Wearable Fitness Trackers and Heart Disease

What Are Fitness Trackers?
Fitness or activity trackers are devices with special sensors that can monitor your movement. Often referred to as “wearables,” these devices are typically worn around the wrist as a bracelet or embedded in a mobile phone or wristwatch. They can measure footsteps taken, distance traveled, type of movement (walk, run, or jog), and quality and duration of sleep. Some wearables have additional sensors to monitor heart rate, blood pressure, blood oxygen levels, and perspiration. Data from wearables can be transferred to a smartphone, computer, database, or website. Connected smartphones and wearables can alert or vibrate to encourage behaviors, such as exercise or sleep. As wearable technology matures, these devices will likely cost less, and it may become easier to share data from them with your health care professional, clinic, or hospital.

Can Fitness Trackers Prevent or Treat Heart Disease?
Professional cardiology society guidelines recommend that most patients participate in regular exercise. However, these societies have not yet given recommendations on how fitness trackers should be used because no long-term studies have been completed that have tested whether the use of fitness trackers can help prevent heart disease. Also, the accuracy of most wearables has not been verified in clinical studies. In fact, some devices may provide inaccurate measurements, particularly during intensive exercise.

What are the Benefits of Using a Fitness Tracker?
Despite these limitations, fitness trackers may still have benefits for you. Physical inactivity is an important risk factor for heart disease. A wearable device can help you set realistic goals at any level of activity or fitness and can help you monitor your progress. Many fitness trackers allow you to review your exercise patterns over the previous weeks and months. By helping you monitor your activity patterns, these devices may encourage regular exercise. Previous studies suggest that fitness trackers increase physical activity and may even promote weight loss. With some devices, websites, or apps, you can even share your exercise progress with your physician or with family members. Therefore, in the right context, a fitness tracker may provide the motivation and tools to maintain an active lifestyle and promote healthy habits.

What Is the Future of Fitness Trackers?
As more patients and clinicians become familiar with fitness trackers, these devices could play a larger role in health care. For example, some electronic health record systems allow you to upload wearable data directly into your medical record. Several health insurance plans even offer incentives to members for achieving activity goals. Like mobile phones, these devices may one day become an integral part of society and health care. Ongoing and future studies will be needed to determine whether they can actually reduce the risk of developing heart disease and its attendant complications.