WHYZE HEALTH

Unifying Health & Research

Health Innovation Hub Ireland
opencall
WINNER 2022

ENTERPRISE IRELAND

DublinBIC

Executive Summary

We are an innovative, female-led, digital health start-up founded in Dublin, Ireland in 2021.

✚ Mission

To deliver better value in healthcare and research through impactful decision making. The artificial intelligence (AI) powered WHYZE Health Platform directly connects each stakeholder central to healthcare and research - patients, healthcare providers, healthcare payers and Pharma / MedTech companies – with the validated, structured, and current health data outcomes they urgently need.

✚ Vision

A globally recognised digital health and research ecosystem powering sustainable healthcare, enhanced outcomes, precision care, and patient well-being.

✚ The Problem

Healthcare spending is unsustainable. It's outpacing economic growth, 3.9% p.a. versus 3.0% respectively. Global healthcare spending is now $8.8tn; 9.9% of GDP, up from 8.5% in 2000 (WHO). Chronic diseases, e.g., cancer, diabetes, mental illness, heart disease, and respiratory disease, are a significant contributing factor, accounting for up to 90% of healthcare spending (CDC).

✚ The Opportunity

Every day, millions of chronic disease patients receive treatments chosen from the many options available. While one set of patients thrives; another does not, adding to the global healthcare burden. This provides an opportunity to use routinely collected data from these patients, real-world evidence (RWE), to gain clinically-rich insights into what actually happens in everyday practice and why. Based on accumulated clinical data and outcomes observed in 'real-life' patients, not just from clinical trials, RWE is the most accurate benchmark to direct and evaluate healthcare efforts and decisions. Stakeholders across the healthcare ecosystem need this new knowledge to support decision-making and improve safety and effectiveness, and ultimately, patient outcomes. Specifically, RWE will be used to tailor therapy to individual patients and enable research to be seen as a health option by patients and physicians. This is especially true when dealing with chronic conditions in which a plethora of factors may contribute to the final clinical outcome of therapeutic choices.

Patients: 40% of American patients demand digital clinical information tools to fully inform them on their health-related choices.

Healthcare providers: 73% view RWE as beneficial to managing patients with chronic conditions by tracking outcomes and quality measures.

Healthcare payers: Patient health outcomes as assessed by RWE can support reimbursement decisions (quality-based reimbursement strategy).

Pharma/MedTech companies: RWE could help save $100mn p.a. in clinical trial design, recruitment, and retention, and create $200mn p.a. in revenue with the discovery of drug repurposing (McKinsey).
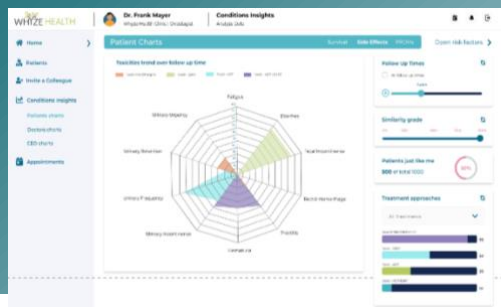
However, the use, comprehensiveness, and value of RWE is currently limited by the siloed approaches of stakeholders collecting and accessing RWE. A significant limiting factor is due to patients being completely disconnected from the healthcare system.

Fortunately, a new pathway is available in the modern world of digitised health data, powerful AI technology and scalable compute power.

✚ The WHYZE Health Platform

We are developing a health and research platform for the streamlined collection and access to RWE in chronic diseases, directly connecting all the stakeholders - patients, healthcare providers, healthcare payers and Pharma / MedTech companies - eliminating the need for siloed approaches. Our digital platform fully integrates up-to-date information from different healthcare sources, e.g., provider encounter information, administrative data, outcomes data, patient-reported outcomes, and wearables data. Bringing together and granting access to data generated by these disparate sources, using Blockchain

effectively to enforce privacy by design principles, establishes an inherently value-based collaborative care and research approach that benefits all stakeholders. In fact, the platform's AI-based algorithms will enable more impactful critical decision-making in healthcare, leading to improved health outcomes, more efficient healthcare systems, and better health economics, while advancing clinical research and innovation at a lower cost. The WHYZE Health Platform will empower patients to bring research options to their doctors enabling a collaborative decision-making process.

The Platform uses RWE to aid physicians in determining the best health intervention for each specific patient based on their health risk factors.

It also demonstrates the possible gravity of the side effects that could be experienced by the specific patient during the treatment.

✚ Customers And End Users

High-validity, RWE collated on our ecosystem will be used by all stakeholders to deliver higher performance:

	Use case	Benefits
Patients	Gain access to their digital health records and share their health data with healthcare providers of their choice. Choose to participate in research and have a direct, anonymised channel to the research community.	Better health outcomes due to an increased capacity to make personalised informed choices, i.e., identifying the best healthcare provider and health intervention for their condition, and bringing research as a health option to their physicians.
Healthcare providers	Access to structured, validated, and secure RWE and a platform to promote their facilities based on the highest value health interventions administered.	Facilitates collaboration, streamlines care, reduces diagnostic timelines, and improves patient health outcomes.
Healthcare payers	Provides data that allows risk-sharing with provider partners. Healthcare payers only have to pay for the evidenced-based healthcare choices which achieve the best patient outcomes.	Identifies the best health outcomes and value, increasing efficiency and reducing cost.

Pharma/MedTech companies	To select which treatments are approved, reimbursed and prescribed, and potentially enter 'risk-sharing contracts' between payers and industry, driven by real-world effectiveness. The platform also provides direct access to anonymised real-world patient and physician data for clinical design, recruitment and retention.	The use of thousands of times more information than is currently used in healthcare, driving forward precision medicine to help patients receive the right care at the right time. Streamlines clinical trial design, recruitment and retention, reducing cost and startup time; while enabling the advancement of innovative drug development by increasing research efficiency.

✚ Market

The WHYZE Health Platform sits within three high growth markets:

+ The RWE solutions market: is set to reach $4.4bn by 2028, growing at a CAGR of 11.8%.
+ Global digital health market: growing from $289bn in 2021 and expected to reach $881bn by 2027, exhibiting a CAGR of 20.14%.
+ AI in healthcare market: growing from $6.9bn in 2021 and expected to reach $67.4bn by 2027, exhibiting a CAGR of 46.2%.

✚ Market Drivers

+ A growing burden of chronic disease.
+ A shift towards personalised, value-based care models.
+ The availability of a large volume of healthcare data and the rising need to convert this data into actionable evidence.
+ The growing need to reduce drug development costs and delays.
+ Regulatory pushes from both the European Commission and the US government (see below)

The European Health Data Space (EHDS): A key pillar of the European Health Union	**Rules to improve the interoperability of health information**
Recently launched by the European Commission, the EHDS will unleash the full potential of health data to help the EU achieve a quantum leap in providing healthcare. While ensuring full compliance with the EU's high data protection standards, this proposal supports: + Better access and control of health data for citizens. + The use of health data for better healthcare delivery in own country and cross-border. + A single market for digital health services and products. + A consistent, trustworthy and efficient framework to use health data for better research, innovation, policy-making and regulatory activities. See the full press release here.	The US Department of Health and Human Services recently proposed a new rule to support seamless and secure access, exchange, and use of electronic health information (EHI). The rule is designed to: + Increase innovation and competition by giving patients and their healthcare providers secure access to health information and new tools, allowing for more choices in care and treatment. + Implement standardised application programming interfaces (APIs), which will help to allow individuals to securely and easily access structured EHI using smartphone applications. + Implement the information blocking provision of the Cures Act to support access and exchange of EHI.