

# Assessing factors impacting the quality of a hospital-based telecare and telehealth service

## Feng- Yueh Yang<sup>1\*</sup>, Por Lai<sup>2</sup>, Yen-Hung Kuo<sup>3</sup>, Feng- Nien Yang<sup>4</sup>

<sup>1</sup> Department of Telecare and Telehealth Center, Kaohsiung Medical University Hospital, Kaohsiung Medical University, Kaohsiung, Taiwan

<sup>2</sup> Crux Health Technologies Co., Ltd., Taiwan

<sup>3</sup> Department of Hospital and Health Care Administration Chia-Nan University of Pharmacy and Science, Taiwan <sup>4</sup> Kaohsiung Chang Gung Memorial Hospital, Taiwan

## Introduction/background

Telehealth care is also a combination of medical, electronic medical equipment and services that can enjoy preventive health care and health care services in the community and family environment. This study aims to assess factors influencing the quality of telecare and telehealth service which has emerged as an important healthcare practice in the era of digital health and precision medicine.

## Conclusions

The quality of the telecare and telehealth service appears to be generally satisfied as indicated in this study. However, service quality should be monitored regularly, as it may vary with diseases conditions and user characteristics. Potential impacts of social economic determinants on expectation and perception of the services by the users should be further investigated.

### **Purpose/methods**

In this study, we conducted a cross-sectional survey and used the Gaps Model of Service Quality for performing the Importance-Performance Analysis. During the period between Nov 2014 and Feb 2015, a total of 150 users of the hospital-based telecare and telehealth service, who had suffered from chronic diseases, were enrolled. The major vital sign monitored in this study was blood pressure. Table 1 - Telehealth care quality of service (Emphasis) (N=150)

Orientations	Average	SD	Rank
Assurance	4.933	0.642	1
Reliability	4.870	0.591	2
Responsiveness	4.693	0.646	3
Empathy	4.653	0.738	4
Tangibles	4.320	0.682	5

Table 2 - Telehealth care quality of service (Satisfaction) (N=150)

Orientations	Average	SD	Rank
Assurance	4.984	0.609	1
Tangibles	4.837	0.494	2
Reliability	4.792	0.568	3

#### Results

With respect to the Degree of Importance relating to the service quality, Assurance, showing a Mean value of 4.933, is the most concerned feature of the service, while Tangibles with a Mean value of 4.320 is the least concerned. For the Degree of Satisfaction, Assurance shows the highest Mean value of 4.984, compared to the least value of 4.693 obtained for Responsiveness. The Importance-Performance Analysis indicates that Assurance should be maintained continuously, and that Reliability and Responsiveness require further enhancement. The IPA also suggests that Tangibles and Empathy seem to be less critical.

Empathy	4.727	0.648	4
Responsiveness	4.693	0.646	5

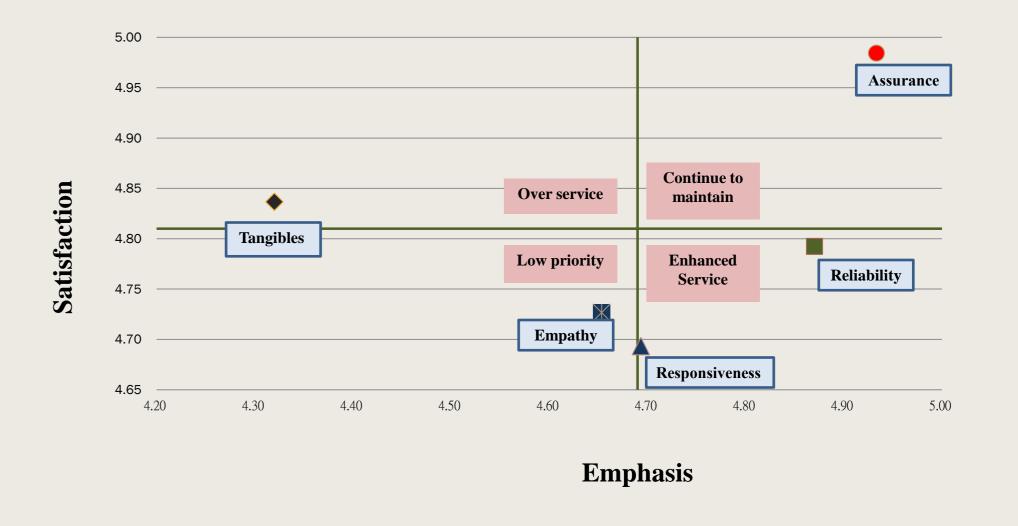


Figure 1- A Study of Adopting IPA To Telehealth Care of Service Quality Importance (Quadrant Comparison)



