

## **Can Digital Technology Innovations Improve Healthcare Inequity for Better Regional Development?**

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### **Abstract:**

The WHO published a strategic plan 2020–2025 on eHealth to promote the use of information and communication technology for shortening health disparity. In Taiwan, it is well documented the health disparity in physical mobility of the elderly between urban and suburban areas. The impairment of physical mobility is related to the development of physical frailty. Rehabilitation exercises may slow down the progression of frailty and even reverse the frailty to robust condition. The purpose of this study was to explore if the intervention of Smart Rehab System to the elderly in both suburban and urban areas can reverse the frailty levels of the elderly. As our data indicated, the ratio of frail or prefrail cases was higher in suburban areas. After an 8-week intervention, about 50% of the prefrail or frail cases in the urban area showed their improvement but no prefrail or frail cases in the suburban area showed their improvement. When interviewing the elderly about their acceptance of using Smart Rehab System, the elderly in urban areas had longer schooling time and showed their motivation in learning the system and willingness of self-practice but those in suburban did not. It becomes clear that in addition to introducing eHealth to the suburban areas, enhancement of digital health literacy needs to be implemented to facilitate regional development in suburban areas.

### **Keywords:**

eHealth, health disparity, physical frailty, rehabilitation, regional development.