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# THE EVALUATION OF THE NATIONAL IMPLEMENTATION OF HEALTH INSURANCE CARD

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#### Abstract

Computerization of health is part of health reform having the ultimate objective of improving the management and financing the health sector (http://siui.casan.ro/cnas). This paper proposes an analysis of the use of the national health card among patients. Implementation of the health card was perceived by patients as a necessity and the medical services they benefit from are confirmed by the electronic signature offered by this card. 96.25% of patients have a Health Card, the reasons for not having one is that they did not receive one, they lost it or they are unemployed. The health card is used correctly both by doctors and by patients, but there have been cases where patients have alienated the card and in a few cases the medical personnel retained the health card. By using the health card the quality of the offered medical care is improved, in the same time it is necessary to refine and improve the system and train the medical personnel.

Key words: health card, patient, utilisation, computer system

### INTRODUCTION

Computerization of health is part of the project for the reform of the health sector reform, Integrated Information System, Information System for electronic prescription, Electronic Card Health Insurance and Electronic Health Record Systems are central systems and components of the Computered Platform of Health Insurrance at different stages of development (http://siui.casan.ro). Integrated Information System (SIUI) of Health Insurrance in Romania is a key factor in the development and improvement of medical and pharmaceutical services, a solution to improve the management of the National Unique Fund of Health Insurrance and offering quality insured medical and pharmaceuticals services. SIUI is extremely important in achieving the computerization of health, for providing a uniform reporting system and data processing of health care at national and county level. It is aligned with the national strategy of computerization and it can easily align with the regulations of international organizations with a continuous data exchange (http://siui.casn.ro/cnas).

The electronic health insurance card was introduced on the 1st of May 2015, and it completes the initiative of the National Health Insurance System to have a global vision of the health services provided to patients and insured employess from the social health insurance system (http://www.cnas.ro).

The Health Card provides online security control over the effected services thus eliminating the possibility of reporting and finding fictive medical services; thus the health insurance fund is used more judicial, and it is targeted on the real needs of the insured patients. To benefit from the advantages of the insurance card and the services offered in the system the person must be insured and must pay health contribution from his total income according to the regulations defined by the current law (H.G. 49/2015).

This study aims to assess the evaluation of the quality of health care regarding the implementation of the National Health Insurance Card.

# MATERIALS AND METHODS

The epidemiological, descriptive, prospective and comparative study was performed in the hospitals in Oradea, during October - December 2015 and October - December 2016, on a number of 240 patients who received a complex questionnaire comprising a total of 25 predefined multiple choice questions.

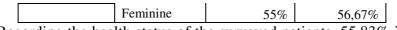
### **RESULTS AND DISCUSSION**

The administering of the questionnaires was achieved through a relatively proportional distribution by representative groups of ages and gender at population level, with minimal differences from one year to the other. Closed percentage (about 20%) was at decades from 30 to 70 years, and the lowest percentage (7.5%) was in the 18-29 age group. The questionnaire was answered by more women (56%) than men (44%).

Table 1

	<u> </u>	oct-dec 2015	oct-dec 2016
		0ct-ucc 2013	0ct-ucc 2010
Age groups	18-29 years	8,33%	6,67%
	30-39 years	18,33%	17,50%
	40-49 years	18,33%	19,17%
	50-59 years	20,83%	20,83%
	60-70 years	18,33%	20%
	> 70 years	15,83%	15,83%
Gender	Masculine	45%	43,33%

Distribution of the group based on age and gender



Regarding the health status of the surveyed patients, 55.83% in 2015, considered their own health status relatively good, compared to 40.83% in 2016, while 27.50% in 2015 opted for a relatively unsatisfactory health status and 46.68% in 2016 (fig. 1).

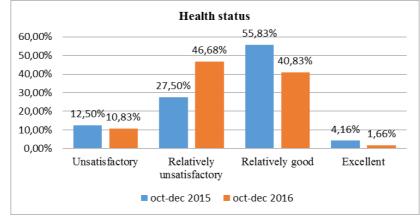


Fig. 1. Distribution of patients based on their own health status

A number of 231 patients (representing 96.25%) from the total 240 involved in the study declared that they have a health card, while 9 patients did not hold National Health Insurrance Card when filling in the questionnaire (6 patients in 2015 and 3 patients in 2016) (fig.2).

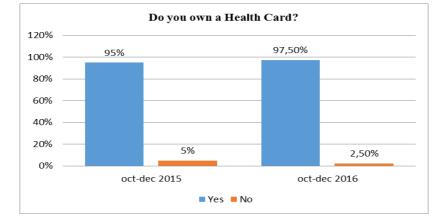
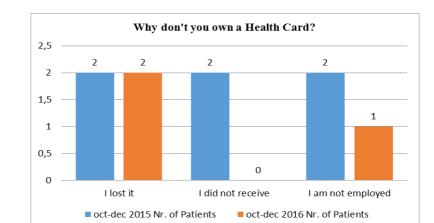


Fig. 2. Percentage distribution of patients regarding the possesion of National Health Insurrance Card

The reason of not possessing a health card is different as follows: 4 patients said they had lost their health card, 2 patients responded in 2015



that they have not received the card and 3 patients did not possess a health card since they were not employed (fig.3).

