A Qualitative Study of the Difficulties in Reaching Sustainable Universal Health Insurance Coverage in Iran

Article *in* Health Policy and Planning · February 2011

DOI: 10.1093/heapol/czq084 · Source: PubMed

CITATIONS
63

READS
158

6 authors, including:

Reza Dehnavieh
Kerman University of Medical Sciences
93 PUBLICATIONS **437** CITATIONS

SEE PROFILE

Health Policy and Planning Advance Access published February 8, 2011

Published by Oxford University Press in association with The London School of Hygiene and Tropical Medicine
Health Policy and Planning 2011;1–11
doi:10.1093/heapol/czq084

A qualitative study of the difficulties in reaching sustainable universal health insurance coverage in Iran

Hossein Ibrahimipour,[1] Mohammad-Reza Maleki,[2] Richard Brown,[3] Mohammadreza Gohari,[2] Iraj Karimi[4] and Reza Dehnavieh[5]*

[1]Assistant Professor, Department of Health and Management, Mashhad University of Medical Sciences, Mashhad, Iran, [2]Associate Professor, Department of Health Services Management, Iran University of Medical Sciences, Tehran, Iran, [3]Professor, UCLA School of Public Health, Director, UCLA Center for Health Policy Research, Los Angeles, USA, [4]Azad University, Tehran, Iran and [5]Assistant Professor, Department of Health Services Management, Kerman University of Medical Sciences, Kerman, Iran

*Corresponding author. Health Services Management Department, Management and Medical Information School, Haft-Bagh Blvd, Kerman, Iran. Cell phone: +98-912-3405187. Fax: +98-341-3205221. E-mail: rdehnavi@gmail.com

Accepted 1 October 2010

Objective To understand the Iranian health financing system and provide lessons for policy makers about achieving universal coverage.

Methods Twenty-five interviewees from seven major health insurance companies were selected for a qualitative study in 2007. Using a semi-structured interview, three main tasks of the health financing system (revenue collection, risk pooling and purchasing) were investigated. A framework method was applied for the data analysis.

Results The results of the study show the following seven major obstacles to universal coverage: unknown insured rate; regressive financing and non-transparent financial flow; fragmented and non-compulsory system; non-scientifically designed benefit package; non-health-oriented and expensive payment system; uncontrolled demands; and administrative deficiency. A long-term systematic plan is required to address the above problems.

Keywords Health insurance, universal coverage, Iran, population coverage, sustainable financing, benefit package

KEY MESSAGES

- Several key obstacles stand in the way of achieving universal coverage in Iran: lack of clear information on coverage; a regressive financing system; fragmentation of insurance funds; no standard benefit package definition; expensive payment system; managerial deficiencies.
- To address these obstacles a long-term systematic plan is required that is based on the principles of accountability, transparency, non-discrimination and stakeholder participation.

Introduction

Secure access to adequate health care for all at an affordable price, or universal coverage, is the main objective of many countries. Universal coverage incorporates two different dimensions: adequate health care and population coverage (Carrin and James 2004). Essentially there are two main strategies to reach universal coverage: 1) a tax-based (government revenue) system, or Beveridge Model, and 2) social health insurance, or Bismarck Model (Asgary *et al*. 2004; Carrin and James 2004).

Health insurance system in Iran

Iran is an upper middle-income country estimated to have a population of 70 495 000 in 2007 (World Bank 2010). According to the World Health Organization's National Health Account data for 2008, Iran spent 6.3% of GDP on health (WHO 2010). The population is split between those who are employed by the government or formal sector and who benefit from relatively well-financed health insurance schemes, and those who rely on more poorly funded government-run services or pay out-of-pocket (OOP).

Efforts to remove obstacles to achieving financial access to health care for all have a long history in Iran. Actions taken include the ratification of the Social Security law in 1975 (Andreano 1984), establishing the health care network in 1984 with the objective of securing equal and fair access of all to primary health care (Shadpour 2000), the ratification of health care insurance in 1994 with the objectives of separating health care service providers from the financiers and covering the entire population by 1999 (WHO Kobe Centre 2003; World Bank Group 2007), and finally the ratification of the family physician law in 2004 (Shadpour 2006; World Bank Group 2007).

Health services are now divided into primary health care (PHC) and medical benefit packages, with their accompanying financing systems.

Primary health care

After the Alma-Ata conference the goal of 'Health for All' was set in Iran in 2000. To satisfy this goal and deliver PHC to the population, a health network system was established. PHC is fully financed by the government; between 1971 and 2001, spending on PHC was between 25–30% of total public health expenditure, and between 8–12% of national health expenditure (World Bank Group 2007). The health networks, which are universally accessible throughout the country, provide basic preventive services such as growth monitoring of children under 5 years, immunizations for children and pregnant women, pre- and post-natal care, etc., mostly free of charge (Schieber and Klingen 1999; Shadpour 2000).

Medical benefit packages

Medical benefit packages are financed through health insurance (Table 1). Prior to 2004, the main insurance organization was supervised by the Ministry of Health & Medical Education (MOHME), the largest health care provider in the country. Its management was also the responsibility of the High Council of Health Insurance (HCHI), which has representatives of the government (including the welfare minister and the health minister), the private sector and the House of Representatives (WHO Kobe Centre 2003; World Bank Group 2007). Responsibilities of this council include indicating the services and medicines that are covered by health insurance, and defining their tariffs (World Bank Group 2007).

In 2004, the Ministry of Welfare and Social Security (MOWSS) was established, with the objective of separating the health care providers from the financiers. The supervision of the health insurance organizations now came under the MOWSS and the HCHI was transferred to the Ministry of Welfare (Shadpour 2006; World Bank Group 2007).

