CHALLENGES OF IMPLEMENTING STRATEGIC PURCHASING OF HEALTH SERVICES IN IRAN: A QUALITATIVE STUDY

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ABSTRACT

Introduction: To understand the challenges of implementing strategic purchasing of health services in Iran from the viewpoints of experts, policy makers, and decision makers.

Methods: In a qualitative study in 2014-15, one focus group discussion (FGD) and 21 interviewees carried out with policy makers, decision makers and experts. Experts were selected from purchaser organizations of health services in Iran health system. The content analysis method was used to analyze the data.

Results: five important themes emerged after the data were analyzed, i.e., infrastructures of strategic purchasing, stakeholders of purchasing health services, payment system, package of health services, and stewardship of health system.

Conclusion: along-term, well-defined plan, developed with the participation of all stakeholders, is needed for proper implementation of strategic purchasing.

Key words: purchasing, health services, Iran, payment system, benefit package.

Introduction

Along with stewardship, creating resources, and service delivery, financing is considered to be one of the main functions of every healthcare system¹⁴. Financing is to provide adequate resources so providers can be incentivized to improve access to healthcare services. The success of healthcare financing depends on the efficient and effective performance of three functions, i.e., the collection of revenue, pooling resources, and purchasing healthcare services. Purchasing can be either passive or strategic. Strategic purchasing involves a continuous search to find the best ways to maximize the performance of the healthcare system by making appropriate decisions concerning interventions¹,².

The theoretical basis for implementing strategic purchasing of healthcare services is rigorous³-⁸. Countries throughout the world have implemented strategic purchasing and some advantages have been realized. England’s healthcare system⁶, Canada⁷, and New Zealand⁸ are some examples. Also, there are examples in developing countries, including Ghana⁹, Cambodia⁹, and Iran¹⁰,¹¹.¹²

In 2011, the deputy of strategic planning and control introduced the fifth development plan in Iran. In this plan, paragraph "g" of article 38 in the healthcare debate, requires Iranian health insurance organizations to develop a plan for strategic purchasing within a year¹³,¹⁴. In response, Iranian health insurance organizations¹⁵ and the armed forces insurance organization had some efforts¹².
This study was designed and implemented to investigate the challenges associated with the implementation of strategic purchasing of healthcare services in Iran. We aim to elicit expert opinions concerning the challenges associated with the identification and classification of the challenges the healthcare system must face and overcome in order to obtain the most benefit from strategic purchasing.

Methods

This is a qualitative study that was conducted in 2014-15. The participants were selected through purposeful and snowball sampling. 18 semi-structured interviews were conducted, including 14 face-to-face interviews and 4 telephone interviews. Also, three of the experts answered a written, semi-structured questionnaire. Furthermore, one Focus Group Discussion (involving six participants) was conducted.

Table 1

<table>
<thead>
<tr>
<th>Organization</th>
<th>Position</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ministry of health and medical education –MOHME-</td>
<td>Expert at running a budget office, senior manager at a budget office, member of the policy setting council, head of the department of economic planning and health insurance, former adviser to the minister of health</td>
<td>5</td>
</tr>
<tr>
<td>Health insurance organization</td>
<td>Senior manager in a health insurance organization, member of a specialized committee on strategic purchasing in a health insurance organization</td>
<td>6</td>
</tr>
<tr>
<td>Armed forces insurance organization</td>
<td>Expert in the armed forces insurance organization, member of the strategic purchasing committee of health services, senior manager in the armed forces insurance organization in strategic purchasing</td>
<td>5</td>
</tr>
<tr>
<td>Social security organization</td>
<td>Senior manager in the social security organization, Head of health, economy, and planning department of the social security organization</td>
<td>5</td>
</tr>
<tr>
<td>Academicians (faculty members of medical sciences universities)</td>
<td>Faculty members in health economics, faculty members in health service management, faculty members in health policy</td>
<td>4</td>
</tr>
<tr>
<td>Medical universities</td>
<td>Senior manager in management and resource development deputy, senior manager and deputy of health in a medical university</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>27</td>
</tr>
</tbody>
</table>

Table 1: Characteristics of the research participants.

Researchers and healthcare system experts participated in the study. They included policy makers, managers, and experts of insurance organizations (the social security organization, the armed forces, and executives from health insurance organizations) as well as academic experts in healthcare management and healthcare policy. The inclusion criteria for interviewees were having relevant information, being most able to give valuable information, being accessible, and being willing to participate in the study. Table 1 shows the characteristics of the research participants.

