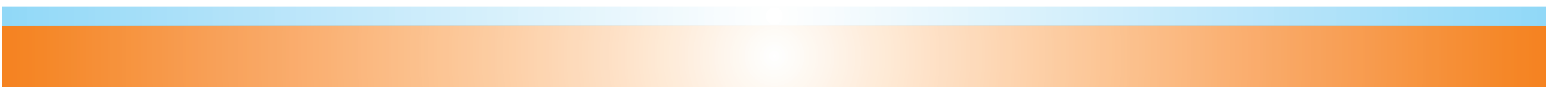


MEDICAL TOURISM: KAZAKHSTAN

Analytical Report September 2018

Interview field work, data analysis and presentation was conducted by GFK company Kazakhstan.

All the information provided was verified by KHIDI CIS (Almaty, Kazakhstan)



Abstract

It has become common for Kazakhstan citizens to travel abroad in terms of medical tourism. This report is based on the qualitative (deep interviews) and quantitative (study) of three reference groups: tourism agencies, existing customers and potential customers of medical tourism. Main aim of the study was to analyze the market of medical tourism services amongst the Kazakh population: reveal the key players in the field, demand dynamics for medical tourism services, typical client image and typical decision-making process. This study provides a comprehensive analysis of the current state of healthcare system in Kazakhstan and main reasons Kazakh nationals are seeking medical treatment abroad (diseases, motives). A deep analysis of the information sources used for medical tourism destination and hospital selection criteria is provided for all countries popular amongst Kazakh citizens. In regard, to South Korea analysis of the strength and weaknesses of medical services in relation to other countries is provided. This study is summarized with a development strategy for Korean medical tourism sector to improve the quality of services offered and increase the inflow of patients from Kazakhstan.

Glossary

AIDS	Acquired immunodeficiency syndrome
AITC	Association of Internet Trade Companies
CIS	Commonwealth of Independent States
GDP	Gross domestic product
GI	Government institutions
GVFMC	Guaranteed volume of free medical care
HIV	Human immunodeficiency virus
II	In-depth interview
JCI	Joint Commission International
LHA	Local health authority
MIBG	Metaiodobenzylguanidine
MOHSD	Ministry of Health and Social Development
MSHI	Mandatory social health insurance
MTI	Medical Tourism Index
MSPC	Medical Services Payment Committee
NSK	“Neftnaya strahovaya kompaniya – oil insurance company”
NSPP	Non-state pension provision
PHC	Primary health care
PPP	Public-private partnerships
RK	Republic of Kazakhstan
SEO	Search engine optimization
SGBP	State guaranteed benefit package
SHIF	Social Health Insurance Fund
SSD	Socially significant diseases
TB	Tuberculosis
UMC	University Medical Center in Astana, Kazakhstan
VfM	Value for Money
WHO	World Health Organization

Contents

Abstract	2
Glossary	3
1. Introduction	6
1.1. Aims and objectives.....	6
1.2. Design of the study.....	7
1.3. Study groups: characteristics	9
2. Kazakhstan: essential information	12
2.1. General information	12
2.2. Economic situation	16
2.3. Population health: statistics	18
2.4. Healthcare system structure	21
2.5. Government support for treatment abroad	27
2.6. National healthcare future development strategy	30
2.7. Changes to the social health insurance system	32
3. Demand for medical tourism in Kazakhstan	33
3.1. Main problems with healthcare in Kazakhstan and reasons for seeking medical treatment abroad (from deep interviews).....	33
3.2. Main players: most popular destinations amongst Kazakh population (from deep interviews with existing customers)	35
3.3. Emerging players: other destinations gaining popularity amongst Kazakh population	38
4. Results: travel agencies (qualitative study)	40
4.1. General information and key players in the Kazakhstan market	40
4.2. Types of services offered by the travel agencies	41
4.3. Key aspects of work and formation of destination ratings	42
4.4. Demand for medical tourism services: opinion of travel agencies	44
4.5. Typical client image	45
4.6. Problems clients expressed to the travel agencies	46
4.7. Needs and requirements of travel agencies and their clients	48
5. Existing customers of medical tourism.....	50
5.1. Reasons / medical diagnose of existing medical tourism users	50
5.2. Decision making process	53
5.3. Trip organization: travel agency services	54
5.4. Critical decision-making factors (in terms of destination country and hospital)	56
5.5. Expectations and satisfaction of treatment abroad	58
5.6. Statistics: key aspects of organization (pre-treatment) phase	60
5.7. Statistics: key aspects of trip for medical tourism	64

5.8. Statistics: Characteristic profile of medical tourism users	69
5.9. Conclusions from existing customers of medical tourism	72
6 Results: potential customers of medical tourism	74
6.1. Qualitative study: potential customers of medical tourism	74
6.2. Statistics: types of planned medical treatments	76
6.3. Statistics: key aspects of upcoming trip organization	78
6.4. Statistics: Characteristic profile of potential users of medical tourism	83
6.5. Conclusions from potential customers	85
7. Competitor analysis: medical tourism destinations	86
7.1. Statistics (existing customers): information about medical tourism destinations	86
7.2. Statistics (existing customers): negative attitude on medical tourism destinations	93
7.3. Statistics (potential customers): countries considered as medical tourism destinations	95
7.4. Statistics (potential customers): negative attitude on medical tourism destinations	99
7.5. Conclusions: competitor analysis	102
8. Medical tourism destination: South Korea	105
8.1. Statistics: Main reasons for choosing Korea	105
8.2. Statistics: Main problems with medical tourism in Korea	107
8.3. SWOT analysis	108
9. Development strategy for medical tourism in Korea	110
9.1. General image: customer-centered communication strategy	110
9.2. Korean hospitals: value for money, provider-patient communication strategies	113
9.3. Tourism agencies/local doctors: intermediary facilitator strategy	117
9.4. Collaboration strategies	118
References	120
Appendix I: tourism agencies	121
Appendix II: medical insurance companies	130
Appendix III: Medical tourism search statistics using Yandex	133

1. Introduction

1.1. Aims and objectives

The aim of this study was to conduct the market research of medical tourism in the Republic of Kazakhstan.

Objectives of the study:

- ❑ Identification of the leading travel agencies involved in the organization of medical tourism to South Korea and other foreign countries
- ❑ Analysis of the main barriers and drivers in the medical tourism market conducted by travel agencies
- ❑ Determination of the basic needs of travel agencies for the development of medical tourism to South Korea
- ❑ Analysis of the demand for medical tourism services among the urban population of the Republic of Kazakhstan
- ❑ Analysis of the main drivers and barriers of potential and actual consumers of medical tourism services abroad, including South Korea
- ❑ Determination of the basic needs of customers and potential customers of medical tourism services amongst the Kazakhstan population
- ❑ Determination of the socio-demographic portrait of potential and actual customers of medical tourism services to foreign countries
- ❑ Definition of the level of knowledge about medical tourism destinations (countries)
- ❑ Analysis of the level of interest in using the medical tourism services;
- ❑ Determination of how the Relevant Set of foreign countries is formed for clients, how and where they choose clinics, which diseases are most common, and how the ranking of South Korean hospitals is formed.

This study was divided into the following stages:

1. Preparation of the database of travel agencies engaged in medical tourism.
2. Performing qualitative research by conducting in-depth interviews with travel agencies engaged in the provision of medical tourism services, with actual users who received medical services abroad in South-East Asia, including South Korea and other countries except the countries of South-East Asia and the CIS countries and with potential users planning to use medical services abroad who do not reject consideration of South Korea.
3. Performing a quantitative study by conducting personal interviews with actual users who received medical services abroad in South-East Asia, including in South Korea and in other countries except in South-East Asia and the CIS countries and with potential users planning to use medical services abroad, who do not reject consideration of South Korea (GfK Kazakhstan).
4. Analysis of the data obtained and development of the strategy for the development of medical tourism in Korea for the Kazakhstan population.
5. Collection of descriptive information of travel agencies for the catalogue.
6. Collection of descriptive information of medical insurance companies for the catalogue.

1.2. Design of the study

Overall, the interview stage was separated according to three study groups:

Tourism agencies

Table 1. Characteristics of the qualitative study amongst medical tourism agencies

Method of study	in-depth interviews
Geography of the study	Almaty and Astana
Target audience	Travel agency managers dealing with medical tourism
Number	10 in-depth interviews
Duration of an in-depth interview	about 60 minutes
Period of the survey	February 5, 2018 – February 19, 2018

Existing medical tourism users

Survey of the existing customers of medical tourism services (14 in-depth interviews (qualitative study) and 200 personal interviews with the help of a tablet (quantitative study))

Table 2. Characteristics of the qualitative study amongst existing medical tourism users

Method of study	in-depth interviews	
Target audience	medical tourism users who visited South-East Asia	7 interviews
	medical tourism users who visited other countries apart from South-East Asia and the CIS countries	7 interviews
Duration of an in-depth interview	about 60 minutes	
Period of the survey	February 5, 2018 – February 19, 2018	
Geography of the study	City of Astana, city of Almaty, city of Shymkent, city of Pavlodar, city of Karaganda, city of Aktau, city of Atyrau	

Table 3. Characteristics of the quantitative study amongst existing medical tourism users

Method of study	personal interviews with the help of a tablet	
Target audience	medical tourism users who visited South-East Asia	100 personal interviews
	medical tourism users who visited other countries apart from South-East Asia and the CIS countries	100 interviews
Duration of a personal interview	20 minutes	
Period of the survey	April 2, 2018 – April 25, 2018	
Geography of the study	City of Astana, city of Almaty, city of Shymkent, city of Pavlodar, city of Karaganda, city of Aktau	

Potential users of medical tourism

Survey of potential users of medical tourism services (7 in-depth interviews (qualitative study) and 200 personal interviews with the help of a tablet (quantitative research))

Table 4. Characteristics of the qualitative study amongst potential medical tourism users

Method of study	in-depth interviews	
Target audience	Potential users of medical tourism services who plan to undergo treatment abroad without not rejecting South-East Asia	7 interviews
Duration of an in-depth interview	about 60 minutes	
Period of the survey	February 5, 2018 – February 19, 2018	
Geography of the study	City of Astana, city of Almaty, city of Shymkent, city of Pavlodar, city of Karaganda, city of Aktau, city of Atyrau	

Table 5. Characteristics of the quantitative study amongst potential medical tourism users

Method of study	personal interviews with the help of a tablet	
Target audience	People who plan to use medical services in South Asia and South-East Asia	100 interviews
	People who plan to use medical services in other countries apart from South Asia, South-East Asia and the CIS countries	100 interviews
Duration of a personal interview	20 minutes	
Period of the survey	April 2, 2018 – April 25, 2018	
Geography of the study	City of Astana, city of Almaty, city of Shymkent, city of Pavlodar, city of Karaganda, city of Aktau	

1.3. Study groups: characteristics

Tourism agencies

Table 6. Details of tourism agencies involved in the qualitative study

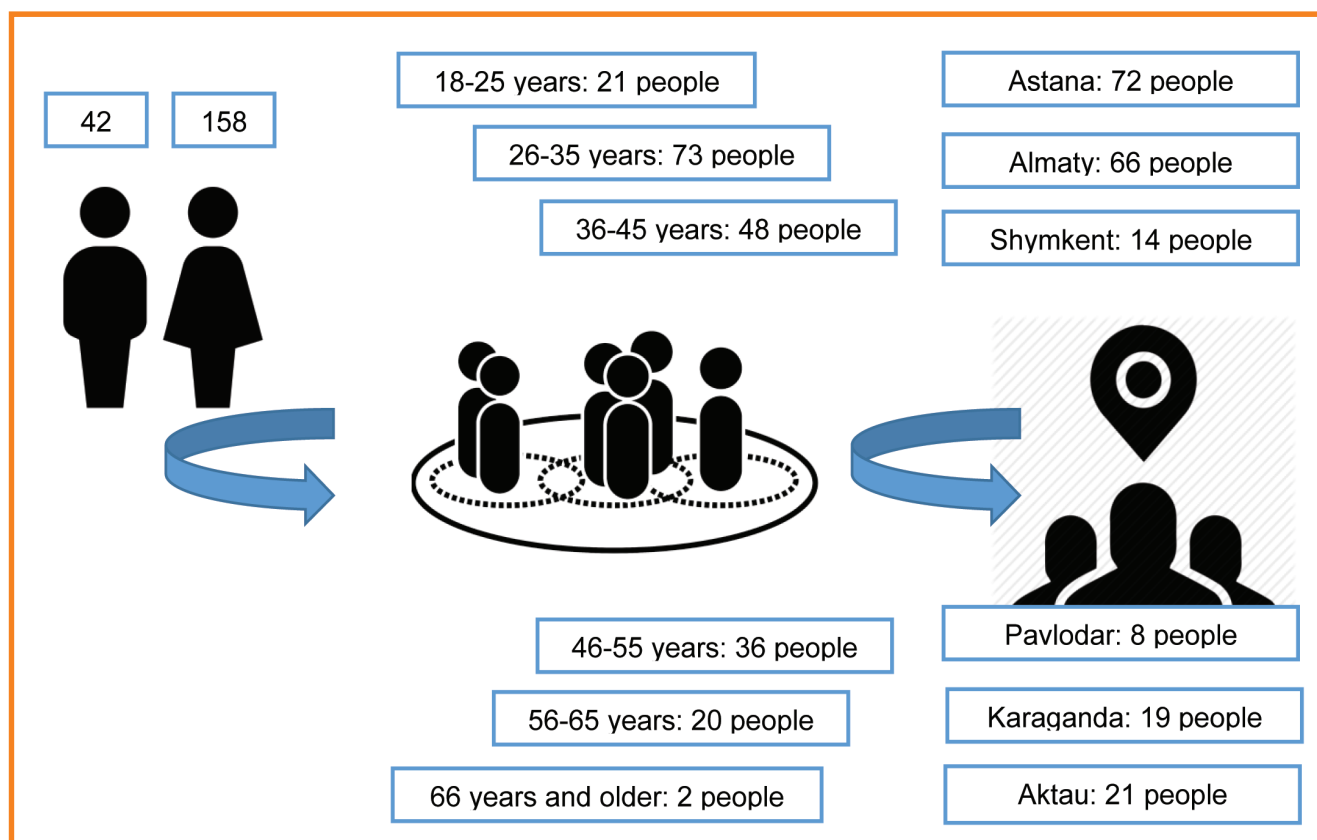
No.	Agency	Name	City	Position	Countries
1	Travel agency	Golden Tour	Almaty	manager	South Korea
2	Travel agency	Viva-City LLC	Astana	manager	Korea, Singapore, China
3	Travel agency	MA-TOUR KAZAKHSTAN	Almaty	manager	
4	Travel agency	Medicaltour	Astana	manager	Germany, China, South Korea, Spain
5	Travel agency	HONEY-MOON	Almaty	manager	China, Israel, Germany
6	Travel agency	NUR-AI & CO	Almaty	manager	Israel, South Korea
7	Travel agency	ELMA-TRAVEL	Almaty	manager	China, South Korea, India
8	Travel agency	SANITA TOURS INTERNATIONAL	Almaty	manager	Israel, Germany, Switzerland
9	Travel agency	Medastana	Astana	manager	South Korea
10	Travel agency	Sayat Travel	Astana	manager	Hungary, Czech Republic, Israel, South Korea

