EXECUTIVE REPORT

GEORGIA HEALTH SYSTEM PERFORMANCE ASSESSMENT

2009
ABSTRACT
This Executive report presents in a concise and readily accessible manner the main findings of the World Health Organization (WHO) assessment of the performance of the Georgian health system, which was carried out by the Ministry of Labour, Health and Social Affairs of Georgia, with the technical and financial support from the WHO Regional Office for Europe and from the World Bank. This assessment was carried out between July 2007 and September 2009 and contributes to the efforts pursued by the government of Georgia to strengthen the capacities of the Ministry of Labour, Health and Social Affairs for effective stewardship of the health system.

The Executive report should be seen as a supplement to the full technical report of the above-mentioned assessment, and offers key stakeholders and decision-makers an overview of the approaches and outcomes of the assessment exercise, with a summary of the recommendations put forward.

This health system performance assessment is the first in a series of similar reports released this year by the World Health Organization Regional Office for Europe. Other reports to be released in 2009 include Armenia, Estonia and Portugal.

Keywords
OUTCOME AND PROCESS ASSESSMENT (HEALTH CARE)
HEALTH SYSTEMS PLANS – organization and administration
PUBLIC HEALTH – organization and administration
HEALTH STATUS
QUALITY OF HEALTH CARE
PROGRAM EVALUATION
GEORGIA
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The government of Georgia is striving to improve the performance of the health system. This implies securing better health for the population of Georgia; ensuring that the poorest Georgians have access to important health services through the Medical Insurance Programme; and using the resources available to fund health services – although limited – in the most effective and efficient way possible. We owe this to our people, and have affirmed this by endorsing, in 2008, the WHO Tallinn Charter: Health Systems, Health and Wealth.

The Georgian health system is performing better. This report shows where we have improved over the last few years, and where there is still progress to be made. One of our core priorities, for example, is to reach the Millennium Development Goals. This report helps us understand where we stand, and shows what components of the health system must be strengthened if these goals are to be attained. Another priority, our effort to strengthen the primary health care system, requires continuous commitment to invest in infrastructure and human resources. Lastly, I would like to mention our policy to ensure coverage and access of the poorest Georgians to essential health care services through the Medical Insurance Program that is already rendering positive results.

This is the first time that such a comprehensive assessment is made of the health system in Georgia. It is a very important exercise: it delivers critical information on overall efficiency of the national health system that we need to know. It shows our commitment to transparency and accountability. It demonstrates that we are ready to take action to make our system better. To do so we need the facts, we need the evidence. This report is a first step for the Ministry of Labour, Health and Social Affairs to utilize the evidence available to make better policies. At the same time, it points to a lack of reliable data and we are committed to resolve this issue. A health system cannot be managed or improved if there is no good information available.

Finally, I would like to thank the staff of the Ministry of Labour, Health and Social Affairs and the partners who have supported us in developing this report. The health department of the Ministry, with the support of the World Health Organization Regional Office for Europe and of the World Bank, has done outstanding work. It is now the responsibility and the commitment of the Ministry to ensure that we build on this milestone to harness evidence about our health system and develop the policies which will bring improved health system performance and better health to the people of Georgia.

Mr Alexander Kvitashvili
Minister
Ministry of Labour, Health and Social Affairs of Georgia
INTRODUCTION

Countries in all phases of social and economic development are working to strengthen their health systems by finding better ways to organize and finance health care, while promoting better health, equity and responsiveness. Despite considerable investments in health care, however, those most in need of care often fail to receive it. Health systems, especially in poor countries and countries in transition, are struggling and falling short of their potential. Although effective and affordable health interventions exist, weak health systems cannot effectively implement them.

Although health systems throughout the world vary widely in their design, content, management and performance, they share the same defining and intrinsic goals of good and equitable health, responsiveness to people’s expectations, fair financing and financial protection. Achieving these goals depends on successful implementation of four functions common to all health systems: stewardship, service delivery, resource generation and financing. Adapting to the country-specific objectives and strategies, these core goals and functions form the basis of a national reform agenda. This provides a framework for assessing how well the health system is performing its functions and achieving the national objectives.

These core goals and functions can provide a framework health system performance assessment (HSPA) such as proposed by the World Health Organization in the World health report 2000 (1) and expounded in the World health report 2004 (2). By relating country-specific objectives to a country’s health system reforms, health planners can adapt the framework to measure the individual country’s performance, understand the factors that contribute to performance and respond better to the needs and expectations of the population. By regularly applying the HSPA framework tailored to country-specific objectives, policy-makers at all levels can analyse variations in health system performance, identify factors that influence it, and articulate policies aimed at achieving better results.

