Health Index. Ukraine — 2016

RESULTS OF THE NATIONAL HOUSEHOLD SURVEY

KYIV — 2016

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The health care system of Ukraine has been reformed for quite a long period of time already. The attempts have been undertaken to introduce primary health care model, to divide primary and specialized care, and to implement pharmaceutical reimbursement. However, in any of these cases the activities have not been completed. Strategies of health care reform have been changing together with transformations of political regime in Ukraine and with the rise to power of various politicians. Therefore, there have been no real improvements in the health care system, in contrast to other post-Soviet countries. Also, it seems that the main objective hasn't been reached — health care services are not easily accessible by the people.

Under such conditions, there is no improvement of health care system functioning. It pushes people to engage in self-medication, seek "folk" medicine providers, independently search for advice online. It has an impact on the health status of the population — we observe quite high share of neglected diseases and mortality.

In 2015, the National Health Reform Strategy for Ukraine 2015-2020 was developed and adopted. It is critically important that a comprehensive evaluation of the system is introduced to assess the quality and access to health care services in Ukraine.

Therefore, International Renaissance Foundation together with partners launched "Health Index. Ukraine" as the main indicator of public health development in the country. Using the data of the first way of survey, which was conducted in 2016, the Index has identified the baseline of satisfaction with health care services, people's experience with health care services, affordability of medicines, and behavior in case of illness, as well as healthy behavior.

In the next years, we will monitor and evaluate the changes in health care (at the national and at the regional levels) that are carried out within the framework of reforms and affect the ultimate consumer of health care services.

"Health Index. Ukraine" is the tool that will be of assistance primarily for health care administrators and policymakers at the national level, in regions (*oblasts*), districts. and cities — they will be able to understand the expectations and evaluate the reform's impact on patients and communities.

We also count on the communities' active use of the Index to support their arguments with evidence while conducting the dialogue with government authorities to change the things for the better.

We expect that "Health Index. Ukraine" will become a respectful source of the information to complement the managerial tools in the regions. Particularly, the data presented in the Index will help better understand the situation in the regions, to compare the regions with each other and with the average national indicators, and promote experience sharing among the regions.

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Abbreviations

BMI — Body Mass Index

CPHC — Centre for Primary Health Care

DA — difficult to answer

ECG — electrocardiography

FMS — feldsher-midwife station

GP — general practitioner

KIIS — Kyiv International Institute of Sociology

NCD — non-communicable diseases

PHCC — primary health care center

R — refuse to answer

TB — tuberculosis

UAH — Ukrainian hryvnia (currency)

Executive summary

A series of surveys to study people's experience in seeking health care services, their healthy behaviors and attitude towards health care reforms started in 2016. The first study phase, the field phase, took place from 15 through to 30 June 2016.

This study was conducted to explore people's perception of health care services, the level of their satisfaction with these services, and other health-related aspects. The specific tasks were to explore:

- Adult Ukrainians' attitudes to and perceptions of health care system and health care services;
- Barriers faced by households when seeking emergency, outpatient, and inpatient care;
- Characteristics of a healthy lifestyle and preventive measures taken in Ukraine;
- Perceptions of the health care reform.

"Health Index. Ukraine" is characterized by several features that make it stand out among many other studies exploring the same issues. First, it has a special sample representative of each oblast. Second, it is a large sample size (overall, 10,178 respondents participated in the survey) that makes it possible to explore not only population's perceptions of health care system, but also the experience of seeking care at different levels. Third, this is a longitudinal study (a study that covers a long period of time) as it provides repeated survey "waves" using the same methods and instruments.

It should be emphasized that a household member was chosen to be a sample unit, not a health care consumer, because only a household level survey allows identifying key barriers preventing from seeking care or looking for alternative ways of treatment.

The **Section 1 of this report** presents data exploring people's satisfaction with health care services and their perception of the reform. The majority of people are mostly satisfied with different health care components in Ukraine. Among those who sought care in the past 5 years, 72% were satisfied with district GPs (69% of the general population), 69% — with specialized care (67% of the general population), 76% — with pediatricians (71% of the general population), 74% — with dentists (71% of the general population). The highest satisfaction with different health care components was observed among people living in Mykolaiv, Khmelnytsky, Luhansk, and Ternopil oblasts. Also, it was noted that in Sumy, Donetsk, and Poltava oblasts the level of satisfaction with health care services was lower than the average for this survey. Moreover, household members were asked about their perception of the main problems currently existing in Ukrainian health care. The answers show that the key problem is affordability of treatment: the majority of respondents reported high cost of medicines (for 63%, it was one of the three priority problems, for 24% among them — the number one problem) and high treatment costs (indicated as one of the three priority problems by 52% and as the number one problem by 10%). Also, the respondents pointed out other key problems: corruption at the Ministry of Health (mentioned as one of the first three priority problems by 39%, 25% — number one problem), informal payments to physicians (33% respectively, of them 12% — number one), lack of modern medical equipment (33%, of them 10% — number one).

Also, the survey results made it possible to find out a consolidated public opinion about expediency of health reforms: 93% of Ukrainian population supported the need for reforms, while 15% believed that the reform was taking place. It is worth noting that respondents who rated their health status

as worse (compared to others) and older people were more reluctant to notice the health care reform. Regarding responsibility for improving health care facilities' functioning, respondents mostly put the responsibility on the shoulders of the Minister of Health (71%). Almost half of respondents (46%) believe that a Chief Doctor or a Director must improve health care facility functioning. Approximately one third of respondents believe that improvements depend on high country officials — Prime Minister or President of Ukraine. Significantly fewer people think that physicians and local authorities are agents of change.

Sections 2 and 3 describe key results about knowledge of healthy lifestyle and disease symptoms, environment assessment, and illness behavior. The majority of Ukrainians (82%) were able to name one or more symptoms of tuberculosis. According to the survey, the highest level of TB symptoms awareness was observed in Donetsk (96% of respondents mentioned at least some symptoms), Kherson (93%), Mykolaiv (91%), Lviv (91%), and Kirovohrad (90%) oblasts, the lowest — in Cherkasy (51%), Poltava (62%), and Ivano-Frankivsk (64%) oblasts. Regarding symptoms of stroke, at least 77% of respondents demonstrated knowledge of at least one symptom. Also, the survey showed that 71% of respondents have rather positive or very positive perception of vaccination. At the same time, 14% of respondents perceive vaccination as rather negative or very negative, the rest 15% remain neutral. The most positive perception of vaccination was noted in Mykolaiv (91% very or rather positive) and Sumy (89%) oblasts, as well as in the city of Kyiv (90%); the most negative — in Khmelnytsky (only 48% positive), Lviv (51%), Rivne (54%), and Volyn (56%) oblasts. More positive perception of vaccination was observed among the young people compared to the elderly: 72% of respondents aged 18-44 and 67% of those over 45 had positive perception of vaccination.

Also, respondents were asked to assess some characteristics of the location where they lived. In general, people were satisfied with the environment they lived in, with 45% of the respondents being positive, 41% — neutral, and only 14% dissatisfied with their environment. People living in Kharkiv oblast were the most satisfied (70% assessed as "good"), as well as Chernivtsi (58%), Kyiv (56%), Kherson, and Luhansk (55% each) oblasts. People living in Zaporizhia (23**%** assessed as "good"), Sumy (24%), and Mykolaiv (30%) oblasts were the most critical of their environment.

The highest level of disease reporting was seen among respondents of Zaporizhia oblast (83%), however, only 46% of patients sought medical care. Low disease reporting level oblasts were Khmelnytsky (40%), and Kharkiv (48%) oblasts; higher levels of medical care seeking were seen in Kirovohrad (95%), Luhansk (84%), Vinnytsia (76%), Donetsk (76%), and Chernivtsi (75%) oblasts.

There are some peculiarities of disease or injury reporting and health care seeking among different social and demographic groups:

- Men have reported their diseases or have sought care less frequently compared to women;
- With age, proportion of sick patients and those seeking care is increasing;
- Poor health, chronic diseases and disability were observed along with high disease incidence and higher level of seeking care;
- Among the highest-income respondents, the share of those with diseases was somewhat smaller in comparison with the lower-income population groups (51.5% for people with income under 1000 UAH vs. 48.8% for people with income over 2000 UAH). At the same time,

there was no significant difference between respondents with different income levels in terms of seeking medical care in case of disease or injury (levels 63.2-63.6%).

Section 4 describes experience of patients seeking outpatient care, and **Section 5** — inpatient care. 36% of adult population of Ukraine reported seeking outpatient care because of health problems in the last 12 months. The majority of those seeking care in the last 12 months have visited their general practitioner (37%) or a family doctor (24%); 2% sought care from their personal family physician (on agreement), and over one third (37%) visited a specialist. One third (38%) of those visiting a specialist were officially referred by a GP or a family physician, the rest 62% visits were without referral. According to respondents, the main reasons of their visits to a health care facility or physician (they were not assigned to) were competencies (33%), personal acquaintance, or recommendation by friends (27%), as well as physician's friendly attitude (21%). Besides, such choice was also influenced by such factors as availability of necessary equipment (16%), good location (9%), preference of a private center over the nearest public center (9%), coverage of a broad spectrum of diseases (7%), affordability (7%), getting free-of-charge care (6%), and absence of waiting lines (4%).

Among those seeking outpatient care in the last 12 months, 20% reported paying for the services through a charitable foundation account (53% — on demand, the rest — voluntarily), 12% — via cash register in accordance with the official price list of a health care facility, and 10% gave informal payments directly to a physician or other health care worker (25% — on demand and 75% — voluntarily). The mean (informal, via cash register or charitable fee) amount of out-of-pocket payments for physician's consultation was 472 UAH (2,644 UAH — standard deviation) or 60 UAH — median payment.

Among respondents who paid money for health care services or medicines (during their outpatient visit), 64% reported it was difficult to find money; for 36% it was not difficult or rather not difficult. Difficulty paying for outpatient services was more frequently experienced by older people as well as household members with low income. The highest percentage of people having difficulty finding money was seen in Kirovohrad (96%), Khmelnytsky (89%), Kharkiv (77%), and Donetsk (75%) oblasts; the lowest — in Ternopil (44%), and Rivne (45%) oblasts. Around 39% of respondents aged 18 and older who were sick in the past 12 months did not seek care because they had no money. Women, older people, and people from lower-income families refused to seek care more frequently because of a lack of money, although the similar percentage was also significantly high in other respondent groups as well.

In terms of inpatient care (**Section 5**), 15% of those older than 18 reported cases of hospital admission in the past 12 months. The lowest percentage of those reporting admission was in Ternopil (10%) and Odesa (11%) oblasts, the highest — in Vinnytsia (20%), Kyiv (19%), and Rivne (19%) oblasts. Some 74% of respondents reported being admitted to municipal or central district hospitals, 18% — to oblasts hospitals, 4% — to departmental (industry-sponsored) hospitals, 3% — to the national level health care facilities. Half of those admitted (56% of those who were hospitalized in the past 12 months) did not choose the health care facility on their own, but were referred by a physician or had used to be admitted to the same hospital. About 11% reported choosing the facility because it had the necessary equipment, 9% — competent staff, 9% — good location, 8% — because they or their friends knew a physician who recommended the hospital.

37% inpatients paid “charitable contributions” (56% of those — on demand), 27% paid via cash register according to the official price list of the facility, 25% made informal payments directly to a physician or other staff (30% of them — on demand). In total, one patient paid 1750 UAH (mean; standard deviation — 5,203 UAH, median — 250 UAH).

Out of respondents with admission experience in the past 12 months, 56% paid physician or surgery services, 97% paid for medicines, 79% — for lab tests and diagnostics. Usually, hospitalized patients had difficulty finding the money for inpatient treatment. For 48% of all the admitted (or 78% of those who paid), it was difficult or impossible to find the money for the services or surgery, for 82% (or 84% of those who paid), it was difficult or impossible to find money for medicines, for 46% (or 59% of those who paid), it was difficult or impossible to find money for diagnostics or lab tests.

The biggest proportion of emergency care consumers (13.9% of all respondents or 61% of those who have had this experience) called for an ambulance once a year, as mentioned in **Section 6**. The average number of ambulance calls per household that reported on calling ambulance was 2.1 (total for Ukraine). This figure was the highest in Volyn (3.2) and Ternopil (3.1) oblasts, the lowest — in Khmelnytskiy (1.6) and Lviv (1,6) oblasts. Most frequently, people called for state ambulance (98.9%). Main complaints and symptoms necessitating services of an ambulance were related to high blood pressure (30%) or a suspected stroke (4%). Overall, 44% of calls were related to cardio-vascular diseases. Second main reason (15%) was high body temperature, at that, other disease signs were not mentioned. In this group, mostly children were emergency care consumers. Symptoms of digestive tract disorders were reported in approximately 10% of cases.

Section 7 describes pediatric outpatient service consumption. Some 67.8% of families with children sought pediatric care in the last 12 months before the interview, and the average annual number of visits to pediatrics (among those who reported relevant service consumption) was 3.1, which is 2.2 as recalculated per each child under 18. The majority of respondents reported visiting a district pediatrician (72%), a family physician, or a GP (15%); 4% used services of a “personal” family physician (on agreement), and 9% used specialists’ services.

According to respondents, most of consultations (88%) were free-of-charge for families of children who needed medical assistance. On average, amount of the payment spent by families for consultation was 100 UAH (median) for the whole country in general. Percentage of those using lab and diagnostic services and paying for them was somewhat higher: 33.5% of consumers paid for tests (66.5% had them free-of-charge), 38.5% paid for diagnostics (61.5% had them free-of-charge). The average amount of out-of-pocket payments for lab test and diagnostics was higher than the average payment for physician’s consultation (amount variability is higher): 50 UAH for tests and 100 UAH for diagnostics (median). Standard deviation value is high and exceeds mean several-fold which means big variability of payment amounts. Thus, expenditures of 10% of those who had paid for diagnostics were in 400 — 40,000 UAH range, for tests — 300 to 10,000 UAH range.

Survey results regarding spending for medicines are presented in **Section 8** of the Report. Medicines were prescribed to 89% of those who reported having used outpatient services during a year preceding the survey. In most of cases (77.6%), people who were prescribed medicines bought all of them, 16.5% — almost all, 5.9% — none or just a few. The smallest number of people who bought all the prescribed medicines was observed in Kirovohrad (62%), Khmelnytsky (63%), Sumy (63%), Chernihiv

(64%), Luhansk (64%), and Dnipro (64%) oblasts, the biggest — in Kyiv (87%), Ternopil (86%), and Volyn (86%) oblasts. The main reason for failure to buy all the prescribed medicines was a lack of money. This reason was reported by 50.5% of those buying some of prescribed medicines. One third of respondents (35.5%) did not consider necessary to buy all the prescribed medicines, and 7.5% explained it by their absence in a pharmacy. If prescribed drugs were purchased, the average cost was 776 UAH; 50% of people spent up to 400 UAH.

Approximately 96% of inpatients reported medicines' prescription. Among those admitted and in need of medicines 16% reported that they paid for medicines provided by the hospital. These patients paid on average 1000 UAH (median); medicines bought at a pharmacy costed 1500 UAH on the average (median).

Expenditures on medicines is a significant budget item for Ukrainian families. When comparing expenditures for the last treatment episode with monthly household income it looks like spending on medicines was a significant burden for most households.

Health Index systematizes and emphasizes key study findings presented in **Section 9**. All oblasts together showed very similar results: the average score for Ukraine is 55 points (of total 100). Mykolaiv and Kherson oblasts scored the highest (63 points), the lowest score — Sumy (50), Ivano-Frankivsk, and Ternopil (51) oblasts. Sub-indicators measurement provides more detailed information about each region, as well as about aspects calling for additional action in certain oblasts. For example, Ternopil oblast is a leading region in such sub-indicators as satisfaction with health care (1-2), however, the level of seeking care in case of disease is rather low (3), the same pertains to health check-ups (4); stroke awareness is also quite low. It leads to an ambiguous result. For Ivano-Frankivsk oblast, the lowest indicator was people's awareness about stroke symptoms.

INTRODUCTION

Series of surveys to study people's experience in seeking health scare services, their healthy behaviors and attitude towards health care reforms started in 2016, when a large-scale National household survey on healthy lifestyles and health care consumption experience was conducted with support of the International Renaissance Foundation.

Data were collected by the Kyiv International Institute of Sociology (KIIS) as part of the first (constituent) national survey in May-June 2016 (total number of respondents — 10,178 people).

The goal of the study was to learn how people perceive health services, level of their satisfaction with these services and other health-related aspects. The specific tasks were to study:

- Attitude and perceptions of Ukrainians of health care system and health care services;
- Barriers faced by household members when seeking emergency, outpatient, inpatient care;
- Features of healthy lifestyles and preventive measures taken;
- Health care reforms perceptions.

"Health Index. Ukraine" study bears several features making it stand out among many other studies looking at the same issues. First, it is a special sample which is representative for each oblast. Study sample is designed in such a way that it allows evaluating data not only for Ukraine in general, but on a level of each individual administrative and territorial unit (oblast, city of Kyiv).

Second, it is a large sample size (overall, 10,178 respondents were surveyed) that makes it possible to study not only population's perceptions of health care system but experience of seeking care at different levels. Third, this is a longitudinal study (covers a certain period) as it provides repeated survey "waves" using the same methods and instruments. It will allow to obtain a unique dynamic picture of people's perceptions and behaviors regarding health status, awareness of symptoms and access to, quality of health care service.

When developing study methodology, the authors were inspired by the Euro Health Consumer Index[1], which for a long time (since 2006) has been allowing to compare development of health care systems of the European Union countries, and identifying the optimal way for their further development, as well as a similar Canadian study[2].

[1] Euro Health Consumer Index: http://www.healthpowerhouse.com/en/news/euro-health-consumer-index-2015/.

[2] Healthy Canadians: A Federal Report on Comparable Health Indicators 2012: http://www.healthycanadians.gc.ca/index-eng.php.
Note. Indicators included to Federal and Provincial Reporting include 52 indicators of health, performance of the Canadian health care system and quality of care that are based on input from health partners, experts and the public at large, and were identified as being of greatest interest and / or use to Canadians.

METHODS

As long as the goal of the study is to examine prevalence of certain behaviors and obtain representative data regarding people's perceptions of problematic issues and awareness of symptoms and other issues, the study design was chosen to be a quantitative cross-sectional study.

The first wave of study, its field phase, took place from 15 May through to 30 June 2016.

General characteristics of a study sample

A study sample is representative of the adult population (18 and older) of Ukraine in general, as well as of each oblast of Ukraine and of the city of Kyiv. The study used multi-stage sampling, random at each stage. At the first stage of sample development in each oblast, inhabited locations were randomly chosen proportionally to their population size. The second stage involved randomization of areas on the territory of the chosen inhabited locations. On the territory of each chosen area, streets, buildings, and apartments were randomly selected. The last stage included choosing a respondent within a household and the actual interview. The data obtained were matched to the estimated data of the State Statistics Service of Ukraine in terms of share of individual sex-age groups within population of Ukraine (as of 1 January 2016).

Overall, 10,178 respondents were interviewed. Theoretical sampling error for the whole data pool is 1.0%.

It should be emphasized that neither a patient, nor a health care consumer, but a household member was chosen to be a sample unit, because only a household level survey allows to identify key barriers preventing from seeking health care services.

Moreover, it is critically important that health care reforms take into account opinions of many different people, not only of health care consumers with an extensive experience seeking care (those who already know how to overcome the barriers). So, the methodological basis used in this study allows to learn attitudes and experience of those people who due to various reasons do not use health care services.

The survey was approved by the International Scientific Board established for the purpose of this project. Research design development took place from August 2015 through to May 2016. Research instrument has been pre-tested with 24 respondents in the city of Kyiv and several towns and villages of the Kyiv oblast from 31 March through to 5 April 2016.

DATA COLLECTION METHODS AND RESEARCH INSTRUMENTS

Household representative survey was conducted by means of personal face-to-face interview, because its advantages are:

- Maximum representation of the population strata which is impossible to achieve in Ukraine through telephone or online survey;
- Tracking spontaneous answers of the respondents, their perception of the problem and the questions asked;

- More prolonged communication compared to other methods;
- Openness of respondents when talking directly to interviewer.

Depending on people's personal experience, respondents were asked max. 200 questions about assessing health care problems, importance of different aspects of health care services; satisfaction with performance of different levels of medical care; illness behavior, experience seeking emergency, outpatient, and inpatient care, as well as experience using services for children under 18; rating one's own health and some lifestyle features. The questionnaire mostly used closed-ended questions except several open-ended questions related to respondent's diagnosis that were encoded later.

An average interview lasted 39 minutes. 303 interviewers were involved in the field phase. All regional interviewer groups working in respective oblasts were involved in the study. A remote briefing of the team leaders took place on 15 May; team leaders briefed their teams at respective locations. During the study, the survey network coordinator answered by phone questions that team leaders and interviewers had during hands-on training and after looking through the sample field documents.

People were interviewed at the place they lived, in Ukrainian or Russian upon each respondent's preference. Respondents with hospitalization experience (the longest interviews) were offered a small gift for their participation (a package of vitamins).

Demographic characteristics of the people interviewed

Distribution of study respondents by key demographic characteristics correlates with official population composition according to statistical data. Among all the interviewed 55% were women, 45% — men (Table 1). One third (33%) of the respondents were people of retirement age (women of 55 or older, men of 60 or older). One third (31%) of respondents lived in villages, the rest (69%) in towns or urban-type settlements.

45% of all respondents were employed, 3% of them were self-employed, 1% — employed pensioners. Those non-employed (55% of the population) included pensioners (30%), unemployed (8%), housewives (11%), students (3%), and people with disabilities (3%).

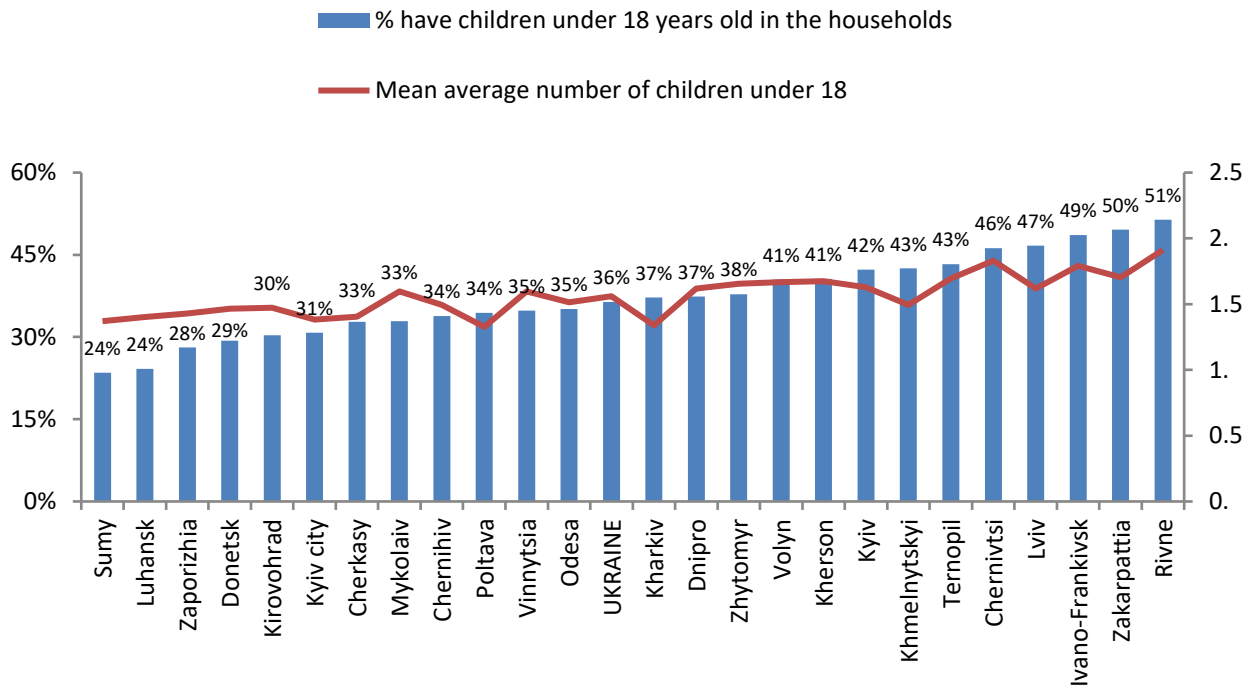
Average respondents' household size was three persons.

According to the survey, 37% of households had children under 18 years old. The average number of children was 1.56 (Ukraine — median 1), in western oblasts (Rivne, Chernivtsi, Ivano-Frankivsk, Zakarpattia, Ternopil, Volyn, Lviv) there were more children per family (median — 2, mean — 1.6-1.9) (Fig. 1).

Table 1. Breakdown of respondents by key demographic characteristic

Survey Questions D1,2,3,14, I4		Health Index Survey		National Data	
		Number (N)	Percentage (%)	Number (N)	Percentage (%)
Age groups	18-29	1485	19.6	6818972	19.5
	30-44	2537	27.9	9757462	27.9
	45-59	2839	25.7	8983229	25.7
	60 and older	3317	26.8	9417210	26.9
Sex	Female	6710	54.8	19176641	54.8
	Male	3468	45.2	15800232	45.2
Education level	Primary / incomplete	511	4.0	-	-
	Complete higher educ.	2256	20.6	-	-
	Vocational educ.	1896	18.4	-	-
	Basic college educ.	2884	29.5	-	-
	Basic higher educ.	510	5.1	-	-
	Complete higher educ.	2017	22.3	-	-
Residential area type	Urban	6318	68.9	19176641	69.6
	Rural	3860	31.1	15800232	30.4
Household size	1 person	1638	14.5	-	-
	2 persons	3133	30.2	-	-
	3 persons	2295	25.0	-	-
	4 persons	1660	17.2	-	-
	5 or more	1439	13.0	-	-
Average household size		10162	2.9	-	2.58

Fig. 1. The average number of children under 18 in households: breakdown by oblast



SECTION 1. SATISFACTION WITH HEALTH CARE AND HEALTH CARE REFORMS: PERCEPTIONS AND ATTITUDES

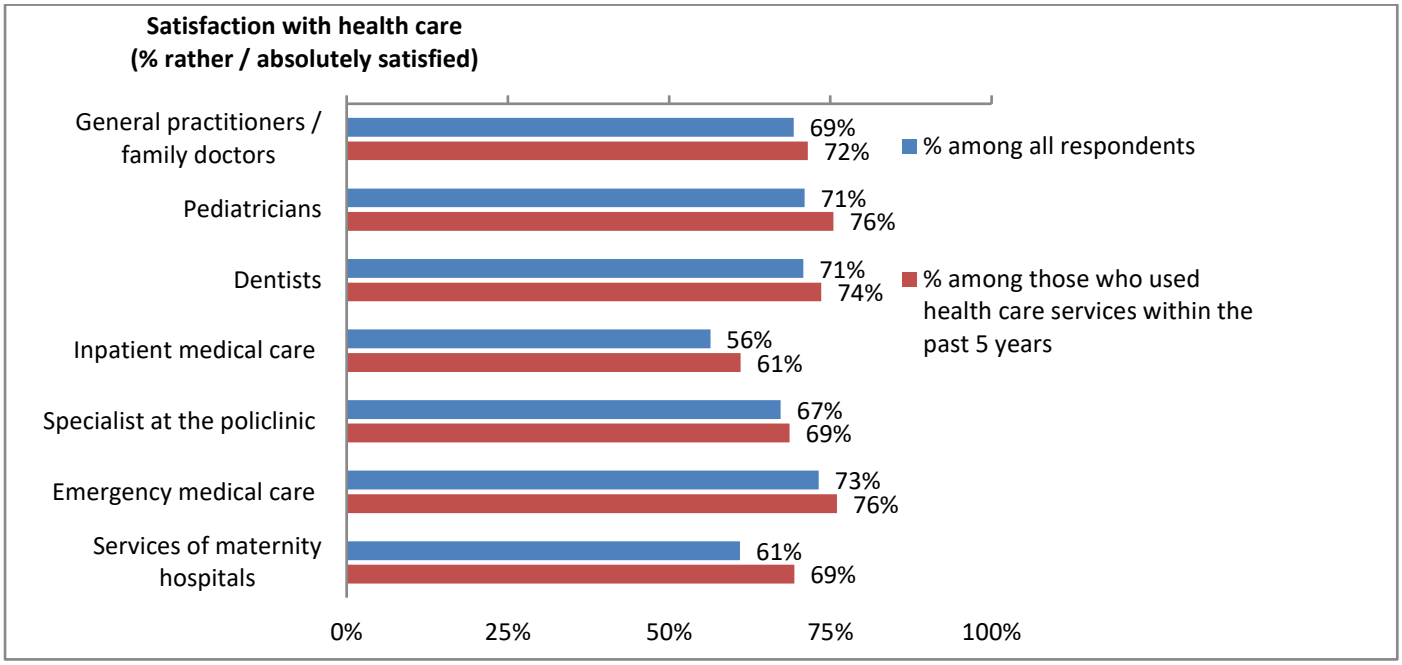
1.1. Satisfaction with health care

According to the survey results, the majority of the population are satisfied with functioning of different health care elements in Ukraine. Those who had the experience of consuming health care are also mostly satisfied with health care. Although in some cases the difference between recent and past consumers did not exceed 2%, this difference is significant because of the large sample size[3].

As described in Fig. 1.1., among those who have had the experience using health care services in the past 5 years (questions A1–A2, Appendix A), 72% were satisfied with their district GPs (69% of the general population), 69% — with sub-specialists (67% of the general population), 76% — with pediatricians (71% of the general population), 74% — with dentists (71% of the general population). It was also reported that 76% of the recently surveyed consumers were satisfied with emergency medical care (73% of the population in general), 69% — with the care at maternity hospitals/departments (61% of the population in general). The least satisfied with inpatient care were 61% of the people seeking this type of care in the past 5 years (56% of the population in general).

[3] Maximum error (for values close to 50%) for the group N=3000 — 1.8%, 5000 — 1.4%, 7000 — 1.18%

Fig. 1.1. Satisfaction with health care providers among the population in general and health care services consumers



Although most respondents are rather satisfied than dissatisfied with health care services, their level of satisfaction is not the highest, and they perceive medical care rather as “acceptable” than “excellent”. When answering a question about satisfaction with different providers and type of service, both consumers of health care and other respondents chose the “rather satisfied” option, and not the “completely satisfied” option (Table 1.1). Among those who have had personal experience seeking medical care in the past 5 years only 17% were completely satisfied with their district GPs (16% of all the respondents), 18% — with their pediatricians (15% of all the respondents), 21% — with their dentists (19% of all the respondents), 13% — with sub-specialists (medical specialists) in the outpatient clinics (12% of all the respondents), 13% — with inpatient medical care (11% of all the respondents), 22% — with emergency care (18% of all the respondents), 17% — with maternity hospitals / departments (11% of all the respondents).

Table 1.1. Level of satisfaction with different health care providers and types among the population in general and health care services consumers

Questions in the questionnaire: A1-2		All surveyed		Sought health care services in the past 5 years	
		Number (N)	Percentage (%)	Number (N)	Percentage (%)
Satisfaction with the district GPs / family physicians *(Total N=8744, of them with experience seeking care in the past 5 years N=7317)*	Completely satisfied	1 456	15,6%	1 288	16,9%
	Rather satisfied	4 697	53,7%	4 003	54,6%
	Rather dissatisfied	1 985	23,6%	1 578	22,4%
	Completely dissatisfied	606	7,1%	448	6,1%
Satisfaction with pediatricians (*Total N*=5412, *of them with experience seeking care N=2972)*	Completely satisfied	825	14.6%	535	17,9%
	Rather satisfied	3 078	56.4%	1 741	57,6%
	Rather dissatisfied	1 137	21.6%	541	18,8%
	Completely dissatisfied	372	7.4%	155	5,7%
Satisfaction with dentists *(Total N=7822, of them with experience seeking care N=5876)*	Completely satisfied	1 477	18,9%	1 229	21,0%
	Rather satisfied	4 040	51,9%	3 105	52,6%
	Rather dissatisfied	1 786	22,9%	1 209	20,9%
	Completely dissatisfied	519	6,3%	333	5,5%
Satisfaction with inpatient care *(Total N=6852, experience seeking care N=3994)*	Completely satisfied	748	10,6%	523	13,1%
	Rather satisfied	3 251	45,8%	1 956	48,0%
	Rather dissatisfied	2 134	32,7%	1 127	28,9%
	Completely dissatisfied	719	10,8%	388	10,0%
Satisfaction with sub-special-ist outpatient care *(Total N=7806, experience seeking care N=5868)*	Completely satisfied	959	12,3%	761	13,3%
	Rather satisfied	4 388	55,0%	3 338	55,4%
	Rather dissatisfied	1 932	25,8%	1 410	24,9%
	Completely dissatisfied	527	6,9%	359	6,4%
Satisfaction with emergency care *(Total N=6907, experience seeking care N=3885)*	Completely satisfied	1 277	18,3%	839	21,7%
	Rather satisfied	3 886	54,9%	2 185	54,3%
	Rather dissatisfied	1 299	20,5%	625	17,8%
	Completely dissatisfied	445	6,3%	236	6,2%
Satisfaction with maternity hospitals / departments (Total N=4115*, experience seeking care N=1460)*	Completely satisfied	466	11,1%	222	17,0%
	Rather satisfied	2 125	49,9%	795	52,4%
	Rather dissatisfied	1 046	26,6%	316	21,7%
	Completely dissatisfied	478	12,3%	127	8,9%

People living in Mykolaiv, Khmelnytsky, Luhansk, and Ternopil oblasts were the most satisfied with different health care providers. In these oblasts, the respondents ranked all providers higher than the average — over 70% positive grades among those who have sought health care in the past 5 years (*Table 1.2)*. The least satisfied were respondents in Kirovohrad oblast. In particular, only 46% of the surveyed people were satisfied with inpatient care, only 39% — with maternity inpatient care, 70% — with emergency care; regarding specialists, only 37% of the respondents were satisfied with dental care, 52% — with their district GPs, 50% — with outpatient care sub-specialists, 76% — with pediatricians.

It was also observed that in Sumy, Donetsk, and Poltava Oblasts the level of satisfaction with health care was lower than the average for the survey.

Breakdown by social and demographic characteristics (Table 1.3) demonstrated that a somewhat larger proportion (4-7% difference) of women were satisfied with individual aspects of medical care. Thus, 77% of women and 72% of men who had had the experience of seeking medical care were satisfied with pediatricians; 76% of women and 71% of men — with dentists, 72% of women and 65% of men — with maternity care. As for the other aspects, men and women were similar in their assessment.

Young people (aged 18-29) tend to be more satisfied with outpatient care sub-specialists (74% of respondents who have had the experience of seeking medical care) and dentists (79%), as well as with inpatient (68%) and maternity care (70%).

