Health Service from Catchment Area Perspective: An Analysis of System

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Abstract

Indonesia is one of the countries in the world which has a decentralized model of government. The decentralization in the form of regional autonomy aims to improve the public welfare through public services. The services, especially the health service depends much on the wide area and also the geographical condition of the regional. Catchment area covers the complexity of health service's problems, particularly of those found in Kabupaten Malang (Malang Regency). Thus, it is necessary to do an analysis of systems towards the health service from the catchment area perspectives to solve the present and future problems.

Keywords : decentralization, catchment area, health service

1.   Introduction

Decentralization is the process of delegating authority from central government to local government. The general form of how the authority is delegated is the decentralization and deconcentration (Aldefer, 1964, p.176). Rondinelli (1983, p.18) reveals the kind of broader decentralization: devolution (the formation and empowerment of local governments controlled by the central government); deconcentration (delegation of the administrative authority to lower levels of government); delegation (transfer of responsibility for specific functions to the organizations outside of the government); privatization (providing functions and responsibilities to the private sector and non government patners).

The type of decentralization is the implementation of the regional autonomy. Regional autonomy is widely given to the local government of regency and a city, where the character of the regency is more rural and the city shows urban character. Through decentralization, it is expected that the government could provide better services to improve the welfare of the community as is stated in Law No. 32 of 2004 on Regional Government. The scope of public services is very broad and it requires a significant role of the government to facilitate the people with the services, especially those which are related to the basic needs, that is health. The autonomy policy makes local governments have a major responsibility to provide maximum service to the community.

The regencies and cities are divided into districts, where each of them has the authority to hold services in its territory. The Community Health Center was built as the representative of the Health Department in the regency and the city. The problem is how the health services are offered to the community and whether the community have been supplied with sufficient services by the Community Health Centers and other health care facilities. Malang Regency has a very wide area so that it might be difficult for the local government to provide universal healthcare. In addition to that, it also has a very unique geographical condition; it is flanked by Malang and Batu City. Three districts in Malang Regency which are located quite far due to the expansion that happened years ago are Pujon, Ngantang and Kasembon. Their position in the border of Malang Regency makes them close to Batu, Malang, Kediri and Blitar. This somehow makes it difficult for people to obtain public services. The existence of Community Health Centers in the district can barely help. The ineffectiveness of the healthcare is caused by lack of facilities and health personnels, unreachable referral hospitals, and bad services. This then led a lot of people come to the regency/city nearby to access more creditable health services.

Therefore, the government needs to arrange an accurate pattern and focus on the society changes as well as the pattern of public services to be provided. To get this started, it is necessary to establish a clear delimitation area for each autonomous region. Smith (1985, p.8) describes several aspects that affect the arrangement of the area. There are some application of the principles that embody certain administrative and political norm in it. The aspects are related to the arrangement of the area border and the determination of the area as the optimal basis of public services. The arrangement of the area border is linked to the spatial pattern of social and economic life of the society, politics identity and the efficiency as well as the effectiveness of public services. It is supported by Meligrana (2004, p.1) who explains that the boundaries of local government must adjust to the economic, environmental, and social condition of the area, local needs and urbanization.

As a result, it is necessary to look at the health service from the catchment area perspective. The catchment area itself can be defined as an optimal area of public services' implementation, construction, resources withdrawals, and control from both the government and the community (Hoessein in Muluk, 2009, p. 108). Through the catchment perspective, the optimal services provided by the government can be seen clearly. Muluk (2009, p.108) outlines that the catchment area includes the coverage of the services that can be performed by public institutions as the service's implementers. Distance and complicated geographical conditions create unreachable public services. Skaburkis (2004, p.45), thus, explains that an optimal size of the viewable area is determined by the area's ability to provide public services.

