

Supplementary Online Content

Cher BAY, Ryan AM, Hoffman GJ, Sheetz KH. Association of Medicaid eligibility with surgical readmission among Medicare beneficiaries. *JAMA Netw Open*. 2020;3(6):e207426. doi:10.1001/jamanetworkopen.2020.7426

eTable 1. Association Between Dual Eligibility and Risk-Adjusted Readmission After Surgery at Michigan Hospitals, in Medicare Claims Cohort and MSQC Clinical Registry Cohort, for Cholecystectomy and Colectomy

eTable 2. Association Between Dual Eligibility and Risk-Adjusted Readmission After Surgery, in National Medicare Claims Cohort

eFigure. Impact of Adjusting for Dual Eligibility on Hospital Profiling Using Risk-Adjusted Readmission Rates After Surgery, in National Medicare Claims Cohort

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Association Between Dual Eligibility and Risk-Adjusted Readmission After Surgery at Michigan Hospitals, in Medicare Claims Cohort and MSQC Clinical Registry Cohort, for Cholecystectomy and Colectomy

Data Source	Cohort	Risk-Adjustment Model	Risk-Adjusted Readmission Rate			
			Medicare-only Beneficiaries, % (95% CI)	Dual-Eligible Beneficiaries, % (95% CI)	Difference,* pp (95% CI)	
Medicare Claims	Cholecystectomy	Age, sex	12.3 (11.1, 13.6)	13.7 (9.7, 17.8)	1.41 (-3.20, 6.02)	
		Age, sex, clinical comorbidities	12.4 (11.2, 13.6)	13.0 (9.2, 16.8)	0.57 (-3.83, 4.97)	
	Colectomy	Age, sex	15.4 (13.8, 16.9)	24.8 (19.9, 29.7)	9.44 (4.40, 14.47)	
		Age, sex, clinical comorbidities	15.7 (14.1, 17.3)	22.4 (17.8, 27.0)	6.72 (1.83, 11.59)	
	MSQC Clinical Registry	Cholecystectomy	Age, sex	10.1 (9.4, 10.8)	15.8 (1.0, 30.6)	5.66 (-8.93, 20.26)
			Age, sex, clinical comorbidities	10.2 (9.6, 10.9)	14.0 (-0.8, 28.8)	3.80 (-11.0, 18.6)
Age, sex, clinical risk assessment			10.3 (9.4, 11.2)	14.4 (0.8, 28.1)	4.10 (-9.35, 17.55)	
Age, sex, clinical comorbidities, clinical risk assessment			10.4 (9.7, 11.1)	13.5 (-0.6, 27.6)	3.10 (-10.99, 17.19)	
Colectomy		Age, sex	13.4 (11.4, 15.5)	17.5 (5.1, 30.0)	4.10 (-8.61, 16.81)	
		Age, sex, clinical comorbidities	13.5 (11.3, 15.7)	16.7 (5.7, 27.7)	3.25 (-7.94, 14.45)	
		Age, sex, clinical risk assessment	13.7 (11.5, 15.8)	16.7 (4.7, 28.7)	3.03 (-0.95, 15.5)	
		Age, sex, clinical comorbidities, clinical risk assessment	13.6 (11.4, 15.9)	16.6 (5.4, 27.7)	2.96 (-8.69, 14.50)	

MSQC = Michigan Surgical Quality Collaborative

CI = confidence interval; pp = percentage points

C-statistics ranged from 0.53 to 0.63 in the Medicare dataset, and from 0.58 to 0.66 in the MSQC dataset.

*Marginal effect of dual-eligibility on risk-adjusted readmission rate.

eTable 2. Association Between Dual Eligibility and Risk-Adjusted Readmission After Surgery, in National Medicare Claims Cohort

Data Source	Cohort	Risk-adjustment model	Risk-Adjusted Readmission Rate		
			Medicare-only Beneficiaries, % (95% CI)	Dual-Eligible Beneficiaries, % (95% CI)	Difference,* pp (95% CI)
Medicare Claims	All surgical patients	Age, sex, case mix	12.2 (12.0, 12.3)	15.3 (15.0, 15.5)	3.12 (2.90, 3.36)
		Age, sex, case mix, clinical comorbidities*	12.3 (12.2, 12.5)	14.2 (14.0, 14.4)	1.81 (1.59, 2.03)

MSQC = Michigan Surgical Quality Collaborative

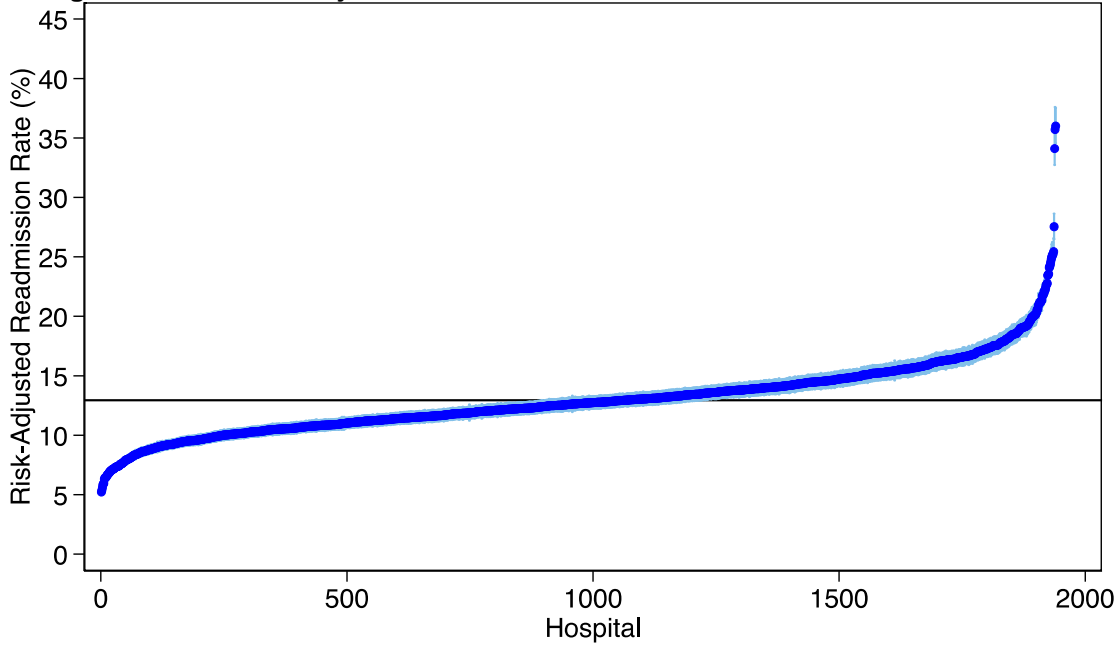
CI = confidence interval; pp = percentage points

C-statistic = 0.6465 for model including age, sex, and case mix. C-statistic = 0.6476 with additional adjustment for clinical comorbidities.

*Marginal effect of dual-eligibility on risk-adjusted readmission rate.

eFigure. Impact of Adjusting for Dual Eligibility on Hospital Profiling Using Risk-Adjusted Readmission Rates After Surgery, in National Medicare Claims Cohort

A. Using Traditional Risk-Adjustment Model



B. Using Traditional Risk-Adjustment Model with Additional Adjustment for Dual-Eligibility