Fig. 3. The distribution of patients regarding the cause of not possessing a National Hralth Insurrance Card

With a very high percentage of 92.66%, the family doctor is in the first category of health professionals that activated the health card, followed by the specialist doctor with only 5.2% and the last with a rate of 4.27% 2016 are other health professionals who activated the National Health Insurrance card (laboratory, radiology) (fig.4).

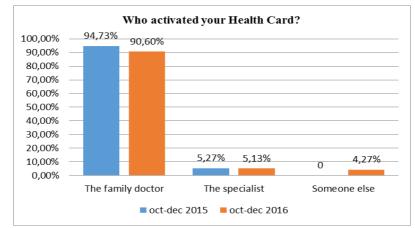


Fig. 4. Distribution of patients regarding the medical personnel who activated the National Health Insurrance Card

Regarding the request of the health card by doctors, most Health Card holder patients, 98.30% in 2015 confirmed this request positively, and in 2016 all patients received health care based upon the health card (fig 5).

87% of the patients declared that they have not given the Health Card for others to use (89.48% in 2016), but there were patients (12.26%) declaring that they have given their Health Card to family or friends to use it (fig.6).

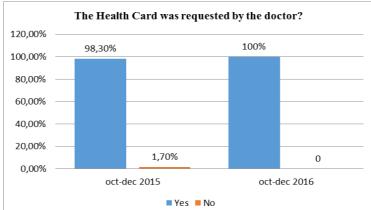


Fig. 5. Distribution of patients regarding the request of the National Health Insurrance Card by the doctor

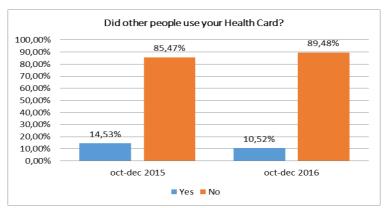


Fig. 6. Distribution of the patients regarding the usage of National Health Insurrance Card by others

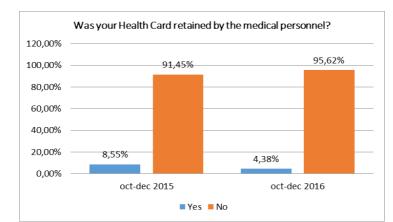


Fig. 7. The distribution of patients regarding the retainment of the National Health Insurrance Card by the medical personnel

The vast majority (93.5%) of patients who have health card declare that the card was not accepted by the medical staff, while 6% were expressed that the health card has been retained by medical personnel, the situation improved in 2016 (fig.7).

Among Health Card holder patients, 73.72% had no problems using the health card, but there were 27,28% patients who reported having trouble using it (fig.8). The cause of the problem arising from the use of National Health Insurance Card for all patients is unanimously the repeated blocking of the computer system.

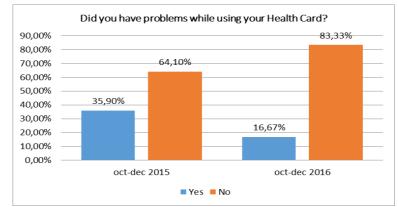


Fig. 8. The distribution of patients having probems with utilising the National Health Insurrance Card

A percentage of 79.46% of the patients are satisfied with the introduction and implementation programs of the National Health Insurrance Card, but 20.54% of the surveyed Health Card holder patients are not satisfied with the existence of the card (fig.9).

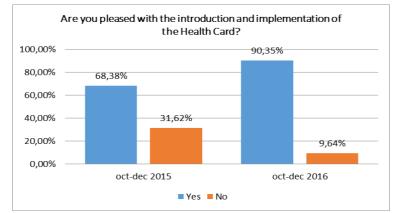


Fig. 9. The distribution of patients regarding the level of satisfaction on the usage of the National Health Insurrance Card

The implementation of the health card was perceived by patients as a necessity and by its means they benefit from medical services and this is confirmed by electronic signature offered by the card.

The quality of health care regarding the use of the National Health Insurrance Card has been affected by increased waiting time of the patients at the medical offices, there were situations when the patient waited more than one hour to receive the scheduled consultation.

To improve the quality of offered health care by using National Health Insurrance Card, which is the access code for all computered systems of the National Health Insurrance and it is also the verification tool of the provision of all services from the Health Insurrance Computer platform systems, it is necessary to refine and improve the system and train the personnel in the health system by providing informatics and computer science courses.

## CONCLUSIONS

General health status is relatively estimated as unsatisfactory by 37.09% of patients, and relatively good by 48.33% of patients who declared that they do not suffer from any chronic disease.

Compared to the questionnaire applied in 2015, in 2016 the number of those who estimated their health as relatively poor is doubled.

The number of National Health Insurance Card holders was 96.25% of the patients, the others who declared nonpossessing because of the following reasons: either the card is lost, they did not receive it or they are unemployed.

Most patients received health card by post and their activation was carried out by their family doctor.

Health Card is required by the physician, claimed the vast majority of patients and, furthermore, decalring that the medical staff did not retain the card during the provision of medical services, but they gave it to family members or friends in order to use it.

A quarter of patients who have health card have trouble using the card owing unanimously repeated blocking system, more common in 2015 compared to 2016.

The comparative study shows an improvement in terms of health card use, both by patients and by medical personnel Introducing and implementing health card use is considered necessary, and improvement of health insurance IT platform is an overriding need to improve the quality of health services offered using the health card.

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