Community-Based Decision Support System for the Manila Health Department

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Abstract: Decision Support Systems are used extensively in different industries to assist in decision-making across a wide spectrum of problem areas. These systems are being developed with much consideration of its enormous benefits, both in time and cost savings, and most especially in helping organizations in their decision making. The researchers have identified the main problem of the Planning and Coordination Unit in the Manila Health Department (MHD) which is its poor use of information resulting to wrong identification of specific programs for the communities of Manila City. This results to the difficulty of health centers in identifying what barangays need to be prioritized and what nutritional programs have to be implemented. The objective of the study is to develop a community-based decision support system which is web-based that helps MHD in planning and implementing nutrition and health programs to the community in District V of Manila City. Rapid Application Development (RAD) methodology was used to develop the system and PHP, HTML, and My SQL were used as the primary programming language following appropriate programming standards to ensure that all parts and features of the system are working properly. Users from the Manila Health Department and Health District, a Barangay Health Worker and a Registered Nurse tested, verified and validated if the developed system has met the organizational requirements. The system was be able to track and authenticate community information accurately, provide MHD an overview of health cases in specific community, provide visual and non-visual reports to MHD, and enabling them to keep track of implemented programs in communities. Additional functionalities such as mobile survey or mobile profiling of the community will be helpful. The system could also suggest the recipe or food for its feeding program based on historical data.

Key Words: Nutrition Program, information system, decision-support system