I. Background and Accomplishments

Many of Romania’s basic health indicators have shown steady improvement since the 1970s. Both male and female life expectancy has gone up, and infant and maternal mortality have declined (see Table 1).

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<tbody>
<tr>
<td>Female life expectancy at birth</td>
<td>70</td>
<td>72</td>
<td>73</td>
<td>74</td>
<td>75</td>
<td>76</td>
<td>76</td>
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<tr>
<td>Male life expectancy at birth</td>
<td>66</td>
<td>67</td>
<td>67</td>
<td>66</td>
<td>68</td>
<td>69</td>
<td>69</td>
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<tr>
<td>SDR ischemic heart disease 0-64 per 100,000 males</td>
<td>26</td>
<td>42</td>
<td>55</td>
<td>72</td>
<td>63</td>
<td>86</td>
<td>85</td>
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<tr>
<td>SDR all causes and ages (per 1,000 live births)</td>
<td>1,236</td>
<td>1,284</td>
<td>1,169</td>
<td>1,224</td>
<td>1,098</td>
<td>1,064</td>
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<td>Infant mortality rate</td>
<td>49</td>
<td>29</td>
<td>27</td>
<td>21</td>
<td>19</td>
<td>15</td>
<td>14</td>
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<tr>
<td>Maternal mortality (per 100,000 live births)</td>
<td>116</td>
<td>132</td>
<td>83</td>
<td>48</td>
<td>33</td>
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Source: WHO HFADB and MoH Statistical Annual Book.

Despite this progress, Romania still faces considerable challenges in improving the overall health status of its population. For example, maternal and neonatal mortality in Romania remains high in comparison with its neighbors. Romania also has a high incidence of infectious diseases, especially in rural areas. Factors contributing to the persistence of these patterns of morbidity and mortality include lack of education and poor sanitation infrastructure. For example, in Romania, a mere 13% of rural households are connected to a water supply system (the second lowest in Europe after Moldova), whereas in Sweden it is 100%. Similarly, the percent of population with access to sewage systems in rural areas in Romania is 10% and in new EU member states (8+2) is 54%. At the same time, SDR for cerebrovascular diseases (205/100000) is while the EU average is 65/100000, SDR for cervix cancer is 14.7/100000 whereas the EU average is 3.5/100000 showing signs of an epidemiological transition. The SDR for motor vehicle traffic accidents is 12.6/100000 compared to 8.8/100000 in EU, possibly due to underdeveloped infrastructure and widespread disregard to traffic rules.

Romania inherited a health sector based on centralized government financing and delivery of services, which functioned until the introduction of the compulsory health insurance system beginning in 1998. Long term under-financing of the health sector had resulted in the deterioration of medical facilities, a disgruntled workforce, poor quality of services, and a poor public image for the system. Following the establishment of the health insurance fund and subsequent reforms, the first steps towards decentralization, better financing, and a more pluralistic approach were made. New regulation introduced professional management of the hospitals. A substantial effort was made to endow health facilities with new diagnostic and emergency/life support equipment. Greater attention

1 Main author of this Note is Richard Florescu. Sector Manager is Abdo S. Yazbeck.
and resources have been directed toward primary care. The steady growth of GDP during the past decade has also contributed to improved health system financing and outcomes.

Currently, health services are being officially financed through three main sources: (i) National Health Insurance Fund (for the purchase of services from public and private providers), (ii) Ministry of Public Health budget for selected National Health Programs and investments in hospital medical equipment and infrastructure and (iii) sin tax (excises on alcohol and tobacco) which is topping up the MoPH budget. In 2007 the NHIF accounted for 88.2% of the total budget allocation for health, while the MoPH budget accounted for 21.8%. The NHIF is currently financed through employers (5.5% on the payroll) and employees (5.5% on the wage income) contributions. Unofficial patient out-of-pocket spending for services is widespread, and is discussed further below.

