



Adult education on digital, health and data literacy for citizen empowerment

NATIONAL REPORT ROMANIA



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1 Introduction

Despite the steady rise in literacy rates over the past 50 years, there are still 773 million illiterate adults around the world, most of whom are women. These numbers produced by the UNESCO Institute for Statistics (UIS) are a stark reminder of the work ahead to meet the Sustainable Development Goals (SDGs), especially Target 4.6 to ensure that all youth and most adults achieve general literacy and numeracy by 2030. While middle- and low-income countries are struggling with these general literacy aspects, the European countries have a large percentage of their adult population classified above the target levels of literacy proficiency (e.g. International Assessment of Adult Competencies Level 1). However, in Europe, more than 90% of EU professional roles require at least a basic level of digital knowledge and skills, just as they require basic literacy and numeracy skills [1]. Yet, around 42% of Europeans lack basic digital skills, including 37% of those in the workforce [2]. Thus, digital literacy has become an important aspect in the continuous education of the EU work force, and not only.

The COVID-19 pandemic has accelerated the growth and usage of the digital technologies in the health domain, on one side bringing significant advances in health and wellbeing promotion through self-monitoring and faster/easier provision of digital health services, but on the other side exacerbating health inequalities and negatively impacting on the health literacy, in particular in the case of digitally illiterate adults. Health literacy [3] is a complex construct, covering three broad elements: (1) knowledge of health, healthcare and health systems; (2) processing and using information in various formats in relation to health and healthcare; and (3) ability to maintain health through self-management and working in partnership with health providers.

Digital and Health come in hand with Data, as the current digital transformation of the healthcare systems in Europe (and worldwide) is aiming at delivering person-centric data driven prevention and healthcare through new models, where medical experts are collaborating with health informaticians, data analysts, health data scientists and clinical information officers. Digital, Health and Data are becoming even more important in prevention and social and community care. Citizen-centred self-management of health, care and healthy behaviour provides an adequate answer to the expanding health care sector, thus supporting the sustainability of it. Citizens' enhanced digital and data skills enable them to take advantage of the further development of artificial intelligence for prevention and environmental measures. Thus, citizens must be able to understand data concepts, data handling (e.g. collection, monitoring, transfer, storage), and security and privacy aspects related to their personal and health data.

Health, digital and data literacy represent a basic combination of elements needed by the European citizens in order to better track, manage and improve their health and well-being through the use of digital tools. Because of the rapid digitalization of the healthcare system in Europe, citizens need to be proficient with their eHealth literacy skills and be sufficiently knowledgeable on the collection and sharing of digital data, as well as data privacy

regulations. Digital and data literacy of citizens is also important to assess what is happening with their data and which data protection measures they can take.

TRIO aims to empower citizens through the development of a modular approach of the trio of literacies (digital, health and data), creating and designing a manual, a toolkit and a Green Paper along with a platform that will ensure customization of content to different needs. The Manual, the first deliverable of the modular approach, will start by making a definition of the average levels of digital, health and data literacy of the three age groups in the partner countries; define the criteria and necessary skills for each group and level and understand the existing gaps. This will allow directing the learners in a bottom-up approach to look at the world with different eyes towards being in charge of their own health and well-being. Awareness will be given to contexts beyond the well-researched theoretical practices or general population approaches, to explore instead the personal perspectives of citizens, including them in the outputs, as well as the ones of policy makers.

Definitions:

- Digital literacy: refers to the skills required to achieve digital competence, the confident and critical use of information and communication technology (ICT) for work, leisure, learning and communication [4].
- Health literacy: empowers people to make positive choices. It implies the achievement of a level of knowledge, personal skills and confidence to take action to improve personal and community health by changing personal lifestyles and living conditions [5].
- Data literacy: is the ability to read, write and communicate data in context, with an understanding of the data sources and constructs, analytical methods and techniques applied. [6].

The TRIO project will focus on the overlapping areas, in particular the digital data and digital health (eHealth) categories. See picture #1.

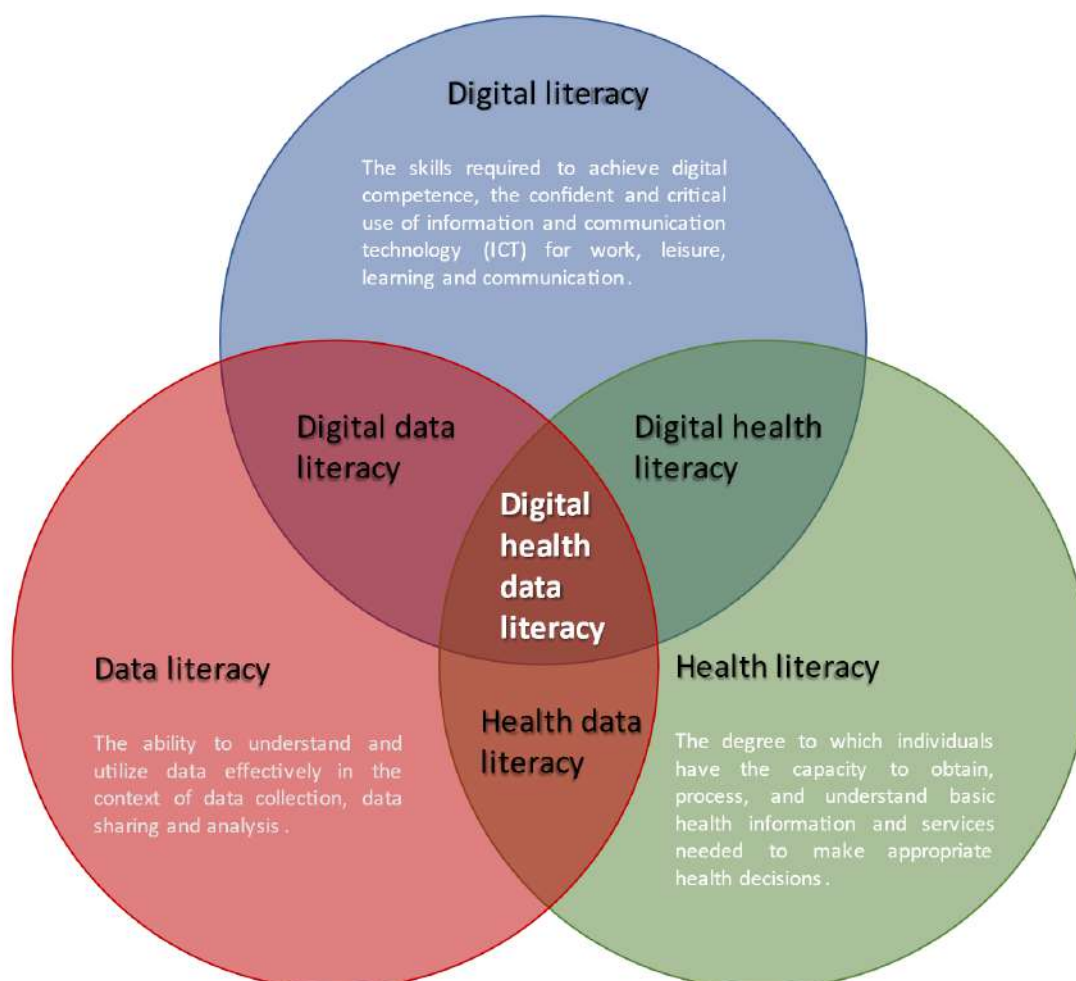


Figure 2. Ven diagram of TRIO literacies

1.1 Aim of the national report

The national report will be the basis for the TRIO Manual that will be released in March 2023. Target groups of the TRIO Manual are:

- Citizens of different ages and levels of education (18-35, 36-50 and 51+) by providing an integrated approach of the competences and skills on health, digital and data, empowering them to navigate in the eHealth world;
- Formal and informal educators by providing them with organised content to share with the citizens;

- Policy makers who will benefit from them to support improved person-centred health pathways.

The manual will act as a stand-alone output, but its contents will also be integrated in the TRIO educational platform with 3 main purposes:

- As preparatory material it will sensitise the learners to digital health and data sharing practices and impacts.
- As a publication disseminated at EU, national and local level, it will be a tool for eHealth-related stakeholders, and general public.

With its underlying data collection, it will serve to refine the educational features.

1.2 Methodology

In order to achieve the above-mentioned aims, the following methods will be applied:

- Desk research in each country concerning status (including quantitative data), main challenges and existing approaches to digital, health and data sharing literacy, best-practice examples as well as training settings and contents
- Interviews in each partner country with stakeholders, experts and representatives of the target group for the training. For the Romanian Informed Consent and Interviews questions see Annex 1.

2 Overview of the national or regional health system in Romania

2.1 Romanian healthcare regulations and financing

Healthcare in Romania is dominated by the public sector, which owns most of the hospitals and provides national health insurance to almost all Romanian citizens. The regulatory system has been generally considered stable and predictable over the past years. Basically, law no. 95/2006 regulates the Romanian public healthcare system, establishing its fundamentals [7]. According to the law, the public health system comprises all medical structures, public and private organisations, institutions and resources designed to prevent illness, to maintain, to improve and to restore the population health. The Ministry of Health as a specialized body of central public administration is the main authority in the field of public health care. Law no 95/2006 has suffered a series of amendments, with Law 08.08.2018 introducing the concepts around the patient electronic health record [8]. Government decisions are issued and amended each year for the approval of the framework

agreement regarding conditions for providing medical assistance in the social health insurance system, and for approval of national health programs, and enactments.

The main principles that govern the medical system in Romania include: (i) social responsibility for the public health; (ii) focus on population groups and primary prevention; (iii) preoccupation with health determinants (e.g. social, environmental, behavioural and health services); (iv) multidisciplinary and intersectorial approach; (v) active partnership with the population and with the central and local public authorities; (vi) decisions based on the scientific evidence existent at that moment (public health based on evidence); (vii) in specific conditions, fundamental decisions according to precautionary principle; (viii) decentralization of the public health system; (ix) existence of an integrated informational and computerized system for public health management [7].

Romania operates a compulsory social health insurance system with strong state stewardship, in order to cover the healthcare needs of the population, counting 19.12 million individuals in 2021. All citizens that are in the workforce, or have income over 50% of the established minimum annual salary, are mandatorily paying public health insurance. Some vulnerable population groups are exempt from making direct contributions (e.g. unemployed people, retired people and people on social benefits), and their contributions are paid by the state budget. The law does not contain specific provisions for foreigners and in principle, third country nationals with residence (temporary or permanent), as well as persons who obtained a form of protection in Romania can access the Romanian public healthcare system in the same conditions as Romanian citizens, enjoying the same rights and having the same obligations. Any private health insurance is compulsory, on top of the public health insurance. The public healthcare plan fully covers the standard health care in all organisations of the public health system and some predefined percentage of medication cost, based on approved and continuously updated lists of medications and health conditions. Despite the compulsory health insurance system, approximately 11% of the population remains uninsured, particularly in rural areas, while these people are entitled to a minimum benefits package that covers life-threatening emergencies, infectious diseases and health care during pregnancy, according to the Romanian National Health Insurance organization (CNAS – Casa Națională de Asigurări de Sănătate)¹.

Health spending in Romania increased in the last decade, but remains the second lowest in the EU (see Figure 2) as a whole, both as a share of GDP and per capita [9]. The cost of healthcare in Romania in 2021 was EUR15.6 billion in total, or EUR820.56 per person, and respectively 5.9 percent of GDP. Government healthcare spending, which made up 78.5 percent of this total, is greater than in other Eastern European markets like Russia, Moldova, and Ukraine, but slightly lower than in countries like Croatia. About 44% of health spending was allocated to inpatient care in 2019, which is the highest proportion among EU countries. Despite attempts to promote primary care, the amount of health spending dedicated to

¹ <http://cas.cnas.ro/hih/page/categorii-de-asigurati.html>

primary and ambulatory care (18.6%) is the second lowest in the EU (behind Bulgaria). In 2018-19, Romania established new screening programs, yet per capita spending on prevention is the second lowest in the EU. Although the public share of health spending is high and in line with the EU average, out-of-pocket payments are above the EU average and are dominated by outpatient pharmaceutical costs.

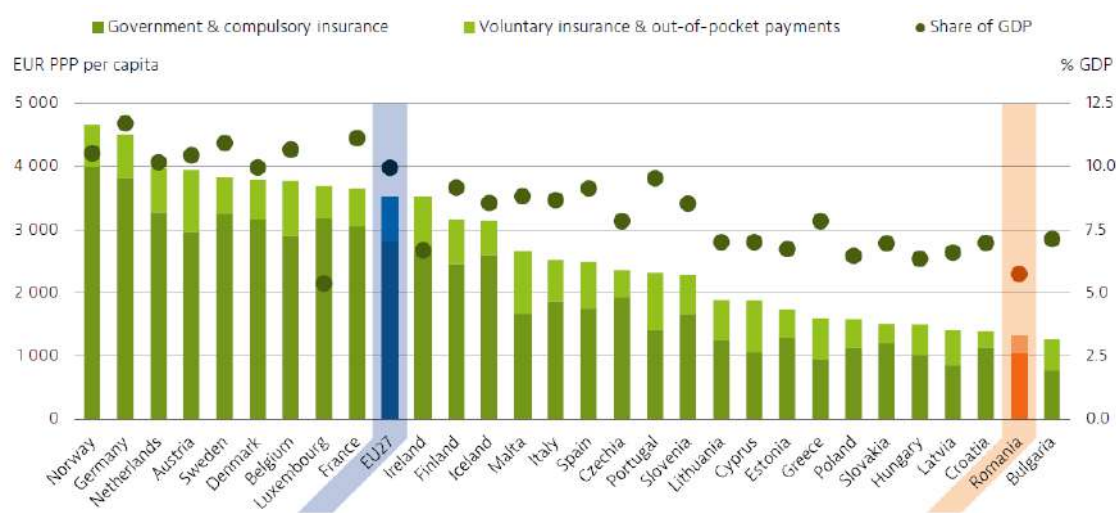


Figure 2. Health spending per capita in Romania is among the lowest among EU countries [9].

2.2 Accessing the Romanian medical system

Excluding emergency care, the Romanian acute and outpatient hospital and mental care can only be accessed by first going to the Family Doctor, who is usually a general practitioner offering services in the proximity of patient residential area. The Family Doctor functions as a gatekeeper, as it will provide the patient with a prescription for any specialized care services or further investigations and treatment. It is compulsory for the beneficiaries of the Romanian public insurance systems to be registered to a Family Doctor. The Romanian health system is built around the central administration and then around the staff. The patient or their representatives are powerless to influence the system they are funding. Medical services, public or private, are fully available in all medium and big cities in the country. However, in the rural area, the situation is different, as over half a million Romanians (2.5% of the total population) don't have easy access to a family doctor (e.g. in the proximity of their residential area). Although self-reported unmet needs for medical examinations had declined by more than half between 2011 and 2019, teleconsultations were not used, not even during the pandemic, as widely as in other EU countries [9].

2.3 Personal medical data

Although Law 08.08.2018 provides the legal framework for the implementation of the patient electronic health record, the only existing version of the Electronic Health Record

[11] at a national level has been released in November 2021 as a test environment and it only implements a section related to “emergency medical data”. In the absence of a national health information system, medical information of patients in Romania is digitally stored in a fragmented approach, in the local health records of the healthcare providers. The patient is the sole person responsible for keeping track and copies (e.g. paper copies of blood test results, CDs/DVDs of CT scans, etc.) of their medical data.

2.4 The digitalisation of the Romanian healthcare system

The health system in Romania has undergone multiple changes in regard to the introduction of the digital information systems in the last 30 years. The vast majority of the healthcare units are currently equipped with a range of IT solutions and the necessary communication and information technologies, but despite this, there is an insufficient share of information on patient status and treatment history, caused by a lack of standardization and interoperability [10]. Sharing of information between providers is limited and, in many cases does not take place at all or only for a totally insufficient purpose. Therefore, the issue of managing and exchanging medical information and documents is an important topic for Romania’s future eHealth strategy. Even if there are several developed solutions on the market, for an exchange of medical information systems and regional data exchange, the possibility of interconnecting these systems is limited, and there is no state-guaranteed alternative to ensure an accessible, safe and secure environment for the exchange of medical information.

In November 2020, the Ministry of Health announced the development of a proposed eHealth Strategy, yet to be approved and implemented. In conclusion, the Romanian Health Information System is characterized by: fragmentation, limited communication between health information system players, duplication of data, no interoperability of existing data bases, and weak access of patients to information.

3 Overview of digital, health and data literacy in Romania

3.1 Statistics on digital, health and data literacy

3.1.1 Digital literacy

Romania is ranked very poorly among the European countries in regard to digital literacy, being on the last places with Albania, Bulgaria and Turkey, and only ranking actually higher as compared to Albania (see Figure 3). According to the data gathered by the European statistical office Eurostat in the year 2021, 28% of the Romanian population between the ages of 16 to 74 was determined to have basic or above basic digital skills [12]. While a small

increase of this percentage was noticed between 2015 and 2019, namely from 26% to 31% [13], it is noticeable that between 2019 and 2021 there was a decrease (from 31% to 28%) in the percentage of people having basic or above basic digital skills. As such, Romania is very far from achieving the European target in digital proficiency, which is set at 80% by 2030 [14]. The comparison of the situation in Romania with the average of the European Union countries shows that all age groups are behind when it comes to digital skills, but particularly individuals in the older age groups (e.g. aged 55+) have significantly less basic digital skills (see Figure 4). The situation for individuals aged 75+ is not clear, as data are missing. However, when looking at the gender comparison, as shown in Figure 5, it appears that women have significantly less digital skills in particular in younger ages.

