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Efforts to investigate health inequalities in the United Kingdom have suffered from the failure to address measurement issues.

In exploring the similarities and differences in the Black Report, the Acheson Enquiry, and the Marmot Review, Bambra et al.,[1] overlook a crucial common feature of these efforts to investigate health inequalities in the United Kingdom and a feature that has much detracted from the value of such efforts. None of the reports addressed the problematic nature of standard measures of health inequalities given that each such measure tends to be affected by the overall prevalence of an outcome. Most notably, the rarer an outcome, the greater tends to be the relative difference in experiencing it and the smaller tends to be the relative differences in avoiding it. Thus, solely for reasons related to the shapes of the underlying risk distributions, as health improves generally relative differences in adverse outcome rates will tend to increase while relative differences in the opposite, favorable outcome rates will tend to decrease. Absolute differences between rates, as well as differences in longevity, tend also to be affected by the overall prevalence of an outcome, though in more complicated ways.[2-4].

Researchers have increasingly recognized these issues over the last five years.[5-8] But such recognition is not evident in even in recent the Marmot report, which merely discusses the availability of various measures without consideration of the way such measures may be affected by the overall prevalence of an outcome. Efforts to investigate or address health inequalities must give thought to measuring inequalities through approaches unaffected by the overall prevalence of an outcome, such as are described in references 9 and 10.

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