Acting upon these commitments is impossible without effective stewardship and reliable and valid health system performance information. The WHO Regional Committee for Europe resolution EUR/RC58/R4 on stewardship/governance of health systems in the WHO European Region (4) explicitly calls on Member States to “strengthen the health system stewardship roles of the ministries and governments” and “ensure the systematic production and use of health system performance and other relevant (epidemiological, economic, etc.) information and evidence in decision-making, in order to better meet the needs of the people and attain health system goals.”
Many countries have adopted this approach and together with the World Health Organization, the World Bank and other international partners have already developed, or are in the process of developing, national HSPA frameworks. The Ministry of Labour, Health and Social Affairs of Georgia (MoLHSA) launched its own HSPA in 2007 with the aims of improving evidence-based policy-making processes and obtaining a reliable instrument for assessing the effectiveness of ongoing reform initiatives in the national health sector.

This executive report presents results of the collaborative effort carried out by the MoLHSA of Georgia with the support of the WHO Regional Office for Europe and the World Bank to develop the first HSPA of the Georgian health system. It describes briefly the methods used to carry out this performance assessment, including the framework and the set of performance indicators selected for the assessment, and it presents a summary of findings and related policy recommendations to improve health system performance. Further details can be found in the full HSPA report.

**METHODS**

The conceptual framework for health system performance in Georgia was developed from internationally recognized health system performance assessment frameworks and national health policy goals and priorities. The main features of the World Health Organization’s framework for HSPA (1,5) served as a basic template for the Georgian health system strategy map. Along with fundamental intrinsic goals (the attainment of which is socially desirable in itself), the framework also defines instrumental, or intermediate, objectives, the achievement of which does not produce direct social gain but furthers progress toward attaining health system goals.

The strategic document of the MoLHSA, Main directions of health care policy (6), was used to shape the national health system strategies; and the Georgian HSPA framework was elaborated on the basis of four national strategic priorities identified in the document. The MoLHSA endorsed the resulting framework for assessing the performance of the health system in late 2007. Nine health system performance dimensions, based on the intrinsic and intermediate goals described above, were defined. Most of these dimensions characterize one or more instrumental goals or national health priorities, described in Table 1. This table shows the relationship between national health priorities as stated in national policy documents and the performance dimensions selected for the HSPA.
### Table 1. National health priorities, the health system performance dimensions and the health system core goals and functions

<table>
<thead>
<tr>
<th>National Health Priorities</th>
<th>Related Health System Strategy Map Performance Dimensions</th>
<th>Related Goals and Core Functions</th>
</tr>
</thead>
<tbody>
<tr>
<td>To ensure the overall affordability of basic health services and protect the general population from catastrophic financial health risks</td>
<td>Improve equity and financial protection of the population</td>
<td>Fair Financing</td>
</tr>
<tr>
<td>To ensure the quality of medical services by creating and enforcing the necessary regulatory environment</td>
<td>Improve the quality of health services and clinical outcomes</td>
<td>Health Service Provision</td>
</tr>
<tr>
<td></td>
<td>Improve health system stewardship</td>
<td>Stewardship</td>
</tr>
<tr>
<td>To ensure the accessibility of quality medical services by the continuous development of medical infrastructure and competent human resources</td>
<td>Improve geographical and informational accessibility to the health system</td>
<td>Health Service Provision</td>
</tr>
<tr>
<td></td>
<td>Improve financial accessibility to the health system</td>
<td>Health Financing</td>
</tr>
<tr>
<td></td>
<td>Ensure efficient allocation of health system resources</td>
<td>Resource Generation</td>
</tr>
<tr>
<td>To increase health system efficiency by capacity building of the MoLHSA and its subordinate institutions, and through introduction of good managerial principles</td>
<td>Ensure efficient allocation of health system resources</td>
<td>Resource Generation</td>
</tr>
<tr>
<td></td>
<td>Improve efficiency and effectiveness of health services</td>
<td>Health Service Provision</td>
</tr>
<tr>
<td></td>
<td>Improve health system stewardship</td>
<td>Stewardship</td>
</tr>
</tbody>
</table>

