

Background

- Approximately 68 million people in the United States (US) have chronic pain and another 45 to 60 million people will experience acute pain in a given year.¹ A review of the literature reveals that racial and ethnic disparities persist in the treatment of acute pain, chronic cancer pain, and palliative pain.² Given the ubiquitous nature of pain, these disparities pose a unique challenge to clinicians and require an awareness at the provider, patient, and systems level to adequately address quality of life-related outcomes.^{3,4}
- The Institute of Medicine noted that “although myriad sources contribute to these disparities, some evidence suggests that bias, prejudice, and stereotyping on the part of healthcare providers may contribute to differences in care.” As the minority population in the US continues to grow, there is an increasingly urgent need to recognize and overcome these disparities in care.^{2,6,7}
- Much of the existing research surrounding healthcare-related ethnic and racial disparities relies largely on national datasets that primarily target patient- and hospital systems-level variables.⁸ In contrast, clinician-level variables are largely absent.^{8,9}
- Further research is needed to identify clinician perceptions of ethnic and racial disparities to inform the development of evidenced-based education that will effectively address these issues.^{2,8-10} Academic medical institutions are uniquely poised to address this research gap given their inherent goals of providing national leadership through research and innovation and promoting healthcare professional education.
- Based on an identified area of educational need, the University of Utah School of Medicine, in collaboration with Med-IQ, LLC, is conducting a national certified educational initiative consisting of a national survey and in-practice clinician interviews.
- This initiative is designed to enhance the ability of healthcare professionals to recognize, address, and formulate innovative solutions to overcome disparities in the delivery of care to patients with chronic pain.

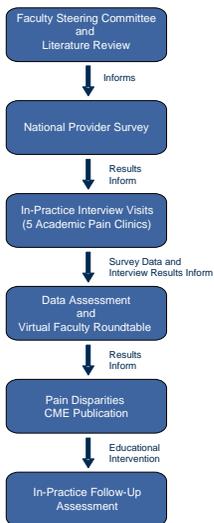
Objectives

- To identify clinician-related variables that contribute to ethnic and racial disparities in pain management, a national quality improvement survey study has been designed to:
 - Analyze provider perceptions of ethnic/racial disparities in pain management
 - Identify gaps in clinician knowledge with regard to ethnic/racial disparities in pain management
 - Explore possible strategies to overcome barriers and identified deficits in clinician knowledge with regard to ethnic/racial disparities in pain management

Methods

A quantitative and qualitative research study was designed to assess, via survey and in-practice interviews, clinicians' baseline knowledge of biases contributing to disparities in pain management (Figure 1). Data from the study's national survey and in-practice interviews will guide the development of a certified continuing medical education publication that will be distributed to practicing healthcare professionals who treat patients with chronic pain.

Figure 1. Schematic of Study Design



National Provider Survey

- The goal is to identify clinician biases that may lead to disparities of care for individuals living with chronic pain as well as common barriers to providing evidence-based pain management.
- A national survey was distributed electronically to US-based clinicians including (Table 1; N = 221, 79% response rate):
 - Anesthesiologists (n = 31)
 - Emergency Medicine Physicians (n = 34)
 - Family Practice/Internal Medicine Physicians (n = 30)
 - Neurologists (n = 34)
 - Physical Medicine and Rehabilitation Specialists (n = 30)
 - Nurse Practitioners (n = 30)
 - Physician Assistants (n = 32)
- Responses will be evaluated in aggregate and compared across clinician groups and respondent race/ethnicity.

Table 1. Sample National Survey Questions

- Before entering the exam room to see new patients for their first visit with you, are you in any way made aware of their primary language?
- Do you or your institution have a standard method to address language barriers?
- Have you ever observed a colleague exhibiting signs of racial or ethnic bias when managing pain in their patients?
- Are you aware of any personal racial or ethnic biases that potentially influence how you evaluate pain in your patients?
- Do you use a pain guideline or clinical standard to guide treatment decisions for your patients with pain?

In-Practice Interview Visits

- The goal is to identify provider behaviors, gaps in education and training, and front-line practice barriers that contribute to disparities in pain management.
- In-practice interviews are being conducted by University of Utah researchers in five US academic pain clinics (Table 2).

Table 2. Sample In-Practice Interview Questions

- Before entering the exam room to see a new patients for the first time, what do you usually know about that individual? How do you obtain this information?
- What improvements, if any, could be made to clinic processes for addressing language barriers?
- Are pain scores routinely documented for individuals presenting to your practice for complaints of pain?
- What criteria do you use when making decisions to prescribe or not prescribe opioids?
- When treating persons living with chronic or persistent pain with opioids, do you use formal written opioid agreements?

Research & Findings

- Information garnered from both the national survey and the in-practice interviews will be compiled and summarized.
- Summarized survey data and interview information will be compared with guideline recommendations, when appropriate, and study peers.
- Comparison findings will serve as the basis for a CME-certified publication. This publication will be direct mailed to an estimated 25,000 practicing clinicians, including those who participated in the in-practice interviews.

In-Practice Follow-Up Assessment

- The five participating academic pain clinics will receive two follow-up surveys at 3 months and 6 months following the release of the CME-certified research and findings publication.
- Surveys will assess any subsequent changes in practice, along with any persisting barriers in evidence-based pain management.

Participant Confidentiality

- E-mail survey responses were de-identified prior to analysis by study investigators. Data regarding in-practice behaviors will be reported anonymously. All study protocols and materials have been reviewed and approved by the University of Utah School of Medicine Institutional Review Board.

Potential Limitations

- Potential limitations of this study include:
 - A small number of survey participants (may not be completely representative of all practicing clinicians in the US).
 - The limited number of in-practice interview sites (could result in reporting of biases that are more representative of an individual clinic rather than pain clinics as a whole).
 - Reporting bias (participants are not observed in practice).

Goals

- Ensuring optimal pain care for all individuals is critically important at every level of healthcare. To further elucidate disparities in the treatment of chronic pain at the clinician level, a strategy has been implemented with the following goals for participants:
 - Recognition of biases that influence treatment decisions
 - Improved use and adaptation of pain-related treatment guidelines to suit individual patient needs
 - Institution of individual- and system-level processes that will allow for the uniform care and treatment of all patients who experience chronic pain
- The results of this study will provide a more basic and fundamental assessment of the true gaps and educational needs of clinicians who treat patients with chronic pain. Ultimately, findings from this study will allow for the development of more informed and influential continuing medical education activities that are relevant to the target audience.

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