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THE GREEK HEALTHCARE SYSTEM IN TRANSITION: AN OVERVIEW AND CHALLENGES THAT REMAIN

Natalya Surmachevska



Health outcomes for the Greek population are favorable when compared to the Organization for Economic Co-operation and Development (OECD) country averages in terms of life expectancy (79.6 years) and indicators such as infant mortality. Access to healthcare is theoretically universal, and inequalities by gender are less pronounced than in other OECD countries (OECD, 2009, pp. 86–87). Underneath the outwardly stellar appearance, however, dissatisfaction among the vast majority of Greeks suggests problems and inefficiencies. Only about 18 percent of the Greek population is satisfied with the healthcare system, which is second lowest to Portugal in a 2002 EU-wide study (OECD, 2009, p. 88). Furthermore, several public health indicators, such as the nation's high childhood obesity rate and unusually high incidence of smoking, are a cause for concern (about 40 percent of the population). In Greece, 47 percent of all deaths are related to cardiovascular problems, which is higher than the OECD average, and approximately 12 percent

of children are not vaccinated against measles, diphtheria, tetanus, or whooping cough (DTP3) (Economou and Giorno, 2009, p. 18).

While most health indicators of the Greek population are still comparable to other OECD countries, the indicators have not improved significantly over the past decade, even though healthcare spending has grown faster in Greece than in most European Union countries. Therefore, changes are necessary not only to improve public health, but also to decrease healthcare costs, especially as the baby boomer generation demands for services increase; people over 65 already represent 20 percent of the population (Economist Intelligence Unit [EIU], 2011). Furthermore, healthcare spending is part of a larger financial crisis that has led to several bailouts and an international effort to help solve Greece's sovereign debt problems. A reduction in government healthcare has become one of the priorities for improving Greece's financial position. Healthcare takes up about 9.7 percent of GDP annually, a figure that is above the 8.9

percent OECD average and will increase to about 10.4 percent by 2015¹ (EIU, 2011).

In response to such relatively high spending on healthcare, the International Monetary Fund (IMF) has requested that Greece reduce healthcare spending to 6 percent of GDP in exchange for the €110 billion bailout (IMF, February 2011, p. 34; EIU, 2011). This goal has been tackled over the past two years by addressing, with a wide array of reforms, inefficiencies of the Greek healthcare system. Changes have been made to the system in response to demands from the European community. Thus, this paper surveys structural inefficiencies of Greece's healthcare system, examines solutions being implemented or proposed, and identifies several of the inefficiencies that remain unaddressed.

Key Problems Being Resolved

In addressing these issues, it is important to note that statistical information on the Greek healthcare system is often incorrect, biased, or simply nonexistent. Simple statistics such as the breakdown of spending by inpatient, outpatient, and pharmaceutical services are difficult to obtain. Even the waiting lists for services are shrouded in mystery. It is widely recognized that no real progress in efficiency can be made without making improvements in the quantity and quality of statistical evidence (OECD, 2009, p. 95).

This problem was addressed in 2010 with the formation of an independent statistical office, known as the Hellenic Statistical Authority (ELSTAT) (IMF, July 2010, p. 14). ELSTAT has a memorandum of understanding with the many existing statistical agencies within the branches of Greek government and compiles all available data, for everything from the healthcare sector to trade, in a consolidated and simple form² (IMF, December 2010, Second Review, p. 83). Still, prominent gaps in data contribute

¹Following an expected slip in the 2011–12 year due to the austerity measures.

²The previous statistical agency, the National Statistical Institute of Greece, was under the authority of the Ministry of Economy and Finance; the current ELSTAT is fully independent and responsible for integrating and controlling the quality of statistics for all of the government bodies, in line with the European Statistics Code of Practice (Georgiou and Snorrason, 2011, pp. 2–8).

to difficulty in researching and assessing the Greek healthcare system.