Table 1 Health insurance organization in Iran, 2008

Insurance name	Contribution type	Insured share	Employer share	Government share	Pooling	Identification criterion	Total insured number
Army Medical Insurance Organization (AMIO)	Fixed premium	30%	70% (Government is the employer)		Special pool	Job	Almost 4 500 000
Social Security Organization (SSO)	Pay-roll tax (almost 9%)	7%	20%	3%	SSO pool	Job	Almost 27 830 916
Medical Service Insurance Organization (MSIO)							
Civil Servant Insurance Fund	Fixed premium	30%	70% (Government is the employer)		Special pool	Job	5 500 000
Rural Households Fund	Fixed premium	Inconsiderable		Almost 100%	Special pool	Geographic area	21 000 000
Special Groups Fund[a]	Fixed premium	0–30%	70–100%		Special pool	Affiliation to special groups	1 900 000
Self-Insured's Fund	Fixed premium	100%			Special pool	Self-employed	300 000
Urban Inpatient Fund[b]	Fixed premium	Inconsiderable	Government	Almost 100%	Budgetary structure (no pool)	Income/poverty	7 800 000
Imam Khomeini Relief Foundation[c] (IKRF)			Charity and governmental resources		Budgetary structure (not pool)	Income/poverty	2 000 000
Minor funds[d]	Fixed premium	30%	70%		Special pool	Job	Almost 500 000
						Total	71 330 916[e]

[a]University and seminary students, poor widows, indigents, prisoners' families, physically or mentally disabled, etc.
[b]For the urban poor who have no insurance. It covers inpatient services in the public hospitals.
[c]Covers the poor and destitute population and is financed by charity and the government.
[d]Banks, oil companies, petrochemical companies, electricity companies, Tehran Municipality, airlines, national TV and radio, automobile companies, steel companies, rail road companies, etc.
[e]Total population in 2008 was 70 500 000. Some of the population are still uninsured, thus this illustrates the overlap in statistics.

The most important insurance organizations of Iran are (Table 1):

- Social Security Organization (SSO): The SSO provides pensions, unemployment benefit, disability benefit, survivor benefit, funeral grants and health insurance for workers in the non-governmental sector including self-employed and voluntary contributors, and contractual workers from the public sector. It provides health services to members in two ways: directly, through the SSO's hospitals and health centres, and indirectly via contracts.
- Army Medical Insurance Organization (AMIO): This covers the members of the army (police, professional army, Revolutionary Guard members) and their families, and provides services mostly through contracting with the private sector, SSO and public hospitals, and directly through its own hospitals and health centres.
- Medical Service Insurance Organization (MSIO): The MSIO provides services through contracts with service providers. It includes the following sections:

  (1) Civil Servant Insurance Fund (CSIF);
  (2) Rural Households Fund (RHIF);
  (3) Self-Insured's Fund (SIF);
  (4) Special Groups Fund (SGF);
  (5) Urban Inpatient Fund (UIF).[1]

- Imam Khomeini Relief Foundation (IKRF): This covers the poor and destitute population and is financed by charity and the government. The IKRF provides basic health services through contracts with special providers as a gatekeeper (special referral system). It also provides more sophisticated services through contracts with other providers.
- Minor Health Insurance Funds (MHIF): There are a number of smaller private insurance schemes for organizations such as oil companies, banks, airlines, etc. (World Bank Group 2007).

In 2000, the World Health Organization (WHO) ranked Iran 93rd among 191 countries based on its health status, and 112th in financial fairness (WHO 2000). Poor performance in financial fairness reflects the fact that many households lacked health insurance or financial protection against the costs of illness, and therefore OOP payment is common (Xu *et al*. 2003). A later study revealed that 2.9% of people faced catastrophic expenditure (Razavi *et al*. 2005), therefore reducing OOP expenditure became a top priority in national health policy debates. This study was backed by the *World Health Report 2006*, which showed that 50% of payments are OOP (Management and Planning Organization 2004; WHO 2006).

To target the issue, some reforms, like rural insurance and urban inpatient insurance for the poor, were started with the objective of extending protection to families without coverage (World Bank Group 2007). Goals were to reduce OOP payments from 51% to 30%, to increase the fairness in financial contribution (FFC) index[2] from 83% to 90% in 5 years and to reduce the number of households faced with catastrophic expenditure to 1% (Management and Planning Organization 2004).

It is expected that reforms will reduce economic barriers to access to timely care for households facing catastrophic expenditure and improve financial fairness. But there is no evidence to show how effective the policy is or its outcomes (Iranian Parliament Press 2007; Pirmoazen 2007). The present study aimed to contribute to a better understanding of the Iranian health financing system and provide information for policy makers about achieving universal coverage.

Methodology

Participants and interviews

This is a qualitative descriptive cross-sectional study which was carried out in 2008. A purposeful sample of 25 participants from seven main actors in the Iranian health insurance system were interviewed, including the MOWSS (two participants), SSO (five participants), MSIO (five participants), AMIO (two participants), IKRF (two participants), Management and Planning Organization (MPO) (three participants) and academics with outstanding work in the areas of health insurance and reform (five participants). A formal letter was sent to each interviewee explaining the objectives of the study, introducing the investigator and asking to set an appointment at a time convenient to the interviewee for the interview, followed by a telephone call. All of the interviews were performed in the interviewees' offices.

Interview guide

The information was obtained through four initial in-depth interviews, 21 semi-structured interviews and six complementary interviews (by phone) by one of the authors (HI) from August 2007 to March 2008. Ranging from 55 to 80 minutes, each interview lasted an average of 65 minutes. Consent for audio-recording the interviews was obtained and they were then transcribed (Morse and Field 1996). The semi-structured interview guide (Appendix 1) was developed using the framework of Carrin and James (2004) (Figure 1); in-depth interviews followed the methodology of Arredondo and Orozco (2008). The interview questions were refined by two authors (HI, MM), and were aimed at capturing opinions and experiences of participants about the topic. All the interviewees spoke Persian so there was no translation.

