

# Patients' Satisfaction of Service Insurance Healthcare Quality in Commune Health Centres of 2 Vietnamese Extremely Poor Districts

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**Abstract:** ***Purpose:** The study was to confirm the satisfaction level of patients about the quality of insurance healthcare services in grassroots level healthcare system. **Design/methodology/approach:** A cross-sectional analytical descriptive study was used to evaluate the satisfaction with the quality of medical examination and treatment at commune health centers (CHCs) and related factors. **Findings:** Cronbach's alpha for five service-quality dimensions (tangibles, reliability, responsiveness, assurance and empathy) were high and the SERVQUAL instrument was proved to be reliable, valid and appropriate. The results showed that the presence of doctor, affiliation to insurance agency, information technology, facilities and equipment of the CHCs were statistically significant in influencing patients' satisfaction, and all the null hypotheses were rejected. **Originality/value/implications:** The study offers some insights into, and guidance for insurance healthcare services in Vietnam in general and in mountainous, remote areas in particular.*

**Keywords:** Patient's Satisfaction; Healthcare Insurance; Public Health; Vietnam.

## 1. Introduction

The Law of Health Insurance came into effect in Vietnam from July 1<sup>st</sup> 2009 and identified 25 target groups to be involved in health insurance. Vietnam health care system comprises by four administrative levels of health establishments: central level, provincial level, district level and commune level. At present, public health care sector is widely covered from central to grassroots levels. Commune health centers provide a range of basis services, such as: mother and child health care, family planning, treatment for acute respiratory infections, immunization and treatment of common ailments. Although mountainous and remote areas are allowed more CHCs, some areas still lack of health care service, not only because of their difficulties in geographic issues, but also because of their lack of attractiveness for health workers. Health management information system, a powerful tool for managing, organizing and planning of the health care system in multiple level, especially for grassroots levels, is necessary for the development of health care system. Therefore, we aim to evaluate patients' satisfaction in CHCs of 2 poor, mountainous and remote districts of Vietnam: Mai Chau district and Tan Lac district. The result of the study will be significant to all stakeholders; it can be used by health insurance providers to evaluate the service quality. Also, the study will be useful to researchers who will in future undertake similar study as it will serve as a source of reference.

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Zeithaml et al. (1990) asserted that Servqual is a reliable instrument for determining service quality and satisfaction of customers and have been applied in different studies in different service industries. Therefore, to assess patient's satisfaction, we used Servqual model.

## 2. Methodology

**Study population:** A cross-sectional survey was conducted in 47 CHCs of Mai Chau and Tan Lac district, Hoa binh province, Vietnam. Mai Chau and Tan Lac were chosen because they are mountainous and very poor areas (According to Decision No. 582 / QD-TTg dated 28/4/2017 of the Vietnamese Prime Minister approving the list of extremely poor villages, communes in Region III, Region II, Region I of ethnic minority region in the period from 2016 to 2020).

The sample size is rounded up to 470 households. There were 47 communes so that in each commune 10 households were surveyed. In each household, one person who had health insurance card and had used medical services at commune health centers from March 2017 to March 2018 were chosen. We excluded people under 18 year-old people and people who were not willing to join the survey. Actually the sample consisted of 471 people. A random sampling method was applied

**Instrument:** Since 1997, healthcare analysts have been applying the SERVQUAL model to measure patient satisfaction and loyalty. SERVQUAL help healthcare service providers to identify the gap between service delivery and patient expectations (Al-Borie and Sheikh Damanhour, 2013; Zarei et al., 2015. According to Parasuraman et al., (1988), service quality represent perceived quality, which influences customer judgement/decision about an entity's overall excellence. The authors also mentioned that organisational service quality consistently meet customer/consumers extenal and internal needs, wants and expectations to fulfil personal desires.

Quantitative data were collected by interviewing the questionnaire design for villagers. Based on the Servqual model of Parasuraman (Parasuraman A et al., 1988), a list of 5 dimensions with 22 items was administered to measured villagers' satisfaction for insurance healthcare. The 22 items making up the 5 dimensions were: Tangibles (4 items); Reliability (5 items); Assurance (4 items); Responsiveness (4 items); Empathy (5 items); We used a five-point Likert scale. These statements measure the gaps between service quality expectations and realizations. The scales reliability was tested using Cronbach's Alpha (Table 1). The questionnaire also included questions regarding respondents' demographic, characteristics.

**Table 1:** Reliability dimensions – Cronbach's alpha

Variants	Statements	Alpha
Tangibles	4	0.79
Reliability	5	0.81
Assurance	4	0.75
Responsiveness	4	0.80
Empathy	5	0.80
Total	22	0.87

**Data collection and analysis**

Research design: A cross-sectional analytical descriptive study was used to avaluate the satisfaction with the quality of medical examination and treatment at commune health centers and related factors.

