

#### What if sports analytics improved public health?

## Game-Changing Link

### 08

#### UNCERTAINTIES

Systems, Technology

#### MEGATREND (Most significant)

**Boundless Multidimensional Data** 

#### **TRENDS**

Big Data Cross-Sectoral Partnerships Longevity & Vitality Open Data Precision/Personalised Medicine

#### **TECHNOLOGIES**

Artificial Intelligence Open Data Real-Time Analytics

#### **SECTORS IMPACTED**

Consumer Goods, Services & Retail Data Science, AI & Machine Learning Health & Healthcare Insurance & Reinsurance

#### **KEYWORDS**

Data Sharing Protocols Healthcare Systems Non-Communicable Diseases Public Health Innovation Sports Analytics /ithin Reach

**Transitional** 

Visionary

Sports analytics integrates with public health through a secure data sharing platform, revealing links between fitness trends, injuries, physical activity patterns and health outcomes, while enabling breakthroughs in public health policy and targeted health interventions.





#### WHY IT MATTERS TODAY

According to the most recent WHO data (2019, non-communicable diseases accounted for

74%

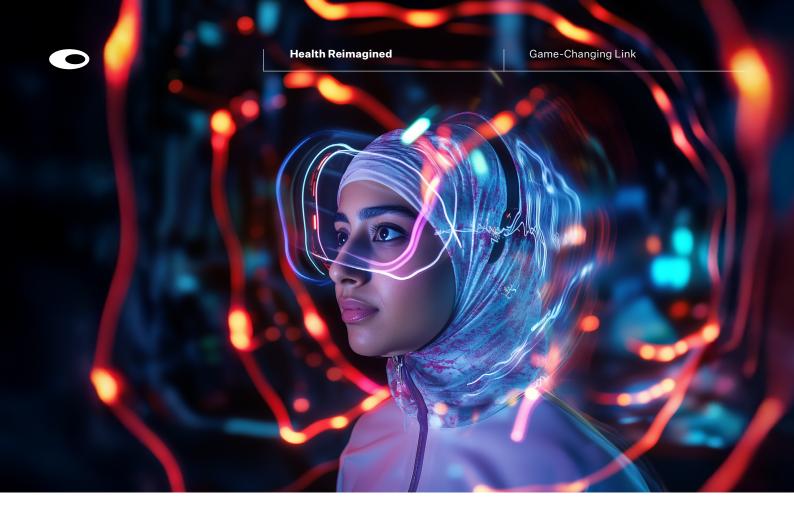
of all deaths globally



Healthcare systems are currently overwhelmed. Global life expectancy is projected to increase from 73.6 years in 2022 to 78.2 years by 2050,605 and this may be accompanied by a rise in disability-adjusted life years.606 While better public health data collection is an ongoing need,607 the World Health Organization projects a shortfall of 10 million health workers by 2030, with the majority of this gap affecting low- and lower-middle-income countries.608

According to the most recent WHO data (2019), non-communicable diseases (NCDs) account for 74% of all deaths globally. NCDs cause 41 million people each year, with cardiovascular diseases, cancer, chronic respiratory conditions and diabetes, making up 80% of premature NCD deaths. NCD deaths Development Goals aim to reduce premature mortality from NCDs by one-third by 2030.

Sports analytics and big data have transformed sports medicine. Biosensors, artificial intelligence (AI),<sup>612</sup> and wearable technologies,<sup>613</sup> among others, are enhancing athlete monitoring and injury prevention.<sup>614</sup> The Podium Institute for Sports Medicine and Technology, a partnership between Podium Analytics and the Institute of Biomedical Engineering at the University of Oxford, focuses on evidence-based innovations for sports injuries suitable for practical adoption within five years.<sup>615</sup> The global sports analytics market is expected to reach a value of \$4.81 billion in 2024 and \$32.31 billion by 2032, with a compound annual growth rate of 26.9%.<sup>616</sup>



#### THE OPPORTUNITY



#### BENEFITS

Better understanding of public health; health innovation breakthroughs; evidence-based policymaking.



#### RISKS

Misinterpretation of health data; data privacy and security concerns; increased health disparities due to unequal access.

Sports analytics platforms are connected to public health data through secure, standardised data sharing protocols, creating a shift in public health and health innovation. Advanced machine intelligence reveals correlations between fitness trends, injuries, physical activity patterns, and health outcomes, accelerating the development of targeted interventions and personalised medicine approaches, particularly for NCDs.

Advanced data exchange protocols, such as blockchain and quantum-secured systems, allow these platforms to share anonymised performance metrics, injury patterns, and recovery data with public health agencies while maintaining strict privacy controls. With multi-partner access, the use of integrated data unlocks unprecedented opportunities for medical breakthroughs and health innovation as researchers analyse patterns across sports performance, recovery, and long-term health outcomes, with findings leading to new insights into injury prevention, treatment protocols, and public health.

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