IS THERE A RATIONALE FOR OUT-OF-POCKET PAYMENTS IN HEALTH PROMOTION AND PREVENTION FOR ELDERLY?

ABSTRACT

Although out-of-pocket payments have well-recognized negative effects on the equity in health care, these payments are a substantial part of the health care system funding in many countries around the world. This is because out-of-pocket payments help to secure resources for health care and are also expected to reduce unnecessary health care use. Out-of-pocket payments are also seen as a tool to encourage healthy behavior by increasing the costs of medical care for those who engage in unhealthy lifestyle.

This policy brief outlines the empirical evidence on the effects of out-of-pocket payments on a healthy lifestyle with the aim to provide a base for an informed policy discussions on whether out-of-pocket payments can and should play a role in health promotion and prevention programs, specifically those targeting older adults. The review emphasizes the controversy of certain findings reported in the literature and outlines recommendations for the consideration of these findings in policy decisions.

Disclaimer: This policy brief arises from the project Pro-Health65+ which has received funding from the European Union, in the framework of the Health Programme (2008-2013). The content of this publication represents the views of the authors and it is their sole responsibility; it can in no way be taken to reflect the views of the European Commission and/or the Executive Agency for Health and Consumers or any other body of the European Union. The European Commission and/or the Executive Agency do(es) not accept responsibility for any use that may be made of the information it contains.

http://pro-health65plus.eu/
**INTRODUCTION**

Out-of-pocket payments for health care services and products are often criticized for their negative effects on equity. Nevertheless, these payments remain a substantial part of the health care system funding in most countries around the world. It is true that many countries rely on out-of-pocket payments because of a lack of other health care resources. However, the potential efficiency improving effects of out-of-pocket payments also play a role in the decisions to increase these payments. Out-of-pocket payments are expected to reduce unnecessary use of health services. Even more, out-of-pocket payments are expected to encourage healthy behavior by increasing the costs of medical care for those who choose an unhealthy lifestyle. But are such expectations confirmed by empirical evidence?

This policy brief outlines the empirical evidence on the topic with the aim to provide a base for an informed policy discussion on whether out-of-pocket payments can and should play a role in health promotion programs, specifically those targeting older adults.

**POLICY CONTEXT**

It is widely recognized that more generous health insurance coverage results in a more frequent use of health care among the insured and thus increases the costs to the insurer. This phenomenon is known as moral hazard. Moral hazard can occur in two ways:

- First, individuals may take less precautionary action to prevent health problems if they know that the costs of medical treatment are covered by the insurer.
- Second, they may seek medical care sooner and more frequently since full health insurance coverage removes the financial barrier to use health care.

Full insurance coverage could, in theory, be a disincentive for prevention (i.e. ex-ante moral hazard) and an incentive for overconsumption of medical services (i.e. ex-post moral hazard). Increased out-of-pocket payments are thus seen as an efficiency improving tool that is expected to discourage overconsumption of medical care and to provide incentives for a healthier lifestyle. However, increased out-of-pocket payments may also decrease the use of preventive services in general and consequently, worsen the health status of the population. This creates a policy dilemma and brings discussions on whether out-of-pocket payments are a rational policy tool in the area of health promotion and prevention.

**EVIDENCE AND ANALYSIS**

**DATA POOL**

Taking into account the above considerations, we present a discussion based on a systematic review of current empirical evidence (Rezayatmand R, Pavlova M, Groot W. The impact of out-of-pocket payments on prevention and health-related lifestyle: a systematic literature review. The European Journal of Public Health; 2013; 23(1): 74-79) as well as series of empirical investigations based on the SHARE dataset (Rezayatmand R. Patient payments
and health behaviors: stick or carrot?. PhD thesis. Maastricht University; 2014. SHARE is the European longitudinal aging survey (http://www.share-project.org/), which provides micro data on health, socioeconomic status and social and family networks of more than 85000 individuals aged 50 or over from 19 European countries. The research methods are presented in detail in the above mentioned publications. Here, we only outline the key conclusions with the aim to highlight the role of out-of-pocket payments in health promotion and prevention.

FINDINGS

OUT-OF-POCKET PAYMENTS: A DOUBLE EDGED SWORD FOR PREVENTION?

- **The case against out-of-pocket payments in health promotion and prevention**

Empirical research clearly confirms the negative effect of out-of-pocket payments on prevention. Most studies come to the conclusion that out-of-pocket payments reduce the utilization of preventive services (e.g. vaccination, screening), and adherence to medication. When the price of health care services is lowered due to health insurance coverage, insured individuals have an incentive to use more insured services. This can include more preventive services in the insurance package but also more health care services that are unnecessary and less valued from an economic point of view. Although out-of-pocket payments can help to decrease the use of these non-essential services, in practice, they are not specifically targeting those non-essential services, which is the reason to call out-of-pocket payments a blunt tool.

