

Health Insurance Benefit Package in Iran: A Qualitative Policy Process Analysis

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Abstract

Introduction The lack of transparency in prioritization of health services, multiple health insurance organizations with various and not-aligned policies, plus limited resources to provide comprehensive health coverage are among the challenges to design appropriate Health Insurance benefit Package (HIBP) in Iran.

Method data collection was done through semi-structured interviews with 25 experts, plus document analysis and observation, from February 2014 until October 2016. Using both deductive and inductive approaches, two independent researchers analyzed data and used MAXQDA.11 software for data management.

Results We identified 10 main themes, plus 81 sub-themes related to development and implementation of BP, including: lack of transparent criteria for inclusion of services within BP, inadequate use of scientific evidences in determination of BP, lack of evaluation systems, and weak decision-making process. We propose 11 solutions and 25 policy options to improve the situation. **Discussion** Design and implementation of HIBP did not follow evidence-based and logical algorithm in Iran. Rather, political and financial influences at the macro level determined the decisions. This is rooted in social, cultural and economic norms in the country, whereby political and economic factors have the greatest impact on the implementation of HIBP.

Conclusion To define a cost-effective HIBP in Iran, it is pivotal to develop transparent and evidence-based guidelines about the processes and the stewardship of BP, which are in line with upstream policies and societal characteristics. Worse still, the possible conflict of interests and its harms need to be minimized in advance.

Introduction

Different types of health systems use various priority setting mechanisms to define their health benefit package (BP), namely the health-care services covered by the government. For instance, the National Health Services –NHS- in the United Kingdom covers almost all services provided by public healthcare centres that are affiliated with the Department of Health (1, 2). Whereas, the National Health Insurance-NHI- systems in Germany develop Basic Benefit Packages (BP) and restrict compensations to defined services that are included in the BP (s) (3). Based on its health system, each country has its own mechanism of priority setting for policy coverage, through which a list or lists of services under insurance coverage, so-called BP(s) are developed (4, 5).

By definition, developing a BP means prioritizing healthcare services based on pre-defined indicators, taking economic, clinical and socio-political factors into consideration (6). Low-middle income countries face many challenges and difficulties in the process of efficient and cost-effective development of a BP. Similar to other settings, the health system in Iran faces a series of challenges to development and implementation processes of BP, i.e, lack of shared perspectives among policy-makers, insufficient

transparent prioritizing criteria, duplicate organizational structures and unsustainable resources (7, 8). The decision to enter a service to the package begins with the agenda of that service during the meetings of the Secretariat of the Supreme Council for Health Insurance (SCHI). The decisions have been traditionally taken based on the bargaining power of the parties during the meetings. The bargaining power of insurance companies, mainly taking into account the financial burden of services

Developing a BP is both politically hierarchical and largely contextual, and is associated with health system structure, budget and technical capacity of the stakeholders (5). Hence, no universal method exists to fit all health systems. This study aims to investigate the policy processes of developing and implementing the HIBP in Iran. We will propose evidence-informed policy options to increase the efficiency and cost-effectiveness of the current BP. Using policy process (as one of the four dimensions of policy: content, process, stakeholders and content) analysis, this article attempts to answer the following questions: how to identify problems that are related to the development and implementation of the BP; who is engaged in policy development; how to develop a BP-related policy; how to formalize policies that are related to the BP; how to implement these policies (BP development, making decisions process of BP); and, finally, how to evaluate the BP.

Methods

This is a qualitative research that used both retrospective (policy analysis) and prospective (analysis for policy) approaches to investigate the policy-making process of the BP in Iran. Data collection and analysis was conducted from February 2014 until October 2016 during two consecutive phases (Figure 1):

Phase 1: Retrospective policy process analysis of BP: We investigated four dimensions of the policy process: agenda setting, policy development, policy implementation, and evaluation. We collected data through: semi-structured interviews with 25 experts (Appendix 1) in the field of insurance and health economics (i.e. academics and field staff, high level managers and policy makers affiliated to the Ministry of Health and Medical Education (MoHME), the Ministry of Cooperatives, Labour, and Social Welfare (MoCLSW)), document analysis and observation (participating in the meetings of HCHI Secretariat).

Semi-structured interviews, using a generic topic guide, were our main data collection method (Appendix 2). These issues were investigated during the interviews: how development of a BP was included in the MoHME agenda? How BP-related policies were developed (or are being developed)? The extent to which the BP development was evidence-based? What mechanisms were used to attract policy-makers attention to the BP-related problems? How BP-related policies are being implemented? Is there an evaluation and revision process to the BP? What instruments and solutions are using for revising the BP?

