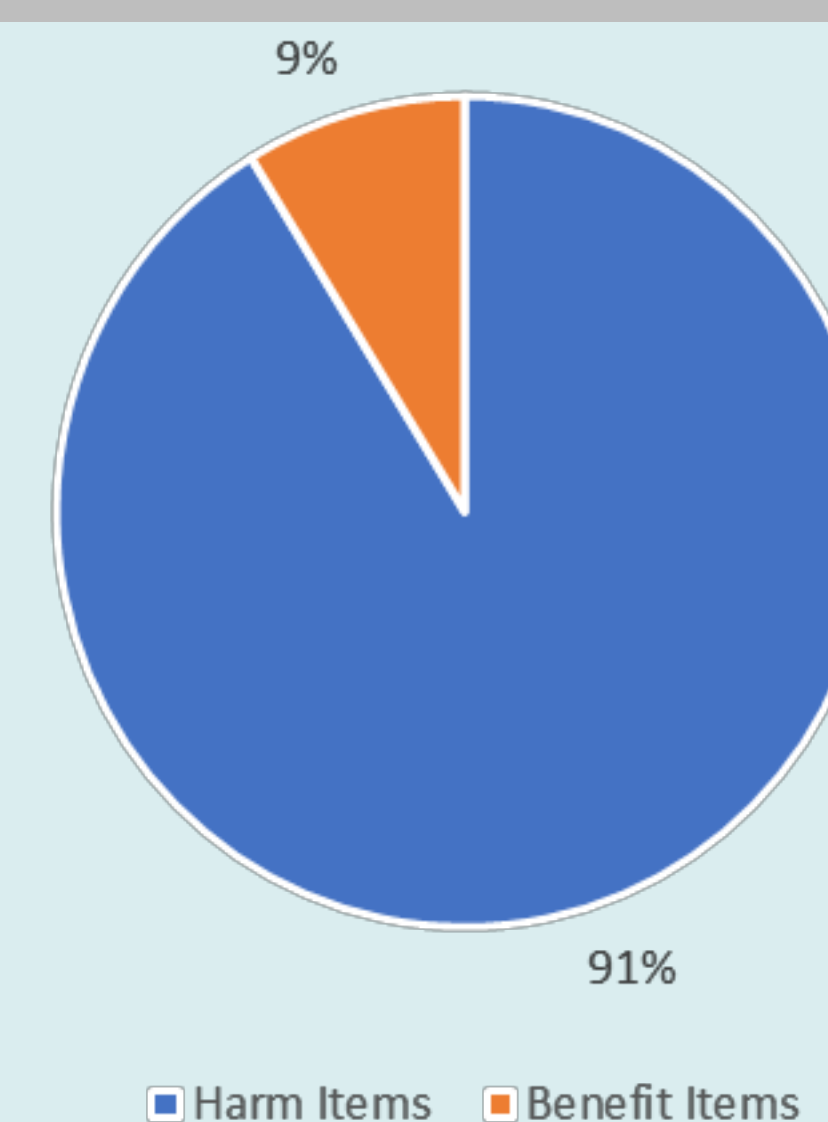
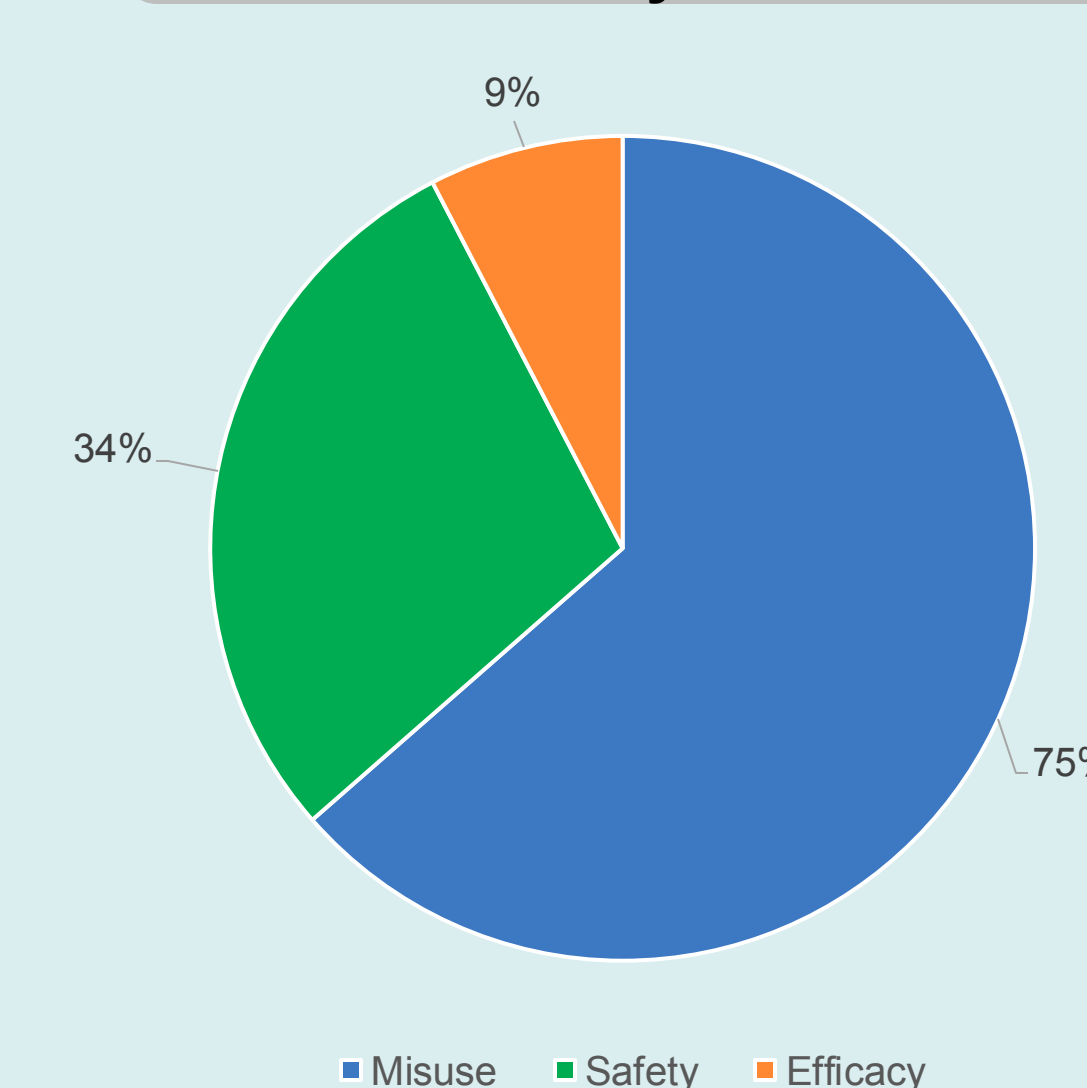
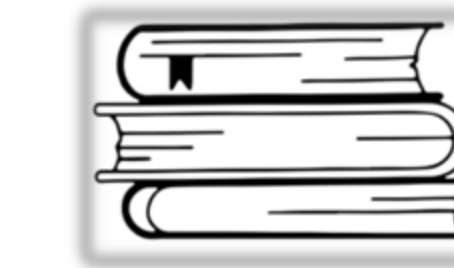