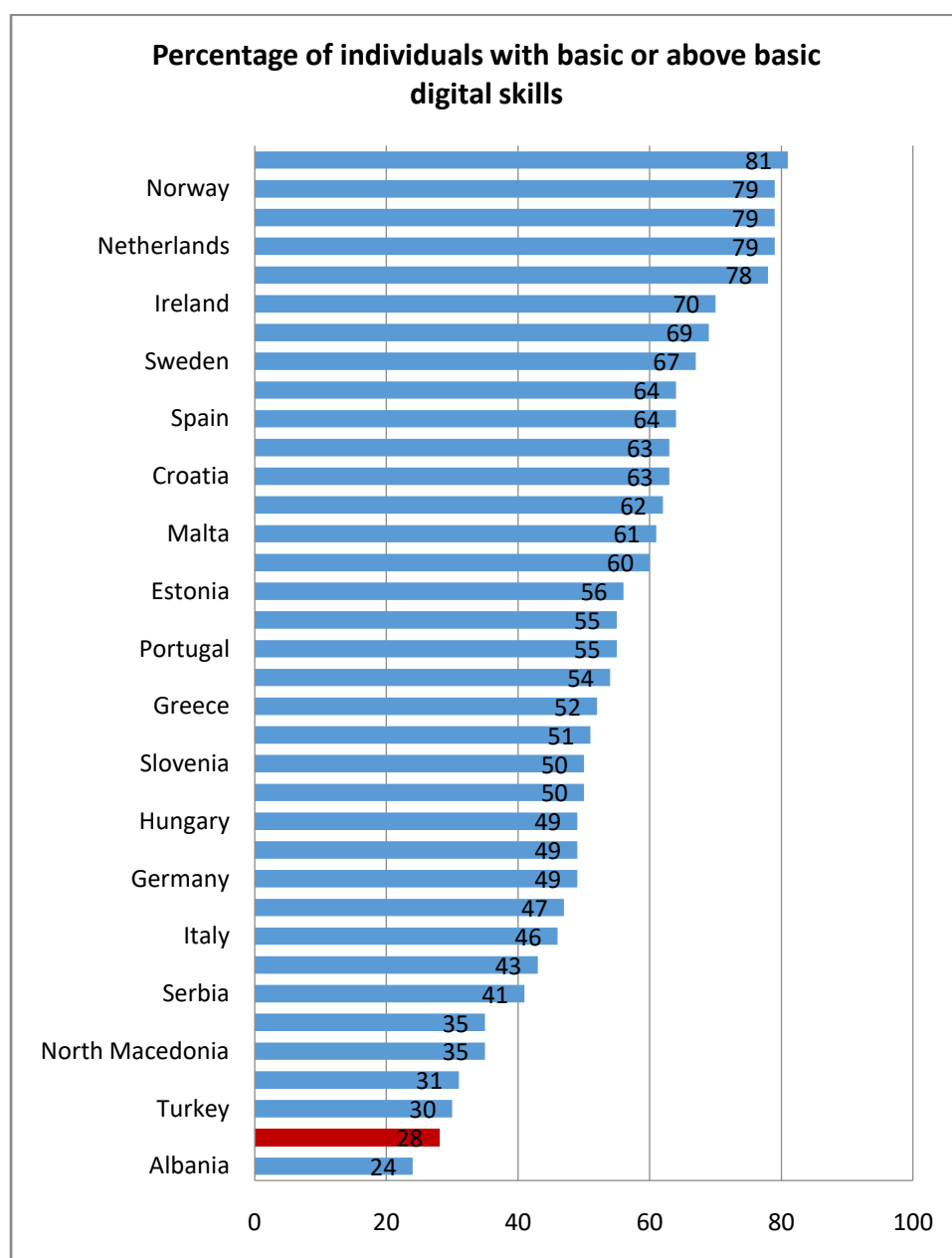


Figure 3. The percentage of individuals with basic or above basic digital skills in every European country in 2021 [12].

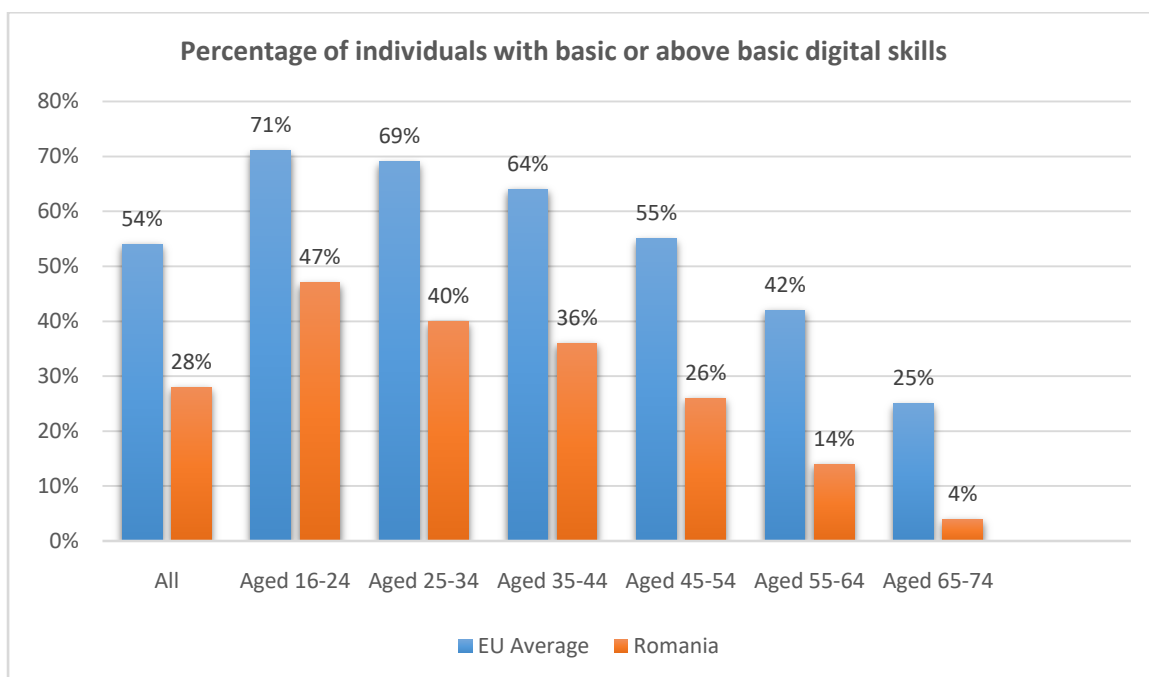


Figure 4. The percentage of individuals with basic or above basic digital skills per age group in EU and Romania in 2021 [12].

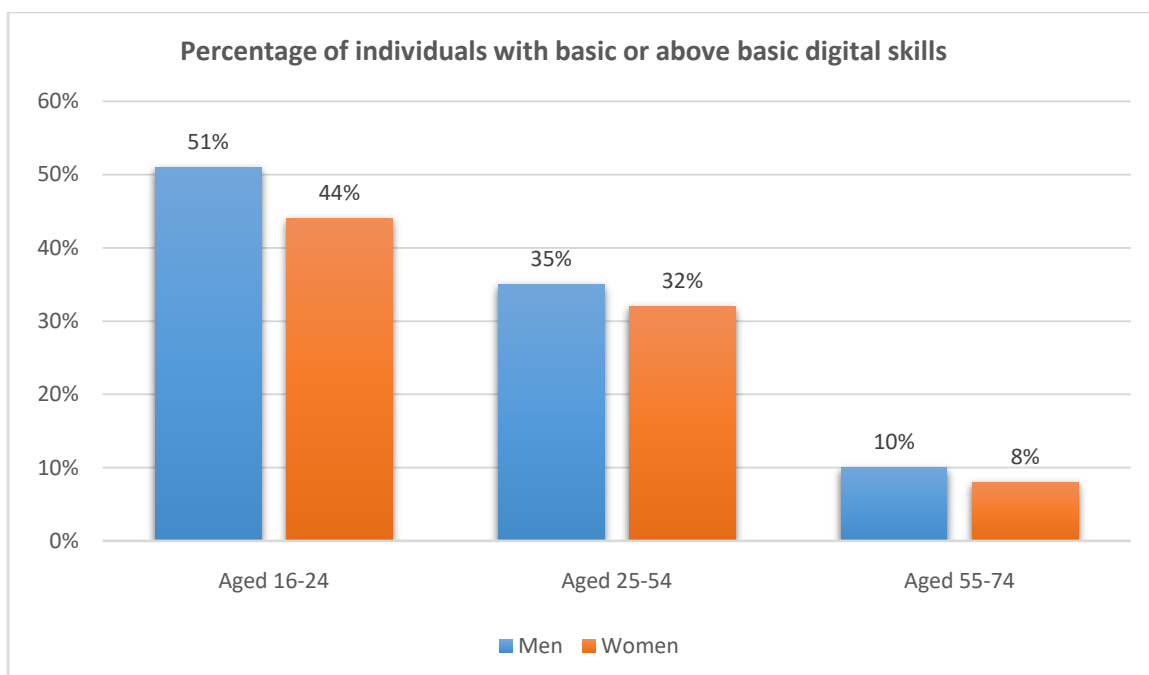


Figure 5. Digital skills of men and women in separate age groups in the year 2021 [12].

Romania's internet infrastructure is highly developed and competitive, the fast broadband coverage reaching the EU average. The share of households with internet access in Romania continuously increased over the last years, having reached a peak in 2021 with 89% of the

households having internet access [15], as shown in Figure 6. While more than 90% of individuals aged 16-24 are using the internet on a daily basis, this percentage drops significantly with age (see Figure 7), with only 25% of the individuals aged 65-74 using the internet daily [16]. No data were found for individuals aged 75+.

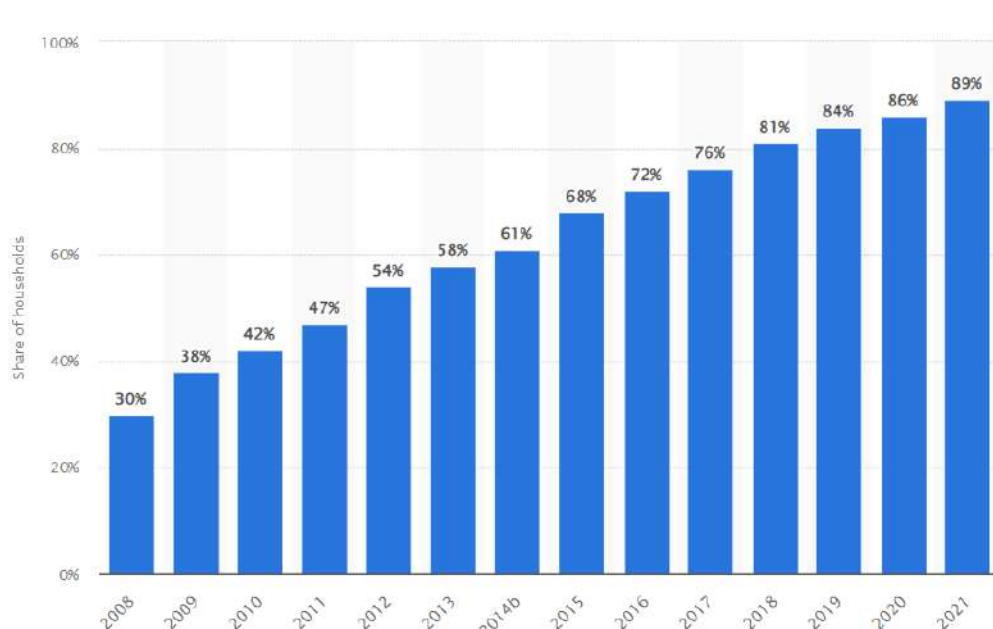


Figure 6. Share of households with internet access in Romania from 2008 to 2021 [15].

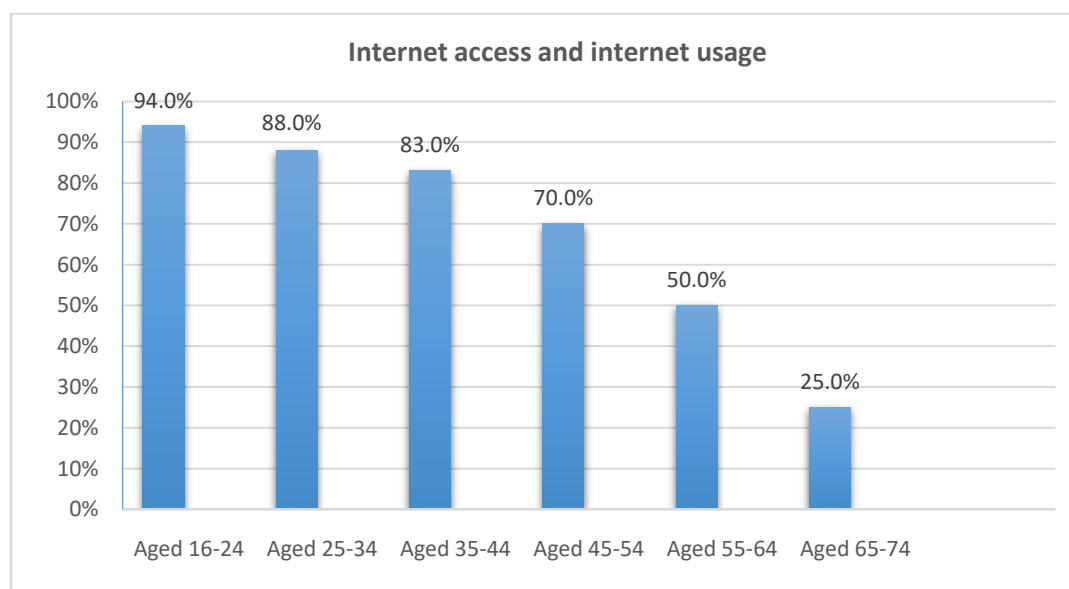


Figure 7. Percentage of individuals that use the internet daily per age group in 2021 [16].

The already low level of digital skills of the Romanian population is strongly influenced by various socio-economic variables (see Figure 8). It is noticeable that only 13% of the individuals with a low formal education have basic or above basic digital skills, as compared to 67% of the individuals with a high formal education. There is also a big disparity in regard

to the employment status, as only 8% of the individuals that are retired and out of the labor market have basic and above basic digital skills as compared to 35% of the employed individuals. A significantly higher percentage of individuals with digital skills is found among students, who are basically young people. Disparities exist also in regard to the residential setting, as only 18% of individuals living in rural areas have digital skills as compared to 38% of the individuals living in cities. Statistical data could not be found for Romania in regard to the place of birth and income socio-economic variables.

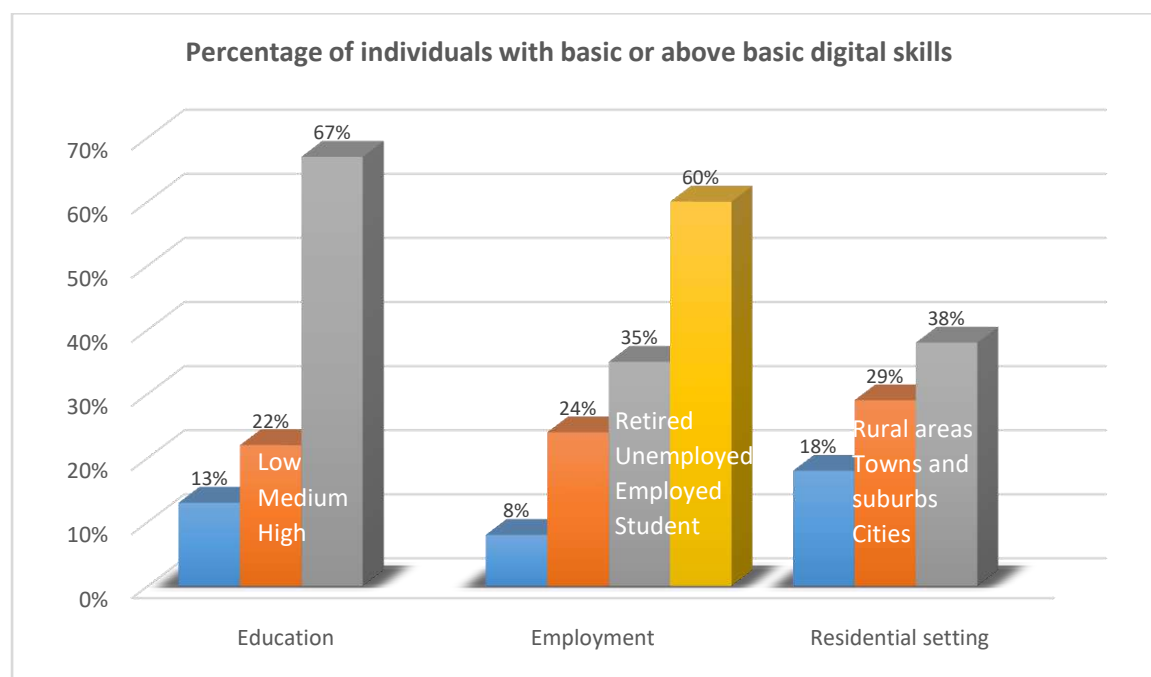


Figure 8. Digital skills per socio-economic variables in 2021 [12].