2. Research Method

This study employed the soft systems methodology approach. Soft Systems Methodology (SSM) is one of the series of qualitative research methodology (Maani and Cavana, 2000, p. 21). The essence of the approach is that it compares the real world application to some possible models of the state. The comparison could give a better understanding of a situation / state of the problem (research) and some ideas for improvement (action) (Williams, 2005, p.2). It started with the process of understanding random problems existing and happening in the field and defining them in a system. The interpretation will help build a conceptual model using a systems thinking framework to explain the design of the desired public service system. Once the conceptual model is constructed, it will be compared to the existing problems and be tested through a debate with the stakeholders who have been determined to ascertain if there are any changes needed to make. This research was conducted in Pujon, Ngantang and Kasembon, Malang Regency from November 2013 - March 2014.

3. Findings

3.1 Structuring Problems of Health Service from Catchment Area Perspective

Structuring the problems is the first step of the soft system methodology process. It aims to deeply understand random problems in the field (real world) (Checkland, 1993, p.165). Structuring issues related to the catchment area of health service is in relation to the capacity of the health service provided by the Government in Malang Regency to the community in Pujon, Ngantang and Kasembon through the balanced scorecard analysis and affordability as well as government control over the health services. The formulation of such structuring are as follows: First, healthcare provided by the health center is still promotive and preventive only; Second, the process and mechanism of health services in the Community Health Centers are less friendly, responsive, fast and precise; Third, there is very little information given by the health posts in the district about how healthcare is provided by the local government to the community; Fourth, the health centers in the districts lack in health personnels and facilities; Fifth, health insurance has not been fully met; Sixth, people prefer to be referred to the nearest hospital either private hospitals or public hospitals; Seventh, referral problems are arising; Eighth, it takes much time and energy to reach the Regency to get the health services and extended coordination; Ninth, people are not well informed about health services; Tenth, there are some economic problems found in the society; Eleventh, there is a minimum control on health services in Pujon, Ngantang, and Kasembon from the government.

The problems formulated above can be viewed in the following richest possible picture to find the relevant solutions (Checkland, 1993, p. 165). Following is the picture of health services' plot from catchment area point of view:
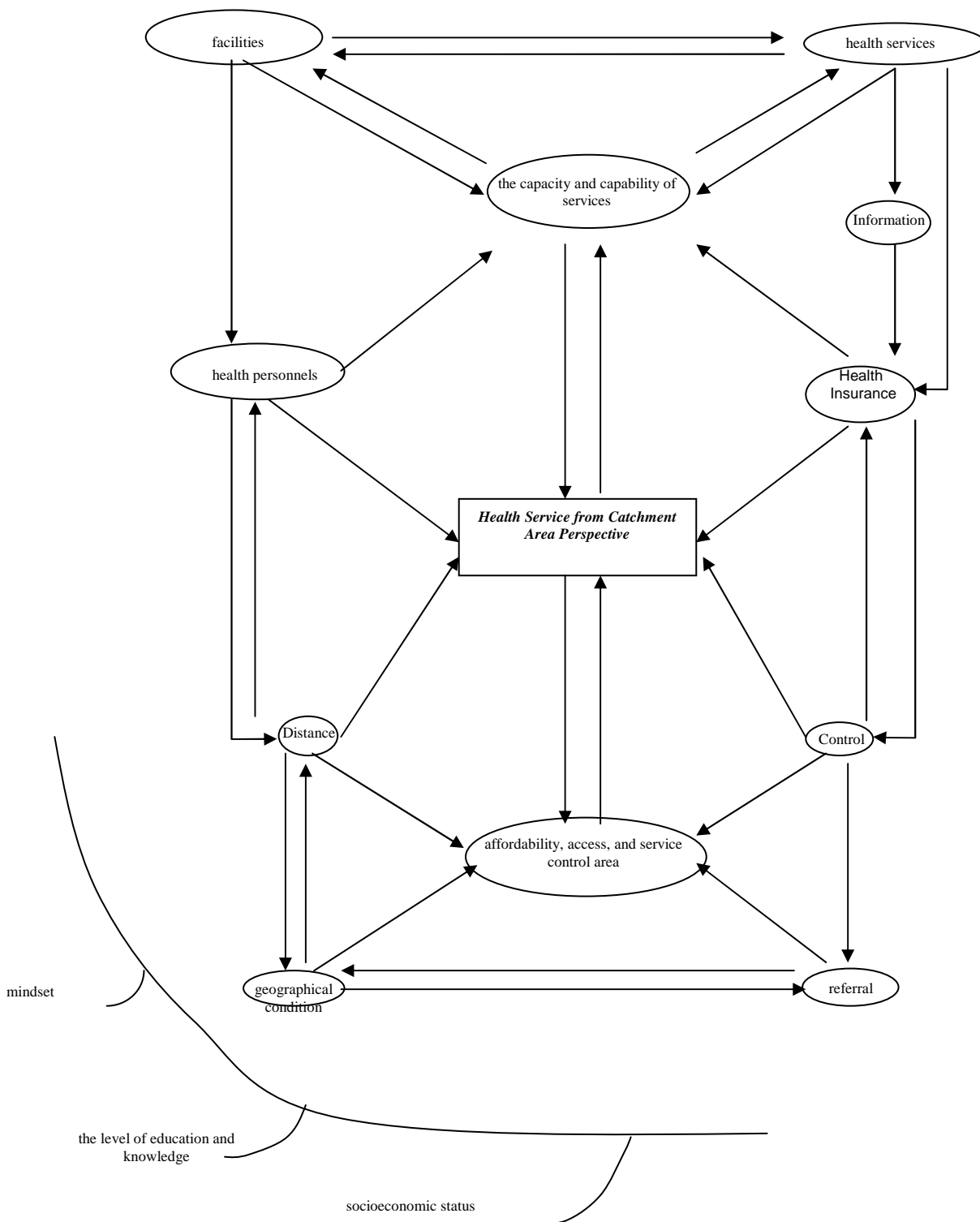
Figure 1. The Problems' Condition