Analysis

The 'framework analysis' method was used to analyse the data. This method consists of five steps of familiarization, identifying a thematic framework, indexing, charting, and mapping and interpretation (Lacey and Luff 2001). This method has been specifically developed for the analysis of qualitative data for policy-oriented studies. A contact and content summary form was developed for each interview during familiarization (Rashidian *et al*. 2008). The initial thematic framework was developed using the interviews, prior thoughts and literature (Arredondo and Orozco 2008), research questions and also the thematic guide. The initial thematic guide was discussed in a series of iterative meetings between the researchers. Then the thematic framework was checked against the interviews by repeating the familiarization process. One author (HI) initially indexed the transcribed interviews using Atlas-Ti software (Arredondo and Orozco 2008). Sections of data were indexed with one or more codes (cross-indexing) wherever appropriate

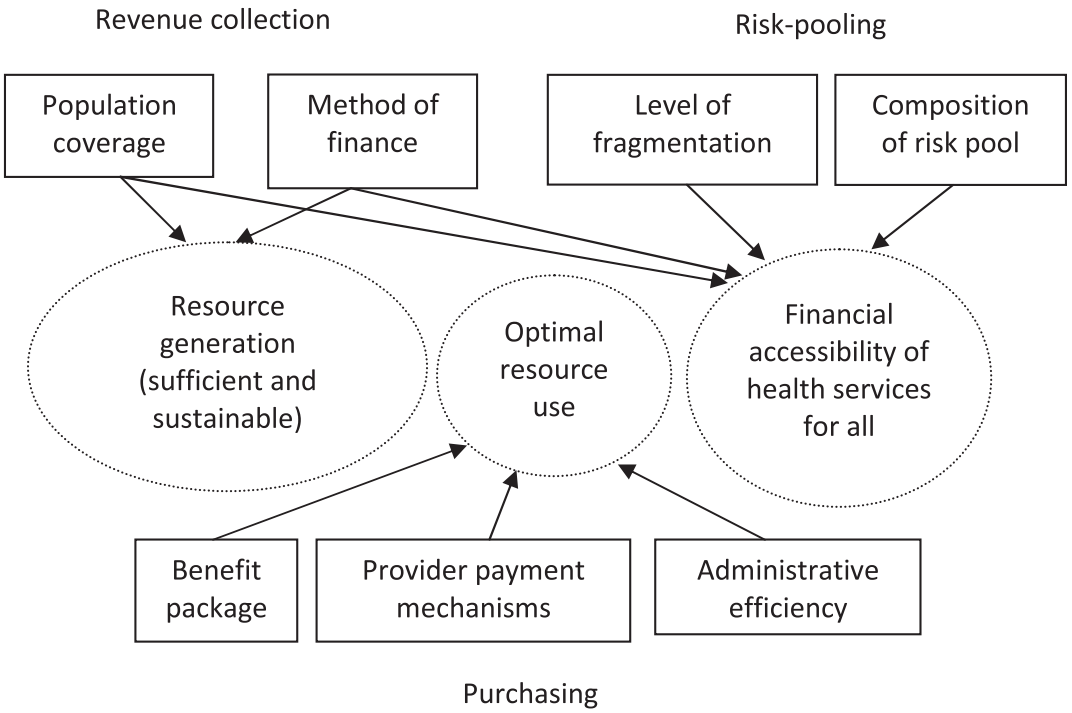

Figure 1 Key design issues in the health financing sub-functions
Source: Carrin and James (2004).

(Lacey and Luff 2001). The indexed text was then discussed with the other authors and adjusted where appropriate. This process was repeated several times for all the interviews. Then they were compared with the different interviewees' point of views about each theme using the analysis chart. This technique increases the credibility of the research. The relation between themes and sub-themes was also investigated. We consulted the transcribed interviews and added extracts to the chart whenever necessary. The interpretation of the themes followed a process similar to that explained for indexing (Rashidian *et al*. 2008).

The thematic framework was updated in the process of the analysis (Lacey and Luff 2001). The initial framework contained seven themes which changed during the process (we combined the fragmentation and composition of risk and shape of the organization as our theme III and added utilization as theme VI). Also, subgroups increased dramatically in each theme as the analysis developed. We obtained verbal consent from the participants and offered no honorarium. Table 2 describes the seven themes and 25 codes.

Results

Theme I: Delineated insurance coverage rate

Indeterminate rate of coverage

The interviewees had two different views about population coverage (breadth of coverage). The first was that the entire population is not covered; 5–20% were believed to be without coverage:

> *''Our population coverage is about 80%''* (Participant 13);
> *''The majority of the self insurers are not covered''* (P8).

The second view was that the entire population is insured but not for the necessary interventions, so the insurance policies cannot protect people from catastrophic expenditure:

> *''With the urban inpatient insurance card everyone is covered, at least in the inpatient sector''* (P11).

Overlapping coverage statistics

Statistical reports show that there are problems with Iran's statistics on those insured, with more than 100% of the population shown to be insured while at the same time some people have no coverage (Table 1). The reason for this is that some people are insured under two or more different policies. The interviewees believed that these overlapping statistics have arisen because of the absence of *''a comprehensive Iranian databank''* (P12), *''a standard definition for insurance coverage''* (P5) and *''coordination between different insurance programmes''* (P20).

Theme II: Financing (cost of coverage)

The government's financing role

The government has a prominent role in the financing of the health insurance system in Iran (Table 1). The research results show that where the government has the financing role, the following problems exist.

(1) *Differences on financial commitments*: For the SSO, there is no agreement on the government's commitments. One interviewee from the SSO believed that:

> *''The government doesn't abide by its commitments because the lack of agreement on the insured numbers or delays in payments*

Table 2 Themes extracted from interview data

Theme	Subgroups
Theme I: Delineated insurance coverage rate	Indeterminate rate of coverage
	Overlap in coverage statistics
Theme II: Financing	Government role:
	Differences on financial commitments
	Non-transparent financial flow
	Unfair payment of financial commitments
	Leakage in supportive subsidies
	Contributions:
	Regressive contribution
	Unscientific calculations
	Problematic contribution policy-making
	Out-of-pocket payments:
	Less coverage or more uncovered services
	Low reimbursements and under-the-table fees
Theme III: Organization	Fragmented pools
	Non-compulsory membership
Theme IV: Basic benefit package	Unscientific approach to defining the benefit package
	Designing a universal benefit package
Theme V: The payment system	Non-cost-conscious providers
	High management expenditure
Theme VI: Utilization	Demand control
	Lack of standard clinical guidelines
	Lack of a technology assessment system
Theme VII: Management efficiency	Government commitment
	Lack of a universal information system
	Different perspectives on the concept of insurance
	Unsustainable management
	Law and constitution requirements

to SSO do not allow the insurance section to take advantage of these funds.'' (P1)

(2) *Unfair payment of financial contributions*: When the government plays the employer role, it does not pay its share. Interviewees believed that:

''The government tries to set the fixed premium lower than usual to decrease its [financial] obligations'' (P18);[3]
''When the Government has an employer role [e.g. MSIO, AHIO and IKRF] it allows fewer shares for itself than the other employers in SSO'' (P4).

