Pneumonia is a leading lethal disease, and the highly contagious influenza is a common cause of pneumonia, especially for the young population. Not all types of flu will cause pneumonia, but those that do are more severe and deadly. Informatics is playing an indispensable role in people’s lives to prevent flu from deteriorating into pneumonia. The precaution could be complex that a single person/team may not have enough knowledge to solve. Informaticians will need technology to search for necessary information and come up with insights. The physicians/nurses, vaccine providers, and flu patients will receive information and benefits. The information resources are the abundant data of historical years from government or healthcare providers’ records. Informaticians will clean the data and find the influenza-pneumonia relationship to report to hospitals. The stakeholders could from various fields of the society including hospitals, government, researchers, patients, and vaccine manufacturers. The primary users are patients and the young population whose parents worry about pneumonia. Researchers could also be the users to study the existed vaccine for the other types of potentially pneumonia-risky flu to help the population to alleviate the lung infection process and block flu infections. Informaticians will obtain the visualization of risks among different population groups and be capable of finding the characteristics of the severe flu types. The decision will be made by physicians by considering the state of illness and physical examination report to determine if the patient will need a vaccine and which kind of vaccine is the most appropriate.

Population health informatics assists on the issues of group levels instead of individuals, and sometimes