



***Republic of Macedonia***  
***Ministry of Health***

**HEALTH SECTOR MANAGEMENT PROJECT (HSMP)**

**FORMULATION OF A CO-PAYMENT POLICY UNDER SOCIAL  
HEALTH INSURANCE**

**PROGRESS REPORT**

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**By**  
**Karl Karol**

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## Background

### 1.1. Project Objectives and TORs

The objective of the consultancy is to revise the existing co-payment policy in Macedonia in order to contribute to the financial sustainability of the basic benefits package, without undue risk for the accessibility to benefits by the vulnerable population groups.

The project tasks are as follows:

1. Prepare a short overview of the international literature on the experiences with user fees and co-payments – including exemption and waiver policies – in otherwise publicly funded health care systems (based on general taxation or social health insurance).
2. Review the current system of user fees and co-payments in Macedonia: who collects the fees, what is the impact on the generation of revenues, and what are the positive and negative incentives of the system including the consequences for the accessibility of essential services.
3. Propose option for applicable exemptions and/or waivers from user fees, elaborating possible financial implications of various exemptions and waiver schemes. Examine financial and equity impact of any user fee exemption and waiver approaches with specific attention to socio-economic and gender related effects. Explore and advise upon mechanisms for identifying those eligible for waivers.
4. Propose options for the future system of user fees and co-payments that promote the effectiveness, efficiency and sustainability of the social health insurance system.

### 1.2. What is a co-payment

A co-payment is an amount of payment, which must be paid by the patient for each service in addition to the amount funded under the universal health funding system.

The case for direct payments in the form of co-payments is generally promoted on the grounds that:

- co-payments provide a disincentive at the point of consumption against overuse. Evidence indicates that such a disincentive disproportionately affects the poor and vulnerable and is therefore an inequitable method of reminding people of the costs of healthcare.

- revenue raised from co-payments could be targeted at poor people or at inequality in the health care system;
- co-payments can be used to bridge any funding gap when public budgets are inadequate.
- co-payments will generate supplementary revenue.

### 1.3. Plan for the Consultancy

The project will comprise three missions:

**Mission 1:** between 21<sup>st</sup> and 24<sup>th</sup> May – to undertake the inception phase

**Mission 2:** between 6<sup>th</sup> and 23<sup>rd</sup> June – to undertake work for the Draft Final Report

**Mission 3:** between 6<sup>th</sup> and 10<sup>th</sup> July – to complete the Final Report

Two workshops are programmed for the consultancy.

**Workshop 1:** on Tuesday 12<sup>th</sup> June to discuss the Progress Report

**Workshop 2:** on Thursday 21<sup>st</sup> June to discuss issues related to the Draft Final Report.

### 1.4. The First Mission

In preparation for the first mission, the consultant was provided with background information on the health insurance and co-payment framework in Macedonia including the latest report on BBP by World Bank project consultant, Kees Schaapveld.

The following meetings were held:

**Monday 21 May:**

Meeting with Katerina Venovska, Assistant Coordinator, Project Coordination Unit

Meeting with the members of the Basic Benefit Package Working Group

**Tuesday 22 May:**

Meeting with Romela Popovic, HIF Financial Director and her staff.

**Wednesday 23 May:**

Discussions with Katerina Venovska, and Zora Uzunoska Assistant Coordinator, Project Coordination Unit

## 2. Summary of the current situation

### 2.1. General Situation

The Republic of Macedonia has a population of some 2.06 million and a per capita GDP of USD8,200 (PPP) <sup>1</sup>.

The national unemployment rate is about 37%<sup>2</sup> and, poverty (measured by cost-of-basic-needs methodology) is estimated to be 21.7 %. It is estimated that the non-monetary dimensions of poverty (in particular, poor housing conditions and low education) affect another 30 percent of the population<sup>3</sup>. In total therefore, some 50% of the Macedonian population can be considered as poor and therefore will have difficulties in making co-payments if they are required to do so.

According to the World Bank<sup>4</sup>, the strongest determinants of poverty are household size and number of employed persons in household.

Total health expenditure in Macedonia as a percentage of GDP in 2003 was 6.8%. Some 85% of health expenditure is public and 15% is private. It is not clear whether informal payments have been included in the calculation of private expenditure on health.

The Health Insurance Fund (HIF) is the main funder of healthcare in Macedonia expending over 90% of the total health budget. 35% of HIF revenues comes from the government and is paid on behalf of pensioners and unemployed. The remainder of HIF revenue is from employer contributions which are currently set at 9.2% (plus 0.5% for workplace accident insurance), co-payments and other income.

HIF procures primary healthcare services from GPs who are paid on a capitation basis. Secondary outpatient care is provided by specialists who work both in public and private practice. Hospitals which are mostly public, are paid according to historical budgets.

Like other countries in the region, Macedonia is undergoing reforms in the health sector aimed at improving system efficiency, effectiveness and equity. Latest initiatives in the reform process have focused at improving the financial management and budget control of both the HIF and providers. It is understood that deficits across the system have been arrested and steps are being taken to repay existing debt accumulated by providers.

According to a recent report by World Bank project consultant, Kees Schaapveld there is general agreement by stakeholders that co-payments should be a part of the health financing framework in Macedonia.

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<sup>1</sup> CIA Factbook

<sup>2</sup> Statistical yearbook (2006) Republic of Macedonia

<sup>3</sup> World Bank (2005) FYR of Macedonia Poverty Assessment for 2002-2003

<sup>4</sup> World Bank (2005) FYR of Macedonia Poverty Assessment for 2002-2003

## **2.2. Healthcare providers**

### **2.2.1. Primary care**

Primary care is delivered essentially by GPs who are contracted to the HIF and are paid on a capitation basis. GPs report their activities to the HIF through monthly reports which are statistical in nature and contain information about the classes of patients and their treatment. The only primary care treatments that attract a co-payment are some injections. GPs are permitted to retain the co-payment income from these services.

### **2.2.2. Specialist care**

Specialists work in both public and private practice and have contracts with HIF based on a fee-for-service payment schedule. Specialist services attract a co-payment which is in proportion to the cost of the healthcare service that is provided (refer Table 1). Under the law, specialist co-payment income must be remitted to the HIF but in practice, the regulations are often ignored, particularly by public sector specialist clinics.

Specialists are required to report their activity to HIF along similar lines to the GP reporting system. HIF uses this data to calculate the co-payment that should be remitted.

A referral is required for a specialist consultation. The referral system is said to be effective in managing the demand for specialist services - the HIF will not reimburse providers without proof that a referral exists.

### **2.2.3. Inpatient care**

Although hospitals are funded through historic budgets, they are required to report their activity to HIF through a system of 'invoices' which are based on activity pricing. Pricing is derived from a point based itemised price list which was originally sourced from the German health system (it is understood that specialist care is priced using the same schedule). The consultant was given to understand that the price list has not been maintained over the years and its point based cost/weights may not reflect the current cost relativities. Hospital invoices are being used by HIF to monitor hospital expenditures and to calculate the co-payment revenue that is due to the HIF.

### **2.2.4. Pharmacy**

Drugs included in the benefits package are described in the Positive List. The cost of the drugs on the list are based on a reference pricing methodology which has been recently introduced in Macedonia. Drug co-payments are charged as a proportion of the cost of the prescription (Table2).

In addition to reimbursing the pharmacy for the cost of the drug, the HIF pays pharmacies a service fee for the dispensing work related to the prescription.

The co-payments collected by the pharmacies are paid to the HIF. The remittance of co-payment revenue is a condition for the pharmacies to be reimbursed by the HIF.

It would appear that in practice, most drugs are freely available to the public from pharmacies over the counter without prescription.

### 2.3. Current co-payment system in Macedonia

In general terms, co-payments are charged for the following services and therapies: specialist care; inpatient care; drugs, some injections, and special nominated services.

Tables 1,2 and 3 below document the co-payments that should be levied under the current regulations.