(3) *Non-transparent financial flow*: The findings show that the government pays some of the health sector financial resources in a budgetary system to public hospitals. The participants believed that this has given the government an excuse to set its subscription to the insurance organizations at a relatively low amount. They believed that this *''disturbs insurance equations''* (P11), *''weakens insurance organizations''* (P12) and *''creates unreal fee rates in public sectors''* (P8).

We also found that the government's roles as a supportive organization and an insurance payer are not distinguishable from each other, which make the financial resource flow untraceable. One participant said:

''The government pays parts of the health sector's financial resources to IKRF which is a supportive organization.'' (P22)

(4) *Leakage in supportive subsidies*: Lack of accurate incomes estimation has led health insurance to rely on imprecise criteria (e.g. geographical, vulnerability, etc.) to identify vulnerable groups. Participants raised the following concerns:

''We can't determine the informal sector's ability to pay'' (P11);
''Paying contributions for the entire rural population or urban inpatient insurance are not sound ways to spend subsidies'' (P1).

Contributions

There are two main contribution calculation methods in Iran: the SSO uses 'pay roll tax', the income ceiling being about

US$875, and the remaining organizations use the fixed premium method (Table 1).

(1) *Regressive contributions*: An indication of a progressive financing system is that the share of the total financing burden borne by the lower income groups is less than their share of society's income, and vice versa for the top income groups (Wagstaff and van Doorslaer 2000). The findings showed that the fixed premium financing is regressive and unfair because cross-subsidization from the wealthier to the poor does not exist. One participant said:

> *''In this system we ask a poor family to pay 20% of his income but a rich one may pay 2% as a contribution''* (P2).

The SSO's financing is proportional or mildly progressive because of the pay roll tax system, but due to the income ceiling it is regressive too.

(2) *Non-scientific contribution calculation*: Participants believed that fixed premiums are not a fair way of financing because they vary every year and are based on:

> *''previous years' expenditures''* (P3),
> *''people's ability to pay''* (P12),
> *''amount of government's budget''* (P16),
> *''inflation''* (P10),
> *''political pressure''* (P8),
> *''priority of health in the government's long-term plans''* (P18).

The results also show that the financing of all insurance organizations, except the SSO, has a budgetary not an insurance structure which respondents believed would hinder their performance as insurance organizations.

(3) *Problematic contribution policy-making*: The variety of contribution calculation mechanisms in different insurance organizations may lead to problems for policy-making. Financial policies will have different effects on organizations with different financing mechanisms and resources:

> *''Every year health insurance organizations try to increase the amount of fixed premium to increase their financial resources but SSO resists, because this increase has no effect on SSO's revenue, while it increases its expenditure because when the fixed premium increases the tariff will increase too''* (P17).

Out-of-pocket payments

In most developing countries, private OOP funding accounts for a substantial share of overall health expenditures (Carrin *et al*. 2007), which can lead to financial hardship and even poverty (Carrin *et al*. 2007; Xu *et al*. 2007). Almost all of the participants believed that *''the OOP rate has increased during the past 4 years''* (P12), although Iran's development plan aimed to reduce it to 30% by 2009 (Management and Planning Organization 2004): *''This is because of unsound policies''* (P21).

The reasons for an increase in the OOP rate are:

(1) *Less coverage or more uncovered services (breadth of coverage)*: Health insurance organizations are bound by law to cover essential services but participants believed that: *''in reality the package doesn't contain many services and health insurance organizations have excluded them through internal circulars''* (P7) because of *''financial restrictions''* (P22). Stringent benefit coverage has been among the reasons for an increase in OOP payments in South Korea (Kwon 2003).

(2) *Low reimbursements leading to under-the-table fees*: In many countries, health insurance programmes rely on service tariffs and government-regulated fees that should be calculated on the basis of costs. Iran's universal insurance law (1994) states that people's ability to pay is one of the factors to be used to determine the contribution rate and the tariff should be based on the contribution; i.e. there is an indirect relationship between tariff and ability to pay. So the tariff is based on the contribution and the contribution should be related to the tariff (Danesh Dehkordi 2001), and if there is a gap it should be filled by the governmental resources. The above regulation leads to reimbursement for services at lower than the actual cost. Participants believed: *''in this system providers try to compensate by inducing demand or by under-the-table fees*" (P10).

Theme III: Organization

Fragmented pools

Fragmentation is associated with too many small risk pools (WHO 2000). Nine different major[4] and some minor funds exist in Iran, with each one covering a special group or groups (Table 1). The fixed premium amount varies in different funds because of the different members' ability to pay and governmental subsidy:

> *''Rural and urban inpatient funds' financial resources are half of the civil servant fund, with no cross-subsidization mechanism. In minor funds the disparities are even worse''* (P6).

So Iran has a fragmented system, a combination of poor and wealthy funds without cross-subsidization.

Non-compulsory membership

It is compulsory for the formal sector working population—including civil servants, armed forces and formal sectors employee—to be insured in Iran. In rural health insurance the geographical grouping is such that the entire population is eligible to be insured, but it is not compulsory. Membership of the other insurance funds (rural inpatient, special groups, self-insured and IKRF) is also not compulsory. In relation to this participants said:

> *''A government won't be successful in reaching universal coverage without compulsion''* (P16).
> *''If we develop our coverage with a voluntary approach, we will have two groups uninsured in the final stage; rich people who don't believed in insurance and contribution to improve the health in the society, and poor or vulnerable without ability to pay''* (P20).