3.2 Defining Problems and Constructing a Conceptual Model of Health Services from the Catchment Area Perspective

Defining problems begins with collecting opinions from the stakeholders involved in the situation. It can be described through a number of key elements abbreviated by CATWOE (Checkland, 1993, p.224-225). CATWOE stands for: Costumers (C), the parties that are benefited and harmed by the the process of transformation and problem solving; Actors (A), the main party which has a role to solve the problem in the

system and a responsible for the changes that will occur; Transformation (T), a process which is associated with the system's changes and solutions to the problems found in an undesirable condition to the expected one; World view / weltanschauung (W), a deep understanding from all parties about the problems that occur; Owners (O), the party that can stop the regulation of the system; Environmental Constraint (E), the insignificant environmental influences which are unavoidable. The definition of healthcare problems from the catchment area perspective can be seen in the following table:

Table 1. The Definition of Effectivity and Efficiency Problems of the Health Service from Catchment *Area* Perspective

No	Indicators of Problems System Definition	Results
1	*2*	*3*
1	Parties that are benefited and harmed by the problems-solving process (*costumers*)	Community and Local Government
2	Parties which are involved in the process (*actors*)	Health Department and Units of Work in Districts
3	Activities that transform the input into output (*transformation*)	Challenges and efforts to improve the health services
4	Stakeholders knowledge of the problems (*world view*)	The complexity of existing healthcare
5	Parties that can stop the system regulation (*owners*)	Local Government
6	Unavoidable environmental constraint	- Geographical condition of a region - People's mindset - Limited Knowledge of the Problems - Socioeconomic status of the Society

Sumber :Primary Data

Through the definition, a conceptual model of healthcare based on the the catchment area perspective can be constructed to seek for the effective and efficient solutions to the problems. Therefore, an assessment was done to gain and hold the desired health services from the government. The evaluation process has led to the identification of the availability of healthcare facilities which are essential to improve the effectiveness and efficiency of the services. In addition to that, the identification of the availability and quality of human resources was also done. The identification of the human resources or health personnels is inseparable with the identification of the healthcare facilities since both of them have a major role in achieving good health care and fix up the deficiencies.

