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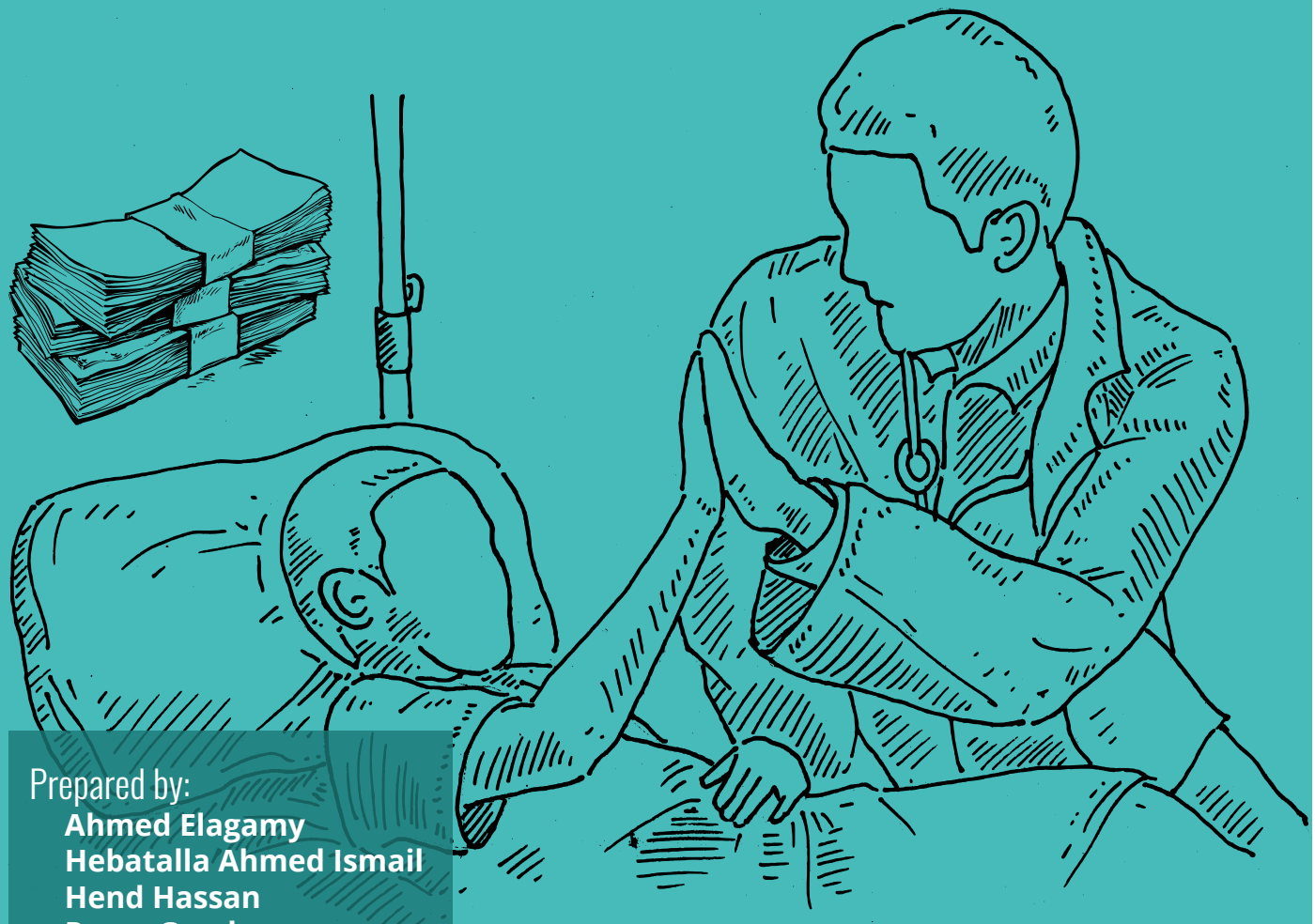
Redesigning Price Setting under the Universal Health Insurance in Egypt

A Policy Paper



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List of Abbreviations

AHRQ	Agency for Healthcare Research and Quality
GAH	General Authority of healthcare
GAHC	General Authority of Healthcare
GAHAR	General Authority for Healthcare Accreditation & Regulation
HIO	Health insurance organization
MoHP	Ministry of Health and Population
MOF	Ministry of Finance
NGO	non-governmental organization
UHI	Universal Health Insurance law
UHIA	Universal Health Insurance Authority
UHC	Universal health Coverage
UPA	Unified Procurement Authority
WHO	World Health Organization

Executive Summary

Health is a main concern for all countries around the world. It can affect the development of nations economically and socially. Consequently, countries should focus on health expenditure, especially with the aim of a Universal Health Coverage (UHC).

If governments do not control their health expenditure, it can lead to poverty. At the same time, they need to maintain high healthcare service quality, so they should ensure the right expenditure. In Egypt, the government approved a new law for Universal Health Coverage. According to the new law, there are three new entities established and are responsible for healthcare services and management, which are the General Authority of Healthcare, the Universal Health Insurance Authority (UHIA) and the General Authority for Healthcare Accreditation and Regulation.

The government started the first phase of Universal Health Coverage in specific governorates based on the Universal Health Insurance (UHI) scheme, which is still under implementation. Upon the start of the UHI program, the government discovered limitations, including setting the pricing for healthcare services.

This policy paper is tackling the problem in the policies and procedures for pricing health services. The methodology used in the research is semi-structured interviews with officials in the Universal Health Insurance Authority to find more about the problem, and desk research to find data about pricing in Egypt and other countries in the literature. The paper shows different strategies are followed in developing and developed countries.

There are several problems discussed in the interview, but after the extensive research and the interviews with UHIA representatives, the problem is highlighted that there is a lack of ability to have actual prices of healthcare services from the local market.