We used the content analysis approach\(^\text{16, 17}\) assisted by MAXQDA 10 to analyze the data. First, all of the texts were coded and the sub-themes were extracted. After interpreting the content in the categories, the main themes were created. To enhance the validity of the final transcripts, we asked some key people to read the transcripts of the interviews and give us their opinions\(^\text{18}\).

Results

Seven themes were extracted during the first stage of the analysis, and the list was subsequently decreased to the following five themes, i.e., “infrastructures of strategic purchasing,” “stakeholders of purchasing healthcare services,” “stewardship of ministry of health -MoH-,” “payment system,” and “package of healthcare services.” Table 2 summarizes the themes and sub-themes.

Theme 1- infrastructures of strategic purchasing

This theme refers to the challenges that exist in infrastructure of Iran’s healthcare system. These challenges can result in some deviations from the perceived desirable outcomes of strategic purchasing. Many interviewees believed that the lack of an effective information management system was a great issue because there is inadequate information about people, specifically their needs, opinions, and demands.

Participants also believed that ambiguity in defining strategic purchasing was an issue. They thought that a widely-accepted definition was needed in order to reach agreements between purchasers and providers.

“The definition of strategic purchasing is not clear; everyone will have different criteria and these criteria may be opposite to each other” (senior manager in health insurance organization)

Poor referral system was another issue stated by the interviewees. They believed that all of the good outcomes earned in level one will be wasted unless there is an efficient referral system. In addition to the cost, they also felt that it would take a long time and significant effort to build a proper
infrastructure in which strategic purchasing can be implemented fully and correctly.

<table>
<thead>
<tr>
<th>Theme</th>
<th>Sub-theme</th>
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</thead>
<tbody>
<tr>
<td>Infrastructures of strategic purchasing</td>
<td>Lack of an effective information management system</td>
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<td></td>
<td>Ambiguity in defining strategic purchasing</td>
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<tr>
<td></td>
<td>Building infrastructures too costly</td>
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<td></td>
<td>Poor referral system for implementing strategic purchasing</td>
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<td></td>
<td>Lack of separation of purchasers and providers</td>
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<tr>
<td>Stakeholders of purchasing healthcare services</td>
<td>Lack of experts in insurance organizations for implementing strategic purchasing</td>
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<tr>
<td></td>
<td>Lack of financial power in insurance organizations</td>
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<td></td>
<td>Resistance of providers against the requirements of strategic purchasing</td>
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<tr>
<td></td>
<td>Diversity of purchasers and providers</td>
</tr>
<tr>
<td>Payment system</td>
<td>Irrational tariffs</td>
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<tr>
<td></td>
<td>Direct link between the provision of service and the revenue of providers</td>
</tr>
<tr>
<td></td>
<td>Lack of monitoring and the capacity to evaluate and manage the payment system</td>
</tr>
<tr>
<td></td>
<td>Lack of infrastructure for choosing the best payment system</td>
</tr>
<tr>
<td>Package of health services</td>
<td>Ambiguity of defining the benefits package</td>
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<tr>
<td></td>
<td>Lack of agreement on the services in the package</td>
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<tr>
<td></td>
<td>Lack of clear criteria for defining the package</td>
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<td></td>
<td>Variety of services in the packages of different insurance organizations</td>
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<tr>
<td></td>
<td>Lack of healthcare-oriented approach in defining the package</td>
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<tr>
<td></td>
<td>Lack of a mechanism to identify poor and needy people</td>
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<tr>
<td>Stewardship of MoH</td>
<td>Conflict of interest between MoH and the insurance organizations</td>
</tr>
<tr>
<td></td>
<td>Avoiding the use of accreditation and licensing to improve purchasing</td>
</tr>
<tr>
<td></td>
<td>Lack of interactions with people and hearing their opinions</td>
</tr>
<tr>
<td></td>
<td>Lack of a clarified stewardship for strategic purchasing</td>
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<tr>
<td></td>
<td>Lack of managerial capacity for implementing strategic purchasing</td>
</tr>
</tbody>
</table>

Table 2: Framework explaining the themes and sub-themes about the challenges of implementing strategic purchasing in the healthcare services in Iran.

