To the Editor:—We are pleased that Rosero et al.1 pursued a study of the epidemiology of malignant hyperthermia (MH). We agree with Rosero et al. that reporting to the North American Malignant Hyperthermia Registry may underestimate MH mortality. From the Malignant Hyperthermia Association of the United States Hotline and the American Society of Anesthesiologists Closed Claims Project database we are aware of deaths clearly due to MH that were not reported to the Registry. Reports to the North American Malignant Hyperthermia Registry are voluntary, but provide key details that administrative databases cannot.2,3 We encourage readers to report suspected MH episodes to the Registry, using forms that are available online at www.mhreg.org.

Rosero et al. define MH cases by the hospital discharge diagnosis code of malignant hyperthermia as a result of anesthetics, after excluding other conditions associated with hyperthermia. Did the authors attempt to confirm that the 2,312 MH cases not admitted from another health facility had been exposed to an anesthetic, for example by linking them to surgical or procedural International Classification of Disease, ninth revision (ICD-9) codes? The diagnosis of MH would be more certain if there was some evidence of anesthetic exposure, not just a code.

Like any database, the “output” depends on the accuracy of the data entered. The Nationwide Inpatient Sample depends on accurate coding by medical records departments, which in turn are dependent on clinical documentation. The diagnosis of MH requires no supporting evidence to be coded as such. Other studies have shown that incorrect coding and diagnostic inaccuracy can undermine calculations derived from administrative databases.3–5

Rosero et al. conclude that the incidence of MH increased from 2000 to 2005. An equally plausible explanation is reporting bias: As coders became aware of the new ICD-9 code for MH, they used it more often.

This code (995.86) was approved in 1997, thanks to the efforts of the Malignant Hyperthermia Association of the United States and American Society of Anesthesiologists, and coders may have been unaware of its existence, given the rarity of MH.

Finally, we point out an error in Rosero et al.’s paper. The 2007 review by Rosenberg et al.5 did not consider our 2008 report of an MH-associated mortality rate of 1.4% to be “controversial.”2 Their review was published almost a year before our paper, making it impossible to cite.

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