

## OPINION SURVEY OF THE HOSPITAL MANAGEMENT PERSONNEL ON THE CLINICAL PATHWAYS IN BULGARIAN HOSPITALS

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### Abstract

*The modern bulgarian society expects rapid and effective reforms in the bulgarian health care sector. Meanwhile increases in the last few years in the bulgarian public sphere the negative attitude to the clinical pathway payment method which is described as an ineffective and not sufficient payment method for hospital health care services. Therefore there is a need to be determinated the personal opinion of the medical managing personnel in Bulgaria about the problems in the present financing model of the budget institutions which offer health care services. The conducted socio-statistical survey in a few bulgarian hospitals aims to gather and determine exactly those personal vision of the medical managing personal and to collect their attitude to the present used clinical payment method in Bulgaria. In the observation take part medical managers and other leading personnel from ten state and municipal hospitals in Bulgaria, divided in four groups - Board of directors, Clinic directors, Nurses/Chief nurses and Other managing personal.*

**Key words:** hospital payment, clinical pathway, hospital personnel

### INTRODUCTION

In the period 2000-2001 in Bulgaria is developed the clinical pathway payment system which includes also the diagnostic medical algorithms. This project is supported financially from the World Bank.

The most popular description of the clinical pathways is: a system of requirements and guidelines, which should be conducted of medical professionals in the treatment of patients with certain diseases, hospital diagnostic procedures and treatment interventions - as symptoms of the disease, and a tool for: ensuring the quality of medical services; reporting of medical activities; payment of medical activities; ensuring the rights of the patient; regulation of the minimum period of hospitalization; regulating codes of diseases and procedures according to the International Classification of Diseases; facilitate the contacts between medical and law enforcement activities; requirements for facilities and equipment needed for diagnosis and treatment according to the guidelines for clinical behavior; requirements for medical training, consistent with the regulations for certain professions; tool for management and control of medical activities and their outcome both in quantitative and qualitative terms.

Clinical pathways as a tool for financing medical activities are economically inefficient. General opinion is that prices are inadequate, that they are made not on the basis of actual costs, but on the basis of the financial framework. Furthermore, the method counts only a single diagnosis, but not the presence of the accompanying health problems to the patient. Therefore, it is necessary to be updated method of financing hospitals in Bulgaria and that is why it is important to reflect the attitudes of that funding among senior medical staff.

