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**Regional and national impact of
eHealth
Equal access to health related
information: the role of the digital
divide in Hungary**

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Outline

1. Methodology
2. The present state of eHealth in Hungary in international comparison
3. The main characteristics of different regions in Hungary (development level, digital literacy, internet use)
4. Preliminary results of the research: regional differences in eHealth access – how can we explain them?
5. Conclusion



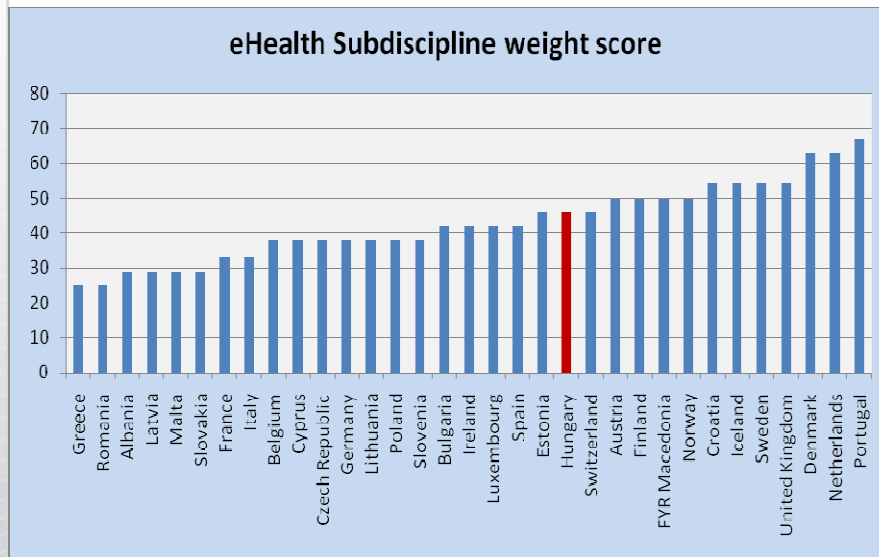
Methodology

Three main sources:

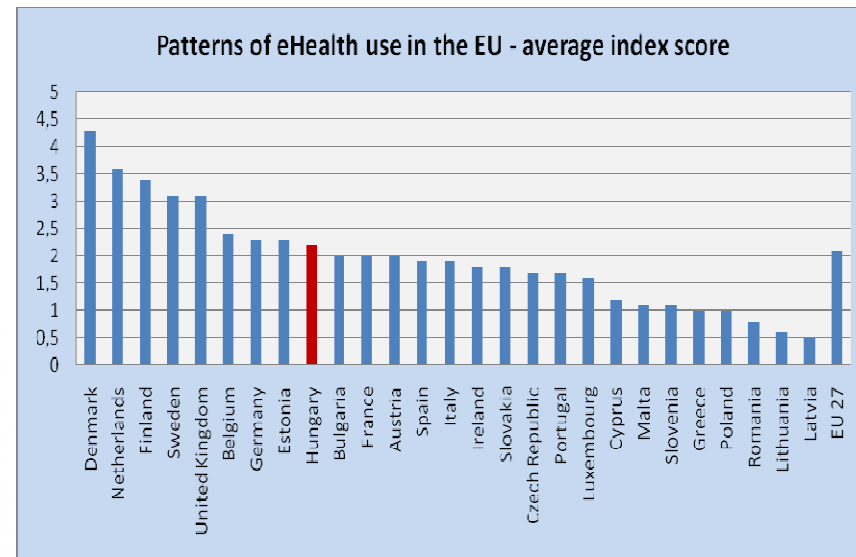
1. The present state of Hungarian eHealth services in international comparison (partly based on the empirical research presented in Sass, Fekó (2011)) and the relevant indicators of Hungarian regions were analysed through the available statistical data.
2. Questionnaire-based personal interviews conducted with patients of hospitals on the access to various types of health related information electronically (N=140).
3. In-depth interviews taken with doctors in hospitals (N=30). (we do not present the results of this part of the research in this presentation).



The present state of eHealth in Hungary



Source: Euro Health Consumer Index 2009 Report. Health Consumer Powerhouse.