Furthermore, it is necessary to evaluate the health insurance that is accepted by the society. Health insurance is one of the healthcare problems that often affects other problems of health services, such as referral issues. An assessment on healthcare facilities, personnels, and insurance can help reveal what is actually needed by the community. Unfortunately, policy has not been made based on the people's needs. In fact, the ongoing assessment is required to help the stakeholders or government improve the health services.

An effort to define and specify the desired healthcare policy can begin with upgrading the number and qualities of the facilities. This is done as an initial step to take after the identification process which shows the weaknesses of the health services related to the facilities. The human resources for health services have to be considered important as well. Improving the quality and quantity of health personnels is another thing to do after the identification process. These steps are purposively prepared to meet the society's needs of healthcare.

The next step that needs to be done is to improve the standard of service. It can be done by improving the quality of health services and health personnels as well as the organizational performance. Health procedures must be made simple and uncomplicated and hospitality has to be in the list of priority. By enhancing this standard, Community Health Centers in some districts are able to expand their capacity and capability in providing good service. As a result, there are many well-functioned Community Health Centers and D/C-type hospitals found in the area.

Another attempt to realize the expected health services is to develop cooperation between regions in the neighboring districts in the border region. The cooperation built is one the policy made to create the desired health services. The regions need to support one another in health services. In other words, people in one district are willing to help other people who come from different districts even different regencies or cities to get the health services due to their medical condition, geographical condition or remoteness of the area. Observing the problems is one of the processes in determining the policy. Other form of the policy changes is to extremely rearrange the remote areas. This might be more appropriate to do to overcome the health service problems and to generate services that are needed by the society.

One need-to-do thing is to monitor the efficiency, effectiveness and efficacy of health services. The monitoring process will help control the health service itself so that the policies can keep the health service apt to the needs of the community and also to the expectations of the government. The conceptual model described is the initial concept of the system thinking made by the authors. This concept was then refined through focus group discussions (FGD) which were conducted in order to obtain repairs and improvements. No more changes will be made in the next section. The conceptual model can be described as follows:
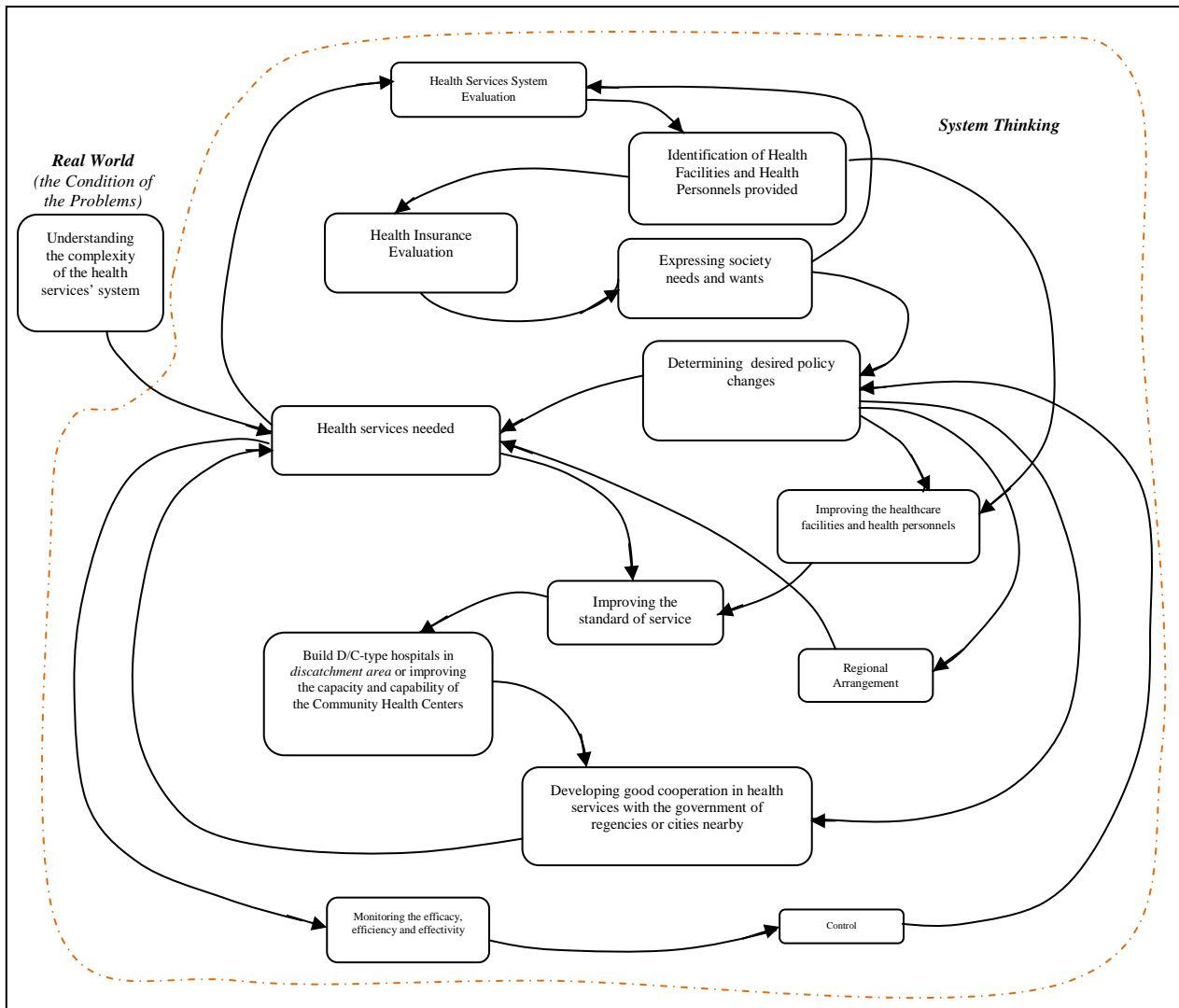