### RESULTS OF THE CONDUCTED SURVEY

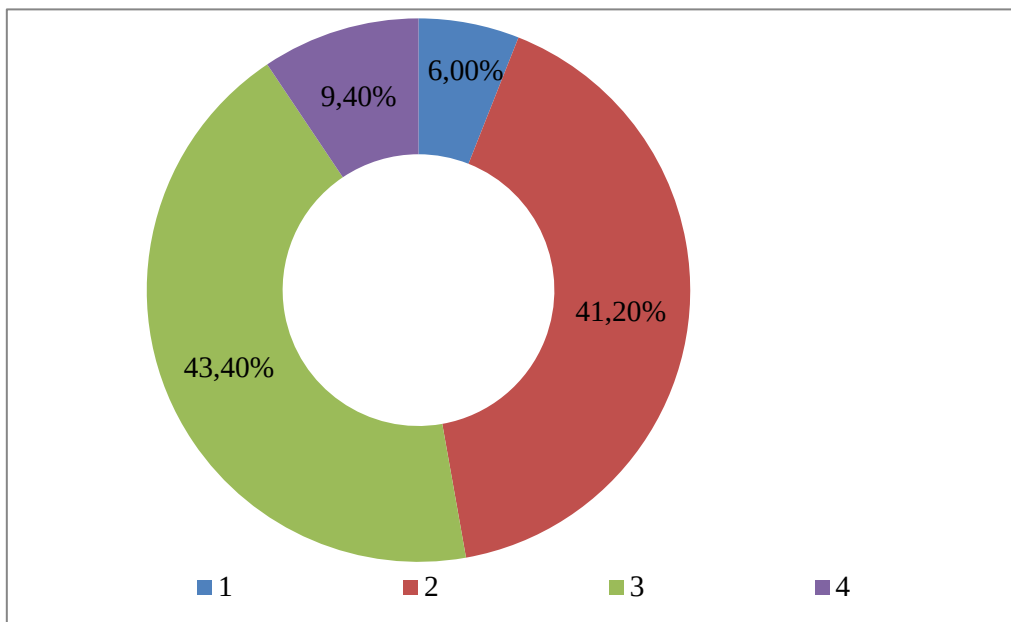
#### 1. Personal data

##### 1.1 Occupation

The presented data show that the total number of participants in the survey is exactly 267. Divided by occupation there are 16 Board of directors /or 6%/, 110 Clinic directors /or 41,2%/, 116 Nurse/Chief nurse /or 43,4%/, and 25 Other managing personal /9,4% from the respondents/. For our further

analytical purposes is obviously that only two groups from the researched people would have a significant share from the answers in the survey: Clinic directors и Nurse/Chief nurse, which share is almost 85% from the total number of respondents. (See Fig. 1)

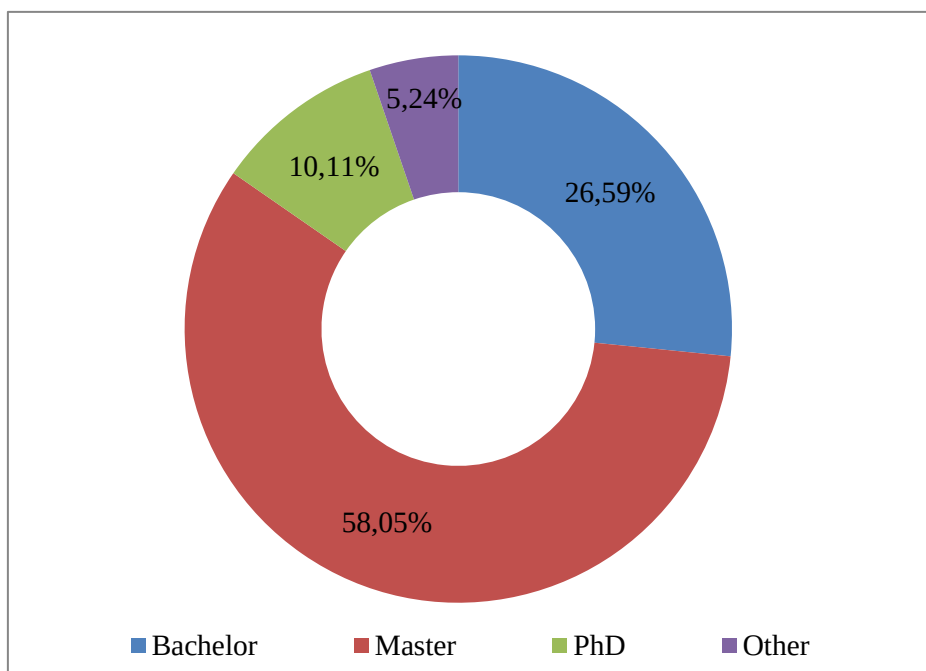
*Fig. 1 Total number of participants in the survey, divided by occupation /in percent/*



### 1.2 Education and training

More than one half from the questioned medical professionals has a Master degree /over 58%/, 27% has a Bachelor degree and 10% has a PhD. Some participants in the survey /5% have a lower educational degree from the shown above or they are just undergraduate. They are summarised in the field "Other education". (See Fig. 2)