Problem # 1: Complicated Institutional Structure

The Greek healthcare system is organized into three parts consisting of a large private sector and two public sector branches. The private sector makes up about 38 percent of total healthcare expenditure and provides many diagnostic facilities, labs, and outpatient clinics (OECD, 2009, p. 87). About 8 percent of the population has private health insurance and is thus able to receive timely and excellent care with high satisfaction rates at private facilities (EIU, 2011). The remainder of the healthcare system is the public system, divided into two parts, each accounting for roughly 31 percent of total healthcare.

One part of this public system, introduced in 1983, is the National Health System (NHS or ESY, in Greek). The NHS is open to any person in Greece, including illegal immigrants, and provides access to basic healthcare. It is similar to the healthcare model used in Great Britain, designed so that the government has control of hospitals as well as primary care clinics in rural areas (OECD, 2009, p. 93). There was a ban on the building of private hospitals until the 1990s aimed at increasing the importance of the NHS in the provision of hospital services. This ban contributed to the growth of a large private sector, which instead invested in diagnostic imaging technology and strong outpatient services and clinics. As a result of the ban, the NHS currently funds 75 percent of all hospital beds, whereas the private sector provides the remaining 25 percent (OECD, 2009, pp. 102–103).

Coinciding with the NHS is the second public system, in which workers are insured through public sickness funds associated with their professions. Membership in a fund is mandatory, and although there are about 30 different funds, four main funds dominate the system. These four are: IKA (for the private sector and accounting for 50 percent of the population), OGA (for the agricultural sector and covering 20 percent of the population), OAEE (for the self-employed and accounting for 13 percent of the population), and OPAD

(covers civil servants and accounts for 11 percent of the population) (OECD, 2009, p. 93). The remaining population is covered by the other 26 funds. The dominance of the four main funds and the mandate to belong to the fund associated with one's profession reduces choice and competition. Each insurance fund has agreements with certain physicians and facilities to provide services to its members, thus limiting which doctors a patient may see. Furthermore, the funds that have better services with lower contribution rates are protected by strong unions, making the merging of funds difficult (EIU, 2011).

To add to the complexity of the three-tier system, the two public branches of healthcare are managed by an amalgam of government ministries. The Ministry of Health and Social Solidarity sets health policy and centrally allocates resources and staff for all NHS hospitals. The Ministry of Employment and Social Protection is in charge of the public sickness funds, determining what medical benefits are covered and setting contribution rates for each fund. The Ministry of Economy and Finance determines patient co-pays and sickness fund payment rates at NHS hospitals (even though resources for the NHS are allocated by the aforementioned Ministry of Health and Social Solidarity) and also covers any deficits of NHS hospitals or deficits of the sickness funds. The number of doctors is determined by the Ministry of Education, based on available spots in medical schools, and the Ministry of Development controls drug prices (OECD, 2009, p. 95).

This three-part system, managed by several agencies, has been inefficient. According to a study using data envelopment analysis (DEA), a method that connects health outcomes to expenditure on healthcare as a measure of efficiency, Greece's rankings fell between 1990 and 2006. When efficiency is measured in terms of healthcare spending per capita, Greece's rank fell nine spots from third to twelfth among OECD countries. Measured by number of healthcare personnel, Greece's rank fell 13 spots from fifth to eighteenth among OECD countries. The relatively larger 13-spot drop between 1990 and 2006, seen with respect to the number of healthcare personnel, suggests that efficiency is related to changes in technical and procedural efficiency, including the higher

administrative costs of dealing with multiple agencies, rather than altered spending patterns (OECD, 2009, p. 90). This observation further suggests that, while spending is important because of the financial hardships facing Greece, the sources and cures for inefficiencies in the healthcare system reach beyond spending.

Changes within the Institutional Structure: Consolidation

With the mandates from the IMF to reduce healthcare spending to 6 percent of GDP, several inadequacies related to the institutional framework have been addressed in the past year (IMF, December 2010, Letter of Intent, p. 35). Health insurance funds were made separate from pension funds, making healthcare a fully distinct entity (IMF, September 2010, p. 10). Further changes have been made to streamline the NHS hospital system and the insurance funds.