Public spending on the health sector has been steadily increasing during the transition period at a sustainable pace from 2.9% of GDP in 1990 to 3.69% of GDP in 2007. Nonetheless, international benchmarking shows that, as a share of GDP, public spending on health, in Romania falls behind the EU countries and New Member States.

II. Key Issues and Challenges.

The overarching challenge for next Romanian government is how to improve equity in access to better quality health care services in a financially sustainable manner.

To achieve this goal, the government will need to consider not only overall funding levels, but also further changes to the composition of health sector funding, the distribution and organization of service delivery, accountability and decisions regarding who pays for what services, and incentive mechanisms to improve service quality. Specific challenges are detailed below.

There is a disconnect between the service package and funding.

To begin with the overall funding issues, the basic service package offered through public health insurance is very comprehensive, but is not matched by adequate funding. This disconnect is leading to arrears in payment of pharmacies, distributors and pharmaceutical manufacturers and providers of medical supplies. These lingering arrears lead to an increase in price of the supplies as suppliers want to protect their businesses from loss of working capital. Hospitals struggle continuously to cover their fixed costs because the base rate within the DRG (diagnostic related group) system is too low to cover costs. Poor fiscal discipline in hospitals compounds the problem. Because substitutive health insurance is not allowed by regulation, private health insurers have to rely on supplementary or complementary health insurance; the basic package is so comprehensive that private insurers have no room to develop.

The health system is biased towards costly hospital-based service delivery over primary and ambulatory care.
This bias is reflected in funding patterns, in patterns of care, and in the distribution of facilities. Approximately 46.4% of the health budget of the National Health Insurance House is spent on hospital care, compared to the OECD average of 40%. The expenditure for primary health care as a share of the National Health Insurance Fund, in contrast, has historically been low, and only recently reached 5.76% in 2007.

The bias towards hospital care is also reflected in the high number of inpatient care admissions (24.3 / 100 population in 2006), favored by the lack of admission control instruments. A high number of cases are treated in hospitals when they should be handled on an outpatient basis. In 2004, Romania had more than 9,000 inpatient surgical procedures per 100,000 population, whereas the EU average at the time was less than 7,000 per 100,000 annually. Paradoxically, in the context of using DRG method for hospital payments, hospitals were recommended through the norms for applying the framework contract to do surgery on 70% of patients admitted in surgical departments, off-setting by these perverse incentives the advantages of this payment method, in order to save inefficient facilities. Reports from 2006 show that 9 out of the 20 most frequent DRGs, which account for almost 15% of the cases treated in acute care hospitals, can be treated in outpatient facilities and 4 of these 9 have average lengths of stay higher than the average length of stay (7.8 days).

Competition between ambulatories and hospitals for delivering certain types of care is not encouraged. Instead the system encourages “integration” of ambulatory and hospital services, creating an unfair competitive advantage against “independent” ambulatories which have to pay certain fixed costs and overheads by themselves. The insurance pays the same price for services, allowing hospitals to gain a financial benefit from the operation of their ambulatories; in fact the insurance pays the overheads and some fixed costs of the “integrated” ambulatory twice, because the hospital was already paid for these costs through DRGs. The planned construction of 8 regional facilities and 20 county hospitals is expected to result in a further upward pressure on hospital based treatment and hence on hospital spending, if this will not be mitigated by considering these investments as replacements of the old facilities which should be closed.

As it regards the primary care there are few issues that harness and restrict the development capabilities of GPs to provide care: diagnostic and treatment of certain diseases are reserved for “specialists”, and certain professional skills that might enhance the scope of care provided are useless from the point of view of the insurance, which doesn’t pay GPs for these services. On the other hand commuting GPs are well known for being truant and sometimes not showing up for days; their performance is not assessed by the Health Insurance House and referral rates are high. The capitation system induces a certain competition among GPs and the usual way they handle it is not by improving their services but fighting against new competition entering the market, with grim consequences on access of people to care.

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2 WHO “Health for All” DataBase
Low funding levels, poor management systems and perverse incentives contribute to the low efficiency of hospitals.