The hypothetical causal relationships among the nine performance dimensions are shown in Fig. 1. This strategy map also illustrates how the performance dimensions relate to the national priorities of Georgia and how they support the four functions of the health system.
Each of these performance dimensions includes subdimensions also determined by the national health policy and reform priorities. On this basis, a set of reliable and valid performance indicators was selected by an expert group composed of health system experts from the Ministry of Health, the National Centre for Disease Control and various health system stakeholder groups and international partners. The working group was supported in developing this report by the WHO Regional Office for Europe and the World Bank.
KEY FINDINGS OF THE HEALTH SYSTEM PERFORMANCE ASSESSMENT

As depicted in the strategy map, the ultimate goals of the health system (shown on the right side of Fig. 1) are to improve the health status of the people of Georgia and to do so in a way that promotes equity and financial protection as well as being responsive to the people it serves with high-quality and safe health care services. To achieve these ultimate goals, the system must deliver health care services efficiently and effectively by providing the right mix of needed services while minimizing the resources required to produce them. Health services must be financially and geographically accessible to the population; individuals must have the information they need to access the services; and the system must deliver services that promote health and prevent diseases. The system can only achieve these intermediate objectives, however, if resources are properly allocated among different sectors of the health system and if the government promotes good stewardship and development of health information resources. The key findings of the HSPA focus on health system performance in these dimensions, assessing where the system is performing well and where the system could improve its performance toward the defining goal of the health system, which is better health for the people of Georgia.

IMPROVING THE HEALTH STATUS OF THE POPULATION

The key indicators of life expectancy, mortality and morbidity are used to assess overall health status and to measure progress in a number of targeted areas, such as reducing the incidence of major causes of mortality and morbidity and reducing rates of infant, child and maternal mortality. There has been substantial improvement on a number of these indicators since the mid-1990s.

Life expectancy at birth has increased, and rates of infant and maternal mortality have decreased. Average life expectancy, after declining during the early 1990s, increased from 70.3 years in 1995 to 75.1 years in 2007. Infant mortality improved from 20 deaths per 1000 live births in 2001 to 14 deaths per 1000 live births in 2007. Maternal mortality decreased from 58.7 per 100 000 in 2001 to 20.2 per 100 000 in 2007. Fig. 2, however, shows that there is still a gap between these numbers and the Millennium Development Goal targets (7) for 2015.
Progress has also been made in decreasing the percentage of low-birth-weight babies, another indicator of prenatal care and health status. In Georgia overall, the rate dropped from approximately 7% in 2001 to 6% in 2007. The percentage has also varied over time, however, with a rate close to 10% in 2004; and there is considerable regional variation.

Cardiovascular disease is by far the largest cause of mortality in Georgia (Fig. 3), and the rate per 100 000 population has remained unchanged from 2001 to 2006, at approximately 645 cases. Although this rate is lower than the average rate for CIS countries, it is higher than the EU average of approximately 250 (8). The rate of deaths due to neoplasms is also high. The rate has dropped somewhat since 2001, from 118 to 110 cases per 100 000 in 2006.

Mortality due to cardiovascular diseases can be reduced through changes in lifestyle behaviours. The continuing high rate points to the need for health promotion efforts to reduce tobacco use, increase physical activity and lower rates of overweight and obesity. Efforts to reduce smoking would also have a beneficial impact on morbidity due to respiratory diseases, which is by far the greatest cause of morbidity, increasing from 3500 per 100 000 in 2001 to more than 7000 cases in 2006. The continuing high rate of mortality due to neoplasms points to the need for screening programmes to detect neoplasms at earlier, more treatable stages.
Fig. 3. Mortality per 100 000 population for the five leading causes of death, 2001–2006

Source: National Centre for Diseases Control

IMPROVING THE QUALITY OF HEALTH SERVICES AND CLINICAL OUTCOMES

While there are factors outside the health system that have a significant impact, the strength of the health system is the main determinant of the health of the population.

There are documented and commonly acknowledged problems with quality in most advanced health systems throughout the world (9). Eliminating variation in the delivery of care services, according to evidence for best practices across health care systems, could save thousands of lives each year in Georgia. Improved quality of health services leads to improved clinical outcomes, better patient safety and greater patient satisfaction.

