<u>Payor Type Is Associated with Increased Rates of Reoperation and Healthcare Utilization</u> <u>following Rotator Cuff Repair: A National Database Study</u>

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INTRODUCTION:

Despite strong evidence supporting the efficacy of rotator cuff repair (RCR), previous literature has demonstrated that socioeconomic disparities exist between patients who undergo surgery. There is a paucity of literature examining whether payor type, including Medicare, Medicaid, and commercial insurance types, impacts early medical complications and rates of reoperation following RCR.

METHODS:

Patients with Medicare, Medicaid, or commercial payor type who underwent primary open or arthroscopic RCR between 2010 and 2019 were identified using a large national database. Ninety-day incidence of various medical complications, emergency department (ED) visit, and readmission, as well as one-year incidence of revision repair, revision to arthroplasty, and cost of care were evaluated. Propensity score matching was used to control for patient demographic factors and comorbidities as covariates.

RESULTS:

113,257 Medicare, 23,074 Medicaid, and 414,447 commercially insured patients were included for analysis. Medicaid insurance were associated with an increased 90-day risk of various medical complications, ED visit (OR 2.87; p<0.001) and one-year revision RCR (OR 1.60; p<0.001) compared to Medicare patients. Medicaid patients were also associated with an increased risk of 90-day medical complications, ED visit (OR 2.98; p<0.001), hospital readmission (OR 1.56; p=0.002), as well as one-year risk of revision RCR (OR 1.60; p<0.001) or conversion to arthroplasty (OR 1.4358; p<0.001) compared to commercially insured patients. Medicaid insurance was associated with a decreased risk of conversion to arthroplasty compared to Medicare patients (OR 0.6887; p<0.001). Medicaid insurance was associated with higher one year cost of care compared to patients with both Medicare (p<0.001) and commercial insurance (p<0.001).

DISCUSSION AND CONCLUSION:

Medicaid insurance is associated with increased rates of medical complication, healthcare utilization, and re operation following rotator cuff surgery, despite controlling for covariates. Medicaid insurance is also associated with a higher one-year cost of care. Additional work is required to understand the complex relationship between sociodemographic factors, like insurance status, and outcomes, to ensure appropriate healthcare access for all patients and to allow for appropriate risk

Complication	Medicald in * 2000()		Modicare (in =		Statistical Analysis		
	N	4		*	CR.	55% CI	P
PK	76	9,54	294	9.25	1,3305	1.8500 to 1.7112	0.816
DVT	58	0.15	266	0.34	1.0563	0.7945 to 1.4056	0.309
transferios	29	9.17	196	0.15		0.8833 to 1.3294	
peramonia	163	9.71	481			1,3774 to 1,9672	
skoke	44	9.21	262			0.8402 to 1.5777	
м	14	9.16	118	9.11		1.0626 to 2.2504	0.012
sepein	21	9.71	193	9.17		1.3889 to 2.3432	-3.08
scute soemia	- 46	0.20	215	0.79	1,0165	0.7536 to 1.4255	0.825
ARE	228	1.0	1991	1.42	0.6911	6.6811 to 0.7906	-3.08

Complication	Medicaid o 200Ns N		Modicare to 111,776		Statistical Analysis		
	N	9	N	9	OR	55% CI	7
1 gg Karbine	1654	7.2	5148	46	1,5965	1,5002 to 1,6856	40
ter							
Convenios te							
arthroplasty	133	0,58	533	0,84	8.6887	0,5740 to 0,6364	40
One-year cost	\$15000 YO		\$10507.41				
of care	\$7997		A				-40
99-day E33							
visit	4579	13.8	8913	7.97	2,8563	12473 to 12697	40
90-day							

	ny Medical	Complication	en Foll	ewing It	CR in Ma	dicaid and Commo	ecial	
cobsets								
Cooplication	Medicald	(n = 23034)	Commercial (x = 4)4447)		Statistical Analysis			
	N	9	N	9	OR.	55%-CI	P	
PE	79	1.54	116	8.29	1705	1.5616 to 2.1547	1.000	
DVT	59	1,36	842	1,29	1,1564	1.8073 to 1.3275	6.320	
transferior	.36	8.16	279	1.00	1,8601	1.8354 to 2.3072	-0.00	
procumonia	363	8.72	1334	1,32	2.2549	1.9499 to 2.6829	-0.00	
stroke	- 49	4.21	571	8,34	1,3208	1.1090 to 1.4052	40	
30	39	9,17	404	1,39	1,2961	1.1029 to 1.5207	1.003	
sepús	76	9,33	530	4.13	2,5866	2.0086 to 3.2834	-9.80	
scote seemis		1,21	543	1.13	1.5769	1,2106 to 2,1737	1.003	
ARF	229	1.59	3346			11452 to 14997	-0.81	
UTI	539	3.15	6112			1.4834 to 1.6867	400	

Complication	23054)		Commencia	l (x =	Statistical Analysis			
			414447)					
	N	%	N	9	OR	19%-CI	P	
One year							Н	
revision	1955	5,329	21493	5,186	1,5963	LSD to L670	-24	
One year								
conversion to								
urthroplasty	170	0.000	1747	0.470	1.4300	1,2974 to 1,7975	۵,	
One-year	\$15909,3		\$11299.49		-			
cost of curv	\$1967	١	SSMI			_	۱.,	
94-day ED							_	
visit	4676	20,360	32766	7,891	2.964	2.8844 to 3.0872	-	
94-day								
rudminion		0.221	967			1,1725 to 2,0795		