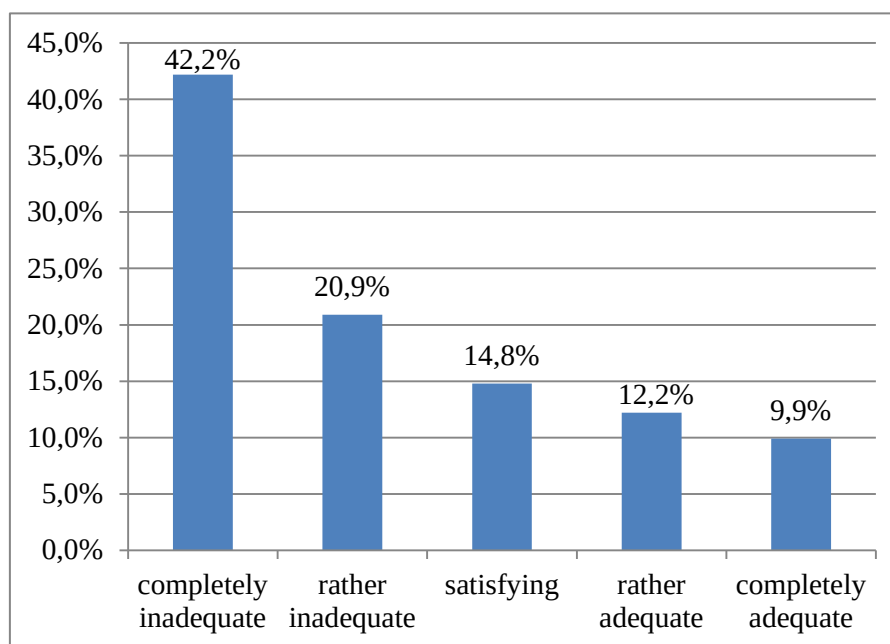
*Fig. 2 Education of the participants /in percent/*



## 2. Estimation of the adequacy of the present existing numbers of clinical pathways

On the question " Estimate the adequacy of the present existing numbers of clinical pathways to carry out your duties" 42% from the questioned answer that the existing numbers of clinical pathways is completely inadequate, 21% think that the existing numbers of clinical pathways is rather inadequate and summary 22% claim that the existing numbers of clinical pathways is completely/rather adequate. (See Fig. 3)

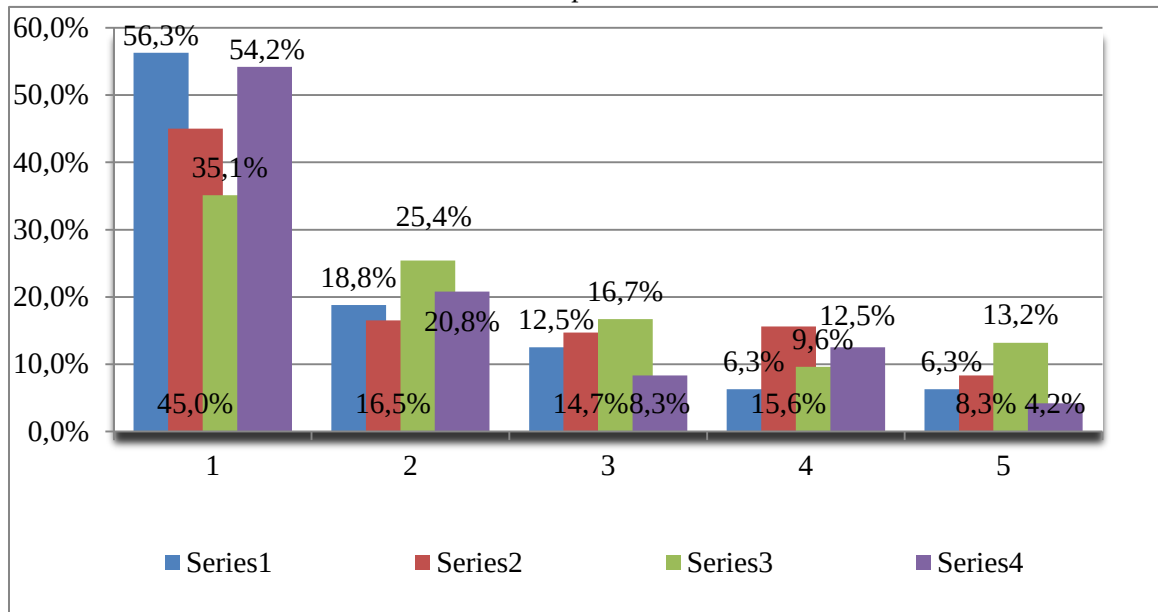
*Fig. 3 Estimation of the adequacy of the present existing numbers of clinical pathways /in percent/*



