

## Chapter 6

# CONCLUSIONS AND RECOMMENDATIONS

### 6.1 Conclusions

The quality of care for insured patients and non-insured patients at Viet-Tiep hospital was compared on basis of process and outcome approaches. The tracer method was applied in this study. For IPD, appendicitis and pneumonia were chosen; for OPD gastric ulcer and URI were selected. The quality of care was assessed from different perspectives: the health care provider, the funder - health insurance agency, and the patient. The process of care was evaluated by analyzing medical records for inpatient care and analyzing prescription for outpatient care. The explicit method was applied in evaluating the process of care. The national treatment guidelines were used as the standard treatment. The level of compliance to the standard treatment was compared between the insured and the non-insured. The patient satisfaction was considered as an important aspect of outcome assesement of health care. A survey on patient satisfaction was designed to compare the level of satisfaction between the insured and the non-insured.

The analysis of inpatient care was implemented with 165 medical records, of which 90 cases were appendicitis and 75 cases were pneumonia. There was no significant difference on the level of compliance to the national treatment guidelines between the insured and the noninsured. The doctors conformed to the standard guidelines quite well for both tracers, especially for the criteria on physical examination and diagnosis. The level of conforming to the standard guidelines in terms of drug prescribing was not very good and varied largely among patients. The booming of the pharmaceutical market in recent years may be the main reason of that situation. On the other hand, LOS of the insured was significantly longer than for the non-insured. The result of the multiple regression of LOS confirmed the effect of insurance enrollment on longer LOS. Besides the insurance enrollment age, severe case, moderate case were also positively related with LOS. The higher level of compliance to the standard treatment was associated with the reduction of LOS, although this relationship was not statistically significant. The medical cost for the insured was significantly higher than for the non-

insured. Meanwhile, the average cost per bed day was not different between them. It means that the extension of LOS in hospital was the main reason of more costly treatment for the insured patients.

The payment method of combination between fee-for-service and flat rate per bed day led to the above results. The doctor tended to prolong numbers of days in hospital for the insured aiming at increasing their benefit. The phenomenon of provider-induced demand happened in this context. In other words, the effect of third party payment resulted in cost escalation but did not influence quality of process of in patient care.

250 prescriptions, including 150 cases of URI and 100 cases of gastric ulcer, were analyzed to compare the prescribing practice - a main element of quality of care for outpatients between the insured and the non-insured. The assessment was based on the general indicators of prescribing practice recommended by WHO (1993) and the national treatment guidelines approved by MOH (1994). The results were consistent for both tracers. The average number of drugs prescribed and average cost per encounter for the insured were significantly lower than for the non-insured. In contrast, the percentage of drugs prescribed by generic name and from the essential drug list for the insured was higher than for the non-insured. All prescriptions contained at least one antibiotic which indicated an overuse of antibiotics or both insured and non-insured patients. The percentage of encounters with an injection prescribed for the insured was lower than for the non-insured in URI treatment. This figure showed an irrational prescribing of injectable drugs since the injection was not indicated commonly in the standard guidelines. The problem of irrational drug use, especially the overuse of antibiotics, is very common in developing countries. This situation not only negatively influences on the health of people but also causes the inefficiency in health care services. The level of compliance to the standard guidelines for URI and gastric ulcer was not different between the insured and the non-insured patients.

The analysis of general indicators showed that the prescribing practice of doctors for the insured was better than the non-insured since the number of items prescribed and average cost per encounter were lower while the proportion of drugs prescribed by generic name and from the essential drug list were higher. The doctors seemed to keep down the cost of the insured by limiting

the number of drugs, prescribing more general and essential drugs due to the ceiling payment of the health insurance agency. Meanwhile they still conformed well with the standard treatment. Therefore, it can be said that, from point of view of the health care provider and the health insurance agency, the treatment for insured outpatients was assured about quality and more cost-effective than non-insured patients.

The analysis of patient satisfaction was based on hypothetical data. The objective of this section was to demonstrate methods of study. At OPD, the insured patients were less satisfied overall than the non-insured. The logistic regression determined that the insured patient, the older patient, and the longer waiting time caused less satisfaction. Higher medical cost was associated with greater satisfaction, although its coefficient was not statistically significant. In contrast, at IPD the insured patients were more satisfied with care provided than non-insured patients. The significantly positive association of insurance enrollment with probability of patient satisfaction provided by logistic regression results made this judgment stronger. Medical costs were also positively related with patient satisfaction, however there was no conclusive evidence for this states.