Hence, the paper offers three suggestions for policy alternatives to solve the problem of pricing in the UHIA which focus on finding a suitable way to regularly collect actual prices data to use in setting tariffs for healthcare services. The first is Annual Reports to be submitted by providers, the second is Contracting out to Third Parties and the third is a National Costing Database. The policies are compared depending on twelve criteria; Readiness to roll-out, Political acceptability, Technical complexity, Time needed, Capacity needed, Administrative challenges, Impact, Agility, Fund attraction, Budget Impact, Ability to drive quick wins, and Entanglement with other dependencies. According to the analysis, contracting out to third parties is the most favorable alternative in the short term.

On the other hand, the other two policies will take longer time and more effort, but their implementation will be useful in the long run in many aspects.

Introduction

Each year, almost 100 million people are being pushed into extreme poverty due to health expenses, and 800 million spend more than ten percent of their household budgets on health care according to Tracking Universal Health Coverage: Global Monitoring Report (World Health Organization, 2017; World Health Organization & World Bank, 2017). The provision of Universal Health Coverage or Insurance, as referred to in Egypt, has been set as a priority around the globe, in accordance with the Sustainable Development Goals, aspiring to provide quality and affordable healthcare for all as part of the most basic human rights.

Many developing countries around the world have been implementing UHC reform programs, varying in paths, models, and policy alternatives. Nevertheless, none of these models have been unanimously called models of reference. In 2018, the Egyptian Parliament adopted the new UHI law, as part of Egypt's Sustainable Development Strategy Vision 2030, with the objective of ensuring access to quality health services for all Egyptian citizens without financial hardship. The vision aspires as well to offer adequate and sustainable funding for health to reduce out-ofpocket expenditures, via a complete health system reform and the introduction of a compulsory social health insurance scheme (Devi, 2018).

Health Financing and Pricing of Health Services

The health care market is not a typical market for goods and services. In fact, information asymmetry is common among healthcare services users. Moreover, in most high-income and middle-income countries, there is a third party who is paying on behalf of people which results in people being less sensitive to prices of health services (D'Cruz & Kini, 2007). The healthcare market has three key players: the patients who are benefiting from the healthcare services, the payers or purchasers who are paying on behalf of the patients, and the healthcare providers who are represented in hospitals and clinics. Although the prices of healthcare services do not affect the demand of purchasing these services, they determine the level of the financial resources needed to deliver the needed healthcare and provide an incentive for providers to deliver quality care (Luca & Paul, n.d.). Therefore, different considerations should be taken during price setting for health services and reflect broader health system goals.

Health financing is one of the health system's building blocks and is significant to expand the UHC to the whole population without any financial hardship. Health financing ensures sustainable flow of funds to the health system.

According to the World Health Organization (WHO) framework for health financing, raising revenue, pooling funds and strategic purchasing are the three main processes of the health financing arrangements that governments should work on to achieve sustainable financing of the system. The Global Burden of Disease 2019 UHC has identified that health financing is very important in reaching universal health coverage (Lozano et al., 2020).

