



## West Visayas State University

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### **Identification of problem:**

Sluggish Contact Tracing in the Philippines

### **Introduction:**

Contact tracing is one of the most crucial prevention methods in the struggle against infectious illnesses. Due to the fact that it is an extreme example of locally targeted management, it has the potential to be highly effective in situations where there aren't many. It is seen as the first and most effective stage in reducing an outbreak because it is exceedingly unlikely that resources for mass testing and a sufficient number of vaccines will be readily available. As a result, this step is regarded as being the most important. If contact tracing is done correctly, it may be possible for society to be released from quarantine even before immunizations are ready. However, according to Benjamin Magalong, mayor of Baguio City and head of contact tracing, the Philippines' COVID-19 reaction still has a "weakest link" in contact tracing. To be completely honest with you, Magalong said at a briefing, "I would say that is still the weakest link among



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the pillars." According to Magalong, contact tracers nationwide can locate at least four contacts of a single coronavirus victim. The revised target contact tracing efficiency ratio of 1:15 is still far away from this.

### **Solution 1 – Training Programs for COVID-19 Contact Tracers**

**Pros:** Following training, Strelau et al. (2022) discovered statistically significant gains in both participants' knowledge and their sense of their own ability to do contact tracing. Participants in the volunteer contact tracing program participated in training sessions as well as fieldwork, which helped them learn about various health professions and enhance their careers. It will be vital for contact tracing programs to prioritize their responsibilities in order to make the most efficient use of their available human and financial resources. The COVID-19 contact tracing programs provide the opportunity for health departments to innovate, in particular in the area of technology that supports various public health efforts. These programs also provide opportunities to reduce health disparities and to increase the community's ability to withstand adversity. A comprehensive contact tracing program will include, among other things, the examination of positive cases, the identification of known exposed contacts, and the provision of support to those who have been exposed as well as positive cases. In order for efficient contact tracing programs to successfully reach cases and contacts, program management skills, logistical capabilities, clinical support standards, and epidemiological



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expertise are required. A large amount of resources as well as political support at a high level are required for a powerful COVID-19 contact tracking program. The programs for COVID-19 contact tracing should be incorporated in or utilized as assistance for public health agencies that are familiar with the environment of a region and have been executing this job for a considerable amount of time. In addition, the work of the local public health departments should not be replaced by this initiative; rather, it should act as a supplement to those departments' efforts. The comprehensive public health response to COVID-19 by a state or local government should comprise testing, mitigation policies, supported isolation, and vaccination distribution operations. Additionally, there should be strong operational integration and strategic alignment with these components. According to the findings of a research study that was carried out by Huda et al., a total of 2,513 community volunteers and young professionals from 10 provinces, as well as 2,005 university students from 268 universities located all over Indonesia, received training between the months of January and July of 2021. (2022). After participating in four different training cohorts, a total of 64 data managers from all 34 provinces have graduated. As a direct result of the training, both the quality of the national data collection on tracing and the number of tracers working in Indonesia have significantly increased. According to the data collected by surveillance systems, the number of COVID-19 close links that were traced on a national level increased from 261,482 to 785,711 between January and July of 2021. This demonstrates how



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multi-sectoral involvement and training in cooperative contact tracing have assisted the Indonesian government in increasing the quantity of human resources as well as their capacity to successfully offer a spike in tracing capacity for the nation. As a consequence of this, it will be able to contribute to COVID-19's mitigation and intervention programs and policies.

**Cons:** As of the 9th of March in 2021, there were a total of 228,225 contact tracers in the country. The vast majority of them are members of the Philippine National Police (PNP), the Bureau of Fire Protection (BFP), and the barangay health professionals (BHWs). After denying the Department of Health's request for an additional PhP11.7 billion in cash to hire at least 135,000 specialized contact tracers in June 2020, the government resorted to using other employees who did not work in the public health sector as well as volunteers. Despite the seeming quantity of contact tracers, the government is still only following up with an inadequate number of people who have been in contact with COVID-19 carriers. It is important to highlight that in most cases, volunteers are not expected to be responsible for performing contact tracing chores on a full-time basis. As a consequence of this, even while it may appear that there are already an excessive number of contact tracers, in reality, they may be working less hours than is required. Even while the number of contract tracers and individuals who have been trained to carry out contact tracing work is on the decline, it is unclear whether those who have been trained to carry out contact tracing work have really



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begun or are currently carrying it out. For example, it has been asserted that the purpose of the PNP-assigned contact tracers was solely to act as security escorts for contact tracers and that they did not make use of their probing abilities to hunt for cases and close relationships.

