A Holistic Approach to Healthcare and Health Systems

Infectious diseases and the global threat of antimicrobial resistance are affecting the human population with devastating costs to society as the incidence of untreatable infectious diseases increases.

Taking a holistic health system approach based on actionable Big Data analytics, we can deliver improved health outcomes, quality of life and productivity.

IBM Research is contributing to combat AMR and infectious diseases by harnessing Big Data research and technologies to create a paradigm shift to address the root causes of AMR and infectious diseases.

An Interdisciplinary, Global Effort

This project brings together skills in microbiology, chemistry, engineering and computer science from IBM Research – Africa, Almaden, Australia, Yorktown Heights (USA) and Zurich.

We have also initiated a European consortium that will investigate actionable Big Data (ABiD) to combat antimicrobial resistance.

Achieving the UN Millenium Development Goals

The Cognitive Health Care and Health System Hub represents a framework to build sustainable health systems to reduce child mortality rates, improve maternal health and combat HIV/AIDS, malaria and other diseases.

The framework comprises an interface for stakeholders, backed by a cognitive computing and advanced analytics layer, and features an integrated data foundation.

Breaking the Disease Chain of Causation

Investigating the chain of causation with a holistic view allows us to understand disease mechanisms, the spread of diseases and their impact on society.

This insight in turn creates opportunities to break the disease chain through multiple and diverse actions, both on an individual and a public-health level.