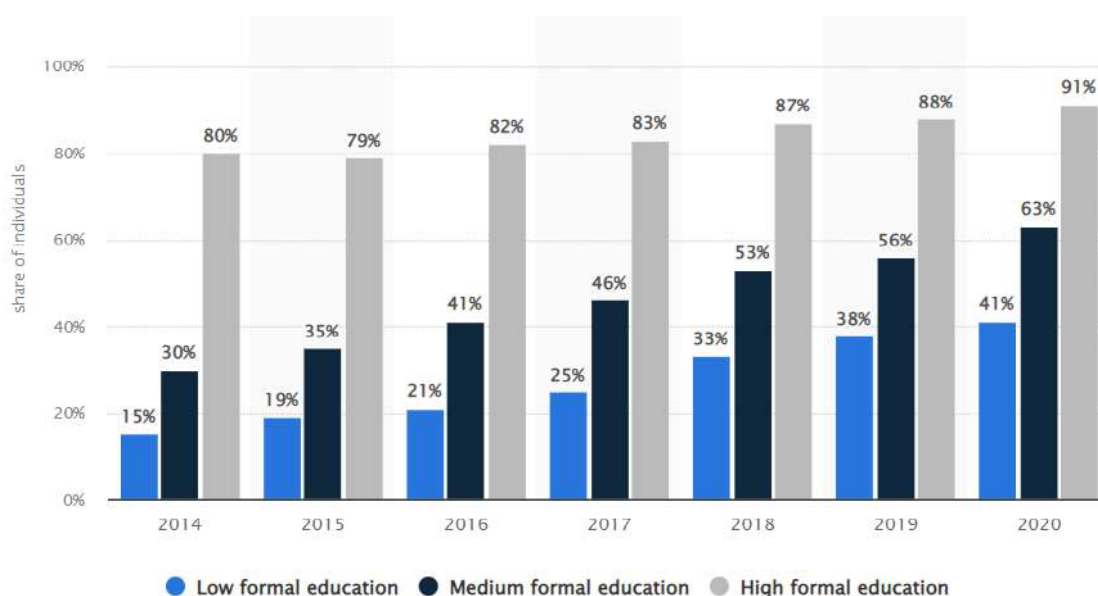


Figure 9. Internet use between 2014 and 2020 by education level [16].

While there has been a steady increase of internet use (e.g. during the last 3 months) by all individuals between 2014 and 2020, there is still a big disparity in internet use in relation to the education level of the individuals [16]. Namely, only 41% of the individuals with low formal education are using the internet as compared to 91% of the individuals with high formal education in 2020 (see Figure 9).

The recently published Digital Economy and Society Index (DESI) of Romania for 2021 further demonstrates that Romania is far beyond the European Union countries in regard to digitalization, as Romania is ranking on the 27th position (last) among the EU member Member States [17], as seen in Figure 10 and Figure 11.

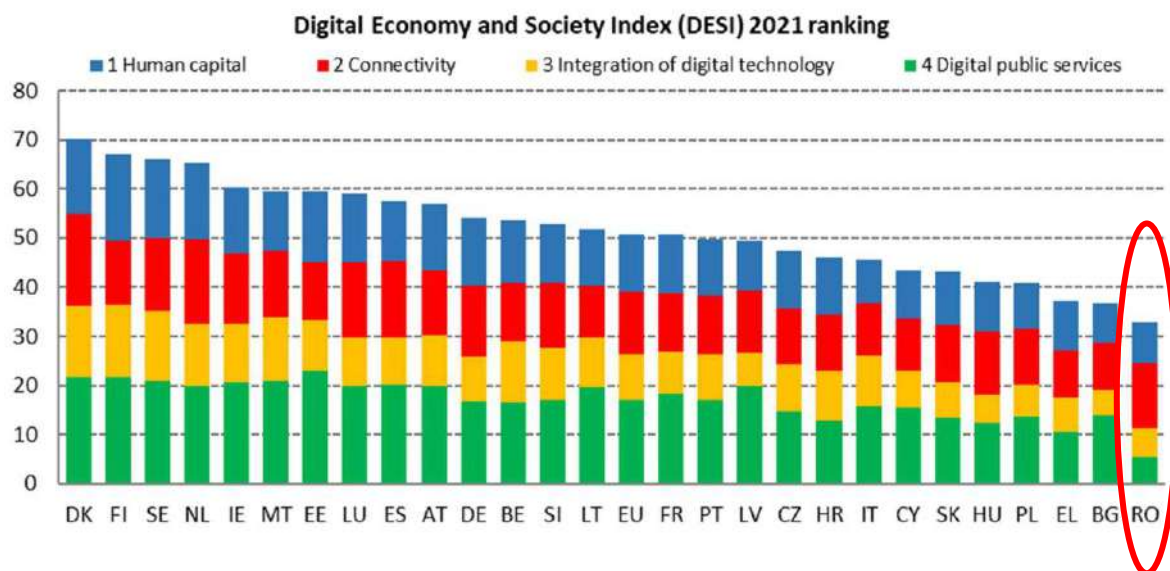


Figure 10. Digital Economy and Society Index (DESI) 2021 ranking [17]

The DESI ranking shows that Romania is well below the EU average on 3 of the the 4 dimensions taken into account to calculate the DESI, namely: ranking 26th in regard to Human capital, ranking 25th in regard to Integration of digital technology, and 27th in regard to Digital public services. The only dimension in which there is good progress concerns the Connectivity, Romania ranking 10th, and this is due to the fact that the infrastructure was mostly developed by the private mobile companies (e.g. fast broadband coverage, 4G coverage, 5G readiness, etc.) in particular in the urban areas.

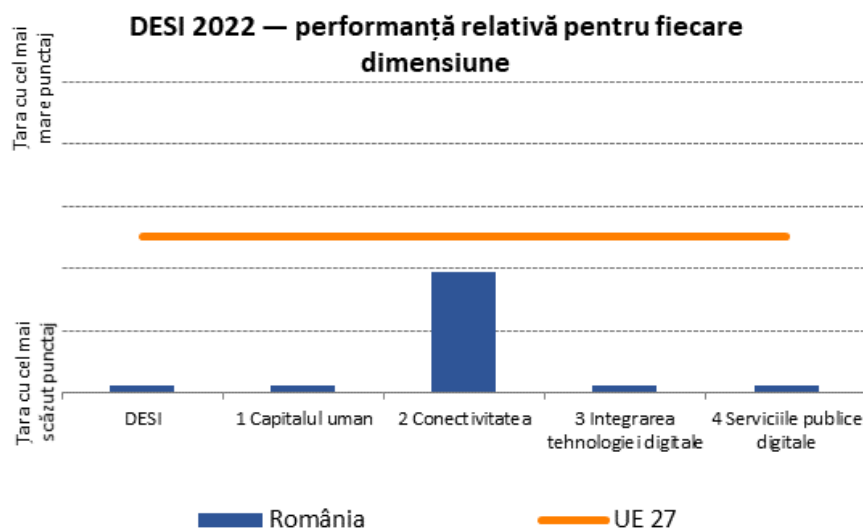


Figure 11. DESI relative performance for each dimension in relation to the average of the 27 UE Member States.

3.1.2 Health literacy

Health Literacy has become an important concept in today's health preventive approaches of modern society, and research has shown that low levels of Health Literacy are leading to overall poorer health, more hospitalizations, greater use of emergency services, low treatment compliance and adherence, poor ability to communicate with the medical provider and to understand medical and health information, poorer vaccine compliance and poorer adherence to screening procedures [18]. As such, there is a constantly growing interest in Health Literacy in Europe and all over the world, in an attempt to integrate health literacy promoting actions in the various settings of everyday life: at home, in the community, at the workplace, in the health care system, in the educational system, in the marketplace and in traditional and social media.

Contrary to the growing interest at European and international level and despite its importance for the health care and public health sectors, Romania is far behind the European countries in regard to establishing procedures, assessing and monitoring health literacy, with official empirical data on health literacy being almost inexistent. The research on health literacy in Romania is not only scarce, but also not aligned with the standards developed at EU level.

A first relevant study [20], which aimed at assessing eHealth skills across Europeans, measured eHealth skills via five questions: (i) knowing how to seek the internet for health information; (ii) knowing where to find reliable health online sources; (iii) understanding the terminology of health online information; (iv) being able to identify the quality of the health information found online; and (v) knowing how to use it. Each item is measured on a 4-point scale from: (1) 'totally disagree' through (4) 'totally agree'. The study overall only reports on cumulative results at European level on the five investigated aspects. The national

distributions of Europeans' self-reported skill are only explicitly presented in regard to the first question, namely surfing the Internet to find health information (see Figure 12). On this particular question, the distribution for Romania shows a high number of individuals (62%) totally agreeing on having this search skills and only a small percentage (6%) disagreeing. However, this study has a number of limitations: (1) the sample of the stud was rather small, with only 13078 interviews being completed for all 27 countries (e.g., less than 500 interviews in each country); (2) the sample is not representative for the entire population, as only individuals that were using the internet and have searched online for health information were selected to participate to the study; (iii) the study does not provide sufficient depth in order to reveal important divides between socio-demogrpahic groups; (iv) the study is already outdated, as the interviews were performed in 2014.



Figure 12. Individuals' self-assessment of eHealth skills on knowing how to navigate the Internet to find health information by country [20].

The first non-experimental, cross-sectional study of health literacy in Romania, aimed at validating the short version with 16 questions of the European Health Literacy Survey Questionnaire (HLS-EU-Q16) [21] for the Romanian population and exploring the predictors of Health Literacy in a sample of population from the North-West Region of Romania [22]. The tool measures general health literacy considering its four core competencies (find,

understand, appraise and apply health information) in three domains (health care, disease prevention and health promotion) and the study was conducted on a representative sample of participants within 5 regions of Romania, with 43 cities and villages being randomly selected.

On a scale from very easy to very difficult, how easy would you say it is to...	Very difficult	Fairly difficult	Fairly easy	Very easy
	%	%	%	%
1. Find information on treatments of illnesses that concern you?	3.1	15.5	51.3	30.1
2. Find out where to get professional help when you are ill?	2.5	14.7	44.2	38.6
3. Understand what your doctor says to you?	1	9.8	46.7	42.4
4. Understand your doctor's or pharmacist's instruction on how to take a prescribed medicine?	0.6	4.7	46.2	48.5
5. Judge when you may need to get a second opinion from another doctor?	3.5	20.2	45.3	31.1
6. Use information the doctor gives you to make decisions about your illness?	0.5	5.7	50.4	43.4
7. Follow instructions from your doctor or pharmacist?	0.7	7.2	44.9	47.2
8. Find information on how to manage mental health problems like stress or depression?	5.5	25.0	43.8	25.6
9. Understand health warnings about behavior such as smoking, low physical activity and drinking too much?	0.7	5.7	37.8	55.8
10. Understand why you need health screenings?	0.9	6.3	34.2	58.7
11. Judge if the information on health risks in the media is reliable?	7.6	31.1	40.3	21.0
12. Decide how you can protect yourself from illness based on information in the media?	21.6	43.0	25.2	10.3
13. Find out about activities that are good for your mental well-being?	5.9	26.1	44.1	23.8
14. Understand advice on health from family members or friends?	4.4	15.8	46.4	33.3
15. Understand information in the media on how to get healthier?	7.3	25.4	46.0	21.3
16. Judge which everyday behavior is related to your health?	0.9	9.2	52.4	37.4

Figure 13. Health literacy survey responses, SWEETCONOMY Project, Romania, 2018-2021 [22]

The results demonstrated that a very large percentage (21.6%) of the respondents found it very difficult to protect themselves from illness based on the health information from the media. Relatively high percentages of “very difficult” answers are also observed for other questions relating to assessing health information from the media as well as relating to mental health issues. On the other hand, high percentages of respondents declared to find it very easy to understand why health screenings are needed (58.7%), to understand health warnings about different behaviours (55.8%), and to understand the doctor’s and pharmacist’s instructions (48.5%). The main conclusion of the study regarding health literacy levels of the studied population is that while 7.5% of the participants have an inadequate level of health literacy and 33.2% have a problematic level, there is a quite large portion of the population that has a sufficient level of health literacy (59.2%). The same study identified age, gender, education and self-reported health status as main determinants of Health Literacy, while residential area was not associated with Health Literacy. Males, older people, people with lower levels of education, and people that rate their health as not very good have lower levels of health literacy.

When comparing the status of eHealth skills of Romanians to the Europe average, the Eurostat statistics [23] shows that there are fewer individuals in Romania (e.g. 40% in Romania as compared to 55% in EU) that is using the internet to seek health information, as shown in Figure 14. This gap is visible for all age groups. The same source [23] shows that gender is a significant determinant, as females are using more (49%) the internet to look for health as compared to males (31%). Education also plays a key role, as only 17% of low educated individuals are using the internet to seek health information as compared to 41% of individuals with medium education and 66.5% of individuals with high education.

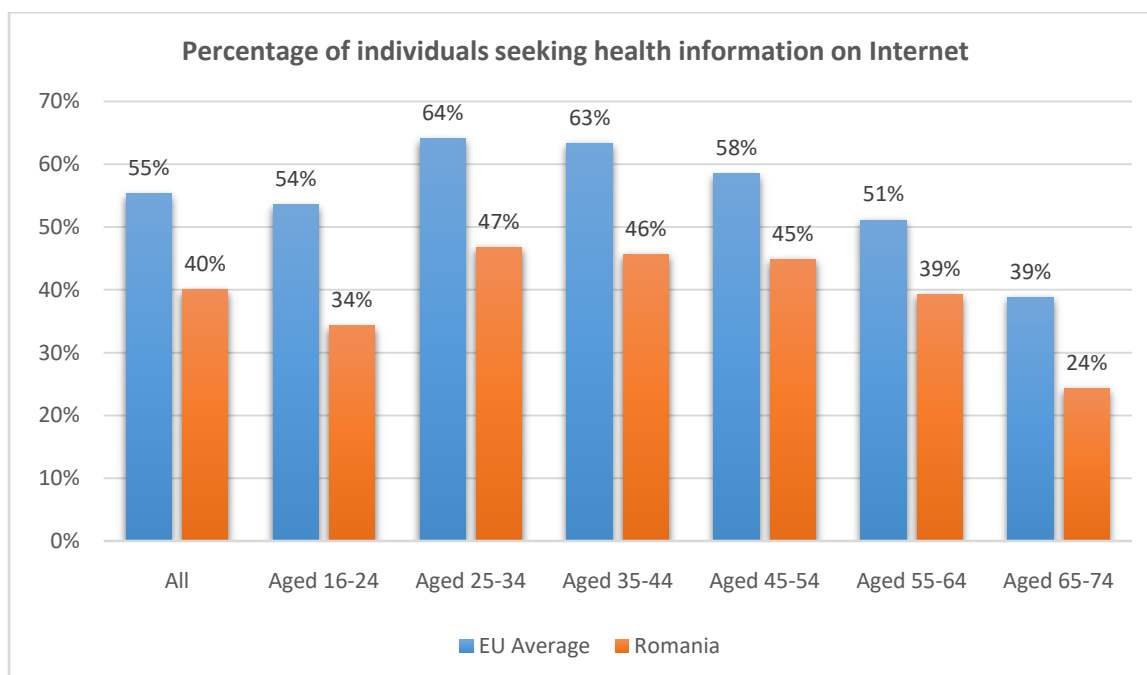


Figure 14. The percentage of individuals using the internet for seeking health information per age group in EU and Romania in 2021 [23].

3.1.3 Data literacy

Information and data literacy rates in Romania are very low (48%), being on the last place in this regard among the European countries, very close to Albania (49%) and Bulgaria (51%) [24]. While gender does not influence the data literacy skills of individuals much, age is an important determinant, as for individuals aged 55-74 there is a drop of almost 20% in regard to information and data literacy skills (see Figure 13). Furthermore, when other socio-economic variables are examined, there are significant disparities between various groups of individuals. In particular, individuals with a low or medium education level, who are retired or unemployed, and those living in rural areas or suburbs have very low information and data literacy skills (see Figure 16). Only highly educated individuals have information and data literacy skills which are above the European Union average (68%) and closer to the average of top rated countries (e.g. Netherlands -89%, Norway – 95%).

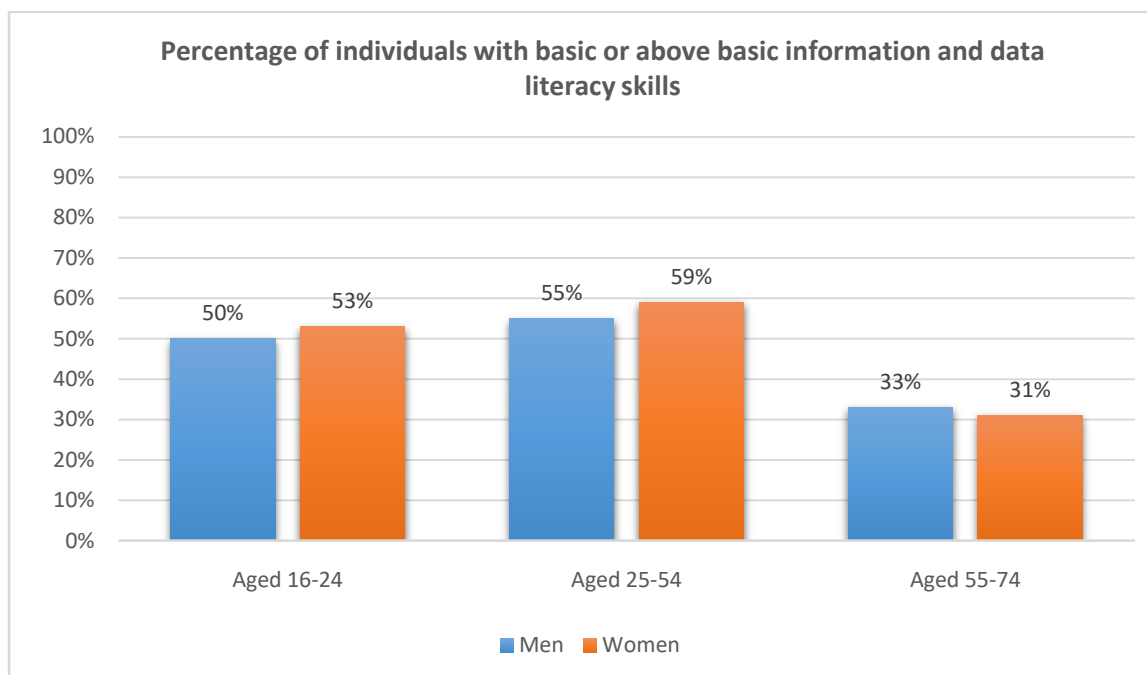


Figure 15. Information and data literacy rates in Romania per age and gender in 2021 [24].