One of the biggest obstacles in assessing performance in this dimension is the lack of reliable data on patient safety. Data required to support key indicators of patient safety such as post-surgical infections and medication errors, for example, are not reported to a central health information system. Information on obstetrical trauma and peritonitis complications following caesarean sections is available, but the data appear to be unreliable. There is a need for accurate measurement and reporting of such indicators to assess patient safety.
An important clinical outcome with respect to cancer treatment is the extent to which the health system can diagnose malignant neoplasm in early, more treatable stages of the disease (stages I and II). Approximately 25% of neoplasm cases were diagnosed in these stages in 2007, a rate almost unchanged from 2003. The rate is low compared to other countries and underscores the need for coordinated screening guidelines and programmes to encourage screening, particularly where proven effective for breast, cervical and colorectal cancers (Fig. 4).

**Fig. 4.** Percentage of neoplasms diagnosed at stages I, II and III–IV, 2003–2007

Clinical practice guidelines can help eliminate unnecessary variation in treatment and can encourage quicker uptake of evidence-based practices. There are processes in place to develop, approve and disseminate guidelines. To date, 30 guidelines have been approved, 38 are ready for approval and another 25 are at various stages of development. There is no mechanism in place, however, to monitor the degree of adherence to the approved guidelines and measure improvement.

There has been a positive trend overall in tuberculosis treatment outcomes. The rate of completed treatment cases (without bacteriological evidence of success) is declining and the rate of recovered (cured) cases is on the rise, with more than a 50% increase in the period from 2003 to 2007. These results indicate progress by the national tuberculosis control programme. At the same time, however, the data on the prevalence of multidrug-resistant tuberculosis in Georgia raise concern. The relatively
high prevalence of multidrug-resistant tuberculosis threatens the continued success of the tuberculosis control programme. Georgia ranks among the 15 countries in the world with the highest prevalences of multidrug-resistant tuberculosis, both among new cases and previously treated cases (10).

Results from the Health Utilization and Expenditure Survey 2007 report in general a fairly high degree of satisfaction with most aspects of health care services, reflecting a health system that can be responsive to the patients it serves (Fig. 5). Rates of satisfaction with explanation of reasons for treatment, adequate time spent with patients, clean or very clean facilities and involvement of patients in treatment decisions were all close to 80% or higher. The percentage of respondents reporting trust in the services at their usual clinic was somewhat lower, at approximately 65%.

**Fig. 5. Percentage of population expressing satisfaction with different aspects of health services, 2007**

Source: Health Utilization and Expenditure Survey 2007
Although the health system shows responsiveness to patients and treatment outcomes for tuberculosis have been improving, performance in other areas is weak. Figures for one key indicator of clinical outcomes, diagnosis of neoplasms in stages I–II, are very low and the emergence of multidrug-resistant tuberculosis is likely to develop into a significant health system challenge. Most troubling for assessing health system performance in this dimension, however, is the lack of high-quality data to support indicators that measure patient safety and quality of care. This information is a prerequisite of any significant improvement in the quality of clinical care and patient safety.

**IMPROVING EQUITY AND FINANCIAL PROTECTION IN THE HEALTH SYSTEM**

A health system cannot promote equity in health outcomes and improved health status if it places an undue financial burden on those who can least afford it. A strong health system provides health care for all, regardless of income level.

Results for this dimension lead to concern over the extent of out-of-pocket payments for health care services, in which individuals pay directly for care at the point of service,\(^1\) and the degree to which households spend on health care beyond their capacity to pay.\(^2\) The Health Utilization and Expenditure Survey (2007) shows that close to 12% of households reported spending more than 40% of their non-food expenditures on health care services. In the poorest quintile of households, over 17% reported spending more than this amount on health care (Fig. 6). Although results from the quarterly Household Budget Survey show a lower rate of household health expenditures as a percentage of capacity to pay, both surveys point to health expenditures as an increasing component of household spending.

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1. Insurance premiums for health care services would not be counted as out-of-pocket spending, since they are paid regularly and separately from the delivery of health care services. However, a copayment required at the time of service would be counted as out-of-pocket spending.

2. Non-subsistence expenditures or *capacity to pay* are defined as all household (monthly or annual) expenditures excluding expenditures on food.

Key Findings of the Health System Performance Assessment
The burden of increasing private out-of-pocket spending falls on those households that can least afford it, leading to an undue financial burden. Expansion of insurance coverage would provide for prepayment of health expenses and reduce out-of-pocket payments at the point of service. Health insurance coverage would also allow the poorest households to manage the financial risks currently associated with ill health.