### 2.1 Estimation of the adequacy of the present existing numbers of clinical pathways, divided by occupation

Here we can see how is estimated the adequacy of the existing numbers of clinical pathways in Bulgaria from the hospital managing personal. More than one half from Board of directors and Other managing personal have an opinion that the existing numbers of clinical pathways is completely inadequate, such as 45% of Clinic directors and 35% of Chief nurse/nurse. In the same time, summary 24% of Clinic directors and 23% of Nurse/Chief nurse think that the existing numbers of clinical pathways is completely/rather adequate, such as 12% of Board of directors and 17% of Clinic directors. (See Fig. 4)

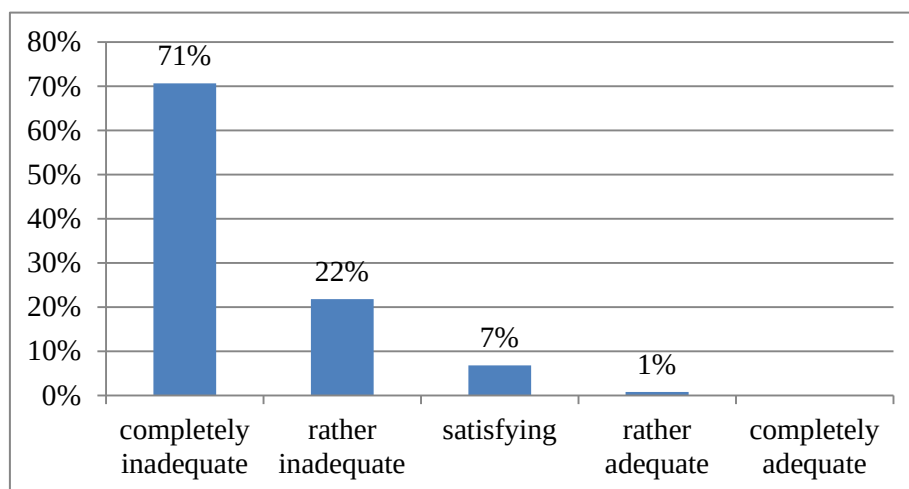
*Fig.4 Estimation of the adequacy of the present existing numbers of clinical pathways by occupation /in percent/*



### *3. Estimation of the financial efficiency of the present used clinical pathways, according to disease's severity*

On the question "Estimate the financial efficiency of the present used clinical pathways, according to disease's severity" 71% from all respondents have an opinion that the financial efficiency of the present used clinical pathways is completely inadequate, 22% think that it is rather inadequate and only 1% claims that the financial efficiency of the present used clinical pathways is rather adequate. There is interesting to mention that nobody understand the financial efficiency of the present used clinical pathways as completely adequate. Approximately 93% from all asked managing personal has a negative vision about the financial efficiency of the present used clinical pathways, namely see it as completely/rather inadequate. (See Fig. 5)