Theme 2: stakeholders of purchasing healthcare services

This theme refers to the challenges that stakeholders will face in purchasing healthcare services in Iran. Concerning the challenges the purchasing organizations will face, some interviewees stated that the lack of experts available for the implementation of strategic purchasing is an issue.

The diversity of providers and purchasers was considered to be an issue. The interviewees indicated that too many providers and purchasers currently exist in Iran’s healthcare system, and they suggested that a larger pool for the insurance system should be created by merging most, if not all, of the insurance organizations into one large pool.

Most of the interviewees thought that purchaser organizations do not have a proper healthcare-oriented attitude, because their primary goal is to make a profit and because they don’t have responsibility for the health of the people.

“They think of their own profit, instead of people health” [faculty member, PhD in health services management]

Strategic purchasing must meet certain requirements, and these requirements should be concerned with both purchasers and providers. But physicians and other healthcare providers are resisting the incorporation of these requirements. Since physicians have great power in Iran’s healthcare system, insurance organizations will find it difficult to implement strategic purchasing. In this respect, one of the interviewees stated that:

Another issue the interviewees brought up was the insurance organizations’ lack of financial power. They do not believe that insurance organizations have enough financial power to influence providers, so strategic purchasing seems unlikely to occur. Insurance organizations are expected to delay payments for every claim submitted by providers, which will provide objective evidence of passive purchasing.

Theme 3: payment system

This theme refers to challenges about payment systems that can affect strategic purchasing.

Most participants thought there was a direct link between the providers of healthcare services that will cause problems, such as supplier-induced demand and reduced quality. They thought providers would tend to sacrifice quality over in favor of quantity and volume of services, and, in addition, they may provide services that are not needed.

“I see the physicians in clinics...just prescribing the medications and tell the patients that come after a month; why? Because more visit more money” [senior manager in social security organization]
The interviewees believed that there is a lack of monitoring and evaluating capacity to manage the payment system in Iran’s healthcare system. They suggested that prospective payment mechanisms may be better suited for strategic purchasing.

Also, the ambiguity of relative values was another challenge mentioned by the interviewees. Unclear codes for services can easily result in extra costs for the purchasers of healthcare services.

**Theme 4- package of health services**

Most of the interviewees indicated that ambiguity in the package of healthcare services was an important issue. They said that various insurance organizations cover a wide range of services without any significant overlap, which would create difficulties in the implementation of strategic purchasing. They thought that the package of healthcare services should be same for all of purchasers and insurance organizations. But the lack of agreement concerning the services that should be included will be a barrier. Since purchasers have perspectives and different priorities, it would be difficult to define clear criteria for what should be in the package.

Most of the participants thought that no mechanisms were available for identifying poor and needy people. We don’t have data and information about those who are really poor or the real needs of the disabled and both are necessary to help ensure justice in purchasing:

“We need to know which person is really poor or disabled, but we don’t have such an information system, we don’t have such a system to know them” [expert in strategic purchasing group of armed forces insurance organization].

**Theme 5- stewardship of ministry of health (MoH)**

This theme refers to issues about the stewardship of the ministry of health as an entity that is responsible for improving the health of people. It is obvious that challenges in this function can have a major effect on other functions of the healthcare system.

Some interviewees thought that ministry of health don’t use accreditation and licensing properly. They believed that if accreditation and licensing were used appropriately, it will be an important element of strategic purchasing:

“Accreditation and licensing are two leverage in the hands of MoH (for strategic purchasing)...but we don’t use them” [member of policy setting council of MoH, faculty member]

Some of interviewees believed that MoH does not have the ability to manage conflict of interest in terms of the strategic purchasing of healthcare services. The participants believed that MoH’s evaluation of entities affiliated with MoH is not true and valid because MoH is a large provider of health services and also has the responsibility for accreditation.

Also, participants believed that there is not a good interaction between MoH and insurance organizations or other stakeholders of healthcare system that have roles in strategic purchasing. Also, the lack of a system to interact with people and get their opinions was another issue stated by some interviewees. They believed that the policy makers do not consider people’s needs and requests:

“I think our policy makers are far from people. Service provision is not in line with needs and demands”. [Senior manager in medical university]

The participants thought that there is not a clarified stewardship for strategic purchasing. This was based on the fact that the medical council, Iranian health insurance organizations, the social security organization, and others are involved in the purchasing aspect of the healthcare system. They felt that a unique steward is needed who can set policies, regulate them, and provide intersectoral leadership.

