Racial Disparity in Pain Diagnosis and Management in a Large City Healthcare System

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OBJECTIVE

Identify and compare racial disparities in diagnoses of pain-related disorders and medical management using former and current medical record coding systems.

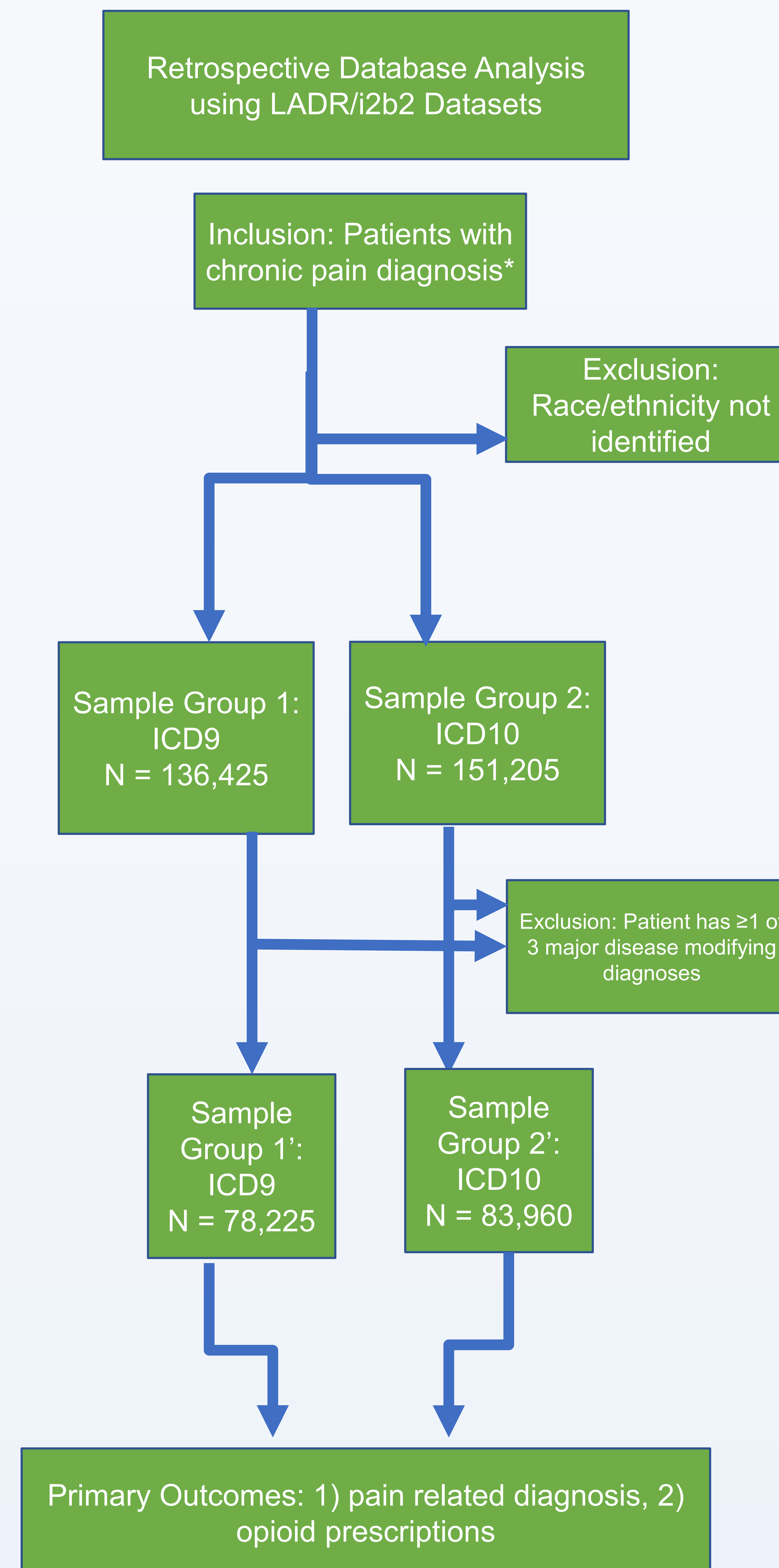
BACKGROUND

- Pain is defined by the IASP as "An aversive sensory and emotional experience typically caused by, or resembling that caused by, actual or potential tissue injury." [1]
- In 1999, Congress mandated a study on the disparities in health care through the Institute of Medicine in the National Academy of Science. This 2003 report identified PAIN as a major area of disparity in health care [4]
- Minority populations have increased sensitivity to pain with increased risk of severe pain, yet are historically undertreated. [2,5,6]
- Under treated pain, can increase the risk of heart disease, stroke, immune system impairment, and susceptibility to disease due to excess stress response. [3]
- Increases the likelihood of disability, financial instability, and social isolation.[3,7]
- Research and policies have been implemented nationwide to narrow the disparities in pain, but are they working?

