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Racial and Ethnic Disparities in Hospital Readmissions After Delivery

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Desire to mitigate hospital readmission rates is motivated by the concept that rehospitalization is an indication of poor quality of care. Practices within facilities (eg, medications prescribed and patient education) may affect readmission rates independent of patient characteristics. The analysis presented in “Racial and Ethnic Disparities in Hospital Readmissions After Delivery” adjusted for multiple risk factors for readmission but did not control for health care facility.¹ We propose that accurately characterizing racial disparities in readmissions would be enhanced by accounting for practice and population differences between facilities.

Consider the following example, in which apparent racial–ethnic disparities in hospital readmission for cesarean birth are explained by differences in both readmission outcomes and racial composition across hospitals (Table 1). Two hypothetical hospitals with different 30-day readmission rates are described by race. Values contributing to the aggregate odds ratio (OR) coincide with findings presented by Aseltine et al, and the distribution of black and white patients between hospitals reflects true variability between Connecticut zip codes.² The proportion of readmissions in each hospital is independent of race (hospital A: OR 1.00; hospital B: OR 0.97), yet the unadjusted aggregate OR (2.05) implies that black women have twice the odds of readmission as white women. However, after adjusting for site of care, this association is null (adjusted OR 0.99). Consequently, an unadjusted analysis results in identifying racial–ethnic disparities where none exist.

Racial–ethnic disparities in reproductive health are important to characterize to address inequalities in our health care system. However, to adequately study these disparities, site of care must be adjusted for to prevent variability in quality of care being inappropriately attributed to race or ethnicity.

REFERENCES

1. Aseltine RH, Yan J, Fleischman S, DeFrancesco M. Racial, and ethnic disparities in hospital readmissions after delivery. *Obstet Gynecol* 2015;126:1040–7. [PubMed: 26444126]
2. U.S. Census Bureau. American [Factfinder.com](http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml). Available at: http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml. Retrieved November 24, 2015.

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An Example of Confounding of the Measured Relationship Between Race and Readmissions by Hospital

Table 1.

Race-Ethnicity	Aggregate		Hospital A		Hospital B	
	n	Readmitted	n	Readmitted	n	Readmitted
Black	1,350	41 (3)	900	36 (4)	450	5 (1.1)
White	8,640	130 (1.5)	1,100	44 (4)	7,540	86 (1.1)
OR	2.05		1.00		0.97	

Data are n (%) unless otherwise specified.