To improve the organization of the NHS hospital system, a system of joint management has been established in which small and large hospitals in geographic proximity coordinate with each other in providing patient care. Small hospitals now specialize in certain types of treatment (such as cancer care or rehabilitation) whereas larger hospitals remain responsible for a wider array of functions. This configuration has lowered the number of hospital administration boards and has replaced some previously unqualified, politically appointed hospital managers with professionals qualified in health administration. By 2012, such greater organizational oversight is expected to culminate in reports that will compare hospitals across Greece in terms of services provided and is expected to reduce costs in NHS hospitals by 10 percent in 2011 and another 5 percent in 2012 (IMF, July 2011, Letter of Intent, pp. 55–56).

In order to improve the social insurance funds, the four big health insurance funds have been merged into a single fund called the National Organization for Healthcare Provision (the EOPYY), which now has improved ability to bargain for the provision of service contracts with healthcare providers. Previously, all social insurance funds had contracts with

specific groups of physicians, and patients of different insurance funds would often pay bribes to doctors who were not authorized to see them (EIU, 2011). Now the EOPYY will provide one health package to all EOPYY members, which should reduce the disparities in both the service and contribution rates that existed among different social insurance funds (IMF, November 2011, pp. 50–51). While the EOPYY has reduced disparities in service, contribution rates are still in the process of being equalized (European Commission, 2011, p. 34).

Yet another step that remains to be taken is the consolidation of healthcare regulation to one government ministry (OECD, 2011, p. 101). While this is a seemingly obvious strategy, consolidating the work of five agencies into one is no easy feat and would undoubtedly increase short-term instability among already-angered public sector workers. It would nonetheless be wise to reduce excess spending incurred by current bureaucratic inefficiency.

Problem # 2: Funding the Healthcare System

The sources of funding for Greece's healthcare system are likewise problematic. Of the 9.7 percent of GDP devoted to healthcare, only about 60.3 percent is public spending, which is low compared to the 72.8 percent OECD average (EIU, 2011). This public spending, dedicated to the NHS and sickness funds, is financed by 52 percent from general taxation and 48 percent from social security contributions (OECD, 2009, p. 93). The reliance on taxation is problematic because of the tax evasion problem in Greece. Also, because about a quarter of all jobs in Greece are undocumented, using social security contributions (which are drawn from paychecks) as a way to fund the system means that 25 percent of the working public is not contributing.

The remaining 38 percent of total healthcare spending, accounting for about 3.5 percent of GDP, comes from private citizens paid directly out of pocket (OECD, 2009, p. 87). This high level private spending contributes to dissatisfaction with the healthcare system. An additional form of private spending is the informal payment system, which is difficult to quantify and consists of bribes that patients pay in

order to get good and timely service. Some studies estimate that informal payments make up about 17 percent of total healthcare spending. The average amount needed to bribe healthcare professionals during a hospital stay is estimated at €300 (OECD, 2009, p. 105). This payment does not contribute to funding the healthcare system but instead supplements the salaries of healthcare professionals. These salaries are lower than in most OECD countries, ranging from 1,233 to 2,466 USD per month adjusted for purchasing power (PPP), while the average Greek monthly salary is 2,569 USD PPP (Reginato and Grosso, 2011). Even the highest official salaries of Greek physicians are lower than the average salary in Greece (adjusted for purchasing power), which explains the prevalence of informal payments.

The burden of private spending is one reason why dissatisfaction with the system is so high. This dissatisfaction is exacerbated by the fact that households privately finance 50 percent of their primary care expenditures, with primary care typically accessed more frequently, compared to the private financing of 30 percent of hospital and pharmaceutical costs (OECD, 2009, p. 102).