NULL HYPOTHESIS

Race/Ethnicity has no impact on diagnosis and treatment of pain, thus populations will be comparable to demographic data

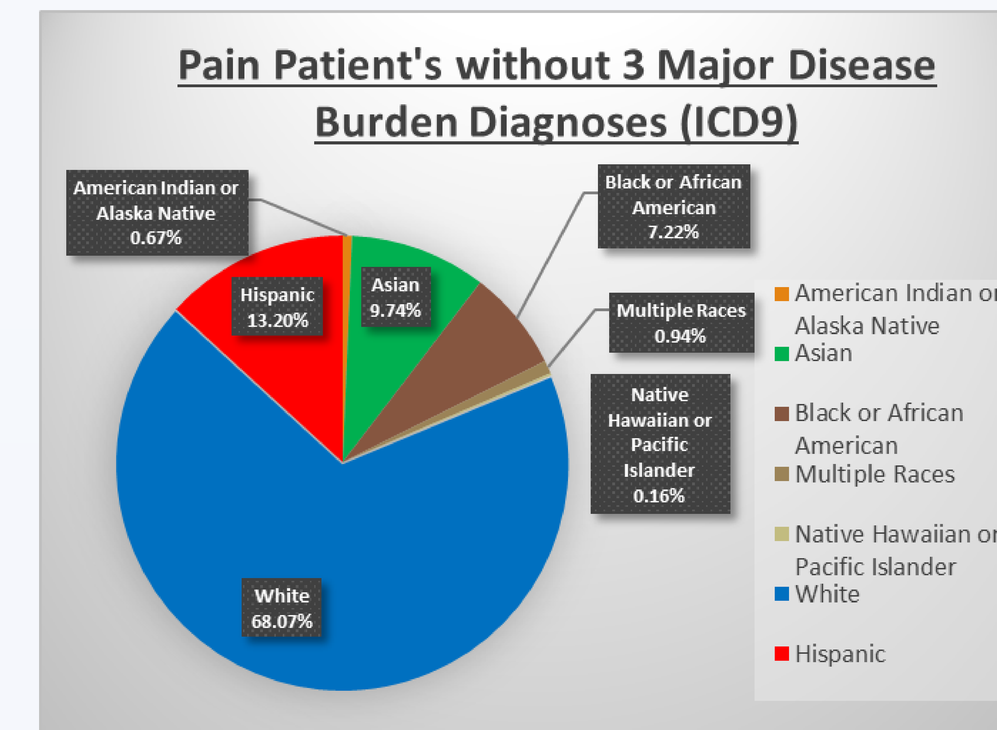
METHODS FLOWCHART

