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Risa Lavizzo-Mourey, M.D., M.B.A.
President and CEO
Robert Wood Johnson Foundation
Route 1 and College Road East
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Dear Dr. Lavizzo-Mourey:

The Robert Wood Johnson Foundation (RWJF) provides substantial support for a wide range of health disparities research activities. In addition to funding many programs and studies, RWJF, by its Health & Society Scholars Program, encourages young researchers to devote their time and talents to studying health disparities issues. But there exist certain methodological issues that have been largely overlooked by the research supported by RWJF, just as such issues have been largely overlooked by research supported by other private and public institutions. And there exists a serious question as to the value of health disparities research that fails to consider those issues.

Disparities in health and healthcare are generally studied in terms of some standard measure of differences between outcome rates – mainly, relative differences in experiencing an adverse or favorable outcome, absolute differences between rates, and odds ratios, as well as certain more complex measures that are in some way functions of the measures just mentioned. Virtually all health disparities research, however, has failed to consider certain patterns whereby, solely for reasons related to the shapes of underlying risk distributions, each standard measure of difference between outcome rates is affected by the overall prevalence of an outcome. The most notable of these patterns is that whereby the rarer an outcome, the greater tends to be the relative difference in experiencing it and the smaller tends to be the relative difference in avoiding it. Thus, as mortality declines, relative differences in mortality rates tend to increase while relative differences in survival rates tend to decrease. As beneficial procedures like mammography and immunization become more widely available, relative differences in receiving them tend to decrease while relative differences in failing to receive them tend to increase. Absolute differences between rates and odds ratios tend also to change systematically as the overall prevalence of an outcome changes, though in a more complicated way. Roughly, as rare outcomes become more common absolute differences

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between rates tend to increase; as common outcomes become even more common absolute differences tend to decrease. Differences measured by odds ratios tend to change in the opposite direction of absolute differences between rates.

The point is not simply that one may draw different conclusions based on choice of measure. The point rather is that to draw meaningful conclusions about the size of health disparities, including whether they are increasing or decreasing over time, one needs to distinguish between patterns that are functions of differences in overall prevalence of an outcome and those that reflect something more significant.

Over a hundred references explaining the above-described patterns as they bear on the interpretation of group differences in the law and the social and medical sciences may be found on the [Measuring Health Disparities](#)¹ (MHD) page of [jpscanlan.com](#), and the nuances of the patterns are discussed on the [Scanlan's Rule](#) page of the same site. The extent of scholarly consensus with the views on those pages and the references they make available is summarized in [Section E.7](#) of MHD. The [Solutions](#) sub-page of MHD addresses an approach to measuring health disparities that is not affected by the overall prevalence of an outcome and the [Solutions Database](#) sub-page of MHD provides a downloadable database with which to implement that approach.

A number of key references are found after the signature. Item 6 is particularly relevant to the activities of RWJF. It comments on a 2008 *Pediatrics* study for which at a conference of state epidemiologists RWJF presented the principal author (Dr. July Morita of the Chicago Department of Public Health) an award for addressing health disparities. Dr. Morita's study examined the effects of a school-entry Hepatitis B vaccination requirement on racial and ethnic disparities in vaccination rates among Chicago school children. Dr. Morita and her colleagues, relying on relative differences in vaccination rates as a measure of disparity, found that the requirement dramatically reduced racial and ethnic disparities in vaccination rates. But the National Center for Health Statistics, which invariably relies on relative differences in adverse outcomes to measure disparities, would have found dramatic increases in disparities. It should be evident that, if common approaches to measurement of health and healthcare disparities may yield diametrically opposed conclusions, health and healthcare disparities research will be suspect – and potentially misleading – until measurement issues are addressed.

Further, I note that on its website, RWJF highlights a recent RWJF-supported perspective piece in the *New England Journal of Medicine*, by Dr. Bruce Siegel and Ms. Lea Nolan of the Center for Health Care Quality of the George Washington University School of Public Health, that called for monetary incentives to reduce health and healthcare disparities. As discussed on an on-line comment to that article (item 7 below) and more fully on the [Pay for Performance](#) sub-page of MHD, it would be a serious mistake to

¹ The underlining of various references in this letter reflects the fact that, in order to facilitate review of those references, links to the references are provided in an electronic copy of this letter posted on the Institutional Correspondence sub-page of the Measuring Health Disparities page of [jpscanlan.com](#).

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implement programs providing monetary incentives for addressing health or healthcare disparities until there exist more satisfactory measures of healthcare disparities than are currently being employed.

I hope you find the referenced materials of interest and consider the points the raise in RWJF's further promotion of health disparities research.

Sincerely,

/s/ **James P. Scanlan**

James P. Scanlan

References:

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Abstract:

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Abstract: http://apha.confex.com/apha/135am/techprogram/paper_153201.htm

PowerPoint Presentation:

http://www.jpscanlan.com/images/APHA_2007_Presentation.ppt

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Addendum (March 11, 2008): <http://www.jpscanlan.com/images/Addendum.pdf>

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7. Scanlan JP. Incentive programs to reduce healthcare disparities should await better understanding of how to measure those disparities. *Journal Review* March 2, 2010 (responding to Siegel B, Nolan L. Leveling the field – ensuring equity through National Health Care Reform. *N Engl J Med* 2009;361:2401-2403):
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