Also, the lack of managerial capacity for implementing strategic purchasing was another challenge stated by the interviewees.

**Discussion**

Despite the importance of strategic purchasing in Iran, there is not a rigorous body of knowledge about it in the literature, and few researches have addressed this issue. This study presents a clear framework for identifying the challenges associated with the implementation of strategic purchasing. Policy makers, managers, and decision makers in the healthcare system can use this framework to learn what the challenges are and to develop a better plan for strategic purchasing.

The Cambodian healthcare system developed a plan for strategic purchasing of health services for the poor in 2009. They aimed to reduce the burden of healthcare costs on people with very low incomes by reducing OPP and increasing their access. They used health equity funds (HEF) for this purpose. Although their approach provided advantages, such
as better access and higher satisfaction, two main challenges were identified during the implementation of the program, i.e., 1) HEF coverage of transportation and users’ fees did not guarantee free care, and the patients still incurred debt, presumably to cover indirect costs, and 2) they had the problem concerning how to identify the poor\(^{10}\).

In this study, the participants believed that identifying the poor, disabled, and needy populations would present a significant challenge. It seems that developing and implementing a comprehensive, effective healthcare information system will be the key to accessing the actual status of every person in terms of her or his healthcare and economic status. Also, the use of electronic records of healthcare provided can be a useful strategy for acquiring information about the entire population.

In 1994, New Zealand used contracting to earn purported efficiencies of the purchaser/provider split. Purchasers were required to contract for services that would maintain, improve, and restore the health of the populations they serve. They found that the process of resource allocation within healthcare was not entirely clear. Also, the absence of competing purchasers was an issue. They also found that the same medical specialists work in both public and private hospitals. Another challenge was contract specification and monitoring arrangements, which were very time-consuming and organizationally expensive\(^{(10)}\).

The results of this study showed that there was ambiguity in definition of strategic purchasing and in the flow of financial resources within purchasers. Also, as was the case in New Zealand’s healthcare system, it was apparent that there was a very strong conflict of interest. There are many physicians who work in both the public and private sectors, which has adverse effects on competition and quality. Also, it is said that low managerial capacity is a challenge that we must deal with in Iran’s healthcare system.

In the US, managed competition for creating the ideal market structure was developed and implemented. They defined what was included and excluded from the list of covered services, but updating the benefits package was challenging and controversial. Also, defining who is eligible for subsidized coverage was another significant challenge\(^{(10)}\).

Our results showed that, since we don’t have valid, precise information about the population, we cannot detect and assess people’s needs properly, so defining who is eligible for subsidized coverage remains an issue. Also, since no agreement has been reached between the purchasers and the insurance organizations about the package of healthcare services and since different purchasers have different priorities, defining a basic package is a challenge. It seems that the stewardship of the healthcare system should unify the process and define the priorities of the purchasers so that a unique, cost-effective package can be identified.

In aggregate, it seems that Iran’s healthcare system has a long way to go to overcome these challenges, and the key action will be addressing the stewardship of MoH. If MoH can identify the proper role and place for its stewardship, the other aspects would be improved, thereby boosting the process of implementing strategic purchasing.

**Limitations**

Because some of the participants refused to participate in the face-to-face interviews because of long distance they would have to travel and the time it would take, so we conducted some of the interviews by telephone. Some of participants preferred to write their opinions, and we used a semi-structured questionnaire to obtain their opinions.

**Conclusion**

Strategic purchasing of healthcare services is considered a necessity in Iran’s healthcare system. However, regarding the evidence we gathered concerning the challenges of implementing such a setting, it seemed that there was a lack of appropriate stewardship, as well as issues in the payment systems and the package of healthcare services. These problems could be made even worse if there are weaknesses in management and the stakeholders are poorly structured. Iran’s healthcare policy makers should not be hasty in implementing a strategic purchasing plan and building the appropriate infrastructures to avoid adverse consequences. A long-term, well-defined plan, developed with the participation of all of the stakeholders, is needed for the proper implementation of strategic purchasing. This study will help in identifying the challenges that must be overcome to achieve that goal.

**Funding and Ethical clearance**

This research was conducted with the approval of the ethics committee at Tabriz University of medical sciences. All interviews were conducted with...
the free and informed consent of interviewees. We received funding from the Tabriz University of Medical Sciences.

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