CHAPTER VI

CONCLUSION

This study focuses on effect of payment incentives of different health insurance schemes on patterns of drug use and care process that could reflect differences in quality of care provided to patients covered by different health insurance schemes. Diabetic care for outpatients with age range between 41 and 60 were studied. It was found that effects of payment incentives existed and imparted directly to health care providers and indirectly to prescribers. The major payment mechanisms in the study are fee-for-service and capitation.

The implementation of the 30-Baht Policy for every disease has been the momentous reform of health care systems in Thailand since 2001, currently covering about three fourth of Thai citizens. Payment methods of this health insurance scheme are capitation for outpatients and case payment based on DRGs for inpatients. Consequences of this policy implementation affect other health insurance scheme in public hospitals as well.

Findings of the study illustrate different responses of hospitals to different payment incentives. Some hospitals, especially with financial problems, adopted a cost containment policy on drug use for the capitation patients whereas drug use for the fee-for-service patients had no restriction. Examples of the strategies to control cost were to prescribe more inexpensive ED drugs for the capitation patients, a generic substitution, or a restriction on period of visit interval. In contrast, some hospitals implement one hospital drug formulary list for all patients regardless of health insurance schemes.

Regarding responses of physicians, they perceived that burdens of patient care increased after the 30-Baht Policy implementation and resulted in negative consequences to quality of care in some hospitals. In addition, they also thought that budgets allocated for the 30-Baht patients were insufficient. Accordingly, they attempted to prescribe more inexpensive ED drugs to the capitation 30-Baht patients regardless of hospital policies. Capitation payment seemed to dedicate effects mainly on cost containment that resulted in limited drug use. On the contrary, fee-for-service payment encouraged effects on expanding opportunities of patients to access new high cost drugs. Concerns of the physicians were not entirely related to the hospital policies on drug use.

When patterns of drug use were carefully scrutinized in order to identify actual effects of health insurance payment mechanisms on drug use, the patterns of expensive drug use for the fee-for-service patients and inexpensive drug use for the capitation patients were discovered. These findings are consistent with the hospital management and policy and perception and concerns of physicians on drug use. Accordingly, the effects of payment incentives on drug use were confirmed.

Concerning the quasi-experimental, interrupted time series design with segmented regression analysis using to understand patterns of drug use in this study,

dynamics of change in patterns of drug use over time before and after the 30-Baht Policy implementation were also depicted. In some hospitals, costs of drug use for the capitation patients were shifted to the fee-for-service patients. In some hospital, the average charge of drugs prescribed per visit for the fee-for-service patients was dramatically increased after the policy implementation whereas the average charge for the capitation patients was tremendously decreased. This apparent finding after the 30-Baht Policy implementation confirmed some anecdotal evidence that fee-for-service CSMBS/SE subsidized costs of drug use to capitation schemes like for the 30-Baht patients. Normally, these interactions among schemes in terms of cost-shifting and cross-subsidization could not be detected by the traditional methods of cross-sectional or two points of time at before and after the policy intervention which could be concluded only the aggregate patterns of drug use, not the dynamics of them.

In addition, payment incentives of the capitation schemes were also limited accessibility of patients to new breakthrough drugs with high costs and single sources, in sharp contrast to the fee-for-service schemes which expanded more opportunity. Consequently, capitation patients were restricted to obtain benefit of new drugs whereas fee-for-service patients may obtain a surplus of drug use.

For diabetic care process of required laboratory tests and physical examinations, hospital responses and physician concerns were correspondingly with no restriction for every procedure for every patient. However, for some procedures that the hospital had no capacity to carry out and had to outsource to other laboratory facilities, a discrepancy in practice was found. Some hospitals required capitation patients to pay out-of-pocket while some hospitals afforded them without any extra payment. From statistical analysis of patterns of diabetic care process provided for patients, payment incentives of health insurance schemes had inconspicuous effects on the patterns, apart from only some tests in some hospitals. Moreover, a great deal of patients was not performed required laboratory tests and physical examinations according to the standard practice guidelines. Especially severe deficiencies of the procedure of routine microalbuminuria test and foot examination were determined.

According to effects of payment incentives on variation in patterns of drug use discovered, quality of care seemed to be threatened as a result. Capitation payment has a strong potential to increase efficient use of drugs with risk of under-treatment whereas fee-for-service payment may induce inefficient use of drugs with over-treatment.

A limitation of the study is that some time series analyses with segmented regression analysis had a constraint on fitting of the regression model with the problems of autocorrelation of the error term, non-linearity of the model, and seasonal effects. However, for models that did not violate the assumptions, this approach provides high explanatory power to determine effects of the schemes and the computation is not complicated. Furthermore, the plots of dependent variables over time can also elucidate basic dynamic changes. A remedy for the models with the indicated problems would be the applying of autoregressive integrating moving average (ARIMA) technique to carve unwanted errors from the model. Nonetheless, this advanced method is quite complicated and needs a facility of expensive commercial statistical package, for example, Minitab or SAS which are not widely available in Thailand.

For further studies, in-depth of outcome studies should be investigated in order to realize the depth of impacts of the effects, for example, rationale or efficiency of drug use in the different schemes. Additionally, in order to adjust the model for disease severity and complications that may cause variations in drug use, more clinical parameters of the disease such as co-morbidity and complications should be collected and calculated as a correcting factor.

Implications of the study are to provide feedback information about drug use for health insurance payer and health care provider to observe the effects that may risk to quality of care and/or inefficiency in health care resources use. It is a supportive tool for policymakers to develop interventions for rational use of drug and also to monitor impacts of the implemented interventions, continuously over time in order to improve quality of care provided to patients in every health insurance scheme.