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Moving forward: Lessons for Cyprus as it implements its health insurance scheme

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ABSTRACT

The Republic of Cyprus is the only country in the European Union (EU) whose health system is comprised of public and private sectors of relatively similar sizes. The division within the health system, combined with a lack of efficient payment mechanisms and monitoring systems, contributes to inequalities in access to care, and inefficient allocation and utilization of resources. In part to address these issues, a new General Health Insurance Scheme (GHIS), was proposed by stakeholders from the Cypriot government along with a team of international consultants in 1992 and eventually approved by the Parliament in 2001. However implementation of the GHIS has been repeatedly delayed since that time due to cost concerns.

In 2012, following recommendations by the European Commission, the Cypriot Cabinet decided to recommit to the reform. In light of this development, the recent Cyprus application for accession to the EU support mechanism due to the economic crisis, and the international spotlight associated with Cyprus' EU Presidency, this article discusses the anticipated Cypriot health system reform—which is now slated to go into effect in 2016—and examines lessons from other countries.

1. Introduction to the Cypriot health system

Cyprus' health system consists of a highly centralized public sector and an under-regulated private sector [26]. The public tax-funded system does not offer universal coverage, while the private sector is fragmented and not universally accessible. Under current law, 83% of the Cypriot population is eligible to receive free health care from the public sector, yet disproportionately, the government ultimately pays for only around 40% of total expenditures. The relatively low public expenditure as a share of total health expenditures can be largely explained by the absence of universal coverage, limited public sector capacity and long waiting lists for certain public sector services, which lead many individuals to seek care from private providers [2].

Private providers are generally remunerated fee-for-service, and as only about 20% of the population has voluntary health insurance coverage, anyone else that wishes to purchase care from the private sector must pay out-of-pocket [15]. As a result, out-of-pocket payments made up 48.8% of total health expenditures in 2010, which was more than in any other EU country [29]. The private system is essentially unregulated by the Ministry of Health in terms of capacity, fees, or quality; comprehensive private utilization data is not collected or reported by the government since there is no universal monitoring system and private providers are otherwise reluctant to submit data. Although there is evidence of high private sector utilization [1], certain elements of the private sector suffer from under

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-utilization and waste, including high cost medical equipment such as CT scans or MRI machines, which are often installed without the need for state approval, and consideration for cost, current levels of capacity, or patient needs.

Total expenditure on health services as a percentage of Gross Domestic Product is also quite low—second only to Romania in the EU. Yet despite all of its shortcomings, Cypriots report that they are generally satisfied with their health system and the quality of services [7,25]. Indeed, Cypriots enjoy levels of health status similar to other wealthy countries [17,24].

The first movements toward major health system reform began in the early 1990s driven by high-level government discussions calling for universal coverage and care free of charge at the point of service. In response, various proposals and cost estimates for a national health insurance scheme were prepared [14,19,20,21]. These proposals formed the basis of a legal framework for health system reform which was eventually approved and passed by the Parliament in 2001. The General Health Insurance Scheme (GHIS) is based on this legal framework, and aims to provide universal access by reducing the imbalance between the public and private sectors. Aside from administrative accomplishments such as the creation of the Health Insurance Organization (HIO) and the preparation of a strategic implementation plan, little progress has been made on operationalizing the GHIS. However in May 2012, the European Commission issued a Council Recommendation which stated that Cyprus should "Complete and implement the national healthcare system without delay, on the basis of a roadmap, which should ensure its financial sustainability while providing universal coverage" [9]. This led the Cypriot Cabinet in June to reaffirm its commitment to the reform, which is now expected to come into effect in 2016.

Given the length of time remaining before the reforms take hold and the details of the reform that are yet to be determined, it is important for the government of Cyprus to plan accordingly. The purpose of this paper is to briefly describe the Cypriot health reform and discuss how it intends to address existing weaknesses in the health system. We then highlight potential lessons associated with similar reform implementation focusing on experiences of selected countries.