Financial discipline in the hospitals is poor; expenditures exceeding the revenues in many cases. As a result, frequently, the hospitals run out of basic medical supplies like bandages, disinfectants or even pharmaceuticals, and patients are asked to bring these needed materials themselves from outside. Another contributing factor to the decreased efficiency of the hospital is the widespread conflict of interest allowed by the regulation for specialist doctors who are employees of a hospital and also have a private practice in the vicinity. These doctors self refer patients and work for themselves during working hours in the hospital. This double “milking” of the system is considered acceptable and supported by the College of Physicians. There is also a questionable practice allowed by the regulation, used by the hospitals to diminish costs only through paperwork: it is called “ambulatory admission” – by which a patient is admitted on paper to the hospital, maybe some test are made or not, but the patient stays home for the whole length of care episode or at least the preoperative part of the surgery episode.

High spending on pharmaceuticals is also pushing health care costs upward, while shortages create a public image problem for the health sector.

The increasingly high level of spending on pharmaceuticals is also creating upward pressures on overall spending. In 2007, drugs and medical supplies for outpatient care (without hospitals) account for 30.5 % of the National Health Insurance Fund, being the second largest item of expenditure after hospital services. (Figure 2).

Recently the reimbursement list was augmented with new drugs and prescription of reimbursable drugs is allowed for the brand name products, hence the expenditure is expected to rise. Although the list of drugs reimbursed by the NHIIH, contains many generic drugs, and regulations regarding the prescription based on the therapeutic value of the drugs are in place, as well as co-payment of the reimbursed drugs, these are poorly enforced and not monitored or controlled. Another lingering issue is the recurrent shortage of reimbursable drugs due to ceilings in pharmacy sales (for reasons of not exceeding the health insurance budget for reimbursable drugs). These shortages have engendered widespread distrust in the health system. There were attempts to move the ceiling from pharmacies to prescribing doctors but the College of Physicians adamantly opposed probably fearing commission loss.
The mismatch between health services and funding has led to widespread use of out-of-pocket payments, with corresponding inequities.

People still pay directly for health services out of pocket either for pharmaceuticals or medical supplies in hospitals or informal payments to receive care. One of the objectives of national health insurance was to alleviate a financial burden by preventing households from having to make large payments in case they needed care. Because the basic service package is very comprehensive and the system is not adequately funded to cope with the operating costs, hospitals usually run with deficits and try to transfer costs directly to patients (drugs, medical supplies and food); although free in theory, in practice they are often brought by patients from outside the hospital. Informal payments paid by patients are widespread in the system at all levels (inpatient and outpatient) but those who benefit most are the experienced doctors who work in big hospitals especially in surgical specialties. Their income can outnumber their official salary more than 10 times.

Out-of-pocket payments (formal or informal) increase the economic burden especially on the poor strata of society, diminishing the access to care and creating a vicious circle of disease, low wages / unemployment, poverty, and so on, leading to public discontent and waste of manpower useful in the economy.

There is also geographic inequity in access to health services
Exclusion is a problem as people in rural areas still have difficulty accessing health services. For example, the oncology network has developed around few regional hospitals with oncology wards. However, post-surgical treatment of cancer is rendered in these hospitals too, because there is no network of ambulatory oncology services with serious consequences on access to care. Transportation to the nearest open medical facility is usually difficult, impeding access. Mortality rates are higher in rural areas, because there are no providers available to diagnose diseases, recommend and render treatments. In addition, there are almost no pharmaceutical services in these areas. There are also insufficient family practitioners in rural areas or destitute urban areas – a clear sign of market failure.