Table 1.2. Satisfaction with health care: breakdown by oblast (for the population in general and for consumers — those who have sought medical care in the past 5 years)

Survey questions A1-2	District GPs /Family physicians				Pediatricians				Specialists in out-patient care				In-patient care				Emergency care				Maternity care				Dentists			
	Total		Users		Total		Users		Total		Users		Total		Users		Total		Users		Total		Users		Total		Users	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Ukraine	6 153	69%	5 291	72%	3 903	71%	2 276	76%	5 347	67%	4 099	69%	3 999	56%	2 479	61%	5 163	73%	3 024	76%	2 591	61%	1 017	69%	5 517	71%	4 334	74%
Vinnytsia oblast	279	75%	267	77%	139	69%	69	82%	240	71%	207	72%	172	59%	122	68%	239	79%	152	83%	116	64%	46	75%	249	77%	213	79%
Volyn oblast	265	72%	229	72%	178	87%	113	84%	247	76%	187	75%	150	62%	85	55%	288	93%	199	95%	120	74%	49	66%	224	66%	175	62%
Dnipro oblast	221	62%	192	65%	160	67%	110	70%	209	65%	152	64%	167	59%	112	60%	248	77%	163	78%	126	62%	65	69%	241	71%	192	73%
Donetsk oblast	230	63%	211	65%	100	62%	72	74%	179	54%	129	56%	147	49%	91	59%	147	53%	91	56%	70	40%	35	68%	232	70%	199	70%
Zhytomyr oblast	267	73%	247	73%	145	71%	99	70%	214	71%	187	69%	163	62%	134	60%	182	75%	144	80%	95	61%	53	66%	205	73%	159	73%
Zakarpattia oblast	278	71%	229	73%	222	75%	101	74%	289	76%	174	76%	209	67%	91	66%	257	82%	96	84%	175	72%	36	66%	293	77%	184	81%
Zaporizhya oblast	233	66%	222	67%	108	64%	65	75%	206	64%	182	65%	109	48%	74	59%	155	62%	97	73%	52	51%	23	79%	165	58%	120	68%
Ivano-Frankivsk oblast	244	70%	200	71%	128	74%	88	72%	190	62%	158	61%	141	42%	102	43%	231	75%	167	75%	93	51%	56	66%	265	84%	239	84%
Kyiv oblast	239	77%	220	77%	142	75%	108	76%	191	70%	169	72%	153	65%	116	65%	171	67%	137	65%	72	64%	38	63%	209	77%	179	78%
Kirovohrad oblast	131	47%	117	52%	87	57%	71	76%	112	46%	91	50%	69	31%	51	46%	142	67%	78	70%	15	24%	10	39%	87	37%	64	37%
Luhansk oblast	219	73%	197	79%	114	79%	59	85%	201	72%	158	74%	132	74%	63	84%	162	81%	80	93%	93	75%	28	83%	174	79%	122	81%
Lviv oblast	220	67%	194	69%	155	72%	106	74%	186	67%	163	70%	146	53%	109	63%	186	78%	118	80%	96	54%	51	68%	204	70%	186	71%
Mykolaiv oblast	300	84%	267	85%	204	87%	95	88%	255	83%	189	85%	212	78%	123	77%	251	89%	134	90%	174	93%	65	97%	224	80%	160	86%
Odesa oblast	268	73%	206	74%	180	75%	91	74%	220	70%	133	70%	145	54%	75	54%	184	69%	61	70%	110	63%	37	61%	233	70%	173	72%
Poltava oblast	211	59%	189	67%	148	57%	77	69%	199	62%	176	65%	147	50%	97	54%	178	65%	121	72%	80	58%	22	67%	214	64%	188	72%
Rivne oblast	267	73%	235	73%	168	73%	143	74%	211	65%	185	67%	161	58%	122	58%	184	70%	131	69%	109	62%	66	66%	222	72%	202	74%
Sumy oblast	215	55%	170	61%	156	54%	102	74%	181	50%	130	63%	144	44%	85	56%	163	50%	92	62%	74	38%	27	57%	214	59%	179	71%
Ternopil oblast	294	84%	194	84%	208	89%	86	82%	196	85%	110	83%	185	73%	83	72%	184	83%	55	82%	100	74%	28	73%	246	89%	145	89%
Kharkiv oblast	254	69%	216	71%	144	68%	78	84%	238	70%	175	70%	141	50%	77	59%	282	82%	141	84%	118	71%	44	79%	237	68%	188	72%
Kherson oblast	268	69%	231	70%	206	75%	133	83%	239	66%	203	66%	193	59%	137	68%	197	64%	107	67%	132	59%	58	67%	234	64%	196	72%
Khmelnytsky oblast	286	80%	245	87%	225	74%	57	77%	263	78%	153	85%	231	73%	74	82%	283	81%	134	92%	189	73%	32	77%	257	78%	164	92%
Cherkasy oblast	214	71%	176	69%	118	73%	82	69%	210	72%	164	71%	169	63%	122	67%	230	83%	160	86%	81	57%	42	56%	197	72%	165	72%

Chernivtsi oblast	*278*	*74%*	*226*	*76%*	*190*	*75%*	*113*	*76%*	*264*	*79%*	*189*	*79%*	*232*	*70%*	*140*	*75%*	*239*	*76%*	*114*	*80%*	*139*	*67%*	*62*	*75%*	*265*	*73%*	*209*	*73%*
Chernihiv oblast	*266*	*83%*	*228*	*84%*	*151*	*84%*	*79*	*85%*	*233*	*77%*	*179*	*76%*	*199*	*73%*	*140*	*70%*	*195*	*80%*	*131*	*77%*	*91*	*72%*	*19*	*69%*	*236*	*78%*	*176*	*75%*
Kyiv city	*206*	*68%*	*183*	*69%*	*127*	*72%*	*79*	*73%*	*174*	*67%*	*156*	*70%*	*82*	*40%*	*54*	*48%*	*185*	*76%*	*121*	*76%*	*71*	*62%*	*25*	*73%*	*190*	*68%*	*157*	*72%*

Table 1.3. Satisfaction with health care: breakdown by sex, age, type of residence, and household income per one adult person (for the population in general and consumers — those who have sought medical care in the past 5 years)

Survey questions A1-2	*District GPs / Family physicians*				*Pediatricians*				*Specialists in outpatient care*				*Inpatient care*				*Emergency care*				*Maternity care*				*Dentists*			
	Total		*Users*		*Total*		*Users*		*Total*		*Users*		*Total*		*Users*		*Total*		*Users*		*Total*		*Users*		*Total*		*Users*	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Total	***6 153***	***69%***	***5 291***	***72%***	***3 903***	***71%***	***2 276***	***76%***	***5 347***	***67%***	***4 099***	***69%***	***3 999***	***56%***	***2 479***	***61%***	***5 163***	***73%***	***3 024***	***76%***	***2 591***	***61%***	***1 017***	***69%***	***5 517***	***71%***	***4 334***	***74%***
SEX																												
Men	1900	68%	1537	71%	1105	68%	515	72%	1652	66%	1191	67%	1222	54%	691	60%	1593	71%	835	75%	667	58%	196	65%	1763	69%	1321	71%
Women	4253	70%	3754	72%	2798	73%	1761	77%	3695	68%	2908	70%	2777	58%	1788	62%	3570	75%	2189	77%	1924	63%	821	72%	3754	72%	3013	76%
AGE GROUP																												
18-29	905	72%	759	74%	768	77%	553	79%	810	73%	590	74%	600	62%	362	68%	694	73%	368	73%	551	68%	338	70%	956	78%	813	79%
30-44	1578	69%	1345	71%	1391	73%	1036	74%	1376	67%	1044	67%	1017	56%	591	58%	1312	73%	736	74%	925	63%	451	70%	1561	73%	1287	75%
45-59	1678	67%	1429	69%	968	65%	444	73%	1491	64%	1153	66%	1079	52%	656	58%	1442	71%	834	76%	619	55%	153	64%	1557	68%	1241	70%
60 and older	1992	70%	1758	72%	776	66%	243	78%	1670	67%	1312	69%	1303	57%	870	63%	1715	76%	1086	80%	496	56%	75	75%	1443	65%	993	70%
RESIDENTIAL AREA TYPE																												
Urban	3696	68%	3200	69%	2427	70%	1391	74%	3334	66%	2560	67%	2440	55%	1475	60%	3352	73%	2033	75%	1696	61%	631	69%	3502	71%	2790	74%
Rural	2457	73%	2091	76%	1476	74%	885	79%	2013	70%	1539	73%	1559	59%	1004	64%	1811	74%	991	78%	895	63%	386	71%	2015	71%	1544	74%
HOUSEHOLD INCOME PER ONE ADULT																												
Up to 1000 UAH	1016	66%	826	69%	706	69%	385	75%	861	67%	632	70%	724	58%	449	66%	864	73%	469	76%	449	62%	170	71%	921	69%	677	73%
1001-1500 UAH	1708	69%	1489	71%	871	69%	455	76%	1452	67%	1119	67%	1128	58%	733	61%	1445	75%	893	78%	599	61%	207	69%	1379	69%	1051	73%
1501-2000 UAH	993	71%	869	73%	613	74%	333	80%	886	69%	674	71%	662	58%	402	64%	845	74%	495	78%	429	62%	146	71%	903	72%	749	75%
Over 2001 UAH	995	68%	848	70%	745	71%	471	72%	892	67%	644	66%	657	54%	375	56%	865	71%	470	73%	512	58%	206	70%	1015	73%	823	74%
HEALTH SELF-ASSESSMENT																												

Very bad	152	72%	134	72%	65	66%	34	75%	130	68%	106	67%	112	62%	90	63%	143	80%	115	79%	37	60%	6	73%	101	64%	75	71%
Bad	855	64%	808	66%	347	62%	150	70%	756	63%	663	66%	598	52%	486	58%	790	72%	586	77%	207	49%	52	55%	578	61%	426	66%
Moderate, not good, but not bad	2721	68%	2379	70%	1577	68%	867	73%	2338	65%	1833	67%	1773	55%	1114	61%	2236	71%	1316	75%	1024	55%	345	64%	2398	68%	1861	71%
Good	2082	71%	1710	73%	1642	74%	1082	77%	1819	70%	1296	71%	1301	58%	693	62%	1714	75%	881	75%	1133	67%	539	73%	2100	75%	1720	77%
Very good	298	79%	225	85%	249	81%	132	82%	267	74%	171	76%	191	66%	82	67%	250	81%	109	86%	174	74%	69	80%	308	82%	231	84%

People living in rural areas are somewhat more satisfied with their GPs / family physicians than those living in the cities (rural — 76%, urban — 69% of those who have consumed health care services in the past 5 years), pediatricians (79% and 74%, respectively), outpatient sub-specialist care (73% and 67%, respectively), inpatient care (64% and 60% in urban areas, respectively).

Middle-income respondents demonstrated higher level of satisfaction with health care. People with the lowest income were the least satisfied due to financial barriers to getting medical care, while people with the highest income were not satisfied because of the higher demands for the quality of health services.

It was observed that respondents who rated their health as good were more satisfied with health care than those who rated their health as bad. This fact points out different expectations and needs of consumers, as well as their assessment of the consumed health services.

To better understand these results, it is worth considering how we define satisfaction[4]. Some theories note the importance of comparing human expectations with the obtained results (if expectations are low then even moderate results can bring satisfaction because they exceed expectations). Other theories describe the concept of satisfaction as a comparison of one's own or known experience. Thus, relatively high percentage of satisfied people can be interpreted not necessarily as "self-perceived good state of things" but rather as a compliance of expectations with the previous experiences.

1.2. Perception of the health care system

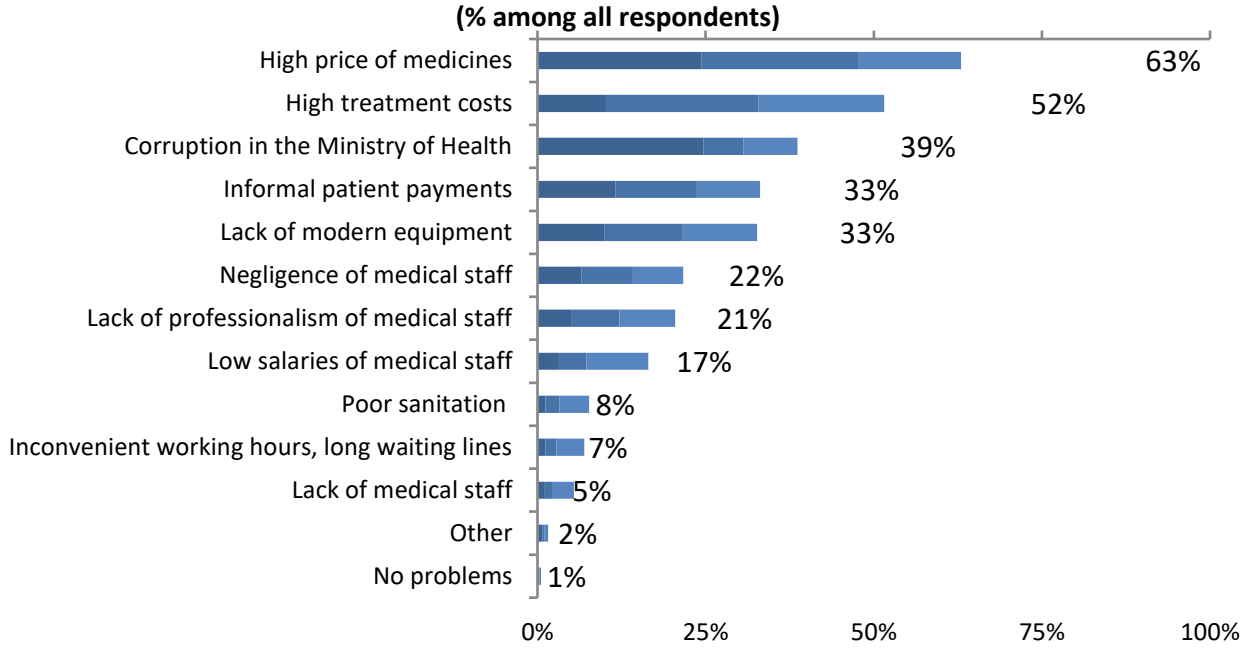
Representatives of each household were asked about their perception of the major problems in health care system of Ukraine. It seems that their perception of the problems is mostly linked to the affordability issues.

The most frequently mentioned problem was high price of medicines (63% of respondents mentioned it as one of the top three problems, among them 24% — as the top problem) and high treatment costs (52% of respondents mentioned it as one of the top three problems, among them 10% — as the top problem) (Fig. 1.2).

Also, among the major problems respondents mentioned corruption at the Ministry of Health (39% of respondents mentioned it as one of the top three problems, among them 25% — as the top problem), informal payments to physicians (33% of respondents mentioned it as one of the top three problems, among them 12% — as the top problem), lack of modern medical equipment (33% of respondents mentioned it as one of the top three problems, 10% — as the top problem). The smallest part of the respondents also mentioned poor sanitation at health care facilities (8% of the surveyed); inconvenient working hours or long waiting lines (7%), as well as lack of health care personnel (5%) were insignificant problems to respondents' opinion.

[4] Pascoe, G. C. (1983). Patient satisfaction in primary health care: a literature review and analysis. Evaluation and program planning, 6(3-4), 185-210.
Sitzia, J., & Wood, N. (1997). Patient satisfaction: a review of issues and concepts. Social science & medicine, 45(12), 1829-1843.

Fig. 1.2. Perception of the biggest problems in health care in Ukraine (first, second, and third choices)



Regional differences suggest that high price of medicines is a crucial problem for residents of all oblasts, especially for those living in Mykolaiv (78% of respondents mentioned it as one of the top three problems), Luhansk (78%), Kirovohrad (74%), and Kyiv (73%) oblasts. High treatment costs were the biggest concern for people living in Chernighiv (72% of respondents mentioned it as one of the top three problems), Rivne (68%), Zhytomyr (68%), and Kharkiv (66%) oblasts.

Corruption at the Ministry of Health was the biggest concern for people living in Kirovohrad oblast (67% of respondents mentioned it as one of the top three problems) and Kyiv city (64%). Informal payments as one of the three main problems were mentioned by respondents in Khmelnytsky (57%), and Zakarpattia (50%) oblasts. Lack of modern equipment was most frequently mentioned in Ternopil (51%) and Lviv (45%) oblasts (Table 1.4)

Perceptions of the major problems in health care by different socio-demographic groups are presented in Table 1.5. High price of medicines and treatment were recognized the most critical problems irrespective of age, sex, residential area type, or income level. It is especially relevant for older people (over 60) — 72% of them reported that high price of medicines was one of the top three problems, 59% — high treatment costs).

Table 1.4. Perception of the biggest problems in health care: breakdown by oblast

Survey question A3	Main problems in health care (first — third choice)												
	Corruption at the Ministry of Health	Informal payments to physicians	Negligence of health care personnel	Lack of modern equipment	Lack of professional-ism, incompetence of health care personnel	High price of medi-cines	High treatment costs	Poor sanitation at health care facilities	Low salaries of medi-cal staff	Lack of health care personnel	Inconvenient working hours, long waiting lines	No problems	Other
Ukraine	***39%***	***33%***	***22%***	***33%***	***21%***	***63%***	***52%***	***8%***	***17%***	***5%***	***7%***	***1%***	***2%***
Vinnytsia	33%	28%	21%	36%	16%	68%	57%	4%	17%	2%	13%	3%	4%
Volyn	35%	34%	14%	31%	17%	58%	47%	3%	20%	14%	24%	0%	4%
Dnipro	31%	21%	24%	35%	24%	63%	41%	10%	22%	13%	14%	0%	3%
Donetsk	41%	44%	32%	24%	23%	62%	51%	7%	7%	5%	3%	0%	0%
Zhytomyr	32%	39%	20%	33%	20%	58%	68%	6%	18%	4%	4%	0%	0%
Zakarpattia	38%	50%	13%	43%	13%	56%	55%	19%	8%	3%	2%	0%	0%
Zaporizhia	40%	25%	22%	25%	30%	66%	58%	5%	10%	5%	11%	0%	3%
Ivano-Frankivsk	28%	42%	24%	37%	20%	64%	41%	8%	20%	0%	14%	0%	0%
Kyiv	31%	23%	15%	40%	16%	73%	46%	8%	25%	9%	7%	0%	7%
Kirovohrad	67%	23%	32%	26%	6%	74%	62%	2%	4%	3%	1%	0%	0%
Luhansk	26%	22%	11%	35%	27%	78%	61%	10%	15%	10%	5%	0%	1%
Lviv	51%	35%	19%	45%	17%	56%	39%	8%	21%	4%	5%	0%	1%
Mykolaiv	39%	20%	14%	25%	31%	78%	64%	3%	13%	4%	7%	1%	1%
Odesa	43%	27%	24%	28%	24%	65%	56%	12%	13%	5%	5%	1%	0%
Poltava	34%	33%	16%	34%	22%	68%	63%	7%	14%	4%	5%	0%	2%
Rivne	40%	35%	19%	32%	22%	61%	68%	3%	14%	1%	5%	0%	0%
Sumy	47%	29%	33%	36%	24%	63%	28%	9%	8%	6%	15%	1%	3%
Ternopil	23%	15%	26%	51%	24%	66%	30%	20%	28%	13%	5%	0%	0%
Kharkiv	31%	38%	12%	40%	12%	68%	66%	5%	19%	3%	3%	2%	2%
Kherson	19%	34%	21%	30%	30%	71%	53%	6%	23%	9%	5%	1%	1%
Khmelnytsky	41%	57%	28%	22%	18%	42%	55%	10%	20%	4%	5%	0%	0%
Cherkasy	36%	41%	23%	30%	15%	64%	52%	3%	16%	5%	11%	2%	2%
Chernivtsi	34%	31%	14%	35%	18%	70%	52%	8%	23%	3%	8%	2%	3%
Chernihiv	44%	36%	11%	27%	8%	70%	72%	3%	17%	4%	5%	1%	2%
Kyiv city	64%	40%	33%	25%	24%	39%	33%	12%	24%	3%	4%	1%	1%

Table 1.5. Perception of the biggest problems in health care: breakdown by sex, age, type of residence, and household income per one adult

Survey question A3	Main problems in health care (first — third choice)												
	Corruption at the Ministry of Health	Informal payments to physicians	Negligence of health care personnel	Lack of modern equipment	Lack of professionalism, incompetence of health care	High price of medicines	High treatment costs	Poor sanitation at health care facilities	Low salaries of medical staff	Lack of health care personnel	Inconvenient working hours, long waiting lines	No problems	Other
Total	***39%***	***33%***	***22%***	***33%***	***21%***	***63%***	***52%***	***8%***	***17%***	***5%***	***7%***	***1%***	***2%***
SEX													
Men	44%	34%	22%	32%	21%	60%	50%	8%	16%	5%	7%	0%	2%
Women	35%	32%	21%	33%	20%	65%	53%	8%	17%	6%	7%	1%	2%
AGE GROUP													
18-29	38%	34%	23%	40%	21%	55%	47%	10%	17%	5%	9%	0%	1%
30-44	41%	33%	24%	35%	22%	59%	46%	9%	17%	6%	7%	0%	2%
45-59	39%	34%	21%	32%	20%	64%	54%	7%	16%	5%	7%	1%	2%
60 and older	37%	32%	19%	27%	19%	72%	59%	6%	16%	5%	6%	1%	2%
TYPE OF RESIDENCE													
Urban	39%	34%	23%	33%	22%	59%	50%	8%	17%	5%	7%	0%	2%
Rural	38%	31%	18%	32%	17%	71%	56%	7%	15%	6%	7%	1%	2%
HOUSEHOLD INCOME PER ONE ADULT													
Up to 1000 UAH	38%	31%	21%	32%	20%	70%	53%	6%	14%	6%	8%	0%	1%
1001-1500 UAH	35%	34%	20%	30%	18%	70%	58%	6%	14%	5%	8%	1%	2%
1501-2000 UAH	36%	33%	22%	35%	21%	62%	52%	9%	17%	4%	6%	0%	2%
Over 2001 UAH	44%	36%	27%	33%	23%	53%	44%	11%	19%	5%	6%	1%	1%
PERCIEVED HEALTH													
Very bad	33%	36%	22%	22%	16%	72%	70%	3%	13%	6%	5%	0%	5%
Bad	36%	32%	21%	27%	18%	72%	62%	5%	14%	5%	7%	1%	2%
Moderate, not bad, but not good	38%	34%	21%	32%	21%	66%	52%	8%	16%	5%	6%	0%	2%
Good	40%	33%	22%	35%	22%	58%	47%	9%	18%	6%	8%	1%	1%
Very good	43%	32%	24%	36%	20%	55%	47%	8%	17%	5%	10%	2%	1%

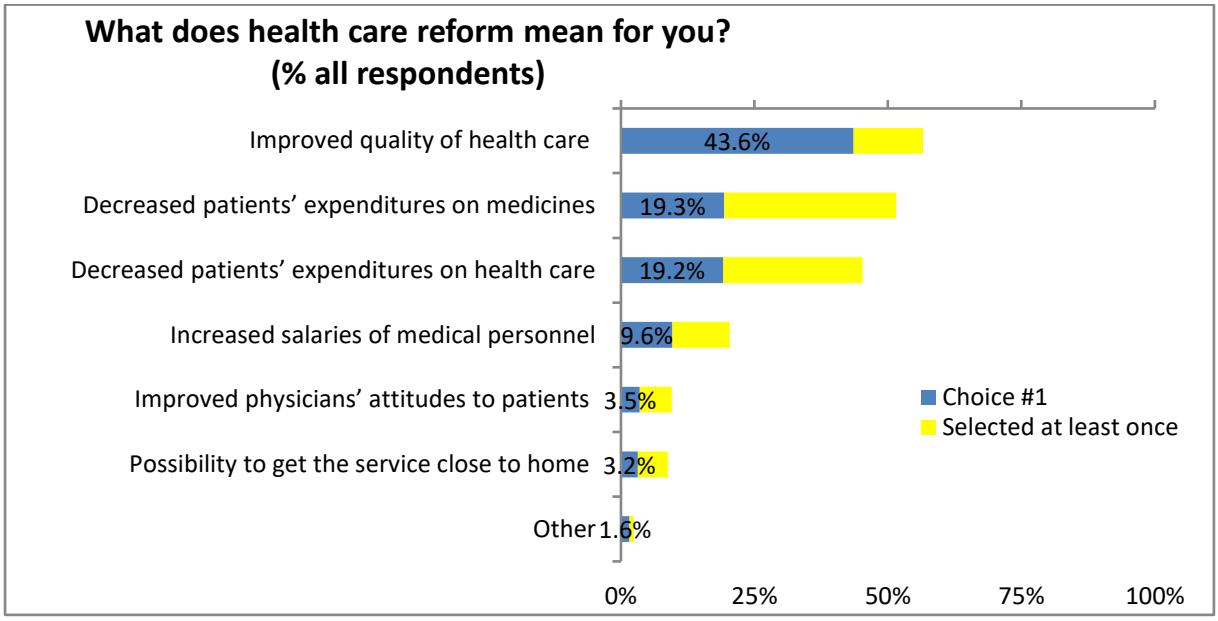
Also, 71% of rural residents reported high prices of medicines, 56% — high treatment costs. This is true for low-income respondents (up to 1500 UAH per adult): 70% of the low-income respondents reported price of medicines as a priority problem, while 58% reported treatment costs as a priority problem.

Concerns with high prices of medicines and treatment increases with worsening health. The high price of medicines as a priority problem was mentioned by 55% of the people who had rated their health as very good and 72% of the respondents who had rated their health as bad or very bad.

1.3. Attitudes towards health care reforms

Among the questions about respondents' attitudes towards health reforms the highest rated option was "improved health care" (Fig. 1.3). The second frequently mentioned option was "decreased patients' expenditures on medicines", as well as expenditures on treatment. Besides, 20% of respondents perceive reform as "increased salaries of health personnel", and approximately 10% believe it is the centerpiece of the reform. "Improved physicians' attitudes to patients and convenience of the service — close to home" were mentioned much less frequently.

Fig. 1.3. Perceived attributes of health care reform in Ukraine



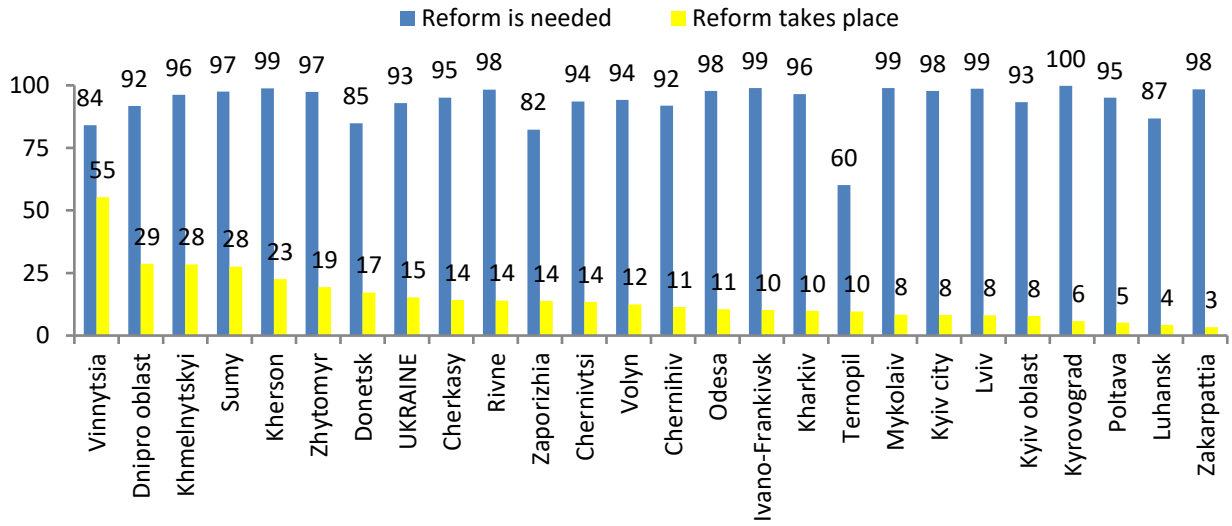
Improved health care as the key reform attribute was reported almost by all oblasts except Sumy and Ternopil (in these oblasts, people attribute health care changes primarily to decreased patients' expenditures). Ternopil oblast stood out among others by highly rated attribute of "proximity of the service to home" (20% respondents in Ternopil oblast vs average 3% for Ukraine) and "improved physicians' attitudes to patients" (9% and 3%, respectively). Other peculiar feature is that respondents living in Sumy (32.5%) and Vinnytsia (31%) oblasts think that reform means decreased price of medicines.

Survey results also brought into focus a consolidated public opinion regarding expediency of health care reforms (Fig. 1.4): 93% of Ukrainian population voiced their support of the reform. Regional

peculiarities were as follows: 100% of Kirovohrad oblast respondents believed reforms were necessary. Respondents living in Luhansk (87%), Donetsk (85%), Vinnytsia (84%), Zaporizhia (82%), and Ternopil (60%) oblasts believe reform expediency was not high (much less compared to average for Ukraine).

Fig. 1.4. Expediency of the health care reform: respondents' perception

(% of all respondents)



Only 15% of respondents believed that Ukrainian health care was being reformed. With 55% of respondents, Vinnytsia oblast was the absolute leader among oblasts where respondents believed that reform was ongoing. Perception of the reform was much higher in such oblasts as Dnipro (29%), Khmelnytsky (28%), Sumy (28%), Kherson (23%), and Zhytomyr (19%) oblasts. This is explained by realistic changes that took place after health care reform pilot project implementation in 2011–2014 in several oblasts, in particular, Vinnytsia and Dnipro oblasts.

Respondents perceive that the Minister of Health (71%) is responsible for improving functioning of health care facilities. Almost half (46%) of respondents believe that improvement of functioning of health care facilities is the responsibility of chief doctors. Approximately one third of respondents think that improvements depend on high officials of Ukraine — the Prime Minister or the President of Ukraine. Much less people believe that physicians and local authorities should be the "agents of change".

Regional differences in perceptions about the influence of different categories of professionals and officials on functioning of the health care facilities are also interesting (Table 1.9). In particular, respondents from Vinnytsia (33%), Poltava (31.8%), Mykolaiv (30.9%) oblasts and Kyiv (30.5%) believe that physicians have the strongest influence on the work of health care facilities. And vice versa, respondents living in Cherkasy (5.7%), Zakarpattia (3.9%), Ternopil (3.4%), and Sumy oblasts (3.2%) did not think so. Chief Doctors in Zakarpattia (67.7%), Odesa (59.3%), Khmelnytsky oblasts (57.9%) and Kyiv (61.9%) seem to be the most influential. The biggest difference in respondents' answers about influence of managers and physicians on health care facilities performance was noted in Zakarpattia, Odesa, Kyiv, Lviv, and Zaporizhia oblasts.

Table 1.6. Who is mostly responsible for functioning of the health care facilities: breakdown by oblast

Survey question A7		President	Prime Minister	Minister of Health	Head of Oblast State Administration (Governor)	City Mayor or village administration Head	District Administration Head	Chief Doctor (Director of Health Care Facility)	Physicians	Other	NO ANSWER
UKRAINE	%	33,2%	35,3%	70,6%	9,3%	15,4%	7,6%	46,3%	17,9%	1,5%	4,9%
	N	3599	3684	7121	971	1451	805	4497	1765	178	516
Vinnytsia	%	41,2%	40,4%	74,2%	9,6%	8,1%	11,3%	50,0%	33,0%	1,5%	1,6%
	N	167	168	309	41	33	48	216	142	5	6
Volyn	%	44,6%	47,9%	83,7%	1,7%	6,7%	1,0%	40,1%	12,9%	0,5%	3,6%
	N	186	199	347	7	29	5	163	51	2	12
Dnipro	%	22,5%	17,5%	71,3%	5,9%	16,9%	2,6%	41,4%	22,4%	0,7%	1,8%
	N	89	71	290	24	71	11	171	93	3	6
Donetsk	%	20,2%	35,1%	69,5%	4,3%	27,1%	8,5%	46,3%	12,5%	0,2%	1,5%
	N	81	144	289	17	108	36	186	48	1	5
Zhytomyr	%	24,6%	13,4%	57,3%	0,8%	5,1%	3,5%	34,8%	16,8%	0,2%	6,1%
	N	102	50	225	5	20	16	148	70	1	24
Zakarpattia	%	36,9%	44,2%	87,2%	5,8%	5,9%	3,5%	67,7%	3,9%	0,7%	1,4%
	N	151	181	356	20	21	14	277	17	2	7
Zaporizhia	%	33,5%	42,6%	84,5%	13,5%	7,9%	4,8%	49,8%	11,5%	2,3%	8,5%
	N	134	175	344	54	33	21	206	49	7	35
Ivano-Frankivsk	%	32,7%	23,6%	70,5%	7,5%	12,6%	9,0%	43,7%	22,8%	5,0%	3,2%
	N	128	97	295	27	55	38	179	90	19	15
Kyiv oblast	%	58,5%	71,8%	77,1%	22,5%	25,5%	23,1%	64,8%	24,8%	0,6%	4,9%
	N	230	294	309	88	102	90	256	97	3	22
Kirovohrad	%	44,3%	43,7%	55,9%	1,5%	11,2%	5,6%	15,6%	9,7%	11,7%	17,4%
	N	180	175	220	7	44	20	60	38	52	72
Luhansk	%	28,7%	40,1%	48,1%	5,4%	9,5%	3,0%	42,5%	18,6%	1,2%	27,8%
	N	115	161	193	20	34	13	182	73	5	107
Lviv	%	30,5%	32,2%	79,5%	6,5%	14,4%	10,4%	52,8%	14,3%	3,2%	0,2%
	N	124	124	315	28	57	38	215	60	14	1
Mykolaiv	%	74,1%	54,6%	90,4%	17,7%	16,6%	11,3%	43,0%	30,9%	0,0%	1,1%
	N	298	217	370	71	70	48	175	130	0	5
Odesa	%	16,7%	32,8%	73,2%	35,4%	29,1%	13,6%	59,3%	15,6%	0,4%	1,1%
	N	70	134	302	142	117	57	234	67	1	5

Poltava	%	39,5%	30,5%	56,5%	10,4%	16,3%	9,5%	37,3%	31,8%	0,7%	5,8%
	N	162	125	234	40	65	39	150	131	3	23
Rivne	%	41,3%	46,9%	85,2%	5,8%	5,7%	3,8%	43,2%	20,8%	0,8%	0,4%
	N	172	195	348	23	21	17	182	82	3	1
Sumy	%	31,5%	19,9%	58,3%	10,7%	12,2%	5,5%	35,2%	3,2%	2,0%	0,2%
	N	127	82	238	41	48	23	140	12	7	1
Ternopil	%	8,2%	9,9%	41,1%	9,6%	24,1%	8,1%	23,5%	3,4%	0,0%	4,1%
	N	36	42	164	41	100	35	92	14	0	13
Kharkiv	%	51,3%	25,3%	75,8%	6,7%	12,2%	3,6%	43,8%	12,3%	2,3%	2,3%
	N	210	108	308	27	49	13	176	52	9	9
Kherson	%	24,6%	43,4%	77,7%	25,7%	27,0%	19,5%	41,9%	16,4%	0,4%	0,6%
	N	101	175	320	110	112	81	174	64	1	3
Khmelnytsky	%	39,0%	20,6%	52,0%	6,8%	7,5%	4,8%	57,9%	24,3%	0,0%	4,1%
	N	160	89	201	31	28	19	230	90	0	17
Cherkasy	%	32,5%	26,2%	60,5%	4,5%	10,6%	4,9%	23,4%	5,7%	1,8%	12,3%
	N	134	106	243	18	37	21	91	26	7	55
Chernivtsi	%	46,6%	34,4%	68,3%	7,4%	22,8%	9,4%	39,5%	11,6%	5,4%	4,4%
	N	185	138	273	30	85	42	155	49	21	19
Chernihiv	%	35,7%	61,7%	82,0%	13,2%	17,3%	13,6%	48,5%	24,9%	3,0%	5,6%
	N	158	248	331	53	69	47	190	97	11	26
Kyiv city	%	24,4%	44,4%	73,7%	1,6%	10,4%	2,7%	61,9%	30,5%	0,4%	6,6%
	N	99	186	297	6	43	13	249	123	1	27

1.4. Perception of improvements in medical care

During the survey, respondents who had received outpatient care in the past 12 months were asked in which aspects of functioning of health care facilities they noticed improvements, and in which — worsening. 70% of the respondents mentioned several aspects of improvement, while 92% reported worsening (Table 1.7).

Table 1.7. Improvements and worsening in health care services in the past 12 months (among consumers of the relevant medical services in the past 12 months)

Survey question A4-6		Outpatient care N=3628		Inpatient care N=1516		Improve 1 thing in out-patient care N=3628
		Improved	Worsened	Improved	Worsened	
		(answer YES to each question about individual aspect of care, answer NO is not presented)				100%
Patient waiting time	%	22%	28%	24%	17%	1,4%
	N	781	1012	359	250	49
Professionalism of physicians	%	23%	25%	28%	19%	17,9%
	N	839	920	423	292	609
Interior of health care facilities	%	29%	24%	28%	24%	3,6%
	N	1050	873	429	363	121
Attitude of physicians towards patients	%	26%	23%	28%	19%	6,8%
	N	949	824	431	290	231
Personal data confidentiality	%	25%	12%	26%	11%	0,1%
	N	916	451	394	162	4
Drugs availability	%	10%	43%	11%	47%	12,6%
	N	370	1546	173	705	429
Price of treatment, in particular, consultation, tests, drugs etc.	%	3%	66%	4%	66%	53,2%
	N	111	2379	52	1000	1808
Possibility to choose a physician	%	25%	21%	22%	18%	1,8%
	N	923	744	326	273	62
Other	%	0%	1%	0%	1%	1,5%
	N	5	36	1	16	52
Nothing	%	23%	7%	25%	6%	1,0%
	N	850	238	371	97	32

Most respondents believe that the following aspects improved in the past 12 months:

- interior of health care facilities (37% of respondents reported improvement, 28% — worsening),
- attitude of physicians towards patients (improvement — 33%, worsening — 27%),
- personal data confidentiality (improvement — 32%, worsening — 15%),
- possibility to choose a physician (improvement — 32%, worsening — 24%).