2. Key features of the reform

The reform is expected to lead to changes in financing, coverage, provider payments, administration, auditing and data collection, which are anticipated to improve quality of care, equity of access, and efficiency. Currently, the public health care system is financed almost completely out of tax revenues, with the co-existing private sector receiving negligible public financing. The GHIS will supplement existing tax revenues[1] with contributions from employees (2% of their annual income), private and state employers (2.55% of annual employee income), pensioners (2% of their annual pension), freelancers and self-employed (3.55% of their annual income). This money will be pooled by the HIO and used to finance both public and private care to ensure universal coverage, thus redistributing funds across the population in an amount congruent to that which was previously spent out-of-pocket by those who could afford private services. Co-payments, which are currently only compulsory for certain types of care and for relatively higher income public sector beneficiaries, are expected to increase to comprise a much larger portion of the total health budget, possibly up to 9% of the budget [13]. They are also anticipated to be required from a larger segment of the population, according to the most recent strategic plan prepared by HIO, though this is still under discussion.

To enable patients to access care in both sectors under a single-payer system, as well as to create a competitive market among all providers, a new provider payment system with a balanced incentive structure will be put in place so that providers in both sectors will be made to compete for patients based on quality and not price. The new payment system will use a mix of payment mechanisms for different levels of care. For example, inpatient care will be remunerated using activity based payment under hard global budgeting. Activity will be reimbursed through case groupings based on the German Diagnostic Related Groupings (DRGs), although cost estimates for these are not complete. Outpatient specialist visits will be paid on a points-per-service basis, whereby the monetary value of points collected from patient visits will be assessed monthly in relation to the total quantity of services delivered that month. The compensation of clinical laboratories will also be based on a similar point-based system and the HIO will reimburse the cost or part of the cost of pharmaceutical products included in the list of approved drugs by reference price. General Practitioners (GPs) will be paid through capitation and receive bonuses for selected performance indicators (estimated at about 20% of their income, though the precise amount is under discussion).

Changes are also being discussed to address inefficiencies related to the administration of public hospitals and to the Ministry itself [1]. There are negotiations to make hospitals more autonomous in order to avoid decision-making taking place outside of hospitals, as centralized administration poses "a serious hurdle to effective and efficient management... and competitiveness". This shift in administration is expected to occur after a transitional restructuring period, during which the HIO will be responsible for funding public hospitals.

There are also likely to be improvements in the level of interaction among providers, specifically between GPs and specialists. While the benefits of a gatekeeping system are noted in terms of possible cost reductions, there is an on-going discussion between key stakeholders including the Cyprus Medical Association (PMA), HIO, the Ministry of Health and the Ministry of Finance about the referral power of GPs. While the PMA is content with GPs having soft referral power, the Ministries are in favor of hard referral power. Yet there are concerns that there may not be enough qualified GPs to deliver care to a larger

[1] The state will contribute 4.55% of the level of total annual income received by all employees, pensioners, freelancers, and self-employed, which is expected to be commensurate with its level of expenditure under the current system.

patient pool, especially if hard referrals are made part of the system.

3. Lessons for successful implementation of the reform

The proposed reform is an ambitious effort to offer universal access and resolve the imbalance between the public and private sectors. The past experiences of other countries provide valuable lessons which can help to ensure that the GHIS is implemented successfully.[2] First, while the new financing structure offers a more comprehensive and universal package of care, it requires individuals and employers to pay more into the system upfront in the form of insurance contributions; there are currently debates as to whether this amount will ultimately be greater or less than current levels of spending at the point of service. Researchers have found that raising health care contribution levels have been associated with lower wages and higher unemployment in the United States [3]. The HIO, Ministry of Health and Ministry of Finance may want to carefully consider what impact social insurance contributions are likely to have on spending, employment and macroeconomic growth before implementing such a policy, particularly considering the on-going financial crisis. Additionally Taiwan, which implemented a similar National Health Insurance scheme in 1995, has found that it has had to raise its contribution rate due to medical costs increasing more rapidly than earnings [16]; this has proven to be politically challenging because the government did not include a schedule of automatic contribution rate increases into law.

Moreover, while patients will have universal access under the new scheme, they will also see increases in co-payments which are regressive, limit demand for care, and should not be expected to unequivocally lead to savings [27]. Especially in times of crisis, user charges may have large adverse consequences on equity and health outcomes. Gericke et al. [11] reveal that cost-sharing in Germany over the last century has not improved efficiency or equity and warn other countries of the dangers of cost-shifting reforms. If copayments do become a part of the new Cypriot health system, it is important to apply exemptions for vulnerable groups such as older people, chronically ill, and very poor members of society.