Improving the Sources of Funding

Reducing tax evasion has been one of the current government's main priorities and is relevant to funding the healthcare system. One new way tax evasion has been targeted is by crosschecking tax information with spending habits. Helicopters are actually flown over physicians' homes to identify those who have backyard swimming pools yet claim low incomes on their tax reports. Recently, hotlines have been set up to promote the reporting of tax evaders, and the government has publicly shamed 68 high-profile doctors who were found guilty (Malone, 2011). More drastic measures, such as revoking the medical licenses of tax-evading physicians, have not been employed to date.

Another idea has been the "Take Your Receipt" movement, where the public is urged to request receipts for services rendered to ensure that transactions are documented and taxed. Asking for receipts is thought also to reduce the level of informal payments. Implementing this movement has been a problem,

however, because doctors often reduce their fees if patients are willing to forego receipts. Simply increasing the salaries of physicians to prevent taking bribes has been ineffective in the past; a 250 percent increase in NHS hospital physicians' salaries in the 1980s had little effect (OECD, 2009, p. 106). Other general anti-tax evasion strategies to increase the size of the formal economy have important implications for the healthcare system but are beyond the scope of this paper.

Problem # 3: Problems within the NHS public hospitals

The revenue from taxes and social security is pooled and distributed to NHS facilities and sickness funds, based on previous years' distributions. Little effort is made to determine which NHS facilities should get more or less funding, partially because there is little statistical data to guide allocations and also because well-funded facilities have political clout. This inequity causes many NHS facilities, particularly in the rural areas, to be underfunded and thus understaffed. Attempts to de-centralize the allocation of resources to NHS facilities have been unsuccessful; for example, the formation of administrative healthcare regions (called DYPEs) to gather data on resource allocation from various geographical regions increased bureaucracy without improving the efficiency of resource allocation (OECD, 2009, p. 100).

Compounding the effect of being underfunded, hospitals themselves are inefficient. Hospital accounting procedures were deficient until a double-entry bookkeeping system was introduced in 2010. Prior to that, hospitals were run on a cash basis. Managers at NHS hospitals were appointed based not on managerial capability, but on political connection. Today, Greek hospitals still largely lack modern IT systems and thus have difficulty maintaining proper accounting procedures and managing other important information.

Despite problems of underfunding and inefficiency in hospitals, there is significant over-utilization of public hospital services. Sickness funds reimburse hospitals for only 20 to 30 percent of the market price of public hospital services and about 10 percent of the market price of primary care screening procedures such

as pap smears; the remainder is funded by the state budget (65 percent) and out-of-pocket expenses of the patients (5–15 percent). The funds' low reimbursement rates for hospital and other services leads to overuse and puts undue pressure on public hospitals while lowering demand for private hospitals, where the sickness funds pay the full market price (OECD, 2009, p. 101). This discrepancy is yet another reason why public hospitals provide the previously mentioned 75 percent of all hospitals beds while private hospitals provide only 25 percent.

People who rely solely on the NHS use hospitals for primary care, so NHS emergency rooms treat conditions that should be addressed by primary care physicians on an outpatient basis. Also, NHS hospitals do not receive payment from the various social insurance funds immediately, leading to increases in hospital debt over time as payments are not properly tracked. Certain insurance funds with lower contribution rates pay benefits that are not in line with the contributions received, creating another cash flow imbalance. Furthermore, because of the emphasis on hospitals, which are preferred by sickness funds and are the main recipients of NHS funding, inadequate resources are allocated for prevention (OECD, 2009, p. 99). This distortion is visible in the previously mentioned poor public health indicators such as immunization rates, obesity, and smoking.