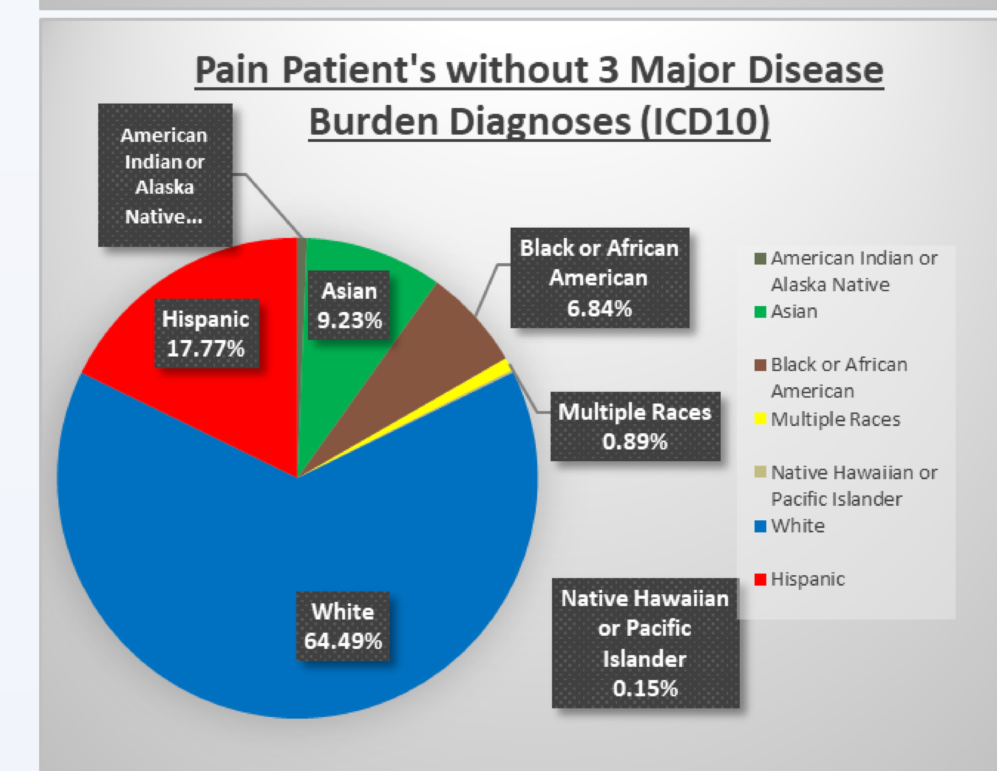


PATIENT CHARACTERISTICS

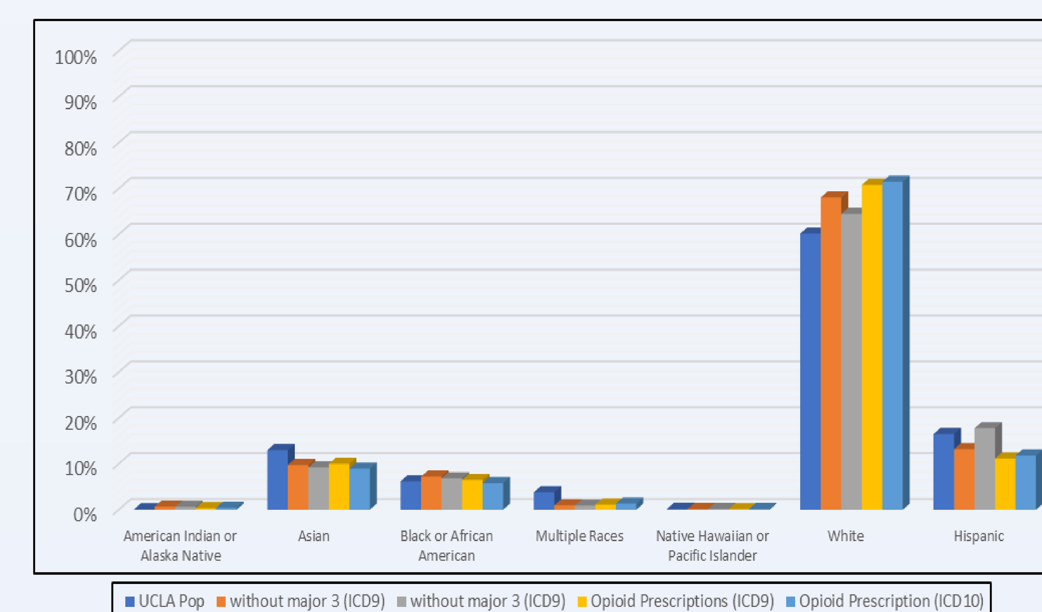
	ICD9	ICD10
Female (%)	55.18%	53.77%
Age: 65+ (%)	44.05%	36.83%
Race: Non-Hispanic White (%)	68.07%	64.48%