**Table 1** Co-payment schedule for services provided by specialists and hospitals

Value of specialist outpatient and inpatient services (MKD)	Co-payment (MKD)	Co-payment as a percentage of top figure in the range
Up to 100	-	
101 to 300	20	6.7%
301 to 500	40	8.0%
501 to 700	60	8.6%
701 to 1,000	80	8.0%
1,001 to 2,000	150	7.5%
2,001 to 3,000	250	8.3%
3,001 to 4,000	350	8.8%
4,001 to 5,000	450	9.0%
5,001 to 6,000	550	9.2%
6,001 to 8,000	700	8.8%
8,001 to 10,000	900	9.0%
10,001 to 15,000	1,250	8.3%
15,001 to 20,000	1,700	8.5%
20,001 to 25,000	2,200	8.8%
25,001 to 30,000	2,700	9.0%
30,001 to 35,000	3,200	9.1%
35,001 to 40,000	3,700	9.3%
40,001 to 45,000	4,200	9.3%
45,001 to 50,000	4,700	9.4%
50,001 to 55,000	5,200	9.5%
55,001 to 60,000	5,700	9.5%
More than 60,000	6,000	10.0%

Source: MOH document and calculation

**Table 2** Co-payment schedule for drugs on the positive list

Value (MKD) of the pharmacy item for every drug from the Positive List (for 1 prescription) and for every ampoule with syringes and needles (for full treatment of a certain disease after each order) in primary health care	Co-payment in (MKD)	Co-payment as a percentage of top figure in the range
Less than 25	0	0.0%
26 to 50	5	10.0%
51 to 75	10	13.3%
76 to 100	15	15.0%
101 to 150	20	13.3%
151 to 200	25	12.5%
201 to 300	40	13.3%
301 to 400	50	12.5%
401 to 500	70	14.0%
501 to 700	90	12.9%
701 to 1,000	120	12.0%
1,001 to 1,500	160	10.7%
1,501 to 2,000	240	12.0%
2,001 to 2,700	280	10.4%
2,701 to 3,000	300	10.0%
3,001 to 3,500	340	9.7%
3,501 to 4,000	390	9.8%
4,001 to 4,500	500	11.1%
4,501 to 5,000	550	11.0%
More than 5,000	600	12.0%

Source: MOH document and calculation

Under the current system, a different co-payment flat rate is used for a different range of values of services that are provided in any one episode of care. The rates that are currently set are regressive in nature in that the higher the value of the service, the higher is the proportion of the co-payment. Although the co-payment percentages vary across the range, an example of the larger proportion charged from Table 1 is that a MKD300 value of service attracts a co-payment of 6.7%, while a MKD60,000 value of service attracts a co-payment of 9.5%.

**Table 3 Co-payment schedule for special nominated services**

Service	Denars
Home consultation per visit	100
Transportation with an ambulance based upon medical indication, except for medical emergency:	
• within the area of the health care organization	50
• outside the area of the health care organization – up to 50 km one direction	200
• outside the area of the health care organization – over 50 km one direction	500
• outside the Republic of Macedonia	20% of the cost of the fuel
MRI after referral (from code 5360-5366 from the pricelist for health services)	2,000
Health services in gerontological institutes per day in hospital	10
Rehabilitation as extended hospital treatment in a specialized institution – per day in hospital	200

Source: MOH document

## 2.4. Collection of Co-payments

HIF data on co-payments collected from 85 hospitals and medical centres in the first the first 3 months of 2007 are indicated in the table below.

**Table 4 Co-payment collection rates for specialist and hospital care**

	Denars
Total three months invoiced amount by providers	2,493,915,995
Calculated co-payment that should have been collected by providers	143,716,047
Co-payment that should have been collected as a proportion of invoiced amounts	5.76%
Co-payments actually collected by providers	138,537,974
Co-payments actually collected by providers as a proportion of co-payments that should have been collected	96.4%
Co-payments remitted to HIF by providers	11,641,363
Co-payments remitted to HIF as a proportion of co-payments should have been collected	8.1%

Source: HIF

According to table above, it would appear that providers are quite effective in collecting co-payments but are most inattentive in remitting the co-payment revenue to the HIF.

As a recourse to not being paid, the HIF adjusts the following years budgets of providers to compensate for the co-payment income that was not remitted to them.

It is understood that a new policy is now being proposed which, as from 1<sup>st</sup> January 2008, will enable providers to retain their co-payment income and in turn, the HIF will adjust the provider budgets so that their net funding will remain constant. This will formalise the process which is currently in-place and will introduce more transparency to the system.

## **2.5. Services and population groups exempted from co-payments**

Co-payment exemptions in Macedonia are defined in a combination of laws and regulations.

### **2.5.1. Population groups exempted from co-payments**

The following population groups are exempt from co-payments:

- Beneficiaries of social protection programs – except for prescribed drugs
- Mentally challenged people without parental care
- Children up to 1 year of age – except for prescribed drugs
- For blood donors donating blood over 10 times per annum – except for prescribed drugs
- Military disabled persons, family disabled insurance beneficiaries
- Mentally ill patients in psychiatric hospitals

### **2.5.2. Health services and treatments for which no co-payments are charged**

No co-payments are imposed for the following healthcare services:

- General practitioner medical services – except some injections
- Emergency care
- Compulsory immunization
- Student health check-ups
- Treatment of diabetic patients with insulin therapy
- Dialysis

- Cancer treatment including chemotherapy, radiotherapy and surgery
- Growth hormone therapy for children
- Medical services related to pregnancy
- Treatment for hemophilia
- For children up to 18 years of age and insured persons needing prostheses for upper and lower extremities, hearing prostheses, wheelchairs

Under special program for the uninsured (refer Attachment 1), the government subsidises the co-payments of insured people for conditions listed below. In effect, therefore, there are no co-payments for the treatment of the following conditions:

- progressive, nervous and muscular diseases:
  - Duchenne-muscular dystrophy,
  - Parkinson disease,
  - miotonia
  - mitochondrial miopathy
  - miastenia
  - spinal muscular atrophia
  - amitrophic lateral sclerosis- diseases of the motor neuron
  - hereditary sensomotor neuropathia;
- progressive systematic sclerosis (Sclerodermia)
- cerebral paralyses
- multiplex sclerosis
- cystic fibrosis
- epilepsy
- pemfigus and lupus epitematodes
- dyslexia , disgraphia and dislalia (rehabilitation exercises)
- communicable diseases: HIV/AIDS; Lyssa; Rabies; Typhus abdominalis; Rubella; Poliomyelitis anterior acuta; Brucellosis; Diphtheria; Dysentaria bacillaris; Tuberculosis; Echinococcosis; Meningitis; Encephalitis; Pertussis; Morbill; Varicella; Scarlatina; Tetanus; Hepatitis; Parotitis epidemica; Salmonellosis; Cholera asiatica; Malaria; quarantine diseases (smallpox, viral hemorrhagic fever, plague); Q - fever; rheumatic fever.

In addition, it should be noted that emergency care is available for all citizens whether they are members of the HIF or not. In other words, in an emergency, all people have access to the HIF funded healthcare system.

### **2.5.3. Safety-net provisions in Macedonia**

The Macedonian co-payment framework includes many safety-net provisions that are designed to protect equity, particularly the poor and the sick, from the burden of excessive healthcare payments. Below is the description of the safety-nets, that is, co-payment thresholds beyond which no further co-payment needs to be made:

- If in any one year, the insured's co-payments for medical (specialist and hospital) services reach 70% of the level of the average monthly net salary in Macedonia in the previous year, then the insured is exempted from paying any further co-payments, except for primary care drugs and treatment abroad, during that calendar year.
- If the insured's family income is less than the average net salary in Macedonia and if in any one year, co-payments for medical (specialist and hospital) services reach 40% of the level of the average monthly net salary, then the insured is exempted from paying any further co-payments, except for drugs, during that calendar year.
- If the insured's family income is lower than 60% the average net salary in Macedonia and if in any one year, co-payments for medical (specialist and hospital) services reach 20% of the level of the average monthly net salary, then the insured is exempted from paying any further co-payments, except for primary care drugs and treatment abroad, during that calendar year.
- If in any one year, co-payments for medical (specialist and hospital) services for children aged between 1 and 5, reach 20% of the level of the average monthly net salary in Macedonia in the previous year, then the insured is exempted from paying any further co-payments, except for primary care drugs and treatment abroad, during that calendar year.
- If in any one year, co-payments for medical (specialist and hospital) services for children aged between 5 and 18 and people older than 65 reach 40% of the level of the average monthly net salary in Macedonia in the previous year, then the insured is exempted from paying any further co-payments, except for primary care drugs and treatment abroad, during that calendar year.

**Table 5 Annual accumulated co-payment threshold as percentage of average annual salary beyond which no further co-payment is required**

	Insured's income more than average salary	Insured's income up to 60% less than average salary	Insured income lower than 60% of the average salary
Children 1 to 5 years	20%	20%	20%
Children 5 to 18 years	40%	40%	20%
Population 18 to 65 years	70%	40%	20%
People over 65 years	40%	40%	20%

Source: Consultant's summary of MOH document

It should be noted that there is no safety net for drugs on the positive list.

To qualify for the safety net exemption, the insured has to demonstrate that they have made co-payments over the relevant threshold (see Table 5) by presenting receipts to HIF regional offices and if appropriate, they may be required to show proof of their family income.

It is understood that in 2006, 9063 co-payment safety-net exemptions were granted by the HIF.

## 2.6. Benefits package and coverage

Despite the fact that membership of HIF is in essence mandatory, it is estimated that some 150,000 – 200,000 people in Macedonia do not have health insurance. It is thought that many of these people are in the higher income group, perhaps self employed, who are ‘self insured’ and therefore pay for healthcare out-of-pocket.

