Costing activity and related capacity building within the Social Health Insurance reform in Egypt- Phase 1

Study report

Executive summary

Egypt has identified the Social Health Insurance (SHI) as its way to achieve Universal Health Coverage (UHC). The new health system reform will imply making important decisions on, among others, how to operationalize the purchasing of services, the selection of provider payment mechanisms and the prices to be paid to healthcare providers. For this to be realized, policymakers, purchasers and providers need to access routine cost information to allow them perform their – planning, purchasing and managing functions.

In Egypt, as in many countries, health financing and reporting systems have not generated the data or expertise needed to use many of the well-established costing methodologies available. As a result, the costing information that exists has been produced through one-off studies that do not follow a standardized approach, are based on small samples and do not generate routine information that is needed to inform provider payment mechanism and pricing policies.

A Steering Group was established under the co-stewardship of the World Health Organization (WHO) country office in Egypt and the Health Insurance Organization (HIO) to develop and oversee the implementation of a routine unified national costing system for health services.

The overarching policy purposes for conducting this costing exercise is to:
a) Produce initial baseline information on health service costs and cost structure. That is, a set of indicative benchmarks that are crucial elements in determining future payments and pricing policies made by the planned Social Health Insurance (SHI) organization to providers;
b) Develop a critical mass of Egyptian experts who can further update and expand initial costing exercise results and thus institutionalize the health services' costing process.

To serve the intended objectives, a top down cost accounting methodology was employed to calculate the average unit costs as well as relative costs per clinical department. Top-down methodology is widely perceived to be an efficient approach that provides considerably accurate cost information in a timely manner. It produces average cost estimates taking into account total facility budget leveraging historical financial and utilization data. The data period for this study covers the fiscal year 2014/2015, as it was the latest year where all facilities had completed their budget cycle reporting before the start of the study. All cost items (recurrent and fixed) that contribute to the full cost and related to delivering the service were included in the cost accounting.

This phase of the costing study focused on secondary and tertiary hospitals. The sample included 10 hospitals representing various providers' entities in the Egyptian Healthcare system, namely; Health Insurance Organization (HIO), MoHP-curative sector, Specialized Medical Centers (SMCs), University hospitals

and the private sector. Primary health care, however, is aimed to be included in the succeeding phases of the costing process.

The study provides a set of considerably accurate indicative cost information that can be used as a basis to inform decisions on pricing policies and provider payment system at the clinical department level. Cost information presented in this document includes:
a) *Cost structure*; to understand the cost drivers and address possible efficiency measures.
b) *Estimated average unit costs* per clinical or ancillary department to inform payment rates/prices. The study provides benchmarks on the average unit cost in 20-23 clinical departments.
c) *Relative costs*, which shows the relative difference in resource intensity between specific clinical department and weighted global average (i.e. across all departments). Relative costs are not only more robust to changes in market prices and inflation, but also, and more importantly, provide the relevant information (e.g. relative case weights) that is needed to inform output-based payment systems such as case based payments.

Cross-hospital variability in cost information reflects the pluralistic and fragmented nature of health care provision and financing in Egypt. Common findings, however, *suggested the following:*

- Information on the cost structure reveals salaries/overhead, medical supplies and medications as the three leading cost drivers with shares of 42 percent, 28 percent and 10 percent, respectively. Cross-hospital variation was remarkably obvious as in certain hospital; overheads represent almost 80 percent of the total cost. High overhead costs coupled with low utilization rates likely produce artificially inflated unit costs. Therefore, it is suggested to revisit input based payment approaches and health workforce plans in such cases.

- In General, average unit cost estimates in most of the study's clinical departments tend to be lower in hospitals with higher utilization rates suggesting a trend towards a positive effect of economies of scale.

- Noted discrepancies in the pattern between the average unit cost per bed-day and per case suggested differences in Average Length of Stay (ALOS). This is likely to be attributed to, among others, differences in clinical practices/treatment approaches as well as differences in hospital payment systems. Existing payment systems do not provide the necessary incentives to improve efficiency measures.

- Systematic, though predicable, variation was clearly evident in specialized hospitals as well as in private sector hospitals. Higher costs are attributed mainly to the case mix (i.e. severity of patients) in the former while to the

relatively higher prices of cost inputs e.g. medications, medical supplies as well as higher wages in the latter. Hence, adjustments to payment rates should be applied to compensate providers for such systematic cost variation and financial risk.

Setting payment systems and pricing policies are not merely an outcome of a technical exercise. Other considerations may include policy objectives, negotiations with providers and other stakeholders and available resources within the purchaser's financial envelope. Reliable cost information, however, is an integral part of the process, as it provides an evidence base for the other factors. A sustainable routine costing system is necessary to expand similar costing exercises to a more representative cohort of hospitals, as well as other forms of service delivery such as primary healthcare so that it can serve as a basis for the establishment of pricing policies and payment system.

Based on international experience, few critical success factors need to be realized to set a sustainable routine costing system:

- A centrally managed costing unit with clear mandate and intersectoral authority to: collect data from various providers, perform and update costing exercises on regular basis. This central unit is suggested to technically support the planned 'pricing committee' that is envisaged in the SHI draft law.

- Standardized data tools and templates, accounting and analytical methods and guidelines that can be used for multiple purposes. This may include standardized chart of accounts that to be used as reference guide by all providers, unified coding for budget items and providers, a standard set of allocation bases and a unified cost accounting tool that standardize the cost accounting process in a timely manner and provide cost information as required by stakeholders.

- A well-established Health and Management Information System (HMIS) is a cornerstone in the transformation towards a sustainable costing system.

- Finally, critical masses of Egyptian experts who can update and expand similar costing exercise results and feed in the institutionalization of the health services costing process.

In conclusion, this costing exercise is considered as the foundational step that provides indicative benchmarks that will inform price setting and provider payment system for the future SHI. It is envisioned that this costing exercise will lead to a unified costing system for Egypt that meets the 3 objectives of policy makers, purchasers and providers — planning, paying and managing.