

Online Supplementary Material

Stevens GD, Shi L, Cooper LA. Patient-provider racial and ethnic concordance and parent reports of the primary care experience of children. *Ann Fam Med* 2003;1:105.

<http://www.annfammed.org/cgi/content/full/1/2/105>

APPENDIX A. DISCUSSION OF THE POWER OF THE SAMPLE AND SUBSAMPLES

Based on effect sizes seen in our previous work,^{1,2} and on the estimate that a 12- to 15-point difference reflects meaningful variation in children's primary care experiences, we conservatively examined whether the study sample would be able to detect differences in primary care scores of 12 points, 10 points, and 8 points in subgroup analyses. Differences of less than 10 points, however, were generally not considered meaningful or practically significant.

Using the total primary care score, we calculated the power of the total sample and subsamples to detect significant differences assuming a 95% confidence interval. The power calculations are presented in Table A. They confirm that, with the exception of the African American subsample, there is adequate power to detect differences of 10 to 12 points (and sometimes even smaller differences) for the total, minority, and subgroup analysis. The lack of power for the African

American sample raises some concerns; however, only 1 estimate exceeds the 10-point cutoff for practical significance, and the grouped minority analysis lends additional support to the potentially underpowered analysis. For 4 of 6 groups, there was adequate power to detect differences of 8 points or even fewer.

Some primary care domains (eg, utilization, strength of affiliation, and services received) might have larger standard errors and, thus, less ability to detect differences than for the primary care total analysis. On the other hand, some primary care subdomains also have smaller standard errors (eg, access, interpersonal relationship, and services available) than the total score, leading to a greater ability to detect differences.

References

1. Stevens G, Shi L. Racial and ethnic disparities in the quality of primary care for children [abstract]. *J Fam Pract* 2002;51:573.
2. Stevens G, Shi L. The effects of managed care on children's relationships with their primary care physicians: differences by race. *Arch Pediatr Adolesc Med* 2002;156:369-377.

Table A. Power for Primary Care Total Scores by Minority Status and Racial and Ethnic Group

Racial and Ethnic Groups	Concordant (n)	Discordant (n)	Concordant (SE)	Discordant (SE)	Power*	Power†	Power‡
Total	106	252	12.6	12.7	1.00	1.00	1.00
Minority	78	188	12.8	12.6	1.00	1.00	1.00
White	28	64	10.1	12.2	1.00	0.98	0.91
Asian, Pacific Islander	60	28	12.3	12.7	1.00	0.94	0.80
Latino	12	72	13.2	14.0	0.82	0.67	0.49
African American	6	88	15.7	12.1	0.45	0.33	0.23

SE = standard error.

* Power calculation assuming an effect size of 12 points.

† Power calculation assuming an effect size of 10 points (the cut-off for practical significance).

‡ Power calculation assuming an effect size of 8 points.