Most worsening aspects of outpatient care as reported by respondents are: treatment costs (78% of health care consumers reported worsening, while only 4% noticed some improvement); availability of necessary medicines (50% reported worsening, 13% — improvement).

Similar situation is observed with regards to changes in getting inpatient care: 68% of inpatients reported some improvement, 92% — deterioration). In particular:

- interior of health care facilities (38% reported improvement, 29% — worsening),
- attitude of physicians towards patients (improvement — 38%, worsening —23%),
- personal data confidentiality (improvement — 35%, worsening — 13%),
- professionalism of physicians (improvement — 37%, worsening — 23%),
- patient waiting time (improvement — 31%, worsening — 20%),
- opportunity to choose a physician (improvement — 29%, worsening — 22%).

Significant worsening in treatment affordability was reported by 79% respondents, while only 5% believed the situation improved; according to 56% of respondents, situation with availability of medicines has worsened, while 15% reported improvement.

So, when respondents were offered to choose an aspect they would improve in outpatient care, 53% of health care consumers reported it would first be lower treatment costs, in particular, price of consultations, tests, and medications, 18% would improve professional level of physicians, 13% — availability of necessary medicines.

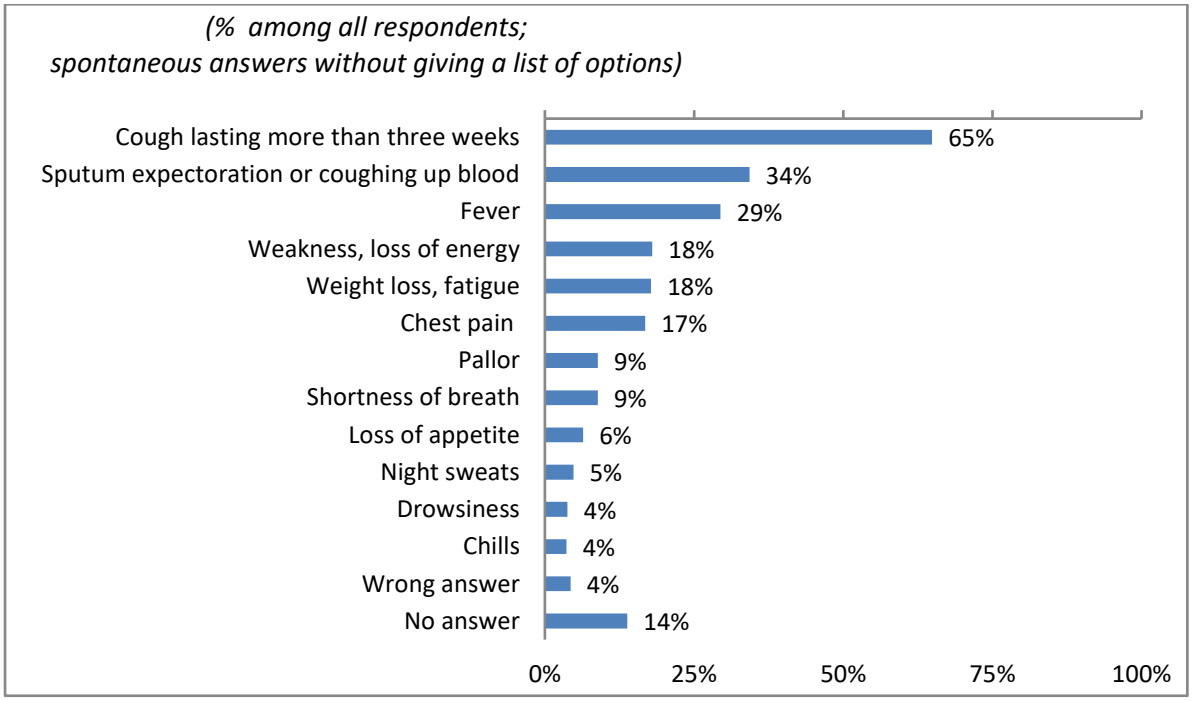
It was reported that situation with medicines' availability, as well as increased treatment costs, affected all populations regardless of their sex, age, place of residence, or income. Besides, all categories of respondents believe that decreased treatment costs are critical for all of them. It was less critical for respondents with relatively higher income (45% of them would decrease treatment costs if they could influence that) and with good health (45%), however, high treatment costs appeared to be the key priority.

SECTION 2. PERCEIVED HEALTH STATUS AND HEALTHY LIFESTYLES

2.1. Awareness of healthy behavior and disease symptoms

The majority of Ukrainian population (82%) could name one or more symptoms of tuberculosis. 65% of respondents believe coughing that lasts for more than three weeks is a TB symptom; 34% mentioned such symptoms as sputum expectoration or coughing up blood, 29% reported fever (Fig. 2.1). Much less frequently respondents were aware of such symptoms as weakness, loss of energy (only 18% of respondents mentioned them), unintentional weight loss, fatigue, and chest pain (18% and 17%, respectively). The most rarely mentioned signs were pallor (9%), shortness of breath (9%), loss of appetite (6%), night sweats (5%), drowsiness (5%), chills (5%).

Fig. 2.1. Awareness of TB symptoms



Women knew TB symptoms somewhat better (at least 84% of them correctly named one of symptoms) than men (79% knew at least one symptom); middle-aged people (30-59 years old, of them 84% know at least one symptom) better than young people aged 18-29 (80%) or people over 60 (79%); urban citizens (84%) — better than rural (77%); respondents with higher income (over 1500 UAH) — better than those with lower income (up to 1500 UAH per one adult): 87% vs 80%.

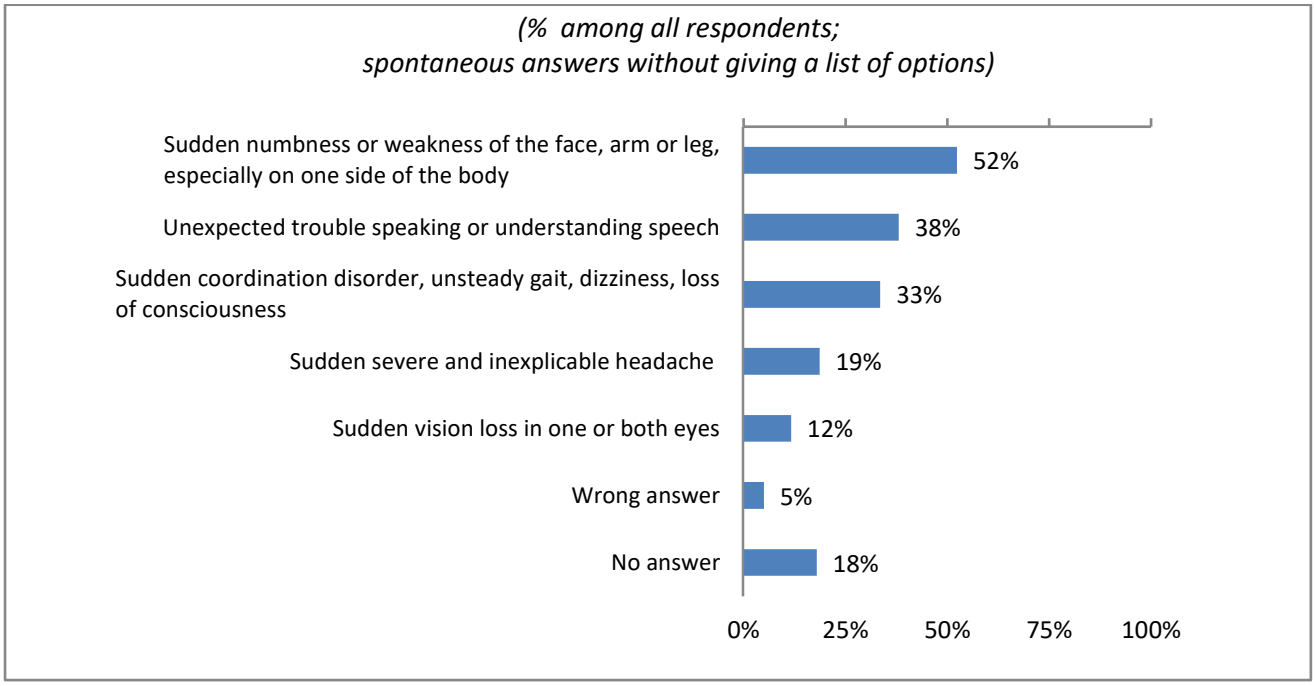
The highest level of TB symptoms awareness was reported in Donetsk (96% of respondents named at least several signs), Kherson (93%), Mykolaiv (91%), Lviv (91%), and Kirovohrad (90%) oblasts, the lowest — in Cherkasy (51%), Poltava (62%), and Ivano-Frankivsk (64%) oblasts (Table 2.1).

Table 2.1. Awareness of TB symptoms: breakdown by oblast

Survey question A12	Cough lasting more than three weeks	Chest pain	Sputum expectoration or coughing up blood	Weakness, loss of energy	Pallor	Shortness of breath	Weight loss, fatigue	Loss of appetite	Chills	Drowsiness	Fever	Night sweats	Wrong answer	NO ANSWER	Awareness (at least 1 symptom named correctly)
Ukraine	***65%***	***17%***	***34%***	***18%***	***9%***	***9%***	***18%***	***6%***	***4%***	***4%***	***29%***	***5%***	***4%***	***14%***	***82%***
Vinnytsia	54%	25%	29%	20%	11%	9%	16%	8%	3%	4%	23%	5%	7%	13%	80%
Volyn	66%	10%	21%	8%	1%	5%	21%	6%	1%	1%	27%	6%	2%	18%	80%
Dnipro	75%	13%	37%	24%	13%	8%	25%	8%	4%	3%	41%	18%	4%	8%	87%
Donetsk	81%	31%	33%	32%	19%	15%	14%	8%	5%	4%	34%	3%	2%	3%	96%
Zhytomyr	78%	10%	37%	9%	4%	3%	9%	2%	2%	2%	19%	4%	1%	14%	85%
Zakarpattia	58%	13%	22%	20%	3%	3%	13%	7%	1%	1%	22%	3%	11%	19%	70%
Zaporizhia	73%	11%	52%	14%	11%	12%	18%	8%	7%	7%	23%	2%	3%	10%	88%
Ivano-Frankivsk	33%	1%	12%	13%	2%	4%	12%	2%	1%	0%	27%	5%	11%	25%	64%
Kyiv oblast	58%	3%	25%	8%	2%	3%	10%	1%	3%	3%	20%	0%	4%	26%	70%
Kirovohrad	77%	29%	36%	33%	9%	17%	15%	11%	5%	3%	42%	6%	0%	10%	90%
Luhansk	68%	20%	35%	17%	6%	6%	18%	8%	3%	5%	42%	3%	1%	29%	70%
Lviv	65%	21%	46%	19%	9%	9%	18%	5%	2%	1%	23%	4%	3%	6%	91%
Mykolaiv	78%	26%	32%	12%	4%	6%	39%	7%	3%	3%	69%	12%	2%	7%	91%
Odesa	55%	21%	44%	24%	24%	31%	18%	13%	16%	20%	34%	3%	0%	12%	88%
Poltava	55%	17%	16%	13%	2%	2%	7%	2%	2%	3%	35%	1%	13%	25%	62%
Rivne	85%	31%	44%	15%	6%	20%	12%	10%	3%	2%	27%	6%	2%	12%	87%
Sumy	58%	26%	24%	10%	4%	2%	5%	3%	2%	3%	22%	0%	6%	11%	83%
Ternopil	33%	7%	12%	23%	15%	9%	13%	9%	8%	2%	12%	2%	2%	20%	78%
Kharkiv	64%	9%	42%	14%	4%	3%	15%	4%	1%	1%	28%	2%	4%	14%	82%
Kherson	67%	14%	58%	24%	6%	9%	35%	10%	2%	1%	35%	5%	2%	6%	93%
Khmelny-tsky	53%	20%	41%	9%	3%	3%	38%	4%	1%	1%	41%	3%	2%	13%	85%
Cherkasy	40%	3%	15%	10%	2%	1%	9%	2%	0%	0%	15%	4%	13%	36%	51%
Chernivtsi	53%	10%	33%	19%	9%	14%	18%	5%	5%	3%	33%	12%	6%	20%	74%
Chernihiv	81%	8%	44%	24%	11%	5%	31%	9%	3%	4%	33%	9%	4%	11%	84%
Kyiv city	69%	17%	27%	11%	9%	7%	21%	5%	2%	6%	10%	1%	8%	10%	82%

Regarding stroke, at least 77% of respondents reported knowing at least one symptom. 52% of respondents named sudden numbness or weakness of the face, arm, or leg, especially on one side of the body as the most common stroke symptom (Fig. 2.2).

Fig. 2.2. Awareness of stroke symptoms



Around one third of respondents knew that stroke might manifest itself as a sudden trouble speaking or understanding speech or text (38%), sudden coordination disorder, unsteady gait, dizziness, and loss of consciousness (33%). Only one in every five respondents (19%) reported that sudden, severe headache with unknown cause also can be a sign of a stroke. One in every ten (12%) respondents knew about such a symptom as sudden vision loss in one or both eyes.

The highest stroke symptoms awareness level was observed in Donetsk (93%), Zaporizhia (92%), and Odesa (90%) oblasts. People living in Ivano-Frankivsk oblast were the least aware of the symptoms (at least one symptom was correctly named only by 33% respondents). Relatively low awareness level was observed in Poltava (58%), Zakarpattia (62%), and Ternopil (66%) oblasts (Table 2.2).

Table 2.2. Awareness of stroke symptoms: breakdown by oblast

Survey question A13	Sudden numbness or weakness of the face, arm, or leg, especially on one side of the body	Sudden trouble speaking or understanding speech or text	Sudden vision loss in one or both eyes	Sudden coordination disorder, unsteady gait, dizziness, loss of consciousness	Sudden, severe headache with unknown cause	Wrong answer	NO ANSWER	Awareness (at least 1 stroke symptom named correctly)
Ukraine	***52%***	***38%***	***12%***	***33%***	***19%***	***5%***	***18%***	***77%***
Vinnytsia	42%	42%	18%	37%	16%	7%	15%	78%
Volyn	32%	24%	5%	39%	14%	5%	26%	69%
Dnipro	60%	38%	9%	40%	18%	4%	17%	79%
Donetsk	65%	55%	25%	32%	14%	2%	5%	93%
Zhytomyr	34%	35%	2%	26%	11%	3%	28%	69%
Zakarpattia	46%	34%	5%	15%	11%	12%	26%	62%
Zaporizhia	72%	54%	17%	34%	18%	0%	8%	92%
Ivano-Frankivsk	21%	10%	1%	8%	5%	25%	42%	33%
Kyiv oblast	48%	31%	5%	39%	16%	5%	26%	69%
Kirovohrad	61%	35%	11%	39%	51%	0%	17%	83%
Luhansk	60%	28%	8%	18%	39%	2%	27%	72%
Lviv	63%	35%	13%	34%	21%	6%	9%	85%
Mykolaiv	68%	37%	6%	47%	32%	4%	13%	83%
Odesa	64%	47%	29%	53%	29%	0%	9%	90%
Poltava	34%	20%	4%	27%	27%	9%	33%	58%
Rivne	64%	35%	17%	52%	15%	3%	16%	81%
Sumy	39%	22%	6%	26%	4%	8%	15%	77%
Ternopil	14%	42%	13%	12%	10%	6%	28%	66%
Kharkiv	41%	40%	5%	30%	26%	5%	19%	75%
Kherson	54%	36%	8%	55%	19%	3%	11%	86%
Khmelnytsky	63%	46%	9%	27%	3%	5%	17%	79%
Cherkasy	30%	16%	3%	15%	11%	10%	42%	48%
Chernivtsi	50%	32%	8%	38%	24%	5%	22%	73%
Chernihiv	72%	55%	15%	42%	21%	3%	16%	82%
Kyiv oblast	53%	48%	11%	41%	8%	4%	12%	77%

2.2. Immunization

Most respondents (91%) were aware of the health status of their children and the medical help they were receiving (only those respondents who had children under 18 years old living in their household were asked). It turned out that 71% of respondents have rather positive or very positive attitude towards vaccination. Some 14% respondents regard vaccination rather negatively or very negatively, while the remaining 15% were neutral towards it (Table 2.3).

Table 2.3. Attitude towards vaccination: breakdown by oblast (% of respondents who had children under 18 living in their household and knew their health status and the medical care they were receiving)

Survey question B5.3 In general, what's your attitude towards vaccination?	Very negative	Rather negative	Neutral	Rather positive	Very positive
Ukraine (N=3270)	***6%***	***8%***	***15%***	***43%***	***28%***
Vinnytsia	10%	6%	10%	40%	33%
Volyn	2%	18%	25%	48%	8%
Dnipro	6%	7%	25%	33%	29%
Donetsk	1%	6%	15%	40%	38%
Zhytomyr	4%	5%	14%	39%	39%
Zakarpattia	13%	10%	18%	38%	20%
Zaporizhia	2%	3%	8%	54%	33%
Ivano-Frankivsk	11%	8%	22%	42%	17%
Kyiv oblast	12%	12%	7%	27%	43%
Kirovohrad	0%	3%	16%	37%	44%
Luhansk	4%	7%	32%	33%	25%
Lviv	16%	13%	20%	33%	19%
Mykolaiv	1%	6%	3%	64%	27%
Odesa	4%	6%	13%	49%	28%
Poltava	4%	9%	9%	43%	35%
Rivne	2%	20%	23%	48%	6%
Sumy	0%	4%	7%	50%	39%
Ternopil	8%	7%	14%	43%	28%
Kharkiv	3%	5%	5%	54%	33%
Kherson	5%	5%	7%	40%	44%
Khmelnytsky	21%	1%	31%	34%	14%
Cherkasy	4%	5%	13%	54%	24%
Chernivtsi	12%	12%	15%	48%	13%
Chernihiv	8%	10%	5%	41%	37%
Kyiv city	1%	1%	9%	57%	33%

The most positive attitude towards vaccination was observed in Mykolaiv (91% of respondents were rather positive or very positive) and Sumy (89%) oblasts, as well as in the city of Kyiv (90%); the most negative — in Khmelnytsky (only 48% positive), Lviv (51%), Rivne (54%), and Volyn (56%) oblasts (Table 2.3).

Young people tend to have more positive attitude towards vaccination compared to older people: 72% of respondents aged 18 to 44 and 67% of respondents over 45 were positive about vaccination.

Among the respondents who had children under 18 and knew about their children's health status, 24% had the experience refusing to vaccinate their children. Half of the people who had this experience (54%, or 13% of all people with children under 16) refused to vaccinate their child on a temporary basis considering their child's health status at the time, 36% (or 8% of all people with children under 16) had no intention to get their child vaccinated, and 10% (2% of all people with children under 16) had both experiences.

Regional peculiarities: the highest share of people refusing to vaccinate their children was reported in Khmelnytsky (50%), Ternopil (43%), Ivano-Frankivsk (41%), and Lviv (40%) oblasts; the lowest — in Kirovohrad (5%), Mykolaiv (8%), and Kharkiv (9%) oblasts.

2.3. Self-assessment of health status

The study included self-assessed health status of respondents. In general, 44% of Ukrainian population chose option "good" or "very good" when assessing their health status, 41% rate their health as "average", 14% — "bad" or "very bad" (Table 2.4). Men reported a slightly better health status (53% reported their health to be "good" or "very good") than women (only each third woman (37%) rated her health positively). Similar data are seen in different age groups: 78% of 18-29 age group vs. 14% of 60 and older[5].

On average, the mean score using a 5-point scale (where 1 is "very bad" and 5 is "very good") for the total sample was 3,3, which is rather moderate.

By oblasts (Table 2.5): the worst perception of health status was reported in Zakarpattia (only 30% of respondents reported good or very good health), Donetsk (32%), Zhytomyr (32%), and Chernihiv (36%) oblasts, the best — by people in Khmelnytsky (58%) and Odesa (55%) oblasts, as well as Kyiv city (53%).

Self-assessed health status is quite a reliable health indicator as it is significantly influenced by, for example, presence of chronic diseases. In general, people suffering from such diseases assessed their health as 2.8 on 5-point scale, while those without such diseases rated their health as 3.7 (*p=0.01*).

[5] These data correlate with the results of the annual health self-assessment and morbidity survey conducted by the State Statistics Service. Besides, compared to the European Union member states where 67% of people aged 18 and over rated their health as "good", and 23% — "moderate", this study reports similar indicators on the level of 44% and 41%, respectively (State Committee on Statistics reports 43% and 45%). (Population health self-assessment and assessment of access to certain health services in 2015 / State Statistics Service of Ukraine. — K., 2016 — P. 1-2)

Table 2.4. Self-assessed health status: breakdown by age and sex

Survey question C5		*Total*	*Sex*		*Age*			
			Men	*Women*	*18-29*	*30-44*	*45-59*	*60 and older*
Very bad	%	2%	1%	3%	0%	0%	2%	5%
	N	193	44	149	4	11	42	136
Bad	%	12%	9%	15%	1%	4%	12%	29%
	N	1232	406	826	24	121	309	778
Moderate	%	41%	37%	45%	21%	35%	53%	52%
	N	4194	1697	2497	408	980	1390	1416
Good	%	39%	45%	33%	63%	54%	30%	13%
	N	3919	2070	1849	1255	1537	785	341
Very good	%	6%	8%	4%	15%	6%	3%	1%
	N	574	354	220	290	180	72	32

In general, a significant part of respondents (42%) reported chronic diseases (50% among women and 34% among men). Share of people with chronic diseases increased from 16% for people aged 18-29 to 26% for 30-44 years of age; chronic diseases were reported by 48% people aged 56-59 and by 73% people aged 60 and over. This score was a little lower among people with high income (Table 2.5).

Regional breakdown shows the highest proportion of people with chronic diseases in Dnipro oblast (62%). The lowest proportion of those reporting chronic diseases was seen in Luhansk (27%), Ternopil (27%), Khmelnytsky (28%), and Odesa (28%) oblasts.

Table 2.5. Self-assessed health status and chronic diseases: breakdown by oblast

Survey question C5		UKRAINE		Vinnytsia	Volyn	Dniprop	Donetsk	Zhytomyr	Zakarpattia	Zaporizhia	Ivano-Frankivsk	Kyiv	Kirovohrad	Luhansk	Lviv	Mykolaiv	Odesa	Poltava	Rivne	Sumy	Ternopil	Kharkiv	Kherson	Khmelnytsky	Cherkasy	Chernivtsi	Chernihiv	Kyiv city
		%	N	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Perceived health status	Very bad	1,9	249	1,5	3,4	2,0	1,3	0,5	0,7	3,6	2,9	2,2	3,9	1,4	1,0	1,3	1,0	1,2	1,6	1,0	1,1	2,9	3,5	0,3	2,5	1,5	6,0	2,0
	Bad	12,2	1461	12,1	12,9	11,8	13,4	19,0	9,6	14,3	9,2	10,7	17,2	9,3	10,1	12,6	10,0	12,0	12,4	10,7	8,3	17,7	13,3	9,5	11,5	7,0	17,8	11,1
	Moder-ate	41,5	4451	41,9	35,2	41,9	53,6	48,0	60,2	43,3	47,0	38,2	29,1	36,4	43,7	38,9	34,1	37,2	41,6	40,0	49,6	35,4	33,3	32,5	48,0	47,1	40,6	33,8
	Good	38,8	3477	40,0	38,1	34,5	29,6	27,3	23,5	33,7	36,7	46,5	44,0	46,5	37,7	39,2	46,3	46,4	40,6	44,5	36,9	41,6	43,8	42,0	30,6	38,5	32,9	48,5
	Very good	5,7	470	4,6	10,4	9,8	2,2	5,1	6,0	5,1	4,2	2,4	5,8	6,5	7,5	8,0	8,5	3,2	3,9	3,8	4,0	2,4	6,0	15,8	7,3	5,9	2,7	4,6
Having any chronic disease		42,3	4670	42,9	36,0	61,9	48,7	52,1	31,3	42,9	52,9	48,7	31,4	27,0	41,0	37,6	28,1	50,5	40,3	34,5	27,0	45,8	39,3	27,7	53,4	47,5	53,8	31,6
Having hyper-tension (high blood pressure)		24,0	2802	20,5	22,3	32,7	30,6	23,3	18,0	24,9	30,8	27,7	23,7	16,1	23,8	24,0	17,9	24,0	22,7	21,6	14,9	25,5	21,8	15,0	26,6	25,0	28,0	20,7
Having diabetes mellitus		4,0	459	4,4	2,2	4,1	7,2	4,8	2,7	1,6	3,6	4,6	1,2	3,5	2,5	2,2	4,1		4,1	4,6	1,6	2,7	3,3	7,3	4,5	3,3	5,0	4,1
Having stroke (consequences of stroke)		3,2	316	2,4	3,1	3,1	7,8	2,5	1,0	2,0	3,7	5,8	1,1	1,1	2,2	3,1	2,4	3,3	2,0	4,4	1,6	2,6	1,9	2,2	2,7	3,2	2,4	3,7

A quarter of respondents (24%) reported having hypertension (or high blood pressure), difference between men and women was 31% vs. 16%, respectively. Significant increase of this indicator with age was noted: hypertension was reported by 3-7% of representatives of younger age groups (18-44), by 27% — of people aged 45-59, and 55% — of those over 60. Also, 3% of respondents reported that they had had a stroke.

7% of respondents confirmed having a disability status (according to the State Statistics Service as of 1 January 2016[6], proportion of disabled people among those aged 18 and over was 7%). 4% of respondents have diabetes (according to Medical Statistics Center, MOH Ukraine[7]), prevalence of this disease was 2861 cases per 100,000 people in 2015, which in conversion to population of 18 and over is 3.5%.

2.4. Body Mass Index (BMI)

Multiple studies have confirmed that smoking, high cholesterol, overweight, lack of exercise, and alcohol abuse are risk factors for non-communicable diseases (NCDs), including cardiovascular. That is why the study methodology provided for reviewing individual risk factors for NCDs. In particular, body mass index was calculated to assess population-level measure of overweight and obesity.

Body mass index (BMI) is a measure that allows to look at the correlation between person's height and weight and thus assess whether their weight is insufficient, normal, or excessive. BMI is calculated by dividing a person's weight (in kg) by the square of their height (in m2). A person is considered underweight if BMI is lower than 18.5 kg/m^2, a number from 18.5 to 24.9 kg/m^2 indicates normal weight, while higher numbers suggest the person is overweight (25-29.0 kg/m^2) or obese (over 30 kg/m^2).

Mean BMI for the sample was 26.2, which corresponds to the lower limit of excessive weight. Overall, 2% of the adult population of Ukraine are underweight (or have low BMI), 41% have normal weight, 36% — excessive weight, and 21% are obese.

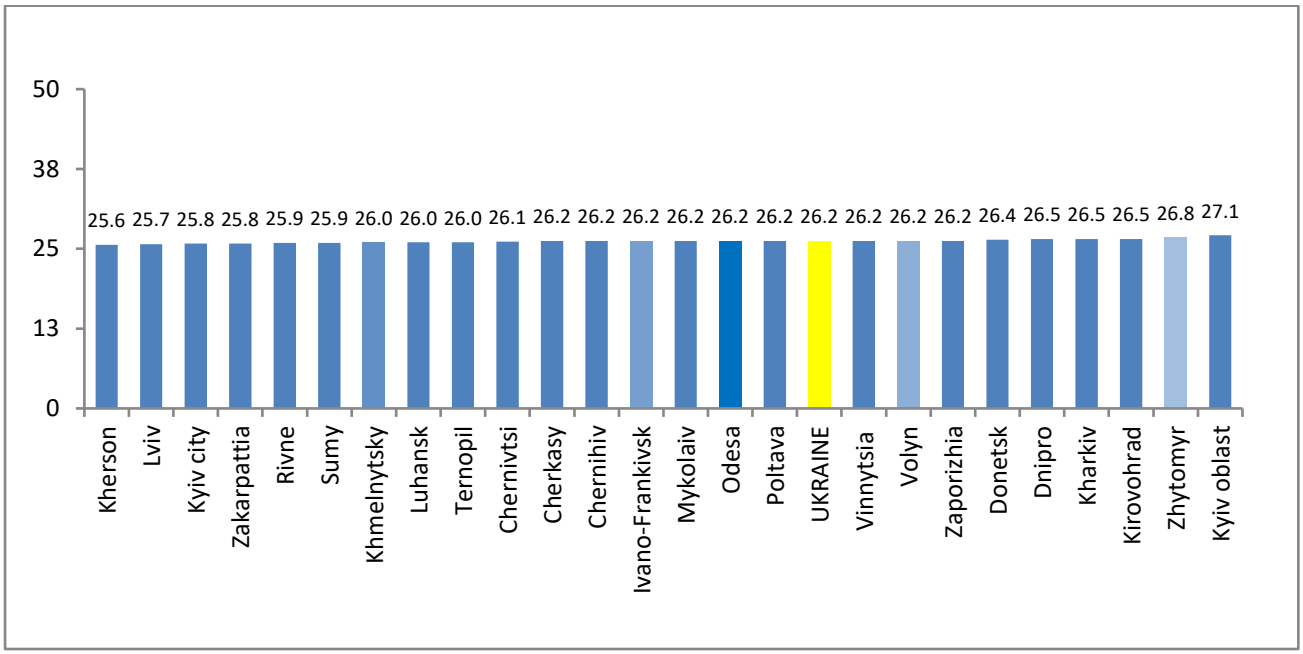
BMI values were a little higher for women (26.5) than for men (25.9). Also, a person's likelihood of having excessive weight increased with age: mean BMI for people aged 18-29 was 23.0 (normal weight), aged 30-44 — 25.45 (excessive weight), aged 45-59 — 27.67 (excessive weight), aged 60 and older — 28.13 (excessive weight).

Mean BMI ranged from 25.6 (Kherson oblast) to 27.1 (Kyiv oblast), but no significant differences between oblasts were noticed (Fig. 2.3).

[6] Population welfare in Ukraine / State Statistics Service of Ukraine – K., 2016 – P. 65–66.

[7] http://medstat.gov.ua/ukr/news.html?id=203

Fig. 2.3. Body mass index: breakdown by oblast



2.5. (Un)healthy behavior

Smoking and alcohol consumption are known as key factors for developing a range of chronic diseases, including cancer, lung diseases, and cardiovascular diseases.

According to the survey, each fourth respondent (25%) reported daily smoking, 4% smoke on a regular basis. The highest number of smokers were reported in Khmelnytsky (35%) and Kyiv (34%) oblasts; the lowest — in Rivne (17%) and Vinnytsia (18%) oblasts (Table 2.6).

Table 2.6. Tobacco smoking and alcohol consumption: breakdown by oblast

Survey question C1,3		Tobacco smoking				Alcohol consumption			
		Daily	Not daily	Not smoking at all	Never	Less than once per month	1-3 times a month	1-4 times a week	5 times a week or more
UKRAINE	%	24,7%	3,5%	71,8%	35,2%	31,7%	20,3%	10,8%	2,0%
	N	1998	303	7836	4002	3241	1821	831	167
Vinnytsia	%	17,5%	3,2%	79,3%	33,1%	34,2%	23,0%	9,7%	0,0%
	N	52	10	342	153	152	71	27	0
Volyn	%	26,0%	2,4%	71,6%	27,5%	37,1%	27,3%	5,9%	2,2%
	N	79	9	318	127	157	94	19	7
Dnipro	%	24,6%	5,1%	70,2%	31,7%	30,7%	26,2%	7,9%	3,4%
	N	82	21	305	135	138	95	26	11
Donetsk	%	23,0%	3,8%	73,2%	41,9%	40,7%	12,0%	4,6%	0,7%
	N	72	12	322	199	154	38	13	2

Zhytomyr	%	23,5%	2,3%	74,2%	34,5%	30,1%	21,8%	12,2%	1,4%
	N	74	8	326	158	129	78	38	5
Zakarpattia	%	26,0%	4,2%	69,8%	22,7%	37,7%	31,0%	6,1%	2,5%
	N	77	16	315	104	165	107	19	9
Zaporizhia	%	25,3%	3,2%	71,6%	29,4%	30,6%	23,7%	13,6%	2,7%
	N	86	12	310	138	131	86	44	9
Ivano-Frankivsk	%	19,8%	1,3%	79,0%	19,2%	33,3%	28,7%	15,7%	3,1%
	N	60	5	343	87	158	106	46	10
Kyiv oblast	%	34,1%	0,6%	65,3%	36,9%	28,7%	19,9%	12,7%	1,8%
	N	106	3	298	177	115	68	39	5
Kirovohrad	%	30,5%	1,7%	67,9%	46,9%	24,7%	21,0%	6,6%	0,9%
	N	99	6	302	208	103	65	19	2
Luhansk	%	19,9%	2,8%	77,3%	46,7%	30,8%	16,5%	5,4%	0,5%
	N	76	11	316	189	118	58	19	2
Lviv	%	24,3%	4,4%	71,3%	25,4%	31,8%	20,9%	19,1%	2,9%
	N	79	17	303	110	137	78	61	10
Mykolaiv	%	23,9%	3,5%	72,6%	54,0%	30,6%	10,8%	4,3%	0,3%
	N	75	12	321	235	116	38	15	1
Odesa	%	23,8%	5,6%	70,6%	34,8%	32,8%	21,3%	9,3%	1,8%
	N	75	19	307	162	136	68	29	6
Poltava	%	27,5%	0,4%	72,2%	40,0%	23,0%	18,7%	15,2%	3,0%
	N	84	2	321	182	104	66	40	9
Rivne	%	16,5%	2,7%	80,7%	37,7%	30,2%	23,2%	8,2%	0,8%
	N	48	7	351	174	121	83	25	2
Sumy	%	18,9%	10,7%	70,4%	35,2%	36,3%	19,4%	5,3%	3,8%
	N	73	42	288	141	147	78	19	14
Ternopil	%	23,0%	1,5%	75,5%	44,9%	18,8%	20,3%	14,5%	1,5%
	N	77	6	319	195	81	75	48	5
Kharkiv	%	27,5%	1,7%	70,8%	34,0%	36,8%	13,4%	12,8%	3,0%
	N	93	7	306	157	147	50	43	10
Kherson	%	30,0%	3,2%	66,8%	38,7%	34,4%	16,7%	8,7%	1,5%
	N	106	11	290	173	142	58	27	5
Khmelnytsky	%	34,6%	7,2%	58,2%	25,0%	26,6%	23,2%	21,1%	4,2%
	N	123	26	257	109	114	92	76	14

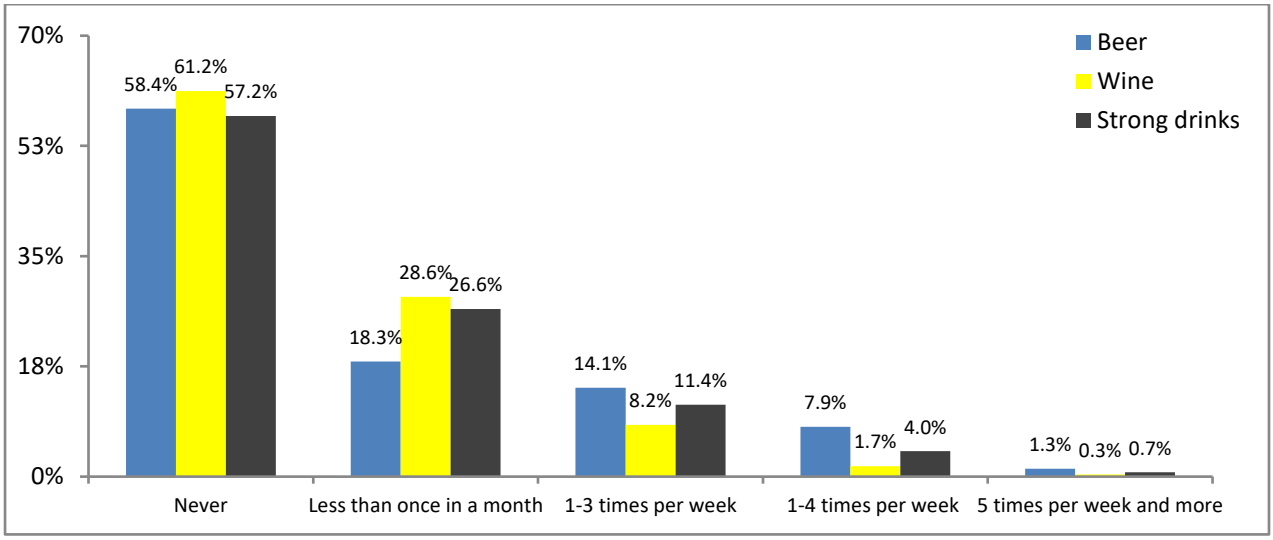
Cherkasy	%	27,9%	3,2%	68,9%	41,4%	29,0%	16,8%	8,5%	4,2%
	N	91	12	306	178	122	61	25	15
Chernivtsi	%	21,3%	1,3%	77,4%	36,0%	30,7%	21,9%	10,2%	1,2%
	N	61	4	340	163	130	77	31	4
Chernihiv	%	21,8%	3,6%	74,6%	45,6%	32,6%	12,6%	8,0%	1,2%
	N	63	11	332	210	127	37	21	3
Kyiv city	%	27,5%	4,0%	68,5%	28,8%	23,5%	26,0%	19,7%	2,0%
	N	87	14	298	138	97	94	62	7

Traditionally, smoking is much more common among men than among women, especially among those smoking daily (43% vs. 10%). The biggest number of daily smokers belong to the middle-aged group; there are 30.2% smokers in the group of people aged 18-29, 35% — among those aged 30-44, 25% — among the people aged 45-59, and 10% — among those who are 60 and older. The average number of cigarettes smoked by an adult smoker per day is 16, and this number does not differ much depending on social and demographical groups.

