

Disparities in the Management of Low Back Pain

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Background

Pain carries a significant burden both at the individual level as well as across the healthcare system. Unmanaged or poorly managed pain can have a variety of negative consequences ranging from a loss of productivity and work absences to psychological difficulties and a lower quality of life. Low back pain is a common reason patients receive care of pain management specialists. It is imperative physicians in this space recognize and understand the effects demographic and other socio-economic factors may have on the treatment course for patients with low back pain.

Objective

This study was designed to identify demographic and socioeconomic factors associated with differences in procedure rates in the treatment of low back pain.

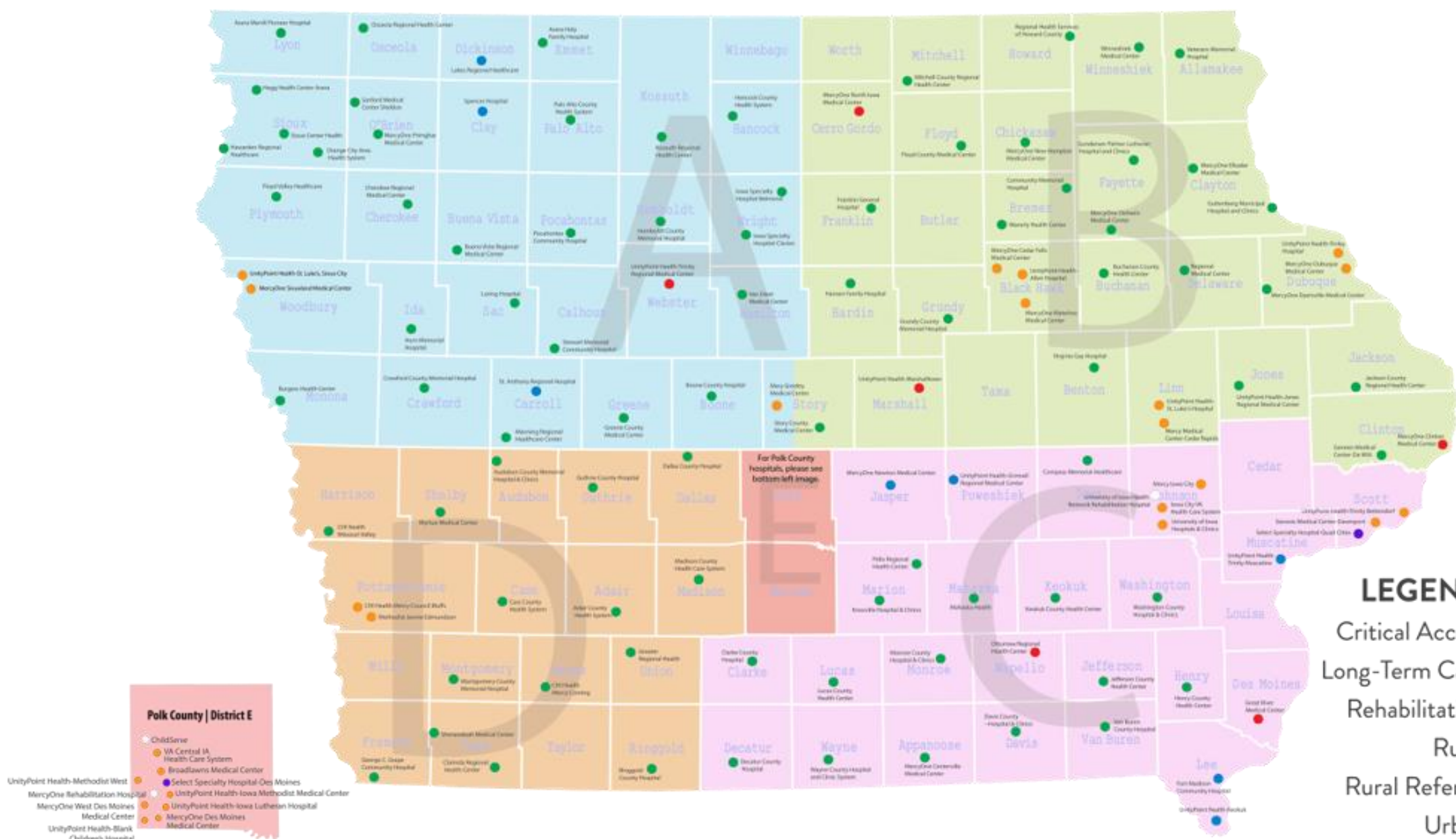
Methods

- This study was approved by the University of Iowa IRB #201911151.
- A retrospective chart review was performed to determine rates of interventional pain procedure performed for the treatment of low back pain within 180 days of initial patient visit with the pain management clinic.
- 2,452 new patient encounters were screened at the IRL Pain Management Clinic. Of those, 1,348 patients (55%) were found to have a diagnosis related to low back pain.
- A diagnosis related to low back pain was, broadly defined, as any diagnosis related to lumbar or sacral spine dysfunction.
- Demographic information including age, gender, race, insurance type, primary language, and county of residence were collected from patients in the low back pain group.
- Analyses were performed to compare rates of procedures based on gender, race, insurance type, primary language, and county of residence.