Existing users of medical tourism services

Table 7. Details of existing medical tourism users involved in the qualitative study

No.	Age	City of residence	Sex	Profession	Country of treatment	Diagnosis
1	33	Almaty	M	Freight manager	South Korea	Oncology disease, tumor on the leg
2	27	Almaty	F	Realtor, sole-proprietor	Israel	Cerebral cyst
3	35	Almaty	F	Accountant	Thailand	Mammoplasty
4	39	Almaty	F	History teacher, private school	Germany	Coronary heart disease
5	29	Astana	F	Accounting services, sole-proprietor	Israel	Stomatology, implantation
6	65	Aktau	M	Director of the Plastic Factory	Turkey	Obstructive jaundice, decontamination of bile ducts
7	48	Shymkent	M	Long-distance driver	Germany	Pleuritis, pneumonia
8	44	Shymkent	F	Clothing trade, sole-proprietor	China	Gallstone disease
9	45	Astana	F	Logistics, freight manager	China	Cervix cyst
10	48	Karaganda	F	Accountant	South Korea	Rhinoplasty
11	28	Karaganda	F	Sales Manager	Turkey	Stomach cancer
12	27	Atyrau	M	Trade	South Korea	Lymphoma
13	35	Pavlodar	F	Teacher of the Kazakh language	South Korea	Third-degree stomach ulcer
14	45	Pavlodar	M	Food trade, sole-proprietor	Germany	Prostate adenoma

Figure 1. Schematic description of existing medical tourism users involved in the quantitative study

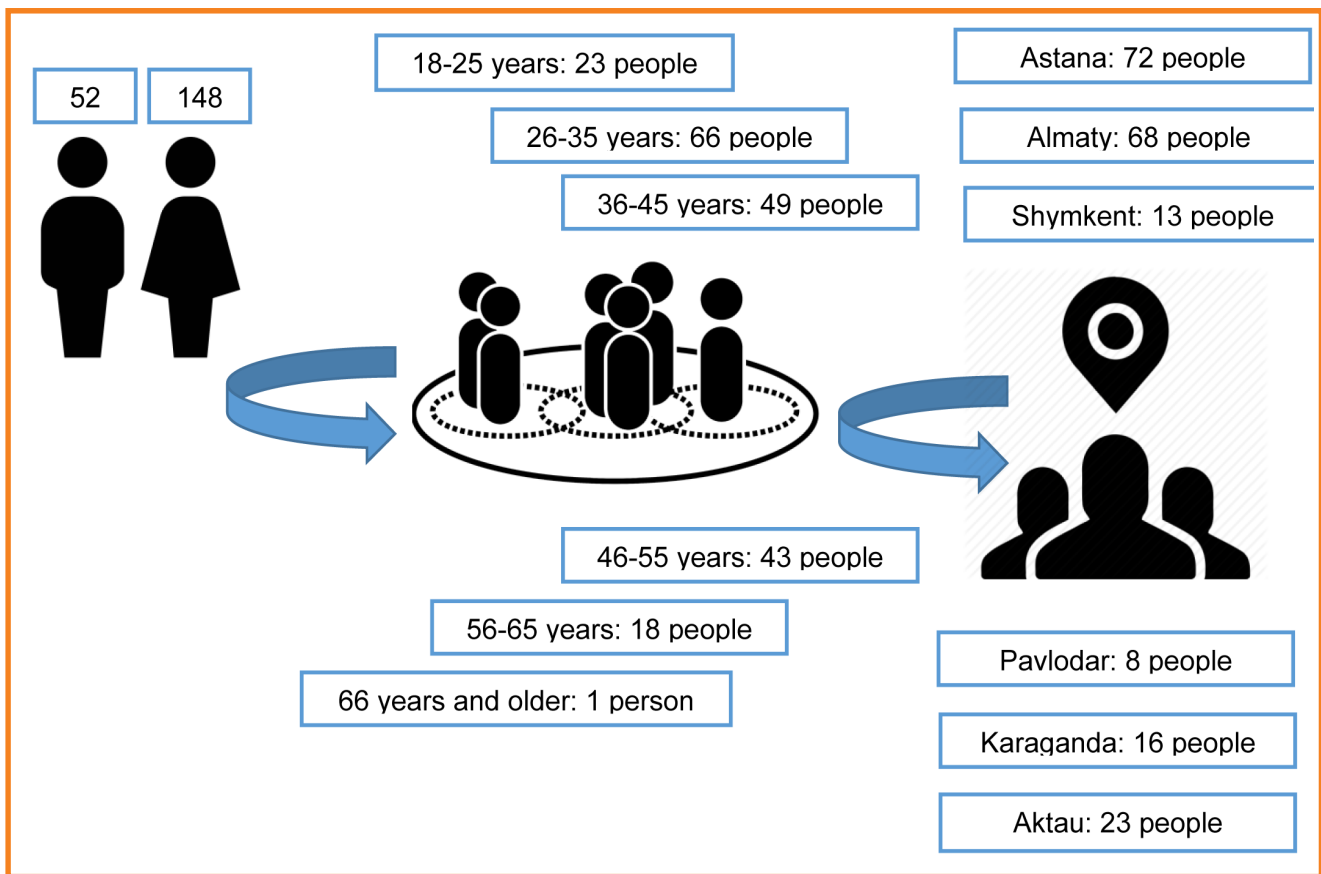


Potential users of medical tourism services

Table 8. Details of potential medical tourism users involved in the qualitative study

No.	Age	City of residence	Sex	Profession	Country of treatment (consider possibility)	Diagnosis
1	36	Almaty	F	Teacher	China	Phlegmon of the neck
2	37	Almaty	M	Vehicle spare parts trading, sole-proprietor	Israel	Prostate adenoma
3	44	Shymkent	F	Clothing trade, sole-proprietor	Israel	Myoma
4	31	Astana	F	Financier	South Korea	Thyroadenitis Hashimoto disease;
5	34	Karaganda	F	Real estate specialist	South Korea	Remodeling of the lower jaw bone, rhinoplasty
6	48	Pavlodar	M	Dental lab technician	South Korea	Stomach ulcer
7	30	Aktau	M	Office manager	South Korea	Myoma

Figure 2. Schematic description of potential medical tourism users involved in the quantitative study



2. Kazakhstan: essential information

2.1. General information

The capital of the Presidential Republic: Astana. Geographical coordinates: 51 10 N, 71 25 E. Time zone: UTC + 6 (Note: Kazakhstan has two time zones). Population of Kazakhstan: 18,556,698 (estimate for July 2017). Languages: Kazakh (official) and Russian (official, used in everyday business, meaning 'language of interethnic communication').

Head of State: President Nursultan Abishuly NAZARBAYEV (Chairman of the Supreme Council as of February 22, 1990, elected President on December 1, 1991)

Head of Government: Prime Minister Bakhytzhan SAGINTAYEV (since September 9, 2016); First Deputy Prime Minister: Askar MAMIN (since September 13, 2016)

Cabinet: Council of Ministers appointed by the President

Elections / appointments: President, directly elected by the majority of votes for 5 years (right for the second consecutive term); elections were held on April 26, 2015; The Prime Minister and Ministers are appointed by the President with the consent of the Mazhilis; the amendments to the Constitution in May 2017 reduced the presidential term from 7 to 5 years and established a 2-consecutive limit. Nazarbayev N.A. has the official status of the 'First President of Kazakhstan' and has an unlimited term of presidential rule.

Election results: Nursultan Abishuly NAZARBAYEV was re-elected as the President; percentage of votes - (Nur Otan): 97.8%, others: 2.2%.

Description of the legislative system: The bicameral parliament consists of the Senate (47 seats, 32 members indirectly elected by the majority in 2 rounds of voting at regional assemblies and 15 members appointed by the President, members serve for six-year terms, half of the members are renewed every 3 years) and the Mazhilis (107 seats, 98 members who are elected by direct vote in one national constituency by voting on a proportional representation for 5 years and 9 indirectly elected by the Assembly of the People of Kazakhstan, 350 members, advisory body called to represent ethnic minorities of the country, appointed by the President).

Elections: The Senate - held on June 28, 2017 (the next to be held in 2020); the Mazhilis - held on March 20, 2016 (the next one by 2021)

Election results: seats by party - Nur Otan - 16 seats; the Mazhilis - percentage of votes from the party - Nur Otan - 82.2%, Ak Zhol - 7.2%, the Communist People's Party - 7.1%, others - 3.5%; seats by parties - Nur Otan - 84 seats, Ak Zhol - 7 seats, the Communist People's Party - 7 seats.

Judicial branch: Supreme Court (s): Supreme Court of the Republic (composed of 44 members); The Constitutional Council (composed of 7 members). The choice of the judge and the term of office: the judges of the Supreme Court, proposed by the President of the Republic on the recommendation of the Supreme Judicial Council and confirmed by the Senate; judges usually serve up to 65 years, but the term can be extended to 70 years; The Constitutional Council - the President of the Republic, the Chairman of the Senate and the Chairman of the Mazhilis appoint 1 member for a three-year term and 1 member for a six-year term; The Chairman of the Constitutional Council is appointed by the President of the Republic for a period of 6 years.

Political parties and leaders:

- Ak Zhol or the Democratic Party of Kazakhstan Ak Zhol [Azat PERUASHEV]
- The Auyl National Patriotic Party [Ali BEKTAYEV] (the merger of the Party of Patriots and the Social-Democratic Party of Auyl)
- The Birlik Party (Unity) [Serik SULTANGALI] (the merger of the Adilet Party (Justice, the former Democratic Party of Kazakhstan) and the Rukhaniyat Party (Spirituality))
- The Communist People's Party of Kazakhstan [Vladislav KOSAREV]
- The National Social Democratic Party or the NSDP [Zharmakhan TUYAKBAY]

Fixed-line telephone statistics: 3,931,100

Mobile phone statistics: 25,534,800

Telephone system: internal: long-distance, landline and radio relay networks; mobile communications quickly increase. International country code is +7; international traffic with other former Soviet republics and China is carried out by terrestrial and microwave radio relay transmitter, with other countries - via satellite and fiber-optic cable *Trans-Asia-Europe* (TAE); satellite earth stations - 2 Intelsat (2017).

Mass media: The state owns almost all objects of radio and television programs and manages national television and radio networks; there are 96 television channels, many of which belong to the government, and 4 state radio stations; some former state media were privatized; households with satellite dishes have access to foreign media; a small number of commercial radio stations are operating near state radio stations; current legislation requires all media to be registered with the government and all television providers for digital broadcasting by 2018; broadcasts reach about 99% of the population, as well as neighboring countries (2018).

Country code in the Internet: .kz

The Internet users: 14,100,751 (percentage of the population: 76.8% (July 2016)).

