



Wearables Research and Analytics Platform

END-TO-END SOLUTION FOR SECURELY COLLECTING AND STORING WEARABLE DATA

THE PROBLEM

Incorporating wearable data into research studies presents new problems

The widespread adoption of wearable technology over the past decade has significantly strengthened the ability of individuals, clinicians, and researchers to understand and intervene in many aspects of personal and population health. Study sponsors, researchers, and clinicians are increasingly interested in collecting data from wearable devices but they are faced with two challenges:

1. They do not have the technology infrastructure or the expertise to incorporate wearable devices into current research programs.
2. When wearables data are collected, they are not standardized—so there is no way to manage and analyze the information in a meaningful way.

THE SOLUTION

Introducing WRAP: Wearables Research Analytics Platform

RTI International can help you with these challenges. Our experts conduct research into the reliability and validity of wearable products and provide guidance and technical support to plan and implement studies that use wearables for various applications. These include data collection, to manage pilot and demonstration programs, and to monitor and evaluate efforts that ensure wearable devices generate trusted and actionable data.



Identify, evaluate, select, and configure the most appropriate wearable(s) for your study's participants.



Procure devices, manage shipping logistics, and distribute devices to study participants.



Obtain informed consent, register devices, and onboard participants in a collected or distributed environment.

APPLICATIONS

- Research studies
 - Longitudinal
 - Observational
 - COVID-19 early detection
- Employee health programs
- Insurance providers
- First responders
- Military health monitoring

ADVANTAGES

- Works with devices from multiple brands
- Encrypts data transmission directly from device to data server
- Stores participant data in one secure and compliant location
- Features integrated electronic consent
- Easily scalable
- Low operating cost

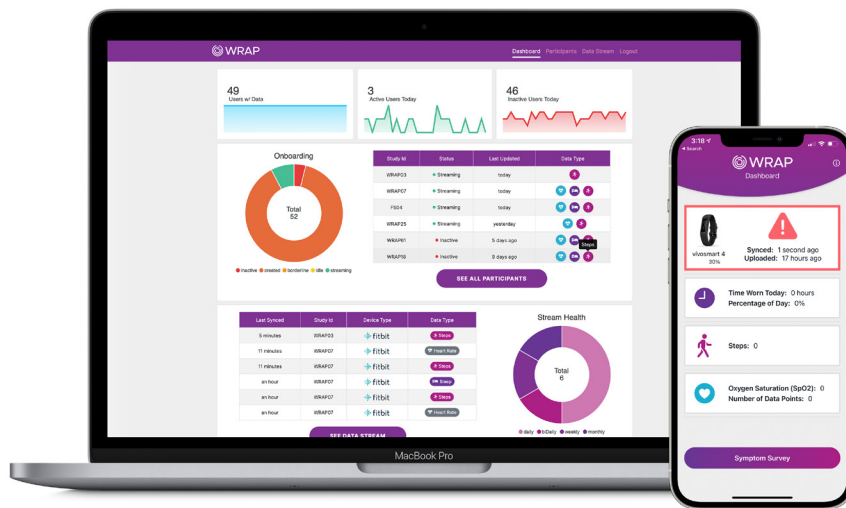
THE TECHNOLOGY

WRAP provides an end-to-end solution that enables research teams to collect, manage, and analyze wearables data from large cohort studies in a streamlined, evidence-based, and cost-effective manner. RTI deploys our WRAP technology stack on the Microsoft Azure® cloud and provide a highly robust, scalable, and secure platform for sensitive study data, such as personally identifiable information (PII) or protected health information (PHI).



Data flows directly from the wearable device to the WRAP smartphone app and then to a server of your choice.

Participant data is safe, secure and free from any third party access.



Web Application

- Compatible with wearable devices from Fitbit, Garmin, Oura, and others
- Monitor participant compliance using the customized dashboard
- Export participant data with the click of a button
- Enroll participants with a simple authentication workflow
- Set up user accounts and permissions across your research team

iOS® Application

- Compatible with wearable devices from Garmin and Polar; new device integrations under way
- Data streaming directly from wearable device to server—not shared with third parties
- On-device customizable surveys to combine with sensor data collection in research studies
- Home screen widget to improve compliance
- Data storage by RTI or on your own personal server location
- Simultaneous data collection from multiple devices

MORE INFORMATION

WRAP has a broad range of potential applications—including health care, research, insurance, and defense.

RTI Commercialization invests in new technologies emerging across the research institute and facilitates industry partnerships to advance these technologies to the marketplace.

To explore partnership opportunities, contact partner@rti.org.

RTI International is an independent, nonprofit research institute dedicated to improving the human condition. We combine scientific rigor and technical expertise in social and laboratory sciences, engineering, and international development to deliver solutions to the critical needs of clients worldwide.

For more information, visit www.rti.org.