Alcohol consumption was somewhat more prevalent: one third (35%) of the adult population of Ukraine reports not consuming alcohol at all, another third (32%) consume alcohol once a month, and the rest (33%) consume it at least monthly (of them, 13% — at least weekly, and 2% — practically every day). Leading oblasts by the share of population consuming alcohol at least weekly are Khmelnytsky (25%) and Lviv (22%) oblasts, as well as the city of Kyiv (22%). The lowest level of alcohol consumption was reported in Mykolaiv (5% use daily), Donetsk (5%), and Luhansk (6%) oblasts.

Regarding alcoholic beverages, respondents reported that beer was the first most consumed alcoholic drink — almost one quarter (23%) consume it at least monthly, 9% — weekly. Horilka and other strong drinks were the second most consumed beverages — 16% of respondents consume them monthly, 5% — weekly. Only 10% of respondents consume wine monthly, 2% — weekly (Fig. 2.4).

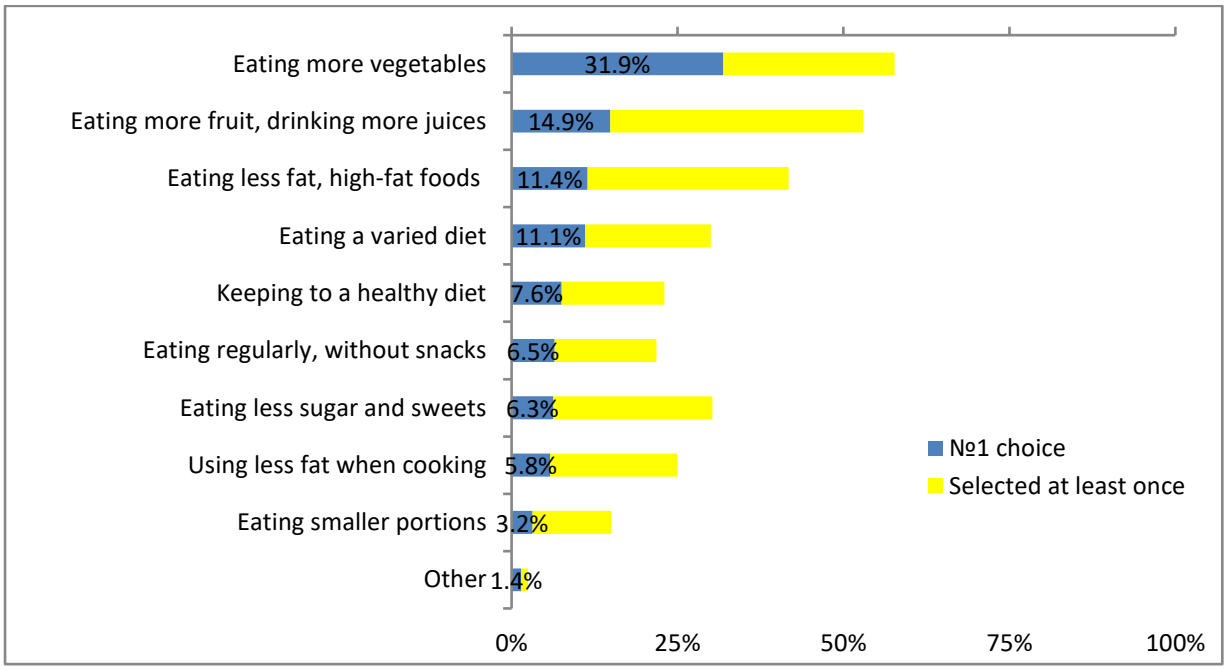
Fig. 2.4. Alcohol consumption: type of drink and frequency of consumption



Not only regular alcohol consumption but its enormous quantity is dangerous. It was established that the average volume of beer consumed at a time was almost 590 ml; wine — 230 ml, strong drinks — 170 ml. Men consumed alcohol more often. Moreover, they consumed it in significantly larger units: on average, 675 ml of beer (women — 405 ml), 275 ml of wine (women — 195 ml), and 195 ml of strong drinks (women — 110 ml).

Respondents were also asked to name and rank three components of healthy eating. The clear majority of respondents (58%) mentioned eating vegetables (for 32%, it was the key element of healthy eating), while 53% of respondents opted for eating fruit / drinking juices (for 15%, it was the number one element). The idea of reducing high-fat foods was supported by 42% of respondents (11% believed it to be the top component of healthy eating). Other answers were mentioned less than in one third answers (Fig. 2.5).

Fig. 2.5. What does healthy eating mean to you?



Taking into account that eating fruit was reported to be a key component of healthy eating, 81% of respondents ate fruit in the past week, while 19% didn't recall eating at least one fruit during that period of time (let us note that these data were collected in June). Two thirds (68%) of those giving a positive response to the previous question ate 5 or more fruits in the past 7 days; 7% — 4 fruits; 10% each — 2 or 3, and 6% limited themselves to one fruit per week. It is likely that lack of fruit in their diet was mostly related to their unavailability or unaffordability for the people. The lowest level of fruit consumption was reported by people aged 60 and over (73%), 45-59 — 79%, 30-44 — 85%, 18-29 — 88%. It turned out that even in summer fruits were more affordable for well-off families and urban citizens. Women reported eating more fruit than men (83% vs. 78%).

The clear majority of respondents (86%) were convinced that it is necessary to exercise at least once in a while for about half an hour to keep fit and stay healthy (Table 2.7). Another 12% couldn't decide whether it was worth doing or how frequently. Some 3% believed that exercise could improve their

health. It was interesting that the same number of people (86%) reported exercising or doing household chores they counted as exercise. Some 51% of those who chose a certain answer had sufficient daily exercise, while 23% exercised 2-5 times a week.

Table 2.7. Exercise frequency: breakdown by sex, age, and type of residence

Survey question C8			Daily	2 to 5 times a week	Once a week	2 to 3 times a month	Approximately once a month or less	Never	Never do this because of a disease
TOTAL		%	50,7%	22,5%	9,3%	3,4%	3,2%	6,8%	4,2%
		N	4911	2124	903	355	329	705	470
Respondent's sex	Male	%	55,6%	21,5%	8,1%	3,0%	2,8%	5,5%	3,5%
		N	1 852	686	281	117	102	185	134
	Female	%	46,6%	23,3%	10,2%	3,8%	3,5%	7,9%	4,7%
		N	3 059	1 438	622	238	227	520	336
Age group	18-29	%	53,2%	25,3%	9,6%	4,0%	2,8%	4,4%	0,7%
		N	771	338	143	64	47	71	10
	30-44	%	57,0%	22,3%	8,7%	3,8%	2,4%	4,6%	1,1%
		N	1 408	543	206	93	62	118	32
	45-59	%	52,5%	21,5%	8,9%	2,5%	3,4%	7,0%	4,2%
		N	1 480	556	245	72	89	177	116
	60 and older	%	40,4%	21,5%	9,9%	3,5%	4,1%	10,7%	9,9%
		N	1 252	687	309	126	131	339	312
Type of location	Urban	%	45,5%	23,8%	10,9%	4,0%	3,9%	7,5%	4,4%
		N	2 690	1 389	689	257	251	495	323
	Rural	%	62,2%	19,6%	5,7%	2,1%	1,8%	5,0%	3,5%
		N	2 221	735	214	98	78	210	147

It is likely that because of daily activities related to household chores rural residents reported daily exercising more often compared to urban residents (62% vs. 46%). Besides, daily exercising was reported more often by men than by women (57% vs. 47%), and by respondents younger than 60 than by those over 60 (53-57% vs. 40%).

2.6. Environment

Respondents were also asked to rate some characteristics of the location they lived in. In general, most people were satisfied with the environment — 45% of respondents rated their place of living as positive, 41% were neutral, and only 14% were not satisfied with their environment. The most satisfied were people in Kharkiv oblast (70% answered "good"), as well as Chernivtsi (58%), Kyiv (56%), Kherson (55%), and Luhansk (55%) oblasts. The most criticizing were people from Zaporizhia (23% answered "good"), Sumy (24%), and Mykolaiv (30%) oblasts.

As for assessment of individual components of the environment (Table 2.8), landscaped / green areas were rated the highest (61% positive and 26% neutral); as well as safety during the day (58% and 33%, respectively) and at night (39% and 37%, respectively). Feedback about children playgrounds and sports grounds and their equipment was somewhat worse. Bike lanes in sufficient quantities are available only to one fourth of the respondents (26%). Thus, it seems that environment encouraged walking outside, rather than active outdoor activities.

Table 2.8. Assessing environmental characteristics: breakdown by oblast

Survey question C13: Your assessment of…		number of outdoor sports grounds		equipment of sports grounds		number of out-door play-grounds		equipment of playgrounds		green areas — trees, parks, walk-ways, lawns		safety during day-time		safety at night		availability of bike lanes	
		Bad	Good	Bad	Good	Bad	Good	Bad	Good	Bad	Good	Bad	Good	Bad	Good	Bad	Good
Ukraine	**%**	**42,5%**	**27,6%**	**42,0%**	**26,4%**	**33,4%**	**35,5%**	**33,4%**	**34,5%**	**12,7%**	**61,0%**	**8,9%**	**57,8%**	**23,6%**	**39,4%**	**74,0%**	**10,5%**
Vinnytsia	%	40,2%	32,9%	38,5%	25,4%	34,0%	38,2%	34,8%	32,6%	12,1%	60,9%	9,3%	63,5%	18,6%	45,3%	68,5%	20,5%
Volyn	%	39,0%	31,0%	36,8%	19,2%	38,4%	32,7%	37,2%	19,6%	5,1%	68,6%	2,8%	81,0%	5,9%	76,3%	83,8%	7,7%
Dnipro	%	39,4%	29,0%	40,0%	25,3%	18,3%	48,3%	22,0%	44,9%	13,5%	58,9%	11,5%	50,1%	34,1%	33,0%	78,1%	6,6%
Donetsk	%	42,8%	17,8%	32,5%	18,5%	22,4%	25,2%	17,9%	26,9%	9,6%	51,6%	4,8%	51,0%	39,5%	24,5%	64,4%	12,6%
Zhytomyr	%	41,3%	34,5%	43,8%	27,9%	34,7%	41,2%	37,5%	33,8%	19,9%	61,5%	8,8%	66,0%	13,5%	51,7%	72,8%	9,4%
Zakarpattia	%	55,0%	11,4%	55,4%	10,9%	53,1%	8,6%	53,3%	8,1%	33,7%	28,1%	0,9%	61,3%	0,9%	59,2%	89,5%	0,7%
Zaporizhia	%	60,8%	16,0%	51,9%	24,0%	55,5%	23,7%	47,6%	25,0%	24,7%	47,2%	22,1%	38,8%	41,8%	19,1%	85,9%	7,0%
Ivano-Frankivsk	%	49,7%	28,6%	51,2%	26,0%	54,1%	26,5%	48,6%	29,9%	13,3%	65,0%	4,2%	83,7%	10,7%	67,1%	97,8%	0,3%
Kyiv oblast	%	38,1%	36,4%	33,7%	39,8%	27,4%	43,7%	24,7%	52,8%	8,9%	66,1%	0,9%	77,8%	17,1%	35,3%	72,7%	10,0%
Kirovohrad	%	46,0%	25,4%	47,6%	24,5%	41,3%	34,1%	39,9%	32,4%	32,9%	56,1%	12,9%	66,8%	17,9%	53,9%	48,3%	21,8%
Luhansk	%	30,2%	31,4%	26,1%	35,3%	23,9%	39,8%	19,3%	45,3%	6,9%	59,9%	9,8%	50,8%	16,1%	37,3%	56,2%	21,9%
Lviv	%	47,1%	21,4%	55,1%	17,6%	42,3%	26,8%	45,6%	26,1%	11,8%	55,7%	6,9%	60,8%	18,0%	40,7%	79,2%	9,0%
Mykolaiv	%	37,4%	19,9%	39,7%	17,4%	36,9%	21,8%	37,8%	18,9%	24,2%	50,6%	12,8%	50,9%	17,2%	37,9%	83,6%	2,5%
Odesa	%	48,9%	19,1%	49,1%	21,5%	31,1%	38,6%	33,3%	37,4%	17,0%	60,0%	7,3%	58,4%	43,4%	15,9%	74,8%	11,5%
Poltava	%	48,4%	29,2%	48,5%	28,5%	35,6%	35,6%	35,1%	33,1%	15,5%	65,0%	14,5%	49,2%	23,2%	31,4%	84,4%	6,3%
Rivne	%	66,4%	14,8%	67,9%	13,1%	66,3%	17,8%	66,7%	15,9%	17,7%	50,3%	20,0%	57,5%	24,8%	42,0%	68,3%	11,7%
Sumy	%	46,1%	23,4%	49,5%	19,8%	46,7%	24,3%	48,0%	22,7%	28,5%	42,3%	12,3%	32,4%	14,2%	31,2%	71,2%	4,4%
Ternopil	%	35,4%	28,9%	35,9%	40,9%	30,2%	42,9%	31,7%	39,2%	5,8%	70,8%	4,0%	73,9%	3,8%	71,4%	52,2%	28,5%
Kharkiv	%	30,8%	54,2%	32,3%	49,6%	16,9%	63,9%	18,3%	63,3%	1,5%	86,7%	4,9%	73,3%	19,2%	43,8%	78,4%	8,8%
Kherson	%	51,3%	20,9%	56,7%	18,2%	46,3%	23,2%	50,4%	22,0%	3,1%	82,9%	13,1%	50,1%	43,1%	29,6%	78,4%	13,3%

Khmelnytsky	%	10,1%	59,6%	10,6%	59,7%	10,3%	61,3%	10,6%	60,6%	8,6%	70,1%	12,0%	43,0%	13,3%	41,6%	38,9%	29,7%
Cherkasy	%	51,6%	28,2%	50,0%	25,9%	40,6%	33,9%	39,9%	33,6%	9,3%	63,7%	5,7%	69,2%	15,9%	53,2%	95,5%	1,7%
Chernivtsi	%	58,7%	20,2%	61,8%	18,7%	63,9%	18,4%	64,1%	16,3%	14,9%	62,8%	13,1%	59,1%	15,2%	55,1%	93,9%	4,0%
Chernihiv	%	56,5%	16,3%	57,6%	15,4%	49,0%	19,7%	53,0%	18,5%	3,6%	83,8%	12,5%	65,0%	25,0%	45,9%	96,0%	1,8%
Kyiv city	%	27,1%	30,7%	30,3%	26,4%	15,0%	49,2%	18,4%	43,1%	5,3%	64,7%	9,1%	43,4%	28,8%	32,9%	57,0%	12,1%

SECTION 3. SCREENING AND ILLNESS BEHAVIOR

Prevention and timely care-seeking play a key role in preventing severe diseases and complications requiring significant financial resources, as well as in decreasing disability and mortality rates.

3.1. Medical examination — early disease detection

According to the survey, fluoroscopy was the most frequently used type of medical examination (in the past 12 months, 60% of respondents underwent this procedure, including 57% women and 61% men).

Some 34% of respondents (men and women equally) underwent occupational health check-ups in the past year (Table 3.1).

Table 3.1. Experience undergoing medical examinations in the past 12 months (percentage of those undergoing medical examination for health checkup)

Survey question B1	*TOTAL*	*SEX*		*AGE*	
		Men	*Women*	*18-39*	*40 and older*
Dentist	40%	37%	42%	50%	33%
Occupational health check-up	34%	34%	33%	41%	29%
(MEN) Urologist	23%	23%	-	24%	22%
(WOMEN) Gynecologist	51%	-	51%	65%	43%
(WOMEN) Mammography	19%	-	19%	22%	18%
Fluoroscopy	60%	57%	61%	63%	57%
Electrocardiography (ECG) for health check-up	42%	39%	44%	37%	45%

Some 51% of women reported having visited a gynecologist and 19% having undergone mammography. Some 23% of men had a preventive urologist visit. A preventive ECG was done by 42% of respondents, including 37% among people under 40 years old and 45% among those over 40.

The lowest percentage of those undergoing different types of scheduled medical examinations (gynecologist visit for women, preventive ECG for people over 40) was observed in Volyn, Odesa, Kirovohrad, Ternopil, and Khmelnytsky oblasts, as well as in the city of Kyiv. In these oblasts, less than 24% of population underwent health check-ups, less than 47% women — gynecologist health check-up, and less than 42% people over 40 — health checkup cardiogram (Table 3.2). The best situation with regular medical examinations was observed in Cherkasy, Poltava, Chernivtsi, and Chernihiv oblasts.

Table 3.2. Experience undergoing medical examinations in the past 12 months: breakdown by oblast (% of respondents undergoing health checkups)

Survey question B1	Percentage of respondents having undergone an occupational health check-up in the past 12 months	Percentage of women having visited a gynecologist in the past 12 months	Percentage of people over 40 having undergone a health check-up cardiogram in the past 12 months
Ukraine	***34%***	***51%***	***45%***
Vinnytsia	33%	51%	44%
Volyn	21%	20%	23%
Dnipro	41%	60%	53%
Donetsk	39%	51%	50%
Zhytomyr	30%	60%	35%
Zakarpattia	38%	47%	38%
Zaporizhia	35%	49%	49%
Ivano-Frankivsk	32%	61%	57%
Kyiv oblast	43%	62%	57%
Kirovohrad	15%	33%	30%
Luhansk	39%	45%	36%
Lviv	34%	51%	42%
Mykolaiv	41%	53%	47%
Odesa	18%	25%	29%
Poltava	48%	61%	56%
Rivne	30%	51%	47%
Sumy	38%	55%	52%

Ternopil	24%	34%	37%
Kharkiv	40%	52%	39%
Kherson	37%	61%	58%
Khmelnytsky	15%	47%	42%
Cherkasy	41%	69%	55%
Chernivtsi	39%	65%	60%
Chernihiv	36%	63%	57%
Kyiv city	21%	42%	37%

3.2. Illness behavior

The data about respondents' illness behaviors were quite alarming. 52% reported self-treatment, 32% used medications, 20% did not use medications and tried to cure themselves using home remedies. Only one third of respondents sought health care services; most often, they visited family physicians / GPs (20%); 6% got advice from a pharmacist.

According to the respondents, seeking care from traditional medicine providers or looking up treatment online as the first response to illness were less prevalent (Table 3.3).

Respondents from Donetsk, Kherson, Lviv, Zakarpattia, and Sumy oblasts preferred seeking medical care to self-treatment. In other oblasts, self-treatment was as prevalent or even more prevalent than seeking medical care. People living in Ivano-Frankivsk, Poltava, Vinnytsia, and Odesa oblasts preferred self-treatment three times as often compared to seeking care from a physician or a pharmacist when getting sick.

Table 3.3. Illness behavior: breakdown by oblast

Survey question B1.2 What is the first thing you do when you get sick?	UKRAINE	Vinnytsia	Volyn	Dnipro	Donetsk	Zhytomyr	Zakarpattia	Zaporizhia	Ivano-Frankivsk	Kyiv city	Kirovohrad	Luhansk	Lviv	Mykolaiv	Odesa	Poltava	Rivne	Sumy	Ternopil	Kharkiv	Kherson	Khmelnytsky	Cherkasy	Chernivtsi	Chernihiv	Kyiv city
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Self-treatment with traditional medicines, no medications	19,8	19,9	15,7	16,0	13,5	32,0	26,7	13,1	19,4	14,2	6,4	13,5	37,2	36,0	32,2	9,8	20,8	23,0	14,1	17,7	19,5	14,7	18,1	26,2	25,4	18,5
Self-treatment with medicines	32,2	23,7	14,9	40,3	22,7	32,2	29,1	46,8	35,3	49,7	41,0	19,9	26,3	27,3	21,5	70,2	38,4	58,9	28,9	35,0	47,9	32,8	27,9	22,1	27,1	18,2
Seek advice from a pharmacist at a pharmacy	6,4	1,1	8,3	6,5	25,6	0,6	6,5	7,8	1,5	3,7	0,0	2,4	6,0	2,1	2,7	3,7	1,4	2,5	15,1	1,0	1,8	7,8	3,3	3,3	3,4	8,0
Call ambulance	2,4	0,8	4,7	4,1	3,8	0,5	1,1	1,5	2,1	2,0	1,3	5,1	1,1	0,6	2,0	0,4	0,7	1,1	9,7	0,5	0,2	2,3	5,1	2,0	0,8	2,8
Visit a family physician / district GP	20,3	40,7	16,4	20,0	24,1	23,3	28,9	19,0	19,6	20,4	18,3	15,2	16,7	17,6	19,6	11,9	16,0	10,3	21,2	19,5	20,7	8,7	17,5	28,8	15,9	25,5
Visit a subspecialist at an out-patient facility	2,9	4,9	7,0	4,7	0,7	3,3	3,4	4,5	5,1	0,4	3,2	0,0	3,3	3,1	4,4	0,6	1,6	2,0	5,8	1,7	1,3	0,5	5,5	6,4	1,7	3,2
Visit a subspecialist at an in-patient facility	0,7	0,2	1,1	0,6	0,2	0,8	0,2	0,3	1,6	1,7	1,9	0,0	0,9	1,1	1,5	0,2	0,0	0,0	1,7	0,0	0,7	1,0	1,3	2,6	0,8	0,8
Seek care from a traditional medicine provider (homeopaths, healers)	0,1	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,3	0,0	0,0	0,4	0,0	0,0	0,0	0,0	0,0	0,9	0,0	0,0	0,1	0,0	0,2	0,0	0,2
Seek advice from the physicians who are your relatives, friends, or acquaintances	3,6	3,6	12,7	3,0	2,3	2,7	1,8	1,1	7,7	2,0	0,8	3,0	4,5	0,6	4,3	2,1	0,5	0,9	1,6	2,5	2,4	1,6	5,4	4,6	0,4	12,3
Look up online for treatment of similar symptoms or diseases	0,6	0,6	0,4	0,6	0,2	1,6	0,8	0,4	0,5	0,0	0,4	0,0	0,7	0,0	0,8	0,2	0,3	0,2	0,0	0,2	0,0	2,6	2,5	0,0	0,6	1,4
Do something else	0,4	0,0	1,1	1,2	0,0	0,0	0,2	0,2	0,2	1,0	0,0	0,5	0,7	0,2	1,2	0,2	0,0	0,0	0,2	0,0	1,0	0,3	0,9	0,7	0,0	0,6
Do nothing	1,6	0,9	14,3	0,0	1,7	0,5	1,3	0,0	0,3	1,1	2,3	1,8	0,0	0,9	5,8	0,0	0,7	0,0	0,5	0,6	0,6	0,0	5,7	0,8	4,5	1,3
DEPENDS ON SYMPTOMS	8,9	3,6	3,5	3,0	5,2	2,6	0,0	5,2	6,6	3,4	24,5	38,6	2,1	10,5	3,9	0,7	19,5	1,2	0,3	21,4	3,8	27,5	6,7	2,3	19,4	7,3
Total 100%																										
No answer	0,8	0,0	1,4	1,5	0,8	0,0	0,2	0,0	0,0	0,0	0,0	0,7	0,6	0,4	0,3	0,2	0,4	0,6	10,7	0,2	0,0	0,7	0,0	0,0	0,7	2,1

Table 3.4. Illness behavior: breakdown by socio-demographic group

Survey question B1.2 *What is the first thing you do when you get sick?*	UKRAINE		Sex				Age group								Type of residence			
	%	N	Men		Women		18-29		30-44		45-59		60 and older		Urban		Rural	
			%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
Self-treatment with traditional medicines, no medications	19,8%	2006	22,9%	788	17,3%	1218	17,8%	246	20,8%	518	19,6%	555	20,6%	687	18,3%	1169	23,2%	837
Self-treatment with medicines	32,2%	3445	29,3%	1064	34,6%	2381	32,1%	497	32,0%	869	33,2%	978	31,5%	1101	30,7%	2073	35,7%	1372
Seek advice from a pharmacist at a pharmacy	6,4%	497	6,5%	166	6,4%	331	6,8%	89	7,3%	142	6,1%	128	5,4%	138	7,4%	348	4,2%	149
Call ambulance	2,4%	247	2,1%	76	2,6%	171	1,4%	22	1,5%	35	2,1%	54	4,3%	136	2,6%	160	1,9%	87
Visit a family physician / district GP	20,3%	2055	17,0%	570	22,9%	1485	20,6%	326	18,0%	464	20,6%	571	22,1%	694	21,3%	1353	17,9%	702
Visit a subspecialist at an out-patient facility	2,9%	313	2,9%	108	2,9%	205	3,2%	52	2,6%	70	3,4%	102	2,5%	89	2,8%	183	3,1%	130
Visit a subspecialist at an in-patient facility	0,7%	85	0,6%	28	0,9%	57	0,9%	15	0,9%	22	0,4%	16	0,8%	32	0,6%	47	1,1%	38
Seek care from traditional medicine professionals (homeo-paths, healers)	0,1%	9	0,0%	2	0,1%	7	0,0%	0	0,1%	3	0,1%	3	0,1%	3	0,1%	7	0,0%	2
Seek advice from the physicians who are your relatives, friends, or acquaintances	3,6%	324	4,2%	130	3,1%	194	4,0%	49	4,1%	97	3,2%	86	3,1%	92	4,1%	219	2,6%	105
Look up online treatment of similar symptoms or diseases	0,6%	57	0,5%	17	0,7%	40	1,2%	16	1,0%	29	0,3%	9	0,1%	3	0,7%	44	0,3%	13
Do something else	0,4%	40	0,6%	18	0,3%	22	0,3%	4	0,2%	6	0,2%	5	0,9%	25	0,4%	24	0,5%	16
Do nothing	1,6%	140	3,0%	103	0,5%	37	2,3%	30	2,0%	43	1,3%	37	1,0%	30	1,4%	75	2,1%	65
DEPENDS ON SYMPTOMS	8,9%	874	10,4%	362	7,7%	512	9,4%	127	9,4%	224	9,4%	270	7,5%	253	9,5%	580	7,4%	294
Total 100%	100	10092	100	3432	100	6660	100	1473	100	2522	100	2814	100	3283	100	6282	100	3810
No answer	0,8%	86	0,9%	36	0,8%	50	0,8%	12	0,7%	15	0,8%	25	1,0%	34	0,6%	36	1,3%	50

Table 3.4. Illness behavior: breakdown by social and demographic group (continued — income and health status)

Survey question B1.2 *What is the first thing you do when you get sick?*	Household income per one adult								Having chronic diseases				Officially confirmed disability status				Perceived health status									
	Up to 1000 UAH		1001-1500 UAH		1501-2000 UAH		Over 2001 UAH		Yes		No		Yes		No		Very bad		Bad		Mode-rate		Good		Very good	
	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
Self-treatment with traditional medicines, no medications	22,9	372	21,5	579	20,3	302	19,6	326	16,0	768	22,7	1216	13,0	97	20,6	1885	14,6	37	12,4	187	19,9	916	21,8	744	24,6	109
Self-treatment with medicines	33,2	532	33,4	973	28,5	512	28,4	517	33,0	1623	32,0	1806	28,6	215	32,6	3174	30,8	79	32,3	495	32,3	1523	33,0	1200	26,1	124
Seek advice from a pharmacist at a pharmacy	6,2	88	5,7	128	7,1	77	8,8	96	5,4	185	7,2	309	6,7	31	6,4	455	3,6	5	4,6	50	7,2	229	6,5	185	5,6	25
Call ambulance	3,2	59	3,0	77	2,3	32	2,1	29	4,0	176	1,2	69	6,2	41	2,1	202	10,8	26	6,0	71	2,3	105	1,0	38	1,0	5
Visit a family physician / district GP	19,8	365	20,8	552	24,5	384	21,5	355	25,2	1117	16,3	910	29,7	207	19,7	1817	25,7	63	27,9	390	21,9	917	16,4	595	15,4	74
Visit a subspecialist at an out-patient facility	2,5	48	2,6	80	2,7	43	4,2	75	3,7	175	2,3	133	4,0	39	2,8	269	3,1	8	3,9	63	3,2	141	2,4	88	2,5	12
Visit a subspecialist at an in-patient facility	0,9	15	0,5	15	0,6	12	0,7	13	1,0	50	0,6	34	2,4	21	0,6	62	2,4	5	1,4	21	0,5	30	0,8	28	0,3	1
Seek care from a traditional medicine provides (homeopath, healer)	0,1	2	0,1	3	0,0	1	0,1	2	0,1	4	0,1	5	0,1	1	0,1	8	0,0	0	0,0	0	0,1	4	0,1	5	0,0	0
Seek advice from the physicians who are your relatives, friends, acquaintances	2,2	40	2,5	68	3,5	47	4,9	69	2,9	127	4,1	192	2,5	14	3,7	301	1,1	3	2,7	34	2,9	126	4,8	143	3,8	17
Look up online treatment of similar symptoms, or diseases	0,3	5	0,3	8	0,3	5	1,0	17	0,3	18	0,8	38	0,2	3	0,6	52	0,0	0	0,2	3	0,4	18	0,8	26	2,2	10
Do something else. Specify what exactly	0,3	4	0,6	15	0,3	5	0,1	2	0,5	22	0,4	18	0,2	2	0,4	35	2,8	7	0,6	7	0,3	13	0,4	12	0,3	1
Do nothing	1,4	24	1,3	29	1,4	17	1,8	20	0,9	31	2,2	106	0,9	6	1,7	132	1,1	3	0,9	10	1,0	36	2,0	62	5,7	27
DEPENDS ON SYMPTOMS	6,9	101	7,6	223	8,4	134	6,6	108	7,0	345	10,2	510	5,6	53	8,7	762	4,1	10	7,2	121	8,1	345	10,0	329	12,5	62
Total 100%	100	1655	100	2750	100	1571	100	1629	100	4641	100	5346	100	730	100	9154	100	246	100	1452	100	4403	100	3455	100	467
No answer	1,2	19	0,8	23	0,9	12	0,6	8	0,7	29	0,8	53	0,8	6	0,8	75	0,7	3	0,9	9	1,0	48	0,6	22	0,9	3

People with poor or very poor health (especially those with disabilities) have more often visited doctors than resorted to self-treatment. However, it is worth noting that even respondents with chronic diseases also preferred self-treatment, which may be indicative of the level of health services accessibility.

Rural residents rarely visited doctors and often resorted to self-treatment.

As for the illness behavior of respondents with different income levels, it was found that low-income people preferred self-treatment, whereas higher-income people were seeking health care services at health care institutions (28.7% of respondents with income up to 1,000 UAH and 33.5% of those who reported having income over 2001 UAH had sought all types of medical care (altogether).

No significant age and sex specific differences in illness behavior were observed (Table 3.4).

Approximately one half of respondents (5468 people or 53.1% of those who had answered the question) reported having had an illness or injury in the past year, and 63% of them (34% of the entire adult population) had sought medical care (Table 3.5). The highest rate of reports of being sick in the past year was observed among the respondents in Zaporizhia oblast (83%); however, only 46% of ill people used health care services. Rates of disease-related health care visits were also low in Khmelnytsky (40%) and Kharkiv (48%) oblast; respondents living in Kirovohrad (95%), Luhansk (84%), Vinnytsia (76%), Donetsk (76%), and Chernivtsi (75%) oblasts were seeking care more often.

The following features of reporting on the illness or trauma and health care visits may be noted in different socio-demographic groups:

- Men reported on the diseases and visited doctors less often than women.
- With age, the proportion of patients and those seeking health care increased.
- Poor health, chronic diseases, and disability were noted along with high level of getting ill and higher rate of medical visits.
- Among respondents with the highest income the proportion of ill people was slightly lower compared to lower-income populations (51.5% among those having income less than 1000 UAH versus 48.8% with more than 2000 UAH of income). At the same time, there were no significant differences in seeking care for illness or injury between respondents with different income levels (63.2-63.6%).

Table 3.5. Illnesses or injuries in the past 12 months and health care visits: breakdown by oblast

Questions B1.2, 1.4		An illness that occurred in the past 12 months				Have you visited a doctor or a feldscher due to your last illness or injury?			
		Yes	No	Total	No answer	Yes	No	Total	No answer
Ukraine	%	53,1%	46,9%	100,0%	3,6%	63,3%	36,7%	100,0%	0,1%
	N	5468	4298	9766	412	3507	1954	5461	7
Vinnytsia	%	60,6%	39,4%	100,0%	0,7%	76,1%	23,9%	100,0%	0,0%
	N	264	141	405	3	200	64	264	0
Volyn	%	58,4%	41,6%	100,0%	5,7%	67,9%	32,1%	100,0%	0,0%
	N	236	149	385	23	160	76	236	0
Dnipro	%	58,5%	41,5%	100,0%	2,7%	64,4%	35,6%	100,0%	0,0%
	N	234	163	397	11	159	75	234	0
Donetsk	%	47,0%	53,0%	100,0%	5,1%	75,9%	24,1%	100,0%	0,6%
	N	201	187	388	20	150	50	200	1
Zhytomyr	%	57,6%	42,4%	100,0%	2,6%	68,2%	31,8%	100,0%	0,0%
	N	242	154	396	12	167	75	242	0
Zakarpattia	%	41,6%	58,4%	100,0%	0,2%	66,7%	33,3%	100,0%	0,0%
	N	181	226	407	1	122	59	181	0
Zaporizhia	%	83,3%	16,7%	100,0%	2,9%	45,8%	54,2%	100,0%	0,0%
	N	339	58	397	11	155	184	339	0
Ivano-Frankivsk	%	60,2%	39,8%	100,0%	3,6%	63,8%	36,2%	100,0%	0,0%
	N	246	145	391	17	161	85	246	0
Kyiv oblast	%	63,0%	37,0%	100,0%	2,8%	56,8%	43,2%	100,0%	0,5%
	N	263	135	398	10	147	115	262	1
Kirovohrad	%	22,3%	77,7%	100,0%	1,0%	95,3%	4,7%	100,0%	0,0%
	N	103	300	403	5	98	5	103	0
Luhansk	%	21,6%	78,4%	100,0%	4,0%	83,7%	16,3%	100,0%	0,0%
	N	93	294	387	17	77	16	93	0
Lviv	%	58,5%	41,5%	100,0%	2,5%	64,7%	35,3%	100,0%	0,3%
	N	231	158	389	10	152	78	230	1

Questions B1.2, 1.4		An illness that occurred in the past 12 months				Have you visited a doctor or a feldscher due to your last illness or injury?			
		Yes	No	Total	No answer	Yes	No	Total	No answer
Mykolaiv	%	56,8%	43,2%	100,0%	18,0%	73,1%	26,9%	100,0%	0,0%
	N	191	137	328	80	141	50	191	0
Odesa	%	44,6%	55,4%	100,0%	3,3%	62,6%	37,4%	100,0%	0,0%
	N	186	207	393	13	117	69	186	0
Poltava	%	72,9%	27,1%	100,0%	2,1%	63,7%	36,3%	100,0%	0,0%
	N	302	99	401	7	193	109	302	0
Rivne	%	67,4%	32,6%	100,0%	1,0%	65,9%	34,1%	100,0%	0,7%
	N	287	117	404	4	190	95	285	2
Sumy	%	39,3%	60,7%	100,0%	16,6%	70,5%	29,5%	100,0%	0,8%
	N	131	207	338	67	92	38	130	1
Ternopil	%	35,2%	64,8%	100,0%	1,0%	53,4%	46,6%	100,0%	0,0%
	N	144	259	403	4	77	67	144	0
Kharkiv	%	63,6%	36,4%	100,0%	0,2%	47,9%	52,1%	100,0%	0,0%
	N	267	140	407	1	131	136	267	0
Kherson	%	63,5%	36,5%	100,0%	0,0%	63,5%	36,5%	100,0%	0,0%
	N	267	140	407	0	173	94	267	0
Khmelnytsky	%	61,8%	38,2%	100,0%	14,0%	40,2%	59,8%	100,0%	0,2%
	N	217	128	345	63	90	126	216	1
Cherkasy	%	66,3%	33,7%	100,0%	2,1%	57,5%	42,5%	100,0%	0,0%
	N	276	124	400	10	161	115	276	0
Chernivtsi	%	45,7%	54,3%	100,0%	2,4%	75,1%	24,9%	100,0%	0,0%
	N	190	209	399	9	142	48	190	0
Chernihiv	%	52,7%	47,3%	100,0%	1,0%	65,4%	34,6%	100,0%	0,0%
	N	226	178	404	4	151	75	226	0
Kyiv city	%	35,5%	64,5%	100,0%	1,9%	64,4%	35,6%	100,0%	0,0%
	N	151	243	394	10	101	50	151	0

3.3. Barriers to consumption of health care services

According to the survey, the main reason for putting off a doctor visit is previous experience of treatment received after a medical consultation (57%). Each fourth respondent expected that the disease will pass without treatment; 24.6% mentioned high treatment costs. 13% of respondents complained about long waiting lines, while 7% didn't visit a doctor because they didn't trust the level of knowledge among medical personnel.