Improving Allocation of Resources to and within NHS Hospitals

Most recent IMF-encouraged reforms aim at making the NHS hospitals themselves more efficient. The newly established statistical body, ELSTAT, compiles data on Greek hospitals in order to guide more efficient allocation of resources—not by precedent, but by current need. Also, in addition to double-entry bookkeeping, accounting firms are being placed into hospitals to oversee spending and accounts payable. A new common registry for medical supplies is being implemented so that the use of supplies can be better monitored. E-prescribing—for everything from drugs to referrals for diagnostic as well as surgical procedures—is soon to be implemented as well. Also, an electronic medical record system is being established to prevent duplication of services or

overutilization of care. The ultimate goal is the complete computerization of hospitals, from budgeting to the provision of services. Hospitals are required to stay open all day to increase revenue, rather than only half-days as they were in the past. To reduce demand, co-payments for hospital visits will be enforced at three euro; additional co-payments are being placed on outpatient, diagnostic services, and unwarranted emergency room visits. A new website (esy.net) will provide information about hospitals and their services (IMF, Aug 2010, p. 5; Feb 2011, p. 35).

Despite these changes, measures remain to be taken to de-incentivize preference for hospitals by the social insurance funds (in that they have to pay for only about 20 percent of the cost of hospital services that their patients use), instead making primary care procedures more highly subsidized while increasing the payments social insurance funds make to hospital stays. Further de-centralization of decision-making (perhaps by using DYPEs as they were originally intended) will help make the NHS more equitable.

Problem # 4: Matching the Goals of Medical Professionals to the Needs of the Healthcare System

The Greek healthcare system is saturated with specialized physicians but desperately lacking primary care physicians. This imbalance is particularly unfortunate because countries with more primary care physicians generally have better population-wide health. About 9.5 percent of doctors in Greece are primary care physicians (including internists), whereas the OECD average was about 35 percent in 2006. Furthermore, only about five percent of Greek doctors work in the countryside, which accounts for 25 percent of the population. This geographical imbalance is especially problematic for the overburdened NHS hospitals in rural areas, which are obligated to treat many illegal immigrants who enter Greece through the islands. Statistics indicate that Greece has the same number of physicians as France, despite having one-sixth of the population. Indeed, Greece has the highest number of physicians per 100,000 inhabitants of all OECD countries. So the issue lies in poor distribution of doctors

across specialties and across geographical regions, and this disproportion creates the problem of inadequate access to care and drives up costs (OECD, 2009, pp. 96–97).

The undersupply of nurses in Greece is another problem. The OECD estimates the shortage to be about 15,000 nurses, which is 40 percent of the current nurse workforce. Even if these positions were filled, the density of nurses would still be approximately 4.7 percent, much below the OECD average of 9.5 percent (OECD, 2009, p. 96). This shortage is attributed to the unattractive wage paid to nurses, which is about half the official wage of physicians. Yet, due to the shortage, many doctors perform nurses' duties while still being paid higher salaries. This is one reason why the nursing deficit causes unnecessary spending on healthcare.

Apart from the substantial shortage of primary care physicians and nurses, the existing doctors, whether they are specialists or primary care physicians, do not have sufficient incentives to improve the public health. Doctors are typically employed by either sickness funds to treat outpatients or by the NHS in hospitals. Their salaries are relatively low, as previously described, and do not differ by geographical area (urban vs. rural) or by the numbers of patients that they see. Doctors are also permitted to set up their own private clinics (i.e. "moonlighting") while practicing in the public sector, and many do so to boost their incomes. This practice moves patients from the public healthcare system to private clinics and is inequitable because, although services should be free according to policy, consultations at private clinics are expensive and exclude poorer people from quality treatment (OECD, 2009, p. 104). However, dual practice has not been prohibited because policymakers recognize that doctors may choose to supplement their incomes with higher bribes. Thus, a ban on dual practice would do nothing to decrease costs and would likely make the system even more unfair.

Incentivizing Change among the Medical Professionals

The consolidation of the major health funds into the EOPYY is predicted to reduce the number of doctors who are employed by social insurance funds by 25 percent (IMF, November

2011, pp. 50–51). Even with this excess of newly unemployed doctors, the shortage of primary care physicians will continue. Some analysts believe that, since the Ministry of Education implements medical education, it may be solely focused on the financial resources at its disposal and may thus be responsible for distortions across medical specialties and for the lack of primary care physicians (OECD, 2009, p. 95).