Figure 3. Ethnic composition of Kazakhstan (2017 statistics)

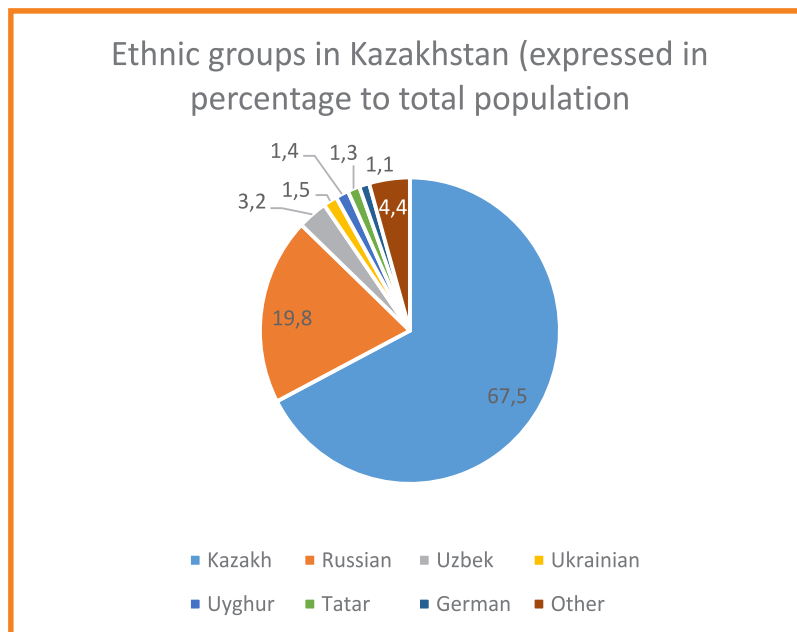


Figure 4. Religious composition of Kazakhstan (2017 statistics)

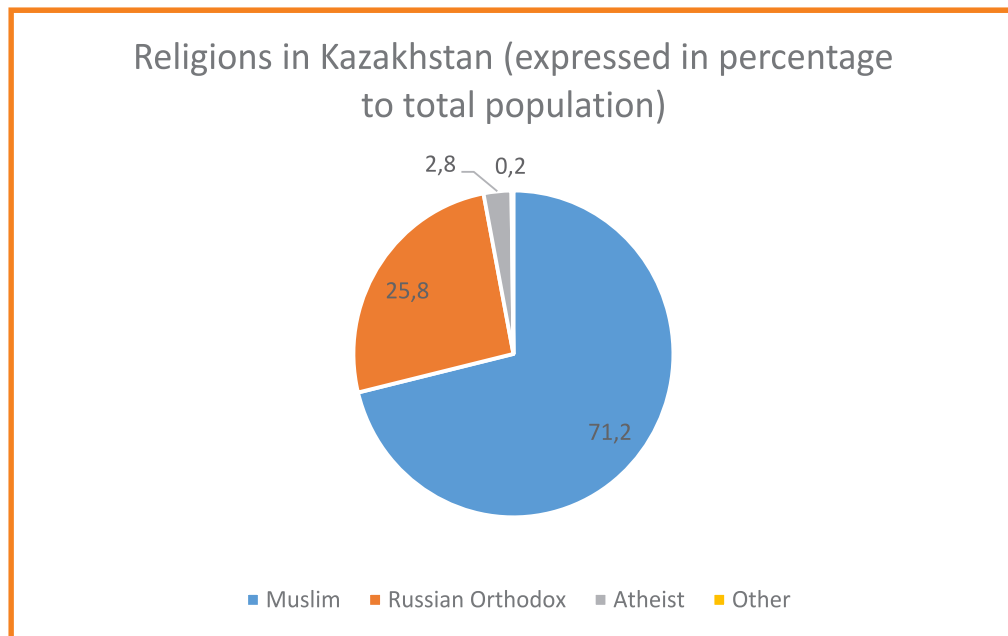


Figure 5. Population division by age and gender (2017 statistics)

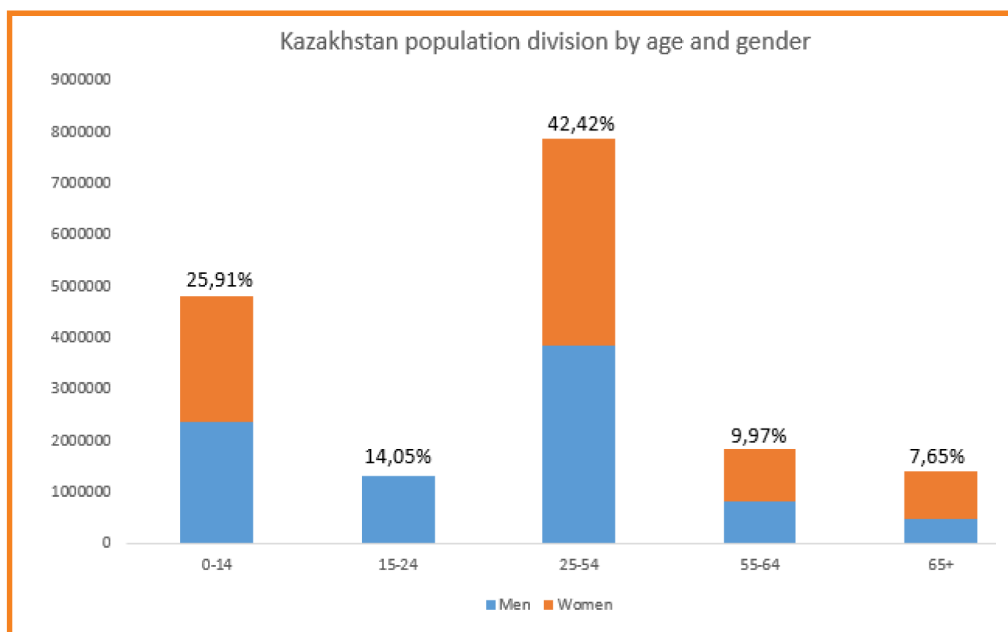


Table 9. Administrative units of Kazakhstan

Nº	City/Region
1	Astana city (capital)
2	Almaty city
3	Shymkent city
4	Akmola region
5	Aktobe region
6	Almaty region
7	Atyrau region
8	East-Kazakhstan region
9	Jambyl region
10	West-Kazakhstan region
11	Karaganda region
12	Kostanay region
13	Kyzylorda region
14	Mangystau region
15	Pavlodar region
16	North-Kazakhstan region
17	Turkestan region

2.2. Economic situation

Economic index

Kazakhstan, the geographically largest country of the former Soviet republics (apart from Russia), has significant resources of fossil fuels, minerals, metals, such as uranium, copper and zinc. In Kazakhstan, there is also a huge agricultural sector where cattle breeding and grain production predominate. In order to avoid dependence of the country's economy on oil and extractive industries, the government of Kazakhstan is working on diversification of the economy, development and attraction of investments in such sectors as transport, pharmaceuticals, telecommunications, petrochemicals, and food industry. In December 2017, the Code 'On Subsoil and Subsoil Use' was adopted to increase exploration and investment in hydrocarbon and, especially, mining industries.

Huge reserves of hydrocarbons and mineral resources of Kazakhstan are the main component of the economy. A 3.8-billion expansion of Kazakhstan's Tengiz oil field shall be completed in 2022. At the same time, the supergiant deposit Kashagan started production in October 2016 after many years of delay and it is estimated that about 55 billion US dollars were invested in its development. Total oil production in Kazakhstan in 2017 has increased by 10.5%.

Industry: Oil, coal, iron ore, manganese, chromite, lead, zinc, copper, titanium, bauxite, gold, silver, phosphates, sulfur, uranium, iron and steel; tractors and other agricultural machinery, electric motors, building materials.

Industrial production growth rates: 4.9% (2017 statistics)

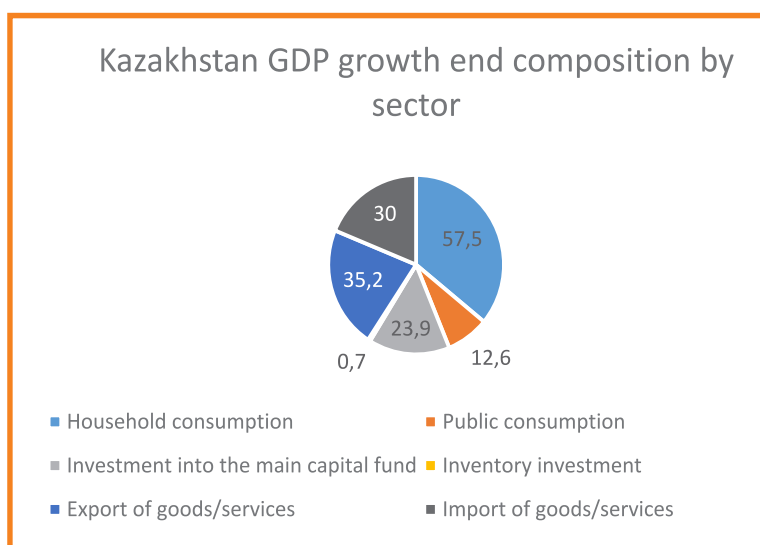
Work force: 9.147 million (2017 statistics).

Unemployment rate: 5% (2017 statistics)

Table 10. Kazakhstan GDP data for the past three years¹:

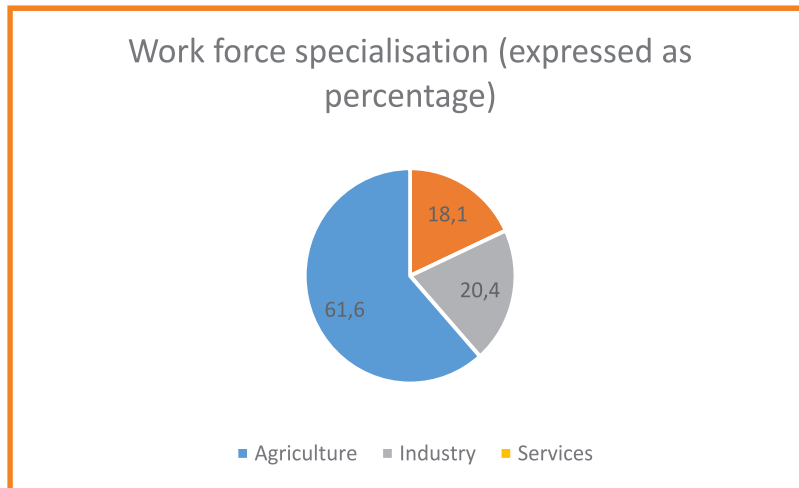
Year	2017	2016	2015
GDP	474.3 billion	459.0 billion	454.1 billion
GDP (rates of growth)	3.3%	1.1%	1.2%
GDP – per capita	26,100	25,600	25,700
Gross national saving	22.8%	22.3%	26.6%

Figure 6. Kazakhstan GDP growth end composition by sector (2017 statistics)



¹All figures are expressed in US Dollars (\$)

Figure 7. Work force specialization (2017 statistics)



National currency: current situation

In similarity to other developing countries such as South Africa, Turkey, Brazil, and Mexico, Kazakhstan national currency (tenge) continues to lose its value. According to the National Bank of Kazakhstan:

“This weakening of the tenge is happening amidst the general weakening of currencies in emerging markets. Main reasons are geopolitical tensions as well as the U.S. protectionism and sanction policies in regard to several developing countries [Russia, China, Turkey], which escalates diplomatic relations,”

The emerging markets witness a foreign capital outflow and expectations for U.S. base rate rise also strengthen the dollar, the Kazakh regulator said. Exchange rate is also influenced by “fundamental factors,” which include oil prices, currency situation in countries that are Kazakhstan’s main trade partners, payment balance and inflation rate. The National Bank maintains a floating exchange rate regime, however it can make interventions to “mitigate significant and destabilizing short-term volatility” in the value of tenge.

Figure 8. Currency rate of Kazakhstan tenge to US dollar (September 2018)²



² Source: Bloomberg

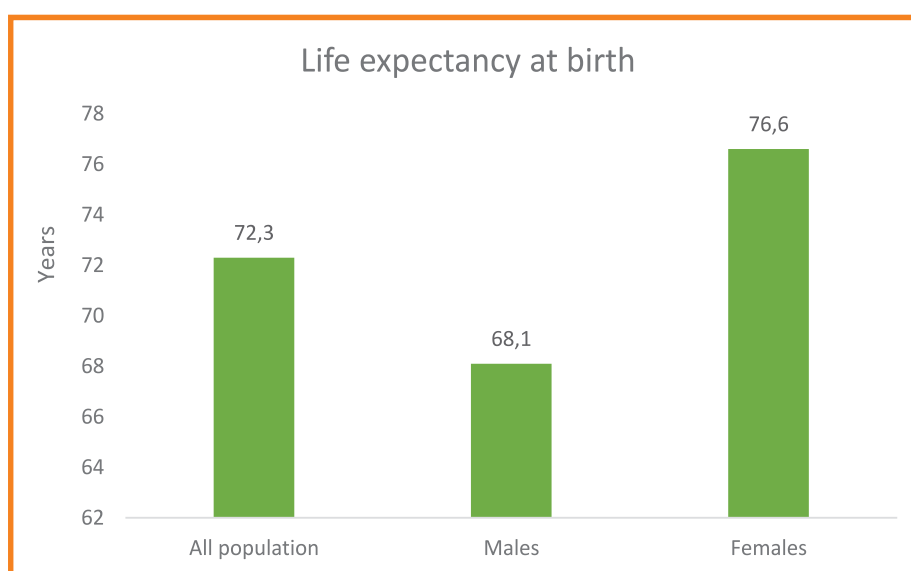
2.3. Population health: statistics

Size and natural movement of the population of the Republic of Kazakhstan

The population of the Republic of Kazakhstan as of November 1, 2017 was 18,117.6 million people, including urban population - 10,399.6 million (57.4%), rural population – 7,718.0 million (42.6%). In comparison to November 1, 2016, the population has increased by 231.6 thousand people or 1.3%. The number of births for January-October 2017 was 327.1 thousand people, which is 5.3% less than for the corresponding period of 2016. The total fertility rate per 1000 people was 21.77 births. The natural increase in the population of the Republic for this period, in comparison with January-October 2016, decreased by 17.5 thousand people or by 7.4% and was equal to 217.7 thousand people. The natural increase per 1000 population was 14.49 people (Ministry of Health of the Republic of Kazakhstan, 2016).

In 2016, the average life expectancy at birth was estimated as 72.3 years, which is comparable with the indicators of life expectancy in neighboring countries (the Kyrgyz Republic, Tajikistan and Uzbekistan), Russia and Ukraine. Kazakhstan has one of the largest gender gaps in life expectancy at birth. On average, women in Kazakhstan live 76.6 years, which is 8.5 years more than men who live 68.1 years (World Bank, 2016, Ministry of Health and Development of Kazakhstan, 2016).

Figure 9. Life expectancy at birth (years)



In general, the three risk factors that cause the greatest number of diseases in Kazakhstan are smoking, drinking alcohol and being overweight (Institute for Health Metrics and Evaluation, 2010). To reduce the risks of disease development, important measures were taken to increase the indicators of mass preventive examination of the population, where significant results were achieved. For example, a population survey for breast cancer is offered to women between the ages of 60 and 70, with a coverage rate close to 70%.