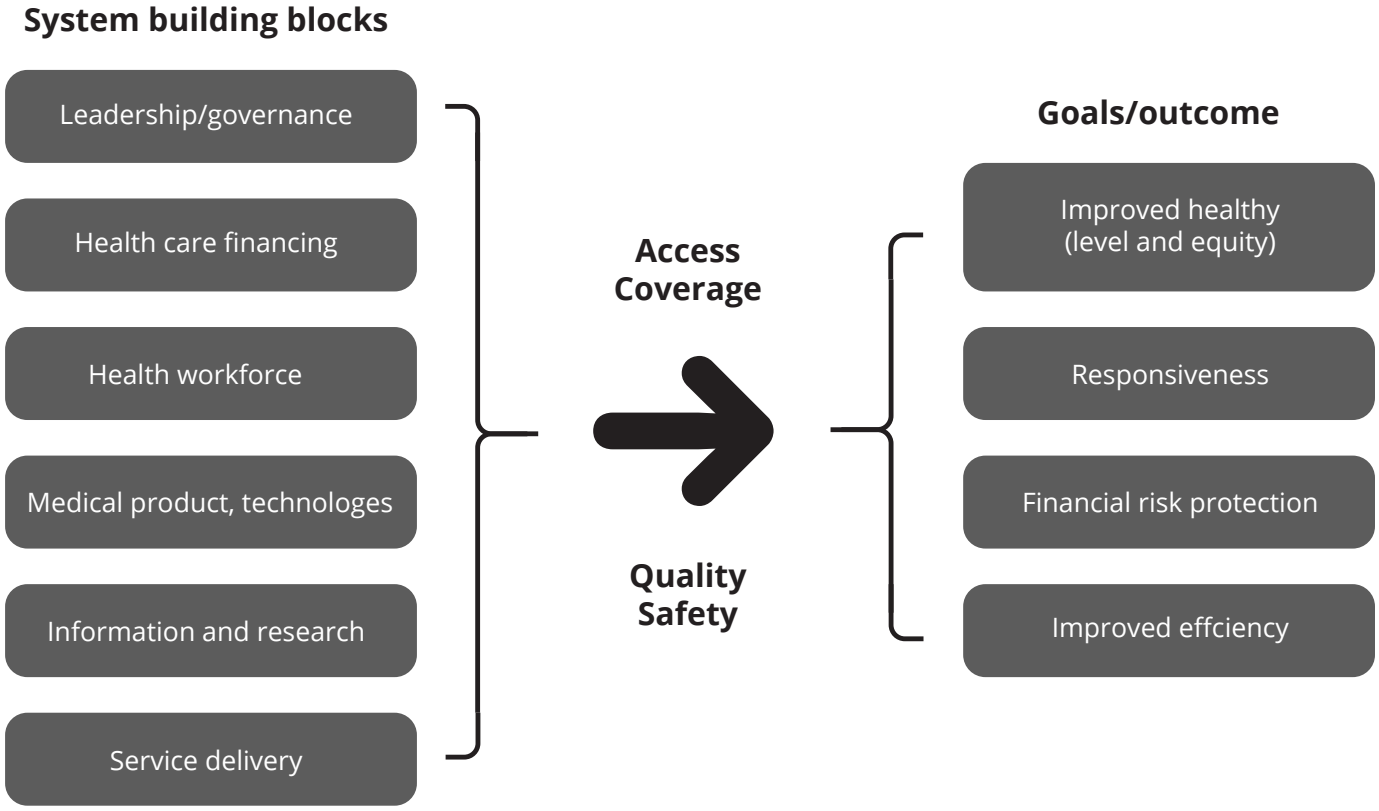

Figure 1: WHO's Health System Framework

Health Financing and Pricing of Health Services

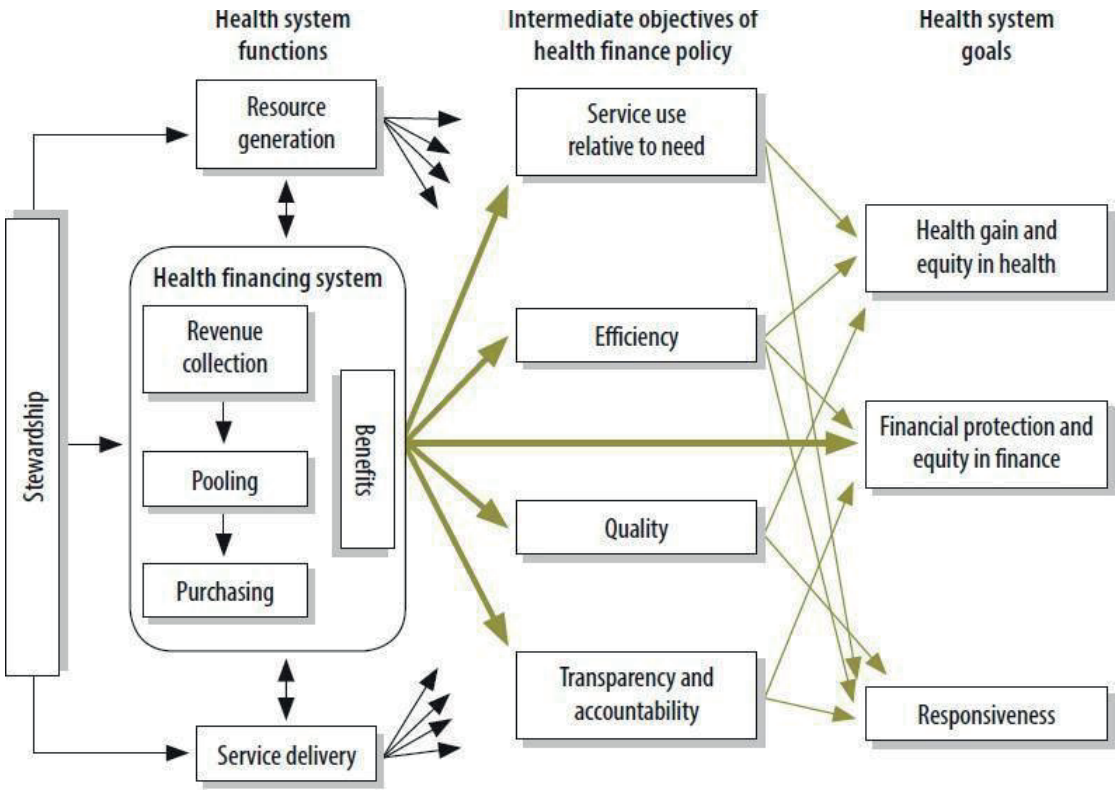

Figure 2: WHO's Framework for Health Financing and Universal Health Coverage

Pricing of Health Services

The pricing of health services is a key aspect under purchasing the benefits package of health services within the overall financing system (Evetovits, 2019; Barber et al., 2020) As public spending on health is increasing, there should be more attention towards strategic purchasing including the pricing of services and payment methods which provide an incentive for providers to deliver quality health care.

Evidence has shown that price setting serves as a tool to control costs and affects the volume of certain services. For instance, in USA, high prices are accounted for half the growth in health spending (Anderson et al., 2003; Martin et al., 2011).

The prices should reflect the actual costs because if they are too low or too high, this will definitely result in unintended negative consequences such as the provider's selection of healthier patients or a low quality of healthcare (Barber et al., 2020).

The other aspect of strategic purchasing is the provider payment systems which could be represented in different types of payments. There are three dimensions for the payment methods: the base of identifying the prices, the level of payment per unit, and the administrative and economic process for determining the price level. This paper explains the challenges in identifying the prices and costs of healthcare services that are provided for insured individuals under the new UHI scheme in Egypt (Reinhardt, 2006)

The Current Egyptian Context

In 2018, the Egyptian parliament legislated the new UHI law which enforces a total health system reform and introduces a compulsory social health insurance scheme to extend health coverage to the whole population ensuring access to quality health services without financial hardship (Devi, 2018). One of the objectives of the new health system is to ensure good governance and separate the funding an provision of the health services. The new health insurance scheme is to have incremental geographical expansion to cover thewhole population within 15 years and implementation has been taking place since late 2019 in Port Said.

Accordingly, three autonomous organizations were created to manage the new health insurance scheme in Egypt. Legally, (Law 2/2018 on Universal Health Insurance, 2018), the General Authority of Healthcare which is a national healthcare provider administers all curative health services, including primary, secondary, and tertiary healthcare services. The UHIA is responsible for managing the new national health insurance program and is responsible for purchasing the health services on behalf of the population. GAHAR is the main authority to set quality standards for health services and accomplish the accreditation and registration of medical facilities and medical professionals, thus ensuring compliance with quality standards *(Law 2/2018 on Universal Health Insurance, 2018).*

Table 1: The law indicated that three autonomous organizations to be created to manage the new insurance scheme

General Authority of Healthcare	Universal Health Insurance Authority	General Authority for Healthcare Accreditation and Regulation
Under the supervision of the Minister of Heath and Population	Under the supervision of the Prime Minister	Under the supervision of the President
The main public provider for healthcare services	The main purchaser of healthcare services	Set the quality standards for health service and ensure compliance with quality standards

The UHI scheme is yet to be fully implemented across the country, with the aim of including the whole population by 2030. These pilots revealed several limitations identified by the Universal Health Insurance Authority regarding applying strategic purchasing and setting prices for healthcare services.