The gap score = (Maximum – Minimum)/n = (5-1)/5 = 0,8

The meaning of the average score of patients and health workers' satisfaction:

- 1.00 – 1.80: Very dissatisfied
- 1.81 – 2.60: Dissatisfied
- 2.61 – 3.40: Normal
- 3.41 – 4.20: Satisfied
- 4.21 – 5.00: Very satisfied

Therefore, the average score  $\geq 3.41$  is considered satisfaction.

The each attribute's satisfaction score = Overall score point/22 items

The average score of each dimension =  $\frac{\sum_{i=1}^5 d_i \cdot n_i}{n}$  (n is the number of attributes)

The average score of m questionnaires =  $\frac{\sum_{i=1}^m DTB_i}{m}$  (m is the number of questionnaires)

The percentage of the average score =  $\frac{ASQ}{5 (Max score)} \times 100$

The data were analyzed using SPSS (version 16.0) for descriptive statistics.

**3. Results and discussion**

**Demographic profile of respondents and Service quality of CHCs**

Demographic characteristics such as age, gender and educational level are very vital in determining and assessing respondents' satisfaction and perceived service quality in healthcare delivery. It is important to be able to determine how they influence satisfaction of respondents. Table 2 shows detailed information on demographic data and background characteristics of respondents.

The patients' age as depicted in table 2 indicated that the age range varied from 18 to 30 (10%) and above 30 years (90%). 45.0 per cent of patients were males whilst the remaining 55.0 per cent were females. In total, 66.8 per cent of the patients had some form of formal education ranging from secondary to tertiary while about 33.2 per cent did not have formal education. However, in group of patients, the satisfaction levels had no statistically significant differences among demographic factors groups.

**Table 2:** Demographic Profile of Patients

Description	Frequency	Percentage
<b>Gender</b>		
Male	212	45.0
Female	259	55.0
<b>Age Group</b>		
18-30 years	47	10.0
Above 30 years	424	90.0
<b>Ethnic</b>		
Mường	269	57.1
Tai	143	30.4
Kinh	36	7.6
Hmong	20	4.2
Other	3	0.6
<b>Educational level</b>		
Illiteracy	13	2.8
Primary	143	30.4
Secondary	165	35.0
Post Secondary	100	21.2
Tertiary	50	10.6

**Patients' satisfaction**

We analyzed five dimensions: (i) tangibles; (ii) reliability; (iii) assurance; (iv) responsiveness; (v) empathy. The results indicated that overall satisfaction of patients concerning the insurance service quality of the CHCs was good. Overall mean score of patients' satisfaction was 3.73 (SD = 0.53) and 74.6% patients satisfied with healthcare quality.

**Table 3:** Mean score and percentage of satisfaction for each quality dimension

Quality dimensions	Mean score	SD	Percentage of satisfaction
Tangibles	3.42	0.75	68.4
Reliability	3.80	0.61	76.0
Assurance	3.85	0.60	77.0
Responsiveness	3.82	0.62	76.4
Empathy	3.76	0.62	75.2
Total	3.73	0.53	74.6

**Table 4:** Mean score and percentage of satisfaction for each statement

	Statements	Mean score	SD	Percentage of satisfaction
1	Tangibles: CHC had up-to-date equipment	3.01	0.97	60.2
2	CHC was visually appealing	3.39	1.05	67.8
3	Health workers were well dressed and appeared neat	3.75	0.89	75.0
4	The physical facilities of CHC were in keeping with the type of healthcare insurance system	3.53	0.92	70.6
5	Reliability: When CHC staff had promised to do something by a certain time, they did so	3.80	0.78	76.0
6	CHC usually makes villagers feel reassured	3.78	0.86	75.6
7	Villagers believe in CHC	3.77	0.86	75.4
8	Health workers of CHC were committed to providing services at specified times	3.74	0.83	74.8
9	CHC staff kept the records accurately	3.91	0.67	78.2
10	Assurance:CHC staff told patients exactly when services would be performed	3.77	0.77	75.4
11	CHC staff responded immediately to patient inquiries and complaints	3.85	0.78	77.0
12	CHC staff usually were willing to help patients	3.95	0.84	79.0
13	CHC staff were busy to respond promptly to all patient needs regardless of the degree of concern (-)*	3.85	0.80	77.0
14	Responsiveness: Patients usually trust CHC staffs	3.85	0.79	77.0
15	Patients felt safe in their transactions with CHC staffs	3.80	0.78	76.0
16	CHC staff were polite	3.83	0.84	76.6
17	Health workers got adequate support from CHC to do their jobs well	3.81	0.75	76.2
18	Empathy: CHC gave the patient individual attention	3.80	0.81	76.0
19	Health workers gave the patient personal attention	3.88	0.82	77.6
20	Health workers understood patients' needs	3.57	0.85	71.4
21	CHC gave patients the best benefits	3.79	0.82	75.8
22	CHC operated hours convenient to all patients	3.82	0.79	76.4

\*Rating on these statements were reverse-scored prior to data analysis

The best dimension of the insurance service quality of the CHCs was the assurance. This dimension included medical qualification, employee cooperation with patients. The worst dimension was tangibles. There was significant difference ( $p < 0.05$ ) in the presence of doctor, affiliation to local government and insurance agency, information technology, facilities and equipment of the CHCs.

