



CHAPTER 8

SELECTION OF ELEMENTS AND ANALYSIS OF IMPLICATIONS FOR GUANGXI

As we emphasized at beginning, the purpose of the research is, firstly, to develop a method for selecting a health insurance scheme; secondly, to try to construct an appropriate scheme based upon the information we have. Now according to the selection result, the best health insurance scheme should be comprised of those optimum alternatives of each element, that is,

the most appropriate scheme = { E1(4), E2(4), E3(2) or
E3(3), E4(1) or E4(2),
E5(1), E6(4) or E6(2), E7(1)
or E7(2), E8(7) or E8(6), }

8.1 Analysis of results

Now the attempts are made to analyze the implications of the selected result i.e. the best insurance scheme, which consists of the optimum alternative of each element, with respect to Guangxi's current situation in health services, as well as in politics and economics.

8.1.1 Element 1: Sources of Insurance Contributions

In the element of sources of insurance contributions, the best alternative is a mixture of government subsidy, collective funds and individual payment. It means that in an insurance scheme the sources of insurance contributions should not come from just only a single party. Governments should make their contributions to improvement of peasants' health. If possible, collective funds had better be absorbed into the scheme, which makes insurance funds stronger in taking a high risk. Of course, individual payment should be the major source of contributions under the current circumstances of Guangxi. However, Guangxi is relatively a poor province, the governments, as well as collective economy, can not provide a great number of subsidies for health insurance programme. But, on the other hand, according to the previous experience in China, as well as in other countries in the world, it is necessary that governments have to subsidize health insurance if a health insurance scheme is expected to successfully operate, because it was said that government subsidy can be an inductive incentive for people for join insurance. The second appropriate alternative is the mixture of government and individual payment and next is the mixture of collective fund and individual payment. All the above suggest that in the sources of insurance contributions, the form of multi-parties is

better than a single party.

8.1.2 Element 2: Premium Standard Rate.

In the element of premium rate, the best alternative is collecting premium based on the probability of utilizing health services. This is reasonable since it reflects better health resource requirement. It is said that the method of collecting insurance premium based upon income and/or age are not considered to be suitable (Group of RHIR, 1989). Generally speaking, when there are not any experiences of health insurance or any data available about premium collection, an estimation of premium rate using the method of probability of utilizing health services is feasible (Cretin, 1989). The situation in Guangxi is similar, that is, there are not experiences of health insurance and data available. The selection reveals that the alternative of collecting premium based upon the probability of utilizing health services is the most appropriate. The next best is collecting based upon income. It may be a better way if the insurance principle of risk-sharing is considered. But the people may find it very difficult to accept.

8.1.3 Element 3 : Insurer's Ownership.

In the element of insurer's ownership, the result reveals that it is best that the insurance agent (company) which runs a health insurance scheme should be private one, even though the cooperative agents have a possibility to be selected. This result may be associated with several factors. One of the major factors, perhaps, is that in the case of China, usually, a state-owned company will probably have more problems in the aspects of management, efficiency, and so on, than a private company, when they run a specific project. Under circumstances of reforming economic system in China, people are more willing to accept the alternative that a health insurance scheme is operated by a private agent. However this result may not be accepted by the governments and concerned authorities. There are two causes, the first is that there are few private insurance companies in the market at present; the second is that for the sake of state-owned insurance company's interests, the government and concerned authorities will not allow private companies to run a health insurance scheme.

8.1.4 Element 4 : Insurance Type.

In the element of insurance type the result is that the alternative of compulsory scheme is better than the alternative of voluntary scheme, even though in the case of the combination of sets v_1 and z_1 the alternative of voluntary scheme has a possibility to be

chosen. It should be said that it is true in a large sense. As a socialist country, the governments have a responsibility to provide more and more public health services for their people. However, under the moment of present economic situation it is impossible and unrealistic to implement a compulsory scheme. On the contrary, a voluntary scheme may be more feasible in the real world and more acceptable for most of peasants. The reason is that since the governments and collective funds can not provide much money for an insurance scheme, the major sources of insurance contributions will come from the people who are insured. Therefore, the peasants should have freedom in choosing to participate in an insurance scheme under the given contracted benefit from the scheme and their ability to pay.

8.1.5 Element 5 : Insurer's Goal

With respect to the element of insurer's goal, the result reveals that a scheme for profit is the best alternative. As mentioned above, it is impossible and unrealistic for an insurance scheme to be implemented if it is not for profit. So, this result is reasonable. However, there must be some regulations to manage insurer's activities so as to prevent overcharge.

8.1.6 Element 6 : Population to be insured.

With respect to the element of population to be insured, the selection is between two alternatives: population in terms of age and population in terms of age and sex. Both of them are equally good. The alternative of population in terms of age is selected under the weight set combination of v_1 and z_1 (RRE = 1.25), and v_1 and z_1 (RRE = 1.27). The alternative of population in terms of age and sex is selected under the weight set combinations of v_1 and z_1 (RRE = 1.19), and v_1 and z_2 (RRE = 1.18). By comparison of their ranked relative efficiency, it seems that the alternative of population in terms of age should first be considered to introduce into a scheme, because it has a high RRE under sets of v_1 and z_1 .

8.1.7 Element 7 : Coverage (type) of services insured

In the element of the coverage of services insured the result is that there are two choices for a best alternative, i.e. E7(1) and E7(2), which present preventive services and curative services respectively. In this case, curative services should be selected into the scheme, because in China preventive services are usually not charged. Otherwise, the problem is that peasants could not afford to consume medical care when they got ill. So, the conclusion is that the coverage of services insured should put emphasis on curative services.