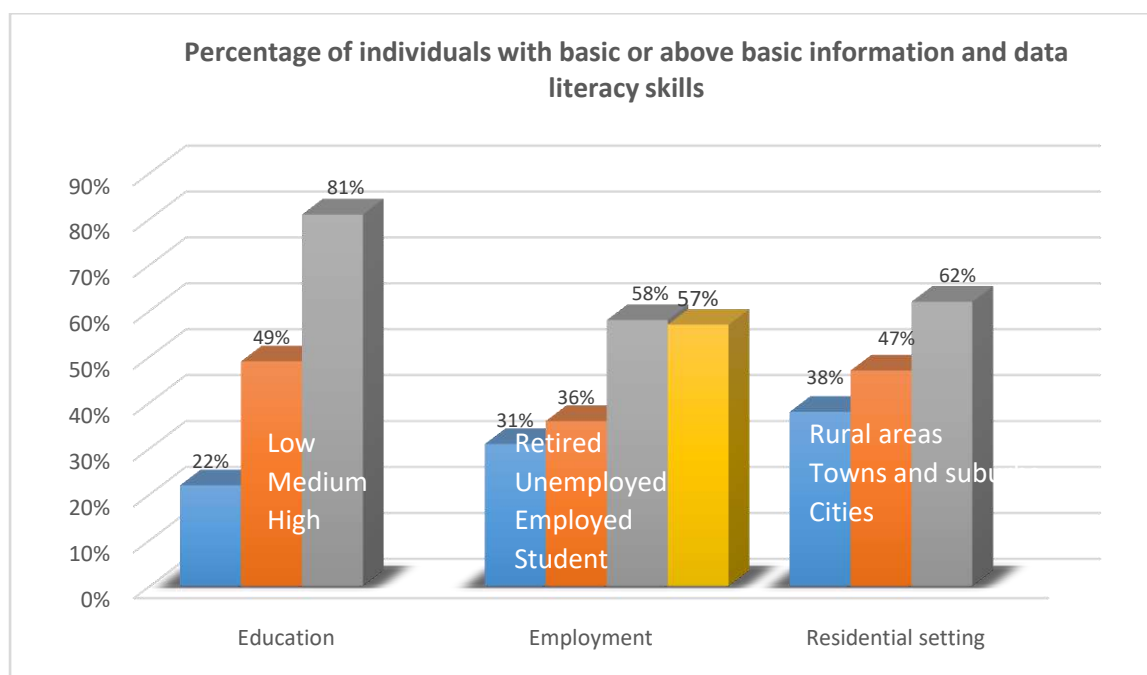


Figure 16. Information and data literacy per socio-economic factor (education, employment and residential setting) in 2021 [24].

Digital data security and safety skills are also very low for the Romanian citizens, with only 48% having basic or above basic safety skills as compared to the average of 68% of people living in the European Union in 2020 [24]. While for younger ages (e.g., individuals aged 16-24 and 25-34) the gap between the average European Union safety skills and the respective

skills of the Romanian people is approximately 15%, for older ages this gap is further increasing, and reaches a 26% difference for individuals aged 65-74. No figures are available for individuals aged 75+.

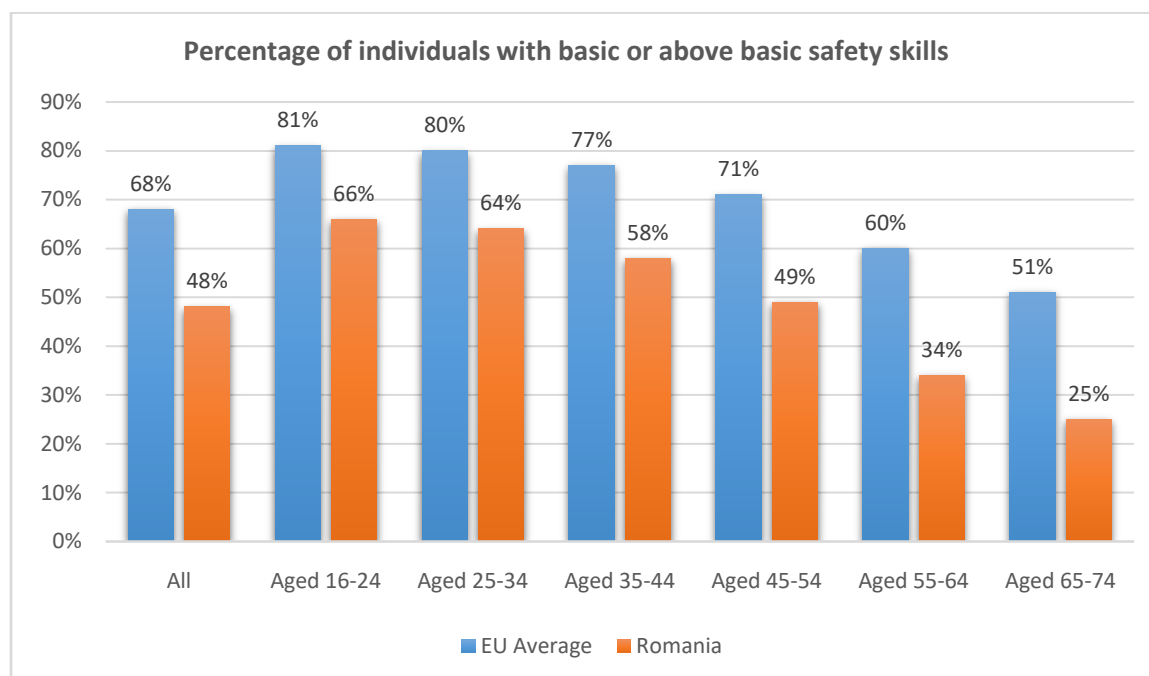


Figure 17. Individual with basic or above basic safety skills in Romania and the European Union in 2020 [24].

Table 1. Percentage of individuals that secure their personal data online by age group in 2021 [25].

Age	Digital data security by percentage of individuals (2021)			
	Individuals that know cookies can be used to trace movement of people on the internet	Individuals that ever changed the settings in their internet browser to prevent or limit cookies on any of their devices	Individuals that checked that the website where they provided personal data was secure	Individuals that refused allowing the use of personal data for advertising purposes
16-24 years	71%	24%	10%	42%
25-34 years	66%	20%	10%	41%
35-44 years	60%	18%	8%	37%
45-54 years	47%	11%	5%	29%
55-64 years	24%	5%	2%	19%
65-74 years	15%	2%	1%	9%
Total	49%	14%	6%	29%

When it comes to digital data security skills, younger people (e.g., aged 16-24, 25-34 and 35-44) are overall well aware that cookies can be used to trace movement of people on the internet and have refused to some degree the use of personal data for advertising purposes.

A significant drop is noticed for older individuals, as among those aged 65-74, only 15% are aware that cookies can be used to trace the movement of people on the internet and only 9% have refused the use of their personal data for advertising purposes. Extremely lows are the percentages of Romanian people of all ages that have changed the settings in their internet browser to prevent or limit cookies on any of their devices and that have checked that the website where they provided personal data was secure.

3.2 Statistics on societal and economic impacts

3.2.1 Health and wellbeing

The health preventive approaches have resulted in an increase of life expectancy in the EU countries over the past decades, reaching 81 years in 2018 in the EU as a whole, but still remaining at only around 75 years in Bulgaria, Latvia and Romania [19], as shown in Figure 18. Gender differences are present, the boys being expected to only reach 72 years, while girls 79 years on average. Romania has very high rates of avoidable deaths from both preventable and treatable causes (see Figure 19), which could be avoided through public health and primary prevention interventions [9]. In the same report, survey data shows that Romania has extremely low rates of breast cancer screening, with only 9% of Romanian women aged 50-69 having reported accessing breast cancer screening in 2019 (the EU average is 57%) and only 5% of those aged 50-74 had been screened for colorectal cancer at least once in their life (the EU average is 47%).

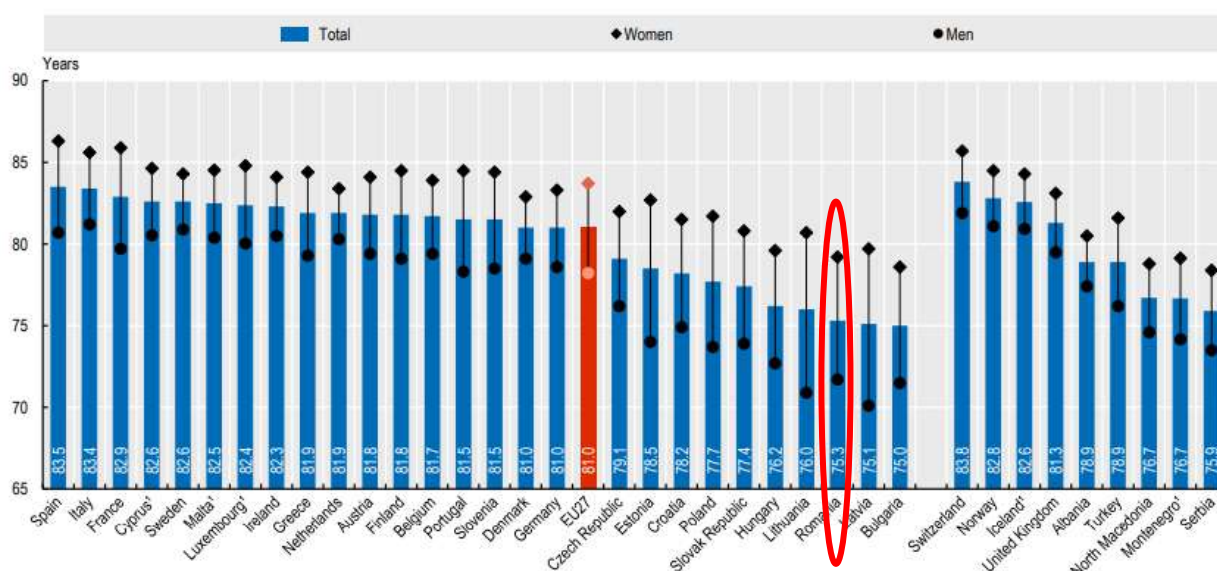


Figure 18. Life expectancy at birth, by gender, 2018 [19].

Almost half of all deaths in Romania in 2019 can be attributed to behavioural risk factors, including tobacco smoking, unhealthy diet, alcohol consumption and low physical activity

[9]. In particular, unhealthy diets, including low fruit and vegetable intake and high sugar and salt consumption, were implicated in a quarter of all deaths in 2019, and tobacco consumption (including second-hand smoking) contributed to an estimated 17% of all deaths.

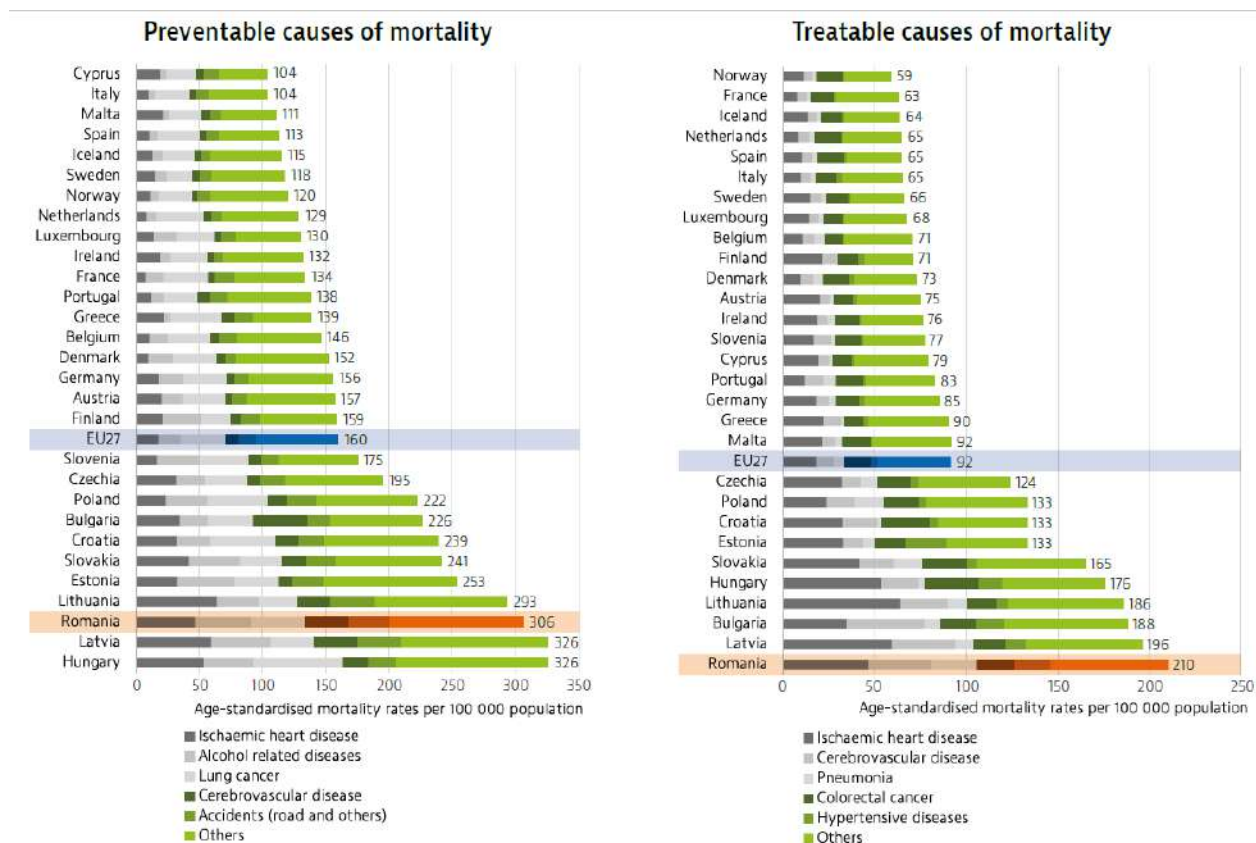


Figure 19. Avoidable deaths from preventable and treatable causes, Romania, 2021 [9].

Life expectancy by residential setting in Romania (see Figure 20), shows that there has been a steady increase both for the rural and urban areas, but there is a significant difference of 3 years between the two [26].

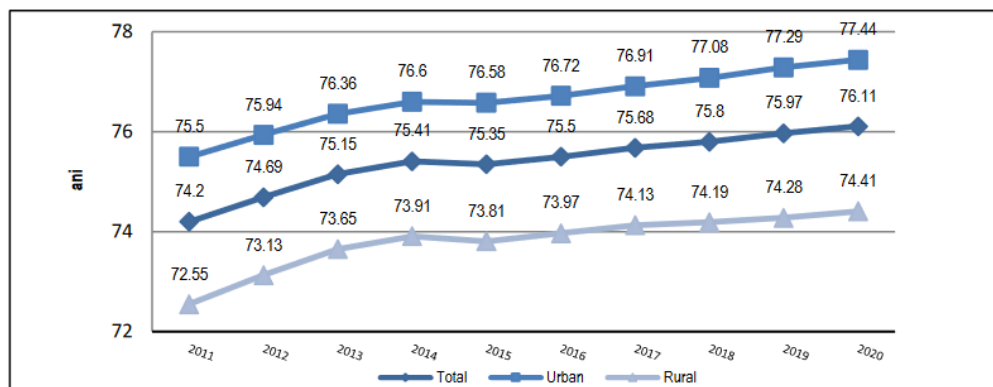


Figure 20. Life expectancy at birth by residential setting in Romania from 2011 to 2020 [26].

3.2.2 Participation in society

Romania records the lowest score in regard to participation in society as compared to the European Union countries [27], as only 6% of Romanian individuals declare they that participate to social activities on a monthly basis in 2016, as compared to approximately 30% of Europeans. Furthermore, while for many countries there is a significant increase in social engagement, this percentage has been constant for Romania between 2011 and 2016 (see Figure 21).

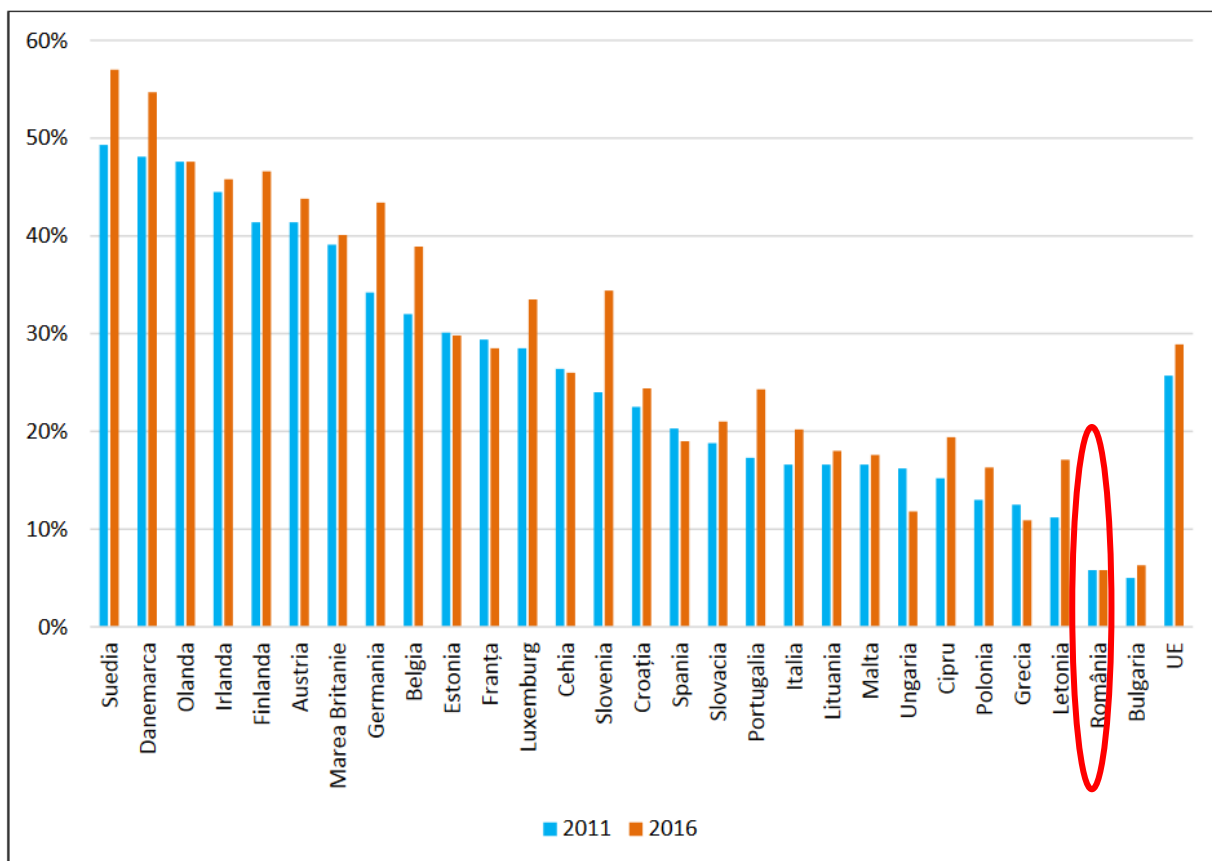


Figure 21. Participation to social activities on a monthly basis in the European Union countries in 2011 and 2016 [27].

