Supplemental Figures:

Pulling the covers in electronic health records for an association study with self-reported sleep behaviors

Seth D. Rhoades[1], Lisa Bastarache[1], Joshua C. Denny[1,2], Jacob J. Hughey[1,3],*

[1]Department of Biomedical Informatics, Vanderbilt University Medical Center, Nashville, TN, USA
[2]Department of Medicine, Vanderbilt University Medical Center, Nashville, TN, USA
[3]Department of Biological Sciences, Vanderbilt University, Nashville, TN, USA

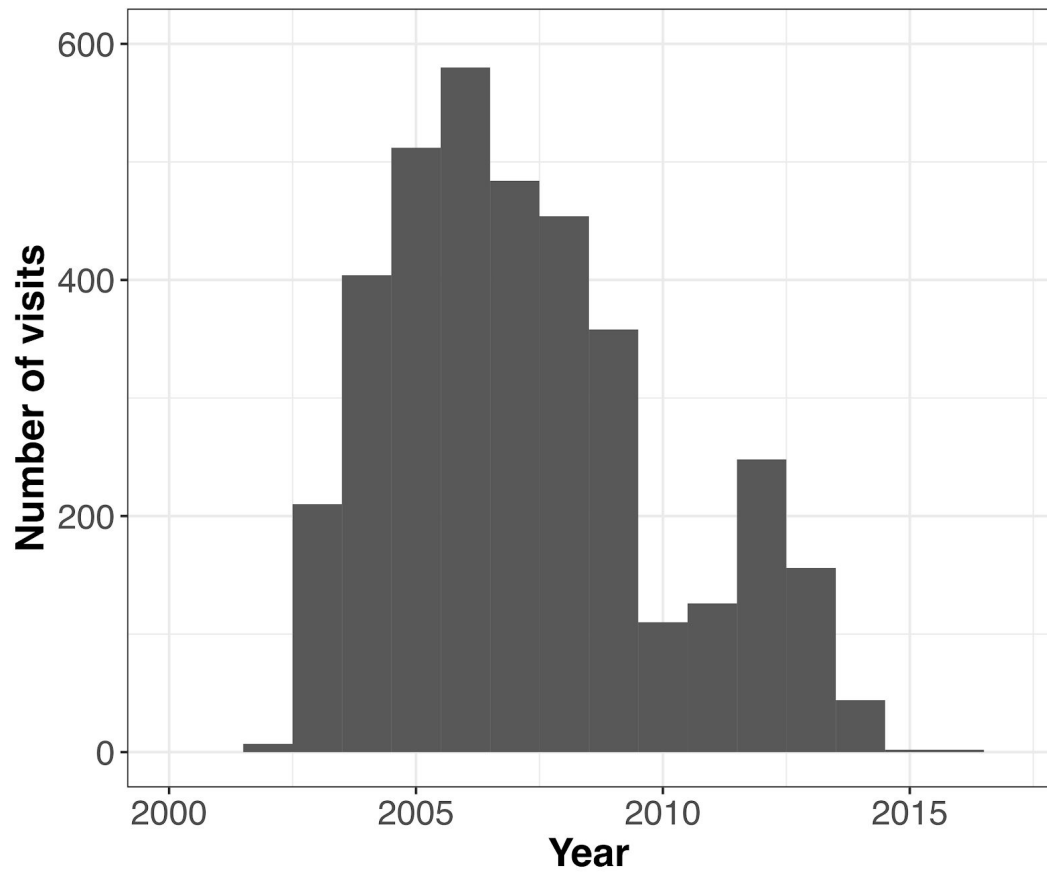*To whom all correspondence should be addressed: jakejhughey@gmail.com

