

Personal Wellness Index (PWI)

Settings for English and Spanish languages

The Rothman Personal Wellness Index (PWI) from BodiMetrics is a subscription service for trending and scoring of the overall patient condition over time with an algorithm derived from a ground-breaking predictive analytics product, the Rothman Index. The service is available for the BodiMetrics Performance Monitor.

The Rothman Index

The Rothman Index (RI) is at the forefront of predictive analytics in healthcare. The RI algorithm provides the only general measure of the overall patient condition. It leverages the investment hospitals have made in electronic health records (EHRs), utilizing existing, real-time data to quantify and visualize patient acuity and risk.

PeraHealth announced in May 2018 that its RI, predictive, real-time clinical surveillance technology, PeraTrend, was the first solution of its kind to receive 510(k) clearance from the U.S. Food and Drug Administration (FDA). This RI based product is currently in use by leading healthcare systems across the United States, including Yale New Haven Health System, Houston Methodist Health System and Mission Health.

The RI allows for the development of one simple, universal (0-100) numerical score from the vast amount of data in the EHR to create a picture of any patient's condition over time – any age, any disease, any unit.

The RI is based on a heuristic model that uses a range of 26 physiological measures including vital signs, laboratory data, cardiac rhythms, and, most importantly, nursing assessments. The model transforms each input into a common representation of univariate risk, allowing heterogeneous data to be summed, solving the data fusion problem.

The result is a continuous measure of patient condition, integrated into the EHR, computed on a real-time basis across all conditions, diseases and care settings.

The Rothman Index predicts common measures of risk including:

- 24-Hour Mortality
- Discharge Disposition
- 30-Day Readmissions
- ICU Mortality



Personal Wellness Index

Patients frequently exhibit subtle warning signs before experiencing lifethreatening health problems. While physicians and nurses are highly skilled to detect this deterioration, earlier detection allows the care team the additional time to intervene more successfully.

Vitals Monitoring has been used successfully over the last few years to reduce hospitalizations and readmissions in high risk populations. The availability of new vitals monitoring devices coupled with Rothman Index powered predictive analytics algorithms provides new opportunities for hospital or health system providers who do not have enterprise-wide integration of EHRs with Rothman Index but who wish to more effectively address care improvements in selected departments or patient populations.

Drawing on the proven ability of the Rothman Index to forecast subtle but significant health trends, Alive Sciences developed the Rothman Personal Wellness Index (PWI) in partnership with BodiMetrics, one of the nation's leading medical device companies. The combination of vitals data and assessment of patient condition via a yes/no questionnaire, when input into the algorithm, provides a continuous measure of the patient's condition.

The PWI is an easy-to-use, cloud based application available to healthcare providers who manage patients with chronic medical conditions, athletes seeking improved performance or anyone who wants to maintain good health and fitness.

This state-of-the-art personal health indicator provides early warning for important changes in patient's condition. Using a BodiMetrics device, (Performance Monitor), it takes just a few minutes to capture key vital signs, answer questions and calculate the PWI score. The data collection and condition assessment (answering 14 yes/no questions) can be done by a case worker, nurse, tech or the patient themselves. Then, results can be shared with physicians, caregivers or family members.

For physicians, caregivers and other providers, PWI provides accurate medical data and early warning for deterioration, while improving the patient experience. This can result in reduced hospitalizations and readmissions, improved care, better medication adherence and more.

The free Rothman PWI mobile app can be installed on iOS or Android smartphones or tablets. Subscriptions for a cloud based service are available for \$15 per month per monitored patient with an annual subscription.









Telemedicine... in the palm of your hand