Figure 2. The Conceptual Model of Health Services from the Catchment Area Perspective

3.3 Model of Health Services System from Catchment Area Perspective

The conceptual model refinement process described in the previous section is done by comparing the concept to reality in the field and conducting a focus group discussion with stakeholders.They are the secretary and staff in health services of Health Department in Malang Regency, Chief of Community Health Center at the locus of the research and village heads as the representatives from three different districts. From the comparison, there are some changes made to the previous conceptual model: the addition and subtraction of the indicators of health service problems. One of which is to add a *BLUD* provision to the community health centers in the villages so that they can manage their own finances based on their needs and healthcare access through policies regarding health insurance and service providers, increased monitoring and control and co-ordination between Health Department with BPJS which has not been exposed maximally. C/D-type Hospitals that were proposed in the previous conceptual model was removed and replaced by the satellite hospitals which have the same function but more reachable. The system model can be described as follows:
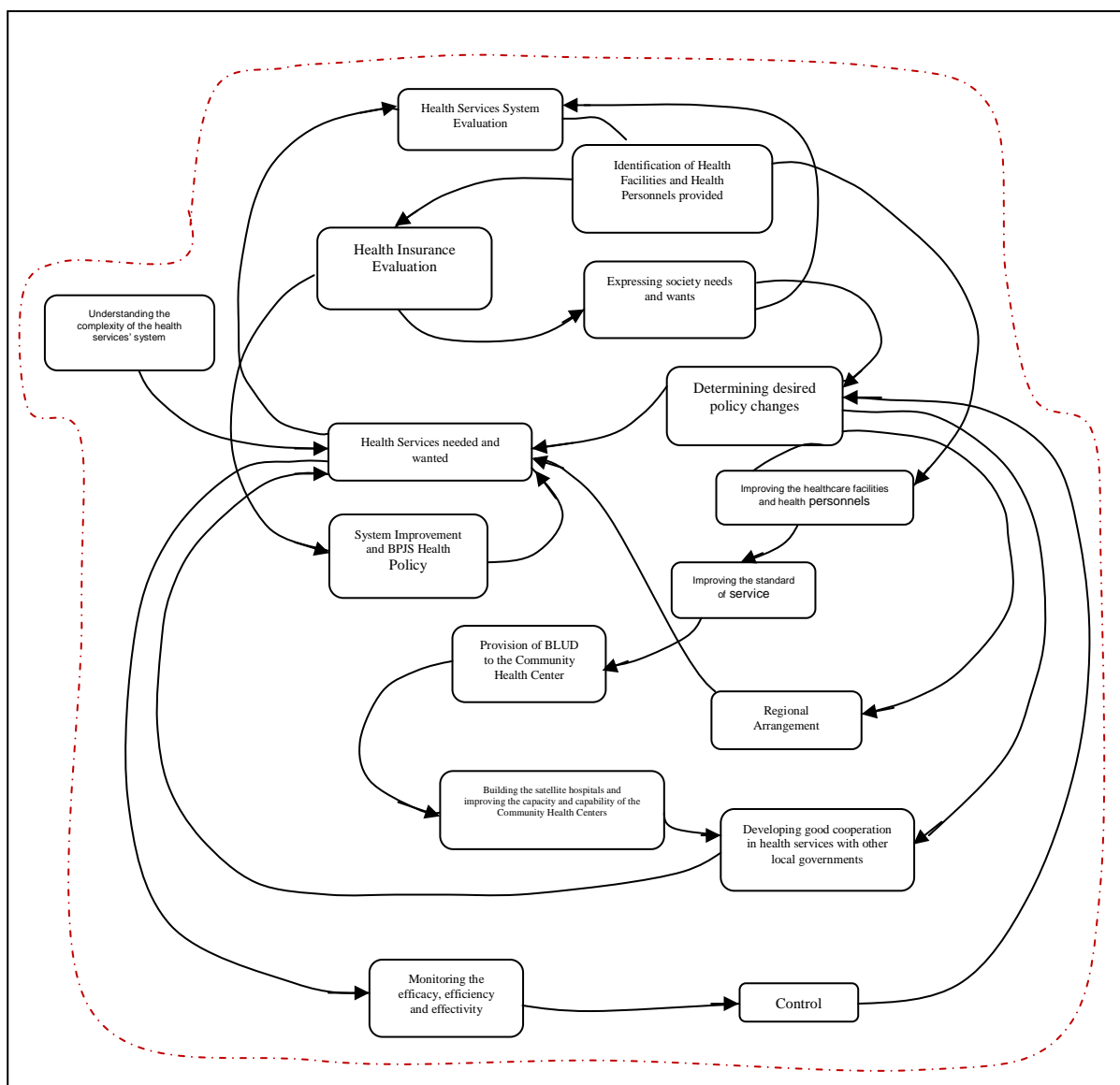
Figure 3. Model of Health Services System from Catchment Area Perspective

The figure above illustrates the efforts to solve the health services problems from catchment area perspective. It starts with observing and understanding the problems in reality. Some of the problems that appear in the reality are related to the customer perspective, financial issues, internal processes difficulties, learning and growth barriers, and constraints to the healthcare access. An understanding of the problems based on the perspective of the catchment area will bring an impact to the problem-solving process.

The problem solving process from the catchment area perspective undergoes these two important things: through continuous internal improvement by the local government and other alternative actions. However, since Malang has a large area and many of the regions are still inaccessible in term of health service, other alternatives such as the regional arrangement may be able to help.

The understanding of the complexities of the healthcare system will lead to some opportunities to see the healthcare phenomena. The urge to get better services based on what is needed and wanted by the various parties will bring up an attempt to evaluate the service's process in all aspects. The identification of the health facilities and human resources (HR) are a part of the evaluation process. It is related to the availability, existence, condition and ability (skills) of the present facilities and resources. The identification process should be done thoroughly so that nothing will be overlooked.

