



Diagnostics – Connecting Forward

SystemOne is a software company located in Springfield, Massachusetts, United States, that is dedicated to 'connecting diagnostics and providing data-driven platform solutions for the developing world.' It provides a software platform used by laboratories in 32 countries to connect and share data on diagnosis of diseases ranging from malaria to Ebola.

The majority of routine diagnostic testing is conducted in a centralised laboratory setting, such as a reference laboratory, with adequate infrastructure, trained staff and a controlled environment. Recent technological advances are increasing coverage and access to diagnostic testing to reach peri-urban, rural and other hard-to-reach areas. Apart from expanding the catchment area for testing, this is also expanding the laboratory network and laboratory systems. The shift from a centralized to a more decentralized testing network will require stronger as well as more innovative systems to support the expanded network and ensure that each patient receives the same quality testing and data is appropriately collected.

Currently, laboratory data are not being fully utilized to measure quality, report on surveillance, elimination and eradication programs, and support the global health security agenda. Various

connectivity initiatives are promising to allow for the expansion of quality diagnostic testing, while continuing an uninterrupted laboratory network. This connected network could closely monitor the quality of testing and testing services and support absolute data collection.

However, connectivity solutions cannot be used to their full potential without the proper support systems needed to establish a sustainable program. Countries will need trained human resources specific for information technology. In many countries, this may mean the establishment of a new cadre supporting healthcare professions. Similarly, as diagnostic testing expands beyond the laboratory, so too will the supporting systems and healthcare professions need to expand beyond the laboratory. Information technology, quality data and clear terminology as to what 'connectivity' is will be central.



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