Metria™
Wearable Sensor Technology
Sensing the future
With costs on the rise, the focus of health care is shifting.

In the years ahead, we’ll see a greater emphasis on preventing disease before it starts. People are taking greater control of their health — leveraging mobility solutions and social media to make more informed decisions and change behaviors.

One emerging technology will be critical in enabling this important change: wearable sensors. At Vancive Medical Technologies, we’ve made them a reality with the Metria Wearable Sensor Technology platform.

By monitoring vital signs, Metria patch-based wearable sensors track key information. Their applications — from sports and fitness to clinical diagnostics — will have a significant impact on the future of health care.

Remote monitoring technology exists today, but it’s not designed with the user in mind.

Today’s devices are complex and difficult to use. They’re uncomfortable, often relying on wires to transmit information. And they can be prohibitively expensive for the people who need them.

That’s why our Metria technology will offer a new level of wearable sensors. Our devices are designed with user comfort, discretion and cost in mind. We believe this approach will capture important information without compromising an active life — and make remote monitoring available to more people.
How Metria™ wearable sensor technology works

In essence, the remote monitoring system is comprised of four components.

**Sensing device**
A small sensor is worn on the body like a disposable bandage, placed on the upper chest or below the rib cage. It is attached using a skin-friendly adhesive, and a low-profile design makes it suitable for daily activities like showering and exercise. The sensor is built to gather a variety of physiological information, from heart rate and respiration to sleep duration and activity levels.

**Algorithms**
Once the sensor captures this information, it is transmitted wirelessly to a computer system and interpreted by algorithms. These calculations help analyze the data, detecting trends and facilitating decision making by the user or health care professionals.

**User interface**
The next step in the process is viewing the results through a smartphone or web browser. This interface can summarize the results, report on trends, and plot the data in graphs and other visual settings. Once information is interpreted, it can provide useful feedback and direction to both health care professionals and consumers.

In certain situations, the phone may also act as a relay to transmit data to other servers.

**Server**
The integrated server architecture provides additional processing for certain algorithms. The server can also support data storage and retrieval. In certain clinical situations, the server may be configurable for integration into existing EMR systems.
How **Metria™** wearable sensor technology can be used

There are a variety of uses for **Metria wearable sensors**—benefiting both consumers and clinicians.

**In consumer applications**
Patients can view their own data on their smartphones. They can determine how many steps they have taken in a day, measure how well they slept or track calorie intake. This information will be useful in conducting a health and wellness assessment, pursuing fitness goals or monitoring the elderly.

**In a clinical setting**
Patient data will flow directly to caregivers for interpretation and action. Professionals will be able to monitor vital signs in real-time or store data for later analysis. Possible applications could include cardiac telemetry, sleep diagnosis, homecare and disease management, and remote monitoring for triage and emergency conditions.

Why **Vancive™**?

Vancive Medical Technologies offers a more innovative approach to remote monitoring. We are dedicated to inspired advances and intelligent results — and this technology allows us to achieve both.

With a proud history of innovation and manufacturing excellence, we have the unique capabilities required for building such complex technology. From expertise in adhesives and materials to component integration, we offer the right perspective for creating sensors that are both effective and easy to use.