**IMPROVING HEALTH PROMOTION, HEALTH BEHAVIOURS, DISEASE PREVENTION, MONITORING AND DETECTION**

A key strategy for improving health status and outcomes for the population is to encourage lifestyle behaviours that promote health and prevent disease. Screening and disease detection programmes also enable individuals and health care providers to prevent diseases from developing by treating health problems at an early stage, when the progression of a disease or chronic condition can be influenced more easily.
There are presently few indicators and only scarce data, however, to assess system performance in this dimension. There are no regular surveys that measure and report key health behaviours such as smoking, alcohol and drug abuse, obesity and overweight, physical activity and sexual behaviour. Some results are available for smoking (reported in 2005 and 2006 in the National Health Report); and a number of studies and surveys have been conducted in the past on alcohol consumption and awareness of sexually transmitted diseases. But there is no systematic reporting of this information via routine or population-based data sources.

The data that are available indicate that alcohol abuse does not appear to be a common problem in Georgia; per capita annual consumption is relatively low compared to other countries (8). There is a high prevalence of tobacco use, however, and drug abuse is a major public health problem for the country. Georgia has one of the highest rates of smoking among males in the world (over 50%), and 5% of the total population is estimated to use drugs (12). Though consistent trend data is limited, it appears that both the rate of smoking and the rate of drug use are increasing over time, while funding for public health programmes and prevention has decreased. At the same time, legislative measures adopted in the last decade against drug use and smoking have not led to visible results. Limited funding and ineffective legislation constrain the government’s ability to effectively cope with these problems.

There are no systematic mechanisms to provide or promote cancer screening, even for cancers for which screening of target populations has been proven effective for reducing mortality (breast, cervical and colorectal cancers). The data on rates of screening are limited. Data comparing screening rates for breast cancer and cervical cancer across a number of countries between 2000 and 2006 are available, however (8). These results show that the percentages of Georgian women who have had mammography or Pap smear are the lowest (at 1% and 13% respectively) among a range of eastern European and other countries. Fig. 7 shows the mammography data for Georgia and selected countries.
This dimension is crucial to improving health status, equity and health care outcomes. Improvement in health behaviours leads in particular to lower rates of mortality and morbidity due to cardiovascular and respiratory diseases. The introduction of screening programmes, including mammography and Pap smears, can lead to early cancer detection and reduced mortality rates. Finally, lifestyle changes that help prevent disease can lessen the financial burden on low-income individuals without the financial resources necessary to pay for medical treatment.

**IMPROVE FINANCIAL, GEOGRAPHICAL AND INFORMATIONAL ACCESSIBILITY OF THE HEALTH SYSTEM**

Individuals cannot benefit from health care services or realize gains in health status if there are barriers that prevent them from accessing health services. Minimizing barriers to access is one of the four official priorities of the Georgian health system strategy. Barriers can be financial (individuals cannot afford the service), geographical (the service does not exist in reasonable geographic proximity) or informational (individuals are not aware of services or do not know that they are entitled to a ser-
Removing financial barriers in particular is vital to improving performance in the dimension of equity and financial protection.

The 2007 Health Utilization and Expenditures Survey (HUES07) provides data on the number of individuals who failed to receive a recommended or prescribed health service because they could not afford to pay for it. Twenty-seven percent of prescribed laboratory tests, for example, were not carried out because the patients could not afford them.

Many of the poor in Georgia have basic health care coverage through state health benefits and/or medical vouchers (673,000 in 2007, increasing to 751,000 in 2008). A relatively small proportion (approximately 25%) of the total population, however, has any form of health insurance; and a much smaller share of those not eligible for state health benefits hold a private health insurance policy (Fig. 8). Lack of insurance coverage significantly reduces financial accessibility. Recent initiatives for a government-subsidized minimal insurance package, however, are likely to increase the percentage of those with insurance coverage during 2009.

**Fig. 8.** Percentage of population covered by any form of health insurance (public programmes, employer or voluntary health insurance) and those not covered, September 2008
With respect to geographical access, there appears to be a good distribution of facilities. Overall, 80% of the population could access a facility where they would normally see a doctor within 30 minutes. Even in rural areas, over 72% had access within 30 minutes. Although there may be some isolated geographical access problems, results are within the 30-minute target for most of the population.

Lack of accurate and specific information about entitlements to health benefits and services can also be a barrier to access. Fewer than half of the beneficiaries of the largest state health programme for the poor population (Medical Insurance Programme) were aware of their specific entitlements under this programme.