Health insurance accepted by the society requires the same evaluation. This is an important part to note because it involves people's right as citizens and it occasionally appears as a significant conflict that happens between the

government and the community. It should be a two-way evaluation, i.e. evaluating the program from both sides, government as the service provider and also the community as the receiver. Evaluation on government includes the implementation of the program, the progress / development of the health insurance program, the range of insurance grant, and barriers to the program implementation. Meanwhile, evaluation from the community side covers an evaluation on the services received by the community itself and the deficiencies that interfere with this process.

Evaluation on health accepted by society will express the people's needs and wants. Society is the object of health services provided by the government. People are also the users of health services. Hence the evaluation is beneficial for the government to help improve the optimum standard of health service. Survey, therefore, is one of techniques to listen to the people needs and wants related to the healthcare provision. The results of the survey and the identification can be used as input to the policy-making process as well as the process of improving healthcare itself.

Identification of the needs and wants of the community is actually aimed at realizing excellent health services. Excellent services are demonstrated through a few things. First of which is how the service can be done quickly. "Done quickly" refers to the simplicity of the procedures; it can be completed in certain period of time. Second is how these services can be done correctly. It is related to the treatment given to the patients. To make it happen, well trained health personnels are required. Third is how health services are responsive to the situation, especially the one that is concerned with the patient's condition. Fourth is a smile and hello. They seem simple, but crucial. Hospitality and courtesy in service delivery may appear as the most priceless medicine ever.

The evaluation process and assurance of public health services performed, identification of facilities and health professionals will influence the process of policy making to create better services which are wanted and needed by the society. It all starts with the identification which could reveal the weaknesses of the healthcare system. To improve the quality of the health facilities, the government may add more facilities to the health centers and build new Community Health Centers. Also, the number of well-trained and competent health personnels should be increasing. More health workers must be recruited. The employment contract needs to be established in order to satisfy needs for health personnels in the districts. Providing the workers with health education and trainings is worth considering. Above all, it is necesary to make sure that each district has accepted the same number and quality of health personnels.

An increase in infrastructure and human resources also leads to increased health service standards. Improving the service standards can be done by improving the service quality, performance of health workers, healthcare procedures, and maintaining the excellent principals of healthcare implementation. Funding is very important. Therefore, there is BLUD given to the Community Health Centers to solve the financial problems. However, since the process is centralized in the regency, some districts may find bariers to this funding process. Therefore, by establishing the unit BLUD, it is expected that these funding problems can be solved in the district without involving any complicated procedures. It can ease the health services process at the district level.

Increased service standards supported by BLUD given to existing local health clinics in the district led to demands for increased functionality of both the health center capacity and capability. The Community Health Centers should not only focus on the promotive and preventive function, but also the curative and rehabilitative measures. Each health center should also be prepared with the best facilities and human resources; moreover, they need to be ready for the Health BPJS existence. All of the aspects are related each other. Therefore, besides enhancing the capacity and capability of the health centers, it is also necessary to build some satellite's hospitals which can provide people with reachable health service.

The next thing to do is to build a good relationship between regionals. The policy making also helps create such cooperative action which can minimize the society's problems in receiving the health services. An MoU which contains some points about how to handle problems of patients coming from different districts can be elaborated. After that, based on the system thinking, what is needed to do is to develop cooperation between neighboring regencies and cities to help people in the borderland access the healthcare. The results of this cooperative effort may later satisfy the needs and wants of all involved parties.

The evaluation on public health insurance done before determines the direction of the health system improvement and Health BPJS policy implementation. The Health BPJS plays a crucial role in creating a better health care. Since the Health BPJS has been established, the healthcare system becomes a little more complicated; some regionals are not ready yet to implement this. The process of introducing the Health BPJS to the community is still in progress. This makes problems and therefore, health systems and BPJS policy needs to be fixed up. One of the attempts to do could be by adding a list of referral hospitals that can be addressed by existing health centers based on their affordability and geographic conditions. It aims to make it easier for people to obtain medical care. Change and health system improvement in this BPJS procedure will create better health services.