Table 11. The total sickness rate of the population by classes of diseases registered in treatment-and-prevention organizations for 2016 (per 100,000 people)

Type of disease	Number of registered patients
Infectious and parasitic diseases	2,139.5
Neoplasms	1,873.3
Diseases of blood, blood-forming organs and certain disorders involving the immune mechanism	4,060.6
Endocrine diseases, eating disorders and metabolic disorders	4,578
Mental and behavioral disorders	1,259.5
Psychiatric and behavioral disorders associated with the use of psychoactive substances	1,189
Diseases of the nervous system	45,22.9
Diseases of the eye and its appendages	5,806
Diseases of the ear and mastoid process	2,316
Diseases of the cardio circulatory system	15,473.4
Diseases of the respiratory system	29372.5
Diseases of the digestive system	8,802.1
Diseases of the skin and subcutaneous tissue	3,649
Diseases of the musculoskeletal system and connective tissue	5,023.8
Diseases of the genitourinary system	8,784.8
Complications of pregnancy, childbirth and the postpartum period	4,591.5
Individual conditions that occur in the perinatal period	1,787.6
Congenital abnormalities (malformations), deformities and chromosomal abnormalities	792.7
Symptoms, signs and abnormalities detected in clinical and laboratory studies, not elsewhere classified	319.2
Injuries, poisonings and some other consequences of external causes	3,471
Total:	105,096.7

As in the EU and CIS countries, the highest mortality rate in Kazakhstan is associated with cardiovascular diseases (circulatory system diseases). Kazakhstan holds one of the highest death rates from respiratory diseases in the region. Death rate from chronic lower respiratory tract diseases, such as chronic obstructive pulmonary disease (COPD), is more than five times higher than the average index for the CIS countries. Unlike other countries, the cancer mortality rate in Kazakhstan is slightly lower than the average for the CIS countries, but cancer, nevertheless, remains today the third most common cause of death in Kazakhstan. In 2016, 36,813 patients were registered with a newly diagnosed malignant neoplasm for the first time (corresponding to 206.9 cases per 100,000 population). Among women, the most common types of cancer affect the cervix and the mammary gland.

Table 12. Mortality rate of the population by basic classes of causes of death per 100,000 people in 2016

Type of disease	Number of registered patients
Malignant and benign neoplasms	90.2
of which malignant neoplasms	88.16
Diseases of the cardio circulatory system	178.92
Coronary heart diseases	65.94
Cerebral hemorrhage	64.68
Diseases of the digestive system	70.95
Diseases of the respiratory system	102.12
Accidents, injuries and poisonings	75.05
Infectious and parasitic diseases	7.78
Overall mortality rate	737.5

Medical care for pregnant women, parturient women and puerperants

Kazakhstan has made significant progress in the area of maternal care and child health, although there are opportunities for further improvement. Over the past two decades, infant and maternal mortality has decreased significantly, allowing Kazakhstan to fulfill the relevant Millennium Development Goals. Maternal mortality has decreased from 90 deaths per 100,000 live births in 1990 to 13 deaths in 2016. The total number of organizations conducting women's consultations and having obstetric-gynecological rooms numbered 930 institutions in 2016, providing 9.5 people with obstetrician-gynecologists for 1000 births. At the same time, it should be noted that the data about indicators of infant and maternal mortality mask discernible interregional differences. Regional data show a large and persistent geographical disparity in the health of infants and mothers.

Table 13. Infant mortality rate at the age of under 1 year by basic classes of causes of death per 10,000 live births for 2016

Type of disease	Number of registered patients
Diseases of the respiratory system	5.12
Pneumonia, including influenza	4.77
Infectious and parasitic diseases	3.07
Intestinal infectious diseases	0.17
Congenital abnormalities	19.44
Conditions arising in the perinatal period	45.9
Sepsis	4.9
Accidents, injuries and poisoning	4.5
Died due to all causes	85.9

2.4. Healthcare system structure

Historical transition of the healthcare system of Kazakhstan

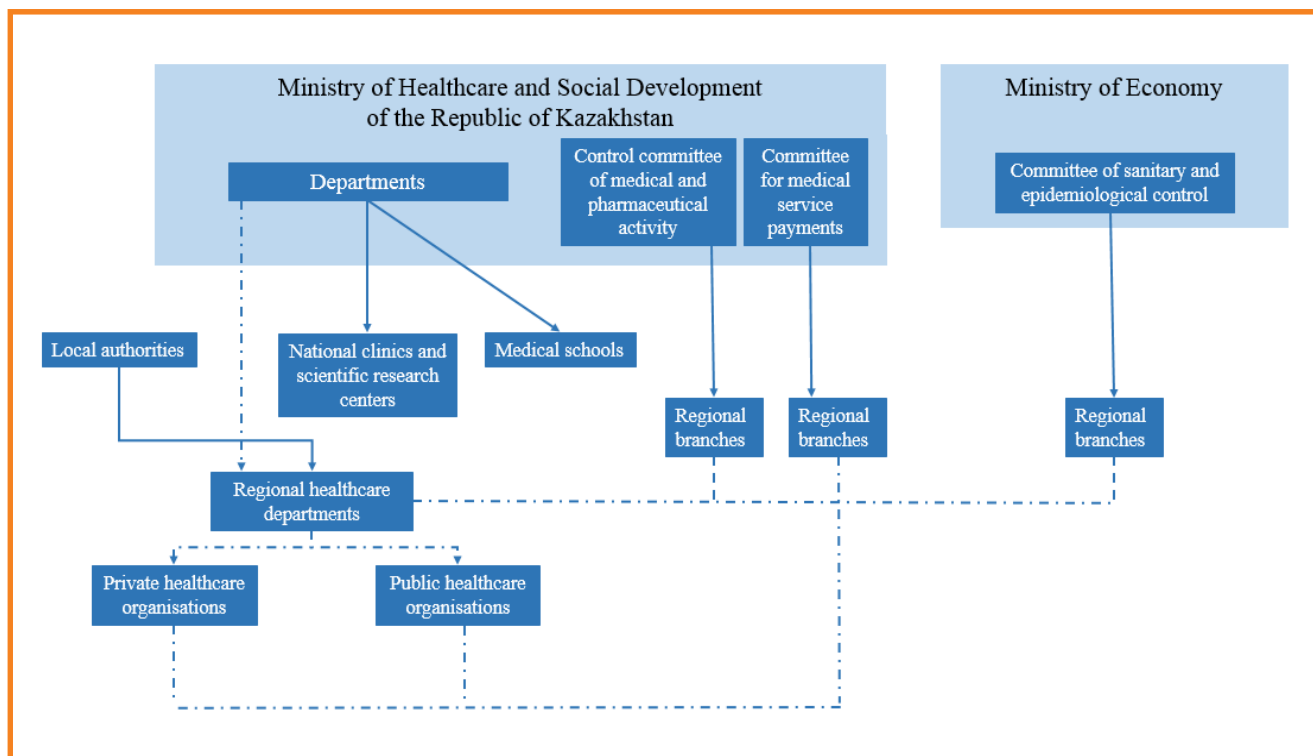
At the collapse of the Soviet Union, Kazakhstan inherited a highly centralized health care system, typical of the Soviet model. Subsequently, several waves of reforms sought to empower regional and local authorities and reorganize service delivery as well as encourage the private provision of services. Not all envisaged changes were implemented, notably the restructuring and decentralization plans initiated during the first decade of independence did not bring about the anticipated changes. The pace of change increased in 2004, when a comprehensive program of reforms - National Program for Health Care Reform and Development 2005-2010 - was adopted, proposing modifications in nearly all aspects of the health care system. It introduced a State-Guaranteed Basic Benefits Package (SGBP) of services provided free of charge, which covers specified health services. The SGBP aims to delimit state guarantees, equalize them between regions and population groups and provide a basis for financial sustainability of the system. Under the same program, the responsibilities for financing and managing health care delivery as well as ownership of most of the health care facilities were consolidated at the level of the 14 administrative units and cities of Almaty and Astana.

In 2009, the government further increased the authority of the Ministry of Health Care and Social Development (MOHSD), which became more explicitly responsible for developing national health policies and strategic development plans, in line with priorities set out by the President. During this period, existing regulations were modified in favor of increased competition, quality of care, evidence-based medicine, accountability, and pluralism of ownership. In 2010, the State Health Care Development Program for 2011-2015- "Salamatty Kazakhstan"- was adopted by way of a Presidential decree which introduced the concept of the Unified National Health Care System. In line with it, elements of the financing and payment functions were recentralized and MOHSD became the main public purchaser of hospital services. The principle of free choice of provider was also strengthened. In parallel, certain functions, such as quality assurance, public health oversight, and sanitary-epidemiological responsibilities were further strengthened.

Hospitals remain the cornerstone of service delivery in Kazakhstan. A combination of normative plans and contractual incentives has been used by the MOHSD and other public authorities to reorganize and downsize hospital infrastructure. The number of hospitals and beds has been declining since the middle of the 2000s. Small hospital departments or units (e.g. maternity and emergency departments used by few patients) were shut down and the services absorbed by other centers. Significant efforts have been also put in place to re-profile rural hospitals into ambulatory care units. The closing of hospitals was often accompanied by the strengthening of regional units with technological investment. A few centers of excellence with state of the art technology have also been set up. These include the hospitals of the Corporate Fund "University Medical Center", formerly known as National Medical Holding, as well as the National Research Cardiac Surgery Center.

Organizational structure of public healthcare in the Republic of Kazakhstan

Figure 10. General organization and management of the healthcare system - simplified organizational chart. Source: The Ministry of Health of the Republic of Kazakhstan, 2017.



Currently, the development of public policy measures and financing functions are largely centralized within the Ministry of Health. Three specialized committees have been established at the national and regional levels to promote healthcare policy at the national and regional levels: the Medical and Pharmaceutical Control Committee (the Pharmacy Committee), the Medical Services Payment Committee (MSPC), and the Public Health Committee.

The main responsibility of the Pharmacy Committee is to ensure quality and control of medicines and drugs. This includes the accreditation, licensing and certification of both individuals and legal entities involved in the provision of health services, and conducting quality audits and investigations of patient complaints at the local level.

The Medical Services Payment Committee is a strategic body set up to acquire (through contractual agreements) all publicly funded health services; it is also the main structure in the creation of modern health financing mechanisms. The objectives of the Medical Services Payment Committee include: creating an equitable environment for public and private players, and reducing the differences in funding between regions. Over time, the Medical Services Payment Committee became the main public purchaser of medical services. Both committees have vertical structures with representations at the regional level. Within the Ministry of Health, a unified distributor of medicines has been created alongside with a mandate to purchase all medicines for public health facilities.

The mandate of the Public Health Committee is broad and includes issues of implementing policies in the field of sanitary and epidemiological welfare of the population. The key areas of its responsibility is the supervision of the state of affairs in the field of public health and sanitary and epidemiological services. The latter area of activity includes the prevention and control of infectious diseases, the monitoring of the sanitary and epidemiological situation in the country, including the quality of water and food, and monitoring of laboratory safety. The Committee of State Sanitary and Epidemiological Supervision has a vertical structure with representatives in all areas.

State Guaranteed Benefits Package

It is allowed for every citizen in Kazakhstan to receive free medical care, and all this together is called the State Guaranteed Benefits Package. Free medical care is provided to citizens of the Republic of Kazakhstan and “oralmans” (ethnic Kazakh immigrants who migrate to Kazakhstan from neighboring countries) at the expense of budgetary funds and includes preventive, diagnostic and therapeutic medical services with the greatest proven effectiveness. The State Guaranteed Benefits Package is separated into two categories, according to the administrative units who bear the financial expenses through state or local budgets.

The State Guaranteed Benefits Package carried out at the expense of the state budget includes:

- Provision of specialized medical assistance, including rehabilitation assistance to adults and children in the direction of health organizations: surgical, neurosurgical, uronephrological, psychiatric, oncological and radiological, dermatological-venereological, ophthalmic, cardiological, obstetric-gynecological and in diseases associated with exposure to harmful and dangerous production factors, tuberculosis, leprosy;
- Provision of medical care to HIV-infected patients;
- Provision of medical care for diseases arising in emergency, emergency situations;
- Forensic medical examination.

State Guaranteed Benefits Package covered at the expense of the local budget, includes:

- Primary health care;
- Consultative and diagnostic assistance provided by specialized outpatient clinics, in the direction of primary health care specialists;
- Dental care for children under 18 years old, except for orthodontic care, pregnant women and patients with acute dental pain;
- Physiotherapy care for children under 18;
- Emergency and emergency care;
- Inpatient medical care, rehabilitation, adults and children at the local level, including:
- Provision of emergency assistance;
- Provision of routine care for all types of diseases in the direction of specialists in primary health care, including: oncological, psycho-neurological, infectious, ophthalmic, surgical, neurosurgical, orthopedic, uronephrological, therapeutic, traumatological, dermatological-venereological, pregnant and sick with gynecological diseases, sick with alcohol and drug addiction, tuberculosis, diabetes, bronchopulmonary diseases;
- Provision of medical care for diseases arising in emergency, emergency situations;
- Provision of medical care to HIV-infected patients

Government finance of public healthcare

According to international standards, Kazakhstan's investment in healthcare in general remains humble. The Ministry of Health allocates most of the health budget either directly or through the regional health departments. The Medical Services Payment Committee (MSPC) finances significant part of the guaranteed volume of free medical care, including:

- Ordinary inpatients treated in urban multi-field hospitals, whose costs are reimbursed within a system based on clinical and statistical groups, and are divided into three categories: specialized medical care, day care and tertiary (highly specialized) medical care. Inpatient treatment of socially significant diseases (SSD), such as tuberculosis, psychiatric / narcological diseases (drug addiction), infectious diseases, HIV / AIDS, dermatovenereological, oncological diseases, is excluded from this funding mechanism.
 - Provision of outpatient care in urban areas with per capita financing.
 - Provision of medical care in rural areas (inpatient and outpatient treatment) through the national budget mechanism.
 - Cancer treatment through the national budget mechanism.