Theme IV: Basic benefit package (depth of coverage)

The pooled contributions in health insurance systems are used to purchase a set of interventions which all insured members are entitled to. This benefit package should be as comprehensive as possible, given the budgetary constraints (Carrin and

James 2004). In Iran the curative benefit package is quite extensive; exceptions aside and according to the law it should cover all services (Government of Iran 2008). Therefore, a curative services package has not been defined. The study findings show that the following problems exist in determining and financing the curative benefit package.

An unscientific approach to defining the benefit package

The laws state that essential services should be covered by health insurance schemes (Schieber and Klingen 1999), but the lack of compromise among policy makers on the meaning of the 'essential' is a major problem:

> *''We don't compromise among the policy makers on the meaning of 'essential services' ''* (P10);
> *''We set an ocean of services with a one millimeter depth of financial coverage''* (P11).

Participants believed that the factors affecting the benefit package boundaries are: *''providers' benefits, political pressures''* (P23), *''the insured's demands, providers' induced demands''* (P25), *''pharmaceutical and medical equipment companies' interests''* (P11), and *''financial restrictions''* (P17).

Overall participants believed that *''the benefit package is not based on a priority setting of needs or a cost-effective mechanism''* (P15).

Designing a universal benefit package

Iranian law now states that everyone should have equal access to basic health services and the HCHI—supervised by MWSS—now has a responsibility to design the benefit package and co-ordinate the functions of insurance programmes. However, according to participants, *''different amounts of contributions in different funds make insurance organizations unable to shape the universal benefit package''* (P9). For example, the contribution amounts in the rural insurance and urban inpatient funds, and in IKRF, are less than for the civil servant and army insurance funds (Table 1), so *''their ability to pay varies and their benefit package would be different too''* (P19).

Theme V: The payment system (for providers and claims)

Provider behaviour and inefficiency (non-cost-conscious providers)

The payment system should encourage providers to be efficient or to provide cost-effective care. Therefore, payment mechanisms have a critical effect on providers' curative decisions and the efficiency and equity of the system (Pati *et al*. 2003).

According to the study participants, in Iran *''the providers are not cost-conscious at all''* (P10); *''the more they provide services, the more they get money''* (P14).

One participant said: *''I know a cardiologist who prescribes electro-cardiographs and exercise tests for 96% of his patients''* (P10).

High management expenditures

The separate health insurance programmes that each have different benefit packages, and their own rules governing the payment of claims, also have different contracts with providers, incurring additional costs (Lu and Hsiao 2003). Participants stated that: *''Fee for service is an expensive method from the managerial perspective''* (P5); *''in our organization [MSIO], two out of three employees are working in claim control units''* (P13).

Theme VI: Utilization

Control system for health care demand

In the mid 1990s, in an attempt to control costs, the gatekeeping system was widely adopted by health insurers (Martin 1989). Results show that *''there is no demand management, no universal referral system or family physician''* (P3). According to one participant: *''When there is no systematic relationship between demand and supply, obtaining universal coverage is impractical''* (P14).

Lack of standard clinical guidelines

Rising costs and deviation in delivery, which are presumed to reduce quality, as well as providers' and patients' innate interest in high quality health care, have led countries to adopt evidence-based clinical guidelines (Park and Lee 2008). Participants believed that due to the lack of standard guidelines in Iran, *''almost whatever is prescribed should be reimbursed''* (P21).

Lack of a technology assessment system

Health systems around the world have been experiencing challenges related to new technology in health care, such as the need for rational use of resources and continuous quality improvement (Pannarunothai *et al*. 2004). One participant said: *''new technologies enter the system without being evaluated and when the physicians and patients get used to them, they force the insurance scheme to reimburse them''* (P5). Another believed: *''Who determines how many MRIs or CT-scans we need? No one!''* (P13).

Theme VII: Management efficiency

Governmental commitment

Regarding governmental commitment, one participant stated:

> *''The three reforms [creating the health network, universal health insurance law and recently piloting of family physicians in rural areas] during the last 25 years show our commitment to improving the community's health status''* (P3).

However, participants believed that none of the reforms were applied completely because of *''the lack of executive will''* (P10), *''pitfalls in the plans like lack of executive tools and sanction''* (P16) and *''not recognizing stakeholders participation''* (P20).

Legislative issues

Legislation is a crucial step in every plan. The main issue is whether to make health insurance coverage compulsory for the entire population (Carrin *et al*. 2008). The Universal Medical Insurance law was enacted in 1994 to make medical services accessible to all (Government of Iran 2008). However, participants believed the goal was not achieved because of weaknesses such as: *''deciding on the fixed premium financing method''* (P16), *''not defining a benefit package''* (P13), *''fragmentation of the system''* (P24), *''lack of sanctions''* (P25) and *''lack of executive tools''* (P17).

But the participants said the most significant problems are: *''making insurance non-compulsory for the informal sector''* (P2) and *''not introducing a system to recognize the people's ability to pay''* (P18).

Discussion

This study provides an illustrative framework (seven key elements) for understanding and analysing challenges faced by the health financing system in Iran as it tries to achieve universal coverage. As mentioned previously, our study was conducted on the basis of a framework designed by Carrin and James (2004) (Figure 1). However, this needed to be adapted for analysis of the challenges of Iran, and we therefore combined some elements (fragmentation and composition of risk pool, Theme III), added the element 'utilization' (Theme V) and broke some of the elements into more detail in order to make it more tailored for our study (Table 2).

We discuss below the issues arising as the main challenges in Iran's health financing system to achieve universal coverage.

Lack of information

The lack of information means the insurance rate is unknown and effective policy-making is not possible, such as determination of the governmental liability to some funds such as SSO, identification of indigents, etc. Some other countries, especially those with disparities in their health insurance programmes, have the same problems (Fronstin 2000). We see a comprehensive databank as a very critical step in targeting universal coverage.