The lack of insurance coverage poses significant financial barriers to access, weakening the system with respect to equity and financial protection. Recent initiatives to expand insurance coverage through a basic government-subsidized package are likely to lead to improvement in this area. It is, however, important that performance data related to this dimension continue to be collected and monitored in the future. The Health Utilization and Expenditure Survey is the key information source for assessing performance in this dimension. As there are no historical results from this survey to provide information about trends and no international comparisons available, it is also important that targets for financial accessibility be established.

**IMPROVING EFFICIENCY AND EFFECTIVENESS OF HEALTH SERVICE PROVISION**

Improving the efficiency and effectiveness of health service provision enables a health system to deliver more services and achieve better health outcomes with existing resources. Strategies to increase the productivity of health care providers and facilities and to improve the effectiveness of services will improve health system performance in this area, as will closer coordination among levels of care, providers and institutions.

The use of primary health care services as the first point of contact can improve coordination of services and lead to more effective care. For this reason, strategies to improve primary health care facilities and human resources are a significant component of health care reform in Georgia. Survey results from 2007 indicate that approximately 50% of first visits for health problems occur at the level of primary care facilities, indicating that many Georgians are first accessing primary care services rather than self-referring directly to hospitals or other specialist care. These survey
results provide a baseline for assessing trends as the implementation of primary care rehabilitation and retraining strategies continues.

The hospital bed occupancy rate has been increasing in conjunction with an overall reduction in bed capacity. The reported occupancy rate of 40%, however, still represents very low utilization of existing inpatient facilities which is certainly a sign of barriers to access health care services. At the same time, average length of hospital stay has decreased over the past few years (Fig. 9) and compares favourably with length of stay in other countries (8). Reduction in the average length of stay means that more hospitalizations can be achieved without significantly increasing resources. Careful monitoring, however, is required to ensure that reductions in average length of stay are achieved through advances in technology and quality of care and not through inappropriately early discharges. A strong health system information would monitor readmission rates, complications and other key indicators to ensure that patient safety and quality of hospital services do not suffer as efficiency and productivity improve. This information is not systematically captured and reported at the present time.

**Fig. 9. Bed occupancy rate and average length of stay, 2003–2007**

![Graph showing bed occupancy rate and average length of stay from 2003 to 2007](image)

Source: National Centre for Diseases Control

Physician productivity for both inpatient and ambulatory care services is very low. On an annual basis, there are approximately 29 patients per full-time hospital physician; but this ratio varies significantly across regions (Fig. 10). Although this is an improvement from 25 patients per physician in 2004, it is still the lowest among the figures for a number of countries (8). Utilization of physicians for outpatient care is
also very low, with roughly half of the available visit capacity (based on staffing) being used. The low productivity of physicians raises concerns regarding quality of services, salary levels and low levels of motivation in the health care workforce. Identifying an optimal mix of skills among health care workers and coordinating hospital capacity with physician capacity are two important factors for raising productivity.

Fig. 10. Ratio of number of patients hospitalized annually per hospital full-time-equivalent doctor, Georgia and country regions, 2004–2007

Results indicate that more can be done and, in fact is being done, to more efficiently and effectively utilize existing resources. On the inpatient side, these strategies include reducing hospital bed capacity and average length of stay. It is important, however, to monitor the impact of these initiatives on access to services and quality of care. What appears to be excess bed capacity might in fact be low utilization due to financial barriers. Similarly, quality of care may suffer if hospital stays are shortened without regard for patient safety.
ENSURING EFFICIENT ALLOCATION OF HEALTH SYSTEM RESOURCES

Efficient allocation of resources is an important aspect of effective performance and supports improvements in health system productivity and accessibility. Investment in different sectors of the health system must be carefully planned. A very productive primary health care system cannot contribute fully to improving population health if its capacity is insufficient; and an excess of specialist care services, even if efficiently produced, can lead to inappropriate or unnecessary care. As discussed in the previous performance dimension, current utilization patterns point to excess hospital and physician capacity, which suggests that resources might be used more effectively in other parts of the health system.

Although there have been significant reductions in health service delivery capacity over the past 10 years, existing hospital bed capacity is still more than double the target figure (Fig. 11). It is expected that targets will be reached in the next three years with the implementation of the hospital master plan.

**Fig. 11. Actual beds as a percentage of planned hospital beds per 100 000 population, by type of bed, 2006–07**

![Bar chart showing actual beds as a percentage of planned hospital beds per 100 000 population, by type of bed, 2006–07.]