**Insufficient funding of the health sector has also led to low salaries of personnel, questionable professional practices, and projected manpower shortages.**

The low salary structure for physicians and specialists has promoted the growth of a host of undesirable practices, from specialists “referring” private patients to hospitals and treating them on hospital time, to doctors accepting informal payments from patients, pharmaceutical companies or from labs to which physicians refer patients for tests. Low salaries have also created a disincentive for young Romanians to go into the health professions, which is likely to create a major manpower shortage in the future. The majority of family doctors in Romania is between 45 and 55 years of age and will retire in 10-15 years, while few young physicians are entering family practice. The average score for admission in medical universities has dropped dangerously from 8.85, 20 years ago, to 3.7 now. In 2007, in Romania there were 180 doctors / 100000 population whereas for average figure for EU is 290/100000 population. For nurses, the figures are 405 / 100000 population in Romania and for EU 566/100000 population. If this trend continues, the supply of doctors, especially family doctors, will decrease, dramatically restricting access to care.

Moreover, as a result of the EU accession, the Western European health systems, which render higher salaries, have become very attractive to Romanian doctors and nurses. There are already worrying signals about large outflows of nurses outside Romania, and doctors will come next too. For certain specialties like pathology and anesthesia the situation is particularly worrying. This is expected to create considerable strain on the health care system in the coming years decreasing health sector performance, yielding a less healthy workforce and thus deteriorating a key factor of economic growth.

**Finally, public concerns regarding quality of services have not been adequately addressed.**

In recent years, increased public awareness, the emergence of patient rights regulation and malpractice insurance, as well heightened media attention, has generated a lot of complaints regarding the health services sector. If the problem occurred in the hospital, the majority of these complaints were against doctors in charge rather than against the

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3 The highest possible equivalent score is 10
hospitals, even though it was obvious that the unfortunate events were due to faulty management of care and not necessarily to medical errors. Doctors were generally cleared of guilt by the College of Physicians, the outcome being declared “nobody’s fault.” The lack of accountability, however, has generated strong public distrust of the system.

At the same time, many standard quality assurance mechanisms are either missing or not enforced. For example, authorization and licensing procedures are complicated and compliance with standards is not enforced. Some hospitals operate without basic sanitary licenses. Accreditation of providers other than hospitals was terminated; accreditation of hospitals although required by law is stalled. With few exceptions, hospital care is not based on guidelines, protocols, and the performance and outcomes of activity are not properly assessed and monitored. It is a common practice to prescribe antibiotics for any kind of surgical operation even for non-septic operations, for prophylactic reasons, revealing a lingering and neglected nosocomial infections issue.

III. Inter-Sectoral Linkages

The likelihood of an economic slowdown and corresponding pressure on government budgets means that containing health care costs while simultaneously seeking ways to improve the equity, quality and efficiency of care will be paramount. Projected cut of employers contribution from 5.5% on the payroll to 5.2% might be reviewed taking into account the economic slowdown and possible rise in unemployment, thus avoiding further financial constraints. Working to meet these challenges in a comprehensive, coordinated, and cross-sectoral manner is also most likely to optimize government spending. For example, investments in rural sanitation are a critical tool in further lowering rates of infectious disease. Including basic health, nutrition, and lifestyle information in education curricula is a relatively low-cost and intervention that can positively influence health outcomes. Ensuring that long term care and disability programs funded under social assistance provide adequate coverage to the rural poor could help at least counter-balance some of the existing inequities in the health system until these can be addressed. Although there is no formal racial discrimination in regard to healthcare delivery, the uninsured are entitled only to the minimal package of services (mainly emergencies and vaccinations); most of the uninsured are nomads (Roma) and poor people living in autarchic communities.

IV. Policy Options/Recommendations

Better defining the basic service package so that it meets the available funding. Shrinking the basic health service package to match the available funding could lead to elimination of arrears, the possibility of introducing co-payments to reduce the abuse of some services and the development of private health insurance.

Begin to shift resources toward primary and ambulatory care, in parallel with restructuring tertiary care. The implementation of a hospital rationalization strategy is likely to produce net savings, but only after a transition period of additional expenditures. It could be argued that the investments for restructuring hospitals should take place
sequentially, only after beds have been closed down and savings have been generated. However, the experience from other countries that implemented the restructuring of their hospital sector—like Canada and Estonia—suggest that a simultaneous approach may be preferable. Those savings could in turn be used to shift resources to primary care and to redevelop the non-hospital health services, in parallel with the hospital restructuring.