Regressive financing

Our findings show the regressive financing method of fixed premiums as the main cause of the lack of fairness in the system. In Taiwan, use of this method also raised serious concerns about equity (Knaul and Frenk 2005). It seems that a fair financing method is still absent even in economically developed countries (Cisse *et al*. 2007; Ruger and Kress 2007), but the situation is worse in developing countries (Huang *et al*. 2006). Therefore, a more progressive financing method such as tax-based or governmental revenue financing should be adopted. Designing such a method in developing countries like Iran, with a sizable informal economy and a relatively small regular wage-earner population, may not be easy (Pannarunothai *et al*. 2004), so the trade-off between equity and feasibility may remain a dilemma for policy makers in the country. We believe that pay roll tax, which is mildly progressive, is more feasible because Iran has had 50 years of experience in using the system in the SSO. This method seems to be more successful, in comparison to other methods, since the SSO has become able to cover almost 40% of the population, while maintaining its independence from the government (approximately 90%) (World Bank Group 2007), and to improve and complete its health service packages even through the challenges raised by the war (1980–88).

High rate of OOP payment

We found the low tariff rate to be the main cause of the high OOP rate. The complexity involved in defining the real price, especially in the public sector, and the tariff-defining clause in the universal insurance law of Iran are the main causes of this problem. In Iran, as in some other countries, the government regulates the fees so tightly that, at best, providers barely cover the cost of providing medical care (Moon and Shin 2007). This makes providers complain (Kwon 2003) and try to compensate by asking patients to pay directly, under the table, and inducing demand for expensive services (Kwon 2003), or they may substitute uninsured services (for which fees are not regulated) for insured ones (Carrin 2002; Kwon 2003).

Fragmented pools

The members of some insurance funds, such as the urban inpatient, rural and self-insured funds, are from low-income groups, with less financial protection against health expenditures than others. The risk pools they are associated with will receive a lower overall amount of contributions, leading to a more limited benefit package (Ruger and Kress 2007). We believe that, at least in short-term, the AIF and SSO funds should be kept and all the MSIO funds should be merged together to create a bigger pool. Then all the better-off minor funds should be merged with these three funds, according to their relevance, in order to decrease fragmentation and combine the poor with public and employer-related funds, and to centralize risk pools and enable a greater financial accessibility (Carrin 2002; Lu and Hsiao 2003). It could also reduce administrative costs by unifying the claims procedures and contracting (Barnighausen and Sauerborn 2002; Moon and Shin 2007). Equity as well as risk pooling and spreading can also be enhanced (Barnighausen and Sauerborn 2002; Pannarunothai *et al*. 2004; WHO Executive Board 2004; Moon and Shin 2007). An important prerequisite here is to change the financing system; otherwise, it can make the situation worse by reducing the accessible financial resources in the health system. In the absence of an overall risk-pooling mechanism, voluntary insurance is subject to risk selection and segmentation, so government action is needed to introduce a principle of compulsion in order to achieve universal coverage (Bitran *et al*. 2000; Carrin and James 2004; Tangcharoensathien *et al*. 2004; WHO 2005; Hughes and Leethongdee 2007; Moon and Shin 2007).

Lack of a standard benefit package

A compromise is needed on the definition of 'basic services' in order to shape the benefit package in Iran. Without this agreement, insurers and government, respectively, try to add services that are less expensive and to increase satisfaction among the population, rather than adding essential services for common health problems (Pannarunothai *et al*. 2004) or those likely to lead patients and their families to catastrophic expenditure (Bitran *et al*. 2000; Hughes and Leethongdee 2007; Moon and Shin 2007). Countries such as South Korea, Singapore and Thailand have experience of setting a restricted benefit package and then developing the package incrementally according to the programme's ability to pay (Barnighausen and Sauerborn 2002) or changing needs, values and economic

circumstances (WHO 2000). This approach is supported by WHO and the World Bank (Chiang 1997; Pannarunothai *et al*. 2004).

Payment system

The predominance of fee-for-service is the biggest pitfall of the payment system in Iran because it encourages providers to provide more services and increase expenditures (Kwon 2003; Lu and Hsiao 2003). It may also lead to the distortion of the medical care provided because physicians have an incentive to provide services with a larger margin (Barnum *et al*. 1995; Bitran and Yip 1998). Furthermore, it is very expensive from a managerial perspective. The capitation payment that has been employed by countries such as Argentina, Brazil and Thailand is an alternative means to control costs (Moon and Shin 2007). It also provides comprehensive information and reduces potential fake claims, abuses in coding and overuse of services (Lu and Hsiao 2003). We believe that a single payer system can reduce the managerial expenditure and make the claims more manageable (Lu and Hsiao 2003).

Lack of a supply management system

The absence of a universal gatekeeping system in Iran (except that of the IKRF which is limited to members), together with fee-for-service payment and moral hazard (Moon and Shin 2007), make the expenditure of the health care system unmanageable for health insurance. Lately, the Ministry of Health and Medical Education (MOHME) has introduced the family physician system in some regions, especially in rural areas and cities with under 100 000 population, and this could potentially be expanded to larger urban areas. But it has a long way to go to reach the goal of universal coverage because it needs co-ordination between the MOHME as provider and the MOWSS as financier. Other study results show that a government cost-containment strategy in the absence of effective monitoring of the supply side cannot succeed in controlling expenditures (Pannarunothai *et al*. 2004; Tangcharoensathien *et al*. 2004; Hu 2008). An insurance plan with a gatekeeper can lower total charges (per enrolee) by 6%, as compared with a plan without it. However, there is little difference in hospital admission fees (Moon and Shin 2007).

Managerial concerns

Our findings show that lack of governmental participation is one reason for the failure to reach universal coverage. This finding is supported by WHO (WHO Executive Board 2004). Implementation of a universal coverage programme requires consistent government stewardship (Carrin and James 2004) as well as monitoring and evaluation (Carrin 2002). A successful strategy needs to be accompanied by a law covering the broad principles of universal coverage via basic design features and regulations, providing details about the design features and a timetable for its establishment (Pannarunothai *et al*. 2004). Legislation is a crucial step, but does not guarantee success (Pannarunothai *et al*. 2004). Strong government policy can deliver a product quicker than the legislation process (WHO Regional Office for Africa 2006).

Setting a long-term systematic plan

Finally, the health financing system needs to be developed within the particular macro-economic, socio-economic and political context of the country. We believe that a long-term plan with a systematic approach is required in any reform in Iran. The plan should aim to address the aspects mentioned above completely and systematically, with identification of the prerequisites for each step. It should be based on the principles of accountability, transparency, non-discrimination and stakeholder participation.