Despite the law which stipulates the right of the population to a broad range of healthcare benefits, the community seems to be of the view that in practice, these entitlements are difficult to access. According to the national health strategy document<sup>5</sup>, consumers view the following as problem issues in accessing the BBP:

- Insufficient drugs on the positive list, especially drugs for chronic conditions; a shortage of drugs is also reported in inpatient settings
- Need to make out-of-pocket payments for services included in the BBP – services specifically mentioned include drugs, laboratory tests, specialist visits and access to inpatient care.
- Poor quality of healthcare services such as non-performance of necessary tests and use of inferior quality materials in dentistry.
- Disrespectful treatment of patients by staff and lack of information from doctors
- Poor food and hygiene in hospitals

## 2.7. Patient identification

All HIF members are provided with a HIF membership ‘card’, which is a booklet that includes the individual’s personal details and their healthcare record. On presentation for treatment, HIF members must also be in the possession of a ‘blue coupon’, which is issued by their employers to demonstrate that their contributions have been paid for the relevant period.

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<sup>5</sup> Health Strategy of the Republic of Macedonia, 2020, *Safe, efficient and just Health care system*, Skopje, February 2007

## 2.8. Private initiative

The following are the key features of the public and private mix in the provision of healthcare in Macedonia:

- GPs work as private practitioners with contracts with HIF
- Specialists can work in either public and private settings – they are permitted, however, to work in both settings, although this is regulated
- Most hospitals are publicly owned – there are only three private hospitals in Macedonia

People with sufficient disposable income can circumvent the HIF contracted healthcare provider system and obtain care in both public and private settings by paying directly out-of-pocket to these providers.

It is understood that informal payments to providers (through cash or presents) are a common practice in Macedonia and recently, the government has taken steps to address the problem by opening a complaints help-line and prosecuting providers suspected of corrupt practices.

## 3. Issues related to co-payment policy development

### 3.1. Types of co-payments

Co-payments come in several forms but in this discussion on co-payments related to universal health insurance, three main types are most common: flat rate; deductibles and co-insurance.

#### 3.1.1. Flat rate co-payments

Flat rate co-payments mean the patient must pay a fixed amount for every service, regardless of its price. For example, the patient might have to pay the first MKD100 whether the full price of the service is MKD200 or MKD1000.

An effect of flat rate co-payments is that they discourage the use of services which are not valued as highly as the amount of the co-payment. However, since patients face the same charge, regardless of the actual cost of the service, flat rate charges do little to encourage them to use lowest cost services.

It is, however, possible to incorporate differentials to provide the appropriate signals to consumers. For example, in the Australian Pharmaceutical Benefits Scheme, patients pay an additional co-payment for non-approved or generic drugs (combination of flat rate co-payment and deductible co-payment discussed below).

Flat rate co-payment can be expected to deter use of healthcare services by the poor more than by the rich, but this can be offset by reducing the level of co-payment to be met by those on lower incomes. Again, the Australian Pharmaceutical Benefits Scheme is an example of charging much lower co-payment rate to patients holding a social protection card.

### **3.1.2. Deductible co-payments**

A deductible is another term for ‘excess’ and is often applied to general insurance. Under this arrangement, patients pay the remainder of the price above a fixed amount which is paid for by the insurer. For example, the insurance scheme might pay up to MKD500 for a nominated service. If the price of the service is below this amount, the patient pays nothing. If the price is MKD750, the patient would pay the remaining MKD250.

This form of cost-sharing implies that people who are sick and need high cost treatment would incur a higher out-of-pocket cost when compared to a flat rate co-payment system.

### **3.1.3. Coinsurance co-payments**

Coinsurance requires patients to pay a fixed percentage of the cost of services. For example, if the proportion is 10%, the patient would pay MKD100 if the price was MKD1000. This type of co-payment regime is currently in use in Macedonia.

Coinsurance is often used by private health insurance, as a means of limiting ‘moral hazard’. It is argued that since, coinsurance provides information to patients about the actual cost of services, it should encourage them to be more selective in choosing lower cost services – but in many instances patients do not have the clinical information to enable them to make this choice.

The impact of coinsurance on the consumer depends very much on the actual percentage of the co-payment. Unless accompanied by a safety-net, coinsurance will, as compared with deductibles and flat rate co-payments – result in high need patients incurring larger proportions of the total health bill.

### **3.1.4. Choice of co-payment models**

Each of the co-payment models discussed above (flat rate, deductibles, co-insurance) affects the rich and the poor, and the sick and the healthy, in different ways. For example, a poor person who needs frequent care would prefer the deductible co-payment system if the services are needed regularly but each service costs less than the ceiling amount. However, a rich person who is generally healthy but who needs a single, very expensive operation such as a hip replacement would prefer a flat-rate co-payment.

It follows that each service type needs to be considered on its merits. It is necessary to take account of value for money, what kinds of people (rich or poor, young or old, etc) need the service, and what kind of health problem exists (acute or chronic, life-

threatening or not, etc). The best designed co-payment system will use a carefully selected mix of different co-payment models.

## 3.2. Demand management and equity

### 3.2.1. Issues related to utilization

It is acknowledged that the higher the cost of the healthcare service to the patient, the less likely the patient is to utilise that service. But what is difficult to predict is the actual impact of the additional impost – for example, Richardson (1991) estimates that an increase in the average patient cost-sharing in Australia from 16% to 50% would result in only a 7.6% drop in utilisation<sup>6</sup>. The relationship between price and utilisation is referred to as the price elasticity of demand<sup>7</sup>.

Individual services have different **price elasticities of demand**. One reason for that is that some services are considered by consumers and providers alike to have a much higher (or more urgent) ‘need’ component. At one end of the spectrum, demand for trauma services and treatments for severe, life threatening illnesses are totally insensitive to price, while at the other, preventative services and attendance at doctors’ surgeries for attention to minor symptoms can be expected to be much more price sensitive. Price elasticity for different services may also be expected to reflect the extent to which the decision to consume rests with the individual patient. Consequently, services which are primarily patient-initiated (such as GP attendance) will have a higher-price elasticity of demand (ie. small increments in price are more likely to effect utilization) than those that are normally initiated by doctors (eg repeat visits, hospital admissions, diagnostic services).

Another factor pertaining to utilisation is **income elasticity of demand**. In general, lower income patients may be expected to be more price-conscious than those on higher incomes. This expectation was borne out by Beck’s analysis reported by Richardson (1991)<sup>8</sup> of the effect of the introduction of a patient co-payment in Saskatchewan (Canada), where the overall reduction in utilization of 6% -7% consisted of a reduction of 12% - 18% in use by the poor and negligible reductions in use by the non-poor.

Finally, utilization may also be impacted by provider responses. If user charges are introduced or raised across the whole healthcare system, the result of the decline in

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<sup>6</sup> Richardson, J.R (1991). ‘The effects of consumer co-payments in medical care’, *National Health Strategy, Background Paper (Australia)*, No 5

<sup>7</sup> Elasticity of demand is defined as - the percentage change in demand (or supply) in response to a percentage change in price. It is measure of the sensitivity of participants in a market to changes in price. For example, the demand for McDonald's hamburgers would probably fall quite rapidly if the price were doubled. Many health care products tend to have an inelastic demand. For example, if you have acute appendicitis, you are unlikely to choose not to have treatment because the price seems too high.

<sup>8</sup> Richardson, J.R (1991). ‘The effects of consumer co-payments in medical care’, *National Health Strategy, Background Paper (Australia)*, No 5

utilization will be a reduction in the incomes and workloads of providers. Where providers are paid totally, or in part, on a fee-for-service basis, some may respond by recommending more care for each episode of illness in an attempt to maintain their income level.

### **3.2.2. Benefit ceilings**

These are ceilings that are placed by insurers to cap the claiming by an individual during a given period of time. They essentially limit the risk of the insurer and therefore impact on service utilisation as the consumption over the ceiling is paid by the patient who will consider the cost/benefit of the purchase.

Benefits ceilings can be applied to annual numbers of services or a total benefit paid. Their objective is to limit costs to insurers and they are a common feature of private health insurance policies and are rare in social health insurance. (it should be noted however, that expenditure caps placed by funders on providers which results in rationing achieve a similar aim – although their impact is population wide, rather than on individuals)

Claiming ceilings may be applied globally, (ie to total benefits) or to individual services which are of low ‘need’ or considered to be open to abuse.

Benefits ceilings have been criticised on equity grounds because they expose the largest users of services to unlimited risks.

### **3.2.3. Issues related to equity**

It is evident that, compared with systems in which the costs of health services are ‘free’ (ie fully covered in the BBP), cost sharing (co-payments) at uniform levels for the whole population will impose a larger proportion of healthcare costs on the poor and less healthy, and will result in proportionately larger reduction in their use of health services, as compared with people with higher incomes and lower healthcare need.

In other words, co-payments will reduce the usage of healthcare services by the very people who may need them the most, while the people that can afford the co-payments will pay them and will largely maintain their utilisation rates (see reference to income elasticity of demand above).

It is possible to reduce the negative equity consequences of co-payments by compensating lower income earners such as pensioners by transfer payments (for example, by increasing their pensions) that offset the cost burden of co-payments.

Another way of reducing the loss in equity resulting from co-payments is to reduce them for low income earners and high users, in other words, exempt certain groups in society from the full or part of the financial burden of co-payments. In Australia for example, all

social security recipients are exempted one way or another from all the gaps between the medical fees charged by providers and the benefits that they receive.

Despite the detrimental impact on the poor, co-payments are sometimes argued on the basis of marginal benefit to society. This case is made by relating the marginal benefits to society generated from public outlays for different purposes. It can be argued that in the context of overall budget constraint, the payment of benefits by the social health insurance system for say the first (say) MKD1000 incurred by an individual in any one year would increase community's welfare status **less** than (say) extending subsidies to people with higher levels of need.

### 3.2.4. Safety-net

These are also sometimes referred to as stoplosses and are maximum limits of co-payment paid by an individual during a specified period (usually a year), beyond which co-payment charges no longer apply. Safety-nets are the opposite to benefit ceilings in that they transfer all costs incurred above a certain figure to the social health insurer. Safety-nets may be global – that is, apply to total expenditures on all health services for any one year – or they can apply separately to individual services and benefits.

While the purpose of the safety-net is to ensure that health services remain affordable, no matter how much healthcare the patient requires, they have the effect of diluting the incentive to restrain service use, especially for higher cost services, and once the safety net ceiling has been exceeded.

### 3.2.5. Equity – efficiency trade-off

Several arguments are advanced for requiring consumers of healthcare to bear some part of the cost of the service which they consume. Two related arguments are based on the concept of '**moral hazard**'<sup>9</sup>, which is a term used to describe the increase in demand for the particular healthcare service from the reduction in the price paid directly by consumers.

One such argument is that the intrinsic reduction in efficiency constitutes a 'welfare loss' in society, which may be manifested by the greater use by consumers of services that are less effective in achieving the best health outcomes for the community. The second argument is that of cost control; that without co-payments, the total cost of healthcare would rise and this can constitute a misallocation of national resources.

A third and quite different argument is related to equity outcomes: that the expansion of expenditures resulting from free care would make it difficult to maintain universal coverage. (We cannot afford free care for all).

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<sup>9</sup> Moral hazard has been defined as the abuse of insurance benefit by insured people which yields to an increase in health expenditure.

To the extent that patient charges result in a trade-off between efficiency and equity objectives there is no 'correct' level of co-payment. Co-payment policy must inevitably be the subject of social decision making. But, the choice should be guided by the prospective impact of co-payments, for example, whether or not a small reduction in equity will result in a larger or a small improvement in efficiency.

Public policy is a difficult course to steer if it is to simultaneously pursue efficiency and equity objectives, in the light of evidence about provider and consumer responses to financial incentives, and the relative 'needs' of different populations. As mentioned above, such an analysis is rendered more complex by the fact that efficiency and equity outcomes of cost sharing by consumers may vary widely, depending on the formulae by which co-payments are calculated, the services to which they apply and the groups that are exempted from them.

To distinguish between these often conflicting demands and optimise the balance between them for best outcomes to society is the challenge for a new co-payment policy for Macedonia.

## 4. International experiences with co-payments

### 4.1. Impact of Co-payments

As discussed above, international literature and research have demonstrated that co-payments by definition, being a fixed fee at point of service decrease equity, in that they necessarily put a greater strain on household budgets of lower income groups when compared to more well to do people who have more disposable income<sup>10</sup>. Moreover, co-payments have been shown to discourage lower income individuals from seeking necessary care<sup>11</sup> and thus reduce equity of access<sup>12</sup>.

Between 1974 and 1977, the US Rand Corporation carried out a random control health insurance experiment (HIE), which as reported by Richardson (1991) is the almost universally accepted as the definitive analysis of the pure demand effects of co-payments. It supports many of the findings discussed above and is described in more detail in Attachment 2.

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<sup>10</sup> Barer, M., Evans, R.G., Hertzman, C. and Johri, M. (1998) *Lies, Damned Lies and Health Care Zombies: Discredited Ideas that will not die*. HPI Discussion Paper #10 (March). Texas: Health Policy Institute, University of Texas – Houston Health Science Center.

<sup>11</sup> Kutzin, J. (1998) The appropriate role for patient cost-sharing, in R.B. Saltman, J. Figueras and C. Sakellariades (eds) *Critical Challenges for Health Care Reform in Europe*, pp. 78–112. Buckingham: Open University Press.

<sup>12</sup> Rice, T. (1998) *The Economics of Health Reconsidered*. Chicago: Health Administration Press.

Figueras et al<sup>13</sup> provide some anecdotal country evidence about the impact of co-payments and other direct charges, and these are discussed below.

In Belgium, for example, the reduction of certain co-payments for selected vulnerable groups lead to a marginal improvement in the equity of access. Despite this adjustment however, it was observed that the less well off, who often were the elderly, still had to make considerable payments both as co-payments and out-of-pocket to meet the full cost of non-reimbursable medicines. Supporting these findings, the first Belgian Health Survey of 1997 revealed that one-third of the Belgian population claimed to experience difficulty in meeting the costs for medical care. The survey also showed that 8% of the respondents occasionally postponed medical care for financial reasons, with visits to the dentist most likely to be sacrificed.

A German policy initiative aimed at managing demand was introduced in 2004. Under the new policy, a co-payment of €10 per quarter was introduced for the first contact at a physician's or a dentist's office. Apart from contributing revenue to the health insurance system, the co-payment aimed at altering patients' behavior toward more self-responsibility. A result of the new co-payment policy was that, physician contacts declined and there is some evidence that the introduction of the new charge may have contributed to a reduction of unnecessary physician visits, without endangering equity of access<sup>14</sup>.

According to Busse et al<sup>15</sup>, patient cost-sharing in the form of co-payments has been increasing in all Western European countries since the early 90ies. All EU countries for example, impose a co-payment on inpatient stays of between €4 and €10 per day. All of these countries also impose co-payments on pharmaceuticals.

Despite the fact that co-payments can be highly regressive as revenue-raising mechanisms<sup>16</sup> and are considered by many to be inappropriate tools for demand moderation<sup>17</sup>, they continue to grow, as health system policy-makers search for short-term solutions to meet the shortfalls in healthcare funding. Below, are some examples of co-payment policies implemented over the past 15 years in the European region<sup>18</sup>.

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<sup>13</sup> Figueras, J., Saltman, R., Reinhard Busse, R. and Hans F.W. Dubois, H., Patterns and performance in social health insurance systems, *Social health insurance systems in western Europe* published in the European Observatory on Health Systems and Policies Series

**1.1.** <sup>14</sup> Grabka MM, Schreyogg J, Busse R. The impact of co-payments on patient behavior: evidence from a natural experiment, *Med Klin (Munich)*, 2006 Jun 15;101(6):476-83. <http://www.ncbi.nlm.nih.gov>

<sup>15</sup> Busse R., Saltman R. and Duboi H., (2004) Organization and financing of social health insurance systems: current status and recent policy developments, *Social health insurance systems in western Europe* published in the European Observatory on Health Systems and Policies Series

<sup>16</sup> Evans, R.G. (2002) Financing healthcare: taxation and the alternatives, in E.A. Mossialos, A. Dixon, J. Figueras and J. Kutzin (eds) *Funding Health Care: Options for Europe*, pp. 31–58. Buckingham: Open University Press.

<sup>17</sup> Robinson, R. (2002) User charges in healthcare, in E.A. Mossialos, A. Dixon, J. Figueras and J. Kutzin (eds) *Funding Health Care: Options for Europe*, pp. 161–83. Buckingham: Open University Press.

<sup>18</sup> Busse R., Saltman R. and Duboi H., (2004) Organization and financing of social health insurance systems: current status and recent policy developments, *Social health insurance systems in western Europe* published in the European Observatory on Health Systems and Policies Series

- In **Austria**: In 1990, co-payment of €6 per day was introduced for the first 28 days inpatient stay; in 1997, co-payment was introduced for primary care doctor visits at a rate of €3.60 per visit; in 2001, a flat co-payment of €18.17 per outpatient hospital visit was introduced (only €10.90 was charged if referred by GP or specialist) – these co-payments were capped however, at €72.67 per person per year.
- **Germany** increased co-payments in 1993 and 1997 although several were subsequently lowered in 1998.
- In 1996, **Switzerland**, introduced mandatory co-payments although the maximum co-payment was limited by law.
- **Belgium** increased out-of-pocket payments 16 times between 1993 and 1997, although, similar to Germany, they were subsequently reduced for certain groups of insured.
- In 1997, the **Netherlands** increased co-payments for hospital stay and specialist care but the increase was revoked two years later.

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## 4.2. Out-of-pocket expenditure

There is little international comparative data available on the scale of co-payments but there is data available on the size of out-of-pocket payments which, in addition to co-payments, also include direct payments for services that are not included in the benefits package.

Out-of-pocket expenditure as a proportion of total health expenditure (summarized in Table 6) varies considerably among western European countries. Among the five social health insurance (SHI) countries assessed, the variation is much greater (in 2000 7.1% for Luxembourg contrasted with 33.3% for Switzerland) than it is among five northern tax-funded countries (in 2000 11.0% for Ireland contrasted with 20.6% for Finland). The data also indicate that between 1990 and 2000, the percentage of out-of-pocket expenditures fell dramatically in one tax-funded country (Ireland by 7.0%) and only slightly in one SHI country (by 1.5% in France). It is also significant that, while Finland's figure increased by 5% over the ten-year period, its absolute percentage at 20.6, as the highest northern European tax-funded system, is only two-thirds of the figure in the highest SHI country which is Switzerland at 33.3%.

In Macedonia by comparison (which is a SHI country), out-of-pocket expenditures have been estimated to be 15% of total health expenditure, which is mid-range among the countries listed below.

**Table 6 Out-of-pocket expenditures as a proportion of total health expenditure in 1990 and 2000**

<b>SHI:</b>	<b>1990</b>	<b>2000</b>
Austria	14.6 (1995)	18.6
France	11.5	10.2
Germany	11.1	12.8 (1998)
Luxembourg	5.5	7.1 (1999)
Switzerland	33.0 (1995)	33.3 (1999)
<b>Northern tax-funded:</b>		
Denmark	16.0	16.4
Finland	15.5	20.6
Ireland	18.0	11.0
Norway	14.6	15.7 (1999)
UK	10.6	11.0 (1996)
<b>Southern tax-funded:</b>		
Italy	15.3	22.9
Spain	19.8 (1991)	26.4 (1999)
<b>SHI Average</b>	<b>15.1</b>	<b>16.4</b>
<b>Northern tax-funded average</b>	<b>14.9</b>	<b>14.9</b>
<b>All tax-funded</b>	<b>15.7</b>	<b>17.7</b>

Source: *Figueras, J., Saltman, R., Reinhard Busse, R and Hans F.W. Dubois, H., Patterns and performance in social health insurance systems, Social health insurance systems in western Europe* published in the European Observatory on Health Systems and Policies Series

### 4.3. Case Study - Croatia<sup>19</sup>

The Croatian 2002 Health Insurance Act changed the health financing framework in Croatia making the Croatian HIF the exclusive funder of mandatory health insurance. The 2002 act substantially enlarged the already existing co-payment scheme and patients were expected to contribute a greater proportion of healthcare costs than was the case before the reform. Furthermore, the law substantially decreased the number of individuals exempted from making co-payments, primarily by excluding the retired from the exempted group.

The 2002 Act also introduced a new product to be offered by the HIF which was named Complementary Health Insurance (CHI), which was an opt-in scheme which provided coverage of co-payments .

#### 4.3.1. Croatian co-payment guidelines

1. The following benefits do not attract a co-payment under the Croatian BBP:

- preventive care for children, pupils, full time students and adults

<sup>19</sup> Based on Internal Paper by the Adrija Stamper School of Public Health in Zagreb (2007) *Health Insurance in Croatia – balancing between Bismarck and Beveridge and financial sustainability and politics*

- curative care and medical rehabilitation for children, pupils and full time students
- orthopaedic devices for children under 18
- preventive and curative primary health care for adults
- preventive and curative gynaecological care related to family planning, pregnancy, delivery and screening for malignant diseases
- preventive and curative dental care for children under 18 and pregnant women
- preventive and curative treatment for HIV infected patients and others with communicable diseases potentially threatening to the general population
- comprehensive vaccination, immunization and chemoprophylaxis programs
- diagnostic procedures provided at the primary health care level
- medical services provided in hospitals (not including accommodation and food costs)
- accommodation and food hospital costs for patients with chronic psychiatric diseases
- chemotherapy and radiotherapy procedures (including related hospital food and accommodation costs)
- medical care relating to organ transplantation procedures (including medical treatment, food and accommodation costs)
- emergency medical care (including food and accommodation costs during intensive medical care)
- emergency dental care
- emergency medical transportation
- home visits for acute diseases
- medical services provided in patients' homes
- community nursing programs
- medical transportation for a defined list of patient categories
- medicines from the "basic list"
- nursing provided in patients' homes

2. The following benefits attract a co-payment of 15%:

- Outpatient medical treatments and consultation provided by specialists (including day hospitals, but not including medical rehabilitation)
- Diagnostic procedures that can not be performed at the primary health care level
- Orthopaedic devices
- Medical treatment abroad (as regulated by the HIF)
- Medical rehabilitation in patients' homes
- Outpatient dental care provided by specialists of paradontology and oral surgery

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3. The following benefits attract a co-payment of 25%:

- accommodation and food costs during hospital care for chronic diseases;
- dental prosthetic medical care for people over 65

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4. The following benefits attract a co-payment of some 30%:

- Outpatient medical treatments provided by specialists in medical rehabilitation
- accommodation and food costs during hospital care for acute diseases

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5. The following benefit attracts a co-payment of some 50%: dental prosthetic medical care for adults

### 4.3.2. “Administrative fees” in Croatia

In 2005 amendments to the Croatian Health Insurance Law introduced a new form of user charges called "administrative fees" (flat rate co-payments). All insured must pay such administrative fees at the point of service with the exception of children under 18, people over the age of 80 and the disabled.

Administrative fees of HRK 10 (€1.4) are charged for the following services:

- medical consultations in primary health care
- referrals to specialists
- prescriptions
- orthopaedic and other aids.

Administrative fees of HRK 5 (€0.7) are charged for ambulance transportation.

The policy rationale for the introduction of the administrative fees was to provide additional funding for the Croatian HIF. It was estimated that these co-payments would raise about HRK 370 million (€50 million). The fees are seen to be small and therefore, not a significant impost on the population. They are collected by providers and remitted to the HIF.

### 4.3.3. Complementary health Insurance in Croatia

In 2004 the complementary health insurance (CHI) scheme begun to experienced financial difficulties and it went into deficit. CHI premiums were community rated and were set at HRK 80 (€11) per month (HRK 50 for the retired)<sup>20</sup>. Despite the attraction of the CHI premiums being tax deductible, its market penetration was low and in 2005, only 15% of the population purchased CHI.

<sup>20</sup> The 2005, the average monthly net salary in Croatia was HRK 4,376 (€600)

Three factors contributed to the problems of CHI. Firstly, 1,258,886 people (28% of the population) were exempted from the co-payments and thus had no interest in CHI; secondly, the scheme suffered from the effects of adverse selection as the healthy had little motive in joining and the pool of the retired (many in ill health) increased; and thirdly, the CHI benefits package was overly generous, covering all co-payments, including pharmaceuticals.

CHI will cease to exist in its present form later in 2007. It will be replaced by an amended scheme which will no longer cover co-payment for pharmaceuticals.

#### 4.4. Case Study - Slovenia

1. The following benefits do not attract a co-payment under the Slovenian BBP:

- a) All services
  - War invalids and civilian invalids of war
  - Other persons who rely on another person for activities of daily living
  - Invalids with at least 70% physical disability
  - Mentally or physically handicapped adults
  - Persons over 75 years of age
- b) Systematic and other preventative examinations
  - Pre-school-age children
  - School children
  - Students attending full time education
  - Women in connection with childbirth
  - Other adults in accordance with programs, except preventative examinations which employees are guaranteed by law
- c) Early detection and prevention of illness in accordance with programs - All citizens
- d) Treatment and rehabilitation
  - All children
  - Students in full time education
  - Children and young people with disturbed mental and physical development
- e) Advice on family planning, contraception, pregnancy and childbirth - Women
- f) Prevention, detection and treatment of infection from AIDS and contagious diseases for which the law proscribes the implementation of measures for the prevention of their spread - All citizens
- g) Compulsory injections, immunoprophylactics and chemoprophylactics in accordance with programs - All citizens

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- h) Treatment and rehabilitation of malign illnesses, muscular and nervous-muscular illnesses, paraplegia, tetraparaplegia, cerebral paralysis, epilepsy, hemophilia, mental disorders, developed forms of diabetes, multiple sclerosis and psoriasis - All citizens
  - i) Treatment and rehabilitation for professional illnesses and injury at work - Employed citizens
  - j) Health care in connection with the donation and exchange of tissue and organs for transplantation in other persons - All citizens
  - k) Urgent medical assistance, including urgent transport by ambulance - All citizens
  - l) Home visits, treatment and home nursing and in social care institutes - All citizens
2. The following benefits attract co-payments of up to 5% under the Slovenian BBP:
- a) Services in connection with the transplantation of organs and other more demanding operations, the extent relating to the cause - All citizens
  - b) Treatment abroad - All citizens
  - c) Services in connection with intensive therapy, radiotherapy, dialysis and other urgent more demanding diagnostic, therapeutic and rehabilitation interventions - All citizens
3. The following benefits attract co-payments of up to 15% under the Slovenian BBP:
- a) Services in connection with ascertaining and treating reduced fertility and artificial insemination, sterilization and abortion - All citizens
  - b) Specialist surgery, hospital and health services as a continuation of hospital treatment, except for professional illnesses and injury at work - All citizens
  - c) Non-medical part of care and treatment in the context of a continuation of hospital treatment, professional illnesses and injury at work - All citizens
  - d) Services on the basis of health activities which are not included under point 1, and treatment of maladies of the teeth and mouth - All citizens
  - e) Orthopedic, orthodontic, hearing and other aids except in cases above - All citizens
3. The following benefits attract co-payments of up to 25% under the Slovenian BBP:

- a) Special surgery, hospital and health services as a continuation of hospital treatment - All citizens
  - b) The non-medical part of care in hospital and health resorts as a continuation of hospital treatment - All citizens
  - c) Orthopedic and other aids in connection with treatment for professional illnesses and injury at work - All citizens
  - d) Medicines from the positive list in all other cases - All citizens
4. The following benefits attract co-payments of up to 40% under the Slovenian BBP:
- a) Non-urgent rescue transportation of insured persons who are immovable or need transportation to and from dialysis, or in other cases where transportation by means of public transport or car would be harmful to their health or who, due to their health condition, need escort by a medical worker - All citizens
  - b) Medical treatment which is not a continuation of hospital treatment - All citizens
5. The following benefits attract co-payments of up to 50% under the Slovenian BBP:
- a) Medicines from the intermediate list - All citizens
  - b) Orthodontic treatment of adults - All adult citizens
  - c) Aids to vision for adults - All adult citizens

According to the above schedule, therefore, the following population groups in Slovenia are exempted from co-payments:

- War invalids and civilian invalids of war
- Other persons who rely on another person for activities of daily living – in other dependants
- People with at least 70% physical disability
- Mentally or physically handicapped adults – similar to the disabled category above
- Persons over 75 years of age

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## 4.5. Case study – Bulgaria

Like most countries, Bulgaria requires co-payments under its universal health insurance scheme. Co-payments are imposed for primary care, secondary outpatient care and inpatient care.

### 4.5.1. Types of co-payment

#### Primary care co-payments

GPs in Bulgaria are paid for their services by both the Bulgarian health insurance fund (NHIF) via a capitation formula and by the patient through a co-payment. The co-payment is legislated to be 1% of the minimum monthly wage, which in 2006 amounted to BGL 1.80 (EUR0.90).

In 2006, the government reviewed the co-payment policy and considered scrapping it as it was not achieving its aims. Upon some deliberation, however, it was decided to retain co-payments for GP visits – the main reason for this decision was that co-payments were seen to be a useful tool in managing unnecessary visits .

#### Secondary outpatient care co-payments

Like GPs, specialists in Bulgaria are self-employed and the NHIF is their single most important formal source of income. The NHIF pays specialists on a fee-for-service basis. First specialist consultations are paid at a rate BGL 12 (EUR 6), the second consultation is paid at a rate of BGL 6. Additional specialist consultations are not reimbursed by the NHIF.

Also, similar to GPs, specialists are able to charge patients a co-payment of 1% of the minimum monthly wage per consultation.

#### Inpatient co-payments

Hospital co-payments are charged on a daily rate for nominated conditions, with a ceiling co-payment of 10 days per annum. The daily rate is based on 2% of the minimum monthly salary, which in 2007 amounted to a daily co-payment of 1.80 EUR. In total therefore, the maximum co-payment that a patient needs to make for inpatient care in any one year is EUR 18 which would calculate out to be some 20% of the monthly minimum wage.

## Health states that attract a co-payment

The conditions that attract a co-payments in Bulgaria are set out in health insurance contracts and the relevant law, and include:

1. preventative treatment and screening performed by doctors and dentists;
2. non-hospital and hospital medical care for the purpose of disease detection and treatment;
3. rehabilitative care
4. emergency medical care
5. maternity care during pregnancy, childbirth and maternity
6. therapeutic abortion and abortion in case of pregnancy resulting from rape
7. dental car
8. nursing care at home
9. prescription and dispensation of medicinal drugs, licensed for use, provided for treatment at home
10. prescription and dispensation of medical goods and dietetic foods for special medical purposes
11. medical expert certification of working ability
12. transportation services on medical indications

### 4.5.2. Exemptions

Groups exempted from co-payment are as follows:

- Children
- Registered unemployed
- military personnel on conscripted service
- War veterans
- people under custody or in jail
- people who receive social assistance payments
- people without an income
- orphaned children under the care of the state

### 4.5.3. Conditions exempted from co-payments

The health insurance law lists the diagnoses that are exempted from co-payment. Generally the exemptions apply to people who are suffering from chronic diseases which

require prolonged medical care Specifically the following are excluded (with ICD10 codes): ,

- Pulmonary and extra-pulmonary form of tuberculosis: A15.0, A15.2, A18.0†, M49.0, A18.0†, M01.1\*, A18.0†, M01.1\*, A18.0†, M90.0\*
- Inherited anomalia: Q.03, Q 04.6, Q 04.8, Q04.5, Q 04.9, Q11.0, Q11.1, Q11.2, Q12.0, Q12.3, Q12.4, Q16.5, Q16.4, Q16.3, Q20.0, Q20.3, Q20.5, Q21.3 , Q21.8, Q21.0, Q21.2, Q21.1, Q21.2, Q20.8 , Q22.0, Q22.2, Q22.1, Q22.8, Q22.4, Q22.5, Q23.0, Q23.1, Q23.2, Q23.3, Q23.4, Q24.0, Q24.3, Q24.5, Q24.6, Q24.8, Q25.1, Q25.3, Q25.4 , Q25.0 , Q25.5, Q25.6, Q25.7, Q26 , Q27.3, Q27.8, Q27.9, Q28.2, Q28.3, Q28.8, Q33.0 , Q33.3, Q33.6, Q33.4 , Q61; N18 , Q78.0, Q90 , Q91, Q93
- Metabolic diseases and disturbances: E10.2† N08.3\* -, E14.2† N08.3\*, E10.3†, H36.0\* - 4.3†, H36.0\*, E10.4†, G63.2\* - E14.4†, G63.2\*, E10.5 – E14.5, E20, E34.3, E23.2, E72.0, E70.0, E70.1, E84, E80.0, E80.1, E80.2, E85
- Cardiovascular diseases; I05, I05.0, I05.1, I05.2, I05.8, I05.9, I06, I06.0, I06.1, I06.2, I06.8, I06.9, I08.0 , I07 , I11, I12, I13, 15, I21 , I25.2 , I25.3 , I28.9 , I27.0 , I42, I50.0, I69.0, I69.1, I69.8, I69.2, I69.3, I69.4, I67
- Pulmonary diseases: J45, J47, J67, J44, J60, J61, J62.8, J63, J69.4, J69.1, J84.1
- Diseases of the digestive system ; K50, K51.0, K71.7
- Renal diseases: N18
- All pregnant women and mothers up to 45 days following delivery: Z39.2. /, Z33, Z35,
- O80-O84
- Diseases of the blood and blood producing organs: D61.0, D66, D67, D68
- Mental diseases: F25, F30-F39, F22.0, F71, F72, F73
- Diseases of the nervous system: G30, G20, G25, G11, G12, G95.0, G35, G81, G80, G83, G40, G70.0 Myasthenia gravis
- Diseses of the sensory organs: H54.0, H54.1, H90
- Diseases of the musculo-skeletal system and the connecting tissue: M32, M34, M05.3†, I52.8\*, M05.3†, I39.-\*, M05.3†, I41.8\*, M05.3†, G73.7\*, M05.3†, I32.8\*, M05.3†, G63.6\*, M45, M46.2 /0-9/, M86.3, M86.4, M86.5, M86.6

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- Patients with transplants and artificial openings: Z 94, Z 43
- All patients with carcinomas: COO – C97
- Individuals with first degree incapacity with outer assistance

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#### 4.5.4. Implementation issues in Bulgaria

There appears to be little transparency in the Bulgarian co-payment system, at least in the case of private GP's and specialists. Patients are not aware of their rights and obligations with respect to co-payments as the information on co-payment rules is not displayed nor effectively publicised.

Providers are required to issue a receipt for the co-payment received but this regulation is seldom observed. Anecdotal evidence suggests that some doctors are hesitant about asking their patients for the co-payment.

Under the law, co-payments revenue is retained by the provider – in case of GPs it may be a group practice. The additional revenue should be declared as the doctor's income but as no receipts are issued, the money is often pocketed by the individual doctor and not formalised as income.

It is estimated that with some 30 million GP and specialist visits per annum in Bulgaria, the total potential co-payment revenue for these providers may be in the region of BGL48 million per annum. It is not known, however, how much of this potential revenue is realised.

## 5. Issues for Macedonia

### 5.1. Co-payment policy rationale

As discussed above, co-payments are potentially inequitable because such costs shift the funding burden away from population-based risk sharing arrangements (e.g. community-rated universal system) towards payments by individuals and households.