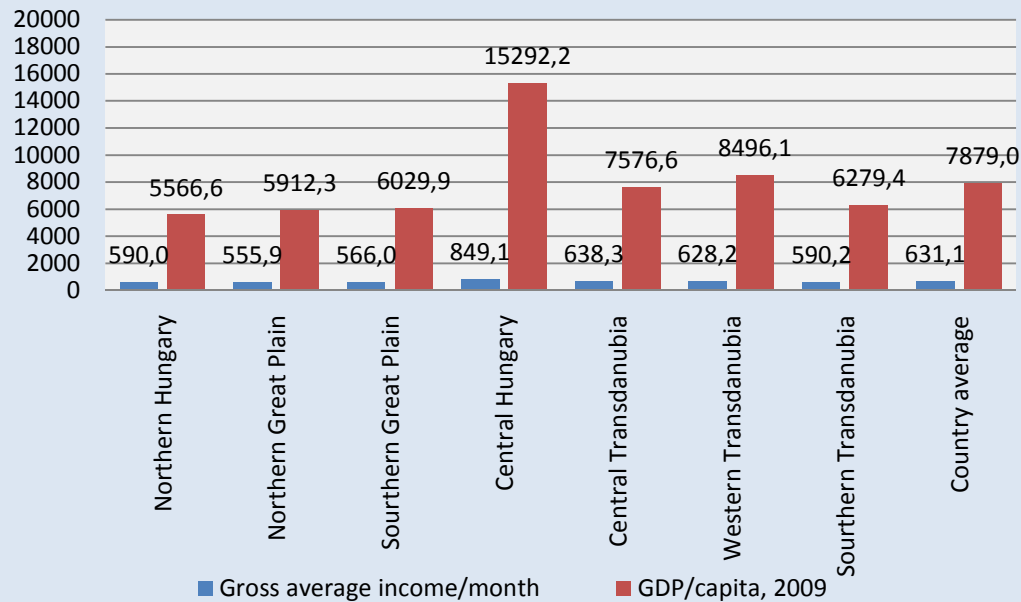


Source: Benchmarking ICT use among General Practitioners in Europe, Final Report, 2008. European Commission Information Society and Media Directorate General

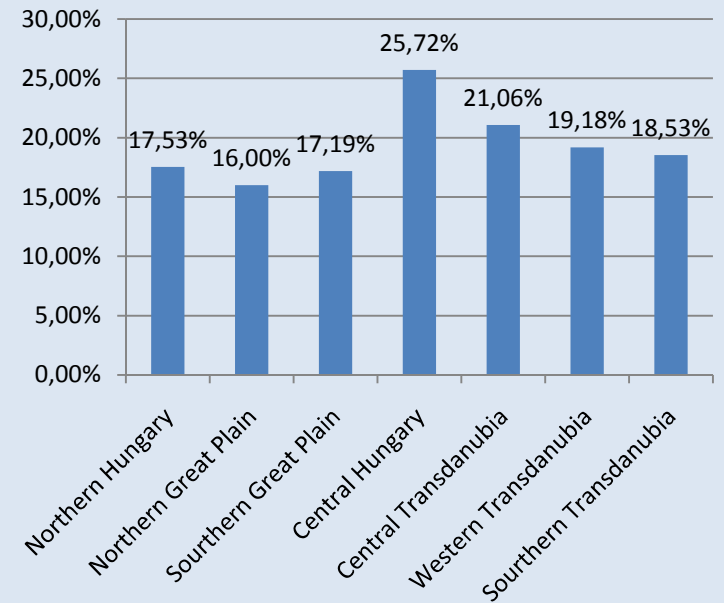


GDP per capita, gross average income, internet penetration in different regions of Hungary

GDP/capita per year and gross average income/month in 2009 (EUR)



Internet subscription/region's population, 2010 (%)



Source: Central Statistical Office of Hungary



Preliminary results – patients I.

Hypotheses:

- Large regional differences in eHealth, related mainly to differences in income, age, education, gender. This is translated into the various level of use of eHealth related services.

1. Computer and internet use

- Computer and internet usage and its frequency declines with age; gender differences are not significant in our sample.
- Computer and internet usage and frequency increases with the level of education and with income.

2. eHealth related results

- Significant regional differences in eHealth in Hungary, related mainly to the differences in computer and internet use.
- Regional differences: not significant between less and more developed regions, but significant between the capital (Budapest) and the countryside; reason: Budapest has the highest share of internet users, Is there a threshold level?



Preliminary results – patients II.

2. eHealth related results (continued)

- Only 20 % of the internet users accessed their health related data, they were among those who accessed the internet every day (39 % of the total sample is an everyday user).
- The main reasons for not accessing these data: many did not know about the possibility (47 % of internet users!) or were simply not interested in these data (11 %).
- Other type of health-related information in the internet were used by a relatively large number of people: information on the hospital (73 % of internet users), information on hospital services (53 %), consulting webpages on opinions about hospitals (30 %), information about doctors' availability (34 %), consulting webpages on opinions about doctors (21%); online fixing of appointment is very rare (4% of internet users).
- The majority of people would not mind if doctors would have access to all their health data (77 % of internet users); More than half of the sample (54 %, including those who do not use the internet) are for a nationwide central server, more than a third for a patient specific data storing (36 % of the total).



Preliminary conclusions

- The use of eHealth is at a relatively low level in Hungary (only 20 % of the internet users accessed their health data (10 % of the total sample), online fixing of an appointment is very rare)
- There are considerable regional differences in eHealth in Hungary, which is the most pronounced between the capital city (Budapest) and the countryside – thus we assume that there is a threshold level of development, which must be reached for moderating the income impact
- The frequency of eHealth activities (access to data and various types of information) is related to internet use, to various aspects of the digital divide (age, income and education), however, these were overwritten in certain cases, when there is a strong motivation and a helpful family or local environment – this points to the direct and indirect impact of education
- Gender aspects were negligible in our sample



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Thank you for your attention!

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