Limitations

Our study has some limitations. Inclusion criteria for interviewees were used, and a snowball system was employed to find interviewees so some experts may have been missed. Our findings may have differed if the participants, or researcher, were changed. One of the AIO top managers referred us to their experts for their organization's comment. In three cases where the managers were appointed recently, we found the ex-manager and interviewed him/her. In some cases, an interviewee may not have told us their views because they had different views from their top managers or because of tape-recording. We tried to reduce this limitation by stating, and ensuring, that their comments will remain confidential.

Acknowledgements

We are grateful to those interviewed. We thank Professor Gail Harrison, Director of Global Health Office, and Dr Shira Shafir for their support during HI's stay as a visiting scholarship at UCLA. The authors would like to thanks Dr Ali Maher and Dr Hossein Zare for their comments on the design of the study.

Ethical clearance

This research was conducted with the ethical approval of the Iran University of Medical Sciences, Ethics Committee. All interviews were conducted with the free and informed consent of interviewees.

Funding

HI received funding from the Iran University of Medical Sciences, Mashhad University of Medical Sciences and Ministry of Health and Medical Education.

Endnotes

[1] Recently the government combined the last three pools (SIF, SGF and UIF) and established the Iranian National Medical Insurance Fund (Sandooghe Bime Iranian), in which the government pays half of the premium for everyone with the remainder being paid by the insured or by charity organizations like Behzisti or IKRF.

[2] The fairness in financial contribution index (FFC) is a measure of whether a country collects contributions from households to finance health care in an equitable manner (Kawabata *et al*. 2002).

[3] A fixed amount of deductible that has no relation with wage, age or other demographic index of population, and is determined every year by the High Council of Health Insurance in Iran. This deductible should be paid by the insured and the government. Their shares vary in different funds.

[4] In 2009, the government merged some funds, reducing their number to seven.

References

Andreano R. 1984. Some personal observations on health policy in Iran, 1973–1978. *Social Science & Medicine* **19**: 1–7.

Arredondo A, Orozco E. 2008. Equity, governance and financing after health care reform: lessons from Mexico. *International Journal of Health Planning and Management* **23**.

Asgary A, Willis K, Taghvaei AA, Rafeian M. 2004. Estimating rural households' willingness to pay for health insurance. *European Journal of Health Economics* **5**: 209–15.

Barnighausen T, Sauerborn R. 2002. One hundred and eighteen years of the German health insurance system: are there any lessons for middle-and low-income countries? *Social Science & Medicine* **54**: 1559–87.

Barnum H, Kutzin J, Saxenian H. 1995. Incentives and provider payment methods. *International Journal of Health Planning and Management* **10**: 23–45.

Bitran R, Yip WC. 1998. A review of health care provider payment reform in selected countries in Asia and Latin America. Major Applied Research 2. Working Paper 1. Bethseda, MD: Partnerships for Health Reform, Abt Associates.

Bitran R, Munoz J, Aguad P, Navarrete M, Ubilla G. 2000. Equity in the financing of social security for health in Chile. *Health Policy* **50**: 171–96.

Blewett LA, Good MB, Call KT, Davern M. 2004. Monitoring the uninsured: a state policy perspective. *Journal of Health Politics, Policy and Law* **29**: 107–45.

Call KT, Davern M, Blewett LA. 2007. Estimates of health insurance coverage: comparing state surveys with the current population survey. *Health Affairs (Millwood)* **26**: 269–78.

Carrin G. 2002. Social health insurance in developing countries: a continuing challenge. *International Social Security Review* **55**: 57–69.

Carrin G, James C. 2004. Reaching universal coverage via social health insurance: key design features in the transition period. Discussion paper. Geneva: World Health Organization, Department of Health Systems Financing and Resource Allocation.

Carrin G, Evans D, Xu K. 2007. Designing health financing policy towards universal coverage. *Bulletin of the World Health Organization* **85**: 652.

Carrin G, Mathauer I, Xu K, Evans DB. 2008. Universal coverage of health services: tailoring its implementation. *Bulletin of the World Health Organization* **86**: 857–63.

Chiang T. 1997. Taiwan's 1995 health care reform. *Health Policy* **39**: 225–39.

Cisse B, Luchini S, Moatti JP. 2007. Progressivity and horizontal equity in health care finance and delivery: what about Africa? *Health Policy* **80**: 51–68.

Danesh Dehkordi N. 2001. *Universal health insurance from law perspective* (in Farsi). Tehran: Medical Service Insurance Organization and Scientific and Cultural Publication Organization.

Eccles M, Mason J. 2001. How to develop cost-conscious guidelines. *Health Technology Assessment* **5**: 1–69.

Fronstin P. 2000. Counting the uninsured: a comparison of national surveys. EBRI Issue Brief, No. 225. Washington, DC: Employee Benefit Research Institute.

Government of Iran. 2008. Universal Health Insurance Law (in Farsi). Online at: http://law.majlis.ir/Law/Lawview.asp?key=6752.

Hu S. 2008. Universal coverage and health financing from China's perspective. *Bulletin of the World Health Organization* **86**: 819.

Huang N, Yip W, Chou YJ, Wang PJ. 2006. The distribution of net benefits under the National Health Insurance programme in Taiwan. *Health Policy and Planning* **22**: 49–59.

Hughes D, Leethongdee S. 2007. Universal coverage in the land of smiles: Lessons from Thailand's 30 baht health reforms. *Health Affairs (Millwood)* **26**: 999–1008.

Iranian Parliament Press. 2007. Debate of Islamic Parliament Research Center on increasing the service price in the private sector by the Iranian Physician Council (in Farsi). Tehran: Iranian Khane Mellat Press.

Kawabata K, Xu K, Ranson MK. 2002. Preventing impoverishment through protection against catastrophic health expenditure. *Bulletin of the World Health Organization* **80**: 612.

Knaul FM, Frenk J. 2005. Health insurance in Mexico: achieving universal coverage through structural reform. *Health Affairs* **24**: 1467–76.

Kwon S. 2003. Payment system reform for health care providers in Korea. *Health Policy and Planning* **18**: 84–92.