It is accepted that co-payments can be unfair to the poor. In most countries, people with low incomes also tend to have poorer health. This is compounded by the general observation that poverty is associated with greater needs for health care, and co-payments will hence reduce the access of the most vulnerable group.

On this basis, dependence on co-payments as part of the funding of the social health insurance system should be avoided, particularly if co-payments are used to finance

priority services. If more money is needed, it should be raised from everyone by increased contributions to the social healthcare system. Dependence on increased co-payments means that the additional funding comes from the people who are sick.

In the case of Macedonia, however, co-payments combined with adequate safety net arrangements could, be maintained as a way is found to balance the complex issues and trade-offs related to system efficiency and equity.

Below we list some of the issues that will impact on co-payment policy development in Macedonia:

**Means of additional revenue** - Opponents to co-payments argue that if more money is needed to fund the universal healthcare system, it should be raised from everyone by increased insurance contributions. They point out that dependence on increased co-payments means that the additional funding comes from the people who are sick.

**Political pragmatism** – It is often politically expedient to introduce co-payments rather than increasing contribution rates. This is partly because in many cases, the people most adversely affected by co-payments tend to be less powerful and articulate.

**Impact on utilization** - It is also argued by some that co-payments give a clear message about the high costs of health care. Yet another claim is that co-payments are useful because they discourage unnecessary use and unreasonable expectations for care. Of course, as discussed above, co-payments also discourage necessary and important care, especially for the poor and the sick.

**Administrative cost** - An issue related to system efficiency is that co-payments are likely to have a higher administrative cost than the simple act of increasing a general contribution or earmarked tax arrangement. The design of co-payment systems should aim for simplicity and transparency to ensure that these costs are minimized.

**Impact on healthcare costs** - Co-payments are particularly undesirable, if they are applied to high value services. If people have to pay for treatment, they may be discouraged from using healthcare, even though the treatment may be necessary to prevent a serious deterioration in health status. As a result, the overall efficiency of the health care system is impacted as more ill health could lead to the need for more costly treatment in the long term.

**Benefits package** - As discussed above, health budgets are never sufficient to meet the demand for health care and governments must make decisions how to make the best use of the available resources. Accordingly, the Macedonian health insurance fund is required to purchase services according to a benefits package within the constraints of the available budget. There are a number of options in

structuring the package but the key decision will be whether to have a more limited package of services with limited co-payments, or to broaden the scope of the package and introduce co-payments which will help to fund the costs of these additional services.

## 5.2. Summary of initial findings

1. Macedonia is a country with a high proportion of people who are poor and in which 85% of total health spending is by the government – the majority of the population (and all of the poor) therefore, depend on the public system for their healthcare needs
2. Despite the fact that some 50% of people can be classified as poor and 37% are unemployed, the HIF only obtains 35% of its revenues from the government which makes contributions on behalf of pensioners and the unemployed – this contribution is unlikely to reflect the true cost of providing healthcare for this segment of the population.
3. The law requires that in all instances (except injections in the primary care setting) co-payments collected (from specialists, pharmacies and hospitals) are to be remitted to the HIF. This policy causes unnecessary administrative costs and removes the accountability for the collection of these charges from providers.
4. The Macedonian co-payment rates that are charged as a proportion of the value of the service (co-insurance) are unfair in a system that is aimed at providing social protection to the population as a whole. Charging people a percentage of their health bill penalises the sick which is not consistent with the principle of social solidarity on which universal health insurance is based.
5. If co-insurance type co-payment regime is to be maintained, the sliding scale of rates should be re-adjusted so that the percentages decrease as the cost of the services increases.
6. Again, if the co-insurance system is to be maintained in Macedonia, the service pricing schedule should be brought up to date so that prices reflect the true costs of the services.
7. According to Table 4, even if all hospital and clinic providers collected and remitted all co-payment revenue according to the regulations, the total revenue if remitted in full, would have only amounted to 5.7% of the hospital and clinic costs (based on the current price schedule). It would follow therefore, that if the average co-payment rate is say 9% of the cost of health service then, one can conclude that some 3.3% of the services provided would have been to people exempted from making co-payments.

8. As indicated in Section 2.5.3, in 2006, some 9063 co-payment safety-net exemptions were granted. This appears to be a low figure when one considers that some 50% of the population could be classified as being poor, even after excluding all of the exempted groups namely: beneficiaries of social protection programs; mentally challenged people without parental care; children up to one year of age; blood donors; disabled war veterans; and mentally ill patients in psychiatric hospitals.
9. In general terms, patient cost-sharing in the form of co-payments in Western European countries has been increasing since the early 90ies. All of these countries for example, impose a co-payment on inpatient stays of between €4 and €10 per day as well as co-payments on pharmaceuticals. Some impose co-payments for primary care visits. In increasing co-payments, however, these countries have struggled to adjust their co-payment policies in an effort to optimise the balance between efficiency and equity.

### **5.3. Recommendations by Kees Schaapveld on co-payments**

The consultant is most appreciative for the work of Kees Schaapveld in making recommendations on co-payment policy in the context of his work on the BBP.

The summary of Kees Schaapveld's recommendations with respect to co-payments is as follows:

- Revise and adapt rates of co-payment for different services, and determine exemptions – including analysis of the present system of co-payments and the calculation of the financial consequences of any changes
- Co-payments should be kept by providers, as an incentive – and the prospective co-payment revenue should be automatically deducted from contracted provider payments by HIF (it is understood that the HIF already adjusts some hospital budgets for the co-payment revenue that is not remitted to it)
- A co-payment system should be simple, easy to understand for patients and providers, and easy to administer
- The following services should be exempted from co-payments: preventative care; primary care should have no co-payments, except for listed drugs and diagnostic tests; and treatment of communicable diseases with external effects (such as tuberculosis, sexually transmitted diseases, and meningitis). Co-payments should target especially those services for which over-consumption exists (Kees Schaapveld correctly questions whether the issue of over-consumption is indeed relevant in Macedonia?).

- There should be an equitable co-payment exemption system for vulnerable groups – nevertheless, providers must be obliged to treat all patients, whether they make a co-payment or not.
- the prospect of the introduction of HIF membership smart card will enable the dynamic tracking of services that are provided and consequently co-payments

## 5.4. Focus for this consultancy

In principle, the consultant agrees with all of the above recommendations and will work to develop policy proposals that will accord with those and other issues that will arise in the course of its work. The specific matters that will be addressed are:

- If more revenue is needed to fund the benefits package, how much is required and are co-payments the best method of raising this revenue?
- If co-payments are to be continued what is their objective in the Macedonian healthcare funding system and how will they be structured so that they do not unfairly impact on vulnerable groups?
- What are the system operational constraints in effectively and fairly collecting co-payments and accounting for their existence?

Importantly, the consultant concurs with Kees Schaapveld's recommendation that "the Government should take a coherent (comprehensive) approach to health financing reform, and should not initiate isolated actions without agreement on the overall picture."

In the case of co-payment policy, decision making will be linked to other policies such as ones related to revenue raising, inclusions in the benefits package, coverage by voluntary health insurance, information systems, activity reporting by providers and provider payment systems.

## 6. Issues for clarification and data requirements

### 6.1. Issues for clarification

The consultant received a considerable amount of information and seeks clarification on the following points:

Clarify the following co-payment rule which is in the schedule provided:

*Value (in denars) of the pharmacy item for every drug from the Positive List (for 1 prescription) and for every ampoule with syringes and needles (for full treatment of a certain disease after each order) in primary health care*

Clarify the following exempted categories of people exempt from co-payments:

- *Military disabled persons, family disabled insurance beneficiaries*
- *For children up to 18 years of age and insured persons needing prostheses for upper and lower extremities, hearing prostheses, wheelchairs*

Clarify the following statement contained in the co-payment policy document provided to the consultant:

*According to a Co-Payment Policy statement provided to the consultant, the co-payment for pharmaceuticals must not exceed 20% of the average costs of health-care services. This statement requires clarification.*

Clarify whether outpatients specialist care payment is fee-for-service, and if so, what is payment schedule that is used.

It is understood that stakeholders are supportive of co-payments. Why is this so? If its to manage demand, to what extent is it though that the system now provides unnecessary services that are requested by the public?