In addition, we investigated laws, instructions and contents of various protocols that were related to the BP. To collect and categorize legal documents, in addition to MAXQDA software, we also developed an information worksheet (Appendix 3). Finally, some of us (EM, AO), as observers, participated in selected HCHI's meeting (5 sessions in 15 hours), during which the BP was discussed, so we could directly observe

the decision-making process, stakeholders' engagement, and the influence making. All discussions and the researcher's perceptions were recorded.

All interviews were recorded and transcribed verbatim. We used an inductive thematic content analysis approach (Elo 2007) for data analysis and categorized the themes using MAXQDA.11 software.

Phase 2: Prospective policy-options analysis: We followed a four steps policy option analysis model (9) to draw evidence-informed policy options about the issues and challenges of developing the BP:

- problem identification: The finding of phase one helped us identify and list the issues and challenges of each dimension.
- evidence collection: We collected scientific evidences for each identified issue through following methods: comprehensive review of valid databases; experts' opinions that were extracted from interviews; rationales extracted from investigating process; and document review and observations from the HCHI's Secretariat meetings. We used MESH and Freetexts approaches to search valid databases. For this purpose, the most important medical electronic databases including the Cochrane, Pubmed and Scopus were searched (2000-March 2016).
- prioritizing and policy options evaluation: after collecting evidences and primary development of policy options, we convened a panel of professionals to prioritize the policy options. All identified options were evaluated in terms of feasibility and neccissity.
- proposing final solutions to achieve evidence-informed and prioritized policy options: finally, we developed a summary of final solutions in the form of policy options.

Results

First, we present the findings of our retrospective qualitative analysis of the BP policies, and then will move to the results of policy options analysis.

Our analysis identified four main issues (agenda setting, policy development, policy implementation, and evaluation), 10 themes and 78 sub-themes, as presented in Table 1.

- Agenda setting: We used Kingdon multistream model (10) to identify issues related to problem stream, Politics stream, and Policies stream. In addition, 12 extra sub-themes were identified.
- Problem stream

There was a constantly increasing demand for healthcare services due to the epidemiological transition. This led to increasing health expenditures, which in turn revealed the importance of developing a BP. During the course of past four decades, a series of policies have been developed and implemented in Iran that show the neccesity of developing basic health insurance package (e.g. the National Health Insurance Act of 1995, Supreme's leader mega policies for health, and instruction of strategic purchasing):

“Resource scarcity has always been an important problem for BP and, therefore, insurers always are trying to avoid implementing the BP..” (R 12).

- Policy stream

Until now, no practical policy or scientific method has been developed to determine the implementation path of macro policies related to the BP in Iran. Issues such as lack of scientific criteria or evidences to develop or revise the BP and ignoring the epidemiological transition have led this problem to be revealed:

“Currently, our problem is that we mistakenly consider the BP as strategic purchasing, but it must be mentioned which services are covered, based on what evidences and for whom, and why this package should be bought, what criteria should be used, I mean, why a service should be included in the BP” (R 26).

- Politics stream

In addition to political support to BP that were endorsed by the sequential National Development Plans, Supreme leader’s mega policies for health of 2013 was a turning point in providing political support for the BP. The mega policies attracted more attention to the health sector and led more funds to be allocated towards health:

“In the eleventh government, government attention to the health sector problems and challenges significantly increased and still continues” (R 11).

Our investigation showed that BP-related policies have been always developing, but never the three streams of problem, policy, and politics came together. Lack of systematic revision and approach to the BP resulted in inadequate growth of policies stream, which in turn led to the policy window never opened.

- Policy development: two main themes (stewardship of policy making, and method and trend of decision-making) and 15 sub-themes were identified here.
- Steward of the policy making

We identified 65 documents containing various policies that were directly and indirectly related to the BP. The most obvious one is Article 29 of the constitution, which endorses social security as a right for all citizens:

“Having social security, in terms of retirement, unemployment, elderly, inability to work, orphanage, financial needs, accidents, health-care services and medical care, is a universal right for all Iranians” (Article 29 of the constitution).

The MoHME is in charge of drafting health sector policies, while the MoCLSW contributes to developing the draft policies related to the BP. The MoHME is also responsible to get the policy approval in liaison with four levels: The HCHI Secretariat, the cabinet, parliament, and supreme leader’s office.

- Methods and trends of decision-making

Health insurance, health system financing and BP-related issues were endorsed by the third NDP for the first time in Iran, which repeated in the following NDPs and OHPs, while, no organized decision-making process was designed to implement such a policy. Therefore, consensus making by officials and policy-makers (negotiation style) were used to define the BP, where bargaining power had (and still has) an important role in influencing decisions. This has led to lack of transparency and determined tasks, resulting in a weak stewardship for BP-related policies:

“A serious problem occurs in the system ... because of bargaining power of some policy-makers, some services won't be included in the BP, while some unnecessary services are included, and it's a serious problem in IHS” (R 6).