Respondents from Volyn and Zaporizhia oblasts stated that the main barriers in the consumption of health care services for them were the high expenditures on treatment and long waiting lines in health care facilities (in other words, financial availability and disadvantages of the organization of care). About half of respondents in Zakarpattia and Kherson oblasts did not visit a doctor because of the high treatment costs. Residents of Kirovohrad oblast saw a lack of skills of medical personnel as a major barrier to consumption of care (18.3% vs. 6.9% in the country). Thus, the decision to visit a doctor largely depends on the financial capacity of households.

Some 1-5% respondents from all over the country mentioned negative attitude of the medical staff toward patients. Respondents in Luhansk, Vinnytsia, and Chernihiv oblasts did not think that medical staff treated patients badly at all (0% of the responses). Chernihiv and Sumy oblasts, where systemic barriers have been hardly ever mentioned, are at the bottom of the list, however one should keep in mind that high rate of self-treatment in case of illness or injury was reported in these regions.

Less than 1% of people used services of a homeopathist, a psychic, a healer, or a traditional medicine practitioner during their past illness or injury (0.3% visited a homeopathist, 0.1% — a psychic, 0.4% — a healer or a traditional medicine practitioner). For these services, most of respondents paid 200 UAH (median), although there were cases of expenditures amounting up to 30,000 UAH (so, the average payment is 859 UAH).

Analyzing the survey data, in particular, types of preventive tests, one may notice that they reflect the standard obligatory scope of examinations during health checks or regular preventive health checks of certain categories of population (fluoroscopy, electrocardiography, gynecological/urological examination), although the efforts to introduce health screening, especially in primary care, have become more active.

SECTION 4. OUTPATIENT CARE

Accessibility and quality of health care are important indicators of the overall health care system performance. Therefore, while studying outpatient and inpatient care, we paid special attention to affordability of health care services and medicines. Also, patients evaluated health care service attributes (a "service wrap" and subjective assessment of health care service efficiency); thus, the dimension of quality of health care services has been included in the study as well.

4.1. Outpatient visits

According to the survey, only 36% of adult population of Ukraine reported having sought outpatient services due to health problems in the past year, while 64% had not consumed outpatient services.

Among those who visited a doctor there were more women than men, and older people than young people. To be more specific, 42% women and 29% men have visited a doctor within the past 12 months. The share of reported outpatient visits increases with age; 30% of respondents aged 18-29 and 47% of those aged 60 and over reported having visited a doctor once a year (Table 4.1).

Table 4.1. Experience of outpatient visits: breakdown by socio-demographic group

Survey question B2.1 *Outpatient visits in the past 12 months*		Yes		No	
		N	%	N	%
Altogether		3628	35.8%	6496	64.2%
Sex of the respondent	Male	1322	28.80%	3260	71.20%
	Female	2307	41.6%	3235	58.4%
Age group	18-29	601	30.4%	1378	69.6%
	30-44	892	31.5%	1936	68.5%
	45-59	951	36.5%	1656	63.5%
	60 and older	1184	43.7%	1526	56.3%
Type of residence	Urban	2545	36.5%	4435	63.5%
	Rural	1083	34.5%	2061	65.5%
Household income per adult	Up to 1000 UAH	499	34.5%	949	65.5%
	1001-1500 UAH	969	40.7%	1409	59.3%
	1501-2000 UAH	634	37.8%	1042	62.2%
	More than 2001 UAH	707	33.3%	1419	66.7%
Chronic diseases	Yes	2317	55.0%	1894	45.0%
	No	1283	22.2%	4501	77.8%
Formally recognized disability	Yes	410	58.6%	290	41.4%
	No	3167	34.4%	6048	65.6%
Self-assessment of health status	Very poor	108	57.1%	81	42.9%
	Poor	754	61.7%	468	38.3%
	Medium	1679	40,3%	2492	59,7%
	Good	970	24,8%	2935	75,2%
	Very good	92	16,1%	480	83,9%

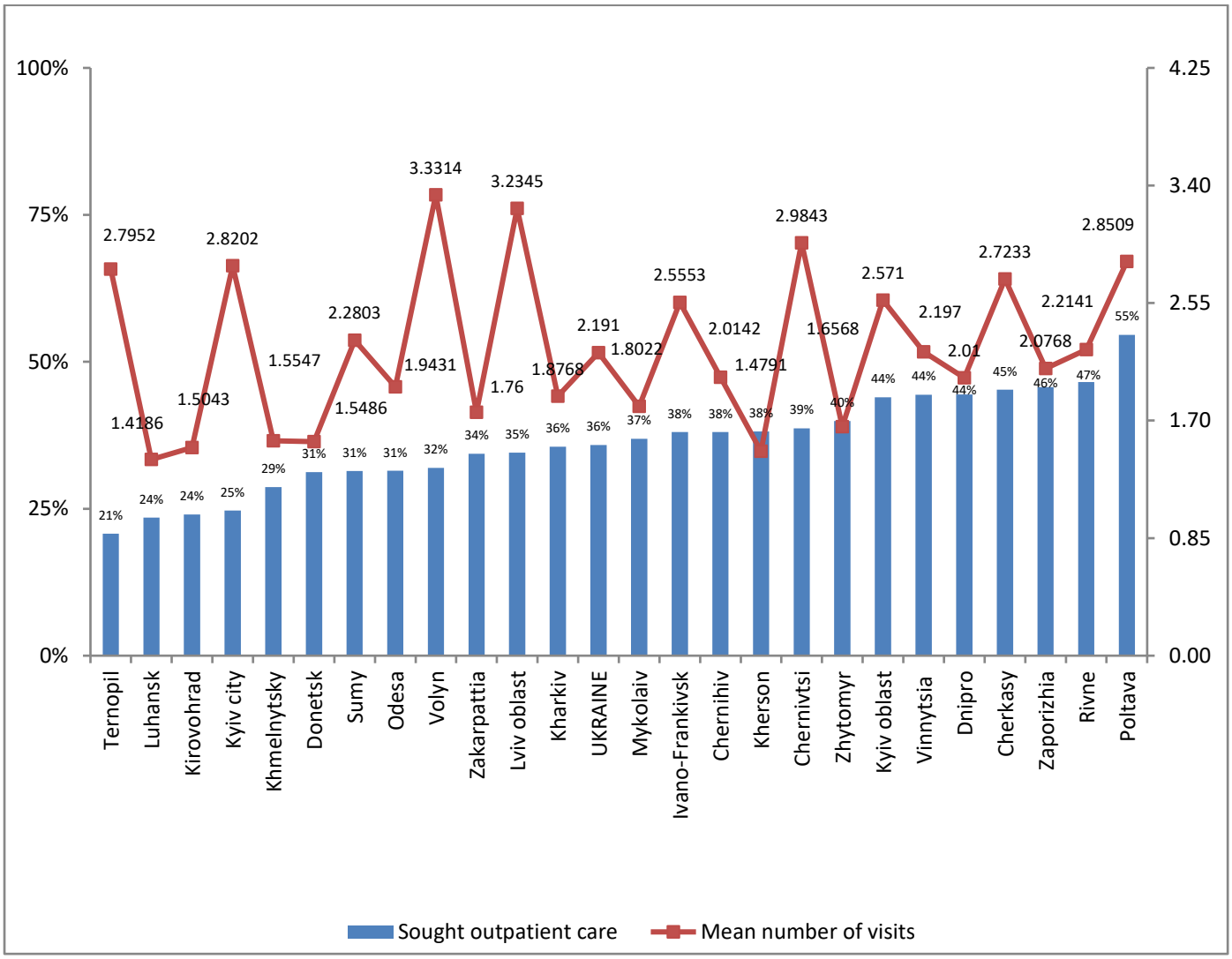
Outpatient services were used by 40% representatives of families with 1001-2000 UAH of income per one adult, by 35% by those with up to 1000 UAH of income per adult, and 33% by those with more than 2001 UAH of income.

There was no difference between the share of outpatient visits in urban and rural areas; 36% of urban residents and 35% of those living in rural areas have sought outpatient care.

The regional profile demonstrates that almost every second respondent living in Poltava (55%), Rivne (47%), Zaporizhia (46%), Cherkasy (45%), Dnipro (44%), Vinnytsia (44%) and Kyiv (44%) oblasts has

visited a physician in the past 12 months. The lowest percentage of people who reported using outpatient care was observed in Ternopil (21%), Luhansk (24%), and Kirovohrad (24%) oblasts, as well as in the city of Kyiv (25%) (Fig. 4.1).

Fig. 4.1. Outpatient visits in the past 12 months: breakdown by oblast



As for the frequency of outpatient visits in the past 12 months, 56% of respondents have visited outpatient facilities once, 22% — twice, another 22% — three or more times.

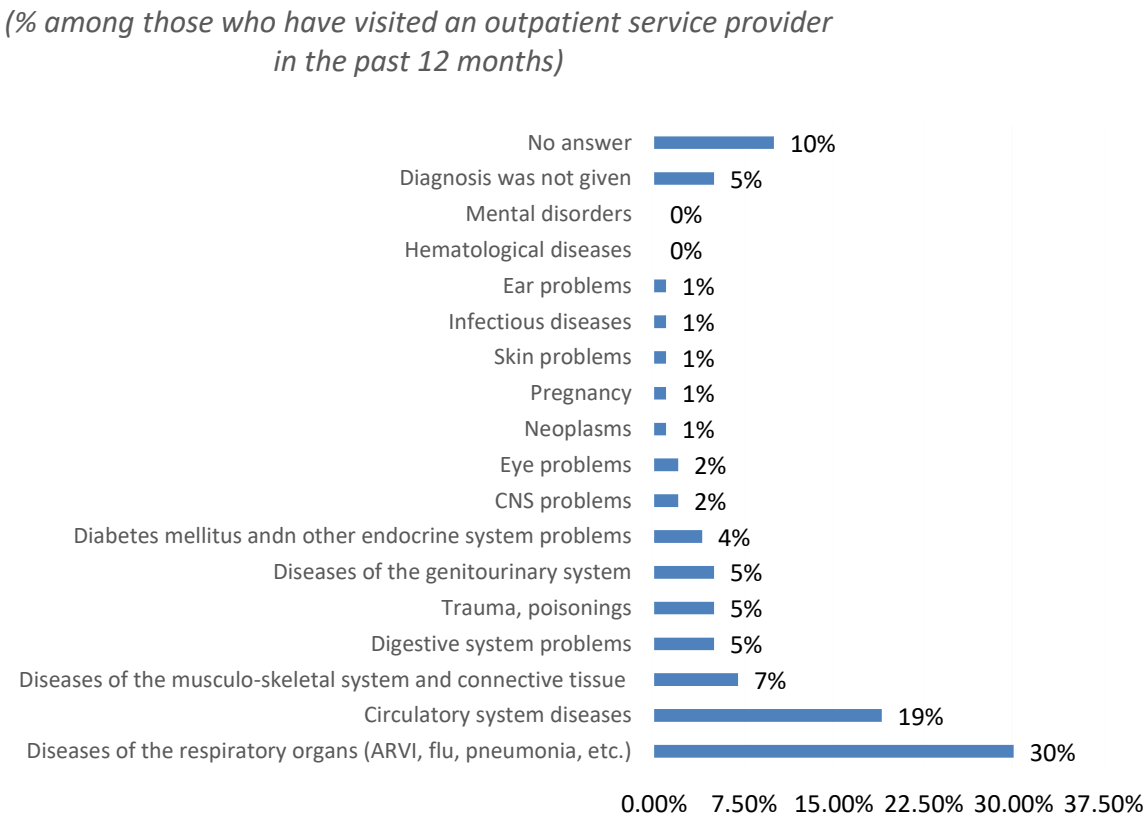
The average number of visits to a physician is 2.2, this number is higher among women (2.4) than men (1.8), the same is true for health care consumers: this number is higher among people aged 60 and older (2.3) than among younger populations.

It was established that the value of this indicator doesn't depend on the place of residence and income of the family.

As for the regional differences, the average number of outpatient visits was higher in Volyn (3.3), Lviv (3.2), Chernivtsi (3.0), and Poltava (2.9) oblasts, and the lowest — in Luhansk (1.4), Kherson (1.5), Kirovohrad (1.5), Donetsk (1.5), and Khmelnytsky (1.6) oblasts.

According to the survey, the main reason for visiting a physician were respiratory diseases (reported by 30% of respondents), including acute viral respiratory infection, influenza (18%), chronic bronchitis (3%), pneumonia (2%), and other (7%), followed by cardiovascular diseases (19%). Hypertension was diagnosed among 11% of patients, coronary heart disease — among 2%, stroke — among 1%, and other cardiovascular diseases — among 5% (Fig. 4.2).

Fig. 4.2. Diagnosis given by a physician during the latest outpatient visit



In addition, 7% used outpatient services due to musculoskeletal and connective tissue diseases, 5% — due to gastrointestinal problems, 5% — due to poisoning, fractures, or other injuries, 5% — due to genitourinary diseases, 4% — due to diabetes mellitus or other endocrine disorders, 2% — due to nervous system disorders, 2% — due to eye problems, 1% — due to neoplasms, 1% — due to pregnancy and childbirth, 1% — due to skin problems, 1% — due to infectious diseases, 1% — due to ear problems. Some 5% of respondents reported that their diagnosis wasn't determined.

Cardiovascular diseases were more frequently reported by women (21% have visited physician due to them) than men (16%). Conversely, men visited a doctor more often due to injuries than women (8% of men vs. 4% of women). As for other diseases, there was no difference between men and women.

In most cases, young people (18-29 years old) used outpatient services due to a cold, flu, or other respiratory diseases (47%); as well as due to urogenital problems (6%), injuries, and poisoning (5%),

as well as digestive disorders (5%). Among respondents over 60, the most common reasons for seeking medical care were cardiovascular diseases (36%), respiratory diseases (14%), and musculoskeletal and connective tissue (10%) disorders.

There was virtually no difference in breakdown of diagnoses neither by the type of locality (city or village), nor by income level.

Respiratory diseases were the major cause for medical visits for the residents of Rivne (42%), Zaporizhia (39%), Lviv (37%), Poltava (37%), and Zhytomyr (37%) oblasts. The percentage of those who sought care due to cardiovascular diseases was the highest in Kirovohrad (26%), Zaporizhia (26%), Vinnytsia (24%), Kharkiv (24%), and Donetsk (22%) oblasts. The percentage of those who have visited a physician due to genitourinary diseases was slightly higher in Ternopil (12%), Kirovohrad (10%), and Luhansk (10%) oblasts; due to injuries — in Volyn (12%) and Kherson (11%) oblasts; due to digestive diseases — in Kirovohrad (11%) and Khmelnytsky (10%) oblasts; due to musculoskeletal and connective tissue disorders — in Chernihiv (15%), Luhansk (12%), Volyn (12%), and Kharkiv (10%) oblasts.

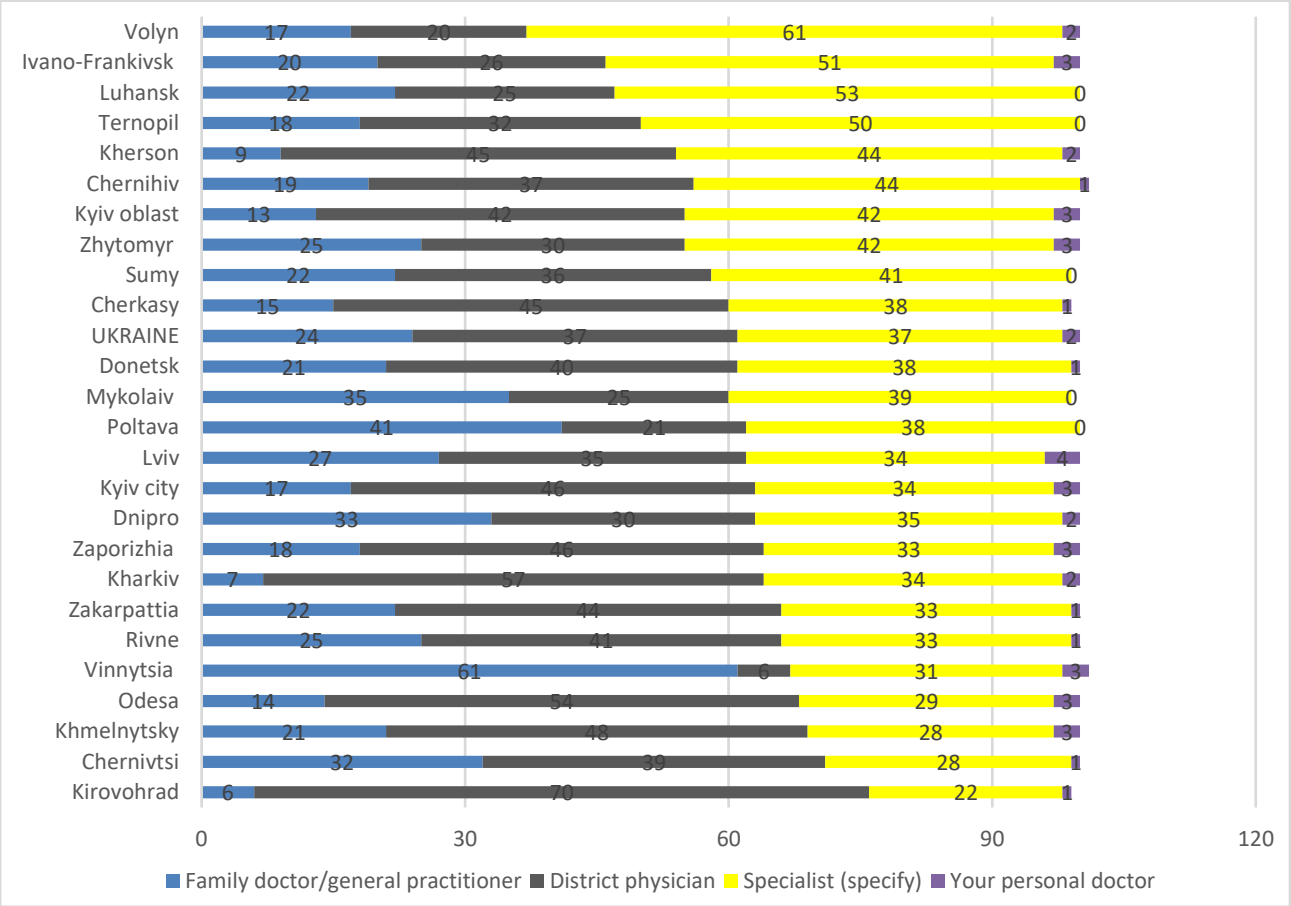
4.2. The choice of a health care provider

Most of those who used outpatient services in the past 12 months had visited a district physician (37%) or a family doctor (24%); 2% were consulted by a personal family doctor (by agreement), while a bit more than one third (37%) visited a sub-specialist (Fig. 4.3).

The practice of seeking care from a family doctor (and not a district physician) was more typical for Vinnytsia (61% of respondents visited a family doctor, 6% — district physicians), Poltava (41% and 21%), Mykolaiv (36% and 25%), and Dnipro (33% and 30%) oblasts.

31% of rural residents visited a family doctor, 35% — a physician/GP. In the cities, the corresponding numbers were slightly lower (20% of respondents consulted a family doctor, 38% — a physician).

Fig. 4.3. Type of an individual outpatient care provider: breakdown by oblast



Residents of Volyn (61%), Luhansk (53%), Ivano-Frankivsk (51%), and Ternopil (50%) oblasts have visited sub-specialists more often.

One third (38%) of those using specialist outpatient care were referred by their district physician or family doctor, the remaining 62% were self-referred. In Kirovohrad (81%), Ivano-Frankivsk (80%), Kyiv (77%), and Poltava (75%) oblasts, as well as in the city of Kyiv (79%), there was the highest percentage of self-referrals to a sub-specialist; the lowest was observed in Donetsk (31%), Sumy (35%), Mykolaiv (42%), and Volyn (44%) oblasts.

The number of those who had visited a specialist was somewhat higher among respondents aged 60 and older (48%) than among the younger respondents (31% among those aged 18-29, 30% — among those aged 30-44, 38% — among those aged 45-59). There was no statistically significant difference by the area of residence and sex.

A city, district, or departmental polyclinic was the most common health care facility for seeking outpatient care. Some 63% of respondents reported having visited a doctor in a polyclinic (from 36% in Chernivtsi oblast to 81% in Zaporizhia oblast). Some 12% of respondents have visited a doctor at a hospital, 11% went to a feldsher-midwife station, 7% — to a primary health care center, 3% — to a private clinic, while 3% were visited by a physician at home. In the cities, most people visited polyclinics (70%) and hospitals (13%), while rural residents mostly went to local policlinics (47%) and feldsher-midwife stations (31%).

Residents of Luhansk (40%) and Odesa (25%) oblasts visited hospitals more often, while residents of Zakarpattia (41%) and Chernivtsi (32%) oblasts sought medical care at feldsher-midwife stations (32%), and residents of Vinnytsia (24%) oblast — from primary health care centers.

The majority (84%) of those who have sought a sub-specialist care in the past 12 months visited the doctor and the institution to which they were assigned, 3% chose another doctor at the same institution, while 13% visited a specialist at the institution to which they were not assigned.

Residents of Ternopil (22%), Chernivtsi (22%), Ivano-Frankivsk (20%), Dnipro (20%), and Odesa (20%) oblasts have visited doctors from other medical institutions more frequently.

Table 4.4. The choice of institution and doctor: referral

Questionnaire questions B2.4, 2.7		Was it an institution or a doctor to which you are assigned? (% of those who sought care in the past 12 months)			
		Assigned to this institution and doctor	Assigned to the institution, but chose another doctor	Not assigned to this institution	Total
Was it a GP (GP, family doctor) or a sub-specialist in a particular field of medicine?	Family doctor, general practitioner	92,3%	3,2%	4,6%	100,0%
	District physician	91,4%	1,6%	7,0%	100,0%
	Specialist	73,9%	4,7%	21,3%	100,0%
	Personal family doctor (on agreement)	20,5%	12,1%	67,4%	100,0%
	TOTAL	83,7%	3,3%	12,9%	100,0%

According to respondents, the main reasons for their visits to health care facilities or physicians to which they were not assigned were professional competence of the doctor (33%), personal acquaintance or recommendation of a friend (27%), and doctor's friendliness (21%). In addition, their choice was influenced by such factors as availability of the necessary equipment (16%), convenient location (9%), preference of a private institution considered a better choice than the nearest public or communal unit (9%), ability to treat a wide range of diseases (7%), affordability (7%), ability to get care free of charge (6%), and absence of waiting lines (4%).

Despite some variations, the reasons for choosing another institution or a specialist they were not assigned to by their place of residence, were similar for all oblasts and socio-demographic categories. Professional competence, recommendation (or personal acquaintance), and goodwill of doctors

were the main factors that influence the choice of an institution or doctor (less important factors include location, prices, etc.).

4.3. Out-of-pocket payments for outpatient services

According to the survey, 20% of those who have used outpatient services over the past 12 months, reported paying for services through a charity fund account (among them 53% — on request), 12% — via cash-desk according to the official prices of the institution, and 10% paid privately directly to the physician or other medical personnel (25% on request and 75% voluntarily).

The proportion of those who had to pay to a charity fund account was slightly higher in the cities (21%) than in the villages (16%). Middle-aged respondents (30-44 years old, 13%) as well as those with relatively high income (16% of those who reported income of more than 2000 UAH) more often resorted to informal payments directly to the doctor.

The highest percentage of those who had to pay from their pocket to a charity fund when visiting a doctor was in Odesa (56%, including a quarter of cases where these payments occurred on request) and Kharkiv (47% paid, including 86% on request) oblasts.

The highest percentage of those who officially paid for medical services was observed in Volyn (41%) and Odesa (38%) oblasts.

Informal payments were the most common in Khmelnytsky (38% paid, including 50% of those who paid on request) and Rivne (21% and 2%) oblasts, as well as in the city of Kyiv (22% and 42% respectively).

Overall, the majority (two-thirds, or 2,294 respondents) of outpatient care consumers did not pay for the most recent care provided to them, 24% made one type of payment, 7% indicated they had paid twice, and 1% had paid three types of out-of-pocket payments.

The average amount of payment to a charity fund account (among those who consumed health care services and paid) is 20 UAH median and 77 UAH — mean (significant difference between mean and median as well as statistical deviation are the evidence of high variation of the amounts paid), official fees for outpatient services — 100 UAH (median; 625 UAH — mean, 10% of payers have spent over 1000 UAH), informal payments to a doctor — 100 UAH (630 UAH — average).

In total (both informally, through the cash desk of the institution, and as a charity fee) the mean amount of out-of-pocket expenditures for outpatient services was 472 UAH (2644 UAH — standard deviation), or 60 UAH — median payment.

Additionally, at the end of the questionnaire there were three questions about the expenditures for outpatient services within the past 30 days. A total of 4.3% of respondents indicated having had such expenses. The median average payment was 200 UAH (mean amount 540 UAH, and the standard deviation — 1076).

4.4. Financial burden

Among respondents who had expenditures on outpatient services and/or medicines, 64% reported having difficulty in finding money, and 36% said it hadn’t been difficult at all or rather easy. Elderly people more often had difficulties in finding money to pay for health services (77% of those over 60

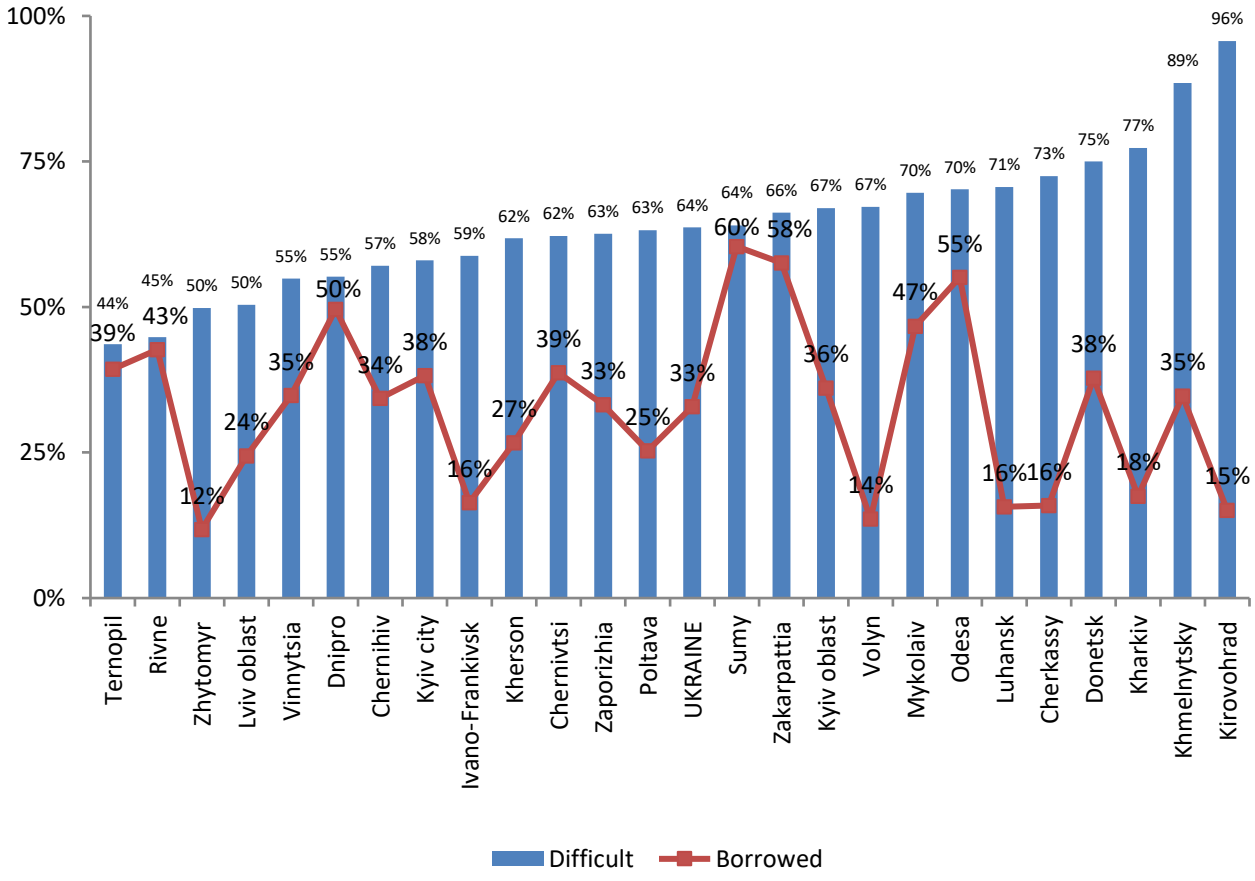
experienced difficulties or very big difficulties in covering expenditures on medical services and medicines) and low-income households (75% of respondents from the families with income below 1500 UAH per adult reported that it was difficult or very difficult).

The highest percentage of those who had found it difficult to find money was observed in Kirovohrad (96%), Khmelnytsky (89%), Kharkiv (77%), and Donetsk (75%) oblasts; the lowest number of those having such difficulties — in Ternopil (44%) and Rivne (45%) oblasts (Fig. 4.4).

One third (33%) of those who had difficulties with paying for outpatient services or medicines had to borrow money from relatives, friends, or at a bank, use funds from a credit card, sell jewelry or property to cover the treatment costs. Women borrowed the money slightly more often than men (35% vs. 30%), but according to other characteristics (age, place of residence, income level) the percentage of those who had to borrow was virtually identical: in all these socio-demographic categories about one-third of those who found it difficult or very difficult to cover the expenditures on medicines have borrowed money for their treatment.

The highest proportion of those who had borrowed money when having trouble covering medicines or treatment costs was observed in Sumy (60%), Zakarpattia (58%), Odesa (55%) and Dnipro (50%) oblasts, the lowest — in Zhytomyr (12%), Volyn (14%), and Kirovohrad (15%) oblasts.

Fig. 4.4. Share of outpatient service consumers who found it difficult / very difficult to cover the expenditures on medicines and treatment costs: breakdown by oblast



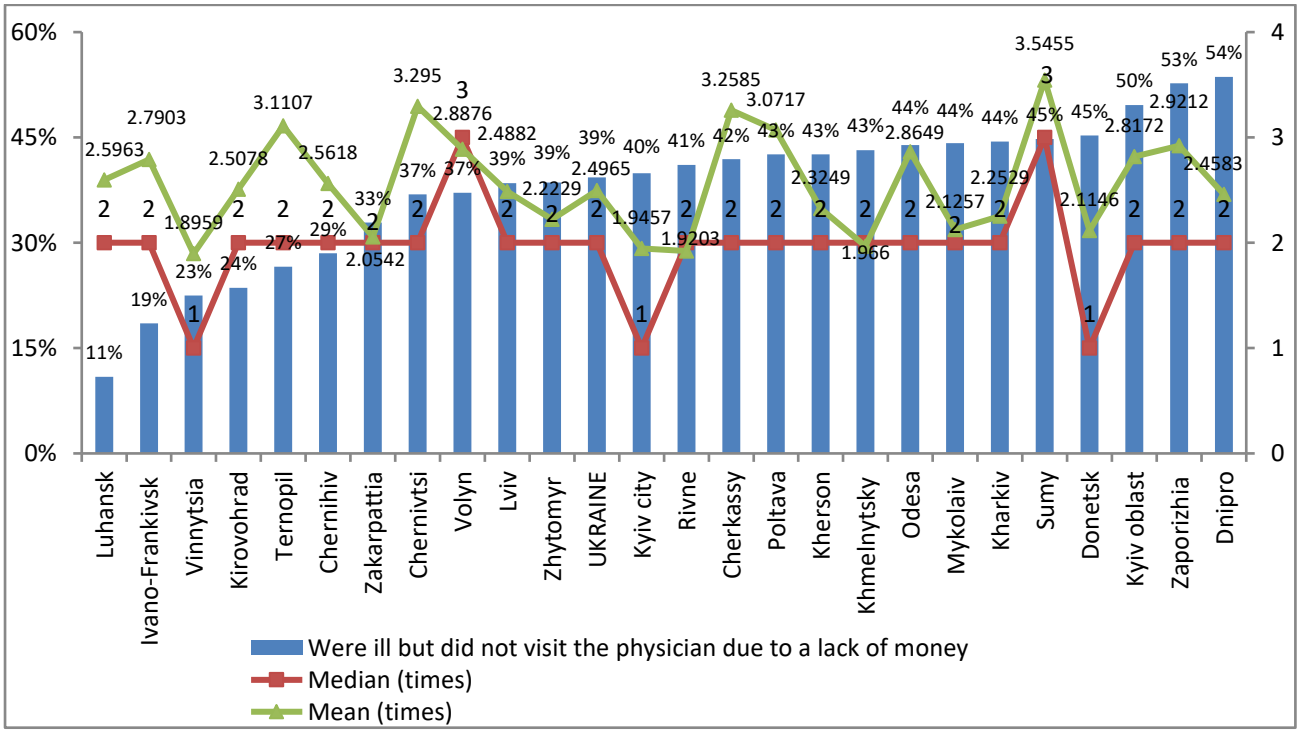
The average amount borrowed to cover medicines or treatment costs approached the median level of 1000 UAH (mean — 1937 UAH). The mean amount almost did not depend on sex, age, place of residence, or family income. By territorial area, the largest amount of the needed loan was reported by residents of Kyiv city (7800 UAH — mean, 3000 UAH — median), Ternopil, Kirovohrad, Chernivtsi, and Odesa oblasts, the lowest — in Khmelnytsky, Vinnytsia, Zhytomyr, Zakarpattia, Rivne, and Kharkiv oblasts.

Some 39% of respondents aged 18 and older had an illness in the past 12 months, but did not sought outpatient services because of **lack of money**. Women, elderly people, and low-income people were the most often to refrain from visiting a physician due to financial troubles. According to the survey, 46% of women and 32% of men, 28% of people aged 18-29, over 50% of people 60 and older, nearly half of those whose income is less than 1500 UAH per adult, and one third of higher-income people didn't use outpatient services due to lack of money.

Limited access to health care due to lack of money was noted in Dnipro (54%), Zaporizhia (53%), and Kyiv (50%) oblasts, as reported by more than half of respondents there; financial barriers to receiving outpatient services were indicated by only 11% of respondents living in Luhansk, 19% in Ivano-Frankivsk, and 23% in Vinnytsia oblasts (Fig.4.5).