RESULTS

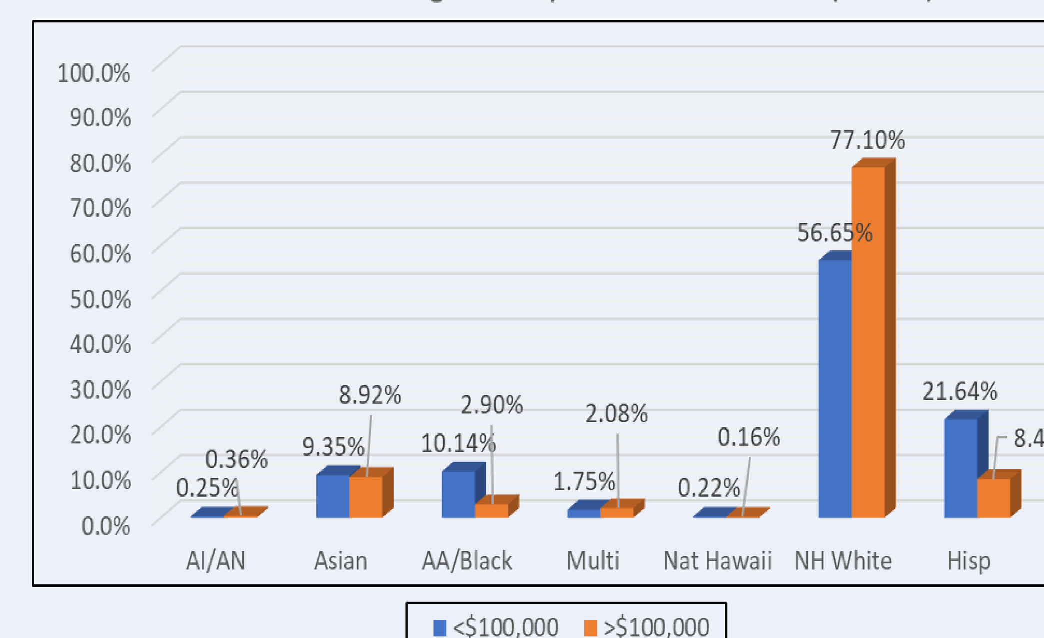




Comparison of Diagnosis to Opioid Prescription

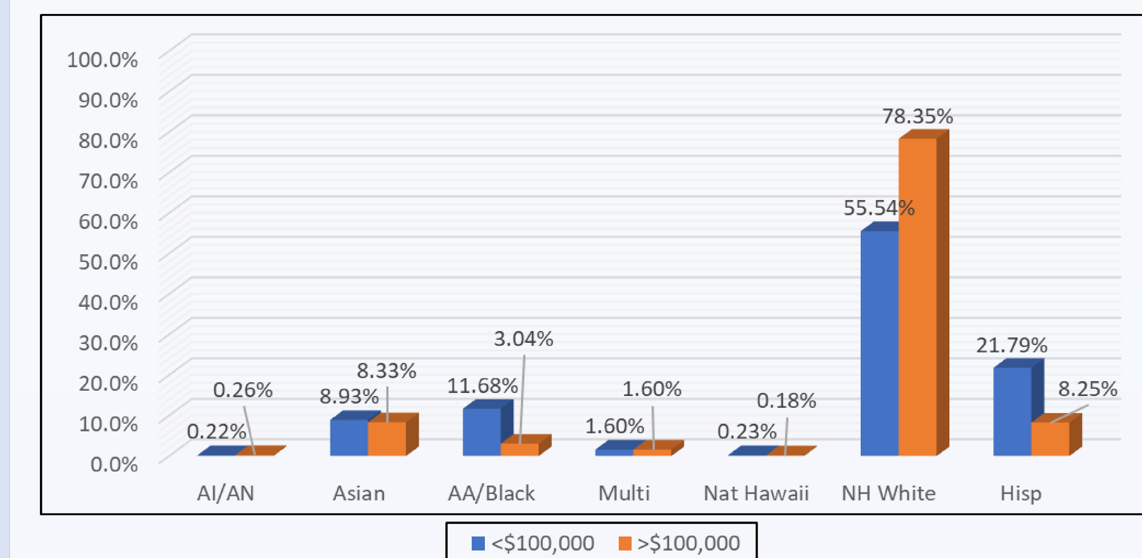


Pain Related Diagnosis by Income and Race (ICD10)



RESULTS (CONT.)

Opioid Prescriptions by Income and Race (ICD10)



CONCLUSIONS

- Despite positive trending in diagnosis between ICD9 and ICD10 for Hispanic patients, race remains a significant predictor of diagnosis and inadequate management.
- Asian patients continue to have decreased diagnoses and treatment percentage throughout all categories
- Lower and middle class, Black and Hispanic patients show increased odds of diagnoses. However, Black patients fail to show an equally significant increased odds of having an opioid prescription, despite the increased severity of pain reported among minorities.

LIMITATIONS

- Does not consider cultural influences on the perception of pain and diagnosis
- Does not consider patient preferences for medical vs non-medical management (ie. massage, acupuncture, mindfulness, etc.)
- Patient insurance status not available, and may impact treatment options

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