From: Scanlan, James <jps@jpscanlan.com>

To: esondik@cdc.gov

Cc:

Date: Sunday, January 11, 2009 08:12 pm **Subject:** Health disparities measurement

Dear Dr. Sondik:

We corresponded just about 10 years ago regarding methodologies for measuring health disparities. The 4th last paragraph of item 1 after the signature alludes to that exchange.

Since that time I have written a great deal maintaining that virtually all health disparities research is deeply flawed for failure to recognize the way each standard measure of differences between rates is affected by the overall prevalence of an outcome.

About 90 references explaining these tendencies in particular contexts may be found on the Measuring Health Disparities (MHD) page of jpscanlan.com

(<u>http://jpscanlan.com/measuringhealthdisp.html</u>), and the nuances of these patterns are discussed on the Scanlan's Rule page of the same site (<u>http://jpscanlan.com/scanlansrule.html</u>). The Solutions sub-page on MHD

(http://www.jpscanlan.com/measuringhealthdisp/solutions.html) discusses an approach to measuring inequalities that is not affected by the overall prevalence of an outcome.

Much of this work is highly critical of the NCHS (and AHRQ) approaches to measuring health and healthcare disparities, especially, items 2, 6-8 below; and Sections E.4 of MHD and A.6 of the Scanlan's Rule page give special attention the positions of these agencies. As discussed in item 4, the NCHS position that all disparities be measured in terms of relative differences in adverse outcome is an oblique response to items 1 and 3. Section A.7 explains why the reasons Ken Keppel has offered for disagreeing, in part, with my views are not satisfactory ones. If you give the matter serious thought, I think you will regard these explanations unsatisfactory as well.

Apart from my works on these issues, I suggest you give some attention to the following: (a) Carr-Hill R, Chalmers-Dixon P. The Public Health Observatory Handbook of Health Inequalities Measurement. Oxford: SEPHO; 2005:

http://www.sepho.org.uk/extras/rch_handbook.aspx Relying on a presentation I gave in Oslo in 2001, the authors (at 172) appear to express complete agreement with my interpretation of patterns of changes in relative differences in experiencing and avoiding an outcome and that such patterns reflect properties of normal distributions rather than meaningful changes in disparities. But, as I discuss in item 5 (at 13) the lengthy work fails to recognize the implications that interpretation with regard to the remainder of the document.(b) Bauld L, Day P, Judge K. Off target: A critical review of setting goals for reducing health inequalities in the United Kingdom. *Int J Health Serv* 2008;38 (3):439-454:The authors do not make clear whether they completely agree with me with respect to the my argument that as outcomes decline relative differences in experiencing them will tend to increase while relative differences in avoiding them will tend to decrease, but they observe: "If governments fail to take account of 'Scanlan's rule' they run the risk of guaranteeing failure, largely for conceptual and methodological reasons rather than for social welfare reasons."(c) Houweling TAJ, Kunst AE, Huisman M, Mackenbach JP. Using relative and absolute measures for monitoring health inequalities: experiences from cross-national analyses on maternal and child health. *International Journal for Equity in Health* 2007;6:15:

http://www.equityhealthj.com/content/6/1/15 This item is partly a response to reference 2. It

quarrels with that reference in a number of respects. But the authors nevertheless reach the same conclusions as 3 with regard to the way relative differences in experiencing and avoiding an outcome tend to be systematically associated with overall prevalence of an outcome and that one cannot effectively use such measures without taking overall prevalence into account. Though unaware of the treatment of absolute differences in item 1 and various other 2006-07 items, the authors also reach the same conclusion as to absolute differences

I hope you will review some of this material and give it serious thought. I continue to give a lot of attention to this issue and have some confidence that there eventually will be widespread acceptance of my views. Such recognition will mean that all guidance provided by NCHS on these has been detrimental to the public's understanding of these issues. Consider especially item 8, which shows an example of researchers finding dramatic reductions in disparities in circumstances where NCHS would find dramatic increases. At a minimum I would urge NCHS to issues a document directly addressing the issue I raise – not obliquely as in the Keppel et al. and the Keppel and Pearcy 2005 works – such the researchers can fully appraise the NCHS position. For that matter, NCHS should be reviewing the approach encompassed in the database I make available. It is a perfect solution. But NCHS's efforts would be spent endeavoring to find a superior solution than in continuing to rely on standard measures without regard to the way those measures are affected by the prevalence of an outcome.

Best regards, James P. Scanlan

Attorney at Law

1529 Wisconsin Avenue, NW

Suite 300

Washington, DC 20007 Phone: 202.338.9224 e-mail jps@jpscanlan.com

1. Race and mortality. Society 2000;37(2):19-35 (reprinted in Current 2000 (Feb)):

http://www.ipscanlan.com/images/Race and Mortality.pdf

2. Can we actually measure health disparities? *Chance* 2006:19(2):47-51: http://www.jpscanlan.com/images/Can We Actually Measure Health Disparities.pdf

3. Divining difference. *Chance* 1994;7(4):38-9,48:

http://jpscanlan.com/images/Divining Difference.pdf 4. Measuring health disparities. J Public Health Manag Pract 2006;12(3):293-296 (responding to Keppel KG, Pearcy JN. Measuring relative disparities in terms of adverse events. J Public Health Manag Pract 2005;11(6):479– 483:http://www.nursingcenter.com/library/JournalArticle.asp?Article ID=641470

- 5. The Misinterpretation of Health Inequalities in the United Kingdom, presented at the British Society for Populations Studies Conference 2006, Southampton, England, Sept. 18-20, 2006: http://www.jpscanlan.com/images/BSPS 2006 Complete Paper.pdf
- 6. Can We Actually Measure Health Disparities?, presented at the 7th International Conference on Health Policy Statistics, Philadelphia, PA, Jan. 17-18, 2008 (invited session).

Abstract: http://www.amstat.org/meetings/ichps/2008/index.cfm?

fuseaction=AbstractDetails&AbstractID=300283

PowerPoint Presentation: http://www.jpscanlan.com/images/2008 ICHPS.ppt Oral Presentation: http://www.jpscanlan.com/images/2008 ICHPS Oral.pdf

7. Measurement Problems in the National Healthcare Disparities Report, presented at American Public Health Association 135th Annual Meeting & Exposition, Washington, DC, Nov. 3-7, 2007.

PowerPoint Presentation: http://www.jpscanlan.com/images/APHA 2007 Presentation.ppt Oral Presentation: http://www.ipscanlan.com/images/ORAL ANNOTATED.pdf Addendum (March 11, 2008): http://www.jpscanlan.com/images/Addendum.pdf 8.

Abstract: http://apha.confex.com/apha/135am/techprogram/paper 153201.htm

Study illustrates ways in which the direction of a change in disparity turns on the measure chosen. *Pediatrics* Mar. 27, 2008 (responding to Morita JY, Ramirez E, Trick WE. Effect of school-entry vaccination requirements on racial and ethnic disparities in Hepatitis B immunization coverage among public high school students. Pediatrics 2008;121:e547-e552): http://pediatrics.aappublications.org/cgi/eletters/121/3/e547

Attachments: