Summary

During the past two decades of transition from a state-planned to a market economy, the Bulgarian health care sector experienced radical reforms. In particular, the development of a private health care sector was accompanied by the introduction of social health insurance in 2000, which brought about important changes in the organization and funding of the Bulgarian health care system. Among other issues, the reform included the introduction of formal patient charges for public health care services. These charges take the form of co-payments and apply to all levels of medical services, except emergency care. The official fee for each outpatient visit to a general practitioner (GP) and medical specialist (after a referral) is equal to 1% of the minimum monthly salary for the country. For hospitalization that fee amounts to 2% of the minimum monthly salary per day for the first 10 days of the hospital stay and it is paid once a year. Since these fees are defined as a percentage of the minimum monthly salary, their amount increases with the rise of the minimum monthly salary in the country. The formal co-payments are collected and retained by the providers and their official objective is to improve efficiency in public health care provision. However, these charges were implemented in a situation of informal patient payments (which continue to exist irrespective of the formal charges). Thus, the dissertation is focusing on the financial burden of formal and informal patient payments in the Bulgarian public health care sector.

The study is also inspired by previous research on out-of-pocket patient payments in Bulgaria conducted before and after the introduction of social health insurance (and the introduction of formal co-payments related to it). However, previous research appears limited in scope since it primarily analyses different aspects of informal payments in Bulgaria. Only in some exceptional cases, the potential of formal co-payments and their acceptability to the population are examined. None of the previous studies however, addresses the co-existence of formal and informal patient payments. Thus, in contrast to previous research, this dissertation offers an integrated analysis of both formal and informal patient payments, as well as of the attitudes of health care stakeholders towards these payments. Besides, the dissertation provides up-to-date evidence on out-of-pocket health care expenditures in Bulgaria, which gives an opportunity to make a comparison to earlier studies and to outline overall trends in formal and informal patient payments in Bulgaria.
The dissertation also focuses on the stated willingness to pay for public health care services and on its comparison to actual out-of-pocket payments. The latter problem has not been addressed in previous studies in Bulgaria, and has received little attention in international research on the analysis of patient payment policies. Although stated-preference methods are broadly applied within the framework of cost-benefit analysis, they are relatively new (as opposed to revealed-preference methods, i.e. actual payment behavior) and their predictive validity is still uncertain. This diminishes their application in policy analysis. The comparison of stated-preference data with revealed-preference data offered in this dissertation is expected to contribute to the establishment of their validity.

Chapter 1 of this dissertation outlines the above research motivation as well as the scope of the study, its central aim and methodology. As specified in the chapter, the aim of this dissertation is to analyze the propensity, magnitude and affordability of formal and informal patient payments for public health care services in Bulgaria, as well as the attitudes of health care stakeholders towards these payments. Given the central aim, the following research questions are addressed: (1) what have been the main outcomes of the financial reforms in the Bulgarian public health care sector?; (2) what is the scale of out-of-pocket payments for public health care services in Bulgaria and to what extent are these payments affordable for Bulgarian patients?; (3) how widespread are informal patient payments in the Bulgarian public health care system and what are the public attitudes towards these payments?; (4) what are the views of health care stakeholders about the existence of official patient charges for public health care services?; (5) to what extent are Bulgarian consumers willing to pay official charges for public health care services and how does stated willingness to pay compare to actual payments?.

The study applies a complex methodology combining three research methods: systematic literature review (desk research), quantitative data analysis (survey method) and qualitative study (focus-groups discussions and semi-structured interviews). The first method (systematic literature review) is applied when addressing research question 1 to review the main directions of the financial reforms in Bulgaria, the trends in health care expenditure and evidence on the outcomes of the health insurance reform. The results of the application of this method provide a basis to analyze prior expectations and concerns in terms of the implementation of social health insurance reform.

The second method (quantitative data analysis) is used to address research questions 2, 3 and 5. The method uses data from representative national surveys of 1003 respondents who participated in 2010 and 817 respondents in 2011. The data
are collected in face-to-face interviews at respondents’ homes using a standardized questionnaire (with identical questions on health care use and expenditure in both years). The questionnaire is validated in discussions with external experts and pre-tested to decide on the amount of questions and to improve the wording of the questions. To draw the sample, a multi-stage random probability method was used: selecting the residence area (based on official statistics to assure representativeness), then selecting the household (random route method), and finally, selecting the individual respondents (last-birthday principle). The data collected in the survey allow for analyzing the propensity, magnitude and affordability of formal and informal patient payments for public health care services in Bulgaria, as well as consumer willingness to pay for public health care services. The attitudes of Bulgarian health care consumers towards informal patient payments are also studied using these survey data.

Related to research question 4, a qualitative study is carried out in Bulgaria in May-June 2009. The qualitative study includes 12 focus group discussions: 6 groups with consumers and 6 groups with health care providers. These focus groups are supplemented with 10 in-depth interviews: 5 with policy-makers and 5 with health insurance representatives. The data collected in the focus-groups discussions and semi-structured interviews are analyzed to compare the opinion and attitudes of the different health care stakeholders toward formal patient payments.

Chapter 2 presents the results of the systematic literature review. The analysis suggests that the implementation of the social health insurance mechanism in Bulgaria helped to improve the transparency in the funding of the public health care sector through the introduction of earmarked social health insurance contributions. However, this did not help to achieve a more important objective, namely to generate additional financial resources for the public health care sector. Even though total health care expenditure has reached 7% of GDP as a result of increased out-of-pocket payments in both the public and private health care sector, public expenditure on health care has remained one of the lowest in the EU in both relative and absolute terms (varying between 3.0% and 4.8% of GDP during the last years). Thus, no matter how funds are collected, if there is no economic growth in the country, the public health care budget cannot be increased significantly. Moreover, to establish the new health insurance body, a huge amount of financial resources was spent and high administrative costs were persuasive in the next year. At the same time, the basic social insurance package was continuously being reduced due to insufficient insurance funds. Also, there is a lack of efficient health care financing corresponding to patient preferences, and an effective system for collecting and managing the scare health care resources. Quality of health care provision and patient satisfaction
with health care services are not well monitored. Most importantly however, the equity-related problems (such as geographical disparities) that characterized the health care provision in the past, have remained and numerous problems related to patient inability to pay have emerged.

In view of this, Chapter 3 presents empirical evidence on the scale of out-of-pocket payments for public health care services in Bulgaria as well as evidence on the affordability of these payments for Bulgarian patients. As suggested by the analysis, about 76% (2010) and 84.0% (2011) of outpatient service users report to have paid out-of-pocket, with 12.6% (2010) and 9.7% (2011) of users reporting informal payments. Of those who used inpatient services, 66.5% (2010) and 63.1% (2011) report to have made out-of-pocket payments, with 32% (2010) and 18% (2011) reporting to have paid informally. Out-of-pocket payments differed considerably across socio-demographic groups. The results suggest a large inability to pay which is indicated by the need to borrow money and/or to forego services. In total, 32% of the sample report in 2010 foregoing physician visits due to high out-of-pocket payments. In 2011, this share is a bit lower (26%) but still substantial. Regarding hospitalizations, about 6% of the sample in 2010 and 4% of the sample in 2011 reported foregoing such services. Also, in both years, about 6% of users borrowed money to pay for physician services and more than 10% of users borrowed money to pay for hospitalizations. Regression analysis shows that the inability to pay is especially pronounced among those with poor health status and chronic diseases, and those on low household income. Lack of transparency of the formal charges is also observed. Older people, women, those with higher levels of education, chronic illnesses, and poor self-reported health are better informed about the size of official user fees than other groups.