Lacey A, Luff D. 2001. Trent focus for research and development in primary health care: an introduction to qualitative data analysis. Nottingham: Trent Focus Group.

Lu JFR, Hsiao WC. 2003. Does universal health insurance make health care unaffordable? Lessons from Taiwan. *Health Affairs* **22**: 77–9.

Management and Planning Organization. 2004. *Law of the Fourth Economic, Social and Cultural Development Plan of Islamic Republic of Iran, 2005–2009*. Tehran: Management and Planning Organization of Iran.

Martin DP. 1989. Effect of a gatekeeper plan on health services use and charges: a randomized trial. *American Journal of Public Health* **79**: 1628–32.

Moon S, Shin J. 2007. Performance of universal health insurance: lessons from South Korea. *World Health and Population* **10**: 116–30.

Morse JM, Field PA. 1996. Principles of data collection. In *Nursing Research: The Application of Qualitative Approaches* (2nd edition). London: Chapman and Hall.

Pannarunothai S, Patmasiriwat D, Srithamrongsawat S. 2004. Universal health coverage in Thailand: ideas for reform and policy struggling. *Health Policy* **68**: 17–30.

Park SH, Lee SM. 2008. Evidence-based decision-making and health technology assessment in South Korea. *Value Health* **11**(Suppl. 1): S163–4.

Pati S, Shea S, Rabinowitz D, Carrasquillo O. 2003. Does gatekeeping control costs for privately insured children? Findings from the 1996 medical expenditure panel survey. *Pediatrics* **111**: 456–60.

Pauly M. 2000. Insurance reimbursement. In: Culyer AJ, Newhouse JP (eds). *Handbook of Health Economics*. Amsterdam: Elsevier.

Pirmoazen N. 2007. Criticising the Ministry of Welfare Performance by the Member of Parliament Health Care Commission. Tehran: Medical Council IRI.

Rashidian A, Eccles MP, Russell I. 2008. Falling on stony ground: a qualitative study of implementation of clinical guidelines' prescribing recommendations in primary care. *Health Policy* **85**: 148–61.

Razavi SM, Hasanzadeh A, Basmengi K. 2005. *Fairness in Financial Contribution in Health System* (in Farsi). Tehran: Andishmand Publication Company.

Ruger JP, Kress D. 2007a. Health financing and insurance reform in Morocco. *Health Affairs* **26**: 1009–16.

Schieber G, Klingen N. 1999. Health financing reform in Iran: principles and possible next steps. Report prepared for the Social Security Research Institute, Health Economic Congress, Tehran, Islamic Republic of Iran, 30 October–1 November 1999. Washington, DC: World Bank.

Shadpour K. 2000. Primary health care networks in the Islamic Republic of Iran. *East Mediterranean Health Journal* **6**: 822–5.

Shadpour K. 2006. Health sector reform in the Islamic Republic of Iran (Farsi). *Hakim Research Journal* **9**: 9–18.

Tangcharoensathien V, Wibulpholprasert S, Nitayaramphong S. 2004. Knowledge-based changes to health systems: the Thai experience in policy development. *Bulletin of the World Health Organization* **82**: 750–6.

Wagstaff A, van Doorslaer E. 2000. Equity in health care finance and delivery. In: Culyer AJ, Newhouse JP (eds). *Handbook of Health Economics*. Amsterdam: Elsevier.

WHO. 2000. *World Health Report 2000: Health Systems: Improving Performance*. Geneva: World Health Organization.

WHO. 2005. *Social Health Insurance, Selected Case Studies from Asia and the Pacific*. New Delhi: World Health Organization Regional Office for South-East Asia.

WHO. 2006. *World Health Report 2006: Working Together for Health*. Geneva: World Health Organization.

WHO. 2010. Iran National Health Accounts. Online at: http://www.who.int/nha/country/irn.pdf. Geneva: World Health Organization.

WHO Executive Board. 2004. Social health insurance. EB115/8 115th Session, Provisional agenda item 4.5, 2–12–2004. Geneva: World Health Organization.

WHO Kobe Centre. 2003. Country studies on health and welfare systems: experiences in Indonesia, Islamic Republic of Iran and Sri Lanka. WHO/WKC/Tech.Ser./03.6. Kobe, Japan: WHO Kobe Centre.

WHO Regional Office for Africa. 2006. Kampala declaration on Fair and Sustainable Health Financing. Report from the Regional and Evidence based Workshop in Kampala, 23–25 November 2005. Kampala: WHO Regional Office for Africa.

World Bank. 2010. *World Development Indicators 2010*. Washington, DC: World Bank.

World Bank Group. 2007. Islamic Republic of Iran Health Sector Review, Volume 1. Main Report. Washington, DC: World Bank.

Xu K, Evans DB, Kawabata K *et al.* 2003. Household catastrophic health expenditure: a multicountry analysis. *The Lancet* **362**: 111–7.

Xu K, Evans DB, Carrin G *et al.* 2007. Protecting households from catastrophic health spending. *Health Affairs* **26**: 972–83.

Appendix 1 Semi-structured interview plan

(a) Summarizing statement about the project and the purpose of the interviews by the interviewer.
(b) Clarifying that the interview will be tape-recorded (consent to record).
(c) A contact form was developed for each interview.
(d) Questions (use questions as a guide only):
  (1) Thinking of the health financing system of Iran, can you tell me what are the most prominent pitfalls of the system that prevent us from reaching universal coverage?
  (2) Thinking about the financing system, can you tell me the most important problem with it?
  (3) Thinking of the basic benefit package, can you tell me what are the main problems with it if it exists? If not why don't we shape the benefit package? And what are the results of not having it?
  (4) Thinking about the health insurance coverage in Iran, what do you estimate is the coverage rate and what are the difficulties in developing it?
  (5) Thinking about the organization of the health financing system in Iran, what are the most prominent problems with it?
  (6) Thinking about the payment system, what are the most important problems with it?
  (7) From the services supply system perspective, do you see any problem in it?
  (8) How do you see the efficiency of the managerial system of health financing in Iran?

Guide: Law, policy making, executive management, expenditure of the system, etc.

(Probe: asking about their specific experience in each items).