

VACCESS.io Market Strategy

Problem & Key Objectives

VACCESS.io aims to support global distribution efforts for the COVID-19 vaccine in 2021-2022. The task of planning the distribution to nearly 8 billion people worldwide will tax the supply chain and overwhelm health systems.

Our proprietary data analytics predict at-risk populations, supporting more effective, fair and equitable distribution of the vaccine supply. Our target market consists of the worldwide stakeholders in the supply and distribution of preventive vaccines for communicable diseases (i.e., vaccine distributors and manufacturers, governments, and international and domestic health organizations). VACCESS.io supports stakeholders by helping them to prioritize vaccine distribution efforts to reach vulnerable populations.

In the future, our proprietary data analytics are adaptable to both known and novel infectious diseases, and capable of supporting and improving distribution efforts for all preventive vaccines worldwide. Our goal is to decrease the millions of deaths worldwide each year due to contagious diseases. We leverage big data and our proprietary algorithm identifies future hot spots, helping to better manage the vaccine supply and contribute to more effective, universal, and equitable vaccine distribution.

Preventive Vaccine Market Size

Vaccine products are segmented into preventive and therapeutic vaccines. Preventive vaccines are used to prevent disease rather than treat illness. The World Health Organization (WHO) reports there exist licensed vaccines to prevent, or contribute to the prevention and control, of 26 vaccine-preventable diseases. Currently, the WHO reports vaccines are under development for 24 diseases, in addition to COVID-19.

The WHO reported in 2016 that the top ten global causes of death that year included 3 million deaths from lower respiratory infections, 1.4 million deaths from diarrheal diseases, and 1.3 million deaths from tuberculosis. HIV/AIDS is no longer among the world's top 10 causes of death, but it still killed 1.0 million people in 2016. While high income countries experience significantly fewer deaths from communicable diseases, the low- and middle-income countries continue to suffer heavy losses from these contagious diseases, despite there being preventative vaccines for many of them.

Value Impact & Growth Potential

COVID-19 is expected to cause a global economic slowdown resulting in losses of at least \$1 trillion, as estimated by the United Nations Conference on Trade and Development (UNCTAD). VACCESS.io helps reap cost savings by helping to more effectively distribute the vaccine supply, and also by decreasing supply challenges such as hoarding and unfair competition between countries (and even between U.S. states).

Business forecasts for the 7-year period, 2019 to 2025, assessed the global infectious vaccine market to experience over 12% compound annual growth rate (CAGR), in part due to increased government efforts to control epidemic diseases. The COVID-19 crisis will spark further investment in vaccine R&D endeavors as well.

Cost Savings Example: The U.S. Vaccines for Children program (VFC) program, which began in 1994, continues to reap huge cost savings and societal benefits. According to a 2014 CDC report, hospitalizations avoided and lives saved through the VFC vaccination program will save nearly \$295 billion in direct costs and \$1.38 trillion in total societal costs.

Opportunity

There appear to be no comprehensive, coordinated global efforts to predict at-risk populations, which also are specifically designed to improve distribution of vaccines to these vulnerable areas. The WHO statistics on communicable disease deaths demonstrate an urgent need for an innovative technology solution like VACCESS.io to combat COVID-19 and other vaccine preventive diseases. VACCESS.io also envisions a unique opportunity to collaborate with the recently created (2018) WHO initiative Market Information for Access to Vaccines (MI4A) that seeks to enhance vaccine market transparency and understand global vaccine market dynamics.

Timeline

We have a significant likelihood of success if we can further define our datasets, gain access to the sources, and refine our proprietary algorithm within the next 6 months. Ideally, we launch the VACCESS.io web-application by the end of 2020, continuing to refine our algorithm based on real-time trends as we await the anticipated COVID-19 vaccine sometime in mid-2021. VACCESS.io is a critical tool to combat future waves of the COVID-19 crisis, but also to manage future contagious disease outbreaks.