

# Sleep monitoring with Smartphone App and Wearable watch



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Mobile health (m-health) uses mobile phones, patient monitoring devices, PDAs, and other wireless devices. The smartphone is the most popular and attractive device in m-health, and it is different from other cellular phones or PDAs in terms of computing power or several sensors. Also, consumer sleep tracking devices and smartphone apps have become increasingly popular. However, clinicians are often befuddled when asked to interpret these data because there are no accepted guidelines of standards on how to interpret it. Adding to the confusion of whether or not commercial devices are valid is the attempt of some companies to measure time spent in "light" or "sound" sleep, or "dream" sleep, with little information provided how these sleep states are defined or measured. We discuss the current sleep tracking technology that these devices utilize as well as summarize the value of these devices in clinical evaluations and their potential limitations.

**Key Words:** consumer sleep technology, Smartphone, Sleep

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