**Table 5:** Relationship between some factors of the health insurance service quality of CHCs and patients' satisfaction

Variants	Coefficient	SD	p	OR	95% CI
The presence of doctor	1.314	0.366	0.000	3.722	1.817– 7.662
Information technology	0.936	0.290	0.001	2.551	1.444– 4.505
Facilities and equipment	2.019	0.434	0.000	7.529	3.213– 17.640
Affiliation to insurance agency	2.163	0.405	0.000	8.695	3.931– 19.230

**4. Recommendations**

The quality of the health insurance service of CHCs in 2 Vietnamese mountainous and very poor communes is fine in general. However, we recommend a plan and policy for

CHCs to improve not only facilities and equipment but also information technology.

**5. Limitations**

The study was constrained by geographical feasibility, time and other resources. The survey was only conducted in 2 mountainous and very poor communes, so the study result wasn't ideal for all very poor areas in particular and Vietnam in general.

**6. Conclusions**

This study identifies some important dimensions of insurance healthcare service quality in Vietnamese CHCs. It helps for future researchers some points to directions and questions. It also provides some guidance to insurance healthcare quality assurance policy and practice.

**References**

[1] Al-Borie, H. M. and Sheikh Damanhour, A. M. (2013), "Patients' satisfaction of service quality in Saudi hospitals: a SERVQUAL analysis", *International*

- Journal of Health Care Quality Assurance*, Vol. 26 No.1, pp. 20-30.
- [2] Fathi, V.K., Pardakhtchi, M.H., Abolghasemi, M. and Mohammad Hadi, F. (2011), "Quality assurance intraining based on the importance/performance analysis model", *Iranian Quarterly of EducationStrategies*, Vol. 4 No. 2, pp. 57-65.
- [3] Fitzpatrick, R. (1991), "Surveys of patient satisfaction: I – important general considerations", *British Medical Journal*, Vol. 302 No. 6781, pp. 887-889.
- [4] Hussein M. Al-Borie, Amal M. Sheikh Damanhour, (2013) "Patients' satisfaction of service quality in Saudi hospitals: a SERVQUAL analysis", *International Journal of Health Care Quality Assurance*, Vol. 26 Issue: 1,pp.20-30.
- [5] Peprah AA, Atarah, BA (2014) "Assessing Patient's Satisfaction using SERVQUAL Model: A Case of Sunyani Regional Hospital, Ghana", *International Journal of Business and Social Research*, Vol. 4, n. 2, pp. 133-143.
- [6] PRIME MINISTER of VIETNAM. 2017. Decision No 582/QD-TTg on approving the list of extremely poor villages, communes in Region III, Region II, Region I of ethnic minority region in the period from 2016 to 2020.
- [7] Parasuraman, A., Zeithaml, V. A. and Berry, L. L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 49, pp. 41–50.
- [8] Selim Ahmed, Kazi Md. Tarique, Ishtiaque Arif, (2017) "Service quality, patient satisfaction and loyalty in the Bangladesh healthcare sector", *International Journal of Health Care Quality Assurance*, Vol. 30 Issue: 5, doi: 10.1108.
- [9] Tran BX, Nguyen LH, Nong VM, Nguyen CT, (2016) "Health status and health service utilization in remote and mountainous areas in Vietnam", *Health Qual Life Outcomes*, Vol 85 Issue: 14, doi:10.1186/s12955-016-0485-8.
- [10] Zarei, A., Arab, M., Froushani, A. R., Rashidian, A. and Tabatabaei, S. M. G. (2012), "Service quality of private hospitals: The Iranian Patients' perspective", *BMC Health Services Research*, Vol. 12 No. 1, pp. 1-7.
- [11] Zarei, E., Daneshkohan, A., Pouragha, B., Marzban, S. and Arab, M. (2015), "An Empirical study of the Impact of Service Quality on patient Satisfaction in private Hospitals, Iran", *Global journal of health science*, Vol. 7 No. 1, pp. 1-9.
- [12] Zeithaml, V. A., Parasuraman, A. And Berry, L. L. (1990), "Delivering Quality service: Balancing Customer perceptions and Expectations", *Macmillan*, London.