

# Facilitating Behavior Change With Consumer Wearable Devices

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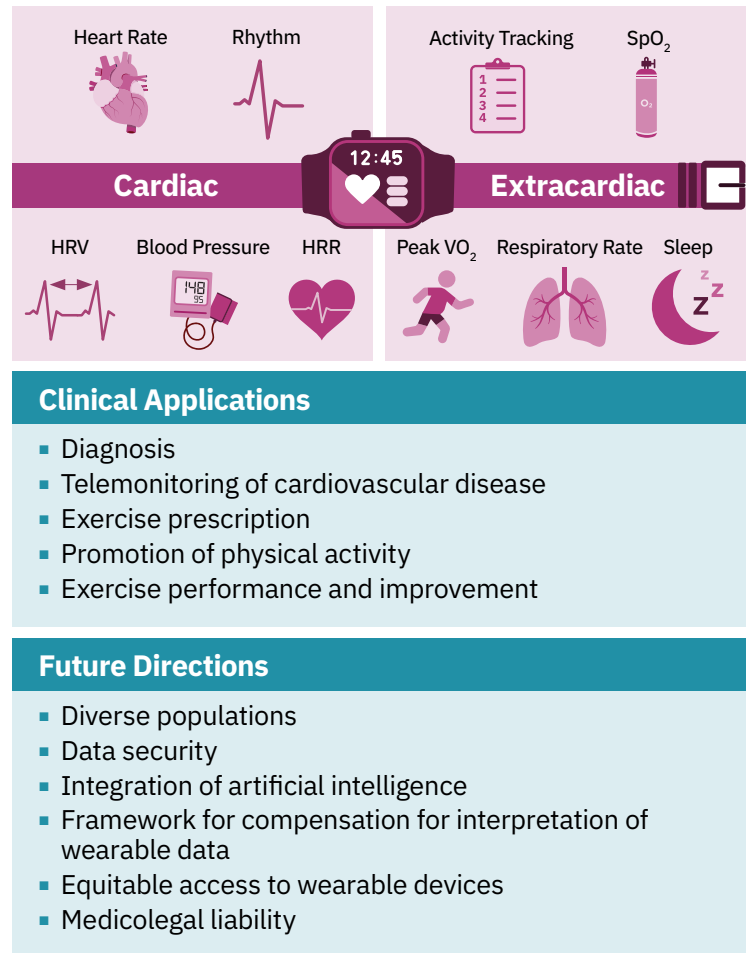


The use of consumer wearable devices (CWDs) to monitor health and fitness data has grown substantially since the mid-2000s. CWDs, such as fitness trackers and smart watches, commonly track basic metrics, such as heart rate, steps, stairs climbed, walking speed, and sleep. Some CWDs track advanced metrics, such as heart rate variability (HRV), heart rate recovery (HRR), VO<sub>2</sub> max, and cardiac rhythm (Figure 1).<sup>1</sup>

Research supporting the use of CWDs in medicine is emerging. The use of CWDs to track step count has been shown to increase physical activity.<sup>2</sup> The immediate feedback from CWDs, such as physical activity data, weights from linked digital scales, and integrating CWD data with patient goal setting, has been shown to be beneficial as part of comprehensive weight management programs.<sup>3</sup> CWDs may support behavior consistency as well as regular monitoring of measures for cardiovascular disease management and prevention.

CWDs and related technologies are facilitators, rather than drivers, of behavior change that can motivate physical activity.<sup>3,4</sup> Currently, there is no definitive evidence in the literature to recommend for or against using these devices. Still, clinical judgment may encourage CWD use in supporting and quantifying physical activity over time.

**Figure 1. Consumer Wearable Devices: Common Metrics and Use in Health Care**



Adapted from *Consumer wearable health and fitness technology in cardiovascular medicine*

**References**

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