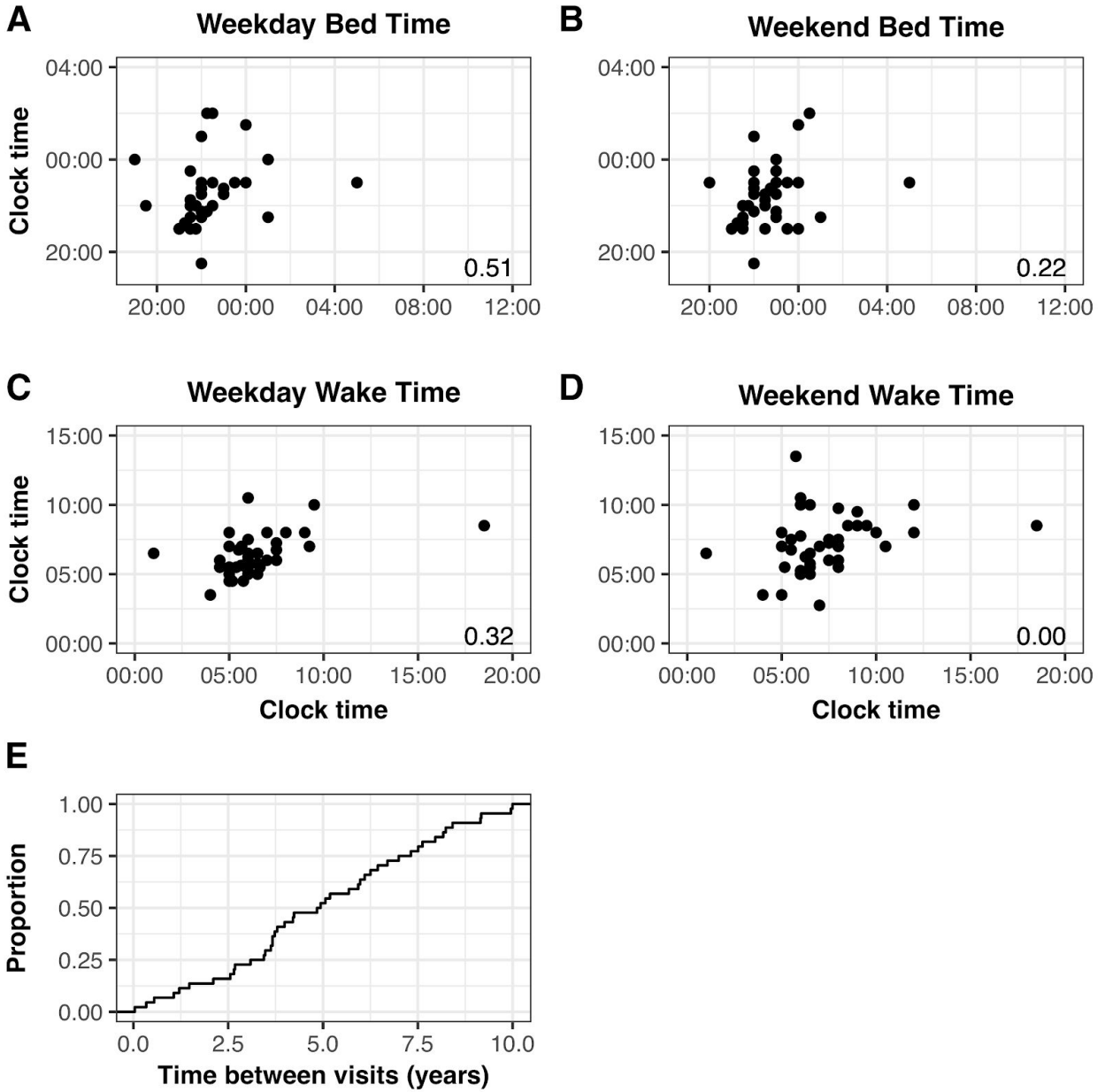**Fig. S1.** Dates of sleep clinic visits used in the sleep phenotypes extraction by year.