Another effort to answer the healthcare problems is to promote the regional arrangement. Trueblood and Honadly in Djojosoekarto and Harjanto (2008, p15) explain that the form of the regional arrangement can be:

first, annexation or expanding the frontier area by entering territory which is not previously included in the territory handled; second, the merger system (consolidation / amalgamation / merger) or combining two or more adjoining regional administration into one contiguous local government; third, the expansion (fragmentasion) of one local government into two or more local governments; fourth, the release (detachment) or the rearrangement of the border region by releasing several areas included. Particularly in Malang Regency, detachment can be done through releasing the Districts of Pujon, Ngantang, and Kasembon and then combine them to join the city of Batu because this area is geographically closer to Batu. As a result, health services can be more effectively and efficiently perceived by the people in those districts. The purpose and the direction of the regional arrangement are helpful in creating good health service. The setup process, however, is not as easy as what is imagined. The regional arrangement requires considerable time, stages and procedures that have been determined by various studies. It could also involve influential political interests although it is quite possible to realize healthcare from catchment area.

As described in the previous conceptual models, the monitoring process of health care needs to be conducted. Its goal is to keep the policy undertaken running as is expected.

This systemic model will produce the health effectiveness, efficiency, and efficacy which fulfill the 3E conditions.The systems' model of catchment area for health services built previously can act as a reference for the local government to realize the accessible health services. The model is a sustainable system of which components inside are interconnected with one another; thus, it is very necessary to balance its elements or subsystems. From the analysis, a simple model of the system to realize the catchment area in the health service can be demonstrated as follows:
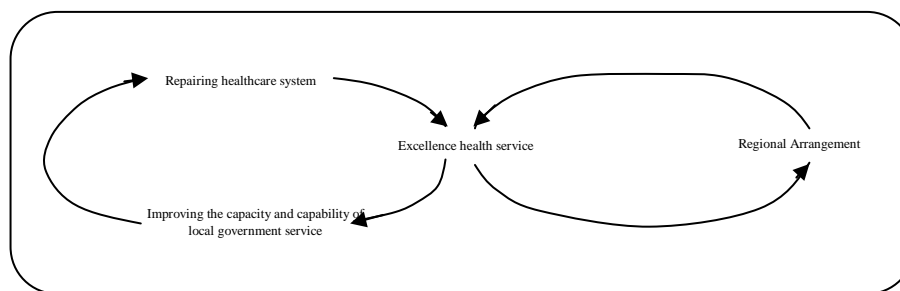

Figure 4. Simple Model of *Catchment Area* System in Health Service

The model of catchment area will be vividly displayed on the service excellence received by the people based on their needs and wants. The impetus for creating optimal health care provides space for local governments to increase the capacity and capability of the services. The capacity and capability of this service involves a variety of things that play a crucial role in creating effectiveness and efficiency of the service, either related to the financial issue, facilities provisions, human resources, or strong monitor and control. This optimization process can refer to the renforcing feedback from the system thinking which is built when there are processes and actions that make something grow better (Senge, 1990, p.64-65). If the community needs of the health service continue to increase and the optimal service improvement is difficult to achieve, the regional arrangement will act as an alternative.

Each system has its own limitations which are also influenced by other factors outside the system as shown in Figure 1. Even though this system model was created by firstly defining the problems in advance and taking into account the environmental constraints that comes from the outside, there are still weaknesses found. This model has not yet offered solutions to minimize the environmental constraints found in the health service process.

4. Conclusion

The catchment area system model in health care has been creaed to answer and resolve complex problems in the health service. This is done by considering the importance of services coverage that should be provided. In developing the conceptual model, it is necessary to conscientiously look at the existing porblems, think of the solutions in a system thinking framework and pay attention to every indicator in analyzing the catchment area. The system model of catchment area could be designed after recognizing the problems and structuring them. They might be related to the processes and mechanisms of the health services, healthcare provided by community health centers, lack of information, facilities and health workers, the referral process, distance and the range of time, as well as the control. Designing the catchment area system model would also involve relevant stakeholders. In this model, control is possessed by the local government, either as the actors or the agent of change or as the leader who is able to stop and run the system (owner).

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