



LETTER TO THE EDITOR

The Manaman ecosystem: A step towards telemonitoring

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TO THE EDITOR:

Management of chronic diseases and aging is a serious challenge in Iran health industry. Statistics from Iran's Ministry of Health indicate that chronic diseases are very common and will likely pose a significant problem to patient care in the future (1).

This fact requires attention with the increase in the aging population, the need to take care of this vulnerable group has becomes increasingly important, and it is estimated that without proper planning to support the elderly, insurance organizations and the Ministry of Health will face heavy costs in the next decade, possibly resulting in the inability to provide services (2). In the past decade, researchers believed that human knowledge had led to effective management of acute disease outbreaks. However, the COVID-19 pandemic shattered this belief, it is likely that we will witness the outbreak of similar infectious diseases in the future, requiring powerful disease management tools.

In addition, policies for encouraging pregnancy have been prioritized in the country's population management programs for the future. Therefore, the projected increase in the number of pregnant women highlights the importance of maternal and newborn health monitoring as a key indicator of health development in this country (3).

Global research demonstrates that patient telemonitoring with online access to the patient's interpretable data can support the provider to predict future outcomes, prevent complications, and lead to ultimate patient satisfaction (4).

Reducing social resource waste, lowering the disease burden, and improving the quality of life are the important impacts of using patient telemonitoring (5). Developed countries such as America, China, Canada, Australia, Denmark, and Ireland, which face similar challenges,

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have a fundamental strategic plan to implement national patient telemonitoring and are committed to doing so (6).

Unfortunately, despite the presence of expert providers such as physicians, and nurses and well-equipped treatment centers in Iran, the absence of a continuous patient telemonitoring hinders the effective provision of healthcare services (7).

Several efforts have been made to implement patient telemonitoring, primarily through universities of medical sciences in Iran. However, these systems are limited by their focus on specific diseases, hindering the monitoring of individuals with multiple diseases. In addition, many companies across the country are attempting to implement telemonitoring infrastructures, including electronic health records, big data, gadgets, and establishing e-health regulations to implement a national platform for public use, but it seems that the lack of attention to creating a structured ecosystem that operates on the basis of telemonitoring platforms has prevented achieving the desired result (8).

Learning from these National and International experiences, the expertized digital health team of POD Smart Land Company has developed a unique patient telemonitoring ecosystem based on a special platform under Manaman brand.

Leveraging the expertise of medical informatics, experienced physicians and software engineers in the POD digital health team is an effective factor that has improved the quality of the monitoring platform. Additionally, designing and implementing the system with respect to the hardware and software infrastructures of the bank have double the functionality of the corresponding brand. Meanwhile, the main distinction of Manaman can be seen in the architecture of the active ecosystem based on its dedicated platform.

With a unique process model that supports communication between different actors, including patient, visitor, patient supporter, nurse and physician, to achieve patient monitoring, the Manaman ecosystem is capable of managing the desired activities of users in multiple roles with different responsibilities in virtual or real organizations for the purpose of providing health services.

In order to evaluate the results of deploying this localized architecture, the Manaman ecosystem has been piloted by considering the limitation of temporal and spatial situations and the population under care at the national level in Iran.

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