Section 2 Problem Statement and Stakeholder analysis

Significance of the Problem

In 2015, United Nations member states reiterated their commitment to universal health coverage (UHC) so that all people have access to quality health care without exposure to financial hardship (WHO, 2019). The Universal Health Insurance reflects three dimensions of coverage: whom it covers, what services or benefits packages are covered, and how much will be financed to cover these services. Thus, the importance of pricing health services accurately ensures the most efficient use of public funding while providing the highest quality of services to citizens.

As the government holds the responsibility of purchasing such health services as part of the UHI, pricing health services is a key component in purchasing the benefits package (the covered services) within the overall financing system (Evetovits et al., 2012). Prices should reflect actual costs and take into consideration broader health system goals and health outcomes. In this context, price setting serves as an instrument to reduce or increase the volume of certain services or treatment modalities to control costs (Luca, & Paul, 2019). One of the main challenges that impede the universal health insurance implementation price setting and regulation is the current "normative" costing practices which have proven to be ineffective in managing financial resources. Additionally, intertwined functions between the UHIA and other pricing committee members delay efficient decision making, confusing the process of price setting and the role of the implementing authority.

Problem Statement

Based on the analysis of the situation, it is quite apparent that it is crucial to establish clear policies in price setting as part of universal health insurance. This paper aims to provide alternatives to the current policies and UHIA costing structure in order to apply the actuarial cost practices.
The researchers conducted semi-structured interviews with the representatives of the main stakeholder UHIA:

- Dr. Sherif El Sherif, the chief beneficiaries' officer -at the Universal Health Insurance Authority
- Dr. Ahmed Syam, the director of health economics - UHIA

The interviews discussed the reasons behind the current normative costing structure lays on several factors:

1- Costing models are not inclusive of all types of hospitals

The availability of accurate comparable information about health services prices in terms of quality and financial value is frequently difficult to be obtained. On the other hand, the demand for the required health services is less responsive to price changes. Thus, the current normative costing model does not include all types of hospitals, only public ones, which is definitely due to the lack of data from the private sector which makes the sample size non - representative for the data. Therefore, data collection from private service providers is thus needed but also requires higher incentives to encourage their participation.

2- Unfinished automation of the HIS system

One of the main reasons for working on normative costing practices with its whole consequences are the unfinished automation of the HIS system.

3- Commitment towards health insurance coverage

Despite the above limitations, the UHIA has a duty to honor its commitments towards the governments and is obligated to take reasonable regulatory measures, within available resources, to achieve the progressive realization of UHI. This is particularly important in health care markets, which are characterized by such failures as information asymmetry: lack of information on prices and quality that preclude consumer choice, adverse selection, and moral hazard (Cohen, & Siegelman, 2010). Despite having this limitations which are concluded in lack of policies regarding price regulation leading to working with non-evidence costing practices while aiming to apply actuarial costing, the work with other governorates in the project phases had to be continued.

4- Lack of coordination between UHIA departments work (UHIA internal issues)

Based on interviews with the UHIA representatives, it was highlighted that the newly established organization is still facing organizational issues in terms of the internal alignment of the departments' function as well as between the claims and reimbursement departments.

5- Issues within the pricing committee

According to the new UHI law and bylaws, a pricing committee was assembled to establish the policies, rules, and regulations of price setting. The committee was composed of members representing all health and financing sectors. Nevertheless, the majority of the pricing committee has a financing background but lacks the knowledge on health systems. This negatively reflects on the pricing decisions.

6- Lack of stakeholders' engagement

Besides the diversity of the committee members› backgrounds, lack of engagement, an important factor as the private sector had a negative influence on pricing setting and regulation. This makes the analysis of stakeholders who may be concerned with pricing and regulation of health services very important and needs to be put into consideration.

Stakeholder Analysis

1- Stakeholders' list

- Universal Health Insurance Organization (UHIA), the Ministry of Finance (MOF)
- Pricing committee
- General Authority of Healthcare (GAHC), the Ministry of Health and Population (MoHP)
- Private sector
- Academia university professors (Responsible for financing)
- Subject matter experts
- Hospital managers
- Beneficiaries
- Media

2- Stakeholders' mapping

Power	**High power/ low interest**	**High power/high interest**
	• Private sector • Academic professors (Universities) • (Parliament - health committee \ presidential office)	• UHIA (MOF) • GAHC (MoHP)
	Low power/ low interest	**Low power/ high interest**
	• Media	• Subject matter experts • Beneficiaries • Hospital managers/Costing employees
Interest		

Figure 3 Stakeholders Mapping

Looking back through history, the factor that appears most critical to successful implementation is genuine and sustained political leadership. This was one of the key findings of a recent synthesis report of eleven UHC case studies published by the World Bank which states that: "Strong national, local political leadership and long-term commitment are required to achieve and sustain UHC" (Maeda et al., 2014).

Section 3 International Practices

Universal Health Coverage has been set as a priority in many nations' political agendas. But not all countries can follow the same strategies, because each has different conditions. Accordingly, each country has its own policies and strategies for approaching fairness in pricing healthcare services. In order to set policies in Egypt, one should look at other countries' experiences to develop the best policies that align with the domestic conditions. The policies are different, varying from the choice of pricing methods, how to adjust prices for specific conditions and when to set bundled payments or give incentives. Also, they can vary according to the income level of each country and the feasibility of tools. In the following part, we will discuss different practices in costing in both developing and developed countries. The examples were taken from different income level countries; high income (the United States and the United Kingdom), low income (Afghanistan) and middle-income countries (Indonesia) like Egypt. So, we can understand the capability of each country to apply costing mechanisms depending on its income level and enable us to choose the best practice suitable for our country's condition (World Bank, n.d.).