It is alarming that people did not seek medical care when being ill, even when it was really needed (half of respondents indicated having two such cases in a year, the other half — more than two). Among those who refrained from visiting a physician due to lack of money slightly more often were women (who didn't visit a doctor 2.7 times in the past 12 months), people over 60 (3 times on average), low-income people (up to 1000 UAH per one adult — 2,8 on the average, from 1001 to 1500 UAH per adult — 2.7 on the average).

Fig. 4.5. Refusing outpatient services in case of illness due to a lack of money: share, mean, and median by oblast



The highest number of cases when respondents did not visit a doctor due to lack of money was observed in Sumy (3.5 — mean, 3 times — median), Chernivtsi and Cherkasy (3.3 and 2, respectively) oblasts, the lowest — in the city of Kyiv, as well as in Vinnytsia (1.9, 1) and Rivne (1.9, 2) oblasts.

4.5. Lab tests and diagnostic examinations

According to the survey, most respondents who have reported not using outpatient care over the past year, did not have any diagnostic tests or lab tests as well (81%). Slightly more women (20% of those who did not see a doctor) than men (17%), young people (21% of those aged 18-44) than elder people (19% of those aged 45-59, 14% of those aged 60 and older) have undergone self-initiated lab or diagnostic tests. Higher-income people (22% with income of 1501-2000 UAH per one adult, 19% with income of more than 2001 UAH per one adult) self-referred for a diagnostic test more often than those with lower income (17% with the income of 1500 UAH). In this aspect, there was no difference between the cities and villages (Table. 4.2).

Table 4.2. Lab tests and diagnostic examinations over the past 12 months

Questionnaire questions B2.2, 2.11		Yes, have had diagnostics only	Yes, have had lab tests only	Yes, have had both diagnostics and lab tests	No, haven't had neither diagnostic tests, nor lab tests
Have you had any type of diagnostics or lab tests over the past 12 months? Do not include those, which you might have as an inpatient, if at all (among those who gave a negative answer to the question about seeking outpatient care)	N=6495	254	295	650	5214
	%	4,0%	4,6%	10,1%	81,3%
		Yes, by doctor's referral	Yes, independent decision	Partly by referral, partly self-initiated	Did not have any diagnostic workup or lab tests
Have your lab tests **been related to your most recent outpatient visit?**	N=3682	2465	66	39	1111
	%	67%	1,8%	1,1%	30,2%
Have your diagnostics **been related to your most recent outpatient visit?**	N=3682	2015	71	53	1544
	%	54,7%	1,9%	1,4%	41,9%

Among those who reported using outpatient services over the past year, 30% didn't undergone lab tests and 42% didn't undergone diagnostic tests. Those having the relevant experience did it mostly

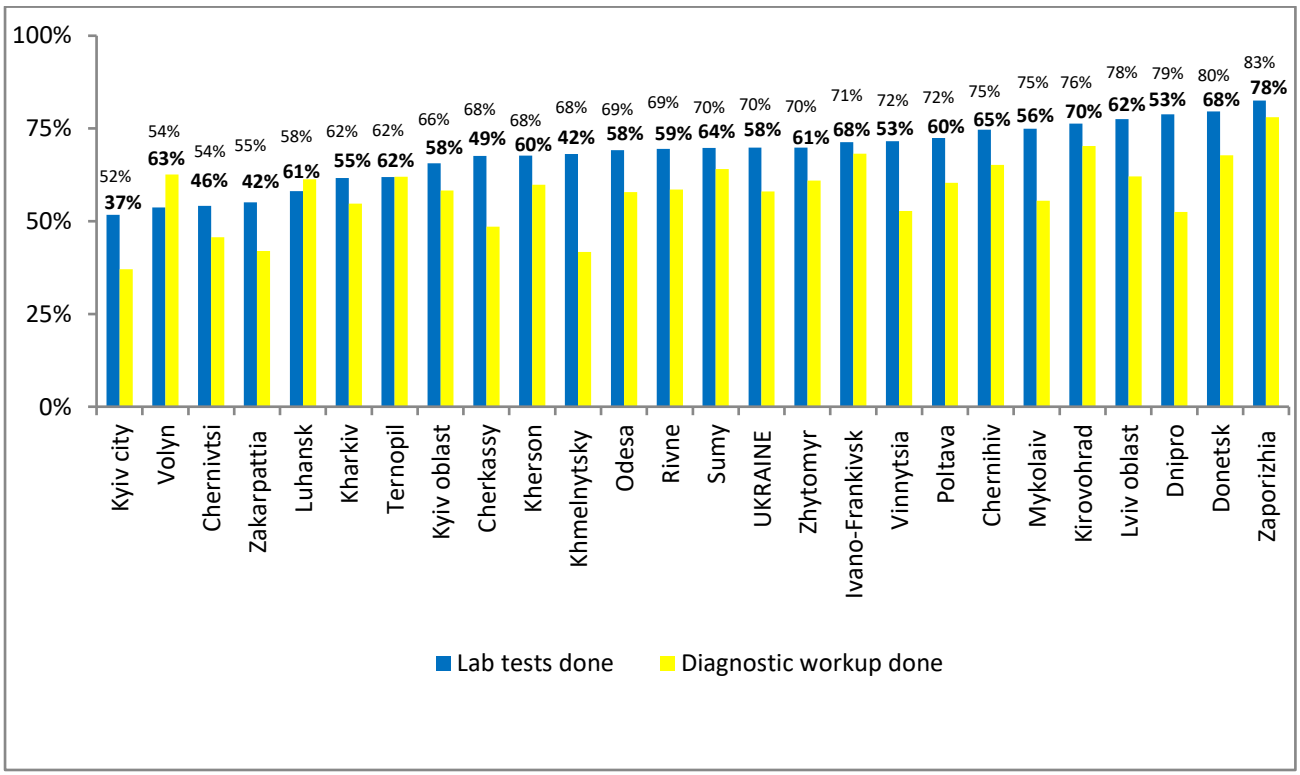
at the physician's referral and a small part — about 3% (of those who answered the question) had undergone both diagnostics and tests.

Almost equal number of women and men, both young and elderly, low-income and above the middle-income people have undergone lab tests in relation to their recent outpatient visit. Among those who visited doctor, 70% of women and 69% of men, 68% in aged 18-29 and 71% of people over 60, 67% of people with a family income of 1000 UAH per adult and 69% of people with a family income of more than 2000 UAH per adult were tested. The percentage of patients who have undergone lab tests is slightly higher in the cities (71%) than in the rural areas (67%), i.e. testing opportunities in rural areas are somewhat more limited than in the cities.

The experience of having undergone diagnostic tests during a recent outpatient visit didn't depend on a person's sex (57% of men and 59% of women who have seen a doctor in the past 12 months undergone diagnostic tests); however, it was more typical for older patients (52% among those aged 18-29 and over 57% of people from the older groups have undergone diagnostic tests). There's also little difference between urban and rural areas: 59% of those who visited the physician in the cities and 56% in the villages undergone diagnostic tests.

The city of Kyiv has the smallest percentage of outpatients who have undergone diagnostics or lab tests (37% of those who have seen a doctor in the past 12 months had undergone diagnostic tests and 52% — lab tests). Zaporizhia oblast has the highest percentage for outpatients who have undergone diagnostics or lab tests (78% and 83% respectively) (Fig. 4.6).

Fig. 4.6. Share of outpatients who had diagnostic examinations or lab tests (% of those who have used outpatient services in the past 12 months): breakdown by oblast



In most cases respondents indicated having had lab tests and diagnostic tests at the state or communal policlinics or hospitals irrespective of being referred by a doctor or self-referred.

Some 80% of outpatients referred by their doctor underwent their lab tests in that same policlinic, 11% turned to another state or communal institution, another 11% turned to a private laboratory or clinic. Some 86% of respondents who self-referred for a lab test were tested according to their place of residence, 12% visited private labs or clinics.

Some 72% of outpatients referred by a physician had diagnostics in that same policlinic, 14% turned to another state or communal institution, another 14% visited a private laboratory or clinic. Among those who self-referred for diagnostics, 84% went to a public clinic / hospital, and 13% — to a private one.

It was observed that private laboratories or clinics had been visited more often by young people than by those over 60, by urban than by rural residents, and by families with income of more than 2000 UAH per adult than by those less well off.

Residents of the city of Kyiv, as well as those living in Dnipro, Zakarpattia, Lviv, Khmelnytsky, and Cherkasy oblasts turned to private laboratories or clinics for diagnostics more frequently, while respondents from Kirovohrad, Zaporizhia, Ternopil, Chernihiv, and Kherson oblasts — quite rarely.

4.6. Evaluating attributes of the outpatient services

Outpatients were asked to rate specific attributes of the service they used. The following attributes were rated the highest: courtesy of doctors in communication with patients and their families (54% rated this aspect as good / very good, 40% as normal, only 6% as bad or very bad), as well as the clarity of doctor's explanations (50%, 41%, and 10% respectively). Such factor as opportunity to get the needed diagnostic examination, lab tests and treatment procedures free of charge got the lowest score (19% rated it positively, 28% as normal, 53% as bad or very bad) (Fig. 4.7).

The overall provision of outpatient care was positively evaluated by 37% (almost one in three participants, 53% as normal, 10% as negative).

Residents of Ternopil (68% of positive feedback), Luhansk (61%), Chernivtsi (59%), and Kyiv (56%) oblasts gave positive feedback on outpatient services, with the worst rates given by the residents of Poltava (17%), Volyn (19%), and Mykolaiv (21%) oblasts, as well as the city of Kyiv (22%) (Fig. 4.8).

According to the outpatients, the most important aspects of outpatient services were efficiency of treatment (61% of respondents consider it the most important aspect) and opportunity to undergo diagnostic tests, lab tests, and treatment free of charge (50% named them as being important). However, though 44% of respondents have rated the treatment efficiency as positive, only 19% did the same regarding the possibility of getting health care free of charge (Table 4.3).

Fig. 4.7. Evaluation of attributes of outpatient services

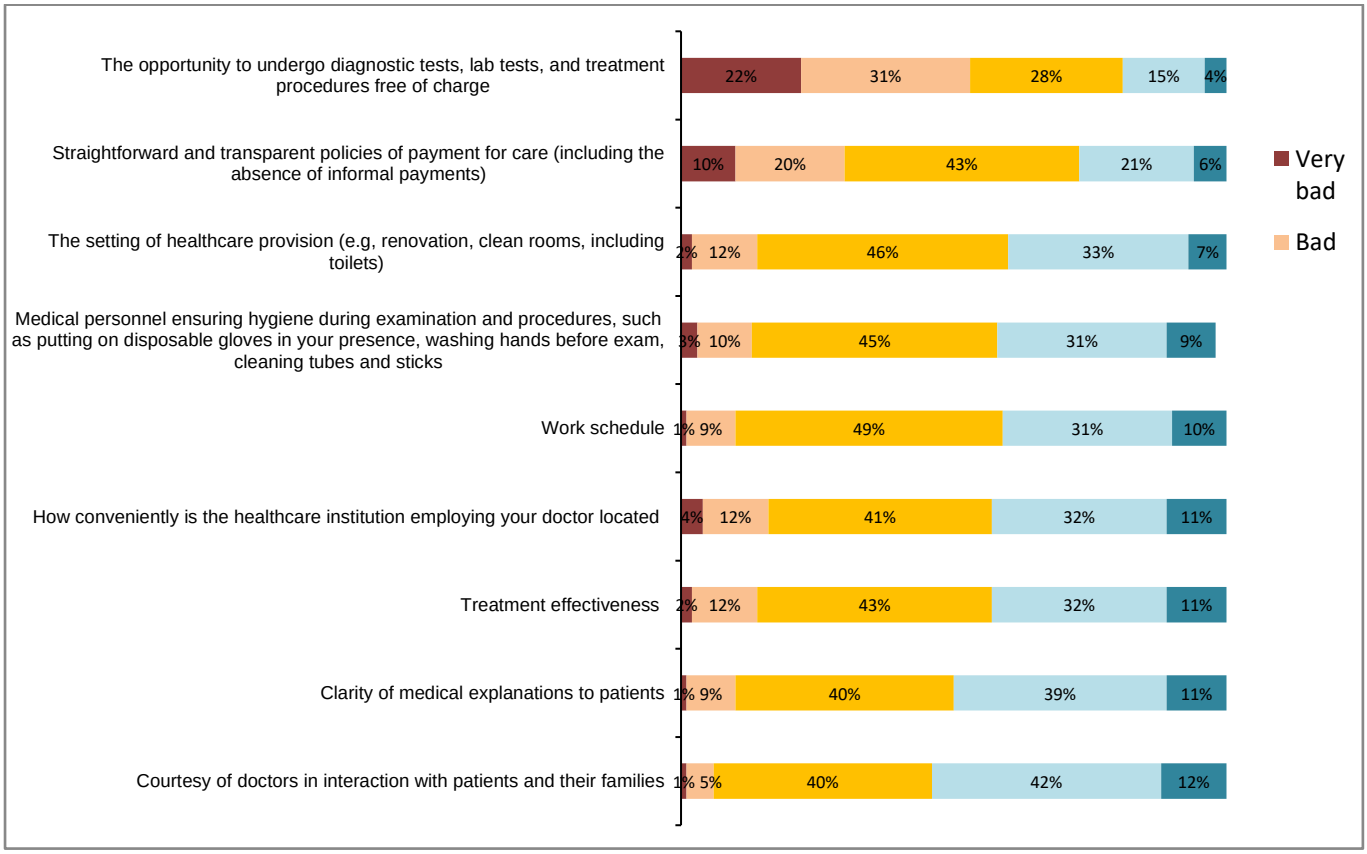


Fig. 4.8. Evaluation of outpatient services in general: breakdown by oblast (% of 'good' and 'very good' answers)

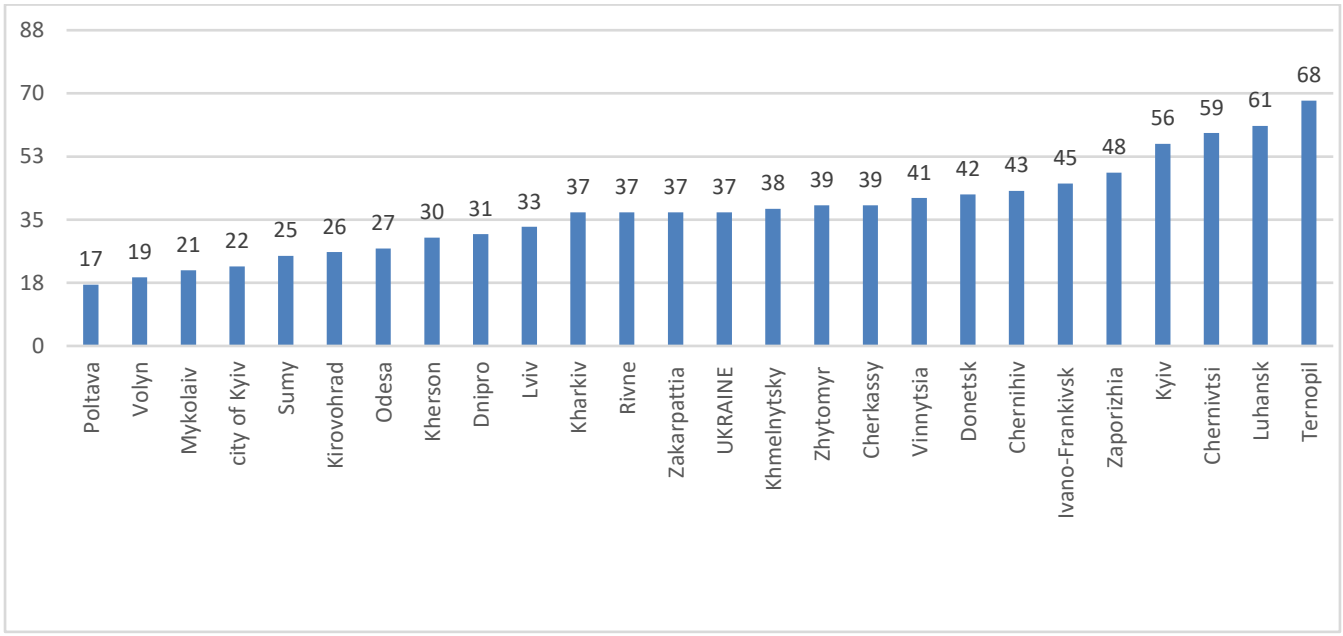


Table 4.3. Comparison of ranking and rating: comparison of the three most important and the least important aspects

Questionnaire question B2.24, 2.25	% consider the most important	Aspect rating				
		Very bad	Bad	Normal	Good	Very good
Treatment efficiency	61%	2%	12%	43%	36%	8%
The opportunity to undergo diagnostic tests, lab tests, and treatment free of charge	50%	22%	31%	28%	15%	4%
How conveniently is located the health care institution employing your doctor	17%	4%	12%	42%	32%	11%
Straightforward and transparent policies of payment for care (including absence of informal payments)	16%	10%	20%	42%	21%	6%
Courtesy of doctors in interaction with patients and their families	15%	1%	6%	40%	42%	12%
Clarity of medical explanations to patients	14%	1%	9%	41%	39%	11%
The setting of health care provision (e.g, renovation, clean rooms, clean toilets)	12%	2%	12%	46%	33%	7%
Are medical personnel ensuring hygiene during examination and procedures, such as putting on disposable gloves in your presence, washing hands before examination, cleaning tubes and sticks?	10%	3%	10%	46%	31%	9%
Working hours, timetable	7%	1%	7%	51%	31%	10%

SECTION 5. INPATIENT CARE

Inpatient care is the most resource-consuming type of medical service, which is explained not only by high costs of medical personnel, but also by expensive equipment and expenditures associated with maintenance of the hospital buildings. Most health care systems are trying to reduce the flow of patients in inpatient facilities by increasing the efficiency of primary care, which is a more cost-efficient service.

5.1. Seeking inpatient care

According to the survey, 15% of people over 18 years old reported hospital admission within the past 12 months (not including day hospital care, staying in hospital with a child, but including hospital admission related to pregnancy and childbirth).

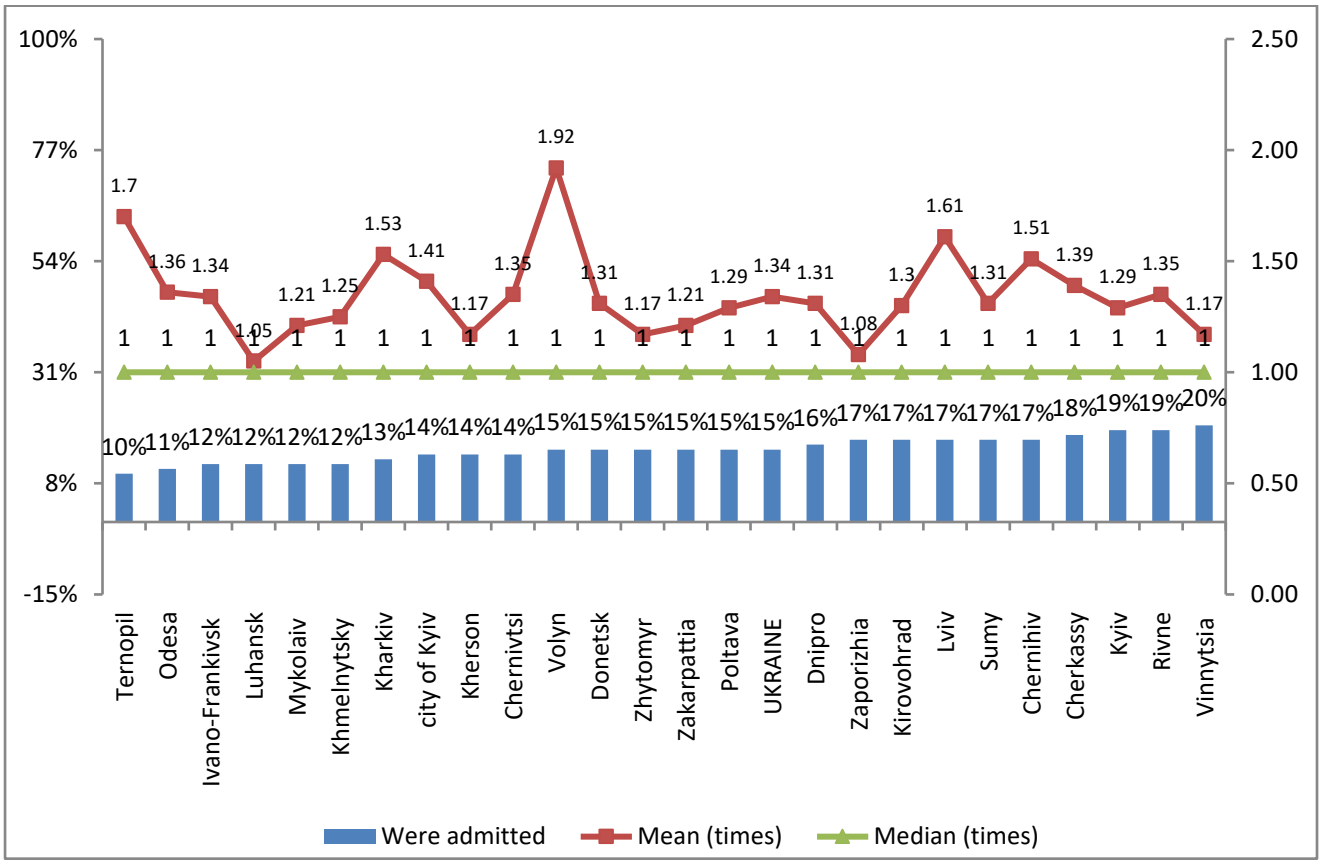
The percentage of those admitted to hospital within the past year was higher among women (17%) than men (13%), among people aged 60 and older (19%) than young people (12%), among rural residents (16%) than among urban residents (14%). On the average, lower-income respondents were hospitalized slightly more often (17% in the group with income of up to 1500 UAH per adult, 15% in the group with income of 1500 UAH per adult). This could be because there were older people (60 and older) among lower-income respondents. Moreover, in the group with income of 1001-1500 UAH per one adult household member the proportion of hospital admissions was slightly higher (17%) than in the group with incomes below 1000 UAH (15%). Thus, it can be assumed that low-income groups need hospital treatment more often than those with higher income; however, if the income is extremely low, people may refuse hospitalization due to the lack of money.

The percentage of reported hospital admissions was the lowest in Ternopil (10%) and Odesa (11%) oblasts, the highest — in Vinnytsia (20%), Kyiv (19%), and Rivne (19%) oblasts (Fig. 5.1).

In most cases (75%), inpatients reported one hospital admission in the past year, the remaining 25% had two or more cases.

The average duration of hospital stay was 14 days (ranging from up to 10 days, as indicated by 54% of respondents to 11 or more days — 46%). There was no statistically significant difference in the mean length of hospital stay related to age, gender, type of residence, income, and oblast.

Fig. 5.1. The share of hospital admissions within the past 12 months: breakdown by oblast

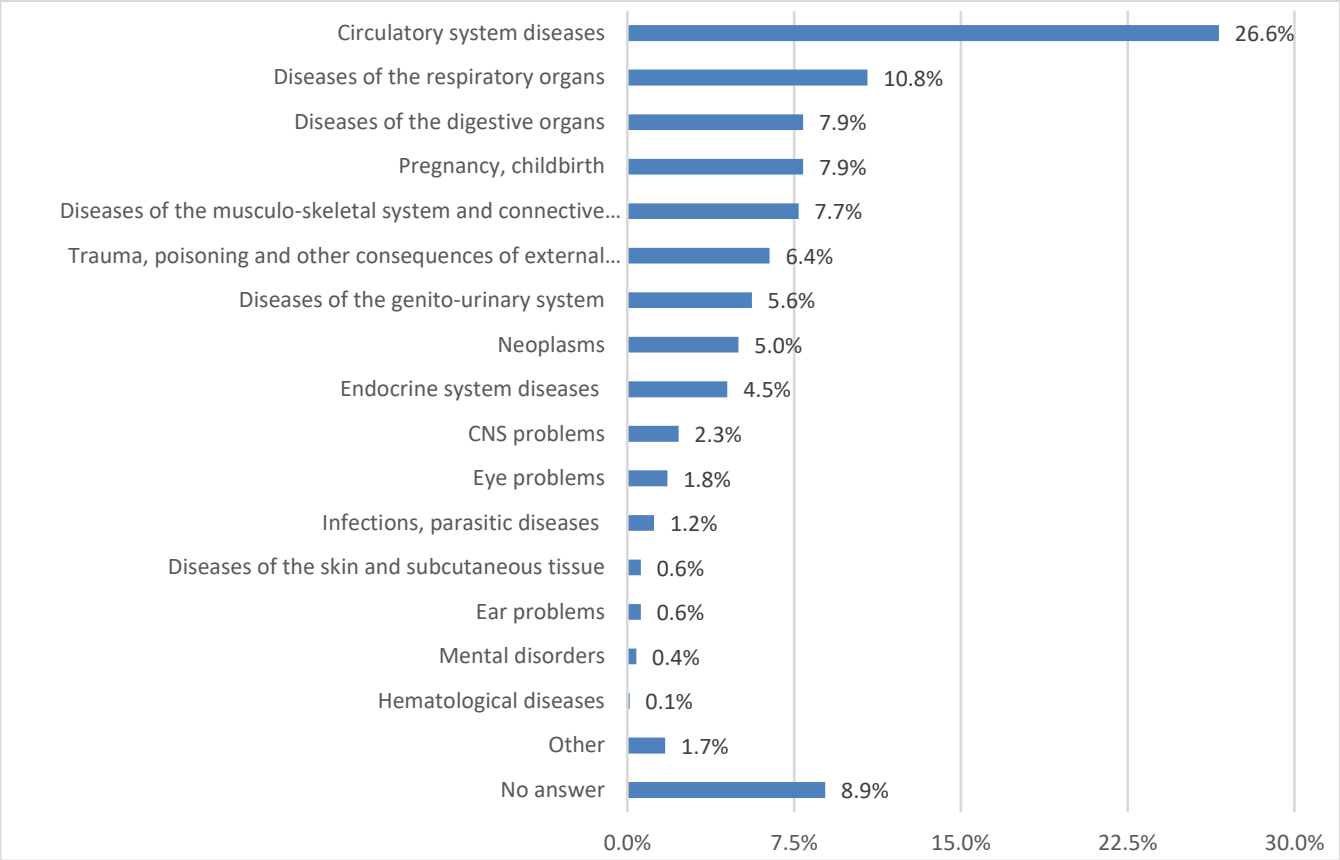


Most of the time people were admitted to hospital by a medical referral (49% of admissions). About a quarter (26%) were brought to hospital by ambulance, 18% were admitted by their own decision, and for 7%, it was readmission or scheduled admission. There was no significant difference in the causes of hospital admission related to gender, age, type of locality, and income.

27% of respondents reporting hospital admission within the past 12 months were admitted due to circulatory system diseases (Fig. 5.2). As for specific diseases, 12% of those were admitted were diagnosed with hypertension, 4% — with stroke, 2% — with ischemic heart disease, 9% — with other circulatory system diseases (heart attack or preinfarction, thrombosis, vascular dystonia / neurocirculatory disease, aneurysm, cardio sclerosis etc).

Another most common cause of hospital admission were respiratory diseases. Some 11% were admitted to hospital due to respiratory diseases, among them 5% were diagnosed with pneumonia, 2% — with bronchitis, 1% — with ARVI, flu, or post flu complications, 4% — with other respiratory problems (asthma, tonsillitis, sinusitis, sarcoidosis, tonsillitis, and others).

Fig. 5.2. Diagnosis upon admission to an inpatient facility



Cases of hospital admission due to digestive system diseases (8% of inpatients within the past 12 months), pregnancy or childbirth (8%), diseases of the musculoskeletal system and connective tissue (8%) were common as well. Some 6% of respondents were admitted due to injuries and poisoning, 6% — due to genitourinary system problems, 5% — due to neoplasms, 5% — due to endocrine system problems, 2% — due to nervous system diseases, 2% — due to eye problems, 1% — due to infections, 1% — due to skin problems, 1% — due to ear problems.

It was established that cardiovascular diseases were the main cause of hospital admission among older people; among people aged 45-59, 28% inpatients had a diagnosis related to the circulatory system, 41% — among 60 and older age group. Among inpatients aged 18 to 29, 39% were admitted due to pregnancy or childbirth, 14% — due to respiratory diseases, 10% — due to digestive system problems.

By gender, the percentage of hospital admissions related to injuries (11% of male patients and 5% of female patients) or digestive system problems (10% of men and 7% of women who were admitted within the past 12 months) was slightly higher among men than among women. However, more women were hospitalized due to tumors (6% of women vs. 3% of men).

There were no significant differences in the breakdown of diagnoses by type of locality or income. Low representation in the groups (less than 100 respondents for each oblast) makes the data on breakdown of diagnoses by oblast not reliable.

5.2. Choosing an inpatient care provider

Some 74% of respondents reported having been admitted to city or central district hospitals, 18% — to regional hospitals, 4% — to departmental hospitals, 3% — to national level institutions.

City residents were mainly treated in city hospitals (78%), 13% — in regional hospitals, the corresponding figures for the rural residents were 66% and 28% of those who had been admitted within the past 12 months.

A half of those admitted to hospital (56% of those who had been admitted within the past 12 months) did not choose the facility, but turned to their doctor for referral or used to be treated in this hospital. About 11% noted that they chose a medical facility because it had the necessary equipment, 9% — because the personnel were professionally competent, 9% — because the location was conveniently located, 8% — because they knew a doctor personally or because their friends recommended the doctor.

In 38% of cases the admission was urgent, in 26% — related to surgery, in 16% — to childbirth, in 5% — to pregnancy.

The majority of those who had been admitted to hospital in the past year (73%) said they had been waiting for examination by a doctor from a few minutes to half an hour, 8% were examined immediately, without waiting, 19% had been waiting more than half an hour. The average waiting time was 37 minutes, the median waiting time — up to 15 minutes in half of the cases. The waiting period was almost the same in all oblasts, and there were no variations in terms of patient's age, gender, income, or place of residence.

5.3. Out-of-pocket payments at inpatient facilities

According to the survey, 37% (N = 512) of those who were admitted to hospital within the past 12 months paid to the charity fund (including 56% on request), 27% (N = 368) paid at the cash desk according to the official prices of the health care institution, 25% (N = 312) paid informally to the physician or other medical personnel (including 30% on request).

Out-of-pocket payments for inpatient services were slightly more often made by young patients: 40% of inpatients aged 18-29 paid to the charity fund (60% of them — on request), 30% officially paid at the cash desk, and 28% paid informally to the doctor or medical personnel (29% — on request). Also, patients from rural areas paid slightly more often (43% — to the charity fund account, 31% — at the cash desk, 28% — informally) in comparison with city residents (35%, 25%, and 23%, respectively). There was no significant difference by the level of income.

The average charitable donation (among those who had such expenditures during their hospital stay) was 181 UAH (median — 60 UAH), official payment at cash desk — 1,951 UAH (median — 200 UAH), informal payments — 1860 UAH (median — 400 UAH).

Some 44% of inpatients noted that they hadn't paid anything for the service, 32% made one type of payment, 19% paid two times, 5% — three times. In total, one patient paid 1750 UAH on the average (standard deviation — 5203 UAH, median — 250 UAH). Among those who paid, 11% said the payment provided for improved conditions of inpatient stay.

The average size of payments was somewhat higher for high-income people; among people with monthly income of more than 2001 UAH per one adult the median amount of charitable donation was 100 UAH, official payment — 300 UAH, informal payment — 600 UAH), young people aged 18-29 (median size of the charitable donation was 100 UAH, official payment — 300 UAH, informal payments to the doctor — 1000 UAH) and for the city residents (median size of the charitable donation on admission was 100 UAH, official payment — 250 UAH, informal payment to the doctor — 500 UAH).

Moreover, at the end of the questionnaire there was a question about expenditures on inpatient care within the past 30 days. Overall, 1.6% of respondents gave positive answer to this question, with the median average payment amount equal to 1000 UAH (average value — 3023 UAH, standard deviation — 5404 UAH).

Some 7% of inpatients had health insurance, 5% were members of a sickness fund.

5.4. Financial burden

Some 56% of inpatients (who were hospitalized within one year preceding the survey) had spent money for doctor's services or surgery, 97% — for medicines, 79% — for lab tests or diagnostic. Most inpatients found it difficult to find the money for hospital treatment: for 48% of all those admitted (or 78% of those who had such expenses) it was difficult or impossible to find the money to pay for doctor's services or surgery, for 82% of patients (or 84% of those who had such expenses) it was difficult or impossible to find the money for medicines, for 46% of patients (or 59% of those who had such expenses) it was difficult or impossible to find the money for diagnostics or tests.

Difficulties in finding money to pay for medicines and medical services at hospital were experienced by all populations, mostly by low-income people and elderly people. Thus, among respondents aged 60 and older difficulties with finding the money to pay for a doctor's services or for a surgery had 85% of those admitted to hospital and needing to pay, difficulties in finding the money for medicines during their hospital stay experienced 91% of those who had to buy medicines when in hospital, difficulties in finding the money for diagnostic and laboratory tests experienced 67% of those who had to pay for such services when in hospital. Among respondents with the total monthly income of less than 1500 UAH per adult, 83% of those who had to pay for a doctor's services or for a surgery, 90% of those who had to pay for the medicines, 66% of those who had such expenses on diagnostic and lab tests found it difficult or impossible to find the money (Tables 5.1 and 5.2).

Table 5.1. How difficult was it for you and your family to find money for inpatient treatment (% of inpatients)?

Questionnaire question B3.26	Impossible	Difficult	Not difficult	Did not have expenditures
% of those admitted to hospital within the past 12 months				
for doctor's services, surgery	3%	45%	14%	38%
for medicines	6%	76%	15%	3%
for diagnostics and lab tests	2%	44%	32%	21%
% of those who had been admitted to the hospital within the past 12 months and had the following expenditures				
for doctor's services, surgery	5%	73%	22%	--
for medicines	6%	78%	16%	--
for diagnostics and lab tests	3%	56%	41%	--

Table 5.2. Difficulties in finding money to cover expenditures associated with inpatient treatment (among those who have been admitted within the past 12 months and had such expenses): breakdown by sex, age, place of residence, and family income

	For doctor's services, surgery		For medicines		For diagnostics and lab tests	
Questionnaire question B3.26	% having expenditure (among those admitted)	% of those for whom it was difficult / impossible to find the money (including	% who had expenditure (among those admitted)	% Who found it were difficult / impossible to find the money (including those with expenditures)	% had expenditure (among those admitted)	% who found it difficult/impossible to find the money (among those who had ex-
ALTOGETHER	***62%***	***78%***	***97%***	***84%***	***79%***	***59%***
Sex						
Male	63%	75%	99%	80%	79%	56%
Female	61%	79%	97%	87%	79%	61%
Age						
18-29	71%	66%	96%	70%	77%	51%
30-44	61%	76%	97%	82%	80%	54%
45-59	63%	78%	98%	86%	81%	58%
60 plus	58%	85%	98%	91%	77%	67%
Type of residence						
City	61%	78%	98%	84%	78%	60%
Village	64%	77%	96%	85%	81%	58%
Aggregate family income per one adult						
Up to 1000 UAH	60%	84%	96%	89%	80%	61%
1001-1500 UAH	58%	83%	98%	91%	80%	69%
1501-2000 UAH	62%	69%	99%	83%	79%	52%
More than 2001	63%	76%	96%	77%	76%	53%

Some 43% of inpatients took or borrowed the money from relatives, friends, the bank, or had to sell valuables to cover the costs of hospital admission. The percentage of those who had to borrow the money to cover the expenditures on inpatient treatment was the highest among the elderly (50%) and low-income people (51%).

The average amount of money that respondents had to borrow to cover the expenditures was 4865 UAH; 52% of those who borrowed the money needed up to 2000 UAH, 48% — more than 2000 UAH (median).

The average amount ranged from one thousand to tens of thousands, however due to the small number of cases, the regional difference was not statistically significant.

About one third (32%) forego inpatient services because of a lack of money (Table 5.3). Women, elderly people, and low-income people refused hospitalization due to a lack of money slightly more often (among them there were 35% of women, 40% of people over 60 and 40% of people with an aggregate family income of less than 1000 UAH per adult).