- Policy implementation: two main themes: policy implementation timeline and the process of BP implementation, plus 38 subthemes were identified here.
- Policy implementation timeline

Implementation and revisions of BP-related policies can be categorized into five time periods: before 1993, 1994 to 2003, 2004 to 2006, 2007 to 2014, and after 2014. Time periods were categorized based on changes in the content of the package, decision-making method, and the stewardship of decision-making. Before 1993 and the enactment of the Universal Health Insurance Act (UHIA), health laws were mainly focused on service coverage, whilst there was no comprehensive document to define which services to be covered by which health insurance organization.

In 1993, by enactment of the UHIA and the establishment of the HCHI Secretariat, health insurance policies became more coherent. The HCHI Secretariat was initially affiliated with the MoHME and held meetings, mostly attended by the representatives of various health insurance organizations, plus the Iranian Medical Association (IMA), to make decisions about inclusion and/or exclusion of medical services in the BP. Indeed, there were no expert debates to make such decisions.

In 2004, the HCHI Secretariat was transferred to the newly established MoCLSW. During this period, the decision criteria to include new services were frequency and utilization patterns, which were based on the insurance organizations' reports. In 2007, the biggest change occurred in the BP governance, when the HCHI Secretariat began to uniform the BP among all health insurance organization. All covered services were published in a book, called “basic package of 2007”. After enactment of the fifth NDP in 2012, the MoCLSW started a new reform to evaluate the BP. Although those measures were based on scientific methodology –called “new BP”-, the previous package was enacted in reality.

The Health Transformation Plan (HTP) of 2014 also affected the BP. HTP initiated the revision of the tariff system and the new Relative Value Unit (RVU) book, which the medical tariffs that were based on the California book. In this book, all services offered in the health system of the country, including

procedures, surgeries, imaging, laboratories, etc. were listed; those services which did not covered by any insurance organizations, marked with an asterisk (*).

“...By 2013, the book of Relative Value Service (RVU) was published. This book includes all new and old health services.. It was actually was considered as revision ob BP, the book was intended to revise the tariff but In fact, there was some kind of review BP...” (R 19)

- The process of the BP implementation

Since 1993, all decisions about including and/or excluding a service within the BP are made by the HCHI Secretariat, with participation of related stakeholders. When a new service is proposed to be included within the BP, the HCHI Secretariat invites various stakeholders (i.e. permanent members of the HHIC, and representatives of the MoHME, health insurance organization, and the IMA as well as other members from professional associations), to attend in a meeting and discuss the agenda. The process and methods of holding these meetings has not changed significantly ever since, with consensus building among members as the dominant method for making decisions. Bargaining of health insurance organizations is mainly focused on financial burden of services, while professional associations may attempt to exaggerate the importance of proposed services. Except for few cases, no specific criteria and/or method (e.g. cost-effectiveness studies, guidelines and etc.) is used to make such decisions. Often, several meetings (in some cases it may take several years), are held until the HCHI Secretariat makes the decisions to include the service within the BP. Services with high financial burden, would require approval by the cabinet:

“In some cases, health insurance organizations propose a service, all proposes, either from the MoHME or MoCLSW, send to the HCHI for expert analysis. There is a waiting list. representatives from different organization as well as MoHME and MoCLSW debate. If consensus is on its inclusion, the cabined must confirm the decision” (R 3).

- Evaluation of BP-related policies: evaluation refers to the investigation of whether goals of the policies were achieved and whether or not an implementation gap exists. Three main themes were identified: revision of the BP, revising the methods and decisions, and evaluating the aims of BP-related policies. We also identified 13 sub-themes.
- BP's revision

Since 1993, any revision in the BP has been mainly focused on creating a more coherent and evidence-based package. In some cases (e.g. in 2007, 2012 and 2014), revisions were temporary and without a defined methodology. Our findings show that no purposive and fundamental revision was conducted. We identified a series of reactional, vs proactive, changes in the content of BP. Rarely, in less than 10 cases, an emerging need led to include and/or exclude some medicines, medical equipment, and services into/from the BP:

“It’s more than 30-years that we have the BP, but there is not a defined method for including a new and better service. Whether it should replace the older service or not” (R 4).

Excluding Over-The-Counter (OTC) drugs was one of the main recent changes. Since 2012, an expert panel has been established for excluding OTC drugs from the BP and allocating the released funds for medicines related to special diseases.