## 6.2. Data requirements

### 6.2.1. Co-payment revenue

To calculate the average co-payment rate per service, the following annual statistics would be useful:

#### **GP co-payments**

- Number of GP injection procedures that attract co-payments
- Total value of injection procedures that attract co-payments
- The total expected co-payment revenue from injection procedures that attract co-payments

#### **Pathology test co-payments**

- Total number of pathology tests that attract a co-payment
- Total value of pathology tests that attract co-payments
- The total expected co-payment revenue from pathology tests that attract a co-payment
- The total co-payment remitted to HIF for pathology tests that attract a co-payment

#### **Radiology test co-payments**

- Total number of radiology tests that attract a co-payment
- Total value of radiology tests that attract co-payments

- The total expected co-payment revenue from radiology tests that attract a co-payment
- The total co-payment remitted to HIF for radiology tests that attract a co-payment

**Specialist consultation co-payments**

- Total number of specialist consultations that attract a co-payment
- Total value of specialist consultations that attract co-payments
- The total expected co-payment revenue from specialist consultations that attract a co-payment
- The total co-payment remitted to HIF for specialist consultations that attract a co-payment

**Specialist procedures co-payments**

- Total number of specialist procedures that attract a co-payment
- Total value of specialist procedures that attract co-payments
- The total expected co-payment revenue from specialist procedures that attract a co-payment
- The total co-payment remitted to HIF for specialist procedures that attract a co-payment

**Hospital admission co-payments**

- Total number of hospital admissions that attract a co-payment
- Total value of hospital admissions that attract co-payments
- The average length of stay per admission
- The total expected co-payment revenue from hospital admissions that attract a co-payment
- The total co-payment remitted to HIF for hospital admissions that attract a co-payment

**Pharmaceutical co-payments**

- Total number of prescriptions that attract a co-payment
- Total value of prescriptions that attract co-payments
- The total expected co-payment revenue from prescriptions that attract a co-payment
- The total co-payment remitted to HIF for prescriptions that attract a co-payment

**Dental co-payments**

- Total number of dental services that attract a co-payment
- Total value of dental services that attract co-payments
- The total expected co-payment revenue from dental services that attract a co-payment
- The total co-payment remitted to HIF for dental services that attract a co-payment

**Co-payments for other services**

- Total number of other episodes of care (not listed above) that attract a co-payment

- Total value of other episodes of care (not listed above) that attract co-payments
- The total expected co-payment revenue from other episodes of care (not listed above) that attract a co-payment
- The total co-payment remitted to HIF for other episodes of care (not listed above) that attract a co-payment

### **6.2.2. Currently exempted population groups in Macedonia**

How many people are there in each of the co-payment exempted categories listed below?

1. Beneficiaries of social protection programs – except for prescribed drugs
2. Mentally challenged children without parental care
3. Children up to 1 year of age – except for prescribed drugs
4. For blood donors donating blood over 10 times – except for prescribed drugs
5. Military disabled persons, family disabled insurance beneficiaries
6. Children 1 to 5 years who co-paid to the value greater than 20% of average salary in the last year
7. Children 5 to 8 years who co-paid to the value greater than 40% of average salary in the last year
8. Children 5 to 8 years whose total family income is less than 60% of the average salary and who co-paid to the value greater than 20% of average salary in the last year
9. Population group 18 to 65 years who co-paid to the value greater than 70% of average salary in the last year
10. Population group 18 to 65 years whose income was up to 60% less than average salary and who co-paid to the value greater than 40% of average salary in the last year
11. Population group 18 to 65 years whose income is less than 60% of the average salary and who co-paid to the value greater than 20% of average salary in the last year
12. Population group over 65 years who co-paid to the value greater than 40% of average salary in the last year
13. Population group over 65 years whose income is less than 60% of the average salary and who co-paid to the value greater than 20% of average salary in the last year

## ATTACHMENT 1

### Program for health protection of certain groups of population and different diseases of citizens who are not health insured<sup>21</sup>

This program is designed to assist the uninsured but in need, namely: pregnant women, infants, children from 1-18 years of age, persons over the age of 65 and the indigent.

The estimated numbers of people qualifying for this program are:

- 2.880 pregnant women, as many infants
- 5.000 uninsured children
- 8.000 uninsured people over 65
- 5000 people who are indigent

The program funds the following sub-programs:

1. To uninsured pregnant women and infants until 1 year of age: delivery; - medical examinations of the newborn; orthopedic medical examination of the newborn with EHO.
2. To uninsured children from 1 to 18 years of age, as well as for the persons older than 65: medical examination (general and specialist); basic diagnostic tests; emergency medical and dental care; as well as ambulatory and hospital treatment.
3. For people who are indigent healthcare for the treatment of the following diseases: rheumatic fever; progressive, nervous and muscular diseases; progressive systematic sclerosis (Sclerodermia); cerebral paralyzes; multiplex sclerosis; cystic fibrosis; epilepsy; pemfigus and lupus epitematodes; dyslexia, disgraphia and dislalia (rehabilitation exercises); and communicable diseases

The costing of the program is as follows:

**Table A Pregnant women and infants up to 1 years of age**

Item	Cost
Non-operative delivery (15.000 x 2.400)	36.000.000
Operative delivery -caesarean (40.000 x 480)	19.200.000
Medical examinations of infants up to 1 year of age (320 denars x 2.880 x 4)	3.686.400
Medical orthopedic examination with EHO of the newborn up to 1 year of age (500 denars x 2.880 x 1)	1.440.000
<b>Total</b>	<b>60.326.400</b>

<sup>21</sup> Summary of MOH document

**Table B Uninsured children from 1 to 18 years of age**

Item	Cost
General medical examination (320 x 8.000)	2.560.000
Basic diagnostic examinations-laboratory and RTG (500 denars x 5.000 x 50%)	1.250.000
Emergency health care (800,00 x 5.000 x 30%)	1.200.000
Treatment in hospital conditions (900 hospital day x 5.000 x 30% x 5 days)	6.750.000
Emergency dental health care (250,00 x 5.000 x 30%)	375.000
<b>Total</b>	<b>11.175.000</b>

**Table C Uninsured persons older than 65**

Item	Cost
General medical examination (320,00 x 8.000)	2.560.000
Basic diagnostic examinations-laboratory and RTG (500,00 denars x 8.000 x 50%)	2.000.000
Emergency health care (800,00 x 8.000 x 30%)	1.920.000
Treatment in hospital conditions (900,00 hospital day x 8.000 x 20% x 10 days)	14.400.000
Emergency dental health care (250,00 x 8.000 x 10%)	200.000
<b>Total</b>	<b>21.080.000</b>

**Table D Sub-program 3**

Item	Cost
General medical examination (320,00 x 5.000)	1.600.000
Basic diagnostic examinations-laboratory and RTG (500 denars x 5.000 x 50%)	1.250.000
Treatment in hospital conditions (900 hospital day x 5.000 x 20% x 5 days)	4.500.000
<b>Total</b>	<b>7.350.000</b>

The total funds required for the activities described in the tables A,B,C and D is 99.931.400 Denars.

In addition to the above services and patient groups, the program covers co-payments of the insured persons in relation to the treatment of the diseases defined in Sub-program 3.

**Table E Co-payments of the insured for treatment of diseases covered in Sub-program 3**

Item	Cost
12.000 insured persons (estimated to be suffering with the relevant conditions defined in sub-program 3) x 4.917 denars co-payment	<b>59.004.000</b>

The total funding needed for the implementation of the whole program in 2006 was 158.935.400 Denars.

## ATTACHMENT 2

### US Rand Corporation – Health Insurance Experiment<sup>22</sup>

Between November 1974 and February 1977, the US Rand Corporation (a government sponsored private research organisation) carried out a random control health insurance experiment (HIE). At a very considerable cost – it represents one of the world’s largest social experiments.

The HIE was carried out in six locations in the USA. The 5809 individuals who participated were randomly assigned to one of four different fee-for-service health insurance schemes or to a pre-paid group practice. All of these covered essentially the same range of services – virtually all inpatient and outpatient care, diagnostic and therapeutic services, dental and mental health services. Co-payments in the four fee-for-service schemes were set equal to 0%, 25%, 50% and 95% of the fee charged but with an upper annual limit to total expenditure of 5%, 10% or 15% of income to a limit (safety-net) of US\$1000 (1974).

In addition to the data on the use of hospital and medical services, the HIE involved the collection of detailed information on the participants’ socio-economic and health status. The latter involved not simply the development of repeated applications of questionnaires to measure reported health status, but also physical examinations of sub-groups of the enrolled population.

The HIE findings were that among those enrolled in the experiment, co-payments resulted in:

#### Use and Cost

- A significant decline in total medical expenditure
- A significant reduction in the number of episodes of care initiated by patients but no change in the type of care provided by doctors
- A large initial impact on the number of episodes of care with the introduction of a co-payment but a lesser additional effect as the size of the co-payment rose
- A significant reduction in the use of most categories of medical care including mental care services, emergency services, dental services and pharmaceutical products.

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<sup>22</sup> Adpoted from Richardson, J.R (1991). ‘The effects of consumer co-payments in medical care’, *National Health Strategy, Background Paper (Australia)*, No 5

**Access**

- A disproportionate negative effect upon service use by the poor and sick
- A negative effect upon a child seeing a specialist

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**Appropriate use of services**

- The same effect on services judged to be “necessary” and “unnecessary”, that is, co-payments decreased the use of both types of service equally

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**Choice of physician**

- No effect upon families’ choice of primary physician
- No effect upon the “shopping around” for a doctor, that is, co-payments did not result in more careful selection of doctors

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**Health outcomes**

- Little impact on general or mental health

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