Total expenditure on health amounted to 4.4% of GDP in Kazakhstan in 2014 (latest available data). In fact, the share of total health spending in GDP has remained in the range between 4.0 and 4.5% for the past two decades: 4.4% in 2010, 4.1% in 2005, 4.2% in 2000, and 4.6% in 1995 (WHO, 2016). As Kazakh economy was one of the fastest growing

ones worldwide for the better part of the 2000s, with the GDP growth averaging almost 8% per annum, in real terms, total health spending has increased significantly since the mid-1990s. At the moment, public spending on healthcare covers only 57% of the total expenditure in this area, and, therefore, leads to significant costs for patients who are forced to pay for health services out of their pocket. Payments from patients' pockets account for 38% of total healthcare expenditure in Kazakhstan, which is significantly higher than the WHO's level, according to which the share of such payments should not exceed 20% (only under this condition the patients are financially protected). A significant part of these costs is due to the fact that the SGBP covers a very limited number of medicines. On average, the Kazakhstanis cover 84% of the cost of medicines from their own funds. Medications prescribed by PHC physicians are usually paid by the patient himself, and they are given free of charge only to patients with 'socially significant diseases' which are limited. To alleviate the burden of medication costs, the government is gradually expanding the primary list of benefits introduced in 2005, but the level of payments from patients' pockets remains high.

Informal payments are also very frequent in Kazakhstan, in comparison to global indicators. According to the Global Corruption Barometer - 2013, published by the organization Transparency International, 17% of people worldwide, who applied for medical assistance during the previous 12 months, said that they had paid bribes. In Kazakhstan, this figure was 28%, which ranks it on the third place among the world countries, where bribes are needed to gain access to the medical care.

Classification of healthcare facilities

Health facilities can now operate under a range of legal status with various levels of autonomy. As of 2015, health care facilities in Kazakhstan could be classified into one of the five categories (introduced after the Law on Self-Government 1995 with the subsequent adjustments):

- *Government institutions (GI)*: These public institutions do not have the autonomy to manage their own budget or fixed assets. For each expense category, a fixed amount is established by the MOHSD or local health authority (LHA). Institutions under this legal status are responsible for providing services as defined by the government. Such institutions are mostly limited to facilities specialized in "socially significant diseases" such as tuberculosis (TB) or psychiatric hospitals.
- *State enterprises (SE) (or Treasury Enterprises, TE)*: These public institutions manage their budget and can receive some fees for services provided outside of the SGBP. However, their autonomy is restricted for instance the prices they charge for services and staff remuneration (salaries and bonus) are set by the MOHSD or the LHA.
- *State Enterprises on the Right of Economic Management (SE on REM) (i.e. state economic enterprises)*. The majority of public hospitals and PHC facilities currently operate under this status, which grants them the most autonomy. In addition to independently managing their own budget – resulting from service contracts with MOHSD -, these institutions can open branches and representative offices as well as define the prices of services provided (with the approval from either MOHSD or LHA). Revenues from the sale of goods and services are managed independently by the facility, although part of the net income is shared with the state. The staff payroll ceiling is defined by either the MOHSD or LHA but the levels of staffing as well as salaries and bonuses are managed independently by the facility (with an exception of salaries of CEO, deputies, and chief accountants for which the MOHSD or LHA is responsible). It is up to the oblast administrations to decide which facilities remain state-owned and funded (SE or TE) and which ones should be re-organized into SE under REM.
- *Joint Stock Companies (JSC)*: Are not different from JSC in any other sector. Their ownership is shared by shareholders and subject to commercial law. They are financed through contracts with a MOHSD - for example, the Corporate Fund "University Medical Center" which comprises five hospitals: National Research Center for Maternal and Child Health, National Children's Rehabilitation Center, Republican Diagnostic Center, National Scientific Center for Oncology and Transplantation and Kyzylorda branch (rehabilitation services hospital).
- *Private Facilities* - In urban areas, one can also find a growing number of private facilities, with some of them providing services under the State Guaranteed Benefit Package (SGBP). Originally, private entities were supposed to serve only the private market yet for reasons of public interest receive 'exceptionally' the right to provide the SGBP.

The hospital system today remains sizeable and fragmented. In 2016, official statistics in Kazakhstan recorded 877 hospitals. Historically, hospitals have been divided into 34 categories, depending on the services they provide, the population they serve, and other criteria – a fact that highlights the origins and the inherited fragmentation of the system. The structure of public-private partnership in the field of medical services has been changing rapidly during the recent years. From the onset of the national healthcare reforms, policy-makers emphasized the importance of increasing providers' autonomy and developing the public-private mix in health care delivery. Public Private Partnerships (PPP) in particular are seen as a way of bringing additional capital into the health system. The general objective has been to create an environment in which competitive pressure increases health service delivery responsiveness and efficiency. Pharmacies and dentists became private profit-making organizations in Kazakhstan soon in the privatization process in early 1990s, while hospitals and large polyclinics remained mainly state-owned. Between 1999 and 2004, the number of private hospitals almost doubled and the general number of private facilities almost tripled. By 2009, 16.4% of all physicians were already working in the private sector. As of 1st July 2015, there were 137 private hospitals, 127 of which were at city level, 3 at administrative unit level and 7 at district level. Some 102 of these 137 private hospitals (or around three quarters) provide care within the SBGP services (MOHSD, 2016). Single specialty (mono-profile) hospitals are not seen as best adapted to meet the burden of disease in modern health care systems – or the most effective and efficient use and distribution of technologies. Yet, they still represent 40% of beds in Kazakhstan. Rehabilitation and long term care facilities are still underdeveloped. In 2015, Kazakhstan had 89,962 hospital beds. This represents 5.1 beds per 1 000 inhabitants – a reduction from 6.9 beds per 1 000 inhabitants in 2006 (MOHSD, 2016). Moreover, the number of beds per capita varies significantly across regions. In South Kazakhstan Region, there are 4 beds per 1 000 population, whereas in North Kazakhstan, there are 6.6 beds per 1 000 population.

Table 14. Number of healthcare facilities (2016)

All executive departments	877
System of the Ministry of Health Care	671
Other executive departments	35
Private hospital organizations	171

Provision of the population with medical personnel

All citizens of Kazakhstan shall be registered with local polyclinics within the framework of the state system of mandatory social health insurance (MSHI). Despite this, a fifth of the population is not registered at all with any primary health care (PHC) provider. This makes an assessment of the actual use of primary health care services by the population difficult to determine. The total number of requests for PHC in per capita terms is on average 5.6 appeals per year, including contacts with specialists from polyclinics. The average figure also masks big differences across regions in Kazakhstan. The number of annual appeals varies from 2.0 in Astana to 9.7 in Mangystau, and some parts of the population have very limited access to primary health care.

The reforms from the past decade have profoundly revamped the PHC workforce. New standards for PHC team have been established, and multi-disciplinary teams are now – in theory – the cornerstone of primary care service delivery. In 2005, the general practitioner function was officially introduced in Kazakhstan health system. Prior to this, medical services at PHC level were essentially provided by district therapists or pediatricians. In 2005, the PHC workforce comprised around 4 000 district therapists and pediatricians,

in both rural and urban areas. In 2005, a new training stream for General practice was introduced in medical education (MOHSD and WHO, forthcoming).

According to the 2016 data, the number of healthcare workers in Kazakhstan was approximately 252,000, including 74,600 doctors and 177,600 medical technicians (such as nurses and paramedics) (Ministry of Health of the Republic of Kazakhstan, 2017). Despite the fairly rapid growth in the number of health personnel, there are still some problems with its distribution in terms of staff qualification. In general, Kazakhstan is experiencing a significant shortage of regional doctors and dentists. There is also a shortage of medical personnel in rural areas.

Table 15. Provision of the population with medium-grade medical personnel of general specialties

Specialization	Absolute numbers	Per 10,000 people
General Medicine	14,028	7.8
Obstetrics	9,766	5.5
Nursing care	127,811	71.3
Dentistry	2,039	1.1
Hygiene and epidemiology	2,905	1.6
Laboratory diagnostics	13,132	7.3

Table 16. Provision of the population with doctors of general specialties (doctors working in private enterprises are included)

Specialization	Absolute numbers	Per 10,000 people
General practice therapists	8,975	5
Cardiologists	1,652	0.9
Endocrinologists	813	0.5
Surgery specialists	8,432	4.7
of which surgeons	3,635	2
Traumatologists (orthopedists)	1,147	0.6
Anesthesiologists-Resuscitators	2,730	1.5
Obstetrician-gynecologists	5,006	2.8
Urologists	753	0.4
Neurosurgeons	326	
Ophthalmologists	1,610	0.9
Pediatricians (including neonatologists)	5,424	3
Neuropathologists	2,194	1.2
Otolaryngologists	1,287	0.7
Radio-diagnostic specialists	3,396	1.9
Radiation therapists	164	
Sanitary and epidemiological doctors	4,287	2.4
Dentists	5,528	3.1

2.5. Government support for treatment abroad

Citizens with diseases that require high-tech (advanced) treatment methods that are not domestically available are eligible for government funding for treatment abroad. The list of diseases due to which citizens of the Republic of Kazakhstan are referred abroad for treatment at the expense of budgetary funds includes:

- Arteriovenous malformations and tumors requiring a radio-surgical method of treatment (gamma-knife) because of localization in the surgically inaccessible functionally important areas of the brain.
- Arteriovenous malformations of the vessels of the brainstem, spinal cord and arterial aneurysms for endovascular treatment.
- Tumors of the base of the skull for trans-oral removal.
- Malignant neoplasms of the eye requiring radio-surgical treatment (gamma knife, radioactive applicators).
- Kerato-prosthetics.
- Diseases requiring the transplantation of the heart, kidney, liver, lungs, bone marrow.
- Stenosis of the larynx.
- Stenosis of the trachea.

The referral for treatment abroad is carried out after confirmation that all the methods of diagnostics and treatment within the healthcare organizations of the Republic of Kazakhstan were unable to bring positive results for the patient. Children, pregnant women, patients who need organ and/or tissue transplantation (in case there is a related donor) are prioritized in accordance with the established order of disease profile. Children, as well as persons in need of extraneous care, are referred to foreign medical organizations with an accompanying person, whose transportation costs are paid by the Ministry of Health of the RK at the expense of budgetary funds. In addition, military and police officers, who received severe injuries during the performance of their duties and who were unable to receive help by domestic doctors, can apply for treatment in foreign clinics.

List of the documents required for obtaining a quota for treatment in a foreign clinic:

- petition of the Health Department to refer a patient for treatment to foreign medical organizations;
- a copy of the patient's identity document;
- an extract from the Patient Medical Record submitted by the medical organization, containing the results of all the studies, consultations, treatment and medical conclusion about the need to treat the patient in foreign medical organizations.

An extract from the Patient Medical Record shall be signed by the physician, the First Head (or his deputy) of the republican medical organization and certified by the seal of the organization no later than 30 working days before it is sent to the working body.

Preliminary statistics: on issues of referral of the citizens of the Republic of Kazakhstan for treatment abroad (as of September 3, 2018)

In 2018, funds have been allocated from the republican budget in the amount of 1,646,894.0 thousand tenge for the implementation of the state task 'Referral of citizens of the Republic of Kazakhstan for treatment abroad at the expense of budgetary funds, including the treatment of citizens applying for treatment abroad in domestic medical organizations'.

For reference: it is expected to send at least 41 patients for treatment abroad and organize at least 27 master classes in domestic clinics with the involvement of foreign specialists at the expense of budgetary funds.

As of September 3, 2018, 371 patient documents, including those that were transferred from 2017, were subject to consideration by the Working Body on the issues of referral of citizens of the Republic of Kazakhstan to treatment abroad by the UMC corporate fund.

11 meetings of the expert commission on sending citizens of the Republic of Kazakhstan for treatment abroad and for domestic medical organizations with the involvement of foreign specialists were held at the expense of budgetary funds, 97 documents were issued, of which 77 were approved for treatment abroad, 5 – for master-classes. The total amount of the concluded contracts with foreign clinics – 1,052,288.3 thousand tenge, for master classes - for the amount of 53,837,112.87 tenge.

Table 17. Results on considering 371 patients' applications

Status of the application:	Number of patients:
Treated in a foreign clinic (positive outcome)	44
Fatal case in a foreign clinic	4
Currently are treated in a foreign clinic	20
Approved treatment in a foreign clinic (waiting for a referral)	4
In search for foreign clinics (including repeating treatments)	8
Treated by medical assistance through master class with the involvement of foreign specialists (under planned procedure)	133

Table 18. Other statistics:

Status of the application:	Number of patients:
Require additional examination and treatment in the RK	10
Medical assistance in the framework of a master class under the budget program is planned	25
Consultation of a foreign specialist in the framework of a master class	17
Treated at the expense of financial resources of non-state pension provision (NSPP) / submitted for consideration by NSPP	8
Expediency for treatment abroad	22
Lethal outcome after approval of the Commission	3
Lethal outcome after receipt of documents (within 10 days)	3
Did not get the treatment	3
Treatment in the framework of the guaranteed volume of free medical care	4
Independent refusals / left independently	12

Table 19. By types of provided medical services (of those approved for foreign treatment by the Commission):

Type of medical treatment	Number of patients	Percentage
stereotactic radiosurgery (Gamma-knife)	23	31.9
bone marrow transplantation	20	27.7
heart and lungs transplantation	5	6.9
selective intra-arterial chemotherapy	5	6.9
brachytherapy	3	4.1
unifocalization	5	6.9
Proton beam radiation therapy	1	1.3
MIBG therapy	1	1.3
Therapy of 'transplant against host reaction' by photophoresis method	1	1.3
other various types of surgical treatments	8	11.1

Statistics of the Labor body on the issues of referring citizens of the Republic of Kazakhstan to treatment abroad at the expense of budgetary funds following the results of 2017.

The Labor body on the referral of citizens of the Republic of Kazakhstan to treatment abroad at the expense of budgetary funds for the year 2017 considered 246 applications for referring patients for treatment abroad.