- Revising the methods and decisions

Revising and reforming the processes that are related to the inclusion and/or exclusion services/drugs into/from the BP are not evaluated and revised yet. Usually, it is common to face that due to technological advances or introduction of lower cost interventions, some committed BP are not be covered:

“We never tried to revise the covered services. As well, we never tried to evaluate the BP” (R 12).

- Evaluating the aims of BP-related policies

Despite the legislator’s emphasis on the annual revision of necessary commitments by health insurance organizations, this is only available for medicines packages and is not executed on a regular and annual basis. In 2007, Article 3 of the comprehensive welfare and social security system Act helped a big step to be taken towards more transparent decision making about the BP and increasing awareness about insurance services. According to the RVU Book (2015), coverage of inpatient and Para-clinic services included in the BP was 88 and 89.9%, respectively. Moreover, the National Health Accounts (NHA) (2013), shows that financial burden of uncovered services all services excluded from the BP is only 6% as all services.

Limitations And Solutions

Table 2 summarizes the identified issues and problems of the BP policy process.

11 solutions and 25 policy options were extracted (at least two policy options per each solution). Then, based on the pros and cons of each one as well appropriateness and feasibility criteria, they were prioritized by an expert panel (table 3).

Discussion

We investigated the policy process (agenda-setting, development, implementation, and evaluation) analysis for the BP in Iran. Our findings show that various stakeholders have developed different policies with different contents during various periods, without a defined algorithm, while different forces have influenced the policy-making process. Such mechanism has resulted in idiosyncratic way of policy making and defining the BP in Iran. At the macro level, the amount and source of financing are the main criteria to make decisions.

Studies in other countries show that macro policies criteria such as services and diseases that are qualified to be covered, how to cover different age groups, financing methods, by both insurance organization and the government, are considered in designing the benefit package (11). In France, for example, an independent organization is established to regulate, facilitate, and increase the transparency of the BP and organize providers' compensation. A new treatment will only be accepted if it is proved that have higher benefits (with the same level of costs) or lower costs (with the same level of benefits) (6, 12). It seems that the debates around developing policies and changing the steward of developing the BP are mostly focused on source of financing, while adequate attention is not paid to how to develop the BP with targeting diseases/individuals.

While decision-making process is based on reliable evidences and through scientific methods in many other countries (13), our findings revealed that the BP is mostly defined based on negotiating with stakeholders in Iran. Thailand uses a four-step mechanism to make decisions that are related to include a service into the BP. The criteria that they use are as follow: number of patients who suffer from the disease, severity, cost-effectiveness of intervention(s), types of available services, economic impact on households, and ethical and equity issues in evaluating it (14). Norway also uses the same method as France. Some important criteria that Norway uses to evaluate a service are as follow: cost-effectiveness, personal benefits, and severity of the disease (15). Whereas, our findings indicate that the BP revisions were mostly temporal and non-systematic. Systematic annual or at least biannual evaluations are important for substituting less effective services/drugs with more effective ones, which can increase the quality of provided treatments and also lead to spend fewer resources for the health system. The BP's goals will only be achieved through revised pathways for defining the cost-effective BP, along with other functions of the health insurance. Otherwise, universal health coverage cannot be achieved and out-of-pocket expenditures will remain high.

Policy recommendation

Here, following prioritization and evaluation of political options, we recommend:

- A BP should only contain 'necessary services', to be financed by the government. Other complementary services can be financed through complementary insurance or users' direct contribution.
- To incorporate evidence-informed decision-making criteria, i.e. HTA and cost-effectiveness analysis into the process of the HCHI Secretariat meetings.
- In line with periodic evaluation and to increase organization of services/drugs lists that are covered, a waiting list needs to be developed for those services/drugs that are under review to be included and those that are about to exclude, due to technological changes, policies changes, etc.).
- BP-related decisions need to be taken based on the scientific evidences, precise demographic information (separated based on the age groups, special needs of each age group, and defining targeted packaged according to such information) as well as considering a combination of cost-

effectiveness, and socio-economic condition of the country (using multi-criteria decision-making to include services) in the frame of using multi-criteria decisions.