Source: National Centre for Diseases Control

There have been significant investments in primary care capacity as part of the Primary Health Care Development Plan. These investments include the rehabilitation of
primary health care facilities and the retraining of physicians and nurses. Over half of the targeted primary care physicians and 40% of nurses have been retrained (Fig. 12), with plans to complete the retraining by 2010. The average number of visits per person per year has increased. Despite this increase, however, the average number of ambulatory visits per capita (1.8 in 2007) is still markedly below the rates of almost all other countries (8). The 2007 result also represented a drop from 2.1 visits per person in 2006. This unexpected decrease might have been due to organizational changes that influenced the accuracy of reporting; however, careful monitoring is needed to discern whether the 2007 figure is an anomaly or the beginning of a downward trend requiring modification of primary care strategies.

**Fig. 12.** Retrained primary health care doctors and nurses as percentage of target defined in the primary health care development plan, Georgia and country regions, 2009

Progress has been made in reducing hospital inpatient capacity while investing in primary health care rehabilitation and human resources retraining. Greater increases in the number of ambulatory visits per capita and better utilization of both hospital and primary health care capacity, as discussed under the previous performance dimension, are still needed.
IMPROVING THE HEALTH INFORMATION SYSTEM

A health information system with the capacity to provide reliable and timely data is essential for evidence-based planning, monitoring, evaluation and policy formulation. It provides critical support for stewardship and is essential for the regulatory activities required to monitor quality of care and safety of health service provision.

Assessments presented previously for a number of dimensions have highlighted current health information requirements and critical shortcomings. Examples include:

- lack of information for assessment and monitoring of the safety of health care services;
- lack of information about population health behaviours;
- questionable data on complications of caesarean sections and obstetrical trauma;
- lack of a mechanism to monitor adherence to clinical practice guidelines;
- need for information to monitor the impact of reduced length of stay on hospital readmissions and post-hospitalization clinical outcomes; and
- need for information to support the capacity of the government to regulate drugs.

A systematic process of using information for evaluating the performance of state programmes is also required. In 2007, monitoring and evaluation measures were defined for programmes covering approximately 68% of health expenditures, but this initiative has not been maintained; only one programme had defined performance measures in 2008. Programme performance measures must be defined and monitored, with action taken when necessary.

There is a lack of consistency in reporting requirements and little in the way of incentives (or penalties) that can be used to enforce reporting by health service providers and insurance companies. Introduction of minimum standard reporting requirements must be accompanied by an adequate enforcement mechanism on the legislative level, through changes to the Administrative Code and/or special Presidential Decree.

Health system stewardship and health information support each other. Stewardship is vital to the development of a good health information system; but stewardship can-
not exist in a health information vacuum. A number of steps have been proposed to develop the health information system essential to support an ongoing HSPA process. These steps are described in the final section of this report.

**IMPROVING HEALTH SYSTEM STEWARDSHIP**

Along with health information, health system stewardship underpins both the intermediate and ultimate goals of the health system. Health system improvement and long-term improvement in population health status is unsustainable without good stewardship. This is recognized explicitly in the Tallinn Charter (3), which declares that governments and ministries of health must “set the vision for health system development and have the mandate and responsibility for legislation, regulation and enforcement of health policies, as well as for gathering intelligence on health and its social, economic and environmental determinants.” The ministries of health should also advocate and lead concerted intersectoral and multistakeholder efforts to maximize population health gains and ensure preparedness of the health system for man-made and natural disasters.

There is some degree of consistency with respect to spending and investment in the health system of Georgia. There are only minor differences between the Medium Term Expenditure Framework and actual annual budgets over the past two years. There is, however, no mechanism for evaluating the consistency of planning and allocation of resources at a programme level. It is not yet clear, for example, if the increased public funding for medical insurance for the population under the poverty line has moved sufficient resources into primary health care delivery to offset the reduction in allocations to the Primary Health Care State programme for 2008. Monitoring at this level is an important factor in executing the stewardship function.