Similarly, a very low percentage of the Romanian population is participating on a weekly basis in physical activities and sports (see Figure 22), with an average of less than 15% of all individuals and marking a decrease in 2016 as compared to 2011 [27]. This participation is higher for the individuals aged 18-24 (48%) in 2016, showing an increase of 11% as compared to 2011. An extremely low percentage of only 4% is noticed in the case of older people (aged 55+). Significant differences are also noticed in regard to education, as people with higher education levels are participating more (36%) as compared to the individuals with lower education levels, where the percentage decreases to 14%.

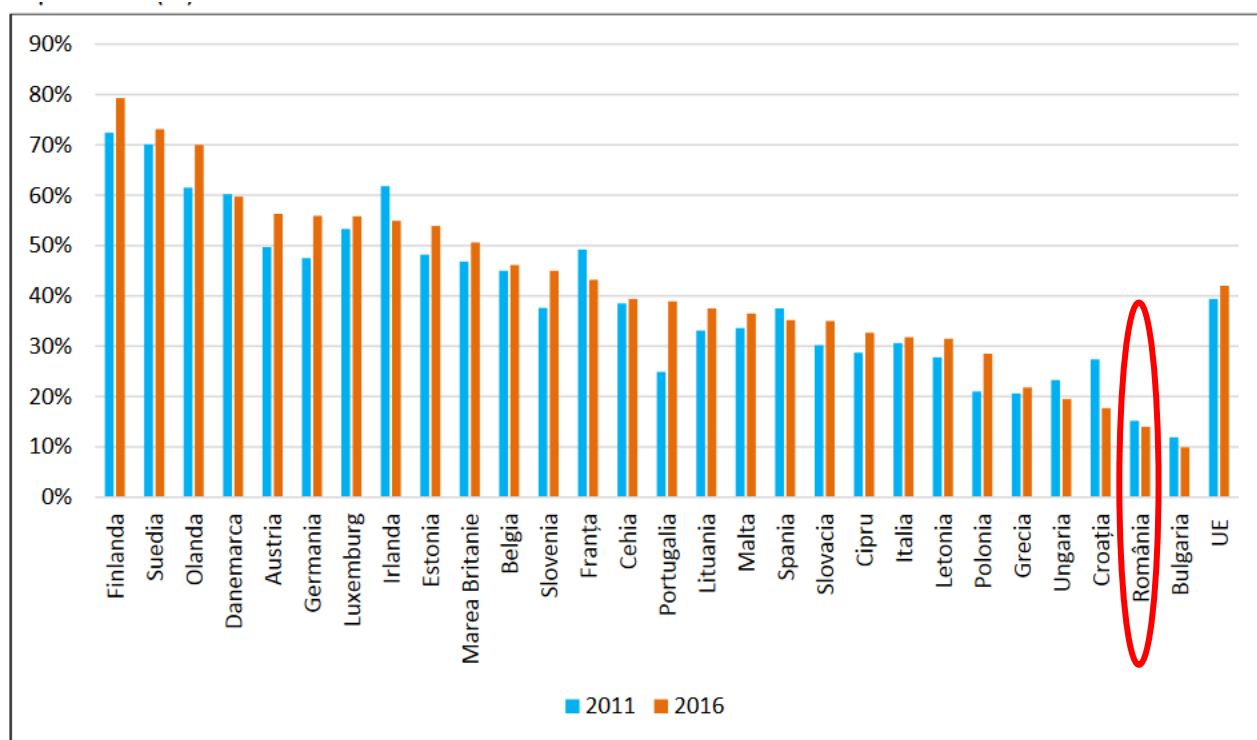


Figure 22. Participation in physical activities and sports in the European Union countries in 2011 and 2016 [27].

3.2.3 Employment

Employment rates in Romania are significantly lower for young people aged 16-24, and for older people aged 55-64 [28]. Furthermore, for all age groups, gender plays an important role, with the employments rates for female individuals being significantly lower than those for male individuals (see Figure 23). Figures are not available in regard to employment of older people, aged 65+.

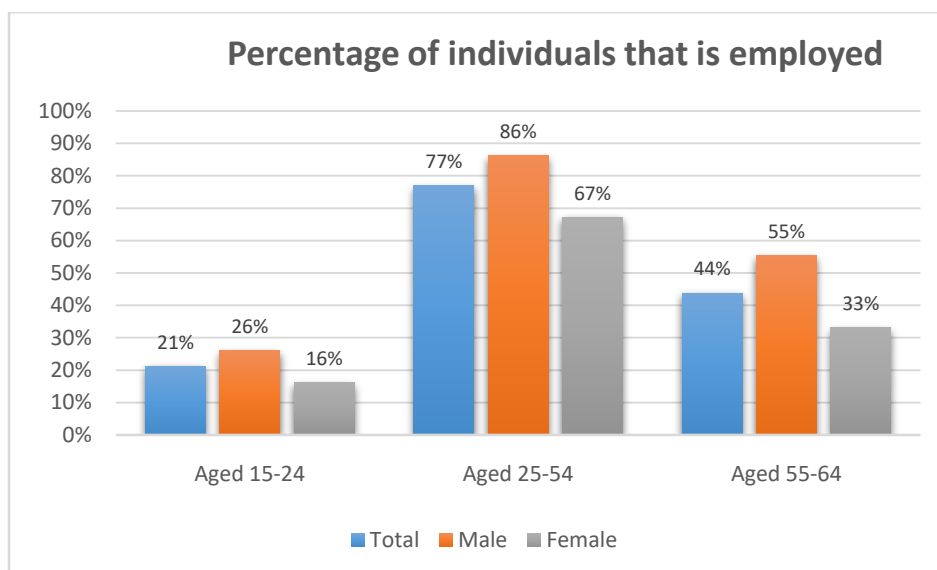


Figure 23. Employment and professional activity, by sex and age, of Romanian individuals in 2021 [28].

3.2.4 Illiteracy and low literacy

The current status of literacy and numeracy levels of Romanian adult populations has not been reported in any recent research works, as such studies have not been conducted at national level in a methodical way. The Programme for International Student Assessment (PISA), which is an international study measuring the main competences of 15 year-old students in three domains (literacy, numeracy and science), has shown that Romania has among the poorest results in Europe in the last years, with a percentage of functional illiteracy of 41% [29]. Although an increase in the overall score has been noticed, namely from 397 in 2006 to 428 in 2018, this is still far below the average of a 500 PISA score. Furthermore, it is estimated that the actual illiteracy at national level is much more serious than what PISA shows, given the fact that PISA focuses only on a specific age group. A more recent study has used the BRIO literacy test specifically designed for the Romanian pupils and students from all school grades, by taking into account the Romanian school education programme [30]. This test reports the results in the form of a literacy index with values between 0 (very poor) and 100 (extremely competent), which reflects the general literacy level of the student, by assessing the competency and capacity of the student to process the text that he/she reads during the testing (e.g., locating information, comprehension, analysis and reflection).

	Localizarea de informație			Înțelegere			Evaluare și reflecție			Scor total		
6 ani	37%	51%	12%	51%	40%	9%	55%	36%	9%	44%	45%	11%
	762	1.051	256	1.032	816	192	1.085	710	169	920	940	227
7 ani	35%	52%	13%	47%	42%	11%	59%	33%	8%	43%	45%	11%
	2.006	2.940	745	2.655	2.399	605	3.231	1.786	456	2.487	2.594	653
8 ani	35%	52%	13%	42%	47%	11%	57%	35%	8%	40%	48%	11%
	2.481	3.721	894	2.970	3.326	769	3.917	2.428	544	2.880	3.435	808
9 ani	38%	49%	13%	42%	46%	12%	48%	40%	12%	38%	49%	13%
	2.156	2.798	770	2.388	2.616	697	2.686	2.262	662	2.213	2.797	749
10 ani	43%	46%	12%	50%	40%	10%	45%	44%	11%	42%	48%	11%
	1.395	1.498	377	1.632	1.320	313	1.435	1.397	359	1.378	1.571	350
11 ani	45%	42%	14%	52%	38%	10%	56%	36%	9%	49%	41%	11%
	910	851	275	1.066	773	194	1.038	664	163	1.002	834	216
12 ani	43%	45%	12%	50%	41%	9%	54%	38%	9%	45%	45%	10%
	932	980	260	1.081	882	199	1.068	753	172	980	986	215
13 ani	40%	47%	14%	47%	43%	10%	53%	38%	9%	43%	46%	11%
	878	1.026	298	1.030	936	227	1.072	759	182	945	1.019	250
14 ani	41%	44%	15%	47%	41%	12%	49%	40%	11%	41%	46%	13%
	464	496	176	537	459	135	506	414	112	472	523	145

2 ■ Nefuncțional (0.20) ■ Minim funcțional (20.50) ■ Funcțional (50.100) ■ Frecvență © Brío Teste Educaționale

Figure 24. Romanian students performance with BRIO testing, per age (from 6 to 14 years) and per literacy component (locating information, comprehension, analysis and reflection) [30].

Through the BRIO platform, in the last 15 months, more than 47,000 students in Romania have had the opportunity to take free literacy tests, which showed them the level they have in terms of their ability to understand a written text. The results shows that a very big percentage of the Romanian students of all ages have scored particularly low (non-functional level, score 0-20) on all components of the literacy test. More specifically, of the

total tested, 45% of students, meaning about 15-20% of the school population, are at the absolute basis of the test's ability to formulate the assessment, which means limited skills in using very simple language, the inability to identify characters if not explicitly mentioned in the text and locating information only in a clear context, presented in short and obviously connected sentences. The outcomes of this last study are of particular concern, as these poor literacy levels at childhood ages are expected to be reflected also in the literacy levels of the adult population, given the fact that literacy skills are essential to a student's education path, thus being extremely important for an adult's development. The Romanian Government recognizes the importance of these findings, and has launched "The Educated Romania" project², which aims to have halve the percentage of functional illiteracy by 2030.

3.2.5 Health mis- and disinformation

The COVID-19 pandemic was an opportunity for the society to look into the ways health mis- and disinformation is affecting the efficacy and efficiency of health policies at local, national and international level. Assessing the credibility of information sources is a valuable skill for all citizens for countering disinformation, a skill that is put at the forefront of media and literacy education. There are healthy ways to engage with new information, such as lateral reading and fact-checking practices. Safe and efficient practices of fact-checking include: evaluating the credibility of the source, checking for biases, comparing to other trustworthy sources, verifying claims, looking for an emotional tone and bad grammar, distinguishing between primary and secondary sources.

Most Romanians get their news from television, according to Standard Eurobarometer 92, 82% of Romanian respondents name television as their primary or secondary source of news [31]. High trust in mass media is accompanied by the lowest overall level of news exposure/consumption through any medium within the EU. Since the COVID-19 outbreak in Romania, false information is spreading faster than the virus itself [32]. The Romanian government and medical public health experts repeatedly warned against the negative consequences of some of the most viral false medical information, such as: the virus does not exist, the pharmaceutical giants invented the pandemic, vitamin C treats coronavirus, 5G is the source of the virus, people are paid to declare that they are infected with the novel coronavirus, and other misinformation. Infodemics can hamper a significant public health response and create confusion and distrust among people.

Recognizing that assessing the credibility of information sources is a valuable skill for countering disinformation, the fact checking habits of Romanians were assessed through a survey, in order to gauge their ability to distinguish between reliable and misleading information [33]. For the Romanian context, it is important to understand the permeability of information based on its source. The extent to which people are open to more trustworthy sources of information, such as official statistics or institutional websites can positively impact the resilience to disinformation to a large extent. An important source of

² <http://www.romaniaeducata.eu/>

information (see Figure 25) for Romanians is also the word of mouth from family and friends, which makes for a very high vulnerability to disinformation. The reliance on persons you know and you trust for sources of information is linked to the demise of the role of experts in the public space. As such, an increasing dilettantism emerges across the world, with lower reliance on experts as sources of validated, reliable information. As shown by the same study [33], despite having a relatively low trust in information from social media sources, Romanians are nevertheless still using Facebook as the most frequent source of information, accessing it daily. A similar frequent source of information is the TV, used several times a week, while newspapers are only consulted once a week on average in Romania.

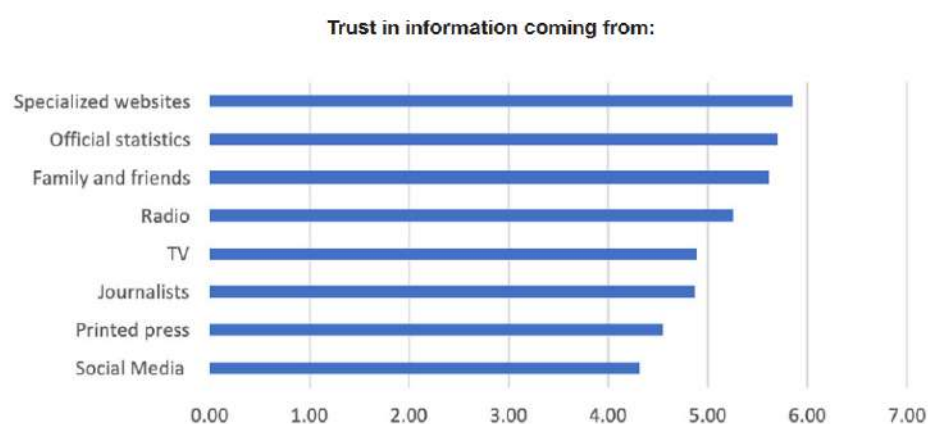


Figure 25. Trust in Sources of Information in Romania (0=low, 10=high) [33].

Romanian respondents of the survey reported a relatively frequent experience of reading or hearing information with which they do not agree, and many engage in various efforts to verify the information they receive, most often through an attempt to verify the information from one additional source, sometimes even multiple sources.

3.3 Intersectional analysis

Digital literacy rates in Romania are extremely low, with only 28% of individuals having basic or above basic digital skills, a percentage very far from meeting the European target of 80% of basic digital proficiency. Furthermore, significant disparities are noticed in relation to age, education, employment status and residential setting. For example, only (i) 4% of individuals aged 65-74, (ii) 13% of individuals with low education, (iii) 8% of retired individuals and (iv) 18% of individuals living in rural areas, have basic digital proficiency.

In regard to health literacy, unfortunately Romania is far beyond the European Union countries in regard to establishing procedures for and monitoring health literacy. A recent research study validated the short version of the European Health Literacy Survey

Questionnaire (HLS-EU-Q16) for the Romanian population, and at the same time provided some preliminary results at regional level in regard to health literacy, concluding that 7.7% of individuals have an inadequate level and 33.2% have a problematic level of health literacy. Age, gender and education were among the main determinants of health literacy in Romania.

While general literacy is being recognized as a driving factor of other life aspects, including health and social integration, unfortunately in Romania no statistical data are available in regard to the literacy levels of the adult population. However, the recent research outcomes concerning literacy of pupils and students are of high concern, as almost 20% of the school population are at a non-functional level (scoring between 0-20 out of 100) on all components of the literacy test.

In regard to data literacy rates, Romania is on the last place among the European countries, with only 48% of the individuals having basic and above basic information and data literacy skills. The desk research showed that age, education, employment and residential setting are key determinants affecting data literacy skills.

In conclusion, the analysis of the data gathered through the desk research performed in this study shows that unfortunately, a very large percentage of the adult population in Romania do not have adequate digital, health and data literacy skills. Furthermore, there are significant disparities between individuals from different age groups, education levels, employment status and residential setting. It is important to note that Romania is also behind in regard to establishing methodologies for and monitoring various aspects of literacy (e.g., health literacy, general literacy), in particular for the adult population and for older individuals (e.g. aged 75+). Although some efforts have been directed towards the young population (e.g. literacy of school age population), more focus should be put on the adult population in particular regarding health promotion and disease prevention, given the fact that Romania has a very high number (double the EU average) of avoidable deaths from both preventable and treatable causes.

4 Reported and identified gaps, needs and demands

4.1 Identified gaps

4.1.1 Desk research

The desk research performed in regard to the Romanians' digital, health and data skills drives us to the conclusion that to a very large extent the whole adult population needs support and education in order to acquire the necessary skills to reach at least the average of the EU. These needs are even more stringent when it comes to individuals of older age, lower education, being unemployed or retired, or living in rural areas.

A potential factor that negatively impacts the development of digital, health and data skills of the population is the fact that the Information Health System in Romania is in very incipient phase, thus not being used either by the population or the health care stakeholders. As a result, the citizens are not using and accessing their electronic health record on a regular basis, which could motivate them towards finding ways to learn and acquire digital skills.

Furthermore, the potentially low levels of general literacy of the adult population, further puts them at risk, as they are more likely to make unhealthy lifestyle choices and to become victims of health mis- and disinformation (e.g. not knowing and not being able to apply practices of fact-checking).