8.1.8 Element 8: Health care institution providing services

In this element, the best alternative is that the contracted health care institutions should include the three level health care providers: the village health clinic, the township health center and the county hospital. Still there is another possibility, that is the mixture of the village health clinic and township health center. Comparatively, the former choice is more suitable than the latter. In rural areas of China, the three level's health care institutions have completely different functions. In general, primary health care is major function carried out by village health clinics and township health centers. A county hospital is a general hospital undertaking various medical care activities. So, if the contracted hospitals do not include county hospitals, as a result, many serious cases will not be treated under insurance protection. That is what we do not wish to see. For this reason, in the scheme the contracted hospitals are the three levels of health care institutions: village health clinic, township health center and county hospital.

After the above analysis and adjustment, the most appropriate health insurance scheme for rural areas of Guangxi, P. R. China is comprised of following elements.

- Source of insurance contributions: A mixture of government subsidy, collective funds and individual payment.
- Method of collecting premium: Based upon the probability of utilizing health care services to estimate.
- Insurer's ownership: State-owned insurance company.
- Insurance type: Voluntary insurance scheme.
- Insurer's goal: An insurance scheme with a goal of making profits.
- Population to be insured: Population to be insured in terms of age.
- Coverage of services insured: Curative services.
- Health care institutes providing services: Three levels of health care institutes, i.e. Village health clinics, Township health center, and County hospital

8.2 Strengths and weaknesses of the process

As we emphasized, the research is a methodological study, in which attempts have been made to select a health insurance scheme for rural areas of Guangxi, P.R. China. The whole process includes these major procedures:

- 1) To make literature review and situation analysis.
- 2) To identify social and economic objectives and operational constraints when health insurance is implemented.
- 3) To identify insurance elements and their possible alternatives.
- 4) To make an assessment of the interactions between objectives and elements, and between constraints and elements, then to scale the extent to which objectives may be achieved and constraints may affect the achievement of objectives, i.e. to construct a MCA effect table for each element.
- 5) To rank alternatives of each element, based upon MCA results, and select the alternatives with the highest RRE, referred to CS and CC.
- 6) From these results to determine a set of elements which best contribute to a health insurance scheme to be carried out.

Of all the above, procedure 4 is the most important.

Of course, as a method to select a health insurance scheme, it must have its strengths as well as its weaknesses.

8.2.1 Strengths

- 1) First of all, since the research is a methodological study, it has provided a general approach to selection of a health insurance scheme, which can be used in similar research elsewhere.
- 2) Selecting a health insurance scheme is based upon a systematic and comprehensive analysis in relation to social and economic objectives and operational constraints, i.e. the scheme is selected on the basis of consideration of its objectives and operational feasibility. So, such a scheme is implemented with very clear objectives and constraints in such a way that the results of implementation may be predictable.
- 3) The method i.e. MCA used in selecting a health insurance

scheme is quantitative, allowing numerical comparisons.

- 4) Relatively, this method to select a scheme is easy to conduct.

8.2.2 Weaknesses

- 1) Objectives, as well as constraints, can be identified, but still there is a difficulty for some objectives to be measured using some specific indicators.
- 2) The method of scaling the objectives as well as constraints in the research has many limitations, but it can be corrected in practice using more appropriate techniques and experimental trial.
- 3) The method of MCA usually relates objectives to claims on resources, but in the present research many constraints are not resource demands. This seems to be a weakness. However, in fact objectives are related not only to resource demands, but also many other factors and conditions, so MCA is still feasible to be used in this case where the relationships between objectives and these factors clearly exist.
- 4) There are insufficient arguments in the research to assign the weight sets of both objectives and constraints, i.e. there is a subjective element in the weighting process. In practice this can be improved by means of systematically and comprehensively prioritizing objectives as well as constraints.
- 5) Even after the weighting process, the final selection involves an additional subjective element related to realistic appraisal of social and political factors in the particular environment.

8.3 Evaluation of implications on using the procedures in Guangxi

One of the major purpose in the research is to develop an approach to selecting a health insurance scheme for rural areas of Guangxi. Now that the selecting procedures have been established, so it is necessary to make an evaluation of implications of these procedures if used in Guangxi.

8.3.1 Shortcomings in decision making in the aspect of health care in Guangxi

Actually, the procedures of selecting a health insurance scheme present a process of decision making. In order to evaluate the procedures produced by the research, it is necessary to point out some main problems in decision making in the field of health care in Guangxi.

- 1) Very often, there is a lack of sufficient information, particularly quantitative data, to support decision making when formulating important health policies and implementing health projects.
- 2) Decision making on many important health matters is usually not based upon a scientific analysis following some necessary procedures.
- 3) Decision making by personal subjective judgements based upon insufficient experience is a major way of making decisions.
- 4) Political factors often interfere with health decision making.
- 5) Decision makers seldom have opportunity pursue their own ideas when carrying out policies and instructions from the Ministry of Public Health.

8.3.2 Implications of the procedures used in Guangxi

Related to the above problems in decision making in Guangxi, if the procedures produced by the research are proved represent an effective method of decision making to select an insurance scheme, there are several implications of the procedures when used in Guangxi:

- 1) Such a method of decision making can provide an active example for improving the current situations of decision making in general in the health sector.
- 2) If Guangxi Province is going to implement health insurance, the procedures produced by the research will provide a quantitative approach to selection of an appropriate scheme.
- 3) If the procedures are accepted by decision makers, then implementation of health insurance may be considered on a reasonably objective basis.
- 4) The MCA method may be used in some similar decision making situations, not just in relation to selection of an insurance scheme.