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RP & DJ

May 25, 1977

Dr. Thomas Strasser  
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Dear Tom,

Thank you for your April 14 letter and interesting manuscript on observer variation. I guess my basic question is the overall value of the exercise, either in terms of the study of observer variation and classification, or in terms specifically useful in employing the Minnesota code. We, of course, have excellent data from external quality control procedures which allow us to know with great reliability the repeat variability of individual Minnesota code classifications. Similarly, we have material for intra-observer variations within the laboratory.

I guess I find it difficult to understand what the significance might be of a range of sums of intra-observer disagreements.

The general issue you discussed concerning systematic vs. random error is, I believe, a common observation and you point out yourself that because of the nature of the calculation of the majority opinion observers tend to agree more with the majority than with the standard code. Your discussion points up the principal question in your mind which is a good one. An answer is not apparent with respect to what is best, an average or a standard expert opinion. Your computations and discussion may fail to consider that the standard code is an adjudicated code of at least two observers. Your demonstration that a high random error is associated with a high systematic error is worthwhile but I suspect not new. This is the common basis on which observers are rejected from any standard scheme.

I guess I have a problem with the remainder of the standard coders disagreements which you assume to be the systematic error. I am not sure this

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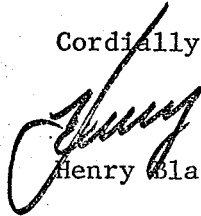
assumption is appropriate in reference to the place (Minnesota) where the measurement rules are defined and presumably best adhered to. In that case it would also be difficult to assume that the majority opinion contains less erroneous opinions than the standard.

Your location of the site of "truth - untruth" is an interesting one as well as reasonable.

I wonder if there is any statistical methodology which would help you in deciding the "truth" in this area. The discussion may also omit the question of the basic validity of the ECG in measuring what it is purported to measure. This certainly enters into the value of a classification process and again is difficult to handle in the way in which you have lumped the ECG findings.

I would like to see you proceed with this. I would like to understand it a little better myself before I would feel comfortable as co-author. In this light, I am sure you will permit me to circulate this to Dr. Prineas and Dr. Jacobs on my staff for enlightenment. Meanwhile, you should proceed. I do agree with you that classification error is a different problem than measurement error. The chief technician to be acknowledged is Robin Macgregor.

Cordially,



Henry Blackburn, M.D.

HB:jp