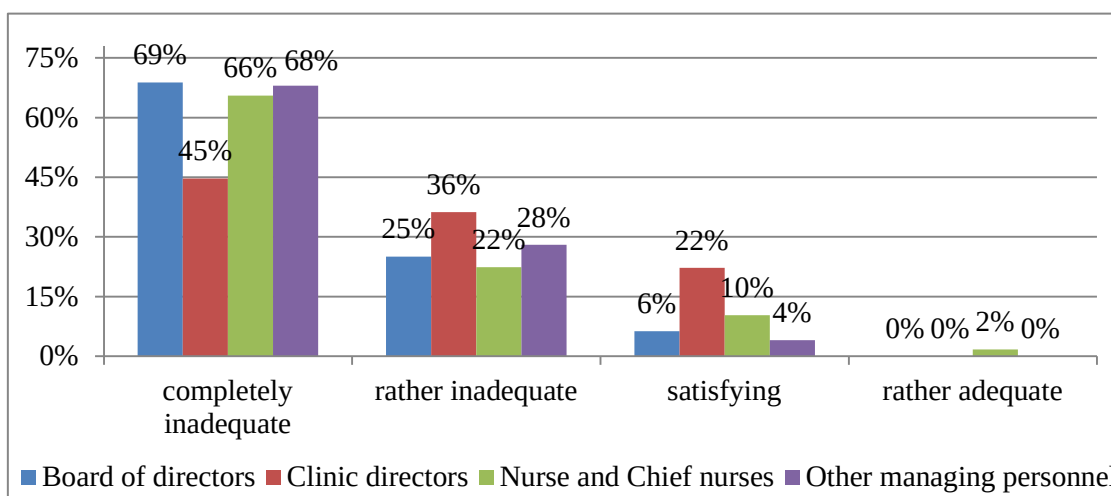
*Fig. 5 Estimation of the financial efficiency of the present used clinical pathways, according to disease's severity /in percent/*



### 3.1 Estimation of the financial efficiency of the present used clinical pathways, according to disease's severity, divided by occupation

Analyzing the question "Estimate the financial efficiency of the present used clinical pathways, according to disease's severity" by occupation we do not see any significant differences in the answers. Most critical answers, such as completely/rather inadequate, give 96% from Other managing personal, followed by Board of directors with 94% and Clinic directors with 81%. According to collected data, we can assume that the majority of the questioned respondents see the clinical pathways payment method as financial ineffective and inadequate. (See Fig. 6)

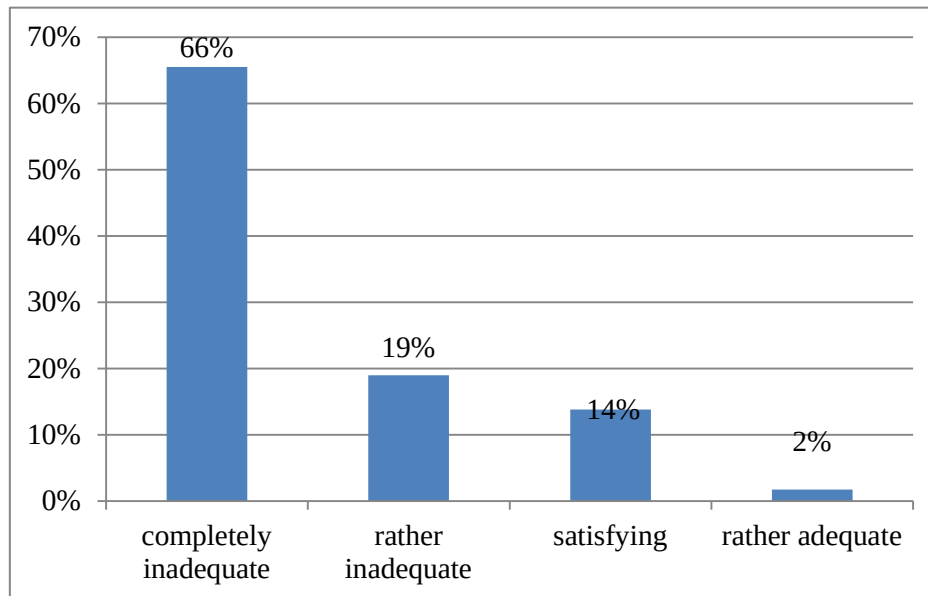
*Fig. 6 Estimation of the financial efficiency of the present used clinical pathways, according to disease's severity, divided by occupation /in percent/*



### 3.2 Estimation of the financial efficiency of the present used clinical pathways divided by answers completely/rather adequate from Estimation of the adequacy of the present existing numbers of clinical pathways

For further researching purposes we combine the answers completely/rather adequate from the question "Estimation of the adequacy of the present existing numbers of clinical pathways" and spread the answers from "Estimation of the financial efficiency of the present used clinical pathways". Doing this we aim to achieve maximal objective and comparative information from the management personnel working on state and municipal hospitals in Bulgaria. The results are very impressive and interesting. 58 respondents answered with completely/rather adequate on the question "Estimation of the adequacy of the present existing numbers of clinical pathways". 85% from them in the same time think that the financial efficiency of the present used clinical pathways is completely/rather inadequate and only 2% confirm that the financial efficiency of the present used clinical pathways is completely/rather adequate. It supposes to mean that the real problem is not the number of the clinical pathways but their valuation, especially for some low-paid clinical pathways. Such a combination of answers gives us a reason to assume that some clinical cases would not have been processed due to their low price. (See Fig. 7)

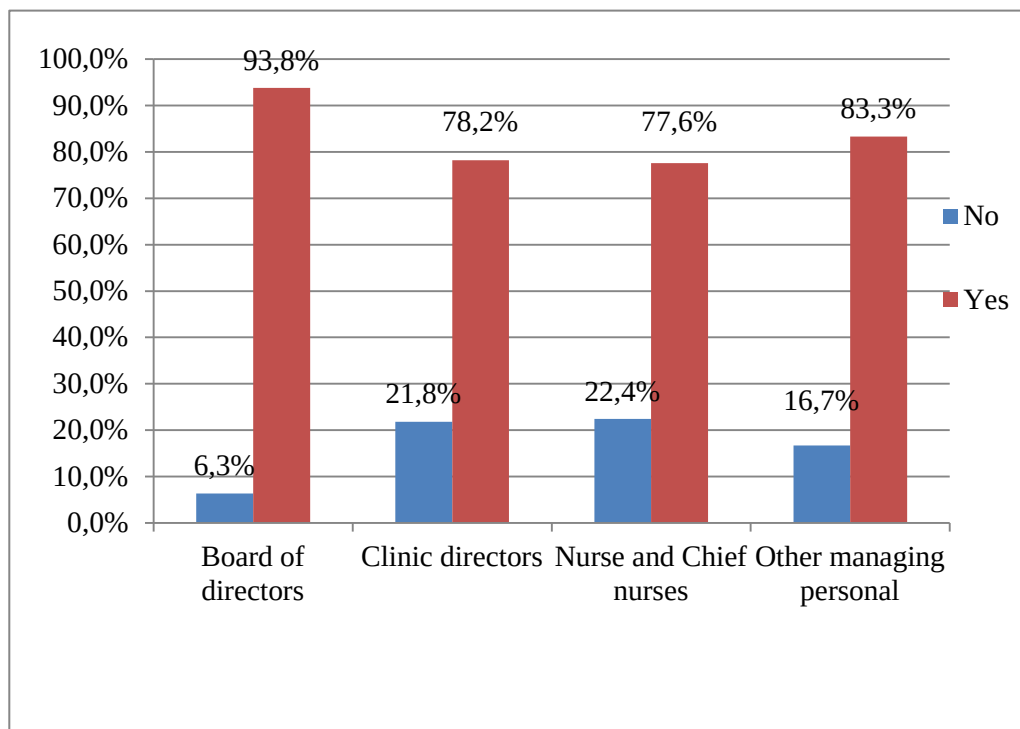
*Fig. 7 Estimation of the financial efficiency of the present used clinical pathways, divided by answers completely/rather adequate from Estimation of the adequacy of the present existing numbers of clinical pathways /in percent/*



#### *4. Handicapped hospital activities due to the present used paying system of the hospital service*

On the question "Do you have difficulties to carry out your duties due to the present used paying system?" 94% of Board of directors answer that they have difficulties to carry out their duties, such as 83% of Other managing personal and 78% of Clinic directors and Nurse/Chief nurse. These results are indicative of the existing problems in the present used paying system, which cause interruptions in the hospital activity. Therefore there is a need to be developed as soon as possible reasonable and reliable counteractive processes, which should improve the hospital activity. (See Fig. 8)

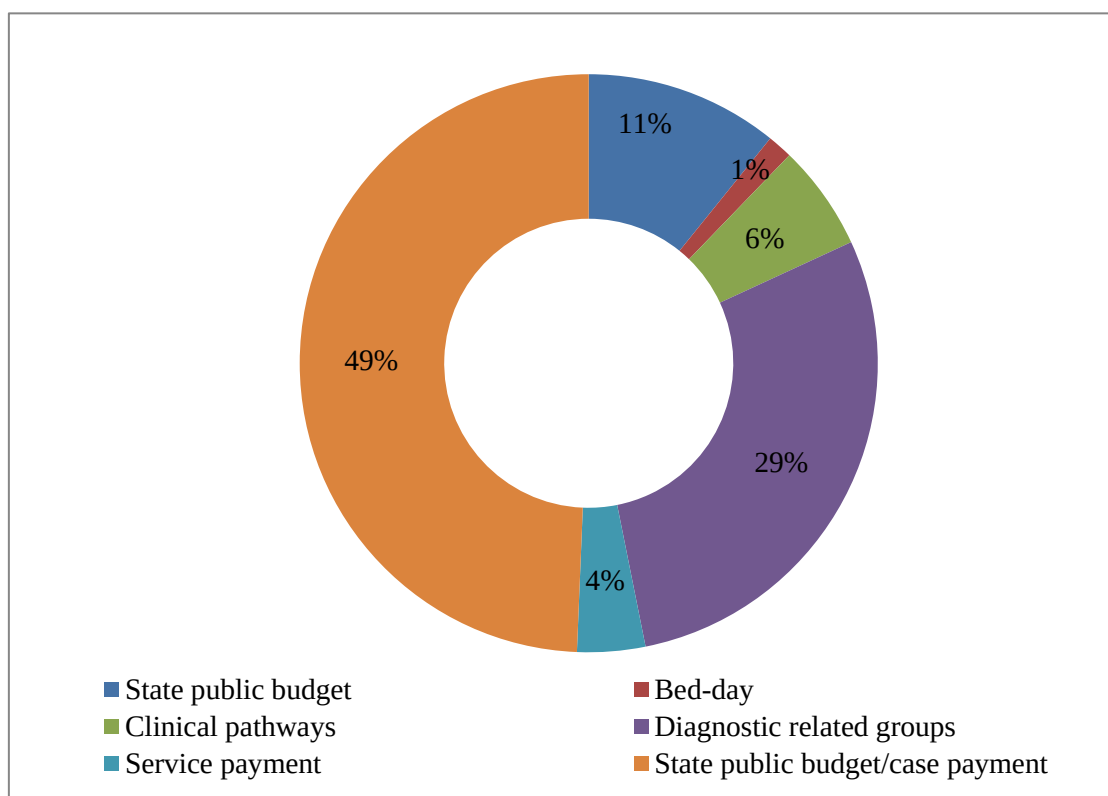
*Fig. 8 Working difficulties due to the present used paying system /in percent/*



#### 5. The most appropriate payment method for hospital services, according to the respondent

On the question "How do you think should be related the payment for the hospital service during the financial crisis and health care reform?" over 49% of the total number of respondents answer that the most appropriate payment method should be State public budget/case payment, followed by answers Diagnostic related groups /29%/ and State public budget /11%/. The present payment method Clinical pathways preferred only 6% of the respondents. The last two answers Bed-day and Service payment stay under 4%. Due to the fact that for this question we use a multiple answer question scheme, known as multianswer, we receive 286 answers from 266 respondents. The observed tendency here is that most of the people who give answer State public budget/case payment, give also the answer Diagnostic related groups. (See Fig. 9)