At the end of the reporting period, the Labor body issued 187 recommendations, from them:

- 45 patients (including 36 children) are referred for treatment abroad;
- 26 patients (including 19 children) received high-tech medical services based on republican clinics within the framework of a master class with the involvement of foreign specialists;
- 88 patients (including 68 children) did not have indications for referral for treatment abroad;
- 27 patients (including 25 children) are expected to go abroad for treatment under the planned procedure

2.6. National healthcare future development strategy

According to the order of the Ministry of Health of the Republic of Kazakhstan dated 28 April 2015 No. 284 "On approval of the state standard of the network of medical organizations" and in accordance with the Road Map for the development of the infrastructure of medical organizations and public-private partnership in the health sector of the Republic of Kazakhstan for 2016-2019, Minister of Health of the Republic of Kazakhstan E. Birtanov January 24, 2017 declared the formulation of regional unified perspective plan (UPP) for the development of the health care network for 2018-2025.

The objective of unified perspective plan (UPP) for the development of the health care network - it is a strategy of transition from the existing network configuration medical organizations to optimized system, including changes in the structure and location, as well as create conditions for accelerated development of infrastructure of medical institutions of Kazakhstan, including with the use of PPPs. The stages of the implementation of the goals are divided into two periods: First stage - medium-term (2017-2019), Second stage - long-term period (2020-2025). Within the Unified Perspective Plan, it is expected to achieve the following indicators:

1. Level of supply by hospital organizations to 3.0 per 100 thousand people (2015 - 4.0 per 100 thousand people);
2. Increase in the share of multi-profile hospitals to 70% in health care network (2015 - 45%);
3. Decrease in the provision of beds in the Republic of Kazakhstan to 50.0 per 10 thousand people. During the optimization, it is planned to reallocate the beds taking into account the needs of each medical organization;
4. Modernization of the hospital network should ensure the renewal of the aging hospital infrastructure and bring the number of buildings built after 1990 to 75%;
5. Build about 80 hospitals and 528 ambulatory-polyclinic organizations; reconstruction of 8 hospitals and 19 ambulatory-polyclinic organizations, overhaul of 216 hospitals and 1193 ambulatory-polyclinic organizations;
6. Reorganization (association) of up to 40 hospital organizations; closing of about 15 low-power unprofitable hospitals, transfer to trust management 13 and privatization of 8 hospital organizations;
7. Organization of about 35 medical dispensaries, reorganization of clinics on the basis of 4 medical dispensaries, closure of 94 medical points, transferred to asset management 17 and privatization of 2 polyclinic organizations;
8. Development of rehabilitation treatment and medical rehabilitation;
9. Creation / or re-profiling of 38 medical organizations to the organization of rehabilitation treatment and medical rehabilitation, incl. 14 rehabilitation centers;
10. Creation and development of palliative care centers (20 hospices, 4 nursing hospitals).

Restructuring of the network of medical organizations, taking into account regional peculiarities will result in the development of people-oriented network of primary care and creation of a certain amount of bed capacity and profiles of beds for the population's needs. At the same time, unified perspective plan prescribes implementation of public-private partnership mechanisms (PPPs) in healthcare system. This plan related with the message of the President of the Republic of Kazakhstan N. Nazarbayev to the people, dated by November 30, 2015, the second direction indicated optimization of the budget policy. The head of state emphasized that for the "unloading" of budgetary expenditures, it is necessary to apply actively mechanisms of public-private partnership, to work out additional measures to encourage private investments in priority areas of the economy, to attract more private investors, including construction of hospitals, their reconstruction and maintenance.

Restructuring of the hospital sector aims:

- 1) Analysis of the activities of hospital beds for evaluating the effective performance;
- 2) Continuation of further consolidation of mono-profile hospitals into multi-profile hospitals;
- 3) Re-profiling of beds for a sought-after profile;
- 4) Re-profiling of unprofitable low-power hospitals with a satisfactory material base to rehabilitation centers, nursing care hospitals and hospices, to objects of Primary Health Care with day beds;
- 5) Closure of unprofitable low-power hospitals which don't comply with generally accepted sanitary standards and rules;
- 6) Construction of new hospital facilities to meet the needs of the population or to replace outdated hospital buildings;
- 7) Planning of capital repairs and reconstruction of buildings of the hospital organizations;
- 8) Analysis of distance, the radius of health services and population density;
- 9) Development of an investment plan, with reflecting the main mechanisms of project implementation and focusing on the involvement of private investment, international financial organizations, with the predominant use of PPP mechanisms.

Development of socially-oriented Primary Health Care with improvement of accessibility of the population to primary health care aims:

- 1) Analysis of objects of Primary Health Care for compliance with the state standard of the network of medical organizations and taking into account regional features;
- 2) Re-profiling of unprofitable low-capacity hospitals with satisfactory material resources to the organizations of primary health care with beds of day stay;
- 3) Construction of new facilities of Primary Health Care for the needs of the population and to replace outdated buildings;
- 4) Planning of capital repairs and reconstruction of Primary Health Care facilities;
- 5) Closure of unprofitable low-power Primary Health Care organizations which don't comply with generally accepted sanitary standards and rules;
- 6) Analysis of distance, the radius of health services and population density;
- 7) Development of an investment plan, with reflecting the main mechanisms of project implementation and focusing on the involvement of private investment, international financial organizations, with the predominant use of PPP mechanisms.

Introduction of public - private partnership mechanisms (PPP). In this regard, the Investment plan of the UPP for the development of the network will include:

- 1) Construction and renovation with the application of PPP mechanisms;
- 2) Transfer of some medical and non-medical services to outsourcing;
- 3) Transfer of healthcare facilities to trust management and privatization;
- 4) Improvement of medical organizations equipment with modern high-tech equipment by using PPP mechanisms;
- 5) Approval by the Republican Budget Commission and regional budget commissions of the expenses for the implementation of the Investment plan, including the alleged obligations under PPP projects.

Implementation of the UPP of the regions will be carried out by the local authorities of regions and Astana, Almaty, Ministry of Health of the Republic of Kazakhstan for republican property in accordance with the UPP activities. In addition, monitoring is planned at least once a half-year in order to make timely changes and update the UPP, starting from 2018 to 2025 according to the approved form with the following content:

- 1) Changing the outpatient network;
- 2) Change of inpatient network;
- 3) Development, creation or re-profiling of some health organizations to the organization of rehabilitation and medical rehabilitation (rehabilitation centers);
- 4) Development, creation or conversion of health care organizations to the organization of palliative care: hospices, hospitals of nursing care;
- 5) Closure of the medical organization;
- 6) Terms of carrying out capital repairs of buildings;
- 7) Planning of reconstruction of existing buildings;
- 8) Planning of construction of new buildings;
- 9) Planning of construction of buildings instead of the existing;
- 10) Increase the share of private investments, including through public-private partnership

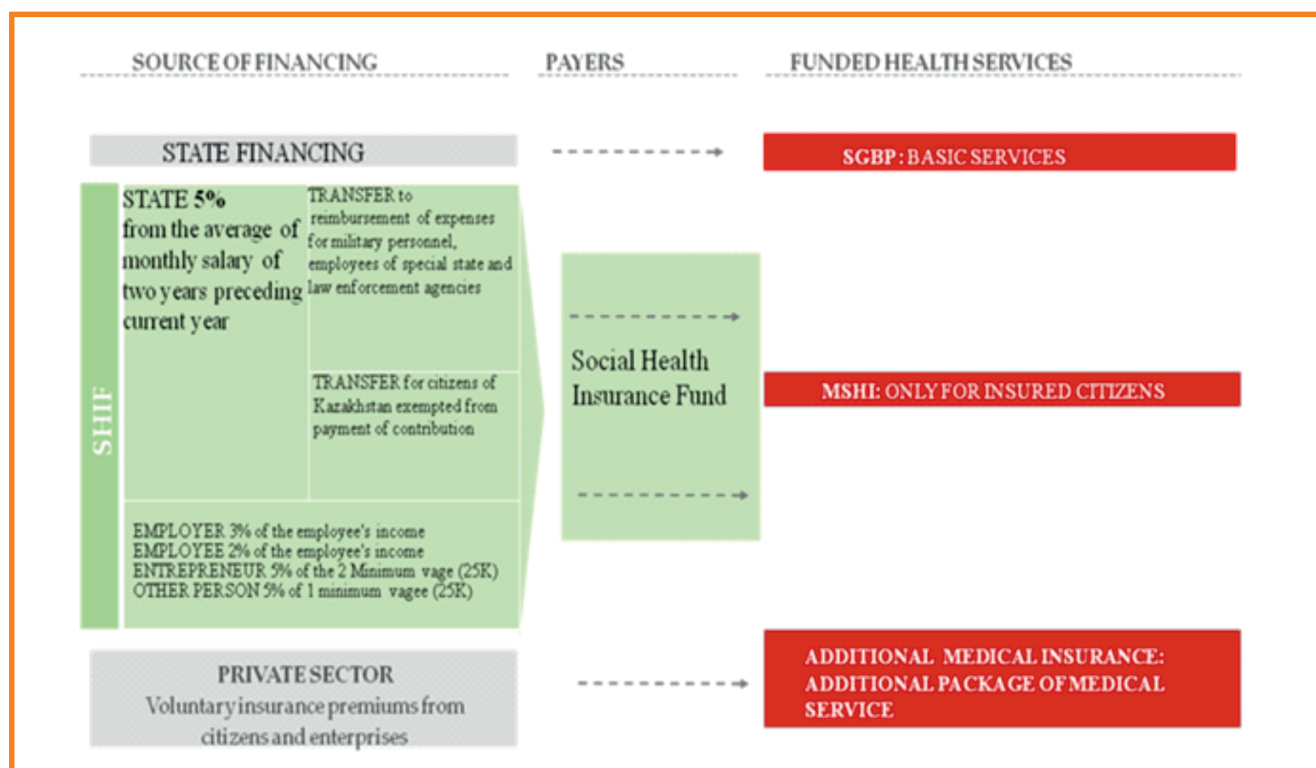
2.7.Changes to the social health insurance system

Health insurance in Kazakhstan for many years operated in the category as voluntary. Compulsory health insurance became one of the main implementations of 2017 in Kazakhstan (new employer obligations from 1 July 2017. Law No. 405-V on Mandatory Social Health Insurance (MSHI), of 16 November 2015 set up a state medical insurance fund to finance the public health system). The article 2 of the Law of Republic of Kazakhstan "On Mandatory Social Health Insurance" (MSHI) is complemented with point 3 of the following contents: "3. The foreigners and members of their families who are temporarily staying in the territory of the Republic of Kazakhstan in accordance with the terms of the international treaty ratified by the Republic of Kazakhstan have the rights and perform duties in the system of compulsory social medical insurance on an equal basis with citizens of the Republic of Kazakhstan if other is not provided by laws and international treaties. Members of the family of foreigners are jointly the living spouses (spouse) and children". For example, according to point 3 of article 98 of the Agreement on the Eurasian Economic Union (EEU) of the May 29, 2014 ratified by the Law RK of October 14, 2014, social security of workers and members of their families of state members is performed on the same conditions and in the same order, as citizens of the state of employment, except pension payments rate – which is defined by the working experience in Kazakhstan.

Thus, workers of state members of Eurasian Economic Union will have the rights and to perform duties in the MSHI system on an equal basis with citizens of the Republic of Kazakhstan, that is the expenses of the employer paid in an income type to nonresident workers (citizens of the countries (members of EEU)) will be subject to calculation of assignments on MSHI since July 1, 2017. Also nonresident workers (citizens of member countries of EEU) will be obliged to pay contributions to MSHI since January 1, 2019.

According to the new law employers, including all foreign legal entities operating in Kazakhstan, must withhold and pay contributions to the new medical insurance fund. From 1 July 2017, employers have to pay 2% of their employees' income out of their own funds and from 1 January 2018, the rate of contributions will rise annually, reaching 5% in 2020. Thus, in 2018 the rate will be 3% and in 2019, 4%. Medical insurance contributions are collected by the newly funded Social Health Insurance Fund (SHIF) which aims to improve the current healthcare system. Full transition to the compulsory health insurance will step into action on 31 March 2020.

Figure 11. Kazakhstan model of social health financing (Source: Kazakhstan Public-Private Partnership Center, 2018).



3. Demand for medical tourism in Kazakhstan

3.1. Main problems with healthcare in Kazakhstan and reasons for seeking medical treatment abroad (from deep interviews)

The main reasons for considering treatment abroad are common for experts, actual and potential users of medical tourism in Kazakhstan. The main reasons for using medical tourism amongst residents of Kazakhstan, in the opinion of both experts and users of services, are the following:

1. Establish a correct diagnosis

'I don't trust our doctors at all because so many inaccurate diagnoses have been made. I've been taking my child to the hospital for a long time. Nobody can tell us what problem the child has.'

In-depth interview (II) 4, f, city of Almaty

'Basically, this is a very good diagnosis assessment, because many cannot make a diagnosis. Due to the fact that the diagnosis is made wrong, the treatment is wrong; many problems arise from this. And there the equipment is expensive, good and due to this the treatment is better.' II14, city of Almaty

2. Need to obtain effective treatment abroad because treatment in Kazakhstan was not effective

'There is a category of patients who have been treated for a long time in Kazakhstan and have not recovered, the treatment was ineffective or the treatment was improperly selected. And the third category of patients travels abroad due to the fact that doctors in Kazakhstan could not make a diagnosis, or this disease in Kazakhstan is not treated, or we do not have enough technology, there are no such devices, no specialists, no drugs. We help such patients, this is a titanic work.' II19, city of Astana

3. Wish to get more qualified medical care, to be treated in the best clinics with modern equipment

'Well, in fact, it makes a big difference, like a day and night, between our doctors and theirs. As well as in technologies. Also in the service itself. Also in our and their institutions, hospitals. The difference is enormous.' II26, m., city of Atyrau

4. Desire to visit another country

'... go, relax, expand your worldview, get acquainted with the culture of other countries, spend your holidays, combine something useful with something pleasant.' II11, f, city of Astana

5. Intention to have treatment with the most modern methods (concerning surgery and dentistry - more sparing and modern methods of surgery: laparoscopy, laser surgery, in the case of dentistry - the use of more modern materials, international practice of treatment).