### **Solution 2 – Use of contact tracing analytical tools by the LGU's**

**Pros:** As a response to the COVID-19 outbreak, a great number of digital technologies have been developed to assist with contact tracing and the identification of cases.

These distinct tools can be included into a single device, or they can be utilized independently. These include techniques for monitoring symptoms, determining proximity, and responding to outbreaks (WHO, 2020). In order to assist COVID-19 analysis, Jahmunah et al. 2021 say that a phone application associated with a wearable device has particular intelligent IoT features built into the system. These qualities include complicated data analysis and intelligent data presentation. Applications for contact tracing need to explain the process of data collection as well as the interpretation of that data. As a result of cognitive data interpretation, epidemiologists are able to more effectively manage public health by predicting clusters and taking the required actions in response. The analytical approaches that have been suggested could be necessary to implement in the event of a future public health emergency on a worldwide scale. The capabilities of COVID-19's contact tracing can potentially be



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improved with the use of digital tools. The application of AI methodologies for the analysis of health data in real time will play an extremely important part in the provision of predictive and preventive medical care. For instance, it will assist in predicting the locations of infections as well as the movement of the virus. In the event of a pandemic, it will also assist in the diagnosis and characterization of the virus, as well as the estimation of the number of beds, healthcare professionals, and other medical resources that will be required. With the appropriate training, a modest investment in technical hardware, and efficient managerial oversight, it is possible to increase access to surveillance data from communities that are difficult to reach in order to influence epidemic control tactics while simultaneously strengthening health systems in order to lower the risk of future disease outbreaks. For example, the use of contact tracing software significantly increased the efficacy of contact tracing during the Ebola virus epidemic that occurred in the Democratic Republic of the Congo.

**Cons:** There would be challenges involved in implementing IoT solutions to combat the outbreak. In order to effectively read and measure the vital signs of COVID-19 patients and transfer the data to the IoT cloud, a considerable number of IoT devices will need to be implemented in healthcare settings. This presents the first challenge. Because of this, a large number of Internet of Things devices would have to be utilized, together with a vast number of sensor points, in this extremely scaled-up configuration. Because of this, a massive population of data is spread out across a relatively small number of



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nodes. In addition to this, the scalability of these devices results in an increase in their requirements for energy (Jahmunah et al., 2021). The authorities, as well as the patients themselves, are concerned about the privacy of medical records and the safety of patient data. This is one reason why medical information is only given under particular circumstances, with certain researchers and for certain purposes. Therefore, it is necessary to define the mechanisms, strategies, and regulations that govern and facilitate access to medical data without compromising the privacy of patients or exploiting the data for purposes that are unacceptable. This is especially important when critical conditions occur and with the spread of dangerous epidemics that require prompt solutions, such as COVID-19. When developing and employing digital technologies for the purpose of contact tracing, it is imperative to give due consideration to ethical concerns of confidentiality, safety, accountability, and openness (WHO, 2020).

## Conclusion

Magalong asserts that contact tracers may identify at least four people who were in contact with a single coronavirus patient across the country. Even with the improved target contact tracing efficiency ratio of 1:15, this is still a long way from being accomplished. Given this information, the adoption of contact tracing analytical instruments by the LGUs would be the best possible choice. This is solution number 2,



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which combines these capabilities into a single instrument or can be employed individually. These strategies include methods for monitoring symptoms, locating epidemics, and responding to them (WHO, 2020). In the event that future crises in global health occur, it is possible that it will be necessary to implement the analytical approaches that were presented in order to reduce the prevalence of illness. With the use of digital tools, COVID-19's contact tracking capabilities can be significantly improved. It is possible to increase access to surveillance data from hard-to-reach communities in order to influence epidemic control strategies and to strengthen health systems in order to reduce the risk of future disease outbreaks. This can be accomplished by receiving the appropriate training, making a small investment in technical hardware, and exercising efficient managerial oversight.





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