Indonesia

In developing countries, there are efforts to reach fair pricing methods. For example, in Indonesia, the Ministry of Health started to use case-based groups for the payment of claims in 2011 (National Team for the Acceleration of Poverty Reduction, 2015). The government set a standard tariff for health services for each diagnostic group. Every year a technical team formed by the Ministry of Health meets and decides on the suitable tariff from the available data, and this tariff is classified according to case or diagnostic groups, these groups are classified by a committee of physicians. The tariff for diagnosis-related groups is calculated by an equation of three main elements, the first element is the cost weight, which is calculated by finding the proportion of the cost of a specific diagnosis-related group to the total cost of the diagnosis-related groups (National Team for the Acceleration of Poverty Reduction, 2015).

The second element is the case mix index which explains the average of the total cost of the diagnosis-related group per hospital, and the final element is the ratio of the total costs of a hospital to the total cases treated in this hospital, also called the hospital-based rate. In addition, there are adjustment factors that can be added to specific cases such as the geographic area of a hospital or the economic status of the people living in the neighborhood of the hospital (National Team for the Acceleration of Poverty Reduction, 2015). Although this method is systematic, it still has a problem in the normative costing. They still depend on expert opinion to indicate the costs. Rochmah et al. (2020) showed that using operational audit, there is a difference between the tariff indicated by the health ministry and the actual cost spent by the hospital. This operational audit was done by calculating the costs from the patients' records, in addition to the details of the treatment journey like the length of stay and complications, to measure the quality of services discharged. The audit found variance between the actual cost and the normative one. Rochmah et al. (2020) suggested that the operational audit should be done annually to indicate the difference and update the tariff, and it will also be a way to improve the health service quality among hospitals.

Afghanistan

In Afghanistan, the citizens still suffer from lack of access to the basic health services (Higgins-Steele et al., 2018). One of the challenges faced by the government is the accessibility of reliable data in addition to the high out-of-pocket payments (Higgins-Steele et al., 2018; Ministry of Public Health of Afghanistan, n.d.). Hence, the Ministry of Public Health of Afghanistan (2020) published a report to find the actual costs of the services. In this report, the costs of the basic packages of health services are calculated by two ways, indicating the actual services with the actual costs or the normative costs, which depend on experts' opinions. Also, the costs are calculated for five different health facilities: inpatient services at district hospitals and outpatient services at health sub centers, basic health centers, mobile health teams and comprehensive health centers. For each facility, the costs are indicated per service, one of three: curative, preventive or promotional. The costs are retrieved from the Expenditure Management Information System and calculated by a system developed by a governmental institution, and it is designed for calculating the costs of the primary care services. The report showed that the normative costs, in most cases, are much higher than the actual costs. This method of costing is still under evaluation, but in general the coverage of health services is progressing (WHO Regional Office for the Eastern Mediterranean, n.d.).

The United States of America

One of the best approaches is to set a pricing list of a service, to know the actual cost of this service first then adjust the price depending on specific conditions. It can be inferred that developed countries are concerned about collecting actual data. For example, the US established an agency to ensure patient safety and improve the quality of the healthcare system. This agency is called the Agency for Healthcare Research and Quality (AHRQ) (Agency for Healthcare Research and Quality, 2021d; Kronick, 2016). It focuses on collecting data from several sources through which to reach its goals (Agency for Healthcare Research and Quality, 2021a). One of its sources is Healthcare Cost and Utilization Project, which is a source of healthcare data, where they collect information about services' visits, in-patient stays, etc. (Agency for Healthcare Research and Quality, 2021c). Another source of data is the Medical Expenditure Panel Survey, which concerns how people pay for health insurance and out-of-pocket money, so from these data they can determine the actual costs of the services (Agency for Healthcare Research and Quality, 2021b). Sometimes, the AHRQ depends on other partners to perform the data collection, which facilitates the process and avoids bias (Agency for Healthcare Research and Quality, 2019). The implementation of such systems in the US not only affects the determination of costs, but also helps in the rapid development in health care and patient safety research by giving evidence-based data (Meyer et al., 2003).

The United Kingdom

In another developed country, the National Health Service in the UK obligates its providers to submit cost reports annually. These reports are used to unify the costs with the national tariff prices. From these reports, the National Health Service presents the data in different ways, such as the whole data of every service provided by different providers, comparing between cost in different National Health Service providers and reconciliation statements to show the adjustment made to reach the total reference costs (National Health Service, n.d.). At the end of 2020, the National Health Service (2021) proposed to record the health services costs for every individual, they will stop collecting reference costs and start the patient level costing in 2022. The system is called Patient Level Information and Costing System (PLICS) Data Collections and it will be useful in making new methods in pricing health services, unifying national cost collection, and finding the association between the costs and characteristics of the patient. In addition, this system will also help in identifying the effect on the cost base in England as a result of the COVID-19 pandemic (National Health Service, n.d.).

Section 4 Policy Alternatives

This section aims to identify applicable policy alternatives that could effectively help in applying strategic purchasing of healthcare services and regulate prices under the new Universal Health Insurance law. Although there is much published literature about countries' best practices in applying costing exercises and setting prices for healthcare services, a conclusion was made that there is no standard guideline or mechanism that Egypt should follow. Each country initiates and tailors the roadmap based on the reality and the maturity of its microsystems. In that sense, a tailored solution will be presented taking into consideration Egypt's health system inputs and capacities. Before tackling the alternatives, there is a crucial principle that must be considered while implementing any of the solutions to facilitate future comprehensive analysis of cost data.

The data should include individual and packaged healthcare services, the total costs of healthcare provision units including each department, the cost of healthcare workforce and direct and indirect costs of purchased medicines, supplies, equipment, and software. While the above list is not exhaustive, it provides examples of the aggregated end products of tackling cost data from different perspectives.

