The *Journal* article by Larson et al. (1) offers new data regarding utilization rates of psychiatric diagnoses in military cohorts. However, crucial information, well known to professionals with knowledge of the military mental health care system and not adequately addressed in the article or accompanying editorial (2), likely renders the results invalid.

To begin with, the time periods used in rate calculations were not equivalent. Although the total study period was identical for all 3 contemporary cohorts (July 2001–September 2005), the electronic medical record system used to access data did not capture health care in the combat environment. Consequently, for members of the combat-deployed cohort, mental health care utilization would be zero during the time of their deployment(s), with the exception of rare occurrences such as evacuation to a tertiary-care facility with electronic records capability. Because Marine deployments last 7 months, cohort members who deployed...
once or twice contribute an average of 7 or 14 months less time toward the study period than nondeployed members. Even the data presented as monthly incidence (1, Figure 1) are not comparable since incidence cannot accumulate for the deployment months.

The study is further confounded by comparing the combat-deployed cohort (which includes only those persons who successfully completed basic training) with nondeployed cohorts that include persons separated from military service because of mental disorders identified during the highest risk period (first 6 months, including basic training). This comparison is presented as the principal reason for the “healthy warrior” effect, yet it simply reflects the a priori differences in the selected cohorts. A true “healthy warrior” effect would need to include comparison of rates among the combat deployed and nondeployed who had also completed their first 6 months of service.

Finally, any analyses of electronic International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) mental disorder 290-319 codes used in the military health care system will lead to grossly erroneous conclusions about incidence and prevalence. Because of a variety of factors, including the stigma of mental disorders (3) and the requirement for military clinicians to record a V-code (V70.5) for visits related to health concerns resulting from deployment (4), military mental health professionals no longer record ICD-9-CM 290-319 diagnostic codes in the majority of their clinical encounters, even as the primary diagnosis (5). Therefore, ICD-9-CM codes entered into the diagnosis section of the electronic encounter do not necessarily reflect the treated conditions (which may be identified elsewhere in the clinical notes section).

For this reason, military researchers rely on other methods to measure the mental health impact of the current wars in Iraq and Afghanistan. These methods include 1) use of validated, self-administered clinical scales with high specificity cutoffs designed to address the issues of predictive value mentioned in this article (1) and the accompanying editorial (3, 6); 2) measures of mental health care utilization and attrition in comparable populations (e.g., cohort of soldiers and Marines deployed to Iraq or Afghanistan compared with a cohort deployed elsewhere) (5); 3) measures of clinician referrals to mental health care from postdeployment assessments (5, 7); 4) well-controlled, population-based longitudinal cohort studies (7, 8); and 5) studies from Veterans Affairs facilities where coding practices are different (9). The Department of Defense and the Department of Veterans Affairs are often criticized for perceived attempts to minimize evidence of the high psychological costs of military service. As a result, it is paramount that military researchers ensure that study methods are scientifically rigorous and impartial, and that readers are educated about the unique factors that bear on the mental health of service members and veterans.

ACKNOWLEDGMENTS

The views expressed in this letter are those of the author and do not represent the official position of the Army, Department of Defense, or Walter Reed Army Institute of Research.

Conflict of interest: none declared.

REFERENCES

5. Hoge CW, Aucinterlonie JL, Milikken CS. Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *JAMA.* 2006;295(9):1023–1032.

Charles W. Hoge (e-mail: charles.hoge@us.army.mil) Division of Psychiatry and Neurosciences, Walter Reed Army Institute of Research, Silver Spring, MD