A 2007 study questioned such assumptions and surveyed about 1,100 soon-to-graduate medical school students about their choice of specialty. Only 4.3 percent of the students surveyed were interested in general or family practice, the most common reasoning of the other 95.7 percent being the reportedly more rigorous, scientific, and higher prestige specialties such as surgery. General and family practice was established as a specialty in the 1980s, and attempts to raise its prestige, such as immediate tenure for general physicians hired at Health Centers, have been unsuccessful. Other incentives are needed, and medical education should be reoriented to convey the importance of primary care (Mariolis et. al., 2007).

Several proposals have addressed the problem of poor incentives for doctors to work efficiently within the healthcare system. Since bribes are essentially informal fees-for-service, it has been suggested that an official fee-for-service mandate would reduce bribery and increase healthcare system revenue. This mandate would tie doctors' salaries to the number of patients they see, incentivizing care for many patients in a timely fashion. To maintain fairness, a coverage limit (referred to as the capitation system), where the government gives a set amount for each patient's treatment, has been proposed. The simultaneous implementation of a fee-for-service and capitation system, and retaining out-of-pocket co-payments to limit the demand from consumers, would reduce both bribes and overuse of medical services, and would also provide an incentive for doctors to see more patients (OECD, 2009, pp. 106–107; 2011, p. 101).

Another suggestion for reducing the inefficiency is the use of a gatekeeping system, where general practitioners screen patients before they see specialists. This approach, while used in many countries with efficient healthcare

systems, would not be immediately feasible in Greece because there are so few primary care physicians to serve as gatekeepers. Salary differentials by specialty (to promote general practice) and geographical region have been proposed but not implemented because of the economic crisis (OECD, 2009, p. 107). Furthermore, it is unclear whether medical students would choose primary care as a specialty solely for the higher salaries, given that a previously mentioned study has shown that their choices are based on status and not swayed by the promise of tenure at a Health Center. However, this conclusion is based on just one study, and financial incentives should therefore be given further consideration. Such a gatekeeping system may also restrict choice for Greeks, and it would necessitate higher salaries as incentive for general practitioners to move to rural areas. However, such a gatekeeping system, if successful, could reduce costs and inefficiencies in the healthcare system.

Problem # 5: Pharmaceuticals and Diagnostic Services

Pharmaceutical spending takes up nearly 2.5 percent of Greece's GDP, which is higher than any other OECD country and another source of excessive waste in the healthcare system (OECD, 2011, p. 100). This expenditure has been the primary target for cost reduction in the effort to lower total healthcare spending to 6 percent of GDP. According to interviews with officials at the National School of Public Health in Greece, past expenditure on pharmaceuticals has been unnecessarily high due to contracts between pharmaceutical companies and unaccountable policymakers. This overspending on pharmaceuticals is caused in part by underutilization of generic drugs, which account for only about 35 percent of the Greek drug market (whereas the U.S. has a generic drug penetration rate of about 90 percent) (McKinsey & Company, 2012, pp. 61–62). Currently, the Greek government is tackling pharmaceutical spending with a set of measures aimed at lowering the cost of pharmaceuticals by mandating that hospitals prescribe generic drugs whenever possible, with the goal of moving to the generic market penetration rate of other European Union countries such as Germany

(62 percent) and the UK (60 percent) (IMF, August 2010, p. 40; IMAP, 2011, Appendix D). Furthermore, drug procurement by hospitals must now take place by active ingredient, not by brand name; additionally, generic drug prices have been capped at 60 percent of the corresponding brand name prices. Lastly, the government has published a new positive list of covered medications, replacing the old negative list of the few medications that are not covered (European Commission, 2011, pp. 59–60).