It is argued that most people cannot distinguish between health care services or prescription drugs that are essential, and those that are not essential. In fact, the negative effects of out-of-pocket payments arise from this lack of knowledge. The blind effect of out-of-payments on the services that are highly valued in secondary prevention, like adherence to medication, leads to a lower utilization of these services, and thus, to the need of more expensive health care like hospitalizations and nursing homes in the future. This eventually may cost the health care system more. Hence, providing some valuable services, such as preventive services, free of charge might imply to the patients that these services should be used.

- **Inconclusive evidence on the positive effect of out-of-pocket payments**

Despite much more evidence on the negative effect of out-of-pocket payments on the use of preventive services, their positive effect on health behavior is not evident yet. Although the ex-ante moral hazard (full insurance coverage as a disincentive for prevention) is more probable to exist in a publicly financed system (e.g. in European countries), only few studies on the topic in Europe can be found. However, the evidence is not conclusive. A negative association between out-of-pocket payments and health behavior is also reported, e.g. among the older population groups in Europe, which is contradictory to the expectation based on ex-ante moral hazard. Thus, the effects of out-of-pocket payments on health behavior continue to hang in the balance.
Challenges in studying the effects of out-of-pocket payments on health-related behavior

An important challenge for future studies on the effect of out-of-pocket payments on prevention and health behaviors is to identify causality. Many previous studies are cross-sectional and correlational studies. The challenges come from the fact that health insurance is not exogenous but self-selected. Thus, the health status of the individual is a determinant in choosing the type of health plan, which also determines the amount of out-of-pocket payments. As a result, a simple correlation cannot say much about the effect of out-of-pocket payments. Health care cost coverage provided in European countries is largely exogenous because having at least a basic package is mandatory for every resident. However, this exogeneity cannot be used to test the effect of different level of coverage on prevention and health-related lifestyle, as the obligatory nature of the health insurance plans in Europe means that there is no or little variation in out-of-pocket payments. Nonetheless, variation in out-of-pocket payments can still exist due to supplementary health insurance which is not obligatory and therefore endogenous. Thus, the problem of endogeneity due to selection bias occurs again.

Conducting a natural experiment – like the Rand study conducted in the US in the 1960s - to deal with this endogeneity problem seems hardly feasible in Europe. Large secondary longitudinal datasets may help researchers to track and model unhealthy behavior. Therefore, the SHARE dataset as a multidisciplinary panel micro dataset has received attention in recent years, particularly among researchers in Europe. As SHARE’s longitudinal dimension increases, it would allow for further modeling of health behaviors to account for causal impacts.

OUT-OF-POCKET PAYMENTS: CARROT OR STICK APPROACH TO HEALTH PROMOTION?

Out-of-pocket payments as a policy tool to punish unhealthy behavior

The high burden of chronic diseases that is preventable through lifestyle change increases the tendency to shift more responsibility to individuals. In doing so, a carrot and stick approach can be used to reward desired behavior and to punish undesired ones; carrots like discounts in premiums, or vouchers for a fitness club or to buy sport equipment, and sticks like copayments or a lower place on a waiting list for people with an unhealthy lifestyle. Some studies challenge the effectiveness of out-of-pocket payments (i.e. copayments, deductibles) as a stick to promote health behavior. In particular, those studies shed more light on the ongoing debate which argues for a sort of lifestyle stratification in health care financing, particularly in solidarity-based health care systems like those of most European countries.

Out-of-pocket payments as a reflection of individual responsibility in health prevention

Regardless of how effective out-of-pocket payments are to encourage healthy behavior or discourage an unhealthy one, they can be viewed as the price one has to pay for the choice he has freely made. Freedom of choice is a widely accepted social value in many European countries. However, autonomy comes with responsibility. It is argued that in a publicly financed system, the costs of an unhealthy lifestyle are borne not only by those who make that unhealthy choice but also by those who choose to live healthy. Thus, in this case, freedom of choice inflicts extra costs upon others and could be subject to interventions. For instance, whether or not to smoke is an individual’s decision. However, due to solidarity, the cost of the adverse health effects of smoking are paid out of a collective pocket, thus, both by smokers and non-smokers. It means that the extra use
of the health care system by smokers is subsidized by non-smokers. As a result, it gives rise to growing support for imposing limits on lifestyle solidarity; for instance by charging out-of-pocket payments for health care that is used as a result of unhealthy behavior, or setting a higher insurance premium for those who engaged in unhealthy behavior.

