

# Lessons Learned From National Health Accounts in Iran: Highlighted Evidence for Policymakers

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**Context:** National Health Account (NHA) is an accepted tool for tracing the flow of health resources at country level. As policy makers concern about the effective allocation of scarce resources, thus NHA can play a dominant role in evidence-based decision making. Reevaluation of last NHA in Iran is required for helpful highlights.

**Evidence Acquisition:** We reviewed last NHA documents in Iran which was performed in 2008 to highlight a good evidence for policy makers and compared it with other national and international available data.

**Results:** Reevaluation of data highlighted some issues, which were compared with the national and international available data and useful evidences for policy makers were extracted. These evidences are mentioned in following part.

**Conclusions:** The issues highlighted in last NHA in Iran were: changes in the health insurance system, adopting approaches for increasing an insurance coverage in noninsured population, informing the population about insurance scheme, private insurance scheme according to indigenous conditions, applying a concerted national effort towards controlling the high cost of medicine alongside concerning about equity and coverage, and applying effective indigenous strategies for decreasing out-of-pocket health care expenditures.

**Keywords:** Learning; Health; Iran; Policy, National Health

## 1. Context

### 1.1. Purpose of the National Health Account Project

National Health Account (NHA) is an accepted tool for tracing the flow of health resources at country level. This analysis shows that how much a country mobilizes the funds and how spends it for health, i.e. for which health care services or goods. Thus, NHA can help us understand the flow of funds in health system from four dimensions: resources, agents, providers and functions. Countries plan to perform this project annually but in our country last NHA project was performed in year 2008 (1). As policymakers concern about the effective allocation of scarce resources, thus NHA can play a dominant role in evidence-based decision making (1, 2).

## 2. Evidence Acquisition

### 2.1. Approaches to the National Health Account (Inside the Ministry of Health and Medical Education, Country Level)

In Islamic Republic of Iran, a NHA project has been

evaluated by Statistical Center of Iran (SCI) annually from 2001. They developed it at the basic for two dimensional levels using routine data. In 2008, a NHA project in Iran has been done by Ministry of Health and Medical Education (MOHME) based on a System of Health Accounts (SHA) questionnaire developed by Organization of Economic Cooperation and Development (OECD). For this purpose, they used three sources of data: Household Health Expenditure Survey (HHES), social health insurance routine data, and MOHME budgetary data. In HHES, 17000 households (10200 urban and 6800 rural) from 32 provinces were interviewed four time during a year seasonally. Final report was published and disseminated all around the country as well as the parliament and all policymakers. In this study, we reviewed this report for lessons which could be learnt from this report because this report has valuable information for future policies related to the health-system reform.

## 3. Results

Reevaluation of data highlighted some issues, which

were compared with the available data and useful evidences for policy makers were extracted. These evidences alongside the comparison with available data are mentioned in detail, in following part.

### 3.1. Challenges and Getting Evidence into Policy

1) Insurance coverage in urban areas is lower than rural areas (76.8% vs. 95.1%). High insurance coverage in rural areas is due to Rural Health Insurance Scheme, planned by government and Medical Services Insurance Organization (MSIO) in 2005, which was an unconditional insurance and covered all rural citizens (living in village for more than 6 months). There was some debate about this plan in two dimensions. First issue is about priority. There is a highly developed Primary Health Care Network (PHCN) in Iran and many evidences imply that this network has played an essential role in good health outcome during last years. However, in urban areas there was not any health care network like rural areas while the urban areas consist more than 60% of the country population. Second issue is about equity. Covering 23 million rural populations with a new health insurance scheme must be based on health care needs. Is it really obvious that people in rural areas need more health care than those who live in urban areas? Effectiveness of a holistic approach, such as this must be concerned by policymakers. It is internationally approved that approaches like targeting poor people, e.g. in rural areas, maybe more effective instead of whole coverage. Beside the quality of delivered care, the quantity of coverage is also important and should be evaluated. Insurance coverage rates have been changed in these years. The last survey, Iran Multiple-Indicator Demographic and Health (IrMIDHS) by National Institute of Health Research and MOHME showed that 6% - 9% of the population never uses any social health schemes. Targeting uninsured people and providing any form of prepayment scheme for them must be the government priority. Obviously, it will be more effective approach if we can evaluate characteristics of this group like socioeconomic status, employment (whether they are occupying in informal setting), age, sex, household size, location (whether they are marginalized population), and etc.

2) The most common cause of being uninsured was living in different regional areas: rural residents do not have any insurance scheme by a head of household and they also do not have money to pay for insurance premiums. This finding in rural areas is quite surprising because as we mentioned before, insurance of rural population is not conditional. This finding is only justifies with low knowledge of rural residents about preconditions for enrollment in insurance scheme, they concern about whether they should pay the money for insurance or not, or lack of access to facilities to being insured. This issue, lack of enough information about facilities and enrollment, has been documented before in some study form north of Iran (3).