The current practice relies mainly on building the capacity of the UHIA to be able to calculate the actual cost of healthcare services based on the data collected on the long term. In the meantime, and according to the law, the pricing committee that has been established is responsible to

recommend and adopt a pricing list of services (Law 2/2018 on Universal Health Insurance, 2018)

In the following section we will give an overview of the three policy alternatives as a brief orientation. This will be followed by a discussion and elaboration of each alternative, and finally analysis and comparison for the three alternatives will be conducted.

Alternative One: Annual Reports by Providers

The first alternative is to have annual cost reports produced by healthcare providers to overcome the challenge of the absence of the real cost data of healthcare services. Additionally, having a committee to collect the data from the market does not guarantee a complete overview of the current prices because they merely estimate the data. Accordingly, this policy option will focus on collecting the real data of costs on a regular basis. The government is recommended to obligate the UHIA providers to submit an annual report of the actual cost of its health services (National Health Service, n.d.-b). This report should contain all the details of the health services per patient, such as the disease, the needed services, and medication. Hence, this report will illustrate what services were needed in treating each case, and in the future, will be a method to monitor the service quality. It is important that the government creates a template for the report to harmonize the work, so it will be easier for the responsible team to collect the data, analyze them, and find the variances between the tariff that was chosen by the government and the actual costs sent by the providers. Therefore, the government can update the prices annually with the prices that are calculated on real costs. Also, in the future, this annual report can be designed to be generated automatically from the digital information system of the UHIA which is still under construction now. This system is designed for the providers to enter the claims electronically and it will be easy to add sections to generate the requested reports automatically.

***Table 2** - Advantages and Disadvantages of Alternative 1*

Advantages:	Disadvantages
• Ensures collecting the actual data regularly, and updating the prices frequently to match the actual prices, so avoid the frustration of providers. • Collects the data from all the providers, not only a sample. • Finds the correlation between the characteristics of patients and costs, which can help in further research in the future. • Enhances the health services quality, in case the government uses these reports in monitoring the health services quality and providing incentives for better quality.	• It may take a long time to apply this method, and some providers may consider it time consuming. But the implementation will only be difficult in the beginning. It can be easier if the government gives incentives to accelerate the process, then this report will be routine work. • There may be bias in filling the reports to achieve specific interests. It can be solved by regular monitoring from the UHIA.

Alternative Two: Contracting out to Third Parties

The second alternative is considered as a shortcut (short-term) solution for the current roadmap. The alternative is to contract with a reputable third-party consultancy to conduct a costing exercise on a representative sample of healthcare institutions on the limited geographic scope of governorates that are currently implementing the UHIA like Port Said and Luxor. The timeline of the project should not exceed 6-9 months and the data collected must be statistically analyzed to provide cost averages on a distribution curve to deliver the most accurate results on the given limited scope. Parallel to this, the third-party consultancy must also run a market research on cost and price data in the private sector and provides average results categorized to A, B, and C classes of the private sector with comparable items to the results of costing exercise. The UHIA policy makers can then position the pricing scale with reference to the private market price scale. The pricing position should reflect the UHIA direction in financial sustainability while ensuring the reasonable reimbursement of healthcare provision units.

In this alternative the challenges of the first alternative are tackled and the results can be used immediately to conduct the pricing exercise. In addition to this, the cost structure and items deliverables can be used in variance analysis and adjustments after comparing it with the long-term results of the first alternative.

Table 3 - *Advantages and Disadvantages of Alternative 2*

Advantages:	Disadvantages
• This alternative will save the time and efforts of the UHIA top management and its employees as well. • It will also help in giving an overview of pricing in the market which will help the pricing department and pricing committee.	• The UHIA experience in costing will not be built to conduct this exercise in the future. • Sample representation of data will give a close estimate but not actual.

Alternative Three: National Costing Database

The third alternative is turning the health sector cost into a national project. This alternative may seem complicated. However, we noticed through our stakeholder analysis the same problem in most healthcare authorities and organizations serving the public sector: the need to have cost data. In this alternative the UHIA will propose to the Council of Ministries a national project to build a healthcare costing database. Once this project is adopted by the council of ministries, a steering committee represented by all concerned stakeholders will run the national project. The deliverables of such a project will solve a chronic problem in Egypt and will provide a unified and validated national healthcare cost registry to be used by all concerned organizations seeking such data. Moreover, it can give access to the researchers of health policy and health economics to analyze the cost data and develop creative recommendations. The stakeholders of interest might be, but not limited to, the UPA, the Ministry of Health, NGOs, GAH, HIO and pharmaceutical companies. This alternative will also use the current cost structure tree that is being developed by the UHIA electronic system as a template to roll out the project and hence the long-term results of the first alternative will be achieved eventually but with more perspectives and more comprehensive data.

Table 4 *- Advantages and Disadvantages of Alternative 3*

Advantages:	Disadvantages
• The costing issue will be completely resolved forever. • The data will be comprehensive. • It will involve different stakeholders	• It is very complex to roll out this exercise hence it requires enforcement from the prime minister or the president himself. • It will take a relatively long time to be accomplished.

Analysis of Policy Alternatives

Comparing policy alternatives should rely on criteria to make objective judgment that is based on analyzing clear factors. Rossell (1993) discussed several criteria to assess policy alternatives such as political feasibility, effectiveness, efficiency, and equity. Also, technical difficulty and perceived difficulty, including political difficulty are used for policy alternatives evaluation (Nutt, 1998). Based on literature and learning experience, we developed 12 criteria to study the alternatives from different perspectives. Not only relying on literature, but also touching base with how we perceive implementation success factors in the governmental sector.

For instance, we know how attractive our country is to receive international financial support because of the new reform laws in healthcare. The literature does not tackle this criterion, but we believe this factor will impact our assessment for the alternative and hence it was developed and described.

In our analysis we discussed the weights of the criteria in comparison to each other and we found they should not be evaluated as similar weights. We referred to our meetings and interviews with the UHIA and reviewed our stakeholders to decide on the weight of each criterion. The weights have been assigned on a 1 to 10 scale given that 1 is the lowest and 10 is the highest possible weight.