At the same time, while it is not fair to let people with a healthy lifestyle pay for the unhealthy choices made by others; it might not seem fair either to punish people because of their lifestyle. This is because lifestyle is not an isolated individual choice. Thus, even when individuals are fully free to make choices, they are limited to choose between available options which are sometimes determined out of their control. Social determinants of health behavior have been extensively discussed in the literature, and it has been shown that their effects are not even consistent across different health behaviors, also among older people. Nonetheless, the risks linked to unhealthy behavior are voluntarily assumed, and they are accepted as the price of their choices which have been eventually made at individual’s discretion. Thus, there is always some autonomy that justifies proportionate responsibility.

- **No systematic evidence on more use of health care by those engaged in unhealthy behavior**

There is little systematic evidence on the use of health care by those engaged in unhealthy behavior (i.e. smoking, excessive alcohol use and obesity or overweight, specifically among elderly) compared to people engaged in healthy behavior. For example, in Europe, elderly current smokers are found to be less likely to use health care while high health care costs are observed among those elderly who have stopped smoking. It should be noted however that given the cross-sectional nature of the data used, these findings can only show the association between a current engagement in unhealthy behavior and the use of health care in the immediate past (last twelve months). It is clear that the adverse health consequence of unhealthy behaviors might appear some years later, which can be a de facto reason for abstaining from that behavior. This is also evident from the results which show a positive association between former-smoking and health care use among older people. Thus, an immediate relationship between unhealthy behavior and health care use might not exist. This could happen some day later even when the person is not engaging in unhealthy behavior.

These findings might imply that out-of-pocket payments (i.e. copayments, deductible) are not that useful as a tool for restricting lifestyle solidarity. Also, out-of-pocket payments for health care might not be an effective tool to discourage smoking behavior especially among the older population groups in Europe. Even conversely, higher out-of-pocket payments might decrease the chance of behavior change that could result from more contacts with a health care professional.

- **Higher insurance premiums as an alternative to out-of-pocket payments**

An alternative to out-of-pocket payments is to set a higher insurance premium for those who engage in unhealthy behavior. This higher premium can generate more funds for the future when the adverse health effects of unhealthy behavior appear, and thus may result in more health care use. In addition, higher premiums can be set for having an unhealthy behavior irrespective of actual health care use. Thus, they can be seen not only as a stick but as a limit to lifestyle solidarity without compromising the provision of basic needs. However, applying a risk-rated premium may not always be feasible.
EUROPEAN LEVEL

☐ Encourage EU member states to continue to provide essential health promotion and prevention services to signal their importance to the population, including older adults. In support of this, empirical evidence clearly shows that out-of-pocket payments reduce the utilization of preventive services (e.g. vaccination, screening), and present a barrier to adherence to medication.

☐ Subsidize research initiatives and implement international projects to study the effects of out-of-pocket payments on health-related behavior. It is important that such studies focus on the modeling of health behaviors that adequately accounts for causal impacts. Therefore, avoid simplified cross-sectional studies and promote international comparisons across EU member states based on longitudinal data.

☐ Stimulate broader discussion on the social desirability of lifestyle solidarity and the role of out-of-pocket payments as a reflector of individual responsibility in health prevention. It is not fair to let people with a healthy lifestyle pay for the unhealthy choices made by others. But it might be also unfair to punish people for their lifestyle because it is not necessarily an isolated individual choice. Yet, there is always some autonomy that justifies proportionate responsibility.

☐ Encourage the EU member states to explore the adequacy of alternative financial incentives for a healthy lifestyle among various population groups, including elderly individuals. Higher insurance premiums for those who engage in unhealthy behavior could be one of these alternative options. It is important to find a suitable mechanism that not only acts as a punishing stick for unhealthy lifestyle but also stimulates the use of preventive services and health maintenance.

NATIONAL LEVEL

☐ Allocate resources to the health sector to assure the free-of-charge provision of essential health promotion and prevention services, and to imply to the citizens that these services should be used. In addition, promote the use of these services among all population groups, including the group of older adults.

☐ Participate in EU research projects focused on the identification of the causal effects of out-of-pocket payments on prevention and health behaviors to better understand the role that out-of-pocket payments can and should play in health promotion and prevention in your country.