4.1.2 Interviews

Methodology

In order to investigate the needs and gaps regarding digital, health and data literacy skills in Romania, an interview was conducted with a total of 12 people from different age groups and educational backgrounds. The distributions of the interviewed citizens per gender, age group and education level are presented in Table 2 and Table 3. As far as professional background and work experience are concerned, the interviewed citizens had various backgrounds, including: teaching (primary education), agriculture, mechanical engineering, electrical engineering, hotel reception, bus driving, financial administration, project management, and factory work.

Table 2. Distribution of interviewed Romanian citizens per gender and age group.

Age group	Male	Female	Total
18-35 years	1	2	3
36-50 years	1	3	4
51+ years	2	3	5
Total	4	8	12

Table 3. Distribution of interviewed Romanian citizens per education level and age group.

Age group	Education Level (ISCED classification)				Total
	3	4	6	7	
18-35 years	1	-	1	1	3
36-50 years	1	-	2	1	4
51+ years	1	3	-	1	5
Total	3	3	3	3	12

In addition, a total of 3 experts were also interviewed, including 2 male and 1 female, and having professional experience in occupational health, medicine and local public administration. Their ages were 34, 46 and 52 and 1 expert had education level 4, while the other two had education level 6 (Bachelor degree or equivalent tertiary education level). The education levels are reported according to the International Standard Classification of Education (ISCED), following the 2011 mapping for Romania³.

The Romanian versions of the informed consent and of the interview questions, both for the citizens and for the experts, are included in Annex 1 of this national report. Overall, the results of the interviews were analyzed from a qualitative perspective (thematic analysis), given the small sample of participants, which did not allow for a detailed statistical analysis, and given the open format of the interview questions.

Interview Results & Conclusions: Citizens

Q1 Basic healthcare accessibility in Romania

The vast majority of the participants identified a number of disadvantaged groups: people with low income and/or low education level, older people and people living in rural areas. It was indicated that people with a higher income have access to the private health system, thus better healthcare services. People living in the urban areas (particularly big cities) have many options and faster access. A perceived disadvantage expressed by low educated participants, is that educated individuals are bolder and use a more sophisticated language to express their needs in the healthcare facilities (e.g., emergency room), thus are sometimes faster and better served.

Q2 Ability to search for health information on the internet

As seen in Figure 26, only half of the participants are able to search for health information by themselves on the internet, and these were younger and/or educated individuals. Older and lower educated people are not able to perform such activities alone or are not confident in their actions. The main reasons are that they are missing basic digital skills, they are not able to use a smart mobile or a PC, or they are miss-informed with regard to the potential of the internet (e.g. claiming that “information on the internet is not to be trusted”).

³ http://uis.unesco.org/en/files/isced_2011_mapping_en_romania-xls

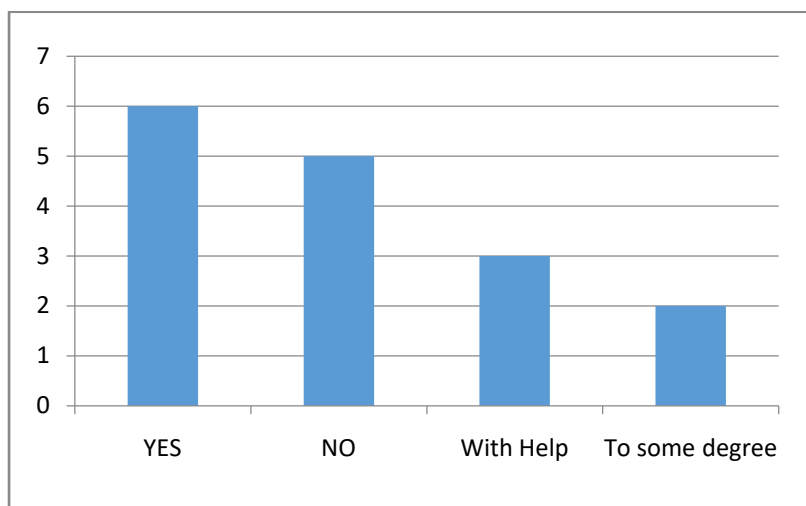


Figure 26. Ability of interview participants to search for health information on the internet.

Q3 Ability to assess quality of health information on the internet

Younger and/or educated people that also answered that they are able to use the internet to search for health information at question Q2, are able overall to assess the quality of health information they find on the internet (see Figure 27). However, they indicated that their trust level in health information on the internet is rather low (e.g., marked with a 5 on a scale from 1 to 10, where 1 was indicated as not trusting at all and 10 as fully trusting), thus they only look for general information about a health condition and, if needed, they consult a medical expert to verify the information. Older people with lower education levels either did not understand the question or answered “No”.

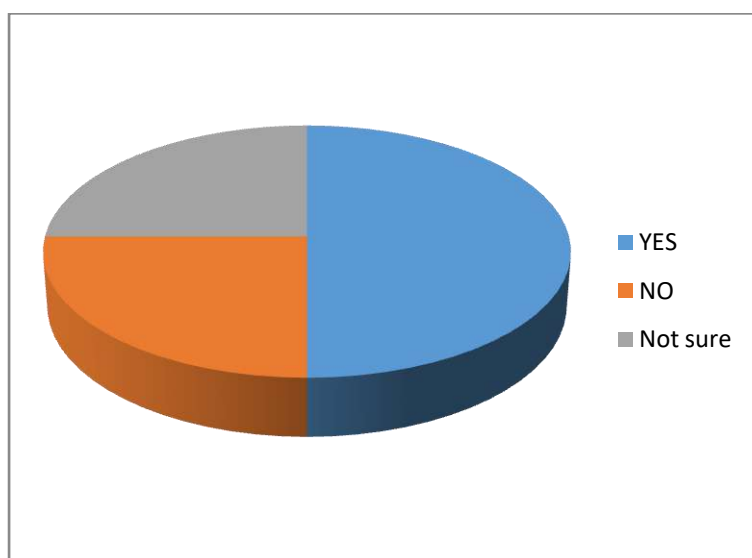


Figure 27. Ability of interview participants to assess quality of health information on the internet.

Q4 Usefulness of the internet in making health decisions

Older people consider the internet as not useful in order to make health decisions, as they feel insecure and confused due to the different views on the same subject, thus trusting a medical expert better whenever they need advice.

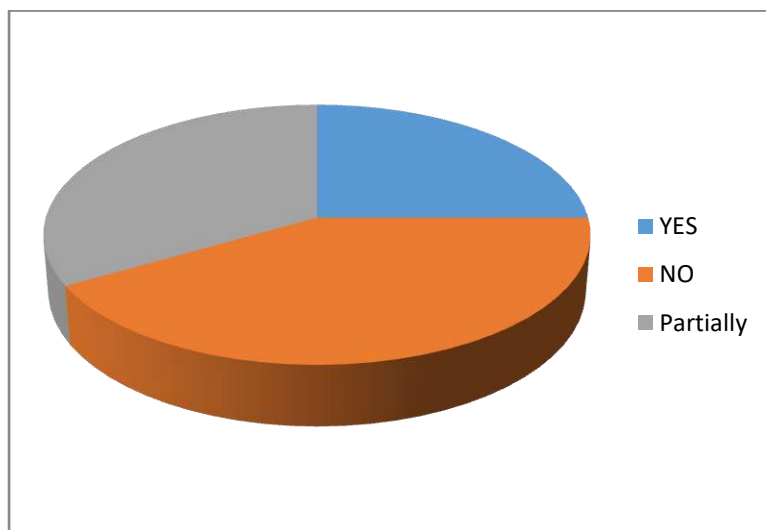


Figure 28. Usefulness of the internet to make health decisions as perceived by the interview participants.

Younger people find it difficult to assess the plethora of medical information, trusting it only for relatively simple things (e.g., well-being decisions), thus finding the internet only partially useful when trying to make health decisions. Only highly educated people find the internet overall useful.

Q5 Usage of online medical portals

Most of the interview participants are not using any online medical portals, the main reasons being that they are not aware of any existing Romanian portals with medical information and the usual search engines are sufficient for their needs (e.g., “Google works”). Older people are not using internet in general, thus they are not aware of the existence of such portals. Younger participants with higher education levels, have used online medical portals of private healthcare organisations (they have access due to private insurance) or dedicated forums and portals for childcare (e.g., they are young parents).

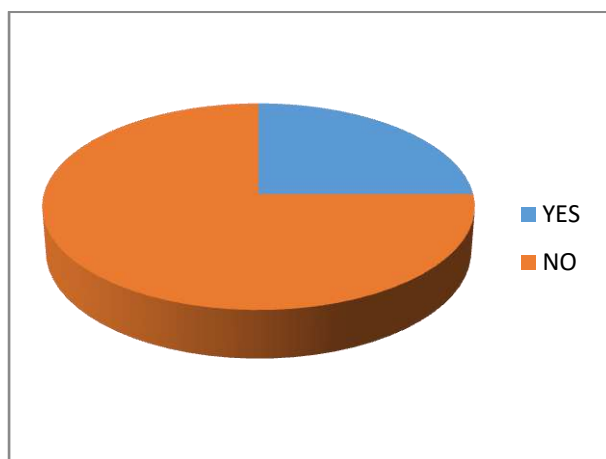


Figure 29. Usage of online medical portals by the interview participants.

Q6 Knowledge concerning personal medical data storage

The vast majority of the participants did not know or was not sure about where their health data is being stored, and indicated the family doctor's archive (hard copies of health data) as the most probable storage place. The public insurance organization and the hospitals and laboratories were also considered as potential storage places of their data. Those that answered yes indicated the private insurance portals as the place where their health data is being stored.

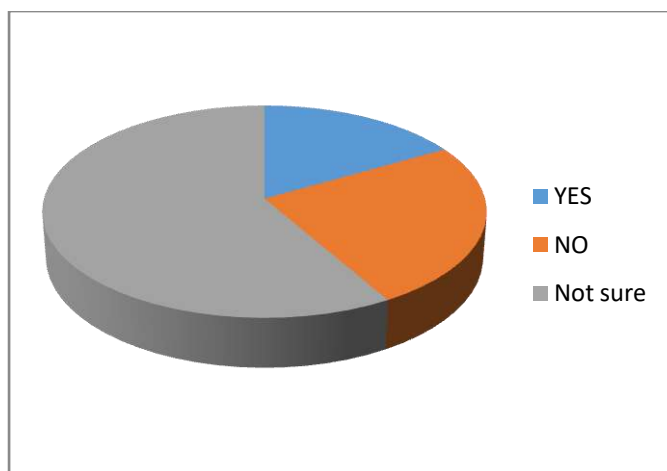


Figure 30. Knowledge concerning personal medical data storage.

Q7 Knowledge concerning personal medical data accessibility

Individuals that have private insurance are aware of who has access to their medical data and they indicated that patients also have access to see their electronic health record. The rest of the Romanian interview participants either don't know or are not sure about the accessibility to their personal medical data. Many of them assume that the family doctor and the public insurance organisation (as an entity) probably have access.

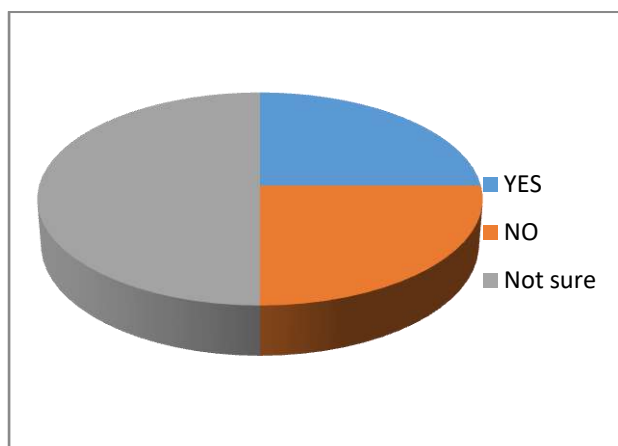


Figure 31. Interview participants' knowledge concerning personal medical data accessibility.

Q8 Ability to understand personal health data (e.g., medical documents, blood tests, medicine dosing instructions, etc.)

Participants having lower education level and/or living in rural areas indicate that they don't understand most of the medical documents or examination results. However they are able to understand and follow instructions regarding medicine dosing (indicated as being able to understand "Very little" information in Figure 32). Many participants indicated that they are able to understand the "Vast majority" of their medical files, but some medical terms are abbreviated making it difficult to understand their meaning and it is difficult to interpret information that has no pre-defined normal ranges or sufficient explanations.

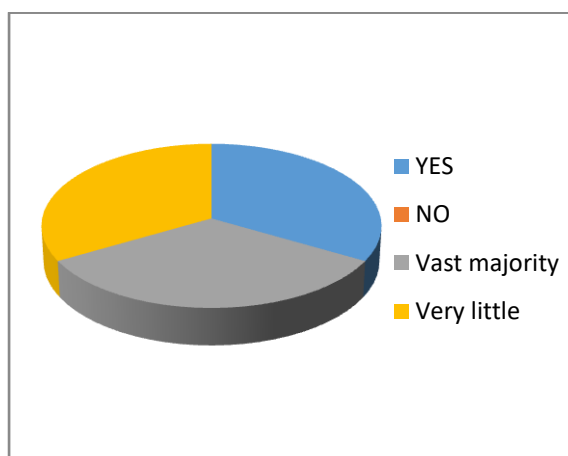


Figure 32. Interview participants' ability to understand personal health data

Q9 Knowledge concerning personal electronic health record

All interview participants indicated that they don't know how or are not able to make any changes to the content or accessibility of their personal electronic health record. Even those with private insurance are only able to view the record online (and they usually access it to see appointments or past exam results), but the system does not allow them to edit any data or change any access rights.

Q10 Usage of digital notification tools

Interview participants who are younger and have higher education levels are using digital notification tools to keep track of healthcare appointments or to set up reminders for a medicine schedule. However some of the participants from the age group 18-25 indicated that they rarely take medicine or visit the healthcare units. Older participants are relying on different approaches for notifications: the private healthcare organisations are sending reminders for appointments, they use simple pill boxes for the medicine and they are using notes on paper to keep track of healthcare appointments.

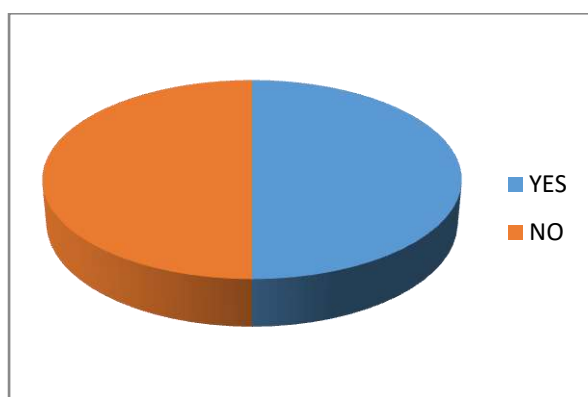


Figure 33. Interview participants' usage of digital notification tools.

Q11 Usage of health apps and digital devices

A large portion (>75%) of the interview participants are not using any health apps or digital devices to monitor their health status. Older people, who are living with a chronic health condition, are using some kind of analogue devices to monitor their health data (e.g. blood pressure, blood oxygen, weight) and keep records on paper to inform their doctor. Two of the participants indicated that although the doctor recommended using some device, it was too expensive to buy one. Younger participants indicated that either they don't need to monitor some serious health condition, or are using a smart watch and a well-being mobile app to keep track of their physical activity.

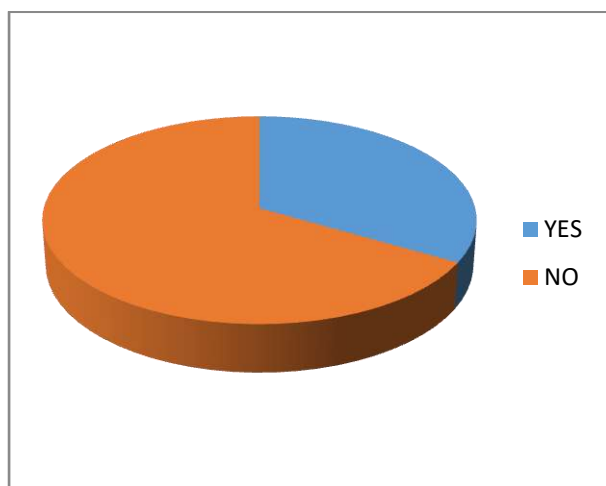


Figure 34. Interview participants' usage of health apps and digital devices.

Qop1 Understanding of health and personal data consent forms

The vast majority of the interview participants indicated that they are asked to sign some paper mentioning their personal data at every visit at the healthcare units. Younger and educated participants are able to read and understand the consent forms. Some of the older participants indicated that they are not sure what they are signing, as most of the time they are not given sufficient time to carefully read the long and small font text of the consent forms.

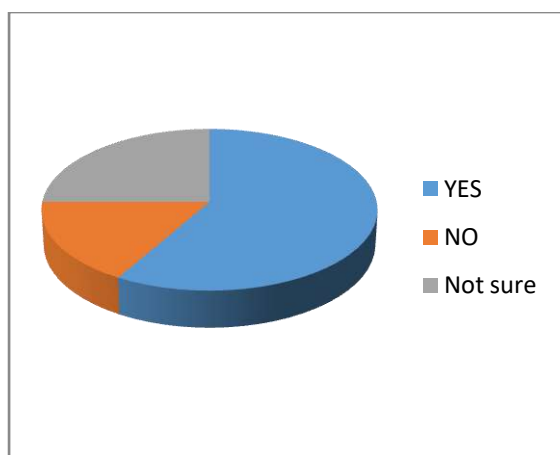


Figure 35. Interview participants' ability to understand the consent forms they sign when visiting healthcare units.

