

Integrating Wearables and Patient Data into Longitudinal Mental Health Care



About Healthesphere

[Healthesphere](#) is a FHIR-native digital health platform focused on precision mental health, interoperability, and whole-person care. The platform combines patient-generated, behavioral, physiological, and clinical data to support scalable, clinically actionable workflows across care settings.



HealthEsphere



The opportunity

- Mental health measurement remains fragmented across disconnected tools, episodic patient-reported outcomes, and siloed clinical systems that often fail to capture longitudinal changes in patient functioning and symptom variability.
- There is a growing need for interoperable and clinically actionable models that integrate behavioral, physiological, patient-generated, and clinical data directly into longitudinal care workflows and EHR-connected environments.



The challenge

- Many digital mental health tools generate large volumes of data without clear pathways for clinical interpretation or action.
- Lack of interoperability standards and workflow integration limits scalability, provider adoption, and longitudinal use across organizations.



The approach

- Healthesphere leveraged standardized FHIR resource structures to normalize behavioral, physiological, patient-generated, and clinical data into interoperable longitudinal workflows across systems and care settings.
- Behavioral trends, patient-reported inputs, and clinical context were combined into summarized longitudinal patient views intended to support contextual interpretation between visits and reduce reliance on isolated point-in-time assessments.
- The workflow emphasized low-burden monitoring approaches, including wearable-derived sleep/activity trends, ecological momentary assessment (EMA), and smartphone-based behavioral inputs to support longitudinal engagement in real-world settings



The impact

- ✓ Demonstrated a scalable implementation approach for integrating interoperable digital mental health measures into longitudinal clinical workflows using standardized FHIR-based architectures and patient-generated data integration models. To drive industry adoption, Healthesphere has engaged major professional audiences on elements of this work including NCQA, the American Psychiatric Association (APA), the American Telemedicine Association (ATA), and the One Mind Lived Experience Advisory Network.
- ✓ Reinforced the importance of combining behavioral, patient-reported, physiological, and clinical data into longitudinal patient views using scalable interoperability standards. This approach has gained international recognition, including presentation at the Orchard OCD Conference in London, reflecting growing global interest in interoperable and clinically actionable approaches to digital mental health monitoring.



Digital mental health measures become significantly more valuable when they move beyond isolated data collection and are integrated into interoperable, clinically actionable workflows that support real-world care.”

— **Ozair Bajwa**

CEO, Healthesphere