**Rationalize and improve efficiency of hospital based services**

- The hospital rationalization strategy provides an excellent road map to reduce bed capacity for acute care, shift services to less expensive ambulatory or day services, and put in place new models of care, especially with regards to social and aged care and rural and remote populations. This will require further reductions in the number of hospital beds (high resource users, with high fixed costs), by redefining the resource and functional requirements for acute care hospitals, expanding specialized services in other hospitals and transforming certain hospitals in ambulatory centers; transparent criteria for decisions in this area should be established (access, efficiency, quality of care). Shifting the focus from inpatient to outpatient care would partially address the problem of lack of access to specialized services by certain vulnerable groups, particularly in poor rural areas, as large hospitals would be replaced by alternative more efficient outpatient models of care that might encompass ambulatory care instead of inpatient care for chronic patients. A possible solution for reducing the number of beds is to establish regional hospital holdings in charge with health care delivery in a certain region and reductions could be made within those holdings at their own initiative. This initiative could be stimulated through financial arrangements and efficiency oriented incentives.

- The current hospital practices should be improved in order to increase efficiency by setting admission criteria, introducing clinical pathways and drug formularies and adopting Romanian relative values for the DRG system, refining the methodology to control the abuse of the system and developing new modalities to support payment methods which encourage efficient use of resources and service quality improvement. This will require introducing practice guidelines in the system together with establishing an incentive mechanism to reward those incurring fewer costs.

- In order to support hospitals to operate on budget constraints a new hospital financial management model should be designed so that managers have more flexibility and efficiency gains are rewarded. In this respect, induced demand should be considered the main inefficiency driver and be mitigated if not thwarted.

- The recent push to decentralize hospitals to local authorities provides good opportunities to improve funding but also bears the threat of difficult implementation of national policies. The decision to open or close a hospital
should take into consideration not only the financial aspects but also in a broader view other criteria like access, local economy and specific morbidity.

**Reposition primary and specialist ambulatory care within the system**

- Expand primary care services to communities especially in rural areas and urban areas where the population has impaired access to care. This typical case of market failure can be addressed through a multi-sector approach which should include an infrastructure (roads, utilities, facilities, communication) enhancement, better education for the poor, increased financing and reorganizing the delivery of care. Encouraging group practice would allow an increase in efficiency while redefining the points scale by which GPs are paid and the capitation / fee-for-service ratio with an in-depth epidemiological consideration might be an incentive to provide care to those who need it most (the Brazil example)

- Foster the competition between hospitals and ambulatories for the overlapping segments of care; this should entail a mandatory decision for doctors and nurses who work both for ambulatory and hospital and develop new financing mechanisms for the “integrated” hospital-ambulatories in order to improve efficiency, possibly shifting from case based/ fee for service to block contracts.

**Set a course for estimating and covering the costs of the reform and bringing health expenditures closer to EU averages.** To accommodate the transition costs of hospital rationalization and EU accession, it is more realistic to anticipate a gradual increase in health spending to around 4.5 percent of GDP by 2010 financed in part with the taxes provided for in the Health Act. A further extent of taxes or excises for unhealthy products could also encompass refined sugar and salt. The budget and the medium term expenditure framework need to reflect adequately the costs of the reform and the transition to a level of health spending more consistent with that of EU countries and with Romania’s increasing per capita GDP. The full assessment of the financial impact of the new package health laws is needed.

**Focus on quality improvement.** Increasing the quality of care should become one of the objectives of reform, especially in the realm of human resources and procedures. This will require a multi-sector effort, and could include: a) introducing quality of care topics in the curricula of medical schools; b) establishing mechanisms for external evaluation of care and encouraging improvement policies in organizations within the health sector; c) providing financial incentives for improved outcomes; d) establishing a legal framework that would make clear the responsibilities of various stakeholders in regard to quality of care; e) establishing an independent Quality Assurance Agency that will deal with quality issues, especially accreditation, guidelines and possibly health technology assessment and evidence based medicine; and f) handling patient complaints in a professional manner with the main purpose of analyzing facts and recommending measures for improvement.