- To control service provision and procedures that can be provided, a series of interventions and regulations should be introduced to restrict the import of new drugs and technologies to those that are cost-effective.
- To increase the health systems capacity to expand service provision based on the health equity and promoting UHC, new guidelines and standards need to be developed for revising the BP. For instance, the coverage should be restricted to those who are eligible. Moreover, specialized BPs for each level of service provision based on the age groups and diseases categories need to be defined.
- A BP should only contain 'necessary services', to be financed by the government. Other complementary services can be financed through complementary insurance or users' direct contribution.
- To incorporate evidence-informed decision-making criteria, i.e. HTA and cost-effectiveness analysis into the process of the HCHI Secretariat meetings.
- In line with periodic evaluation and to increase organization of services/drugs lists that are covered, a waiting list needs to be developed for those services/drugs that are under review to be included and those that are about to exclude, due to technological changes, policies changes, etc.).
- To revise and evaluate the current BP, we suggest categorizing services and drugs into three different lists (i.e. must be covered, must not be covered, and can be covered) based on cost-effectiveness, budget impact, safety, and availability of alternative services criteria as well as experts' and users' opinions. This can be galvanized by including the findings of HTA studies for the services that can be covered.

Rigors of study

To the best of our knowledge, this is the first deep and extensive study for analyzing the BP policies in Iran, whose findings can respond to long-waiting questions of health policy-makers in this regard. The final solutions presented in this study are based on scientific and objective evidence that have been approved by the experts. However, our study had some limitations. We did not find a universal definition of a BP, and encountered discrepancies between scientific literature and the experience of different countries. We also faced some challenges in obtaining some documentation from different organizations, due to which determining the effects of the BP implementation in achieving desired goals might be incomplete.

Conclusion

Given the limited resources and ever-increasing public demand for healthcare services, designing an evidence-based BP, which is in line with upstream policies, is crucial to reach and sustain UHC in Iran. This renders systematic implementation process and appropriate ways to manage stakeholders' power and influence for minimizing the possibility of conflicts during the BP development. Equitable and quality

healthcare with no one left behind, is at the heart of UHC, which is in turn the center of sustainable health development. To reach UHC by 2025, as manifested by the MOHME, Iran has no choice than implementing substantial reforms into its pathway in designing evidence-informed health BP, i.e. but not limited to employing efficient financial, economic and political solutions, e.g. HTA. Unless the conventional method of negotiation and bargaining is replaced with robust, transparent and culturally accepted ways of defining the BP, healthcare system of Iran will face unsustainability in provision of resources and public dissatisfaction, which may in turn endanger its pathway along with sustainable health development.

Declarations

Ethical approval and consent to participate: We had been assured confidentiality of Topic Guide information. Also this study received the ethical code from Tehran University of Medical science: IR.TUMS.REC.1395.2517.

Consent for publication: Not applicable

Availability of data and materials: The data supporting the results reported in the article are qualitative and provide in this manuscript

Competing interest: There is no conflict of interests.

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Tables

Table 1; Policy "process" Analysis of BP

Issues	Themes	Sub-themes	
Agenda setting	Problem stream	<ol style="list-style-type: none"> 1. Increasing the number of services that can be provided 2. Soaring health expenditures 3. Unavailability of information about inequality within insured populations 4. Inadequacy of resources 5. 5. Parallel budgets (insurances, hygiene, special programs, etc.) 	
	Policies stream	<ol style="list-style-type: none"> 6. Managing services that can be provided 7. Deficiencies in legislation and decision-making process that are related to the BP 8. Lack of clear criteria for including services in the BP 9. Not using professional and related staffs (not only those who are experienced) in implementation and support of the BP 	
	Politics stream	<ol style="list-style-type: none"> 10. Prioritizing health, and therefore its related policies, in the twelfth government 11. Increasing health sector budget in the 11th government 12. 13. Notifying OHP and making decision about the BP 	
Policy development	Stewardship of the policy making	<ol style="list-style-type: none"> 13. Developing the article 29 of the constitution 14. Developing policy's draft by the MoHME and MoCLSW 15. HCHI as the steward of developing and notifying the BP's strategies 16. Confirming policies by the National Expediency Council 17. Enacting policies by the Parliament 18. Final approval and notifying OHP by the supreme leader's office 19. The MoHME is the steward of developing the BP based on the OHP 	
	Method and trend of decision-making	<ol style="list-style-type: none"> 20. Endorsing the BP by the third NDP for the first time 21. Lack of a defined methodology to include/exclude services into/from the BP 22. Drafted policies are different from notified policies, up to 70% 23. The HCHI Secretariat makes decision about the strategic policies of the BP 24. Developing polices according to the available resources 25. A defined contribution approach in developing BP-related policies 26. Inadequate attention to people's preference/demand 27. 28. Using a top-down approach in developing BP-related policies in OHP 	
Policy implementation	Policy implementation timeline	Before 1993	<ol style="list-style-type: none"> 28. Article 29 of the constitution, requires the government to cover all necessary services 29. Lack of a clear distinction between service provision in public and private sectors 30. Lack of defined criteria to cover services by health insurance organizations 31. 33. Considering the availability of services when deciding to provide a service
		Between 1993 to 2003	<ol style="list-style-type: none"> 32. Developing the UHI Act in 1993 and notifying it in 1994 33. Establishing the HCHI within the MoHME 34. HCHI became responsible about the BP 35. Experts debating in joint meetings 36. Commitment to provide all services that can be provided 37. Determining the covered services by the health insurance organizations 38. Political top-down decisions, without expert debates