3) There is a big difference between rural and urban citizens in enrolling in any form of private insurance, 5.2%

vs. 20.4%, respectively. It is not well-developed in Iran and consists of 4% of national private expenditure on health. Private insurance is supplementary (complementary) to other social insurance basic benefit packages. It is suggested that this type of insurance is a way for protection against catastrophic cost. They differ in range and depth of coverage based on social insurance schemes i.e. it covers services that social insurance do not cover. The main characteristic is "group" enrollment not individually. They menu many insurance plans and cover groups of people based on their ability to pay. A study in France indicated that an income level affects strongly on the decision to purchase complementary insurance, but health risk considerations do not affect this decision at all (4). With our best knowledge there were no study about the best way of private insurance implementation in Iran, but in developing countries if we aimed to consider the private insurance in health care system, private insurance should be adjusted at each country level case by case and factors, which should be considered include the level of economic development of country, ability to institutionalize a regulatory system, level of acceptance of inequality in health care coverage, main burden of the disease in the national level and the experience with current insurance mechanisms (5).

4) The most common expenditures that household spend as Out-of-Pocket Payment (OOP) for health have been categorized into 6 main groups as follows:

- Medication and equipment (disposable and long lasting), 40%
- Outpatient services (in home, office or clinic), 33.5%
- Medical diagnostic (laboratory, radiology), 11.4%
- Inpatient services in a private or public hospital, 7.7%
- Outpatient services (in hospitals), 6.9 %
- Nursery or long-care services, 0.4%

The medication and equipment group, first in household health expenditures ranking, was purchased mostly from drug stores entails 83% of a total cost. Second one is outpatient services in home, office or clinic and entails dentistry services (59%), medical and paramedical 34% and 7%, respectively. In data released by US in 2009, high proportions of OOP expenditures for health were prescription drugs, physician and clinical services, and dental services, respectively while in Australia (2011 - 2012) high proportions of OOP expenditures were medications (mostly non benefit-paid pharmaceuticals), dental services and medical services, respectively (6, 7). Although in Iran, a lot of valuable efforts for the rational usage of medicine were done in country, it seems that the burden of medicine cost affects both government and people. In the case of government, high-quality exported drugs, low-quality manufactured drugs inside the country and false beliefs on superiority of imported drugs by people, wide and strong advertising drug companies and black markets are the most important encountering issues. In the case of households, incomplete insurance coverage (sometimes refer as the most diverse and complex coverage), false beliefs about the drugs manufactured inside the country, low quality of some routine

(out-of-counter) drugs and self-treatment make them be far from rational use of medicine. It is not simple to cope with these issues for government as well as households. There is not a simple way and it is not easy to control high medication cost in this context while the medicine access is the most important debate nationally and internationally. It seems there is a need for a concerted national effort toward controlling the high cost of medicine alongside concerning about equity and coverage. Anyway, an active committee for real need-based evaluation of imported medication, supporting a family medicine program as a gatekeeper, improving the referral system and finally implementation of Electronic Health Records (HER) may be helpful for this purpose. Some other efforts for control of high cost of medications are: decrease total cost and increase efficiency of health system, control for rational prescription of medication which include monitoring systems of both insurance institutes and ministry of health.

In recent reform named "Health System Evolution", the government defined 8 initiative new goals alongside fifth development plan (2011 - 2015). Some of these goals, which target public hospital inpatient services and medication for chronic diseases of health system in Iran, have been somehow effective in removal of financial barriers to provide easy access to inpatient services in public hospital as well as a reduction of inpatient OOP payment of households (8).

Diagnostic and medication expenditures of outpatient care, in this survey, consist 36% of total healthcare expenditures. Looking at the trend of these expenditures from 2003 to 2008 shows that it is incremental (from 28.9% to 36%) while a large proportion (more than 55%) of it belongs to pharmacies for prescribed and out-of-counter drugs. Reversely, inpatient and rehabilitation expenditures have been decreased from 29.9% to 5%. Also, in this survey, the proportion of OOP for health has been estimated 53.79% while that is comparable with other upper middle income countries such as Malaysia, which was about 40% in 2008 and it was 46% at the same time in Philippines (which is a lower middle income country) (9, 10). Out-of-pocket payment also rises during this period of time (2003 - 2008). Most proportion of this raising is attributable to diagnostic and medication and for outpatient care (from 39.4% to 51.8%) but inpatient and rehabilitation decrease from 16.3% to 6.5% (discussion of this part is in line with part 4). The OOP expenditure proportion as total private health expenditure is 96.6% in this study; it is too high compared with other countries (near 50.7%) although this proportion decreases constantly from low income to high income countries (85%, 70% and 38% for low, middle and high income countries, respectively). Nationally thinking, we can find many alarming systems like early warning system in disasters. The high OOP payment in our health care financing system could work like an alarm which informs policymakers about the burden of high OOP, such as catastrophic health expenditure and impoverishment. Now the most concerning debate, in-

ternationally, is moving toward Universal Health Coverage (UHC). Financial protection of household when they need and utilize health services is the most important issue in reforming health care financing toward UHC. Developing a single pool (a unitary risk pooling system) social health insurance system, instead of scattered risk pooling, with a high possibility of cross subsidization as well as improving tax collection methods for raising the share of tax in financing health care may smooth the path to UHC in Iran. Also, there is a need for understanding the most common cause of OOP expenditures in Iran and planning to resolve or at least decrease the OOP in these parts and according to part 4, about 90% of family payments for health can be attributed to medication, disposable equipment and long lasting medical equipment, out-patient services in home, office or clinic, and medical-diagnostic services (suggestions are indicated in part 4).

#### 4. Conclusions

Performing a regular NHA survey in Iran seems to be critical because there has been no further NHA survey in Iran since 2008 and it is obvious that NHA can play a dominant role in evidence-based decision making for policy makers for programs to be planned for implementation or to be changed.

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