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4 This has been a World Bank suggestion since 1996
of the system, and only subsequently for determining guilt. Complaints could be considered a quality issue and addressed to a national body (Quality Assurance Agency) and not to professional bodies. Only professional errors and misconductions should be referred to the latter.

**Address the human resources issue**

- Address the growing issue of deteriorating human resources in terms of number and quality by enhancing the status of the medical professionals, improving medical education and better payments to cope with other trades in the labor market, to retain valuable professionals in the system and attracting promising young undergraduates to a medical career.

- In addition the introduction of up-to-date human resources structures and policies in the system (especially in the administrative structures and hospitals) is a must.

- In the short term, immigration might be considered an option to cope with the demand for health professionals if cultural and linguistic barriers could be overcome.

**Alleviate the financial burden due to out-of-pocket payments.** Providers could move towards pricing the services they render in a transparent manner, and co-payments could be established for certain services. Low income groups might benefit from free health vouchers issued for them by the state.

**Improve equity of access to health services.**

- The difficult access to health care in remote rural areas is a typical case of market failure and is part of a broader problem of these destitute areas, encompassing: ageing population, underdeveloped infrastructure, economic failure, unemployment, and poverty. Tackling this issue requires a thorough analysis to assess its magnitude and understand the causes; secondly a two pronged approach is needed. In the short term, the focus should be on facilitating movement of patients to health care providers, while in the longer term encouraging providers to set up facilities in these areas. Such an approach might require increased financing (possible cost subsidies), and improved infrastructure, which in turn would require the joined effort of the Ministry of Health, other Ministries, and local authorities.

- As it regards chronic diseases like diabetes mellitus and cancer where access problems were encountered, a possible solution is changing the regulation and allowing internal medicine and endocrinology doctors to prescribe the therapy and encouraging family doctors to manage patients with diabetes mellitus. For the oncology, it is obvious that the network of ambulatories with this specialty is underdeveloped and requires urgent expansion.
**Improve value for money spent in the pharmaceutical sector.** This will require improving economic mechanisms in the pharmaceuticals’ market by increasing competition especially in the realm of generic drugs and adopting evidence based criteria for the establishment of reimbursable drug list. Increased competition will lead to lower prices and savings that can be used for increased drug subsidy/reimbursement, leading to lower copayments and increased access to pharmaceutical therapies. More transparent and objective procedures and criteria for establishing the reimbursement list will lead to decreased corruption and better use of funds, while better monitoring of prescribing practices and utilization of drugs could yield both health and economic benefits.

The Austrian model for establishing the reimbursable drug list.

| THE RED BOX – New drugs, restricted prescription, controlled volume (based on disease data), reimbursement based on reference pricing |
| THE YELLOW BOX – Proven effective drugs with additional benefits, less restricted prescription, controlled volume (based on disease data), reimbursement based on volume discounts and price categories |
| THE GREEN BOX - Proven effective drugs and generics, unrestricted prescription, price control, 100% reimbursement |

**Address the high incidence of infectious diseases through both direct and cross sectoral measures.** Direct measures include basic prevention such as: (1) enforcing hygiene measures – especially in medical facilities, food shops, catering, restaurants, bars, barbers and cosmetic shops, (2) vaccination programs and (3) controlling animal pests (requiring cooperation with environment and agricultural sectors). Aside from these “direct” measures, a cross-sectoral effort is needed to improve sanitation and sewerage systems (infrastructure) in order to assure safe water and clean air especially in public places, together with an educational effort focused on children.

**Support health reforms with a robust communication strategy.** Develop a communication strategy to develop a better understanding and building consensus among the public and the professionals towards the objectives of reform and to restoring the confidence of the public in the health system.