Fig. S2. (A-D) Concordance of self-reported sleep and wake times for the 46 individuals with multiple reports. Numbers represent circular correlations. (E) Cumulative distribution of the interval (in years) between visits for individuals with multiple reports.
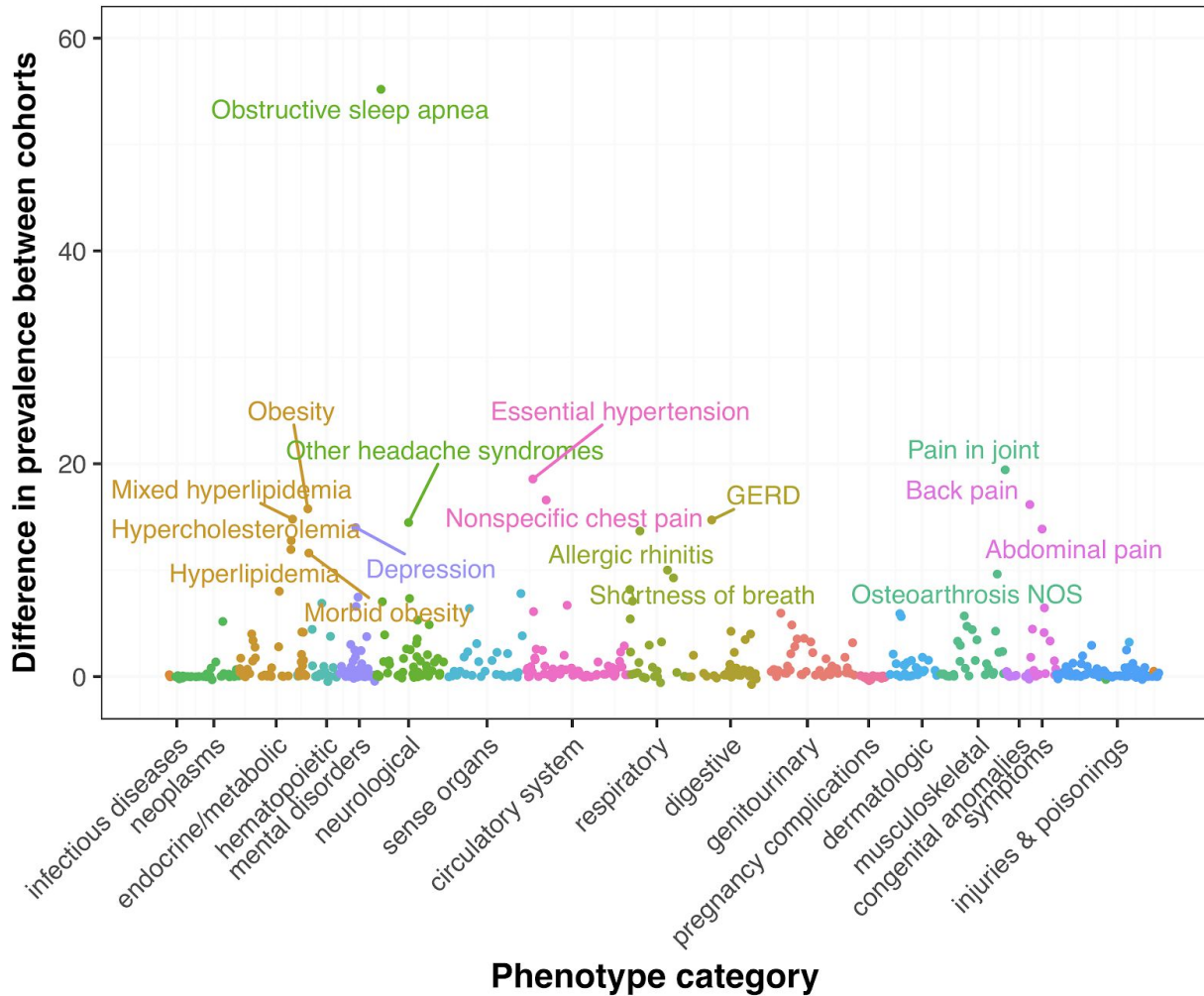
Fig. S3. Difference of phecode prevalence between sleep (n=3652) and matched cohorts (n=3646). Phecodes must have appeared in the individual's medical record on at least two separate dates. Differences greater than 10% and q<0.05 by a two-proportions z-test are annotated.
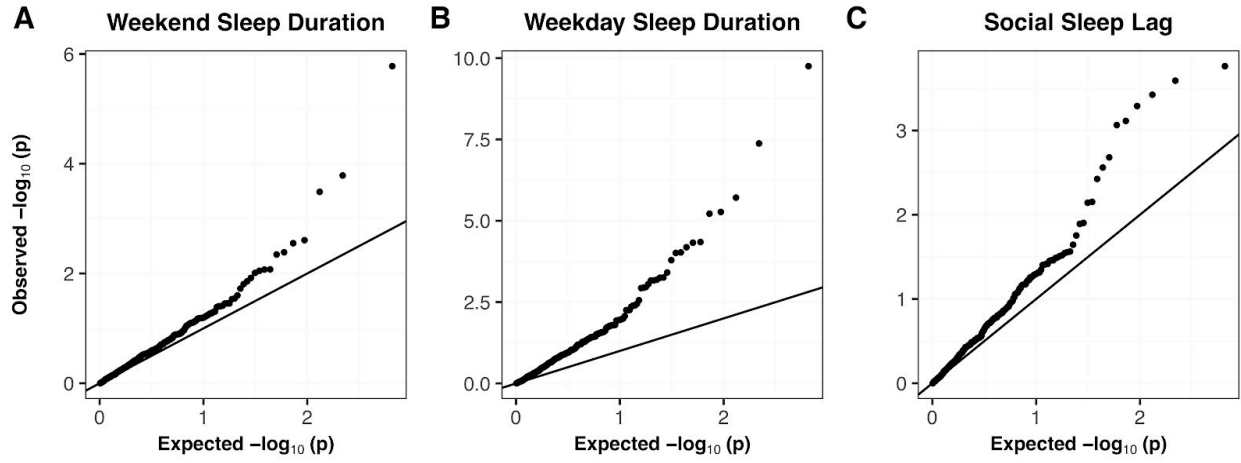
Fig. S4. Quantile-quantile plots for PheWAS analyses of (A) weekend sleep duration, (B) weekday sleep duration, and (C) social sleep lag.