Chapter 4 presents empirical evidence on the scale of informal patient payments, as well as on public attitudes and perceived behavior related to these payments. The results confirm the existence of informal payments in the Bulgarian health care sector. In 2010, the average amount paid informally per year for outpatient visits is 92 BGN (about 46 EUR). The average amount paid informally for inpatient services is nearly twice higher (198 BGN, about 100 EUR). Overall, gifts in kind appear to be more common and more tolerated by health care consumers than cash informal payments. Respondents who have ever paid informally in cash in health care facilities represented 19% of the sample in contrast to 44.4% of the sample who have ever personally given any gift in kind. In addition to this, more than 50% of the sample has negative attitudes towards both informal cash payments and gifts in kind but these attitudes are more negative in case of cash informal payments than in case of gifts in kind. In general, about 30% of the interviewed indicate a
tolerance towards gifts in kind. Nevertheless, 78% of the sample state that they would not feel uncomfortable if they leave the physician’s office without gratitude cash payment or gift in kind. About 54% of the respondents would refuse paying informally if a physician or medical staff asked them to make such payments and 52% would prefer to use private services to avoid paying informally. However, a group of respondents who express negative attitudes towards informal patient payments, reported making such payments (i.e. being pushed to pay informally). Informal payments exist despite the formal service charges, which questions the adequacy of patient payment policy in Bulgaria.

**In Chapter 5**, qualitative data on the opinions and attitudes of Bulgarian health care stakeholders (health care consumers, providers, insurers and policy makers) toward formal patient charges are analyzed. The analysis suggests that overall, health care providers, health insurance representatives and policy makers support the existence of official patient charges. The attitudes of consumers towards the existence of formal patient payments for health care services are divided. In particular, the groups of pensioners, working individuals, disable and chronically sick people are overall against formal patient payments. With regard to the primary policy objective of patient charges for health care services, the stakeholders’ opinions suggest that these payments can contribute to both efficiency improvements in the health care sector and generation of additional financial resources for public health care provision. All stakeholder groups unanimously agree that official payments are not capable of replacing, even reducing, informal payments. Also, an overall consensus exists among the stakeholder groups that patient charges are most suitable in case of services of outpatient medical specialists and such charges should not be applied for emergency care. There is no unanimity among the groups with regard to who should be exempted partly or fully from patient charges. The opinions of the four groups are also divided with regard to who should be the beneficiary of patient charges. The group of health care providers indicates problems with the administration of formal services charges. There is a need of revising the current legislation on patient payments in Bulgaria and specifying its application in a more explicit manner.

To facilitate the development of an adequate patient payment policy in Bulgaria, **Chapter 6** presents empirical evidence on the willingness of Bulgarian consumers to pay official charges for public health care services (stated-preference data). The stated willingness to pay is compared to actual out-of-pocket payment for health care. Three fourths of the outpatient care user report out-of-pocket payments (about 14 BGN ≈ 7 EUR per visits). For inpatient care, out-of-pocket payments are reported by two-thirds of the inpatient care users (about 125 BGN ≈ 62 EUR per
hospitalization). Results on the consumer willingness to pay and the amount willing to pay for both physician visits and hospitalizations are very close to actual payments, especially when service users are included. Specifically, 75.8% of respondents state willingness to pay for a physician visits (average amount willing to pay of 18 BGN per visit) and 66.6% of respondents state willingness to pay a formal fee for a hospitalization (average amount willing to pay of 225 BGN per hospitalization). Results of binary regression show the importance of socio-demographic factors when comparing the probability of paying based on revealed-preference data and probability of being willing to pay using stated-preference data. The results on willingness to pay are however obtained based on the scenario that public health care services are provided with good quality and quick access (e.g. adequate availability of equipment and materials, provider's skills, facility maintenance and service delivery). Thus, improvements in health care provision in Bulgaria are required before the willingness to pay levels can be expected in reality.