'Accordingly, when the diagnosis 'Gallstone disease' was made, our doctors offered an abdominal operation, that is, to cut, cut and cut. It did not quite suit me, I wanted doctors to remove this gallbladder differently - three punctures and remove the bile. Our doctors offered to register at the portal, it was very long, very difficult, and I thought that time was limited because there were severe pains.' II22, f, city of Shymkent

Specific reasons named by the existing users of medical tourism:

6. General mistrust of medicine in Kazakhstan (resulting from such factors as low qualification of local doctors and low level of modern equipment, as well as wish to be examined and treated in countries with a high level of medical development).

'There is a category of patients who initially do not want to be treated in Kazakhstan; they immediately leave after obtaining the diagnosis assessment.' II19, Astana

'Abroad, professional competent doctors examine patients, in comparison with our doctors. Secondly, the level of service. Thirdly, advanced technologies, fourthly, modern medical equipment that allows you to make more accurate diagnoses, it determines the source of the disease almost 100%. Here are 5 factors that mainly affect the choice of people. Not in favor of Kazakhstan, so to say.' II1, m., city of Almaty

7. Insufficient level of service in Kazakhstan medical institutions (staff is not considerate enough and doesn't express caring attitude towards patients)

'our medicine cannot treat people in a humane manner. You even want to pay money to be treated well. There is no sense. What else I did not like they gave me the runaround in Almaty. In Astana, the diagnosis was made. But here I've visited every single specialist.'115, f, city of Almaty

Demand for medical tourism among the Kazakhstan population

According to experts, mainly residents of the cities of Almaty, Astana, Aktobe, Pavlodar, Ust-Kamenogorsk, Shymkent, Uralsk, Kokshetau, Karaganda, Atyrau, in Kyrgyzstan - residents of Bishkek are the consumers of medical tourism services. The dynamics of demand for medical tourism services over the past few years is likely to be negative because of the economic reasons in the country (see 2.2 national currency), but not because of a decline in interest in medical tourism services.

According to the director of the Kazakhstan Tourism Association R. Shaikenova, in 2014, medical and health tourism pushed aside the leading positions of holiday tourism and came out on top in demand among Kazakhstan citizens traveling abroad. According to the director of the Medical Tourism Association B. Abdildin, in the same year of 2014 Kazakh have spent about 300 million euros for treatment abroad. At the same time, in 2015-2016, tourists from Kazakhstan who applied to foreign medical specialists spent about 280 million dollars (less than 250 million euros), which confirms the negative dynamics of the medical tourism market indicated by experts.

Some experts also point out that demand dynamics for medical tourism services depends on the growth or decline in the level of popularity of specific countries. In particular, the decline in the popularity of Israel and Germany has been observed (very expensive treatment, fewer people in Kazakhstan can afford it), on the contrary the growth of popularity of other countries – such as China, India and South Korea (according to some respondents). Others (about a third of experts) note that the peak demand for South Korea was observed 2-3 years ago (due to the rise of popularity in plastic surgery) and has now declined. Thus, one of the interviewed experts stated the following statistics for their agency: in 2017, they referred 70-80 people for treatment to Asian countries (in total) and only 40-50 people - to European countries (II No. 19).

3.2. Main players: most popular destinations amongst Kazakh population (from deep interviews with existing customers)

Among the key countries in which medical tourism is developed, the participants are Israel, Germany, South Korea, China, and Russia. The perception of key countries among experts and users is very similar.

South Korea

In general, the perception of South Korea as a destination for medical tourism in most cases is positive, most travel agencies regularly send medical tourists to South Korea; in few cases there is a negative perception and refusal to send medical tourists to this country.

Table 20. Stated advantages and disadvantages of South Korea in providing medical tourism

Advantages	Disadvantages
No need to open a visa	Image of a country with developed eastern medicine (similar to China) and underdeveloped modern medicine. This presentation is due to a lack of information on the level of development of modern medicine, as well as stereotypical views of users of services
Availability of clinics with international accreditation and highly qualified doctors in the country	
High level of services	Some respondents do not fully trust the capabilities of South Korean hospitals in the treatment of complex diseases - rather they would choose South Korea for prevention / rehabilitation / plastic surgery
The image of the country with rapidly developing medicine, modern technologies	
Lower cost in comparison with the leading countries	Quite expensive treatment in terms of existing perception and knowledge (in comparison with China)
Operative provision of all statements and test results	Some experts point out that the level of medicine in different hospitals in South Korea is significantly different from each other, that is, "you need to know where to send."
Provision of a Russian-speaking translator at the clinic	
Friendly customer service	
Possibility of getting consultations through skype	Agencies do not send children to South Korea associated with long and expensive treatment ("monitoring can last for years, Koreans rarely apply radical treatment to children", so they send children to Europe)

Opinions from qualitative study (shown in quotes) regarding South Korea as a medical tourism destination:

"For example, a check-up in Korea costs \$ 500. And in Greece, in Thessaloniki, the average check-up costs 50 euros » II14, Almaty

"There are about 10 proven, established clinics in South Korea, to which we constantly send customers, and then they have some weaknesses. From the minuses, we can say that the treatment of children - this is expensive, and long, and not always possible." II19, Astana

"For example, we do not send complex children to Korea ... they never radically treat children, they try to observe. Let it be, let it take a few years ... Therefore, why should a client spend money?" II19, Astana

"There are no such (bad) sides. We did not come across them. Everything was perfect for us" II13, Almaty

Israel

Israel is an unconditional image leader, perceived as a country with highly developed medicine and vast experience in the treatment of diseases of various profiles.

Table 21. Stated advantages and disadvantages of Israel in providing medical tourism

Advantages	Additional positive features	Disadvantages
High level of medicine development: high qualification, doctors, innovative equipment	Respect for the people of the country, who was able to achieve a lot	Climatic conditions (for some participants): a very hot climate, which causes discomfort
The presence of a large number of Russian-speaking personnel from the former Soviet countries A very high level of service - care 24 hours a day	A country with a high level of development of tourism business (the Dead Sea)	Expensive, complicated flight
	Cleanliness, Kosher food	Difficulties with obtaining a visa
Less: more affordable cost compared to Germany and some other European countries	A developed economy in all spheres is "a confident, financially stable country"	High cost of treatment
High level of medicine development: high qualification, doctors, innovative equipment		An Uneasy Country (Terrorism)
		Single: long customs inspections, waiting at the airport upon arrival
		Single: some prejudice against the Israelis: cunning, hypocrisy, mistrust

Opinions from qualitative study (shown in quotes) regarding Israel as a medical tourism destination:

"I was not satisfied with the Israel flight. Very long flight plus transfers" I122, Shymkent

"First, Israeli medicine is very famous for a long time, they have been working since the 30s. This indicates that the specialization is at the proper level. I am guided by this." I19, Almaty

"Promised land. There they fight well and cure well. Very clever people. Very clever and cunning people" I131, Pavlodar

"And as far as I've read, in Israel, even the dead can be resurrected." I126, m, Atyrau

"My friends went to the clinic" Yeohops ", they say that there is a lot of equipment, even they did not see and did not imagine that such exists. They were impressed by the equipment, a lot of equipment, which they did not encounter in other clinics." I19, Almaty

"If I had more money, I would go to Israel. I would have gone, I would not even have thought, and I went. It's just very expensive, at that time I did not have such funds." I11, Almaty

"Smart Israelis will be deceive you. The main disadvantage of Israel is expensive and far. There are no direct flights. It's difficult to get there." I122, Shymkent

"Israel is definitely not an option. I do not want to go there. Customs, inspections - for me it will be problematic. It's hard for me to stand in the queue. Imagine standing there for hours straight after the plane. It will be difficult because of the climate too" I15, Almaty.

"Because when I looked, I searched between South Korea, and China, got to know where better, how better, how much cheaper, then faced with the fact that Israel is the best option, in terms of the effectiveness of treatment that they offer, and language support is much more than in other countries, in comparison to South Korea. At us 90% of the population does not know the language basics, including English, 5-10 phrases and everything» II15, Shymkent

Germany

Germany is a country with highly developed medicine, German precision and quality in everything.

Table 22. Stated advantages and disadvantages of Germany in providing medical tourism

Advantages	Disadvantages
Very advanced medicine, one of the most advanced in the world. High quality of services	Very high cost of treatment
Professionalism of doctors	High price of living (food, accommodation)
Experts: trust from clients, there is a segment that is treated only there (the most well-off customers)	Difficulties with obtaining a visa
Responsibility for results	The fear of a language barrier
High level of advanced surgery	Single, user: uneasy, frequent strikes, terrorist attacks
Single: soft European climate	

Opinions from qualitative study (shown in quotes) regarding Germany as a medical tourism destination:

"Germany is also a very developed country. Friends went there for treatment and also for tourism. I did not go myself, but I heard from their words that it is a very positive country. In terms of how people are treated very positively." II12, Almaty

"My aunt went to Turkey. They did shunting there. She was convinced by the price policy. We had money at that time, and we were able to afford it. Everyone has his own. Someone on the climate. Then it was October-November, in Turkey it's still hot. I cannot bear the heat, it was very hard for me. The European climate like in Germany is softer, cooler." II5, Almaty

Russia

Russia is becoming a popular country for medical tourism because of the close distance for the flight and the absence of a language barrier.

Table 23. Stated advantages and disadvantages of Russia in providing medical tourism

Advantages	Disadvantages
High level of medicine in large cities (Moscow, St. Petersburg, Grozny, Rostov-on-Don, Novorossiysk). Particularly in the fields of cardiology, ophthalmology, treatment of oncological diseases	Costly treatment, comparable in value to the leading countries (Israel and Germany)
Highly qualified specialists	Single: too "radical" treatment methods (suggested cavity surgery, while Israel offers laser surgery)
Lack of language barrier	
Do not need a visa for a trip	
Many people have relatives in Russia, friends, which reduces psychological barriers to travel and facilitates adaptation to the conditions of another country	

Opinion from qualitative study (shown in quotes) regarding Russia as a medical tourism destination:

"They have the highest score, the highest! But I again say that their prices are very high! In Rostov, Novorossiysk, Moscow there are very good clinics » II3, Almaty

3.3. Emerging players: other destinations gaining popularity amongst Kazakh population

Turkey

Turkey is a country with developed tourism, associated with the sea, beaches, high level of hotel services.

Table 24. Stated advantages and disadvantages of Turkey in providing medical tourism

Advantages	Disadvantages
Good clinics, modern equipment	Experts: quite expensive service cost
Starts to gain popularity as a destination for medical tourism	Single, experts: the low quality of the services provided, "not far from the hotel service"
Visa-free regime	
Experts: high level of check-up diagnostics	
Sufficiently loyal prices in comparison with the leading countries (Israel and Germany)	
Very warm attitude of staff, doctors' attention, respect from medical staff	
Single: one of the few countries where they perform operations to clean the bile duct	

Opinion from qualitative study (shown in quotes) regarding Turkey as a medical tourism destination:

"People in Turkey are treated very well. This cannot even be conveyed in words. I was lying in the hospital for a treatment, what kind of staff! How they respect you, like a mother, sister. The doctor spent every day for half an hour or even an hour with me." I112, Almaty

China

China is associated as a tourist country, with a fairly developed medicine, but there is a certain stereotypical mistrust and negativity (overpopulation, unsavory cuisine)

Table 25. Stated advantages and disadvantages of China in providing medical tourism

Advantages	Disadvantages
Affordable prices, sometimes even lower than in private clinics in Kazakhstan	Sometimes there is mistrust of the medical training of doctors and quality in China with clients and agencies themselves.
Fast-developing medicine, the availability of modern technology	Many respondents from the principle did not choose China, despite the offer of agencies (rather stereotyped, by analogy with "Chinese goods", which are often of poor quality)
The following areas are developed: plastic surgery and oriental medicine (acupuncture, wrapping, herbal treatment), orthopedics, dentistry, treatment of cerebral palsy	Experts: there are clinics of very different levels, you need to select carefully hospitals for partnerships
Close to Kazakhstan, the location of the country, the convenience of the flight	Difficulties with obtaining a visa
Tourist country, where there are many sights that can be visited during the treatment	Single: contamination, overpopulation and poor food quality (too greasy and spicy)

Opinion from qualitative study (shown in quotes) regarding China as a medical tourism destination:

"I heard that in China has very good medicine, a lot of plastic surgery. With other types of surgery everything is fine too. They have ben working in medical field for a long time, and they have moved far ahead of Kazakhstan. "GI23, Astana

Other countries (mentioned in deep interviews)

India

Main advantages:

Homeopathic medicine is very developed - herbal medicine, etc.

Natural preparations cause trust in certain category of clients

Greece (only experts in the field of medical tourism)

Main advantages:

A very accessible check-up, one of the most accessible among the countries with which experts work

Singapore

Main advantages:

Loyal prices, focus on medical tourists from the CIS

4. Results: travel agencies (qualitative study)

4.1. General information and key players in the Kazakhstan market

Competitive environment amongst travel agencies in Kazakhstan

Most of the interviewed experts were not interested in their competitors (other agencies working in the field of medical tourism), or refused to answer the question because of corporate solidarity.

'Someone says I also offer medical tourism, someone else says so too. But I do not know which of them is doing well.' II6, city of Almaty

'I'm not interested. Why should I be interested in competitors?' II8, city of Almaty

'Oh, I do not know, to be honest. I'll never know. We are busy with our work from morning till evening. It is not the basic kind of activity for us. Maybe, if I was engaged into it, only medical tourism, then, yes, I would be interested. So, I cannot not answer you.' II13, city of Almaty

Only 4 experts out of 6 were able to name some companies operating in the medical tourism market (all were stated single time, by a maximum of two respondents):

- ❑ Golden Tour¹ - founded by the citizens of South Korea, makes medical tours only to South Korea
- ❑ Caspian Travel¹ (Astana, Almaty)
- ❑ Planet KZ¹ (Atyrau)
- ❑ Silk Road Kazakhstan plus¹
- ❑ Korea Vision¹ (Astana) - makes medical tours only to South Korea
- ❑ Medical tour¹ (Astana)
- ❑ Medsputnik¹ (Almaty)
- ❑ It was pointed out that some Kazakhstan clinics directly work with clinics in Korea - for example, city hospitals 1 and 4, 'Evelina', 'Medicare' (Astana).