On the average, those who refused inpatient services due to a lack of money had two occasions in the past year when they needed hospital treatment but had no money to afford it.

Table 5.3. Refusing inpatient treatment due to a lack of money: breakdown by socio-demographic group

Questionnaire questions *B3.30*		Yes		No		Mean (Standard deviation)
		N	%	N	%	
Altogether		445	31.9%	950	68.1%	2.05 (2.08)
Respondent's sex	Male	142	26.9%	387	73.1%	1.70 (1.12)
	Female	303	35.0%	563	65.0%	2.21 (2.39)
Age group	18-29	37	17.4%	177	82.6%	1.82 (1.07)
	30-44	95	27.3%	252	72.7%	1.85 (1.30)
	45-59	125	34.9%	234	65.1%	2.04 (1.48)
	60 plus	188	39.6%	286	60.4%	2.20 (2.78)
Type of residence	Urban	277	30.1%	643	69.9%	1.96 (1.52)
	Rural	168	35.4%	307	64.9%	2.19 (2.78)
Household income per adult	Up to 1000 UAH	82	40.3%	122	59.7%	2.58 (3.79)
	1001-1500 UAH	143	37.3%	241	62.7%	2.11 (1.65)
	1501-2000 UAH	80	36.1%	142	63.9%	1.88 (1.26)
	More than 2001 UAH	63	22.4%	217	77.6%	1.64 (1.12)

5.5. Lab tests and diagnostic tests related to inpatient treatment

Some 77% of inpatients underwent lab tests and diagnostic examination, 15% only had their tests done, 3% only had their diagnostic tests done, 6% didn't undergo any lab tests or diagnostics while treated at an inpatient facility.

The percentage of those who had no examination while being treated in a hospital was slightly higher among women aged 18-29 (12%) because in many cases their admission to hospital was not related to disease but to childbirth.

According to the survey, the clear majority of evaluations were conducted at the same hospital where the patient was admitted (94% of lab tests and 90% of diagnostic tests). There was no significant difference by type of residence, gender, age, or income.

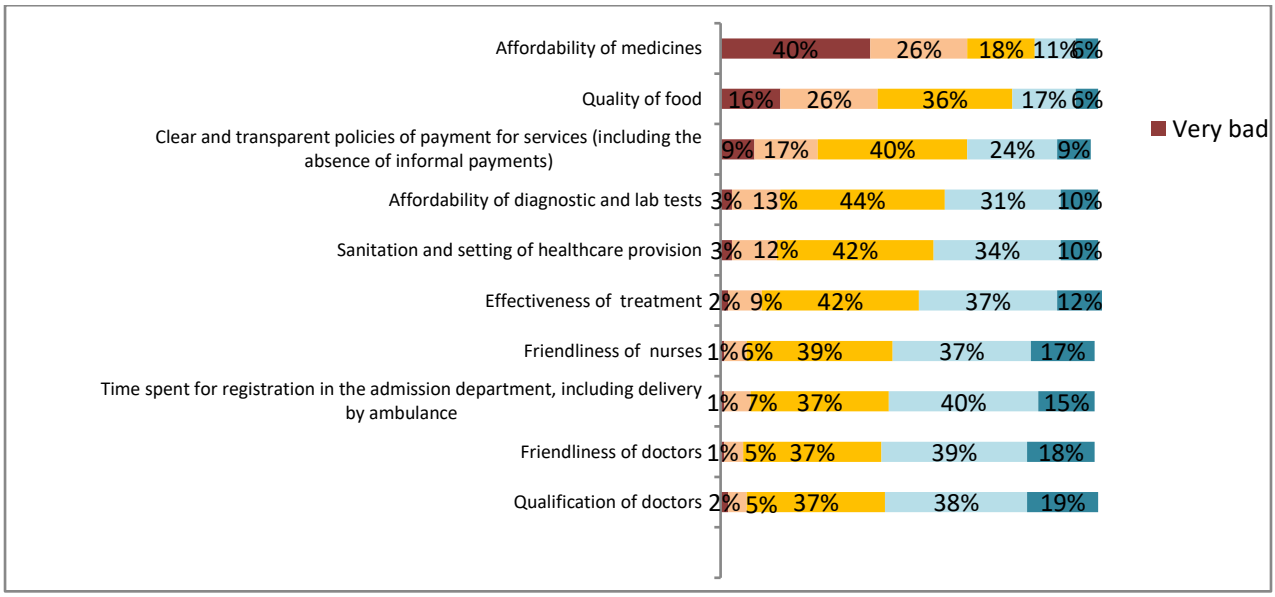
On the average, the inpatients spent 100 UAH (median) on lab tests; 40% had these expenditures, whereas 43% inpatients paid for diagnostic tests, and on the average, they spent 200 UAH (median).

5.6. Evaluating the attributes of inpatient services

Among the attributes suggested during the survey, respondents have rated the highest the following: qualification of doctors (57% — as good /very good, 37% as normal, 6% as poor/ very poor), friendliness of doctors (57% — as good / very good, 37% — normal, 6% bad / very bad), time spent at the hospital admission department (55% — as good / very good, 37% — normal, 8% bad / very bad), and friendliness of nurses (55% — as good / very good, 39% — normal, 7% bad / very bad) (Fig. 5.3).

Low rates were given to such aspects as affordability of medicines (only 17% of inpatients rated this aspect as good / very good, 18% as normal, 66% as bad / very bad). Moreover, many inpatients rated low quality of food in hospitals (42% as bad).

Fig. 5.3. Evaluation of attributes of inpatient services



On the whole, 42% of respondents rated the quality of inpatient care as good or very good, 50% — as normal, 9% — as bad or very bad.

According to respondents, the efficiency of treatment (for 47%, it was one of the most important aspects), affordability of medicines (40%), and the qualification of doctors (38%) were the most important aspects of inpatient care (Table 5.4). Among these aspects, respondents have mainly positively rated the efficiency of treatment and qualification of doctors. However, inpatients assessed affordability of medicines for inpatient treatment as poor.

Table 5.4. Evaluating the three most important attributes of inpatient services

Questionnaire question B3.28, 3.29	% consider the most important	Rating of the attribute					
		Very bad	Bad	Normal	Good	Very good	Altogether
Efficiency of treatment	47%	2%	9%	42%	37%	12%	100%
Affordability and availability of medicines	40%	40%	26%	18%	11%	6%	100%
Qualification of doctors	38%	1%	5%	37%	38%	19%	100%
Affordability and availability of diagnostic and lab tests	26%	3%	13%	44%	31%	10%	100%
Sanitation and setting of health care provision	14%	3%	12%	42%	34%	10%	100%
Quality of food	11%	16%	26%	36%	17%	6%	100%
Friendliness of doctors	8%	1%	5%	37%	39%	18%	100%
Time spent in the admission department, including delivery by ambulance	8%	1%	7%	37%	40%	15%	100%
Clear and transparent policies of payment for care (including the absence of informal payments)	6%	9%	17%	40%	24%	9%	100%
Friendliness of nurses	2%	1%	6%	39%	37%	17%	100%

SECTION 6. EMERGENCY CARE

"Health Index. Ukraine — 2016" includes a section on the patients' experience of calling an ambulance, reasons for calling an ambulance, and out-of-pocket payments for such care, since the issue of rational use of ambulance/emergency care is being actively discussed both in mass media and in the expert community in Ukraine.

Overall, the previously available data show that every year the ambulance crews respond to about 13 million[8] calls, and that in 70% of cases the ambulance arrives in less than 10 minutes from the time the call was made. The status of provision with special equipment and medical commodities needs to be improved, although in recent years the park of vehicles has been significantly modernized, and subventions cover the costs of emergency service provision. The viewpoint and experience of consumers regarding the services provided by emergency medical crews is important for understanding the key barriers existing in the system.

In particular, 22.8% of respondents had the experience of calling for an ambulance (for themselves or someone else) within 12 months preceding the survey (2314 respondents of the 10,154 people who responded to the question). Women (25.2% among female respondents) and older people (26.5% for the age group 60 years and older) reported having called for an ambulance slightly more often (Table 6.1). Emergency care was less available for the rural residents — only 18,8% of those living in the villages used it within the past 12 months compared to 24.6% of city residents. Families with children were more likely to seek emergency care (26.5%). Besides the very fact of calling for an ambulance these categories were also characterized by somewhat higher average number of calling for an ambulance throughout the year.

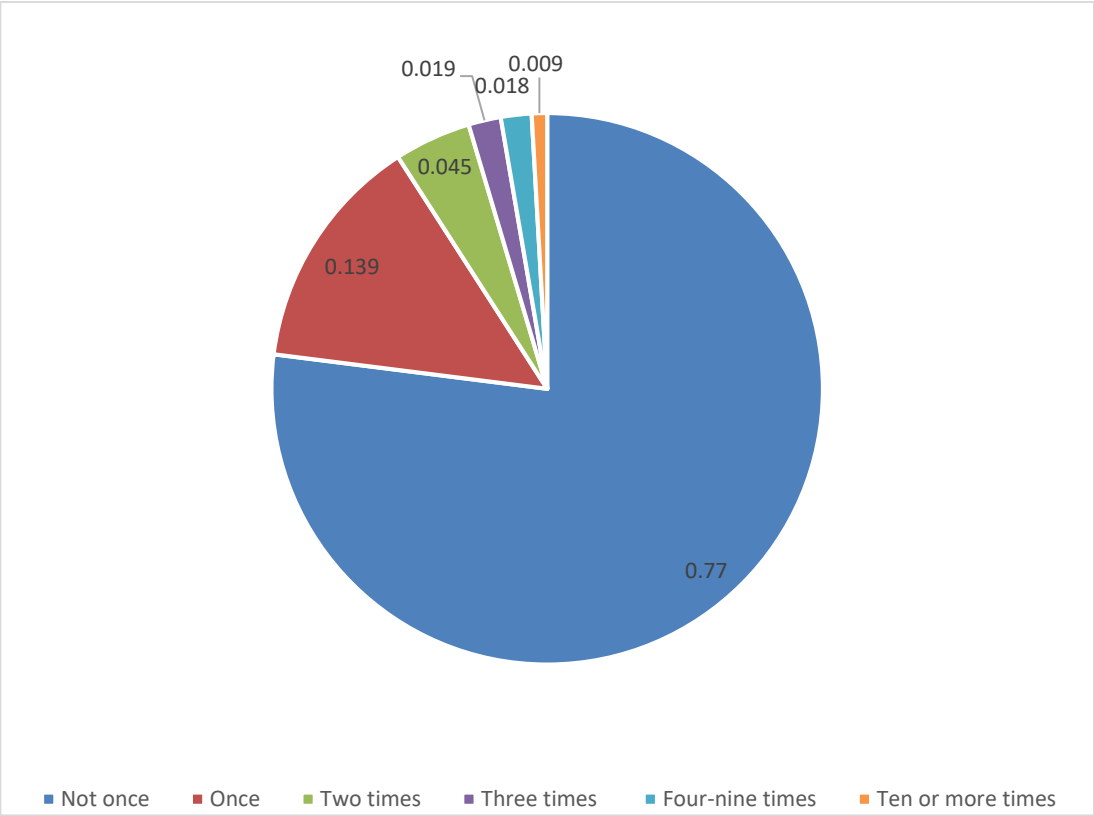
[8] National program on creating uniform system for emergency care provision for the period up to 2010 # 1290 – revised on 05.11.2007 http://www.kmu.gov.ua/control/uk/cardnpd?docid=96548251

Table 6.1. Experience of calling for an ambulance: breakdown by socio-demographic group

Questionnaire question B4.1		Have experience of calling for an ambulance within the past 12 months / N = 2 314; mean=2,05, SD =3,46, median=1				
		N	%	Mean	SD	Median
The sex of the respondents	Females	1404	25.2	2.19	4.08	1.00
	Males	910	19.8	1.84	2.15	1.00
Age groups	18-29	403	20.3	2.26	6.31	1.00
	30-44	637	22.5	1.78	1.97	1.00
	45-59	554	21.2	2.06	2.63	1.00
	60 and older	721	26.5	2.17	2.70	1.00
Type of residence	City	1720	24.6	2.13	3.86	1.00
	Village	585	18.8	1.81	1.81	1.00
Educational level	Primary / lower secondary	108	26.9	2.26	2.79	1.00
	Complete secondary	435	20.8	2.37	5.95	1.00
	Vocational	458	24.5	2.06	2.81	1.00
	Advanced	669	22.4	2.00	2.77	1.00
	Undergraduate higher	93	17.9	1.40	0.85	1.00
	Complete higher	507	23.3	1.93	2.18	1.00
	Degree	35	37.6	1.90	1.75	1.00
Children in the household	Yes	978	26.5	2.09	4.29	1.00
	No	1332	20.6	2.02	2.70	1.00

The largest proportion of ambulance users (13.9% of all respondents or 61% of those who had such experience) called for an ambulance once a year, 5% (or 20% of those who had such experience) — twice (Fig. 6.1). Thus, 9% of respondents (or 19% among all those who sought emergency care during the year) reported more than two ambulance calls.

Fig. 6.1. Frequency of ambulance calls in the past year (including the cases of calling for an ambulance for children or family members)

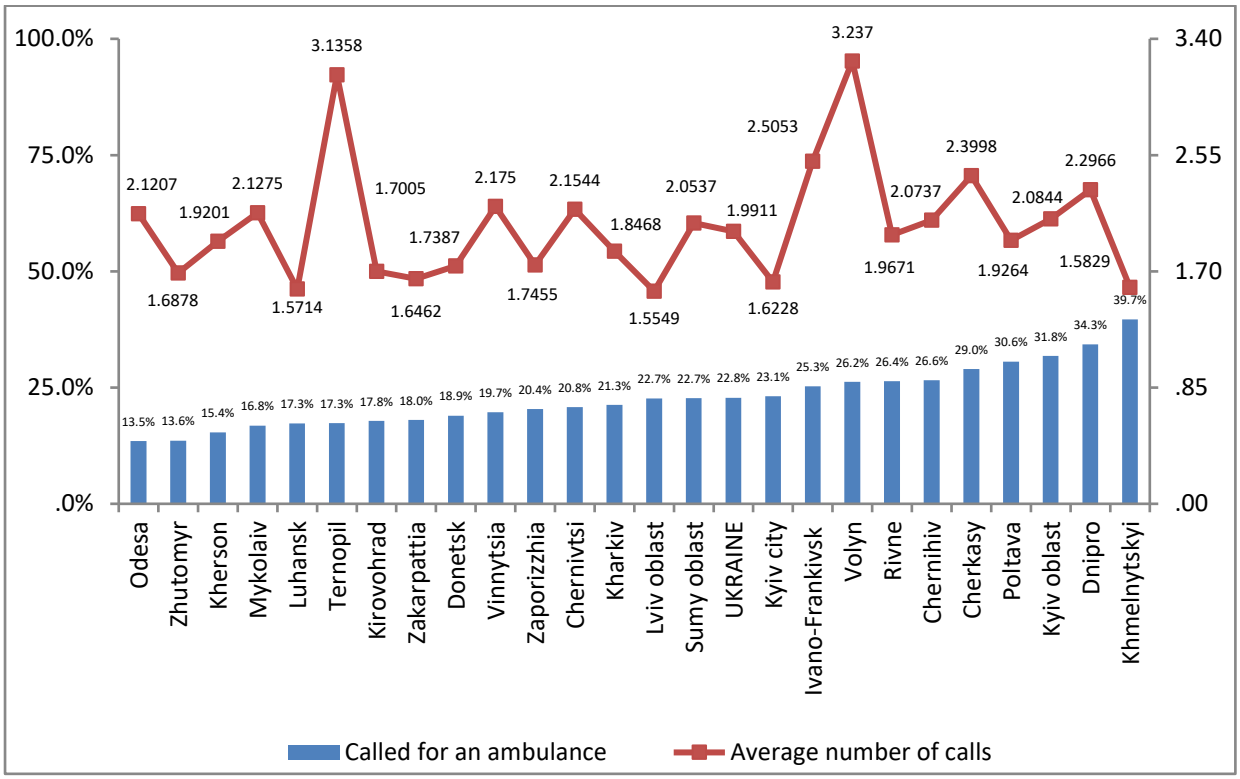


The respondents were mostly calling for a state ambulance (98.9%), 1.4% used services of a private ambulance (1% among them called only for a private ambulance, while 0.4% sought services of both private and public emergency care providers).

The average number of calls per a household that has called the ambulance was 2.1 (in the entire Ukraine). This number was the highest in Volyn (3.2) and Ternopil (3.1) oblasts; the lowest in Khmelnytsky (1.6) and Lviv (1.6) oblasts.

Khmelnytsky (40%), Dnipro (34%), Kyiv (32%), and Poltava (31%) oblasts were the leaders in proportion of population that had used emergency care services last year, Odesa (13.5%), Zhytomyr (13.6%), and Kherson oblasts (15.4%) had the lowest proportion of those who had called for an ambulance (Fig. 6.2).

Fig. 6.2. Experience of calling for an ambulance: breakdown by oblast



The average reported waiting time for an ambulance to arrive was 20 minutes: 19 minutes in the city and 22 minutes in the rural areas (the difference was statistically significant with $p = 0.01$). Overall, a third of respondents (33%) have been waiting for an ambulance less than 10 min, a quarter (25%) — for 10-15 min, 18% — for 15 to 20 min. By subjective estimates, it took 76% of consumers less than 20 minutes to wait for an ambulance. To less than 1% of patients the ambulance has never arrived.

The main complaints — the symptoms that made people seek emergency care were related to high blood pressure — almost 30% of respondents who needed emergency care called it for this very reason, another 4% suspected a stroke. Overall, 44% of the calls were associated with symptoms of circulatory system diseases. The second most frequently mentioned reason (15%) was high body temperature/fever, while other signs of disease were not specified. In this group, children often needed emergency care. The symptoms pointing to disorders of digestive system were mentioned in about 10% of cases. No other cause accounted for more than 10% of the mentions.

It seems the respondents' lack of information and knowledge about the cases requiring emergency care and other conditions requiring care form other providers results in inefficient use of the existing limited resources. Thus, a clearly defined policy of using emergency care, which is provided by mobile medical crews, as well as information campaigns and strengthening of capacities of the emergency crews could lead to a more rational use of this resource.

SECTION 7. PEDIATRIC CARE

The situation with pediatric services in Ukraine is ambiguous: de jure, most functions of managing the children population were transferred to the family doctor. Pediatricians are secondary care specialists, whose services are needed only when a child gets sick. However, people turn to pediatricians for pediatric care, and to family doctors mostly in rural areas. However, if approximately 40% of adults visit a doctor when getting sick, this figure, according to official statistics, is much higher in pediatric practice.

7.1. Child health care services: pattern of usage

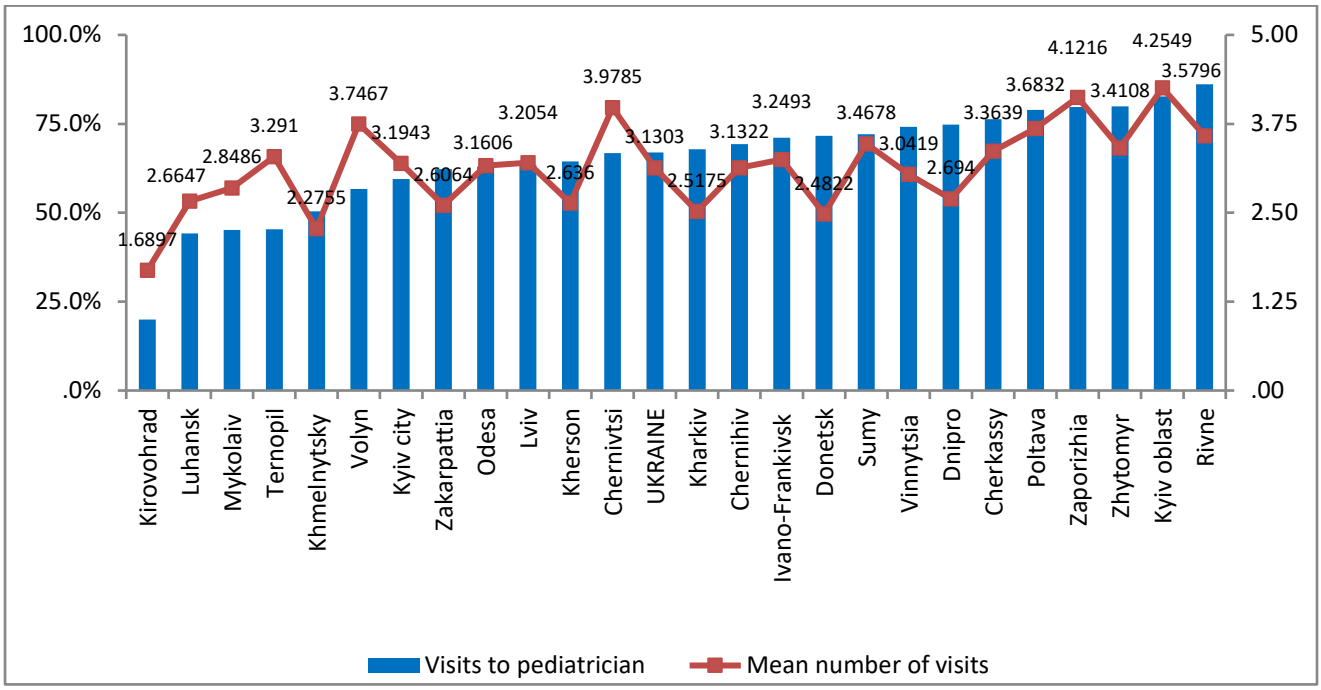
The study found that 36.5% (N = 3701) of respondents had been living in households with children under 18 years. This section provides an analysis of the responses of those who had information about the health of their child and health care services that could have been provided to their child (90.8% or 3342 respondents in households with children).

Some 67.8% (N=2181) of families with children have used outpatient services within 12 months preceding the interview. Some 68% urban residents and 64% of rural residents reported having used health care services for their child. As for the families with income of 1001-2000 UAH per one adult, about 70% of families with children in this income group visited pediatricians, 65% of families with lower incomes (up to 1000 UAH per adult) and 67% of those with higher income (over 2001 UAH).

The highest percentage of those who visited a pediatrician in the past 12 months was observed among residents of Rivne (86%), Kyiv (83%), and Zhytomyr (80%) oblasts; the lowest — among residents of Kirovohrad (20%) oblast (Fig. 7.1).

Almost 30% of families with children (N=648) among those who have visited pediatricians within the past 12 months, did it once, 27% (N=580) — two times; the remaining 43% visited three or more times.

Fig. 7.1. Share of visits to outpatient facilities for a child under 18 in the past 12 months: breakdown by oblast



7.2. Choosing a health care provider

Respondents provided more details on the services received by their children during their last visit to a doctor; most respondents said they had visited their district pediatrician (72%, N = 1608), family doctor, or general practitioner (15%, N=344); 4% used services of a "personal" family doctor (on agreement), and for 9%, this was a visit to a specialist. Services of otolaryngologists (22%), surgeons (15%), and trauma specialists (13%) were in the greatest demand.

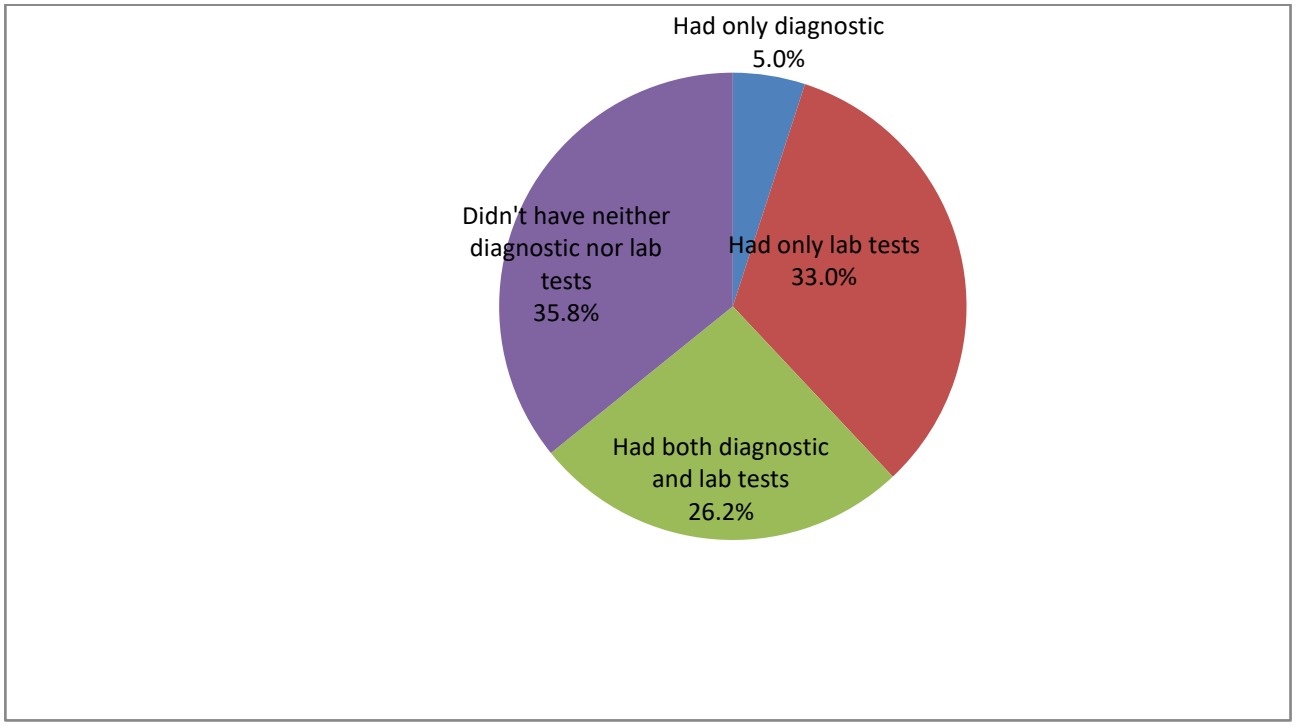
Visits to GPs / family doctors (not to district pediatricians), same as in the case of adult outpatient visits were more characteristic for the rural areas (25% visited a family doctor / feldscher, 60% — a pediatrician) than for the cities (11% visited a family doctor, 78% — a pediatrician). Like outpatient care used by adults, one third (37% or 78 respondents) visited a specialist by referral from a primary care doctor, while the remaining 63% were self-referred.

In all oblasts, a city, district, or departmental policlinic was the main facility for a visit to a doctor with a child: 58% of respondents with appropriate referrals visited a pediatrician in polyclinics. Moreover, 14% visited feldsher-midwife stations, 9% — national level health care facilities or departmental hospitals, 8% called for a home visit, 7% turned to a primary care center, 3.5% — to private clinics.

As it has been noted earlier, the choice of institution was significantly affected by the availability of infrastructure at a certain setting, and therefore the greatest differences were observed between urban and rural areas. For example, in the city the policlinics undoubtedly hold the primary position (67.8%). Other differences relate to visits to private clinics (4.4% in urban areas vs. 1.9% in rural areas) and medical home visits (10.1% in urban areas against 3.3% in rural areas).

According to the survey, 33% of children underwent lab tests during their last outpatient visit, 5% — diagnostics, 26.2% — both tests and diagnostics. One third (35.8%) of children didn't undergo neither tests nor diagnostic during their recent visit to a doctor (Fig. 7.2).

Fig. 7.2. Share of children who had diagnostic examinations or lab tests related to medical visit in the past 12 months



7.3. Expenditures on outpatient services provided to a child

The clear majority of outpatient services (88%) were provided free of charge, and 12% (N = 262) of respondents reported paying for doctor's consultation. If payment to doctors from private institutions or practices was not taken into account, this proportion decreased to 10%. The average amount of money spent by the family for a medical consultation was 100 UAH (median value) throughout the entire country (Table 7.1).

Table 7.1. Share of consumers and payers and amounts paid for outpatient services, diagnostics, and tests for a child

Questionnaire question B5.11		Medical consultation	Tests*	Diagnostic*
Experience of use	Yes	2181 67,0%	1312 59,2%	693 31,2%
	No	1077 33,0%	905 40,8%	1525 68,8%
Payment experience (among those who used)	Yes	262 12,0%	440 33,5%	267 38,5%
	No	1919 88,0%	872 66,5%	426 61,5%
Amount of payment (among those who paid), UAH	Mean	120,01	134,37	278,93
	Standard deviation	132,11	405,02	1803,36
	Median	100,00	50,00	100,00

* The category “Tests” included those who answered, “undergone tests” and “undergone tests and diagnostic” (Fig. 7.2), and the “Diagnostic” category included those who answered, “undergone diagnostic” and “undergone tests” and “undergone tests and diagnostic”.

The proportion of those who consumed laboratory and diagnostic services and paid for them was somewhat higher: 33.5% of consumers paid for tests (66.5% had them done free of charge), 38.5% paid for diagnostic (61.5% underwent them free of charge). The available data do not allow separating occasions when these services were provided in private institutions.

The average amount of out-of-pocket payments for laboratory and diagnostic tests was higher than the average amount paid for medical consultation (and with greater variation in value) — 50 UAH for tests and 100 UAH for diagnostics (median value). The value of the standard deviation was high and several times higher than the mean value, which indicate a high variability in the amount of payments. Thus, expenditure of 10% of those who paid for the diagnostic workup ranges from 400 to 40 000 UAH, for the tests — from 300 to 10,000 UAH.

7.4. Prescription of medicines

Some 11% of visits didn’t require prescription of medicines, and in 89% of cases the child was prescribed at least one drug. Thus, according to the interviewed adults, in one third of cases (35%) drugs were prescribed with no prescription written, while 65% got written prescriptions from the doctor. In the current context, we cannot be sure about the meaning of “written prescription” used by those interviewed.

The average number of drugs prescribed to a child was 4.4 (median — 3.0). Some 83% reported having purchased all the prescribed drugs (Table 7.2).

Table 7.2. Share of payers and the amount of payment for medicines for a child

		Corresponding value
Prescription of medicines at the most recent visit	Yes (N)	1761 (89,0%)
	Mean	4,44
	Standard deviation	12,85
	Median	3,0
Have you bought all the prescribed medicines?	No -N (%)	77 (3,8%)
	Almost all -N (%)	262 (12,8%)
	All -N (%)	1649 (80,6%)
	Hard to tell -N (%)	60 (2,8 %)
Expenditures for the medicines during the last episode of treatment (which took place last year)	Yes (N)	1746 (99,4%)
	Mean	571,57
	Standard deviation	1089,36
	Median	320,00

Provision of medicines to treat a child (except for the inpatient treatment of a child, which was not included in the study) was a financial burden for families: 13% of respondents bought almost all the medicines prescribed by the doctor, and 4% didn't buy any. Less than 1% of respondents, who were prescribed drugs, got them for free. On the average, the expenditures were about 571 UAH, and 20% of those who bought drugs spent from 600 to 20,500 UAH.

SECTION 8. PATIENTS' EXPENDITURES ON MEDICINES

Households' out-of-pocket expenditures on medicines constitute the largest share of private expenditures, which is related to the affordability of treatment and catastrophic spending. Moreover, high level of spending (both as the share of those who spend money on medicines and the amount of money spent) is associated with a lack of effective pharmaceutical policy of a country or an oblast, where the doctors' "habits" in prescribing medicines (brand-name or generic drugs), a lack of evidence-based prescription guidelines, and virtually unlimited access to medicines in pharmacies, as well as unrestricted flow of drug commercials in mass media and online play an important role[9].

[9] Richardson, E., Sautenkova, N., & Bolokhovets, G. (2014). Pharmaceutical care. Trends in health systems in the former Soviet countries, 145.
Footman, K., Richardson, E., Roberts, B., Alimbekova, G., Pachulia, M., Rotman, D., ... & McKee, M. (2014). Foregoing medicines in the former Soviet Union: changes between 2001 and 2010. Health Policy, 118(2), 184-192.

8.1. Consumption of medicines without prescription

As it was mentioned above, 71.6% of those who had an illness and resorted to self-treatment or turned to alternative medicine, bought medicines, herbs, ointments, etc. They also purchased about 2.6 medicinal items on the average. Some 55% bought 1-2 drugs, 26.9% — 3 drugs, 18% — from 4 to 15 drugs. Those who was spending money on medicines or herbs paid 248 UAH, the median value — 150 UAH (Table 8.1).

Table 8.1. Experience of consuming medicines and expenditures on medicines among those who resorted to self-treatment or turned to an alternative medicine professional

		Corresponding value
Consumption of medicines or other treatments during self-treatment or visit to an alternative medicine professional N = 894	Yes (N)	640 (71,6%)
	Mean	2,64
	Standard deviation	1,59
	Median	2,0
Expenditures for medical or other treatments in the course of self-treatment or after a visit to an alternative medicine professional treatment (among those who consumed) N=584	Yes (N)	559 (95, 8%)
	Mean	247,54
	Standard deviation	486,73
	Median	150,00

8.2. Consumption of medicines among outpatients

As indicated in Table 8.2, medicines were prescribed to 89% (or 2953 respondents) of those who used outpatient services when being sick and who provided information about their last visit. Among women, the percentage of those who got a prescription was slightly higher (90%) than among men (87%), but there was almost no variation between age groups, different income, and place of residence.

Table 8.2. Experience of consuming medicines and expenditures on medicines among outpatients

		Corresponding value
Prescription of medicines during the latest visit	Yes	2 953 (89%)
	Mean	4,02
	Standard deviation	2,24
	Median	4,0
Expenditures on medicines during the last visits (among those to whom they were prescribed)	Yes	2869 (97,1%)
	Mean	776,36
	Standard deviation	1597,70
	Median	420,00
Was the prescription written out (among those to whom medicines were prescribed)	Yes	1944(66,5%)
	No	979 (33,5%)
Were all prescribed medicines purchased?	No	172 (5,9%)
	Almost all	486 (16,5%)
	All	2284 (77,6%)
Reasons for not purchasing all medicines (including those who did not buy all the medicines)	Did not have the money (Yes)	333 (50,5%)
	Did not consider it necessary to buy all the medicines	234 (35,5%)
	Did not find, was not available in the pharmacy	50 (7,5%)
	Other	43 (6,5%)

Based on outpatient responses, it appears that doctors prescribed on the average 4 drugs during an outpatient visit. Number of medicines prescribed to young people was slightly lower: among respondents aged 18-29 years the mean number of prescribed medicines was 3.7, the median — 3. There was no significant variation in the number of prescribed medicines related to other socio-demographic characteristics (gender, place of residence, income).

Median number of prescribed medicines ranged from 3 to 5, being the highest in Kirovohrad oblast (mean — 5.4, median — 5) and the lowest — in Lviv (mean — 3.5, median — 3) and Zakarpattia (mean — 3.6, median — 3) oblasts.

Some 66.5% of outpatients stated that the prescription for medicines was written out by a doctor. On the average, people over 60 (70%) got prescriptions slightly more often than those aged 18-29 (65%). There was no significant statistical difference in other characteristics (gender, income, type of locality). However, there was significant variation in the percentage of those who received prescription for medicines between oblasts ranging from 16% in Kyiv to more than 90% in Mykolaiv, Kherson, Volyn, Luhansk, Zaporizhia, and Kirovohrad oblasts.

In most of cases (77.6%), health care consumers bought all the medicines (among those who were prescribed), 16.5% — almost all, 5.9% didn't buy any or just one medicine. The share of those who bought all the prescribed drugs did not vary between groups of different age and sex, but increased with higher income: in families with income up to 1000 UAH per adult 70% purchased all the prescribed drugs, in families with income above 2001 UAH — 79%. The share of those who bought all the medicines prescribed by the doctor is higher in the rural (81%) than in the urban areas (75%).

In Kirovohrad (62%), Khmelnytsky (63%), Sumy (63%), Chernihiv (64%), Luhansk (64%), and Dnipro (64%) oblasts the number of those who bought all the prescribed drugs was the lowest, while it was the highest in Kyiv (87%), Ternopil (86%), and Volyn (86%) oblasts.

A lack of money was the main reason patients didn't buy all the medicines prescribed by their doctor. This very reason was indicated by 50.5% of those who did not buy all the prescribed drugs. In one third of cases (35.5%), respondents did not consider it necessary to buy all the medicines prescribed by their doctor, and 7.5% explained it by unavailability of drugs in the pharmacy. Somewhat more often women (56%), people over 45 years of age (61%), rural residents (63%), and people with low income (1000 UAH per adult) (70%) did not buy the medicines due to a lack of money. On the contrary, it was more typical of men (44%), people aged 18-29 (46%), and people with higher income (over 2001 UAH) (52%) not to purchase all the drugs because they didn't think it necessary.

