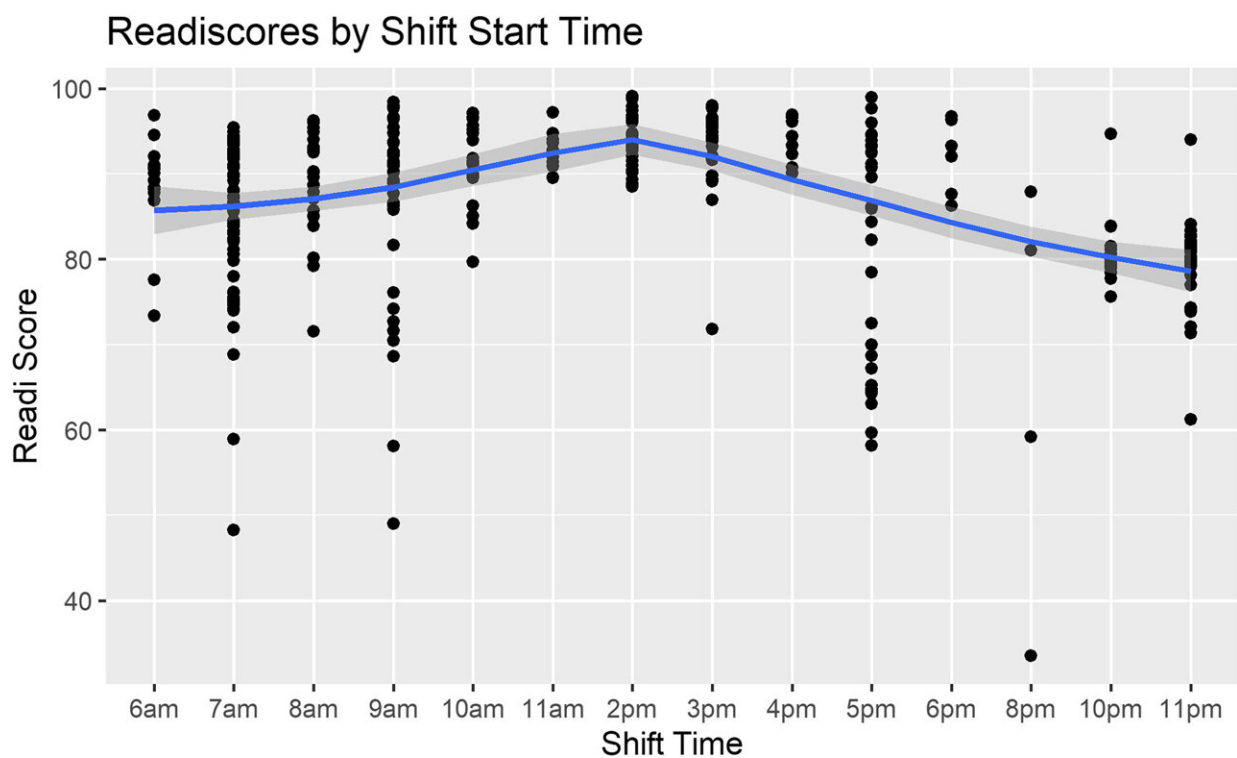


Novel actigraphy device can provide objective assessment of sleep and fatigue risk in emergency medicine physicians

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Readiscores by shift start time. The line represents the trend in Readiscores across all shift start times through the day. Credit: *Academic Emergency Medicine* (2022). DOI: 10.1111/acem.14606

ReadiScores—fatigue data gathered from a novel actigraphy device, the

ReadiBand—can be used to index emergency physician (EP) fatigue and therefore can be used to evaluate interventions designed to reduce fatigue in emergency physician populations. This is one conclusion of a study titled, Objective Assessment of Sleep and Fatigue Risk in Emergency Medicine, published in the March issue of *Academic Emergency Medicine*.

The study measured fatigue longitudinally to establish the current state of fatigue risk in [emergency medicine](#). The overall goals were to characterize the percentage of time EPs spent in a fatigued state during shifts and to test the [hypothesis](#) that later shift start times would be associated with greater fatigue because of circadian rhythm disruption.

The study assessed [sleep](#) and fatigue risk in EPs over the course of two months using the wearable Readiband device. Overall Readiscores demonstrated that EPs spent approximately 50% of their shift in a high state of cognitive readiness, and they spent almost 25% of their time in a reduced or significantly impaired state.

The lead author of the study is Lauren A. Fowler, Ph.D., professor of neuroscience at Wake Forest School of Medicine. With this study, Fowler and colleagues longitudinally and objectively assess fatigue in EPs and demonstrate fatigue risk by shift, laying the groundwork for the future research needed to examine system-level interventions for reducing [fatigue](#) in emergency physicians.

More information: Lauren A. Fowler et al, Objective assessment of sleep and fatigue risk in emergency medicine physicians, *Academic Emergency Medicine* (2022). [DOI: 10.1111/acem.14606](https://doi.org/10.1111/acem.14606)

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