Spending on pharmaceuticals is higher than it should be as indicated by Greece's climate and disease burden. Typically, drugs are a cheaper alternative to surgery and other treatments, but overuse and cost in Greece are so high that this is not the case. Currently, the Greek government is working on a set of prescription guidelines for physicians as well as a means of prescribing medication electronically (e-prescribing). This technological change would allow the government to track prescriptions and even provide all physicians with individual biannual reports on how much they have prescribed. The Greek government has additionally made a priority of monitoring misconduct and conflict of interest of doctors who may be overprescribing certain medications (IMF, July 2011, p. 6; Fourth Review, p. 131).

A further issue in the pharmaceutical industry prior to 2011 was the closed nature of the pharmacist profession, which imposed tight restrictions on entrance into the profession and allowed pharmacists to make a 35 percent profit, driving up costs (Daley, 2010). Deregulation of the industry in January 2011 was controversial, reducing the profits to a small flat fee plus a margin of 15 percent. The changes also included more flexible hours for pharmacies and reduced minimum population criteria for opening new pharmacies (IMF, February 2011, pp. 38, 55).

Another cause of inefficiency is the overuse of diagnostic services; a professor at the National School of Public Health revealed that about 3.5 million CT scans are performed on a yearly basis for a population of 10 million (Maniadakis, N.). Similar to the over-prescription of pharmaceuticals, overuse of diagnostic imaging can be curtailed by e-prescribing and improved oversight. Because many diagnostic facilities are

privately owned, cost control on diagnostic procedures is difficult; therefore, reductions in diagnostic testing must come from physicians through diagnostic imaging guidelines. However, no known measures have been implemented as of May 2012.

Progress in the Pharmaceutical Goals

By the end of 2011, the goal was to have a generic drug penetration rate of 50 percent (IMF, December 2010, Letter of Intent, p. 47). This target was not met, however, because although prescription guidelines and a positive drug list have been published, the e-prescription system has not yet been fully launched. Thus, it has been impossible to enforce prescription guidelines or to move forward without the advantages of the e-prescribing system (European Commission, 2011, pp. 59–60). In terms of drug procurement, Greece is moving toward a more central method of drug procurement with the support of a uniform coding system and the e-prescription system to help define demand (European Commission, 2011, p. 63). Consequently, it remains to be seen how and when a comprehensive e-prescribing system may produce changes in the way pharmaceuticals are prescribed and procured.

Conclusion

While the Greek healthcare system is in transition at present, and many changes are being legislated and implemented, several recommendations are needed for further improvement. While it may be tempting to cut costs in every aspect of healthcare, I recommend a series of transformations that are sustainable and avoid severe counterproductive cutbacks.

Major improvements to the institutional structure can be made by consolidating healthcare administration from five ministries to just one, which would lower costs and reduce bureaucratic inefficiency. Healthcare funding can be improved first by reducing tax evasion on all levels. Furthermore, funds should be diverted from the informal to the formal payment system, possibly by launching a campaign that would curtail bribes. To reduce pressure on NHS hospitals, the contribution rates of social insurance funds should be altered to

de-incentivize preference for hospitals in favor of primary care facilities. To address the human capital problem, the profile of primary care practice must be raised in medical schools, and the nursing profession must be more lucrative and respected. When medical schools graduate more primary care physicians, a gate-keeper system should be established to limit specialized services. To give physicians more incentive to work efficiently, a dual fee-for-service and capitation system should be established, while maintaining co-payments to decrease demand from the public. Lastly, to address the overuse of pharmaceuticals and diagnostic tools and to promote centralized drug procurement, e-prescribing should be imple-

mented to improve the monitoring of prescriptions. Without e-prescribing, crucial reforms in healthcare spending on hospitals, pharmaceuticals, and diagnostics are difficult to implement and track.

These suggestions are meant to supplement efforts that policy makers in Greece have already initiated to reform the healthcare system. Indeed, even if such changes are implemented, other issues will likely emerge. Similar to those in other countries, the healthcare system of Greece is continuously in flux. Constant changes and alteration to healthcare will be necessary in the future to keep up with the changing needs of Greece's economy and society.

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