The vast majority (97%) of those who had been prescribed medicines bought them at their own expense. The percentage of those who paid for the drugs was slightly higher among women (97%) than men (95%) and in villages (98%) than in the cities (96%). The proportion of those who spent money on prescribed medicines ranged from 93% in Dnipro and Odesa oblasts to 99% in Zakarpattia and Zaporizhia oblasts.

Outpatients paid about 776 UAH; 50% spent up to 400 UAH. There was no statistically significant difference depending on such characteristics as region, type of locality, gender, age, or income level between the average expenditures on prescribed medicines.

8.3. Expenditures on medicines by inpatients

About 96% of respondents who were admitted to hospital within the past 12 months reported being prescribed drugs (Table 8.3). Drugs were prescribed to slightly more men (96%) than women (91%). The proportion of those who were prescribed medicines during hospital treatment increased depending on the patients' age (from 87% among those aged 18-29 year to 97% among people aged 60 and older). No significant difference in prescriptions depending on the type of residence and income was found.

Table 8.3. Experience of consuming medicines and expenditures on medicines among inpatients

		Corresponding value
Prescription of medicines during the last admission to hospital N=1210	Yes	1136 (95.9%)
	Mean	6.23
	Standard deviation	3.93
	Median	6.00
How many medicines were dispensed in the hospital *free of charge*? N=1360	0	1129 (83.0%)
	1-2	138 (10.1%)
	3 and more	93 (6.9%)
Payment for medicines dispensed in the hospital N=1186	0	992 (83.7%)
	1-500 UAH	62 (5.2%)
	501 UAH plus	132 (11.1)
Expenditures on medicines during the last hospitalization (among those to whom they were prescribed; purchasing at the pharmacy)	Yes	922 (97.9%)
	Mean	2344.36
	Standard deviation	3711.82
	Median	1500.00
Total expenditures on medicines during the last hospital admission (among those to whom they were prescribed)	Yes	965 (95.8%)
	Mean	2568.79
	Standard deviation	4235.97
	Median	1500.00
Reasons for not purchasing all the prescribed medicines (among those who didn't buy all the prescribed medicines)	Had no money (Yes)	84 (55,2%)
	Didn't consider it necessary to buy all the drugs (Yes)	42 (27.6%)
	Didn't find them, weren't available in the pharmacy	16 (10.4%)
	Other	5 (3.3%)

On the average, inpatients were prescribed about six medicines. Some 17% of those who were prescribed medicines during their last hospital stay got part of them free of charge; 83% had to buy all the prescribed medicines themselves. The majority (85.2%) had bought all the prescribed medicines, 11.5% — almost all, 3.3% — some of them. The main reason inpatients didn't buy all the medicines was a lack of money (55.2%); the next most common statement was "didn't consider it necessary to buy" (27.6%). Moreover, 10.4% of those who didn't buy all the prescribed medicines during hospital stay didn't find the necessary medicines at a pharmacy.

Elderly people don't buy all the medicines somewhat more often, in most cases, due to a lack of money. The proportion of those who didn't buy all the medicines during their last hospital admission is slightly higher in the cities than in the villages. If in the cities two main reasons why people didn't buy all the prescribed drugs was a lack of money (37%) or need (23%), in the villages it was a lack of money (36%) or unavailability of the necessary medicines at a pharmacy (11%).

Some 16% of inpatients who needed medicinal treatment reported having paid for medicines dispensed at the hospital. The percentage of those who paid for the medicines received at a hospital was slightly higher among men aged 60 and older (20% of patients of this age paid for the medicines received at a hospital) and in the cities (18%). Inpatients who had these expenses paid on the average 1000 UAH (median); the average expenditures on medicines purchased in a pharmacy was 1500 UAH (median).

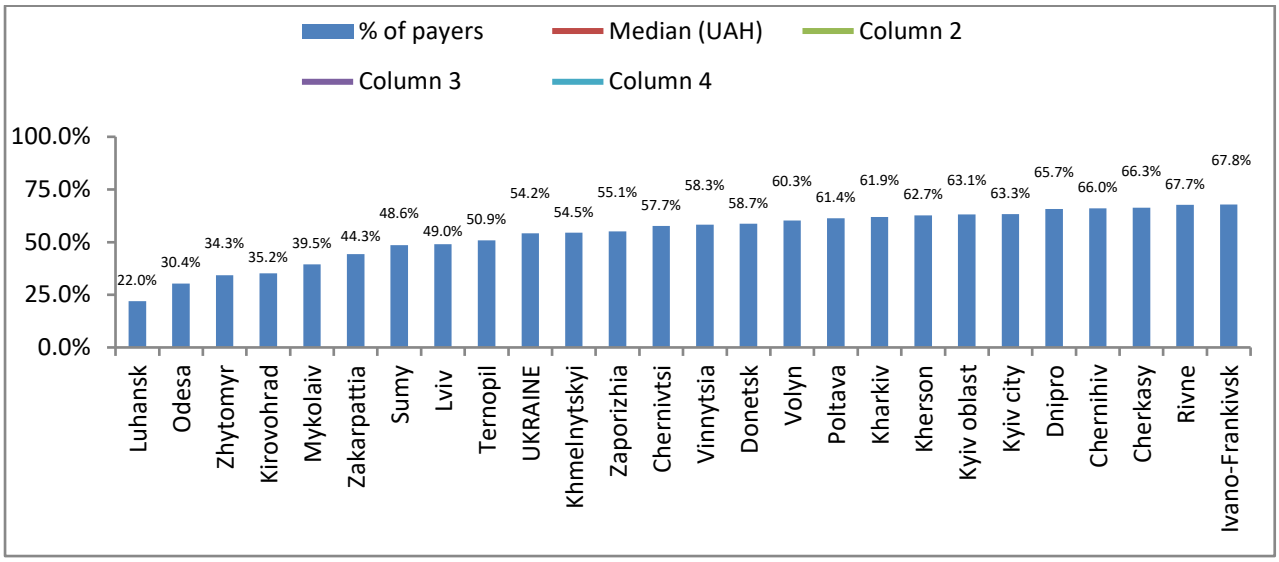
8.4. Overall out-of-pocket expenditures on medicines

Only those respondents who had received medical care in hospital or outside it and had paid for it from their own household budget were asked the previous questions. In addition, we decided to ask a question, which would summarize all the expenditures on medicines within the past 30 days. Such expenditures could also be related to treatment of members of another (e.g. extended family) household.

Overall, 54.2% of respondents reported having expenditures on medicines in the past 30 days. On average 300 UAH (median) were spent with large difference between the mean value (550 UAH) and the median, which is related to high variability of expenditures (SD — 1665.66 UAH). The median value of expenditures among city residents was 300 UAH, 280 UAH among rural residents; 290 UAH among women.

The highest percentage of those who paid for medications was recorded in Rivne, Ivano-Frankivsk (67.7%), Cherkasy (66.3%), Chernihiv (66.0%), and Dnipro (65.7%) oblasts, the lowest — in Sumy (48.6%), Zakarpatia (44.3%), Mykolaiyv (39.5%), Kirovohrad (35.2%), Zhytomyr (34.3%), Odesa (30.4%), and Luhansk (22.0%) oblasts (Fig. 8.1).

Fig. 8.1. Share of those who paid for medicines and the median amount paid over the past 30 days



APPENDIX A. Research instruments

SECTION A. HEALTH CARE SYSTEM AND SERVICE SATISFACTION, PERCEPTION

A1. From your own experience of consuming private or public health care, or from experience of other people, please say how satisfied or dissatisfied you are with the way each part of the health care system is functioning (CARD A1)

PARTS – CARD A1:

- District doctors / family doctors
- Pediatricians
- Dentists
- Hospitalization
- Specialist at a policlinics or ambulatory
- Emergency care
- Maternity care

Answer options:

- Completely satisfied
- Rather satisfied
- Rather dissatisfied
- Completely dissatisfied
- Difficult to answer (DA)
- Refuse to respond (R)

A2. Have you experienced any personal contact with representatives of health care system during the past 5 years? It could be you personally or another person, who you helped to seek medical assistance? (CARD A1)

Answer options:

- Yes
- No
- DA / R

A3. What do you think are the main problems in health care? Name up to three starting with the most important. CARD A3. ONE ANSWER IN EACH COLUMN

Columns: 1st choice; 2nd choice; 3rd choice

CARD A3:

- Corruption at the Ministry of Health
- Informal payments to physicians — so-called “honoraria” and “gratitude”
- Negligence of medical staff
- Lack of modern equipment
- Lack of professionalism of medical staff, unqualified medical staff
- High price of medicines
- High price of treatment
- Poor hygienic conditions in health care facilities
- Low salaries of medical staff
- Lack of medical staff
- Inconvenient schedule, long waiting lines
- No problems
- Other (describe)
- DA / R

A4. Talking about outpatient facilities or polyclinics, please name three characteristics of polyclinic or ambulatory performance in which you observed any improvements during the past 12 months. In which have you observed worsening?

A5. Now, think about inpatient medical assistance. Name characteristics where you have observed improvement during the past 12 months. In which have you observed worsening?

A6. If you could change one thing in policlinic or ambulatory, what would it be? (one answer)

Answer options:

- Waiting times
- Professionalism of physicians
- Interior of health care facilities
- Attitudes of physicians towards patients
- Confidentiality of personal data
- Availability of the necessary medicines
- Treatment costs, including consultation, lab tests, and medicines
- Possibility to choose a physician
- Other (describe)
- NO SUCH
- DA / R

A7. Whom do you think the functioning of health care facilities depends on? (CARD A7. Multiple responses are allowed)

CARD A7:

- President
- Prime Minister
- Minister of Health
- Head of the regional (oblast) state administration (governor)
- Mayor of your city or head of your village
- Head of the district administration
- Chief doctor of a health care facility
- Physicians
- Other (describe)
- DA / R

A8. What does health care reform mean to you? You can choose two answers, starting from the most important. (CARD A8. One answer in each column; 1st choice and 2nd choice)

Answer options:

- Improved quality of health care
- Increased salaries of medical personnel
- Decreased patients' expenditures on health care
- Decreased patients' expenditures on medicines
- Possibility to receive health care close to home
- Improved attitude of physicians towards patients
- Other (describe)
- DA / R

A10. Do you think the health care reform is needed?

Answer options:

- Yes
- No
- DA / R

A11. Do you think the reform is taking place?

Answer options:

- Yes
- No
- DA / R

A12. Let's change the topic a little bit. In your opinion, what are the symptoms of tuberculosis? (multiple responses are allowed, do not read out options, spontaneous response, do not count incomplete answers (for instance, just "cough") as correct.

Answer options:

- Cough lasting more than three weeks
- Chest pain
- Coughing up blood or sputum
- Weakness, loss of energy
- Pallor
- Shortness of breath
- Weight loss, fatigue
- Loss of appetite
- Chills
- Sleepiness
- Fever
- Night sweats
- INCORRECT ANSWER
- DA / R

A13. What are the symptoms of a stroke? (multiple responses are allowed, do not read out options, spontaneous response).

Answer options:

- Sudden numbness or loss of mobility of the face, arm, or leg, especially on one side of the body
- Sudden trouble speaking or understanding speech
- Sudden vision loss in one or both eyes
- Sudden coordination disorder, unsteady gait, dizziness, loss of consciousness
- Sudden severe and inexplicable headache
- INCORRECT ANSWER

- DA / R

A14. What do you consider a healthy diet? You can choose three options, starting from the most important. CARD A 14. ONE ANSWER IN EACH COLUMN 1st choice; 2nd choice; 3rd choice)

Answer option:

- Eating more vegetables
- Eating more fruits, drink more juices
- Eating less fat, high-fat foods
- Eating less sugar and sweets
- Using less fat when cooking
- Keeping to a healthy diet
- Eating smaller portions
- Eating regularly, without snacks
- Eating a more varied diet
- Other (describe)
- DA / R

SECTION B1. EXPERIENCE IN CASE OF ILLNESS

Now I am going to ask several questions about your behavior in case of illness. We are interested in your personal experience. It means, when medical assistance was provided exactly to you, not those cases when you asked for assistance for somebody else. Also, these questions are not about the cases when you could have been seeking medical assistance for your children and grandchildren.

B1.1. Over the past 12 months, have you undergone medical checkups:

Answer options:

- Yes
- No
- DA / R
- Dentist?
- Professional checkup?
- ASK MEN ONLY: Urologist?
- ASK WOMEN ONLY: Gynecologist?
- ASK WOMEN ONLY: Mammography?
- Fluorography?
- Preventive cardiogram?

B1.2. What do you usually do first when you feel sick?

CARD B1.2. One answer.

- Self-treatment with traditional remedies, no medications?
- Self-treatment with medicines?
- Ask for advice from a pharmacist?
- Call an ambulance?
- Visit a family doctor / district GP?
- Visit a sub-specialist at an ambulatory or a polyclinic?
- Visit a sub-specialist at an inpatient facility?
- Seek care from an alternative medicine provider (homeopathists, healers)?
- Seek advice from the doctors who are your relatives, friends, or acquaintances?
- Look up for treatment of similar symptoms online?
- Do something else? What exactly (specify)?
- Do nothing
- DEPENDS ON SYMPTOMS
- DA / R

B1.3. Recall your last case of illness or trauma which happened over the past 12 months. Name the month and year when it happened.

MONTH: ____ YEAR: 201__ NO SUCH CASES…..0 =>GO TO SECTION B2

B1.4. Have you asked for medical assistance physician or feldsher in the case of your last illness or trauma?

Answer options:

- Yes => B1.6
- No
- DA/R

B1.5. Why did you refuse to visit a physician? Name tree reasons.

CARD B1.5:

- Too expensive (services, medicines, transport)
- Do not trust medical staff, their qualification
- Bad attitude of staff, brutality
- Long waiting lines in hospitals

- No transport connection
- Know how to treat due to previous experience
- Do not know whom to visit
- Expect that illness will disappear, did not disturb much
- Other (describe)
- DA / R

B1.6. In case of your latest illness or trauma did you go to an alternative medical provider or practiced self-treatment? If yes, who did you go to?

CARDB1.6. (Several options could be chosen).

- Did not go / did not practice => SECTION B2
- Homeopathist
- Psychic
- Healer
- Self-treatment with the use of medicines (pharmacy drugs)
- Self-treatment with the use of traditional remedies, non-drugs products
- Other (describe)
- DA / R
- IF ONLY ANSWERS 5 OR 6 ARE MARKED => GO TO QUESTION B1.8.

B1.7. How much did you pay for this consultation, without drugs?

_____UAH

B1.8. How many medicines, medicinal tinctures, ointments, herbal blends you were prescribed during the consultation of a traditional medicines provider or you bought for self-treatment?

_____names IF 0 => GO TO SECTION B2

B1.9. How much did you pay for the medicines, medicinal tinctures, ointments, herbal blends you were prescribed during the consultation of a traditional medicines provider or you bought for self-treatment?

_____ UAH

SECTION B2. EXPERIENCE OF CONSUMPTION OF OUTPATIENT (AMBULATORY) MEDICAL ASSISTANCE

B2.1. Now let's talk about ambulatory care.

Please do not include here ambulance calls, dental services, medical or professional checkups, refer for health certificate or sick leave, refer to homeopathists, healers, who are not physicians, passing only through diagnostic procedures or tests, as well as assistance provided to your child or another family member. Asking about ambulatory care, we do not mean going through a series of procedures, day inpatient facility and so on.

So, how many times did you use ambulatory medical assistance during the past 12 months?

_____ times IF1 OR MORE => GO TO QUESTIONB2.3

B2.2. During the past 12 months did you pass any diagnostics or were tested? Do not count those that could be the part of inpatient care.

- Yes, diagnostics only => B2.12
- Yes, were tested only => B2.12
- Yes, both, passed diagnostics and tests => B2.12
- Did not pass diagnostics or were tested => B2.26
- DA/R => B2.26

B2.3. What was your diagnosis? CADRB2.3.

WRITE DOWN _____ CODE DA…998 R…999

Diagnose was not given….0

B2.4. Was it a general practitioner (therapist, family doctor) or a sub-specialist? CARD B2.4. One answer

- Family doctor, general practitioner => B2.6
- District therapist => B2.6
- A sub-specialist (define)
- Your own family doctor (on personal agreement) => B2.6
- DA / R

B2.5. Did you have a referral to this specialist / district doctor?

Answer options:

- Yes
- No
- DA / R

B2.6. Where did you meet the physician?

CARD B2.6. One answer

- Feldsher point
- Center of primary health care
- City / district / departmental policlinic
- State / departmental hospital
- Private clinic / practice
- Calling for a home visit
- Other (describe)
- DA / R

B2.7. Was this the facility and doctor you were assigned to?

Answer options:

- Assigned to this facility and doctor => B2.9
- Assigned to this facility, but chose another doctor
- Was not assigned to this facility

B2.8. Why did you choose this facility or physician? Select max. 3 reasons.

CARD B2.8.

- Physician is friendly
- Physician is competent
- Service payment is affordable or cheap
- Waiting time is short / There are no waiting lines in this facility
- Necessary equipment
- Convenient location
- Referral of this physician was needed
- Familiar physician / This physician was recommended
- There is a possibility to treat a wide range of diseases
- It is the only physician / health care facility that accepts me without payment
- This is a private health care facility where the quality of medical assistance is better than in the nearest state health care facilities
- Other (describe)
- DA / R

B2.9. Not counting drugs, diagnostic procedures, and lab tests during this visit how much did you pay?

B2.10. (for each item, regardless of respondent paid or did not pay, ask) Did somebody require any payment, even if only hinted?

- Pay to the account of a charitable fund or other (non-medical) organization? _____ UAH
- Pay at the cash desk according to the official rules and official price lists of a medical facility? __ UAH
- Pay informally, through hands to hands or give a gift to the doctor or other medical staff? (if gave a gift ask to evaluate the price)

B2.11. Have you had any diagnostics or lab tests due to this health problem? If yes, did you do this upon doctor's referral or independently on your own?

A. Lab. Tests; B. Diagnostics

Answer options:

- Yes, upon doctor's referral
- Yes, my own decision
- Partially myself, partially doctor's referral
- No

B2.12. How much did it cost to you?

A. Lab tests? _____ UAH

Б. Diagnostics? _____ UAH

B2.13. Where did you pass the diagnostics and/or make the lab tests? (several answers in each column are available)

A. Lab. tests B. Diagnostics

Answer options:

- In the same policlinic / hospital
- In [another] state policlinic / hospital
- In private diagnostic center (laboratory)
- In [other] private clinic / hospital
- Other (specify)
- Did not pass / make
- DA / R

B2.14. (if a respondent did not seek for outpatient medical assistance during the past 12 months (B2.1 = 0) => go to question B2.26) How many medicines physician prescribed you last time?

_____ names If none (0) => go to instruction before B2.20

B2.15. Did you get a written prescription?

Answer options:

- Yes
- No
- DA/R

B2.16. Did you buy all the prescribed medicines?

Answer options:

- No
- Almost all
- All => B2.18
- DA / R => B2.18

B2.17. Why did you fail to buy all the drugs? (several options are available)

- Had no money
- Considered that it wasn't necessary to buy all the medicines
- No available in pharmacy, did not find
- Other (specify)
- DA / R

B2.18. How much did you pay for these medicines? _____ UAH If 0 => go to instruction before B2.20

B2.19. Which part of the drugs' cost were reimbursed by the state? _____ %

Interviewer! Check the answers for questions B2.9, B2.12 & B2.18. if all existing answers = 0 (respondents did have any expenditures) => go to B2.24

B2.20. If you have insurance, what part of such costs were covered:

- Medicines costs __ %
- Medical assistance costs __ %

B2.21. If you are participant of a hospital fund, which part was covered:

- Medicines costs __%
- Medical assistance costs __ %

B2.22. Was it difficult for you and your family to find the money to cover all the expenses (formal and informal)?

CARD B2.22

- Not difficult at all => B2.24
- Rather easy => B2.24
- Rather difficult
- Extremely difficult

B2.23. How much your household needed to ask or borrow money from relatives, friends, bank, with credit card or sell jewelry, property to cover these expenses?

_____ UAH HA…98R…99

B2.24. How do you asses the following aspects of outpatient medical assistance?

CARD B2.24. Read and choose an answer in each row in table below.

B2.25. Now look at card B2.25. Listed here are all the aspects that I have just read to you. Please say, which of these are more important to you. You can choose up to three.

CARD B2.25. Not more than 3 answers in column B2.25.

Answer options:

- Very good
- Good
- Normal
- Bad
- Very bad

CARD B2.24:

- Treatment efficiency
- The opportunity to undergo the necessary diagnostic tests, lab tests, and treatment procedures free of charge
- Convenient location of the health care facility where your doctor works
- Straightforward and transparent policies of payment for care (including the absence of informal payments)
- Courtesy of doctors towards patients and their families
- Clarity of medical explanations to patients
- The setting of health care provision (renovation, clean rooms, including toilets)
- Are medical personnel ensuring hygiene during examination and procedures, such as putting on disposable gloves in your presence, washing hands before exam, cleaning tubes and sticks?
- Work hours
- In general, how do you assess the outpatient medical care?
- NONE OF ABOVE OPTIONS
- DA / R

B2.26. During the past 12 months how many times you were ill but did not visit the doctor at all because of a lack of money? ____ times

SECTION B3. EXPERIENCE OF INPATIENT SERVICE CONSUMPTION

B3.1. How many times you were hospitalized during the past 12 months with an exception of one day inpatient care, hospitalization with a child, but including hospitalization related to pregnancy or delivery? ____ times If 1 or more => Go to additional questionnaire «inpatient care»

B3.26. During the past 12 months how many times you were ill but wasn't hospitalized because of a lack of money? ____ times

SECTION B4. EXPERIENCE OF EMERGENCY CARE CONSUMPTION

B4.1. How many times you personally or your family during the past 12 months had to call an ambulance (including cases, when you had to call an ambulance for your children / grandchildren)? ____ times IF 0 => GO TO SECTION B5

B4.2. How many times out of these you called

A) public ambulance? _____ times

B) private ambulance? _____ times

B4.3. For how long have you waited for the ambulance to arrive last time? _ minutes / has not arrived.

B4.4. What was the reason to call an ambulance last time? Describe the symptoms. _____

SECTION B5. EXPERIENCE OF PEDIATRIC CARE CONSUMPTION

B5.1. How many children under 18 are there in your household? ____ children
if 0 => go to Section c

B5.2. Do you have information about the status of their health and medical assistance they get?

Answer options:

- Yes
- No => Part C
- DA / R

B5.3. In general, what is your attitude towards vaccination?

CARD B5.3.

- Very positive
- Rather positive
- Neutral
- Rather negative
- Very negative

B5.4. Have you ever refused required immunization for your child?

Answer options:

- Yes
- No => B5.6
- DA/R => B5.6
- Do not have my own children under 16 years old => B5.6

B5.5. Refusing immunization, did you do this temporarily (for example, until your child gets well) or because you did not intend to immunize your child?

- Refused immunization temporarily
- Did not intend to immunize the child
- Had both experiences

B5.6. Now I am going to ask you about the experience of medical assistance for children.

Do not count: ambulance calls, service of dentist, medical checkup, getting health certificate or sick leave, homeopathists, healers, who are not physicians. So, how many times during the past 12 months did you sick for medical assistance because of health problems of your children?

_____ times if 0 => go to PART C

B5.7. To which doctor did you refer during your last visit? (one answer)

Answer options:

- Family doctor, general practitioner => B5.9
- District pediatrician => B5.9
- Sub-specialist (specify)
- Your personal family doctor / pediatrician (upon personal agreement) => B5.9
- DA / R

B5.8. Did you have a referral to this specialist from family / district doctor?

Answer options:

- Yes
- No
- DA / R

B5.9. Where was the visit to this doctor happening? CARD B5.9. ONE ANSWER

Answer options:

- Feldsher point
- Center of primary health care
- City / district / departmental policlinic
- State / departmental hospital
- Private clinic / practice
- Called for a home visit
- Other (describe)
- DA / R

B5.10. Did your child pass any diagnostics or undergo lab tests due to this last doctor visit?

Answer options:

- Yes, diagnostics only
- Yes, lab tests only
- Yes, both diagnostics and lab tests
- Did not undergo any diagnostics or lab tests

B5.11. How much did it cost in total?

Answer options:

A. Doctor's consultation? _____ UAH

B. Lab tests? _____ UAH

C. Diagnostics? _____ UAH

B5.12. How many medicines did the doctor prescribe to your child last time? _____ names

B5.13. Did you receive a prescription?

Answer options:

- Yes
- No
- DA / R

B5.14. Did you buy all the prescribed medicines?

Answer options:

- No
- Almost all
- None
- DA / R

B5.15. How much did you pay for these medicines? _____ UAH

PART C. SELF ASSESSMENT OF HEALTH STATUS AND LIFESTYLE

C1. Do you smoke tobacco (for example cigarettes) every day, not every day or do not smoke at all?

Answer options:

- Every day
- Not every day
- Do not smoke at all => C3
- DA / R

C2. How many cigarettes do you smoke on the average in a day? _____

C3. During the past 12 months how often did you consume the following alcohol drinks and how much at one time?

CARD C3.

C3.1. How often? C3.2. How many milliliters?

- Never
- Less than once a month
- 1-3 times a month
- 1-4 times a week
- 5 times a week and more

- Beer _____ ml
- Wine _____ ml
- Vodka, strong drinks _____ ml

C4. During the last 7 days how many fresh fruits (apples, pears, oranges etc.) have you consumed?

_____ pieces

C5. How can you evaluate the state of your health on a 5-point scale?

CARD C5.

- Very good
- Good
- Average, not good, not bad
- Bad
- Very bad

C6. How many kilograms do you weight? |_____| kg

C7. What is your height in centimeters |_____| cm

C8. How often do you need to work out at least for half an hour to break a sweat or start breathing heavily? It doesn't matter if it is work or home activities or a work out. CARD C8. One answer in column C8.

C9. In your opinion, how often a person of your age should work out at least for half an hour to stay physically fit? CARDC8. One answer in column C9.

CARD C8

- Every day
- 2-5 times a week
- Once a week
- 2-3 times a month
- Approximately once a month
- Never
- Never do the because of a disease
- DA / R

C10. Do you have any chronic or long-term diseases?

Answer options:

- Yes
- No
- DA / R

C11. Do you have any of these diseases:

- Hypertension (high blood pressure)
- Diabetes
- Stroke (stroke consequences)

C12. Do you have an officially established disability?

Answer options:

- Yes
- No
- DA / R

C13. How would you rate on scale from 1 to 5, where 1 is “very bad”, and 5 is “very well”, the location where you live for the following characteristics?

CARDC13.

- Very well
- Well
- Not well, not bad
- Bad
- Very bad

- Quantity of outdoor sport grounds
- Quality of equipment for sports grounds
- Quantity of outdoor children playgrounds
- Quality of equipment for children playgrounds
- Existence of green areas — trees, parks, alleys, lawns
- Safety during the day
- Safety at night
- Availability of bicycle paths
- Overall rate of the surroundings

PART D. SOCIO-DEMOGRAPHIC PROFILE OF RESPONDENT

D1. Record sex as observed:

- Male
- Female

D2. How old are you? _____ years

D3. What is your education? CARD D3. one answer

- Primary or secondary - Basic higher education (Bachelor)
- High school completed - University degree (Specialist, Master)
- Vocational (PTU, lyceum) - Scientific degree (PhD, DSc)
- Specialized secondary education (college, Junior Specialist)

D4. What is your main occupation? CARD D4. One answer

- Employed => D6
- Self-employed => D6
- Working pensioner => D6
- Temporarily unemployed; looking for a job
- Non-working and not looking for a job (incl. housewife, maternity leave etc.)
- Student
- Non-working pensioner
- Disability (handicap)
- Other (specify)

D5. Have you ever had a paid job?

Answer options:

- Yes
- No => D13
- DA / R

D6. Now we are going to talk about your current (last) work place. At your work place you are a...? one answer

- Hired worker => D8

- I work (worked) for myself (self-employment)
- I work (worked) in my own family business

D7. How many employees do (did) you have, if any? _____ number of employees

D8. At your main job do (did) you have to supervise the staff and be responsible for their work?

Answer options:

- Yes
- No => D10
- DA / R

D9. If you have (had) to lead, for the work of how many subordinates are (were) you responsible?

_____ number of subordinates

D10. How is (was) your main job position called? What are (were) you? Interviewer! Record a complete answer. Specify the rank or category of the worker. _____

D11. What training / qualification is required for your work?

CARD D11. One answer

- None or insignificant
- Several weeks / months of training
- Vocational education (vocational school) or several years of experience
- Specialized secondary education (college, Junior Specialist)
- Basic higher education (Bachelor)
- University degree (Specialist, Master)
- Scientific degree (PhD, DSc)

D12. Which sector of the economy does company / organization where you work (worked) belong to?

CARD D12. One answer

- Agriculture, forestry, and fishing
- Industry
- Construction
- Wholesale and retail trade, hotels, and restaurants
- Transport and communications
- Financial activities

- Research and expert activities, related activities, advertising, real estate
- Public administration
- Education
- Health
- Social assistance
- The provision of collective and individual services, cultural activity and sports activity, public organizations' activity
- Other (specify)

D13. Do you have any health insurance? It is not a question of compulsory social insurance or liability insurance (such as car insurance):

- Private medical insurance directly from the insurer?
- Private health insurance directly through your current or former employer?
- Private health insurance through a current or former employer of your husband (wife)?
- Any other type of medical insurance? (specify) _____

D14. How many people, adults, and children (including you) live with you a common household?

_____ people

D16. Currently, how many people in your household (incl. you) have chronic diseases or serious health problems? _____ people

D17. Please look at the card and tell which of the statements most accurately correspond to the financial status of your family? CARD D17. One answer

- We do not have enough money even for food
- We have enough money for food, but buying clothes is difficult
- We have enough money for food and clothes and we can save a little, but not enough to buy expensive things (such as a TV or refrigerator)
- We can afford to buy some expensive things (such as a TV or refrigerator) or save money
- We can make significant savings

D18. Please look at this card. Tell me, which of these categories corresponds to the net average income of your household per month (income after taxes), taking into account all household members and all sources — wages, social benefits, pensions, rents, royalties, etc.? CARD D18. One answer

- Less than 1000 UAH
- From 1001 to 1500 UAH
- From 5001 to 6000 UAH
- From 6001 to 7000 UAH

- From 1501 to 2000 UAH
- From 2001 to 2500 UAH
- From 2501 to 3000 UAH
- From 3001 to 3500 UAH
- From 3501 to 4000 UAH
- From 4001 to 4500 UAH
- From 4501 to 5000 UAH
- From 7001 to 8000 UAH
- From 8001 to 9000 UAH
- From 9001 to 10 000 UAH
- More than10 000 UAH

D19. Where are you registered?

- At this address (where interview was conducted)
- At another address in this settlement
- In another settlement in Ukraine

Write down the name of settlement, oblast (if another), region: _____

Not registered anywhere

D20. Are you an internally displace person from Crimea or occupied / frontline territories in Donbas?

Answer options:

- Yes
- No
- DA/R

Thank you for your agreement to answer the questions of this survey!

SUPPLEMENTARY PART OF THE RESEARCH INSTRUMENT

SECTION B3. EXPERIENCE OF INPATIENT SERVICE CONSUMPTION

B3.2. You mentioned that during the past 12 months you had an experience of inpatient service consumption. How many nights in general have you spent in an inpatient facility in the past year?

____ nights

B3.3. Who did refer you to the last hospitalization:

- Own decision
- Ambulance
- Physician — choose specialty

- Or it was planned / regular hospitalization?
- Other (specify)
- DA / R

B3.4. What was your diagnosis when you were hospitalized? _____

B3.5. Where have you been hospitalized last time?

CARD B3.5

- City or regional hospital
- Oblast hospital
- Republican clinic / hospital
- Departmental hospital
- Private clinic
- Other (specify)
- DA / R

B3.6. Why did you choose that exact facility? CARD B3.6. Choose up to three options.

- I or my family always receive inpatient care there, do not choose (doctor's referral) 1
- Building / facility is in a good condition
- There is necessary equipment there
- Location
- Physician is always present
- Friendly medical staff
- Affordable medicines
- Service payment is affordable or cheap
- Short waiting time (places are available)
- Competent medical staff
- This is a private health care facility where the quality of medical assistance is better than in the nearest state health care facilities
- Ambulance took me there
- Familiar physician / This physician was recommended
- Other (specify) _____
- DA / R

B3.7. For how many nights did your last hospitalization last?

____ nights

B3.8. Was this hospitalization:

- Urgent (called ambulance)
- Related to surgery
- Related to pregnancy (exclude delivery)
- Related to birth of a child

B3.9. How much time did it take before doctor in an inpatient facility examined you? ____ hours____ minutes

B3.10. Not counting medicines, diagnostic procedures, and lab tests during this hospitalization how much did you pay?

B3.11. (for each item, regardless of respondent paid or did not pay, ask) Did somebody require any payment, even if only hinted?

- Pay to the account of a charitable fund or other (non-medical) organization? _____ UAH
- Pay at the cash desk according to the official rules and official price list of a medical facility? __ UAH
- Pay informally, through hands to hands or give a gift to the doctor or other medical staff? (if gave a gift ask to evaluate the price)

B3.12. Did this payment cover improved conditions of stay (e.g., VIP room)?

Answer options:

- Yes
- No
- DA/R

B3.13. Have you had any diagnostics or lab tests during inpatient treatment?

A. Lab tests; B. Diagnostics

- Yes, diagnostics only
- Yes, lab tests only
- Yes, both
- No

B3.14. How much did it cost for you in total?

А. Lab tests? _____ UAH

Б. Diagnostics? _____ UAH

B3.15. Where did you undergo that diagnostics and / or lab tests? (several answers in each column are available)

A. Lab tests B. Diagnostics

Answer options:

- In the same hospital
- In [another] state policlinic / hospital
- In private diagnostic center (laboratory)
- In [other] private clinic / hospital
- Other (specify)

B3.16. How many medicines were you prescribed by a physician?

_____ names If none (0) => go to instruction before B3.23

B3.17. Which of them did you receive in the hospital free of charge? ____ names

B3.18. If you were given any medicines did you need to pay for them and how much did you pay?

_____ UAH

B3.19. Did you buy all the prescribed medicines?

Answer options:

- No
- Almost all
- All => B3.21

B3.20. Why didn't you buy all the medicines? (several options are available)

- Had no money
- Didn't think it was necessary to buy all the medicines
- Not available in pharmacy, did not find
- Other (specify)

B3.21. How much did you pay for these medicines (except of those given at the hospital)? _____ UAH

B3.22. Which part of the medicines cost were reimbursed by the stat? _____ %

B3.23. If you have insurance, what part of such costs were covered:

- Medicines costs __%
- Medical assistance costs __ %

B3.24. If you are participant of a sick fund, what part was covered:

- Medicines costs __%
- Medical assistance costs __ %

B3.25. Was it difficult for you and your family to find money to cover all the expenses (formal and informal)?

- Not difficult at all
- Rather easy
- Rather difficult
- Extremely difficult

- For doctor's services, surgery
- For medicines
- For diagnostics and lab tests

B3.27. How much your household needed to ask or borrow money from relatives, friends, bank, use your credit card or sell jewelry, property to cover these expenses? _____ UAH

B3.28. How do you rate the following aspects of inpatient care?

CARD B3.28. Read and choose an answer in each row in the table below.

B3.29. Now look at card B3.29. Listed here are all the aspects that I have just read to you. Please say, which of these are more important for you. You can choose up to three.

CARD B3.28. No more than 3 answers in column B3.28.

Answer options:

- Very good
- Good
- Normal
- Bad

- Very bad

CARD B3.28:

- Treatment efficiency
- Affordability and availability of medicines
- Qualification of doctors
- Affordability and availability of diagnostic and lab tests
- Sanitation and setting of health care facility
- Quality of food
- Friendliness of doctors
- Time spent for registration in the admission department, including transportation by ambulance
- Clear and transparent policies of payment for care (including the absence of informal payments)
- Friendliness of nurses
- In general, how do you rate the inpatient care?
- NONE OF ABOVE OPTIONS
- DA / R