Outcomes

Was a procedure performed?	No (n)	%	Yes (n)	%	Total	P-value
Total patients	810	60%	538	40%	1348	
Median age	56		61			
SD age	16		16			
Male	319	57%	243	43%	562	p=0.037
Female	491	62%	295	38%	786	
White	700	59%	478	41%	1178	p=0.37
African American/Black	50	71%	20	29%	70	
Hispanic/Latino	28	60%	19	40%	47	
Asian	12	60%	8	40%	20	
American Indian/Alaska Native	5	71%	2	29%	7	
Native Hawaiian/Pacific Islander	0	0%	1	100%	1	
Multiracial/Two or more races	2	50%	2	50%	4	
Declined	5	45%	6	55%	11	
Unknown/Unspecified	8	80%	2	20%	10	

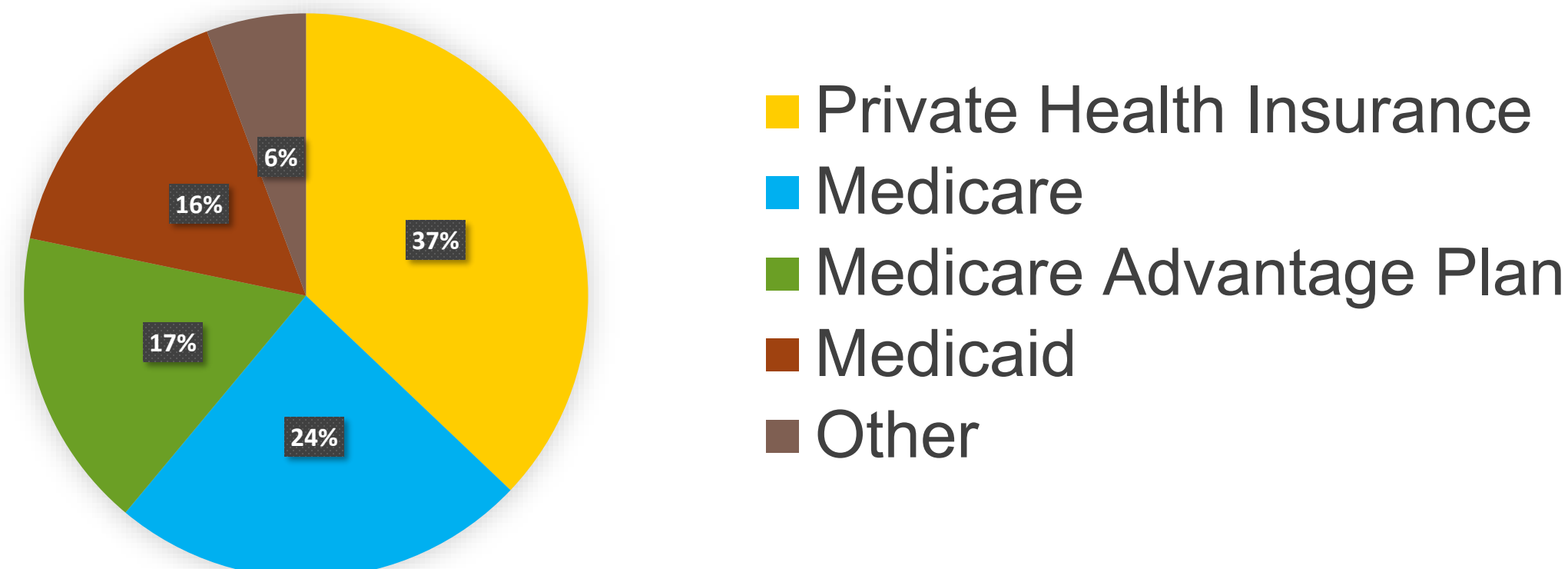
Iowa Hospital Association District Map



Retrieved from: <https://www.ihaonline.org/iowa-hospital-association-districts/>

Was a procedure performed?	Yes (n)	%	Total	P-value
District				
A	7	27%	26	p <0.001
B	105	30%	355	
C	388	46%	852	
D	4	67%	6	
E	7	19%	36	
Not Iowa	27	37%	73	C vs all others p<0.001
Johnson county	217	50%	430	
C excluding Johnson county	171	41%	422	
All Iowa excluding district C	123	29%	423	

Insurance type



Was a procedure performed?	Yes (n)	%	Total	P-value
Medicare	143	44%	323	p=0.0014
Medicare Advantage Plan	96	41%	232	
Medicaid	59	27%	216	Medicaid vs all others p<0.001
Private Health Insurance	207	41%	500	
Other	33	43%	77	

Key Findings

- Patients with Medicaid insurance were significantly less likely to receive an interventional procedure for the treatment of low back pain.
- Patients living in “district C” of Southeastern Iowa were significantly more likely to undergo a procedure for treatment of low back pain.
- Approximately half of patients from Johnson county seeking care at the IRL pain management clinic for treatment of low back pain received an interventional procedure within 180 days of first patient visit.

Future Directives

- Having identified a difference in procedure rates based on insurance should spur future research focusing on whether there are barriers to care for patients with Iowa Medicaid.
- If identified, modifiable confounding factors may be intervened upon to ensure equal access to treatment.

Acknowledgments

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