Qop2 Ability and need to inform medical experts on personal health history

All participants indicated that they are able to inform the medical experts on their health condition and medical history during the visits at healthcare units. However, only those having private insurance don't need to bring past examination results and blood tests. The vast majority of the participants indicated that they need to bring hard copies with them

(e.g., paper or CD/DVDs) of medical test results in order to accurately inform the family doctor.

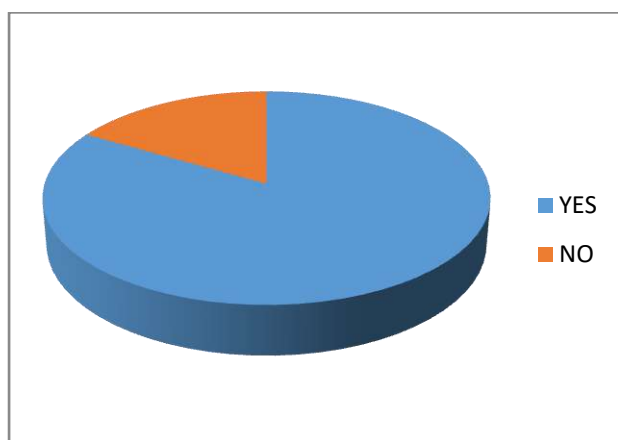


Figure 36. Interview participants' need to carry hard copies of medical files to healthcare appointments.

Q12 Interest in using an online platform and/or manual to improve digital health literacy skills

More than 75% of the interviewed participants are interested in using an online platform and/or manual to improve their digital, health and data literacy skills. Younger participants, with a lower education level, indicated that they are not interested in further education to improve their digital, health and data literacy skills as they do not see the benefit of it. Among those that answered "Yes", older female are more interested in a printed version of the manual and educational materials, due to largely missing digital skills and financial aspects related to internet services and smart mobile device acquisition.

Q13 Preferred information format

Older people with low digital skills would prefer to have the possibility to print the education materials. People with a higher education level, and a technical background, prefer practical exercises in order to learn new skills. The participants indicated that images should supplement text information and video should be an alternative for text, for example for people with difficulties to read.

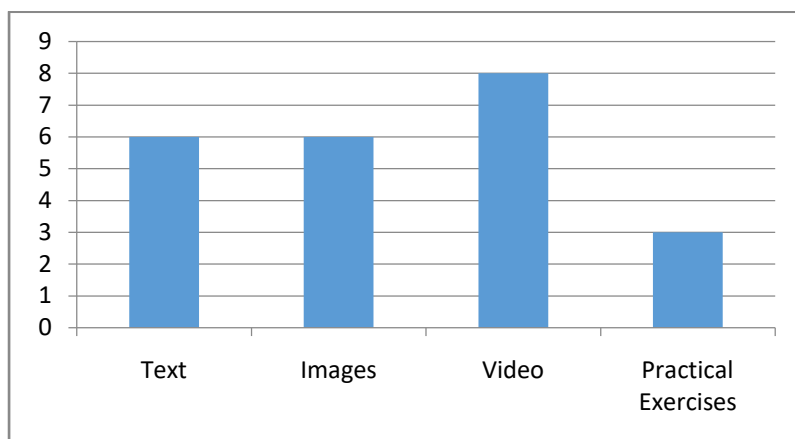


Figure 37. Preferred information format of the interview participants.

Q14 Potential motivation to increase participation in TRIO-like educational activities

In order to increase participation of Romanian citizens to educational activities directed to acquiring digital, health and data skills, it was considered important by all interview participants that the family doctors are involved and play a key role, as they are regularly in contact with patients and the citizens and they are also a trusted referee for any education activities or online information sources/portals. For the rural areas, it was considered important to have such educational activities organised locally. It was also indicated that primary and secondary schools could play an indirect role, as children could represent gateways for reaching and educating other family members. It was also mentioned that financial incentives could help to some degree, especially if they are in the form of relevant equipment or services (e.g. smart devices, subscription to mobile data, free medical services, etc.).

Interview Results & Conclusions: Experts

When asked if they meet people with poor digital, health or data literacy skills during the execution of their profession, all the experts participating in the interview indicated that more than 50% of the individuals have poor skill in regard to this trio of literacies. The experts indicated a range of socio-economic variable as being linked to this high percentage of people with low skills, namely: lower income, lower education levels, and residential setting (e.g. people living in rural areas and so called workers' suburbs).

The main benefits linked to the digitalization of the healthcare system were considered the facilitation for the medical experts to more easily follow patient history, and the benefits for the patients who do not need to remember their history or keep their own medical files at home. It was also considered that the digitalization would eventually reduce the number of visits at the healthcare units and the use of services. Potential barriers for the digitalization of the healthcare system were indicated mainly in relation to human factors, as the healthcare personnel and patients don't have the necessary digital skills, users are

reluctant/unwilling to use such systems, and mistakes may appear due to misuse. In addition, unavailability of services in some area (e.g., rural areas) due to poor infrastructure was also seen as a potential barrier.

All interviewed experts have used online health portals and medical information websites in the past, both for personal use or to find information related to provision of services in the work environment.

All experts considered all digital health tools indicated during the interview (e.g., medication reminders, monitoring health data, access to pharmacy prescription) as being equally important for the everyday healthcare of citizens. In addition, e-consultation was seen as important, in order to facilitate the monitoring of chronic conditions when a physical examination is not needed. For the current Romanian setup, it was indicated that not all suggested online health tools are made available through the public health system.

The main barriers preventing people from using digital health tools indicated by the interviewed experts are: missing digital services and devices, low literacy of the population in regard to basic digital skills, missing medical information portals, insufficient education on health and digital issues, and costs of healthcare services and equipment.

The main suggestion in regard to using policy to help a wider range of people to access online health information was to start with the family doctors, who are in touch with the largest part of the population and in particular the disadvantaged ones (e.g. those that don't have access to private insurance and the private healthcare system). The experts indicated that policy should focus on educating family doctors and supporting them with "certified online information portals", so that they can guide patients in particular in regard to prevention (e.g. "All about x or y chronic condition").

The interviewed experts consider that the vast majority (>90%) of the citizens do not know where their health data is being stored, with the exception of the medical files that they keep at home. When asked about their personal medical data, the experts indicated that it is stored in a scattered manner, at any healthcare unit that they have visited and they also keep files at home.

It was seen as important for the citizens to have access to their medical and health data through an online platform, but it was considered that it is not (yet) a good idea to have editing right to the medical history data. At the same time it was recognized that such a platform would be difficult to use by a large part of the population due to low digital skills.

The experts indicated that in order for the TRIO platform to be useful for a large number of individuals, it should focus on the basics of the trio of literacies: informative texts and instructions on basic digital skills (how to), examples of how a health portal looks like and how to access easy information and services, information about what health and personal digital data is and what are the security and privacy issues someone is most likely to encounter. The platform should have simple functionality, use plain language, be easy to access from mobile devices, should not require complex registration processes (e.g., e-mail

verification), should allow re-start and re-visiting of the educational modules and provide means for alternative interaction (e.g., audio versus text).

In order to motivate people, any efforts toward education on this trio of literacies should start locally, with trusted representatives (e.g., medical doctors, public authorities, workplace, etc.). However, no particular ideas or past projects were indicated by the interviewed experts as inspiring examples to improve access and understanding of digital health data.

4.2 Identified needs and demands of the target groups

For the particular case of Romania, the learning needs and gaps in regard to digital, health and data literacy and skills are extensive and do not apply only to a particular socio-demographic group. Except of young and highly educated people that are living in well-developed urban areas (e.g., capital or very big cities), the remaining individuals are missing even the basic digital skills or information and data literacy. Furthermore, important determinants are age, education level, employment status and residential setup, with big disparities being evident based on these socio-economic variables.

4.3 Suggested learning needs for the target groups

For Romanian citizens the focus of the TRIO learning platform should be on establishing a set of educational modules for acquiring the most basic elements at the intersection of the various dimensions of digital health and data literacy. For older people and people with lower education levels, the accent should be on improving their digital and data skills in the context of health management. People from the disadvantaged socio-demographic groups would benefit from additional education and support towards better understanding preventive health practices (e.g., purposes of health screening, regular checkups, healthy lifestyle, etc).

Institutions and policy makers should be made aware of the extremely important role of monitoring health and literacy of the adult population, and of the promotion of educational activities on all the TRIO dimensions for the public health prevention and treatment outcomes, and the benefits of the public healthcare system.

5 Examples of good practices and educational training offers

<https://comp-up.erasmus.site/>

The **COMP-UP project** aimed at increasing the motivation of low-qualified adult learners to take part in education and improve their literacy, numeracy and digital skills. The project developed the COMP-UP online platform along with a training curriculum, targeted at training adult education professionals for: assessment of key competences; facilitation techniques – how to work with trust and relationship building; inclusive approaches in adult education; involvement and motivation. The developed materials and tools are also available in the Romanian language.

[Competente Digitale – Curs Online - TeachBit.ro](#)

TeachBit is offering a free online course on digital competences, mainly aiming to educate adult citizens how to use a PC or a smartphone with focus on communication and collaborative platforms (e.g., Zoom, Mail, Google Drive, Dropbox, etc).

[Despre CDS – Centrul de Dezvoltare Sociala \(centruldezvoltaresociala.ro\)](#)

The Romanian Center of Social Development is a non-governmental organisation that is organising various educational activities for adults, along with cultural and social assistance actions. The organisation is continuously involved in a series of national or regional projects, including projects targeting the development of digital competences of the workforce.

[digiLEAP – Digitally Shifting EU's Law & Legal Studies' Content in Higher Education](#)

The main aim of the digiLEAP project was to boost the digital readiness of university law departments and of the legal sector towards the digitally transformed environment (both online education and the professional environment) targeting to effective digital skill development. The outcomes of the project consist of virtual environments for the learner and the tutors, including a course on the digital transformation of the legal/law system and a serious game for formative assessment. The materials are available in 4 EU languages, including Romanian.

[DiTEMP – Digital Transformation & Employability](#)

DiTEMP project provides a model of intervention, completed with tools, to integrate important and critical aspects of Digital Transformation into curricular education in Higher education, promoting this way students' employability. The project has developed guidelines for integrating digital transformation competences in further curricula and academic field in 5 languages (English, Greek, Italian, Romanian and Spanish), including: a framework of intervention, a how-to guide, a teacher toolkit, and an online training platform.

[UPSKILLING ADULTS 45+](#)

Upskilling Adults 45+, with Migrant Background (UPAM 45+) project aims to provide solutions for better integration on the labour market and in the society of adults 45+, with the

migrant background, through basic skills learning. The project develops integrated solutions necessary for adult education providers in order to support (re)migrants, adults aged 45+, to acquire basic skills: entrepreneurship, digital and soft skills, and/or, to validate their competences. The training package with two modules, digital skills and soft skills, and a user guide for trainers, have been developed in 6 EU languages, namely English, Romanian, Dutch, German, Greek and Spanish.

6 Suggested input for TRIO training and education

Navigating the internet:

- How to use web browsers and search engines
- How to assess online information quality
- How to deny/set-up personal data tracking (cookies) for advertising purposes

Health promotion and disease prevention:

- Usage of digital notification tools for appointments and medicines
- Basic digital health tools to monitor lifestyle aspects (e.g., physical activity, sleep, nutrition)

Health portals:

- How to use online information portals to understand medical files
- How to connect to the personal Electronic Health Record (Dosarul Electronic de Sanatate)

7 Relevant stakeholders and potential cooperation partners

Centrul Judetean de Resurse si Asistenta Educationala Iasi – Regional center for educational resources and assistance: [Misiune/Viziune \(cjrae-iasi.ro\)](http://Misiune/Viziune/cjrae-iasi.ro)

Biblioteca Judeteana Iasi – Iasi County Library: [Biblioteca Judeteana „Gh. Asachi” Iasi \(bjiasi.ro\)](http://BibliotecaJudeteanaGh.AsachiIasi.ro)

EOS Digital Academy – Microsoft platform for the development of digital competences for unemployed people and students, offering free courses on basic digital competencies: [EOS Digital Academy – Conectat | Calificat | Angajat](http://EOSDigitalAcademy-Conectat|Calificat|Angajat)

8 Quotes of interviewees

[On the topic of basic healthcare accessibility] “I can’t talk their language and they ignore me [in the emergency room]” [51+, low education]

[On the topic of searching medical information on the internet] “My daughter helps me to find what I need on the internet when she has time.” [51+, medium education]

[On the topic of the medical data storage] “Are my medical data stored somewhere online? Are you sure? I haven’t heard of that, maybe you are referring to some private insurance company.” [36-50, high education]

[On the topic of barriers for the digitalization of the healthcare system] “To get there, you must first convince all doctors that they must use a computer on a daily basis.” [male, occupational health supervisor in a factory]

9 Resources

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10 Annex 1 Romanian Informed Consent and Interviews questions

Annex 1.1 Romanian Informed Consent

Fișă informativă pentru participarea la proiectul TRIO

Dragă domnule/doamnă,

Ați fost invitat(ă) să participați la acest studiu care face parte dintr-un proiect educațional european al cărui obiectiv principal este de a crește alfabetizarea digitală a cetățenilor în domeniul sănătății și de prelucrarea datelor.

Tematica cursului va fi dezvoltată în trei categorii adaptate la diferite intervale de vârstă (18-35; 36-50; 51+) și se va acorda o atenție deosebită grupurilor cu risc de excludere și/sau cu impedimente fizice, cognitive, emoționale și culturale.

Veți primi informații detaliate despre acest studiu într-un mod personalizat.

Această fișă informativă are două părți:

- Partea I: Informații generale despre studiu
- Partea a II-a: Consimțământ informat (de semnat, dacă sunteți de acord să participați la studiu)

Dacă nu doriți să participați, acest lucru nu va afecta în niciun fel relația cu instituția care vă contactează și nu vor exista consecințe negative pentru dumneavoastră. Dacă sunteți de acord să participați, sunteți, de asemenea, liber(ă) să părăsiți studiul în orice moment. Alegerea și dreptul dumneavoastră vor fi întotdeauna respectate.

Implicarea potențialilor utilizatori în proiecte este esențială, pentru a le oferi rezultate utile și relevante. Prin urmare, avem nevoie de consimțământul dumneavoastră scris, pentru a coopera cu noi. Vă rugăm să citiți cu atenție Partea I a acestei fișe informative, înainte de a lua o decizie. De asemenea, puteți solicita clarificări și adresa întrebări care nu au un răspuns clar și complet în acest document.

Semnați partea a II-a a fișei informative numai dacă:

- Ați înțeles pe deplin tipul și procedura studiului;
- Sunteți dispus(ă) să dați consimțământul în scris;
- Înțelegeți drepturile dumneavoastră ca participant(ă) la acest proiect.

Care este scopul acestui studiu?

Studiul acesta face parte din activitățile proiectului educațional – TRIO, finanțat prin Programul Erasmus+ (număr proiect 2021-1-PT01-KA220-ADU-000033817). Acest proiect își propune să ofere competențele și abilitățile adecvate în domeniul sănătății, digitale și de prelucrarea datelor pentru a permite cetățenilor, de toate vârstele și diferitele niveluri de educație, să navigheze în lumea sănătății online, luând decizii informate și de încredere, crescându-le astfel bunăstarea, autonomia, incluziunea și accesul la servicii. În acest scop, vor fi dezvoltate mai multe instrumente: un manual, un set de instrumente educative, o Carte verde și o platformă online pentru educația adulților.

Cine este responsabilul pentru studiul în România?

Proiectul este coordonat de INESCTEC în Portugalia și are participarea partenerilor din Germania, Olanda, Portugalia, România și Spania. Interviuurile fac parte din pachetul de lucru PR1, a cărei organizație coordonatoare este AFEdeMy (Olanda). BOKtech este organizația responsabilă pentru aceste activități de consultare desfășurate în România.

Cercetător responsabil cu studiul la BOKtech

Nume – Camelia Ungureanu

Date de contact – +40720974453 | cungureanu@boktech.eu

Cum se va desfășura acest studiu?

Pentru acest studiu, partenerii din fiecare țară participantă (Germania, Olanda, Portugalia, România și Spania) vor intervieva șase cetățeni, precum și trei experți sau părți interesate. Din fiecare grupă de vârstă (18-35, 36-50 și 51+) vor fi interviuate cel puțin două persoane, cu niveluri mixte din punct de vedere educațional. Scopul este de a identifica cunoștințele actuale existente și utilizarea tehnologiei sănătății pentru diferite grupuri socio-demografice, astfel încât să putem determina care aspecte sunt percepute ca fiind cele mai dificile. Experții/părțile interesate pot fi reprezentanți ai factorilor de decizie, autorităților locale, organizații de sănătate sau de asistență socială, furnizori de educație pentru adulți, Companii ICT sau voluntari care pot completa lacunele de cunoștințe încă existente din faza de cercetare de birou și pot contribui la un plan adecvat de instruire în ceea ce privește conținutul și metodele potrivite pentru grupul țintă al proiectului. Chestionarele vor colecta informații generale despre dumneavoastră și anume: vârsta, sexul, mediul educațional, țara de naștere și mediul profesional și/sau activitățile de voluntariat.

Chestionarele și interviurile nu au scopul de a colecta informații personale sau de a testa abilitățile personale, dar sunt de importanță majoră pentru îmbunătățirea modului de abordare și a materialelor educative.

Care sunt beneficiile participării dumneavoastră la studiu?

Prin participarea la acest studiu și oferindu-vă opiniile, contribuiți la dobândirea de cunoștințe privind nivelurile competențelor digitale, de sănătate și alfabetizarea prelucrării datelor și la dezvoltarea de material educațional adecvat.

Există riscuri, disconfort sau efecte secundare legate de participarea dumneavoastră la acest studiu?

Deoarece este un studiu ne-invaziv, nu se prevede niciun risc. Cu toate acestea, dacă întâmpinați orice îndoială, dificultate sau problemă, vă rugăm să contactați imediat cercetătorul responsabil cu studiul din țara dumneavoastră.

