



How Is the UAE Preparing for the Next Epidemic?

As we pass the two-year mark since the outbreak of the coronavirus pandemic, the world appears to be finally getting to grips with the disease. Around 60% of the global population has received at least one dose of a viable vaccine and initiatives like [the COVID Moonshot project](#) aim to make them available to all.

Of course, some countries have performed more impressively than others. The UAE, for example, has one of the highest vaccination rates in the world, with around 99% partially vaccinated and over 93% fully vaccinated against COVID-19. However, the Emirati government is not content with resting on those laurels and has instead set about futureproofing itself against the next epidemic via the launch of a new integrated detection and management system.

Sphere

The electronic system is known as Sphere, an acronym of Surveillance of Public Health, Electronic Records and Early Warning. It has been designed to provide a holistic solution to epidemic management by detecting the outbreak of an infectious disease early on, then notifying the relevant health boards in both the private and public sector to give them the opportunity to prepare.

Sphere also incorporates contact tracing and immunisation programme progress reports, offering a comprehensive integrated tool for dealing with infectious diseases. By giving all stakeholders access to a centralised database, the UAE authorities can greatly facilitate the transfer of information and curb the spread of an epidemic more effectively.

DECC

Sphere is being launched in conjunction with the Digital Epidemiological Control Centre, or DECC. This newly created division will handle all aspects of data storage and analysis, including the use of smart prediction tools which are capable of employing artificial intelligence (AI) to project how the disease will behave going forwards.

Through the assimilation and assessment of some 1.4 million data points, including the demographics and population density of different parts of the country, as well as



their respective vaccination drives and contact tracing setups, DECC will be able to pre-emptively prevent the spread of the epidemic. Such tools are already in use by a number of respected health bodies around the world, including the World Health Organisation (WHO) and the US Centre for Disease Control.

Leading by example

Both Sphere and DECC were announced at the recent Arab Health 2022 exhibition and conference in Dubai. The three-day event showcases the most cutting-edge medical innovations from all over the globe and by choosing to unveil the new systems at the summit, the UAE demonstrated how it is once again leading by example with regards to its healthcare sector.

“Sphere is meant to create an integrated record from all health entities to be able to have integrated action on surveillance management and control of the disease,” [explained Dr Nada al Marzouqi](#), the Head of Public Health at the Ministry of Health and Protection (MOHAP). Speaking about DECC, Dr al Marzouqi said that “by using vast data, the DECC will effectively work to use predictive tools to prevent the spread of infectious disease in UAE.”