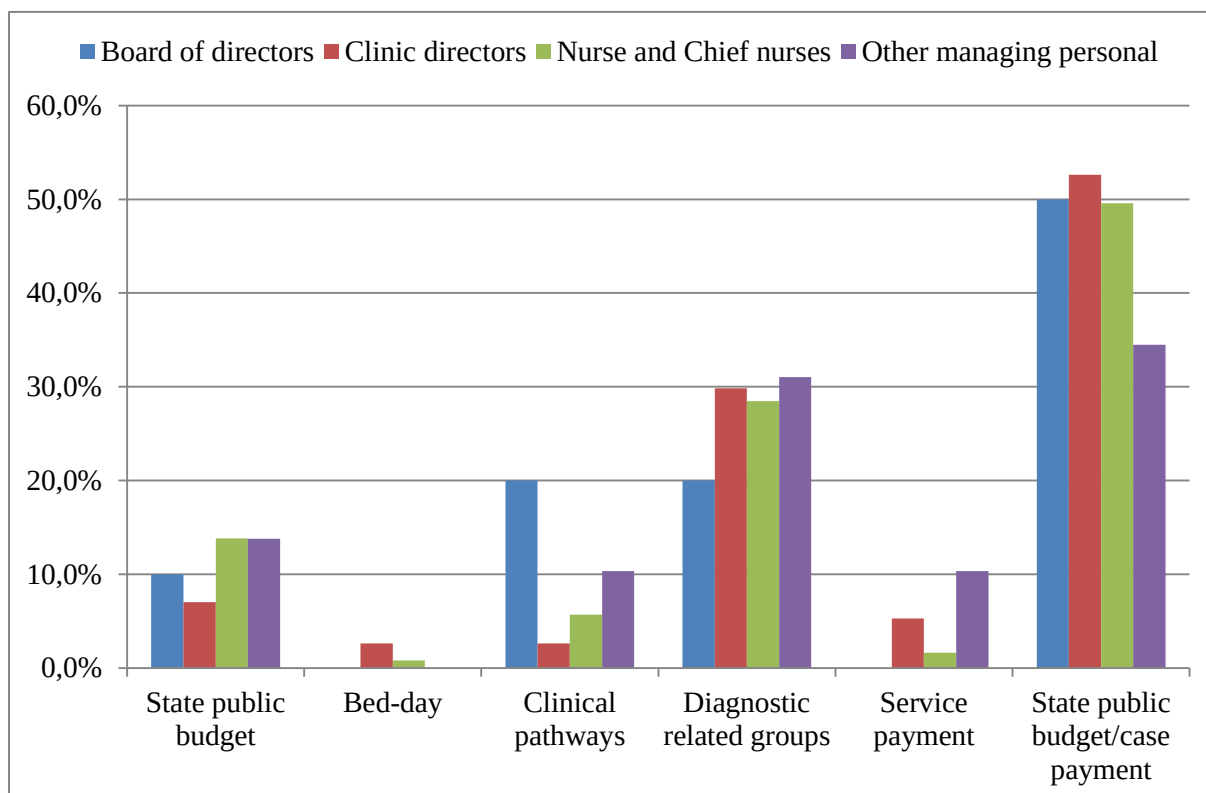
*Fig. 9 The most appropriate payment method for hospital services /in percent/*



#### 5.1 The most appropriate payment method for hospital services, divided by occupation of the respondent

Analysing the data we found some interesting statistics: 35% of Other managing personal notice the combination of State public budget and Diagnostic related groups as most appropriate payment method for hospital services, such as all five observed groups (even more than 50% of Clinic directors and 50% of the questioned Nurse/Chief nurse). Board of directors ignores the Bed-day option and Service payment at all, and Other managing personal ignore the Bed-day option too. Diagnostic related groups as an appropriate payment method is preferred almost from 30% to Nurse/Chief nurse, Other managing personal, Clinic directors and from 20% to Board of directors. (See Fig. 10)

*Fig. 10 The most appropriate payment method for hospital services, divided by occupation of the respondent /in percent/*



## CONCLUSIONS AND PROPOSAL

The majority of the questioned people estimate the funding of the hospitals as not sufficient.

More than one half of the participants estimate the number of clinical pathways as not sufficient.

Another global problem, founded during the survey, is the lack of financial adequacy of the clinical pathways.

The researchers catch that handicapped hospital activities due to the present used paying system of the hospital service occurs 80% of participants in the survey and only 20% of questioned work without problems.

We observe the answers that as most appropriate and effective payment method for hospital services is noticed the combination of State public budget and Diagnostic related groups.

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