Overall, government expenditures on health have consistently remained among the lowest internationally at 1.5% of GDP and 4.7% of general government expenditures in 2007 (Fig. 13). This in turn has lead to a very high share (73%) of private health expenditure compared to total health expenditures. This is the highest percentage of private expenditures on health in the European Region, and it also exceeds the CIS average of approximately 46%. Despite an increase in absolute terms in recent years, government expenditures on public health and health promotion have remained extremely low. It would be a priority for the Georgian government to increase its level of expenditures on health, for example by expanding the package of services covered for the poorest population.
Key Findings of the Health System Performance Assessment

Fig. 13. Total and public expenditures on health as percentage of GDP, and public expenditures on health as percentage of total government expenditures, 2001–2007

Good stewardship of the health system requires a regulatory framework and capacity that can ensure safety and quality of health care services. As noted in the previous section, there is insufficient information to report on the percentage of false, substandard and expired drugs that are subject to state quality control. Concerns regarding the quality and sufficiency of information from private and public health care providers are discussed further in the full report. Focusing attention on regulatory capacity with respect to information gathering, development of efficient and effective regulations for private and public facilities and enforcement of standards is required in order to strengthen stewardship of the health system.

Plans have been developed to mobilize health services in the event of large-scale disasters and challenges to the health system. Ministry staff are being trained with assistance from the World Health Organization, and the capacities of polyclinics and hospitals to deal with emergencies are being updated. It is important to ensure that this activity continues and that the plans are supported and regularly tested through simulations.

Stewardship of the health system explicitly recognizes that factors outside of the health system such as environment, transportation and education have a significant impact.

Source: National Health Accounts
on the health of the population. Intersectoral collaboration on health issues across the government is a core stewardship responsibility. Although there is evidence of coordinated planning and policies with respect to health issues, this collaboration has not yet been addressed in a systematic way. Integration of public health considerations into all sectors of government is part of the foundation for achieving a high performing, responsive and sustainable health system that improves the health status of all members of society.
RECOMMENDATIONS FOR HEALTH INFORMATION MANAGEMENT AND INSTITUTIONALIZATION OF HSPA

HSPA will be an effective tool supporting health policy and decision-making only if it is routinely supplied with accurate, valid and timely data on health system performance. The HSPA findings highlight numerous gaps in information, data quality issues and validity concerns with respect to a number of performance dimensions and subdimensions. Many of these weaknesses can only be addressed through systemic improvements in the national health information system. The Strategic Plan for Health Information System Development (11), and the Development of HMIS concept, definition of indicators and HMIS implementation plans for Georgia Primary Health Care Development Project (12), define in detail the steps for introducing these systemic changes. These include changes in regulation, institutional reorganization, development of new health information system management tools and funding mechanisms. Such ambitious plan will take a number of years to implement and will require the investment of major effort and resources. In the interim, there is a need to develop a set of actions to address immediate HSPA information requirements. In order to address these information requirements and institutionalize the performance assessment process, the following actions are proposed:

- elaboration and approval of a new Presidential (or Cabinet of Ministers) decree on the production of HSPA and National Health Reports, replacing the 2000 Presidential Decree that promulgated the production of the National Health Report and defining in detail the timelines for production of the reports and the responsible bodies for data collection, analysis and preparation of the reports;

- initiation of legislative changes incorporating the information requirements for key health system performance assessment indicators into the Law on State Statistics and introducing the enforcement clause and penalties for not complying with the State Statistical Reporting requirements on data collection by public and especially private health providers into the Georgian Administrative Code;

- implementation on a regular basis (at least once every two years) of the Health Utilization and Expenditure Survey, the most reliable source of data for a significant number of health system performance assessment indicators, and reconciliation
of the different methodologies used to measure household health expenditures in the Health Utilization and Expenditure Survey and the Household Budget Quarterly Survey;

- addition of questions to the 2010 Health Utilization and Expenditure Survey regarding public awareness of state entitlements in health care (at least for the Medical Assistance Programme and state-subsidized private insurance beneficiaries captured by the survey) and of the major lifestyle risk factors (tobacco and alcohol consumption, body mass index, sexual behaviour, targeted screening for breast, cervical and prostate cancers); or design of a new countrywide survey to assess awareness and lifestyle indicators on a regular basis;

- introduction of new data collection instruments (including forms and manuals) for the health system performance assessment indicators not currently included in routine reporting by health providers in addition to training of health providers in reporting these indicators; and

- introduction of training for health providers in data collection, analysis and reporting of the health system performance assessment indicators for which data quality is currently deemed problematic.
REFERENCES


(4) WHO Regional Committee for Europe resolution EUR/RC58/R4 on stewardship/governance of health systems in the WHO European Region. Copenhagen, WHO Regional Office for Europe, 2008 (http://www.euro.who.int/Governance/resolutions/2008/20080918_1, accessed 15 September 2009).