Figure 4: Misuse, Safety, and Efficacy Items



METHODS CONTINUED



Established definitions were used to guide this review:

Safety: *adverse effects, harmful interactions, and opioid-related problems*

Efficacy: *ability of treatment or therapy to produce desired outcomes, including pain relief, quality of life, and improved functioning*

Misuse: *opioid use not in accordance with prescribed directions, regardless of the presence of absence of harm resulting from use*



Records were reviewed by at least two of three coders (AC, AG, and MA). Any discrepancies in inclusion decisions were resolved by third coder.

CONCLUSION



Most existing instruments for patients on long-term opioid therapy focus heavily on harms rather than benefits (90% of items assess harm while 10% assess benefits). This imbalance limits their utility as tools for weighing the harms (current and potential) vs. benefits of long-term opioid therapy for chronic pain.



The imbalance of items assessing harms versus benefits is concerning, because prior research demonstrates that placing treatment benefits on equal footing with treatment risks prevents misalignment between patients and prescribers, enhances patient satisfaction with care, and promotes overall well-being in support of shared goals.



The development of a new screener tool that incorporates a balanced assessment of harms (current and potential) and benefits of long-term opioid treatment for chronic pain could enhance the value of longitudinal assessments in clinicians' pain and opioid management decisions and improve collaborative decision-making.

REFERENCES



Disclosures: The authors have no relevant financial relationship to disclose