☐ Create an environment for social discussion on lifestyle solidarity and the implementation of suitable mechanism that discourage unhealthy lifestyle, e.g. higher insurance premiums for those who choose to live unhealthy. These higher premiums can spare more funds for the future when the adverse health effects of unhealthy behavior appear, and thus may result in more health care use.
PROJECT FOCUS

ProHealth 65+ is focused on health promotion and prevention of health risks among seniors. The project seeks to determine effective methods of promoting a healthy lifestyle among older population groups by bringing together knowledge and experience of main partners and health promoters from Poland, Germany, Italy and the Netherlands and exchange it with collaborating partners from Portugal, Greece, Bulgaria, Czech Republic and Hungary. The effective implementation of training for health promoters working with this age group is the ultimate project goal.

PROJECT OVERVIEW

Pro-Health 65+ project corresponds with directions of the EU strategic Health Program (the Second and Third Health Program). The project is focused on ‘Investing in Health’ as part of the Social Investment Package for Growth and Cohesion through professionally designed health promotion programs implemented by well-informed and efficiently operating health promoters. It is targeted at the elderly with the intention of providing them with good health and good quality of life, and enabling them to be active and socially integrated (Healthy Aging). It will be implemented as a collaborative project in close cooperation with partner countries using a variety of research and institutional experience. It will be important to add the project activities to other European and national activities so that they are complementary and compatible.

METHODOLOGY

This project is about research and implementation. It will use two sets of tools. For research, we will accumulate and develop knowledge: analyze previous studies related to the subject of health status of older people and the health determinants (social, economic and cultural) in different stages of life; identify and evaluate health promotion methods; analyze institutions of health promoters and also funding, distribution, and modelling of financial circuit and incentives; critically review cost-effectiveness analysis. Quality will be guaranteed by supervision of the Advisory Board and will be assessed in accordance with the rules of the project. For the implementation of project results, we plan to prepare a manual for health promotion that will help to fill the most common knowledge gaps among street-level health promoters and training materials for key institutions providing health promotion for the elderly. We will also conduct training in cooperation with the newly created Board of Health Promoters for selected street-level health promoters.

EXPECTED OUTCOMES

Widespread knowledge and use of evidence based and economically effective methods of health promotion within different groups of street-level health promoters (health care practitioners, policy-makers, local and NGOs activists, social workers, trade unionists, journalists etc.) is one direct result of the project. Analyzing different institutions of public health, legal basis, sources and methods of financing and cost-effective ways of conducting the work in this area, will enrich the knowledge on possibilities and barriers related to promoting health. The project will contribute to the application of relevant health promotion methods in joint actions in the field of public health.
| **PROJECT NAME** | PRO HEALTH 65+  
Health Promotion and Prevention of Risk – Action for Seniors |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COORDINATORS</strong></td>
<td>JAGIELLONIAN UNIVERSITY MEDICAL COLLEGE</td>
</tr>
</tbody>
</table>
|                 | Project leader: Prof. dr. hab. Stanisława Golinowska  
Project manager: Andrzej Kropiwnicki |
| **ASSOCIATED PARTNERS** | JAGIELLONIAN UNIVERSITY MEDICAL COLLEGE |
|                 | www.uj.edu.pl  
Principle investigator: Prof. dr. hab. Stanisława Golinowska |
|                 | MAASTRICHT UNIVERSITY |
|                 | www.maastrichtuniversity.nl  
Principle investigator: Prof. dr. Wim Groot |
|                 | UNIVERSITÀ CATTOLICA DEL SACRO CUORE |
|                 | www.unicatt.it  
Principle investigator: Prof. dr. Nicola Magnavita |
|                 | UNIVERSITÄT BREMEN |
|                 | www.uni-bremen.de  
Principle investigator: Prof. dr. Heinz Rothgang |
| **FUNDING SCHEME** | Pro-Health65+ which has received funding from the European Union in the framework of the Health Programme (2008-2013) |
| **DURATION** | August 2015 – July 2017 (36 months) |
| **BUDGET** | EU contribution: 960 165 Euro |
| **WEBSITE** | http://pro-health65plus.eu |
| **LINKEDIN FORUM** | https://www.linkedin.com/groups/ProHealth-65-Health-Promotion-Prevention-8354412/about |
| **FOR MORE INFORMATION** | PROJECT OFFICE |
|                 | Anna Najduchowska, leader’s assistant  
Jagiellonian University Medical College  
ul. Grzegórzecka 20, 31-531 Kraków, Poland  
Tel: +48 12 433 28 09 / +48 603 663 822 |
|                 | E-MAIL |
|                 | iandrzejkropiwnicki@uj.edu.pl |
|                 | anna.najduchowska@uj.edu.pl |

http://pro-health65plus.eu/