

Application of Telehealth System to Improve Home Care Services

Yen-Ni Chang¹, Jessy Yu¹, Chin-Li Lin², Hsiao-Hui Yang²

¹ForaCare Suisse AG, Switzerland

²Senior Citizen Welfare and Protection Association of Yunlin County, Yunlin, Taiwan

Under the Taiwan government policies, medical care is separated into two professional services: medical treatment and care service. Thus care facilities must advance their expertise and provide comprehensive services. A high quality servicing mechanism, by consolidating the system management, delivering real-time care, and improving the service techniques, has to be developed for home care services.

In this study, we applied a FORA TeleHealth system, composed a blood glucose and blood pressure 2-in-1 meter, a data transmission gateway, and a data analysis platform, to address this mechanism. Care supervisors monitored and analyzed uploaded vital signs on the platform conventionally; when vital sign limit alerts, they telephoned home users directly to give concerns and messaged caregivers to home visit immediately. These vital sign data also provided references for physicians to adjust medication.

After implementation of this real-time data monitoring system, the service system was improved: the duration of assessing care program decreased dramatically from 40 days to 5 days; the rate of continuing home services increased from 53% to 73%. For users with diabetes mellitus, the mean blood glucose decreased significantly from 211 mg/dL to 164 mg/dL in 3-month care services. For users with hypertension, the average blood pressure, from 142/76 mmHg to 135/75 mmHg, maintained within physicians' recommendations. And interestingly, this service system could help medicine adherence with increasing from 61% to 71% within 3-month care services.

From these excellent results of applying telehealth system, four advantages were concluded: users have real-time cares and better health; caregivers and supervisors can provide more convenient service solutions; physicians have another reliable reference for treatment adjustment; care facilities have enhanced service system and increased income. Telehealth system does provide brilliant solutions for care system in service and quality improvement.

Corresponding Author: Yen-Ni Chang

Email: yenni@foracare.com

TEL: 02-66258188 ext 1182