The scores of each criterion were given after a team discussion per each of the criteria regardless of the weights of the criterion. Finally, the scores have been multiplied to the relevant weights to give the weighted score.

Table 5 enumerates and details of the developed criteria, while Table 6 scores each alternative based on each criterion from 1 to 5, and also gives weights and weighted scores.

Analysis of Policy Alternatives

Table 5 *- Criteria of Policy Alternatives Assessment*

Comparator/Criterion	Description/ Elaboration
Readiness to roll-out	Minimal preparation, planning, alignment, stakeholder management and time needed to roll out the policy.
Political acceptability	The policy will have the support of policy makers in the council of ministries, healthcare sector governmental policy makers, decision makers in the UHI authorities and when released in the media to the public.
Technical complexity	The implementers and targeted employees are fully aware of related processes, understand their role in the policy, and are able to deliver the expected results.
Time needed	The duration needed to implement the alternative and achieve deliverables as expected.
Capacity needed	Number and level of human capacity, education and training, infrastructure, or IT base.
Administrative challenges	The cascading of the policy will not require limiting administrative decisions and bureaucratic pathways.
Impact	The effectiveness of the policy to resolve the problem itself and the collateral positive effects on other related issues.
Agility	In a very dynamic and uncertain environment we face currently; the flexibility of the alternative to be executed in different ways in harmony with changes.
Fund attraction	The ability of the policy to attract funds from international funding agencies.
Budget impact	The financial burden that can jeopardize the execution of the policy. The costs could be a monetary payment to an external entity or man days needed from employees.
Ability to drive quick wins	The policy can have short-term impactful outcomes as well as long ones. Policy makers need to see positive changes to be able to get the required support to continue.
Entanglement to other dependencies	The alternative should have minimal dependencies on other policies, decisions, functions, and processes so it can fly easily.

Table 6 *- Scores of Policy Alternative Assessment*

Comparators	Relative Weight (From 1 to 10)	On a scale from 1 (The least favorable) to 5 (The most favorable)					
		Alternative 1: Annual Reports by Providers		Alternative 2: Contracting out to Third Parties		Alternative 3: National Costing Database	
		Score	Weighted Score	Score	Weighted Score	Score	Weighted Score
Readiness to roll-out	5	2	10	3	15	1	5
Political acceptability	7	2	14	4	28	3	21
Technical complexity	8	1	8	5	40	1	8
Time needed	5	2	10	5	25	1	5
Capacity needed	9	1	9	5	45	3	27
Administrative challenges	4	1	4	3	12	2	8
Impact	5	4	20	3	15	5	25
Agility	6	1	6	3	18	4	24
Fund attraction	7	1	7	4	28	5	35
Budget impact	2	2	4	3	6	1	2
Ability to drive quick wins	7	1	7	5	35	1	7
Entanglement to other dependencies	7	1	7	4	28	2	41
Total		NA	106	NA	295	NA	181

The following figures are visual illustrations of the alternatives' analysis based on weighted scores given in the above table. The figures are developed as radar charts to give a comprehensive visual overview.

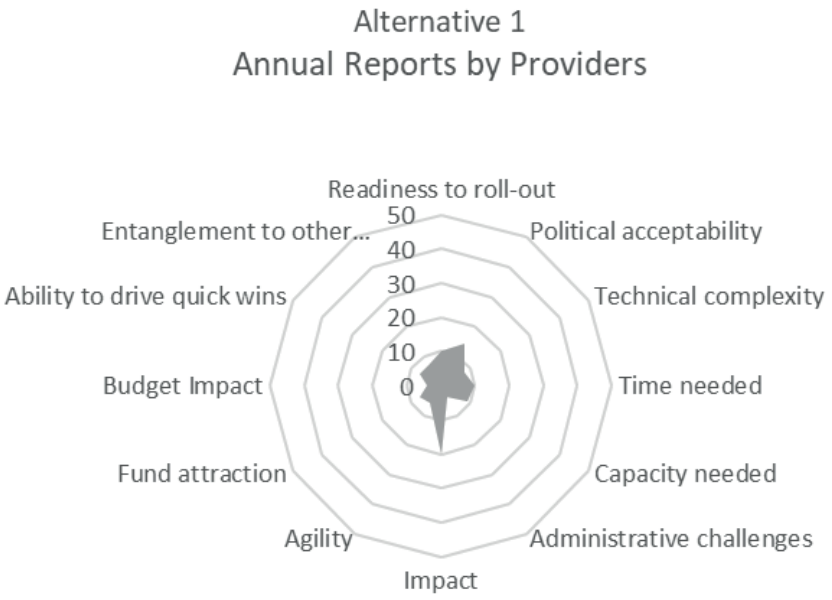

Figure 4: *Alternative 1: Annual Reports by Providers Analysis Visual Radar Chart*

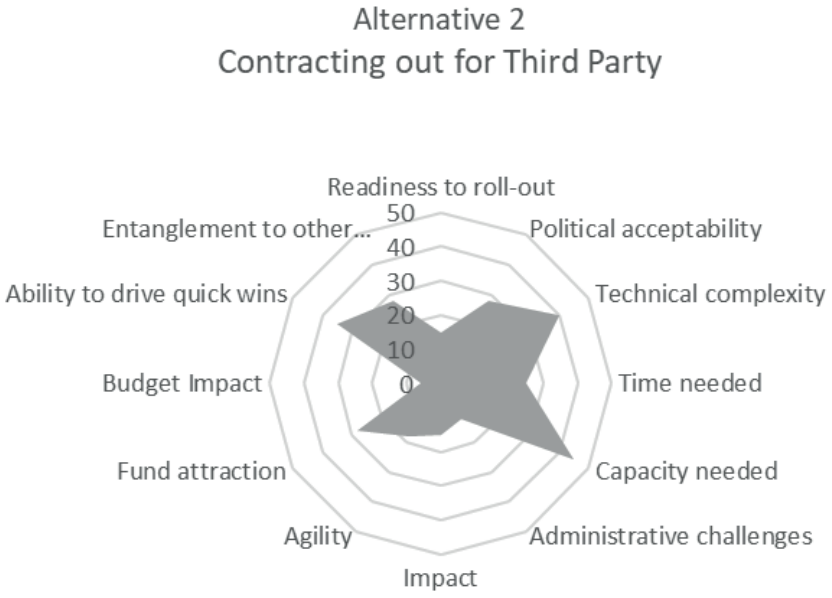

Figure 5: *Alternative 2 Contracting out to Third Parties Analysis Visual Radar Chart*