Additionally, while a switch to a competitive system of provision will certainly provide more choice for patients and access to a larger network of providers, the different organizational and remuneration structures that currently exist for public and private health workers make it difficult to determine what effect any new financial incentives will have on quality of care and activity. Due to the civil servant status of public sector health providers, there is no perfect way to provide identical financial incentives in the public sector and the private sector without renegotiating civil servants' employment status; such a change may be politically impractical. However lessons from Taiwan suggest that it is feasible for the HIO to contract separately with the public and private sectors [5]. In order to ensure that the proper incentive structures are in place for both the public and the private providers of care, it is necessary to introduce a mix of payment systems across the two sectors to balance out the different incentives. For example, for public primary care providers this could include a large capitation component, which would be expected to increase activity as compared to salary alone [12], and for secondary providers a mix of contact capitation and payment for performance to incentivize public providers to see more patients and manage quality in monitored areas [10,22].

Furthermore, as private providers will contract directly with the HIO with a large element of performance based remuneration and capitation, they are likely to have greater incentives to see more patients and provide particular services than the public sector. Current literature suggests that high levels of performance based payment may run the risk of crowding out providers' intrinsic motivation. For example, discussions surrounding the recent payment for performance systems implemented in England which offered a bonus of 20% to GPs conclude that this bonus might have been too high [6]. While payment for performance and case based payment systems are being applied within many developed countries, the past years have shown that if not implemented carefully they can result in adverse incentives, especially when financial incentives are high and they are implemented alongside other initiatives where high risk patients can be 'dumped' [18,23].

All of the proposed activity and performance based payment systems depend on the availability of reliable information on health activity and quality of care. Currently data is collected on primary diagnoses from some public and private hospitals and clinics, but this is incomplete and there is little to no information collected on further diagnoses, complications, or additional procedures carried out. While the HIO is planning to outsource development of an integrated information system to a third-party and expand to cover all hospitals/clinics and other health providers, this is not expected to begin until 2015—only one year before implementation of the GHIS.

Regarding case based payments, past experience has shown that a factor of success is the collection of substantial clinical and cost information in order to refine case groupings and reimbursement rates. As current DRG coding is lacking and an integrated IT system will only come into existence one year prior to implementation of the GHIS, this is likely to inhibit the ability of the activity based payments system to capture realistic costs, providing wrong incentives to providers [4]. As a first stage of implementation, a monitoring system that is able to routinely collect clinical, cost and outcome data from all organizations, public and private, should be introduced as soon as possible to inform decisions taken in the Ministry and the HIO. The proposed reform needs to provide support for dedicated staff from inside the system to record costs for secondary diagnoses, complications and medical procedures. Additionally,

[2] Only certain key issues are reviewed; however, there are a number of other issues that have not been addressed at this time. These include possible efficiency concerns such as, waste and duplication due to too many laboratory and diagnostic tests, and what to do with current overcapacity of high cost technology equipment

an audit system needs to be put in place to periodically review these estimates. While this is a large and costly endeavour, the small size of the population makes this more practicable to accomplish in such a short time frame.

4. Conclusion

Although cost concerns were one of the reasons for previous delays of the GHIS, the current economic crisis in some respects provides an opportunity. As a result of lower household incomes during the current crisis, the use of the private health sector has decreased, while the public sector has experienced an increase in demand. This has led not only to a renewed appetite for reform to target the already overloaded public sector, but also for more willingness on the part of the private sector to accept change due to decreases in revenues, as the reform is likely to lead to increased private sector utilization, albeit likely at lower reimbursement prices than under the current system. Concerns over potential high costs associated with reform implementation are also no longer considered to be valid due in part to a private financing initiative to install and operate the new integrated information system.

