

Figure, Supplemental Digital Content 3. The Risk Stratification Index algorithm from Sessler et al. *Anesthesiology*. 2010;113(5):1026-1037. (Question for Medical Care editors: DO WE NEED PERMISSION from Anesthesiology to reproduce this as SDC?)

Legend: Figure 1 outlines the details of the RSI method for truncation and roll-up using the ICD9 system of coding. First, the average Annual Incidence is computed. Then, iteratively, all 5-digit codes with > 5000 cases annually are included, while the rest are moved into their 4-digit parent. All 4 -digit codes with more than 5000 annual AAI are then included while the rest are rolled into their 3-digit parent. For 3-digit codes, all codes with more than 1000 cases are included. Once the covariate set of sufficient frequency has been established, each case's diagnostic and procedure codes are matched iteratively to the available codes in the candidate covariate set until all sampled cases have been assigned the proper diagnostic and procedure code. The endpoint of interest is then modeled using the resultant set of diagnostic and procedure codes as covariates.



