

ADDITIONAL FILE 3

Vital-sign circadian rhythms in patients prior to discharge from an ICU: A retrospective observational analysis of routinely recorded physiological data

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Admission diagnoses

Figs. 1, 2 and 3 present the 15 most common diagnosis codes for different age and gender subgroups. Note that MIMIC-III and eICU-CRD used the ICD-9 coding system for admission diagnoses, while PICRAM used the ICNARC Coding Method (ICM). All analysis of diagnosis codes in this section is performed using up to the top 3 diagnosis codes for each patient. Note that the normalised frequency plotted is the proportion of ICU admissions, not admission diagnosis codes, that match a given admission diagnosis. Thus, for up to three diagnosis codes per patient, the total sum of normalised frequency will be between 1 and 3, rather than equal to 1.

From these figures, it is apparent that the younger 15 - 44 year cohorts of both genders have notably more varied causes of admission than the older 45 - 90+ year cohorts. Men in the younger cohort had the highest prevalence of diagnosis codes related to alcohol abuse, HIV, and trauma, by a considerable margin. Thus, younger men were one of the more heterogeneous cohorts, with a higher prevalence of HIV, alcohol, and trauma-related intake codes. Older men, in contrast, were a more homogeneous cohort. Women show a less dramatic variance in cohort heterogeneity with age, and younger women, while still heterogeneous, show a lower prevalence of alcohol-related, trauma-related, or otherwise unique admission diagnosis codes than younger men. This contrast may explain the lack of a clear upward trend in mean SBP with age in men, compared to the expected upward trend in mean SBP with age observed in women.

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References