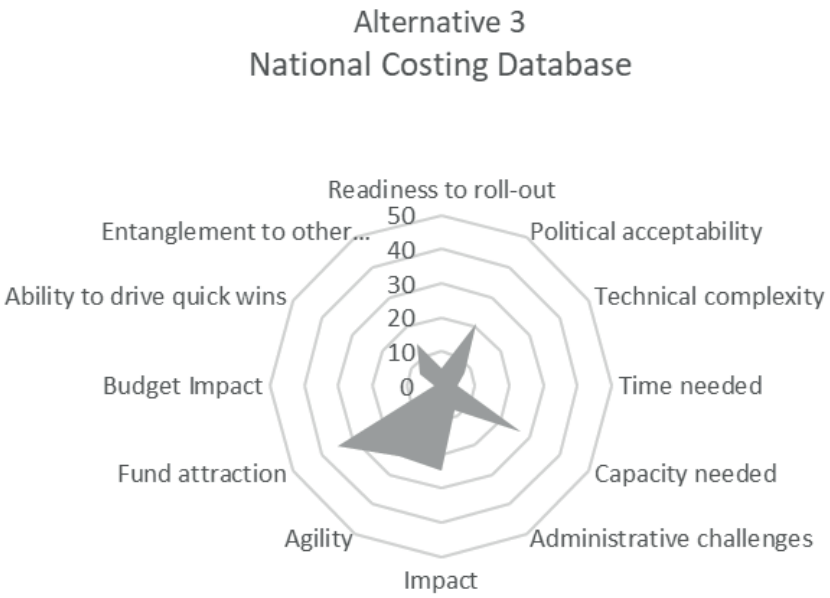

Figure 6: *Alternative 3 National Costing Database Analysis Visual Rada Chart*

Section 5 Conclusion

As public spending levels are increasing among the middle-income countries, the importance of applying strategic approaches in purchasing and pricing of health services has been highlighted and puts pressure on governments to link the payment and pricing to the performance of healthcare providers. In Egypt the new health insurance system will include the whole population, there is an urgent need to apply the strategic purchasing and enhance the health financing domain to apply the efficient use of resources and ensure sustainability for the new system. During the evaluation stage of policy alternatives, it is significant to consider the different policy criteria and assign weights to these criteria to have a well-informed policy recommendation at the end.

According to the above evaluation criteria, contracting out for third parties is the most favorable among the other policy alternatives because it needs a shorter time to plan, prepare and implement. It fulfills the political acceptability criteria and there is no technical complexity at all.

Although this policy can result in short-term impactful outcomes by producing a list of actual prices that ensure the fair pricing of health services, the financial burden is considered the highest compared to other policy alternatives. Moreover, contracting out for services will impose few administrative challenges and must pass through some bureaucratic hurdles.

Regarding the policy, alternative number one, which is establishing an annual report system by all providers under the UHIA will ensure collecting the actual data regularly and update the prices frequently. This alternative needs an investment in infrastructure and human capacity to be able to produce the needed outcome and it also needs longer duration to enhance the technical experiences and required skills for employees. Although this policy alternative is considered the least favorable policy alternative, it will enhance the capacities and will be effective in resolving the problem from its roots. Establishing the National Costing database is considered the second favorable choice as it has the highest score for impactful and effective outcome and also fulfills the criteria of political acceptability. As a national project, this policy will attract funding agencies and will also result in building the capacities of employees among the government. In conclusion, hiring a third party to conduct the exercise will yield a quick win for the government and will pave the road for the implementation of the National Costing Database which will help in resolving the problem and yield positive effects on pricing and purchasing of health services under the UHI.

A conclusion was also made that strengthening the national role is setting prices decreases price discrimination and controls healthcare costs. Prices of healthcare services not only ensure accuracy and adequacy in covering costs but also act as important incentives for healthcare providers and tools to achieve health system goals.

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THE PUBLIC POLICY HUB

Where Rigour Meets Creativity

The Public Policy HUB is an initiative that was developed at the School of Global Affairs and Public Policy (GAPP) in October 2017. It was designed to fill in the policy research gap in Egypt. It provides the mechanism by which the good ideas, plausible answers, and meaningful solutions to Egypt's chronic and acute policy dilemmas that are proposed by the country's best minds, the experienced and the creative from different age brackets, can be nurtured, discussed, debated, refined, tested and presented to policymakers in a format that is systematic, highly-visible and most likely to have a lasting impact.

It is designed to develop a cadre of well-informed and seasoned policy developers and advocates, while simultaneously fostering and promoting creative solutions to the challenges facing Egypt today. The project provides a processing unit or hub where policy teams are formed on a regular basis, combining experienced policy scholars/mentors with young creative policy analysts, provide them with the needed resources, training, exposure, space, tools, networks, knowledge and contacts to enable them to come up with sound, rigorous and yet creative policy solutions that have a greater potential to be effectively advocated and communicated to the relevant policymakers and to the general public.

Since its establishment, the Public Policy HUB has been supported by Carnegie Corporation of New York, UNICEF Egypt, and Oxfam. The Hub had partnerships with different ministries and governmental institutions like the Ministry of Social Solidarity, Ministry of Planning, Ministry of Health, Ministry of Trade and Industry, Ministry of Local Development, Ministry of Education, Ministry of Environment, National Council for Childhood and Motherhood, National Population Council, and General Authority For Transportation Projects Planning.

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