Regional support for outbreak preparedness/ enhancing regional health security in Asia through genomic surveillance

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ABSTRACT

Summary: While the COVID-19 pandemic has been an unprecedented public health crisis, the SARS CoV-2 virus is just one of many zoonotic pathogens with outbreak potential. Many potential threats concentrate in South and Southeast Asia given high-levels of population density, environmental change, patterns of human-animal interaction and increasing human mobility. Genomic surveillance has emerged as an essential tool to enhance early pathogen detection. However, the application of these emerging tools and technologies in high-risk settings, particularly low and middle-income countries, remains limited. This presentation will profile the work of the Asia Pathogen Genomics Initiative (APGI). It will include a review of the current status of sequencing capacity across the region, highlight emerging challenges and bottlenecks, and discuss a strategy for adoption and scale in the context of improving the capacity of national surveillance systems.