		39. Stakeholders or head of the meeting have greater influence
	2004 to 2006	40. Transferring the HCHI Secretariat from the MoHME to the MoCLSW 41. Insurance-related stakeholders had more influence 42. Services/medicines were included based on the frequency and compensation patterns 43. Including Services/medicines based on the reviewing less expensive services and equipment 44. Top-down political decisions, without expert debates 45. Introducing complementary insurance to cover services that were not covered by the basic insurance
	2007 to 2014	46. Developing the first comprehensive package 47. Using the most frequent services criterion to develop the BP 48. It takes a long time to decide whether to include a service/medicine or not 49. HCHI decides based on the consensus criteria 50. Special packages or separate resources/stewards (e.g. special diseases) 51. In 2010, the MoHME and the MoCLSW started strategic purchasing 52. New mandatory criteria were introduced (i.e. safety studies, effectiveness, cost-effectiveness) to include new medicines to the national formulary 53. In 2012, new RVU Book was developed
	Since 2014	54. In 2014, the OHP were notified by the Supreme Leader's office 55. In 2014, the MoHME was mandated to develop the new BP 56. The MoCLSW was selected as the steward of financing and implementing the BP 57. In 2014, health transformation plan was started 58. The new BP was defined in the form of the RVU Book 59. Services that are not included in the BP were clearly mentioned in the new RVU Book 60. Defining and providing services that were not previously covered in the BP, as a part of the HTP
	Process of BP implementation	61. Sending a request to the HCHI Secretariat 62. Expert review of the request 63. Deciding about the request 64. If it has low financial burden, notifying its inclusion to the BP 65. If it has high financial burden, the cabinet confirmation is required
Evaluation	BP Revision	66. Lack of fundamental and purposive revision(s) 67. Before 2014, there was no significant change occurred in the BP 68. Due to changes in the treatment methods, some services/drugs are automatically excluded 69. Mandating the HCHI Secretariat to annually revise the BP 70. Temporary and non-methodological changes (three times, in 2007, 2012, and 2014) 71. Unorganized revision of the OTC drugs 72. In 2003, some performance-enhancing drugs were excluded
	Revising the methods and	73. Process and criteria for including/excluding services are not revised

decisions	74. No evaluation has been performed, and laws and regulations are not revised 75. In 2013, service prioritizing program was begun, without clear outcomes
Evaluating the aims of BP-related policies	76. The impact of BP-related policies on achieving universal health insurance coverage 77. The impact of BP-related policies on developing basic and complementary BPs 78. The impact of BP-related policies on unifying the BP among all health insurance organizations

Table 2; Limitations and problems of the BP policy process

Limitations and issues that can be investigated
Lack of clear criteria to include services into the BP
Not considering the epidemiological transitions to increase the effectiveness of included services.
Scientific evidences were not adequately used
Health Technology Assessment (HTA) studies were not used
Bargaining power had an important role in HCHI Secretariat decisions
The extensive BP list regardless of the priorities and costs
Policies on Bp and the strategic purchasing were not implemented
Cultural, social and economic issues were not considered
Passive performance of health insurance organizations to include new proposed services within the BP
Lack of revision and evaluation systems
OTC drugs are included in the BP
Unproportioned percentage of the health expenditures are created by a small percentage of patients
Development and implementation of programs and policies are not permanent
Inadequate resources

Table 3: Solutions and policy options derived from the policy process analysis for the BP