While this opportunity for reforming the health system should not be neglected, key lessons other countries should be taken into account. Efforts must be made to ensure that the financial needs of the GHIS do not adversely affect growth in a vulnerable economic climate. Vulnerable groups should be made exempt from co-payments. Public and private providers competing for patients must be able to compete under a balanced incentive structure. Lastly, a comprehensive data collection system needs to be put in place within a manageable timeframe across public and private facilities, long *before* the reform is implemented in order to enable policy makers to collect the relevant data necessary to ensure the proposed policies are effective, but also to assess the extent to which the GHIS achieves its desired objectives. Learning from the experiences of other countries will help Cyprus to better meet challenges of the reform process.

Note added in proof

Addendum: Authors' comment on the November 2012 Troika's Memorandum of Understanding

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As the economic situation in Cyprus has not improved over the last year, in November 2012, a Memorandum of Understanding (MoU) was agreed between the Troika and the Cypriot government. The MoU makes special reference to the health care sector with a number of recommendations that aim to improve sustainability. While many of these recommendations further the goals of the GHIS, others are in sharp contrast to the objectives of the reform, despite the Commission just recently advocating on its behalf. Most notably, some of the Troika's key recommendations clearly go against the move towards universal coverage: the main objective of the new health system.

A key example is the MoU recommendation that the government abolish the beneficiary category known as Class "B", who are currently entitled to reduced rates for publicly provided health care. This group, making up about 2% of the population, is comprised of individuals with gross annual income between €15,380 and €20,500, or €30,750 to 37,590 for two-member families, increasing by €1,700 for each dependent child [26]. Because this group is small, relatively poor, and contributes very limited revenues to hospitals, there have previously been proposals to allow them access to free medical care, as is the standard for Cypriots earning even lower incomes. Eliminating access to care at reduced rates for this group has no significant impact on sustainability of the health system as Class "B" recipients make up a very small percentage of the population and contribute very little to total health expenditures. Additionally, the MoU endorses increasing fees for medical services for non-beneficiaries (which would now include those in class "B") by 30%. They also encourage increasing fees for using "higher levels of care for all patients irrespective of age" which will undoubtedly reduce access to health services for many who require care.

Not all recommendations by the Troika contradict the objectives of the GHIS and many are likely to improve the performance of the health system. The MoU encourages classifying inpatient cases on the basis of Diagnosis Related Groups (DRGs) with the aim of replacing the hospital payment mechanism under the new health system. Gate-keepers are recommended—consistent with the plan for the GHIS—although there have been concerns in the past that at this time there may not be enough qualified GPs to deliver care to a larger patient pool, especially if a strict referral policy (or 'hard' referrals) are made part of the system. There are also efforts to use cost-effectiveness more in coverage and reimbursement decisions, which would likely improve efficiency. Efforts to restructure public hospitals are also in line with plans to give these facilities greater autonomy so that they can actively manage their own resources and improve performance. Finally, the recommendation to implement the GHIS in stages—if the reform is indeed implemented—is rational.

However, some recommendations are contradictory to the Commission's advice to the government to enact the GHIS as soon as possible. For example, the MoU asks for an updated actuarial study of the GHIS prior to implementation. This would be the third study of its kind, with the most recent having been completed by Mercer in 2008 [13]; this recommendation is likely to delay the reform further. Recent analyses by the Cypriot Health Insurance Organization (HIO) have already indicated that the GHIS could be implemented with no added cost to the government budget because additional costs would be covered by social insurance contributions [13].

The MoU in Cyprus may motivate necessary structural reforms that can improve the efficiency of the health system in the long-run. Indeed, the financial crisis has already better aligned the interests of the public and private health sectors in Cyprus, finally making implementation politically feasible. The Troika's role should be to act as a steward promoting transparency and responsible spending, not to derail reforms towards universal coverage that

have taken over a decade to come to fruition and that are in line with international health policy goals [8,30]. The Current European Health Strategy, based on recommendations from the European Council, explicitly calls on the European Commission to respect the overarching values of universality, access to good quality care, equity and solidarity [8]. As health expenditure already comprises less of the government budget in Cyprus than in any other EU member state [17], we do not believe that fiscal sustainability should be accomplished by reducing government spending on health even further, especially as the demand for public health services has increased in light of the crisis. We appeal to the Troika to review their recommendations and ensure that they are consistent with the European goal of providing universally accessible health care coverage.

Conflicts of interest

We declare no conflicts of interest.

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