The perception of patients of quality of care can be determined by a complex of factors such as age, sex, education, income, payment status etc. In this study the focus was the influence of payment status on patient satisfaction. In fact, the patient usually lacks information and knowledge on treatment process while they are very sensitive to the interpersonnal activities of health care providers and of course, the cost of the bill. Due to the affect of different payment methods of the health insurance agency applied to outpatient care and inpatient care on medical cost, the level of satisfaction of patients varied from OPD to IPD. The insured outpatients may be less satisfied when they receive less drugs than the non-insured and the cost of their encounter was cheaper, while the insured inpatient was likely happier when the doctor prescribed more drugs, ordered more laboratory tests. However, these results were assumptions only. Each dimension of measurement of patient satisfaction like treatment and care, courtesy of health providers, information and communication activities, medical outcomes etc. designed in questionnaires should be analyzed in detail with actual data, then compared between the insured and the non-

insured.

In conclusion, from the professional perspective the quality of care was not different between the insured and the non-insured patients at both OPD and IPD. Nevertheless it can be different from patient perspective. For the health insurance agency, it is impossible to separate the quality of care from the efficiency because of constrained budgets. Accordingly, they were likely to be satisfied with health care provided at OPD but not at IPD due to question of inefficiency there.

## **6.2 Recommendations**

The health sector reform process has been implemented in Vietnam since the early 90's. Health insurance is a major component of that process. The evaluation of the effect of health reforms on health care delivery is a crucial issue. The assessment of quality of care under health insurance is, therefore, very important, not only for the health insurance agency and the insured patient but also for the health policy makers.

At present, quality of care issues do not receive much attention in Vietnam. A system of quality assurance of health care delivery should be established in the whole country. First of all, the standard of good quality of care must be set out in order to facilitate the assessment of the quality of care in health delivery system. This study found that the national treatment guidelines could be the milestones for standardizing of quality of care. Therefore, it should be revised and updated frequently to become better as well as more adaptable in practice.

The results on drug prescribing practice revealed an extensive overuse of antibiotics in Viet-Tiep hospital. In fact, the overuse of antibiotics is a very critical problem in Vietnam. A rational use of antibiotics should be one of the first concerns in the national drug policy.

An increasing trend of medical costs for the insured patients at inpatient care is the major concern for the health insurance agency. A list of drugs used under the health insurance scheme should be issued with approval of MOH. This drug list should be aimed at

limitation of drug overuse, and needs to meet the requirements of good treatment. The contribution of the health professionals from various fields is necessary. A mechanism of co-payment may be used for certain cases such as severe disease, costly treatment, long treatment etc.

At present, the choice of health facility for the insured patient is greatly limited by the health insurance agency. The perception of patient on quality of care may be improved if they have more choices. The health insurance agency, before choosing the health care provider for the insured patients should consult their customers with providing them adequate information. In addition, knowledge of the insured patients about health insurance is limited also. For many people, health insurance is still a new definition. The health insurance agency should improve the education and information to the insured people.

On the other hand, health care delivery in Vietnam for the time being is mostly public, except the contribution of small private clinics. Thus, there is not significant competition between providers. Competition is known as a useful mechanism to improve quality as well as effectiveness of care. Therefore, the encouragement of expanding health care delivery to the private sector may result in better quality of care overall. However, from experience of many countries the question of control of quality of care of private hospital as well as private clinics is not easy.

### **6.3 Limitation of the study**

Due to many reasons, this study cannot avoid from certain limitations. First, the lack of data meant the researcher could not draw complete conclusions for all aspects designed in the methodology chapter. The data collection was very limited because of time and financial constraints.

Second, the process of quality of care was assessed by using the explicit method only, while it is better if the implicit method could be used. The standard guidelines are convenient to use but sometimes they are not adaptable. Therefore, the implicit method by using the panel of experts to review each case, should be done in further studies.

Third, the measurement of outcome of care was limited to the investigation patient satisfaction only. The information about outcomes of the care process such as time from discharge to return to work, readmission after 30 days etc. should be analyzed. The index of QALYs (Quality adjusted life years) can be used as a final and complex measurement of outcomes of care on patient health status.