Solutions	Policy options/description	Pros	Cons	Average Necessity and feasibility (+) standard deviation (1-10)
Differentiating between BP(s) from services that can be provided	Defining necessary services benefit package and financing it by government and defining the higher level package that its financing is elective	Creating elective options for patients/people and financial savings for the government	Establishing limitations on access to higher level services	7.8 ± 1
	Defining “necessary primary services BP” and financing it by the MoHME and also a “ BP for secondary and tertiary necessary services” and financing it by insurance organizations	Ensure easy and free access to primary services, more effective management of curative services with stewardship of health insurance organizations	Inadequate attention of insurance organizations to the importance of preventive and screening services	5 ± 2.55
	Developing a BP that can be provided in all levels and financing it by health insurance organizations	Matching the BP with society's health needs	Probability of increasing the number of covered services without considering available resources of health insurance organizations has increased	5.3±2.3
Using scientific evidences to make BP-related decisions	Collecting and reviewing demographic information	Prioritizing services and evidence-based decision-making, indeed the BP should be targeted	Lack of precise information systems to determine the burden and pattern of diseases, by age groups	7.6±1.5
	Conducting HTA studies	Developing a cost effective BP based on the comprehensive needs	These studies are cost driven and adequate experts to conduct them are not available	6.9±1.6
	Considering cultural problems and needs in developing the BP (i.e. religious beliefs and cultural behaviors)	Increasing the acceptability of services for targeted populations, increasing equity in health	Increasing the probability of health expenditure soaring for the health system	4.6±1.7
	Considering intervention's QALY and DALY (analyzing the epidemiologic profile, and determining interventions based on it)	Prioritizing services that have more influence on life expectancy and quality of life	Ethical and social criteria are neglected	6.7±1
Estimating the financial burden of diseases	Direct, indirect and intangible costs	Creating a systemic view or considering costs carried out by patients and avoiding catastrophic expenditures	Ignoring the necessity of covering some services that based on economic terms should not be covered	6.6±1.6

Employing multi-criteria decision-making methods to develop the BP	Considering criteria that are related to economic aspects of services (cost effectiveness, budget impact, reducing poverty, quality and quantity of evidences and equity in better access to health-care services	More economic mix of services and avoiding exorbitant costs; transparency of definitions and prioritizing economic criteria	Some decision have unethical economic consequences	7.6±1.1
	Mixing cost and effectiveness and economic and socio-economic criteria in related decisions (using multi-criteria decisions)	Creating a comprehensive view or considering all criteria that affects the decisions; increasing cost-effectiveness of the BP	Collecting information is time-consuming, and such decisions are costly	7.9±1
Controlling inclusion of drugs, services and equipment that their effectiveness is not proved	The MoHME's intervention in licensing new drugs and technologies or developing and implementing laws and regulations to restrict and control them	Increasing the control over services that can be provided, and, therefore, preventing the inclusion of services that are not cost effectiveness	A prolonged period is required to update health services of the country	8±1.1
Organizing services/ drugs list that are covered or not covered	Developing a waiting list to include/exclude services/drugs (due to technological changes, policy change, new diseases patterns)	More efficient management of decisions to include/exclude services/drugs and facilitating annual revisions	More health human resources as well as continuous monitoring are required	8±0.7
Creating a decision-making framework based on mathematical models and defined criteria	Weighting predetermined criteria and determining how to mix them by mathematical models	Transparency of method and process of decision-making and determining weights of criteria to make decisions	Possibility of conflict with ethical values in decision's outcomes	6.7±1
Expanding the package of services that can be provided	Expanding the BP by providing extra resources	Increasing access to health-care services	Services utilization is out of control and is creating exorbitant costs	5.8±1.3
	Expanding the BP along with developing guidelines and standards for services provision	Increasing cost-effectiveness of services, reducing induced demand	Access to services can potentially be decreased	7±1.2
	Expanding the BP along with developing specialized packages for each level of the health system	Increasing cost - effectiveness of services, reducing induced demand	Access to services can potentially be decreased	7.7±1.2
Policies should be based on study's findings and expert's opinions	Macro decisions be made at higher levels and following that performing expert studies to increase efficacy of implementation	Clear tasks of middle and lower levels, converging tasks at lower levels	Environmental problems and issues are not reflected in macro decisions	7±1.2
	Proposing policies by expert level and following that developing and notifying policies at macro level	Developing evidence-based policies	Prolonging decision-making process	7.3±1.2
	Determining macro-level decisions orientation and following that developing expert-based policies	Transparency of overall strategies and finally making	Possibility of different interpretations that may be different from macro policies	7.9±1.3

		evidence-based decisions		
Organizing HCHI Secretariat meeting on including/excluding a service/drug/equipment	Developing specialized forms which contain key criteria such as cost-effectiveness	Increasing efficacy of decisions through systematic process and defined participation of stakeholders	Challenges may arise in exceptional cases	8.3±1
Revision and evaluation of the BP, both services- and- drugs related	Categorizing services/ drugs in three different lists (i.e. must be under coverage, can be covered, and must not be covered). Then, conducting cost-effectiveness studies for those services that can be covered	Making the BP cost-effective by spending minimum time and cost	HTA studies are not performed for all services; categorization may be biased	7.9±1.3
	Conducting HTA studies for all services/drugs that can be provided, then revising the BP	Having a BP with cost-effective services, as much as possible	HTA studies are highly time and cost consuming; social criteria may be neglected	6.1±1.6
	Perform the first method for the services in the package and the requirement for the HTA to include the new services / drug into the package	The BP will be cost-effective; these studies will be institutionalized in deciding about including services/ drugs	HTA studies are not performed for all services; categorization may be biased	7.5±1.1
	Conducting second method and mandating HTA studies	Having a BP with highest possible of cost-effective services/drugs; these studies will be institutionalized in deciding about including services/ drugs	HTA studies are highly time and cost consuming; social criteria may be neglected	6.6±1.8
	Determining the minimum expected level of health with measurable indicators to identify the situation or measuring the gap between coverage level and defined standards	Developing the BP based on the country's needs	Lack of scientific evidences and field studies; conducting required studies require extra resources	5.8±1.7