The general discussion of the key findings of the dissertation is presented in Chapter 7. As the chapter outlines, social health insurance in Bulgaria brought about certain efficiency improvements in the public health care sector, but the system is still rather inefficient. Overall, the social benefit of the reform is less than expected. The main reasons for this are related to the ineffective organization of the Bulgarian public health care sector, as well as to the overall lack of financial resources for health care in the country. Our analysis raises a major concern about the deterioration of equity in the public health care sector after the introduction of social health insurance. Some fundamental equity principles (e.g. solidarity, equality, accessibility) are violated as a result of the insurance implementation. As shown by the empirical evidence in this dissertation, Bulgarian patients experience a high burden of out-of-pocket payments for health care. More than 30% of those in need of health care services either borrow money or forego services due to payments. There are considerable inequities in accessing health care services especially for poorer part of the population. It is essential to revise the current system of exemptions taking into account the household income and health status of patients. Poor people and frequent health care users should be exempted from formal patient charges or should meet reduce charges. It is also essential to eradicate informal patient payments since these payments are outside any formal regulation. The results in this dissertation confirm the existence of substantial informal patient payments in Bulgaria even after 10 years of formal co-payments. This means that co-payments are unable to replace informal payments. The forms of payments co-exist at present increasing the financial burden to the patients.
The eradication of informal patient payments will be a challenging policy task. As shown by this dissertation, Bulgarian consumers are in general negative towards informal cash payments and the majority agrees that informal payments should be eradicated. However, informal gifts in kind are still accepted by the public. Also, some patients pay informally despite their negative attitude toward such payments. Thus, apart from consumer attitudes, factors related to insufficient and inefficient funding of public health care services, as well as to weak governance in the Bulgarian health care sector should be also addressed when developing a strategy for dealing with informal patient payments. Although, Bulgarian consumer are willing to pay formal chargers if services are provided with good quality and quick access, the ability of these charges to eliminate informal payments is questionable. Moreover, there is a lack of consensus among Bulgarian health care stakeholders on what is an adequate patient payment mechanism. However, the stakeholders agree that a reform in this direction is needed.

The dissertation provides clear evidence on the affordability problems in the Bulgarian public health care sector. The burden of out-of-pocket payments experienced by the poor who are less likely to seek health care when needed and are more likely to report inability to pay as the reason for not obtaining treatment, should raise concern among policy makers. Financial barriers are the most important limiting factor in health care accessibility. The impact of out-of-pocket payments on access to health care is underlined by the high percentage of people who avoid visits or hospitalizations namely because of inability to pay. Moreover, patients are still weakly informed about the formal user charges for hospitals. Some of the suggested measures in this regard could be improving and updating the available information about official user fees and free-of-charge services as well as their accessibility to patients. A stronger regulatory framework, higher and regular salaries for health workers, more developed patient rights are also incentives for the improvement of the relations between health care stakeholders.

The legislation on patient payments in Bulgaria needs to be carefully revised. In order to sustain equitable additional financing, Bulgarian policy-makers need not only to maintain the current exemption mechanism but also to further discuss the limitations of outpatient services, especially if informal payments continue to exist. Stated-preference data used in this survey could be an appropriate instruments for policy-makers to help them to analyze the changes in demand when the service prices (i.e. the size of patient charges) change, before actually implementing the price changes.
Bulgarians are very sensitive about the subject of corruption in health care and the Bulgarian government considers the two concepts of “corruption” and “health care” as mutually incompatible. Informal payments have compromised the health care sector and it is placed in the leading triad of corruption occurrence. Future strategies against informal payments should ensure creation of a simple and easily accessible system for filing complaints by patients that are asked to pay informally for health care services. This calls for strengthening control and accountability in the health care sector and creating a system of penalties against those who receive/request informal payments.

The results presented in this dissertation can be of interest for other countries as well. In particular, Bulgaria is no exception from the overall trends in Europe related to the continuously growing rates of private expenditure on health care. These facts are confirmed by our study and strengthen the relevance of the research results presented in this dissertation. Moreover, the inability to pay for health care, reported in this dissertation could be a warning for policy makers in other European countries to analyze in advance the potential effect of patient charges before their introduction or amendment. Moreover, the Bulgarian experience shows that even 10 years after the introduction the official payments, informal payments can continue to exist if no additional policy measure are taken.