Există vreun cost pentru participarea la studiu? Există vreo rambursare financiară pentru participanți?

Nu există costuri asociate cu participarea dumneavoastră la studiu sau care decurg din acesta și nici nu veți primi nici o compensație financiară pentru colaborarea dumneavoastră.

Cum vor fi tratate datele colectate în acest studiu?

Toate datele vor fi protejate împotriva accesului neautorizat. Informațiile colectate despre dumneavoastră vor fi stocate în siguranță de BOKtech și vor fi șterse la 6 luni de la încheierea proiectului TRIO în mai 2024. Datele culese în urma interviului vor fi folosite pentru analiză și incluse în raportul național. Dacă nu ați dat expres consimțământul pentru utilizarea numelui dumneavoastră în partea a II-a a acestui document, răspunsurile dumneavoastră vor fi anonime. Interviul va fi rezumat și folosit ca sursă de informații; orice înregistrări ale interviului vor fi șterse după ce raportul național este finalizat, în noiembrie 2022. Citatele vor fi incluse în funcție de vârstă și nivel de educație sau de mediul profesional, cu excepția cazului în care ați dat permisiunea de a folosi numele dumneavoastră. În plus, cei responsabili de studiu nu vor avea acces la data dumneavoastră de naștere (doar vârsta dumneavoastră) și nu va fi posibil ca niciun alt cercetător să identifice care au fost răspunsurile dumneavoastră, în afară de cercetătorii responsabili cu desfășurarea interviului. Dacă datele sunt partajate cu alți cercetători și instituții de cercetare care nu fac parte din consorțiu, numele dumneavoastră nu va fi niciodată inclus și nu poate fi identificat. De asemenea, orice publicație care ar putea rezulta în urma acestui studiu nu va include nici o informație personală care ar putea duce la identificarea dumneavoastră.

Participarea dumneavoastră este planificată să dureze până la finalizarea Raportului național în noiembrie 2022. Toți membrii acestui studiu sunt obligați să respecte standardele europene de protecție a datelor. Dacă aveți întrebări despre prelucrarea, partajarea și stocarea datelor dumneavoastră care au caracter personal, vă rugăm să contactați managerul de proiect sau responsabilul cu protecția datelor din această instituție.

Retragerea anticipată a participării dumneavoastră la studiu.

Se poate întrerupe participarea oricând, fără nicio explicație. Retragerea nu va avea absolut nici o consecință negativă pentru dumneavoastră sau pentru serviciul pe care BOKtech vi-l oferă. De asemenea, este posibil să aveți acces la datele dumneavoastră colectate în timpul studiului și să faceți corecții, dacă identificați vreo neclaritate.

Chiar și după finalizarea studiului, aveți dreptul să vă exprimați dorința ca datele dumneavoastră să fie eliminate și șterse, cu excepția celor care au fost deja publicate sau utilizate în rapoarte care nu pot fi retrase sau modificate. Pentru a solicita ștergerea datelor dumneavoastră, vă rugăm să contactați cercetătorul responsabil de proiect.

Posibilitatea de a discuta alte probleme

Dacă aveți întrebări despre proiect sau despre participarea dumneavoastră la acesta, puteți contacta managerul de proiect la BOKtech acum sau mai târziu. De asemenea, puteți contacta cercetătorul responsabil al pachetului de lucru PR1 la nivel internațional – Willeke van Staalduinen de la AFEdeMy, Olanda (date de contact mai jos).

Pe lângă cercetătorul responsabil pentru studiu și responsabilul cu protecția datelor al firmei BOKtech, aveți dreptul de a depune o plângere la Autoritatea Națională de Supraveghere a Prelucrării Datelor cu Caracter Personal cu privire la prelucrarea datelor dumneavoastră care au caracter personal la: anspdcpr@dataprotection.ro / +40.318.059.211.

Persoane de Contact

Cercetător la BOKtech

Nume – Camelia Ungureanu

Date de contact – +40720974453 | cungureanu@boktech.eu

Responsabil cu protecția datelor la BOKtech

Nume – Otilia Kocsis

Date de contact - +40761573194 | okocsis@boktech.eu

Cercetător responsabil la nivel internațional cu această activitate

Nume – Willeke van Staalduinen

Date de contact - +31.651053949 | willeke@afedemy.eu

Dacă doriți să participați la acest studiu, am dori să completați Partea II - Declarație de consimțământ informat și să păstrați această fișă informativă.

PARTEA II: DECLARAȚIA DE CONSIMȚĂMÂNT INFORMAT PENTRU PARTICIPANȚI

Numele _____

participantului: _____

Declar că am fost informat(ă) pe deplin și cuprinzător cu privire la scopul, sensul și domeniul de aplicare al studiului Proiectului TRIO, precum și despre toate riscurile și impacturile posibile. Aceste informații mi-au fost oferite de către _____.

Vă rugăm să bifați toate căsuțele corespunzătoare:

<input type="checkbox"/>	Prin prezenta, declar că sunt dispus(ă) să particip la interviul TRIO.
<input type="checkbox"/>	Declar că am fost informat(ă) corespunzător despre proiectul TRIO și înțeleg explicațiile scrise și verbale.
<input type="checkbox"/>	Mi s-a dat timpul necesar pentru a reflecta asupra cererii de participare. Am avut ocazia să adresez întrebările necesare și am primit răspunsuri satisfăcătoare.
<input type="checkbox"/>	Autorizez înregistrări audio/video care vor fi folosite doar pentru analiza datelor din interviu și implementarea tehnică ulterioară a proiectului.
<input type="checkbox"/>	Știu că datele din interviu vor fi analizate și rezumate de intervievatorul meu. Voi avea dreptul de a revizui acest rezumat, înainte de a fi distribuit echipei de cercetare pentru integrare în raportul de sinteză.
<input type="checkbox"/>	Am fost informat(ă) că datele vor fi stocate doar până la maxim 6 luni după încheierea proiectului TRIO în mai 2024, după care vor fi șterse și că le pot modifica/șterge oricând.
<input type="checkbox"/>	Înțeleg că numele meu va fi afișat doar cu acordul meu expres.
<input type="checkbox"/>	Înțeleg că îmi pot retrage participarea în orice moment, fără a fi nevoie să dau un motiv și nu vor exista penalități din acest motiv.
<input type="checkbox"/>	Aș dori să primesc mai multe informații, despre proiectul TRIO și să primesc buletinul periodic informativ al proiectului, la următoarea adresă:

Vă rugăm să selectați NUMAI UNA dintre opțiuni:

<input type="checkbox"/>	Sunt de acord ca numele meu să fie folosit ca participant la interviurile TRIO și înțeleg că poate fi folosit în diferite rapoarte și publicații în cadrul acestui proiect.
<input type="checkbox"/>	Nu permit ca numele meu să fie folosit.

Acest consimțământ se aplică conform noului „Regulament general privind protecția datelor” care a intrat în vigoare la 25 mai 2018 (Regulamentul UE 2016/679).

PARTICIPANT

CERCETĂTOR

Nume: _____

Nume: _____

Data: ____ / ____ / ____

Data: ____ / ____ / ____

Semnătura: _____

Semnătura: _____

Protecția datelor participanților

Prin semnarea acestui formular, sunt de acord cu prelucrarea datelor mele personale și transmiterea lor, eventual în format anonimizat și în afara Uniunii Europene, în scopuri de cercetare.

Semnătura participantului: _____

Data: ____ / ____ / ____

A FI COMPLETAT DE RESPONSABILUL STUDIULUI DIN ACEASTĂ ORGANIZAȚIE

Eu, _____ declar că participantul a semnat spontan și a fost de acord cu participarea sa la acest studiu.

De asemenea, declar că,

- Am oferit participantului toate informațiile necesare pentru înțelegerea acestui studiu, scopurile, procedurile, posibilele riscuri și beneficii.
- Confirm că participantul a înțeles informațiile furnizate.
- Am oferit timp pentru reflecție și oportunitatea de a adresa întrebări despre studiu.
- Nu am exercitat nicio constrângere sau nu i-am influențat în alt mod consimțământul.

Semnătura: _____

Data: ____ / ____ / ____

11 Annex 1.2 Romanian Interview Questions: Citizens

Întrebări pentru interviurile cu cetățenii

Introducerea proiectului TRIO: Sistemul nostru de asistență medicală este digitalizat foarte rapid, dar nu toată lumea are abilitățile digitale, cunoștințele necesare despre sănătate sau abilitățile de prelucrare a datelor pentru a ține pasul cu această schimbare. Proiectul TRIO își propune să ajute cetățenii să își îmbunătățească aceste trei seturi de abilități, astfel încât sistemul de sănătate să fie accesibil pentru toată lumea. În acest scop, dezvoltăm mai multe instrumente: un manual, un set de instrumente, o Carte verde și o platformă online pentru educația adulților. Dar mai întâi trebuie să investigăm unde sunt exact lacunele și nevoile și cum putem personaliza cel mai bine instrumentele pentru a se potrivi acestor nevoi. În acest scop, interviuăm persoane din diferite grupe de vârstă și medii educaționale, precum și profesioniști din domeniul sănătății și elaborarea politicilor.

Utilizarea datelor: Interviul va fi mai întâi rezumat și cu dumneavoastră pentru revizuire. Rezumatul va fi folosit ca sursă de informații în raportul nostru național, dar nu va fi transcris literal. Răspunsurile pe care le dați sunt complet anonime. Vă vom întreba dacă putem include un citat în raport, dar numele dumneavoastră nu va fi menționat. În schimb, vom grupa toți intervievații, în funcție de vârstă și nivel de educație, iar citatele vor fi menționate ca atare.

(Obțineți versiunea semnată a Consimțământului Informat.)

Vârstă:...

Sex:...

Țara natală: ...

Nivel educațional (ISCED 2011 nivel 0-8): ...

Experiența Profesională:.....

Q1 Credeți că asistența medicală de bază în țara dumneavoastră este accesibilă în mod egal pentru toată lumea? [în sens financiar, precum și în ceea ce privește capacitatea fizică și psihică.]

Q2 Știți cum să căutați informații despre sănătate pe internet? Dacă da, cum procedați?

Q3 Cum vă puteți da seama dacă informațiile despre sănătate pe care le găsiți pe internet sunt precise/exacte (și nu sunt incorecte sau derutante)?

Q4 Cât de folositor credeți că este internetul pentru a vă ajuta să luați decizii cu privire la sănătatea dumneavoastră? De ce?

Q5 Utilizați vreun portal medical online (de exemplu ROMEDIC)? Dacă da, de ce? Dacă nu, de ce nu?

Q6 Știți unde sunt stocate datele dumneavoastră medicale? Dacă da, unde?

- Q7** Știți cine are acces la datele dumneavoastră medicale? Dacă da, cine?
- Q8** Considerați că dosarul dumneavoastră medical este ușor de înțeles? De exemplu, aveți probleme cu citirea și înțelegerea documentelor medicale, cum ar fi rapoarte de consultații sau analizele sângelui? Înțelegeți instrucțiunile legate de folosirea medicamentelor?
- Q9** Știți **dacă** și **cum** vă puteți accesa dosarul medical și modifica conținutul și accesibilitatea acestuia? De exemplu, dacă doriți să ștergeți o parte din istoricul dumneavoastră medical sau să vă asigurați că alți profesioniști din domeniul sănătății nu îl pot accesa, știți cum să procedați?
- Q10** Folosiți vreun instrument digital pentru a ține evidența programărilor medicale sau a programului de medicație, cum ar fi un calendar telefonic sau o alarmă? Dacă da, vi se pare ușor de folosit? Dacă nu, știi unde să le găsiți și cum să le folosiți?
- Q11** Utilizați vreo aplicație/instrument digital care să vă ajute să monitorizați sănătatea, de exemplu greutatea, tensiunea arterială sau nivelul zahărului din sânge? Folosiți alte instrumente? Dacă da, ce anume?
- Qop1** Este obișnuit să vi se ceară să semnați un document care conține informațiile dumneavoastră personale atunci când mergeți la un control medical? Puteți citi și înțelege documentul?
- Qop2** Reușiți să informați medicul despre istoricul și problemele medicale pe care le aveți? Este necesar să aduceți investigațiile medicale anterioare la consultație?

Următoarele întrebări se vor concentra în special asupra proiectului TRIO

- Q12** Ați fi interesat(ă) să utilizați o platformă de educație online și/sau un manual pentru a vă îmbunătăți abilitățile digitale în domeniul sănătății? Dacă da, de ce? Dacă nu, de ce nu?
- Q13** Dacă ați utiliza o platformă de educație online, ce format al informațiilor (de exemplu, texte explicative, imagini, videoclipuri, exerciții etc.) v-ar fi mai util?
- Q14** Care credeți că ar fi o modalitate bună de a încuraja cetățenii, de ex. cei cu probleme socio-economice sau de sănătate, sau persoane de vârstă înaintată, să participe la un curs de formare pentru îmbunătățirea abilităților digitale în domeniul sănătății și de prelucrarea datelor?

Doriți să rămâneți implicat(ă) în proiect pe viitor? Ați fi interesat(ă) să participați la sesiunea de co-creare?

12 Annex 1.3 Romanian Interview Questions: Experts

Întrebări pentru interviuri cu experții

Introducerea proiectului TRIO: Sistemul nostru de asistență medicală este digitalizat foarte rapid, dar nu toată lumea are abilitățile digitale, cunoștințele necesare despre sănătate sau abilitățile de prelucrarea datelor pentru a ține pasul cu această schimbare. Proiectul TRIO își propune să ajute cetățenii să își îmbunătățească aceste trei seturi de abilități, astfel încât sistemul de sănătate să fie accesibil pentru toată lumea. În acest scop, dezvoltăm mai multe instrumente: un manual, un set de instrumente, o Carte verde și o platformă online pentru educația adulților. Dar mai întâi trebuie să investigăm unde sunt exact lacunele și nevoile și cum putem personaliza cel mai bine instrumentele pentru a se potrivi acestor nevoi. În acest scop, interviuăm persoane din diferite grupe de vârstă și medii educaționale, precum și profesioniști din domeniul sănătății și elaborarea politicilor.

Utilizarea datelor: Interviul va fi mai întâi rezumat și cu dumneavoastră pentru revizuire. Rezumatul va fi folosit ca sursă de informații în raportul nostru național, dar nu va fi transcris literal. Răspunsurile pe care le dați sunt complet anonime. Vă vom întreba dacă putem include un citat în raport, dar numele dumneavoastră nu va fi menționat. În schimb, vom grupa toți intervievații, în funcție de vârstă și nivel de educație, iar citatele vor fi menționate ca atare.

(Obțineți versiunea semnată a Consimțământului Informat.)

Organizația: ...

Nivel educațional (ISCED 2011 nivel 0-8): ...

Experiența Profesională: ...

Q1 În domeniul dumneavoastră de activitate, întâlniți mulți cetățeni cu competențe slabe ale abilităților digitale în domeniul sănătății sau de prelucrarea datelor?

Q2 Dacă da, există variabile socio-economice sau demografice care considerați că sunt legate de acest lucru?

Q3 În opinia dumneavoastră, ce beneficii și ce probleme apar din digitalizarea sistemului de sănătate?

Q4 Dumneavoastră utilizați instrumente de sănătate digitale/online, cum ar fi portaluri de sănătate, site-uri web medicale sau asistență medicală online?

Q5 În opinia dumneavoastră, care sunt cele mai importante instrumente digitale legate de sănătate pentru cetățeni? De exemplu:

-Aplicații de notificare pentru medicamente pe telefoanele mobile? (DA/NU)

-Vizualizarea/transmiterea informațiilor de monitorizare a sănătății, cum ar fi greutatea, tensiunea arterială și nivelul zahărului? (DA/NU)

-Accesarea/obținerea online a rețetelor medicale ? (DA/NU)

- Alte instrumente digitale: _____

- Q6** Ce instrumente online (în domeniul sănătății) lipsesc sau nu sunt puse la dispoziție în mod corespunzător pentru toată lumea?
- Q7** Care credeți că sunt principalele bariere care împiedică cetățenii să folosească instrumentele digitale de sănătate?
- Q8** Cum am putea folosi politici de sănătate, pentru a ajuta o gamă mai largă de persoane să acceseze online informațiile despre sănătate?
- Q9** Credeți că cetățenii știu unde sunt stocate datele lor medicale? Dumneavoastră știți unde sunt stocate datele dumneavoastră medicale?
- Q10** Credeți că este important pentru cetățeni să aibă acces la propriul istoric medical utilizând o platformă online ? Credeți că acesta ar fi ușor de utilizat de toți cetățenii?

Următoarele întrebări se vor concentra în special asupra proiectului TRIO

- Q11** Ce informații ar trebui să conțină platforma de educație TRIO, astfel încât să fie utilă pentru cetățeni? Ce format al informațiilor (de exemplu, texte explicative, imagini, videoclipuri, exerciții etc.) ar fi mai util?
- Q12** Ce ar trebui să conțină o platformă de educație online, astfel încât să fie mai atractivă pentru persoanele cu mai puține oportunități (de exemplu, cei cu probleme socio-economice sau de sănătate, persoanele de vârstă înaintată, persoanele din mediul rural)? Cum putem facilita cetățenii care au mai puține oportunități (de exemplu din cauza problemelor financiare sau de sănătate) pentru a folosi platformele de educație online? Ce este necesar pentru ei?
- Q13** Cum am putea să motivăm cetățenii cu competențe slabe în privința abilităților digitale din domeniul sănătății, să participe la formare pe o platformă de educație online?
- Q14** Aveți idei sau știți exemple inspiratoare (de exemplu din alte proiecte la care ați participat, din alte țări sau zone geografice), pentru a îmbunătăți accesul cetățenilor și abilitățile lor de prelucrarea datelor digitale din domeniul sănătății?

Doriți să rămâneți implicat(ă) în proiect pe viitor? Ați fi interesat(ă) să participați la sesiunea de co-creare?