Figures

Process

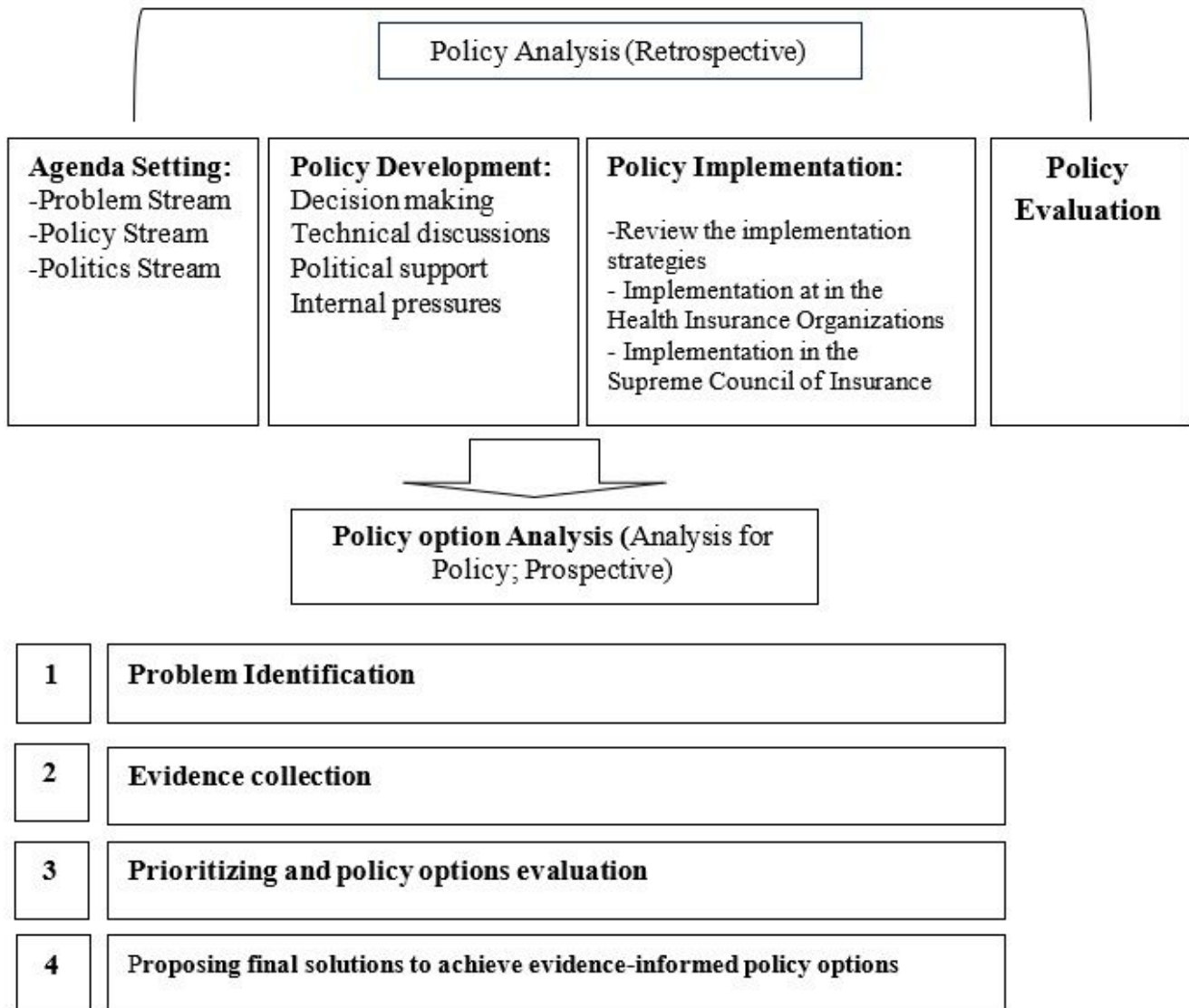


Figure 1

Diagram of conceptual framework