It was also pointed out that in Kazakhstan there are only 6 travel agencies that were able to join the International Association of Medical Tourism²: these agencies are professionally engaged in medical tourism services. Those who do not specialize in medical tourism often provide services, which are not of high quality.

'In Kazakhstan, there are 6 agencies in total that were able to join the Association for International Tourism³.

I can proudly say that one of them is us. Many travel agencies are also engaged in medical tourism, but since this is not their main specialization, their services are their weak point.' II19, city of Astana

³The International Association for Medical Tourism (IAMT) is an international non-profit organization operating in the field of medical tourism and international medical industry. IAMT cooperates with medical institutions, public services, insurance companies and other healthcare providers. The International Association for Medical Tourism pays special attention to ensuring the high quality of medical care. Source: <http://healthtravel.pro/association/5>

4.2. Types of services offered by the travel agencies

Most of the surveyed travel agencies provide a broad range of services, which can be represented in the following stages:

1) Primary consultations. Help with selection of the country and clinic

- Manager of the agency tells what countries the agency works with, what clinics and services it can offer.
- The client reports on his request (diagnosis assessment, treatment, rehabilitation, appearance correction).
- The results of the examinations, tests, diagnosis or diagnosis assessment request are sent to several clinics (sometimes to 2-3 countries) so that the patient can choose the most appropriate option (first of all, in line with his budget).

It should also be noted that representatives of travel companies that deal only with medical tourism, in contrast to those who work with different types of tourism, are more careful and thorough to approach the stage of primary counseling. According to opinion of one of the experts: at the primary stage, it is important to provide not just tourism and medical advice, but also psychologically support the client, especially those who are in a difficult situation. Ability to listen, show sympathy, support, and give qualified advice is very important during primary communication with the client. Also, this expert points out that in order to refer a client to a certain country it is not sufficient to establish the diagnosis and financial resources of the client, but it is also necessary to take into account the patient's condition, the possibility to conduct a long flight. Sometimes they can refuse if the patient's condition is severe and he will not be able to reschedule the flight (even if the patient himself insists on the trip).

2) Arrangement of the trip

After coordinating the clinic with the patient and getting a positive response from the clinic, trip arrangement takes place. At this stage, the agency's services include:

- Flight booking
- Visa processing
- Optionally - medical insurance (for emergencies)
- Accommodation booking
- Arrangement of the transfer and, if necessary, provision of a Russian-speaking guide
- Continuous remote support for the client on the trip (they can call the clinic, monitor the treatment process, respond to urgent client requests - for example, the extension of the visa if the treatment is delayed).

3) Post-support

It is carried out by choice, in case the client needs observation after the completion of the main stage of treatment.

- Scheduled examinations after the main treatment - sending the results of tests and other examinations to the clinic to monitor the patient's condition in dynamics.
- Arrangement of repeating visits to the foreign country for treatment, etc.

Less often (isolated cases): the travel agency carries out a limited range of services:

- 1) Primary counseling. Help with the choice of the country and the clinic.
- 2) Optional: preparation of documents for the trip (visa, flight, hotel reservation).
- 3) Usually, in this case the client pays for medical services on the spot, and the company does not accompany the client during the treatment in the 24/7 mode.

4.3. Key aspects of work and formation of destination ratings

Regarding cooperation with clinics, three main working strategies for medical tourism agencies can be depicted:

1) The agency works directly with the foreign hospital

These agencies are usually found by foreign hospitals through tourism exhibitions dedicated to medical tourism, which are regularly held in Kazakhstan. It also happens that hospitals contact the agency directly and offer cooperation, send their presentations, conduct various webinars. Representatives of some clinics come to personal meetings with agencies in Kazakhstan. The agency studies the principles of the clinic, the availability of highly qualified doctors, international accreditation of the clinic, the availability of Russian-speaking staff. Sometimes managers or directors of the Kazakhstan agencies visit the hospital themselves in the information tour framework and assess the quality of the services provided. Also, all information about the hospital that is available on the Internet is evaluated: the clinic's website, feedback on forums, social networks, etc. Most often, multi-specialization hospitals are selected for further cooperation in comparison to narrow-specialized hospitals, since multidisciplinary clinics are more universal, can provide treatment for any patient, even in cases when the diagnosis has been changed, complications during surgery have developed, etc.

'They send us mailings themselves, they find us somewhere. Probably, also, googling, finding travel agencies in Almaty. They conduct presentations, webinars, and if they are wealthy companies, even come to get acquainted personally. Then we try, give a request, calculate the prices, fly ourselves to informational tours to see ourselves to understand if this clinic is of high quality. It's a long process, it's not fast, it's not just that. Money, expenditures, time are to be spent everywhere. Only in this way we identify them.' I113, city of Almaty

In general, these procedures are sufficient to start cooperation with a hospital. However, there are agencies that have a more extensive list of requirements for hospitals (single answers concerned the selection of hospitals in South Korea):

- They cooperate only with the hospitals that have a developed scientific base, with scientific institutions, institutes, universities

'Basically, those that have a scientific base. That is to say, we say: 'The hospital of the Seoul National University, the medical center 'Gayle' at the University 'Gajon', the medical center at the university 'Hanyang' I117

- They cooperate only with clinics of the highest category who have a high rating
- They cooperate with all highly rated clinics which were personally assessed, which have an international status and which are supported by national corporations, such as Samsung and Hyundai, where the specialists have US / German diplomas or internship experiences in America, Germany etc.

'In all clinics that have international status, all doctors must have an American diploma. They all must at least practice in America or Germany' I117, city of Almaty

- They cooperate only with clinics that have an international certificate for foreign patients.

2) The agency more often works with medical tourism partners in host country

In this case, the selection of hospital is carried out by a local partner and coordinated with the Kazakhstan agency. As a rule, in these cases, travel agencies rely entirely on the choice of partner due to the fact that employees of such agencies are qualified doctors who determine the most suitable hospital for a particular request. Travel agencies cooperate only with trusted local agencies that have proven themselves in the market and have a long working experience. Often such partners find the Kazakhstan agencies independently through contacts on the Internet.

'They have 100% cases of doctors, people with medical education, who see the alleged diagnosis and refer a patient to the necessary medical facilities' I16, city of Almaty

'We connect our partners, with whom we are already working, they come to our exhibitions. The exhibition is held annually in April. There we sign contracts with them and after signing the contracts, we are already sending our first clients.' I18, city of Almaty

Followers of this style of work note that it is more convenient to work with partners than directly with hospital due to the fact that the partners provide the entire range of services of the host party: transfer, hotel, guide, etc.

3) There is also a 'mixed' type of work when the Kazakhstan agency works directly with hospital and through partners

*'There are direct ways, there are partners. Different ways. Hospital representatives arrive themselves, we meet, partners come. Partners have everything complete, as a tour, which is good. And the transfer is included, as well as treatment and hotel accommodation. A tour is sometimes cheaper.'*114, city of Almaty

The following criteria are important during the hospital rating formation and cooperation:

- Long-term positive experience of cooperation. Usually, agencies are not inclined to actively search for new clinics, preferring to cooperate with trusted partners.

*'To be honest, there are proven good recognized clinics with which we work, and new clinics do not interest us.'*119, city of Astana

- Availability of highly-skilled doctors who have been trained in the European countries or the USA
- Availability of modern equipment in the clinic
- Prompt response to requests, speed and accuracy of communication for 24 hours a day

*'... demands for the question-answer process to be accelerated so that they are in touch all 24 hours, so that the client will not be left without attention'*113, city of Almaty

- Acquisition of international accreditation (JCI)
- Availability of an international department for work with foreign patients
- Availability of Russian-speaking staff
- Multidisciplinary specialization of the hospital
- Clinic category: 'higher category clinics are chosen more often, although some indicate that they started cooperation with 'second' and 'third' category clinics (they are more affordable, and began to provide high-quality services)
- International status of the clinic and its reputation
- Availability of a developed scientific base
- It is also noted as an advantage that the clinic should be trusted and be in the confidence of local residents, and not only be oriented towards providing services to foreign clients.

*'There is an unspoken secret: a good clinic is the clinic that is popular with local residents. There are clinics that are tuned, only, to the foreign market, they are, for the most part, far from perfect, they are more attuned to marketing, to foreign customers and some research technologies, equipment, medical staff can be a weak point.'*119, city of Astana

4.4. Demand for medical tourism services: opinion of travel agencies

The opinion of experts on the evaluation of the demand for medical tourism services in Kazakhstan was divided:

- More often: demand is estimated as quite low due to the high cost of services related to medical tourism. This is not such a massive type of tourism as classical tourism, only a small percentage compared to those who go on vacation. Some experts point out that they are more likely to deal with more accessible diagnosis assessment (check-up) than with expensive treatment

'I think 80% is cancer. Of course, customers ask, but few of them leave. They ask only to get information.' I110, city of Almaty

- Less: demand for services is quite high (the opinion is more pronounced in Astana)

'It's just that trends change every year. If one year people are interested more in Korea, then another year - in other countries. If two years ago it was very popular to go to Israel, now people do not go to Israel so often.' I119, Astana

The majority of participants note a certain decrease in demand for medical tourism services, which is primarily related to the fall in the population's solvency associated with the growth of the dollar against the tenge, the economic crisis (see 2.2. national currency).

'In 2006, until 2012, there were a lot more patients. On average, there were 20-30 patients per year. After 2012, it started to decline.' I16, city of Almaty

"The economic factor, this is primarily a crisis, people have less money." I17, city of Almaty

Speaking about client inquiries, the respondents were united in that the largest share of appeals is associated with cancer (diagnosis assessment of oncological diseases or their treatment, confirmation of diagnosis, etc.). The proportion of applications related to cancer is estimated at 60-80%.

Other types of inquiries:

- Plastic surgery (5 to 15%) - blepharoplasty, liposuction
- Diagnosis assessment
- Dermatology, cosmetology
- Orthopedics
- Neurosurgery
- Neurology (ICP, epilepsy)
- Diseases of the joints
- Eye diseases (cataracts)

'Medical tourism means that someone wants to go to Korea, say, to be diagnosed. That is, to learn everything about his or her health. They go to be beautiful. These are plastic surgery, dermatology, cosmetology and, of course, patients who have problems. Health problems that they cannot solve here.' I117, city of Almaty

Some participants note that the dynamics of demand varies depending on the specific country of medical tourism: for example, there is a slight drop in interest in Israel and Germany (high cost of services, difficulties with issuing visas), and, conversely, the growth in demand in countries such as India, China, Singapore. Individuals also noted the growing interest in 'new' countries for medical tourism - France, Spain, Greece, the United Arab Emirates (one of the participants shared information that in Dubai they began to build American clinics in which the US doctors will work, as it is far and expensive to fly to the USA)

'Everybody wants to go to America, but it's very far, very expensive and America does not provide any opportunities for patients from the CIS countries (coordinators, translators), so it is inconvenient. And in Dubai, they began to build American clinics where American doctors will work. That is, it's very interesting. The flight is short, it's an interesting country to enjoy the resorts, translators will be provided. Every year interests change, countries change.' I119, city of Astana

4.5. Typical client image

More often, a typical client is described as a secured person or with a well-off income above average (the so-called 'middle class'). However, they also point out that there are cases when clients with incomes below the average, in case of a serious diagnosis, sell apartments or other valuable property to pay for the cost of treatment.

'No, the main segment is wealthy people. They themselves, their children, or their parents.' II6, city of Almaty

'Well, speaking specifically about Kazakhstan, there is a third category of people who do it for prestige. I had many of the patients who acted for these reasons. They want to undergo examination in the most prestigious clinic and confirm their status.' city of Almaty, II7

Most often, clients are people with higher education, aged 35-50, who pay for their treatment and / or for children or parents. There are rarely clients of the older age group of 50 years old and older.

'... this is a middle-class person who has a stable income, has a higher education, worries about his health' II7, city of Almaty

Regionally, travel agencies are most often applied to by clients from the cities of Almaty and Astana, and also:

1) in Almaty: Aktobe, Pavlodar, Ust-Kamenogorsk, Bishkek, Shymkent

'Basically, of course, Almaty and Astana. There is also the West, where oil workers live. Who has the money.' II14, city of Almaty

2) in Astana: Atyrau, Pavlodar, Aktau, Uralsk, Kokshetau, Ust-Kamenogorsk, Karaganda

4.6. Problems clients expressed to the travel agencies

Among the main problems that travel agencies face are psychological barriers of clients, complaints from clients, and difficulties related to working with foreign hospitals.

1) Psychological barriers of clients

Experts note that fears and anxiety from clients are encountered in this specific work quite often (especially those respondents who are exclusively engaged in medical tourism). They distinguish the following psychological barriers to the use of medical tourism:

More often:

- Fears and anxieties associated with traveling to a new country, fear of the unknown, fear of remaining alone, language barrier
- Anxiety about financial risks: fears that treatment will not be effective at a significant financial cost; fear of overpaying for treatment, as they fear that travel companies overstate prices compared to the actual cost of treatment in the clinic
- Mistrust, fear of fraud / deception, associated with a doubtful recommendation by the agency of a highly qualified hospital
- Fears associated with the surgery associated with doubt in the successful outcome of the treatment / surgery

The respondents note the following ways of dealing with the fears and doubts of clients:

- Implementation of psychological support for those who are afraid to go to another country and are afraid of surgery: the client needs to be reassured, to give a sense of certainty, for example, to give positive examples of curing the same disease in this hospital, to tell in detail the stages of the trip. To provide constant support in the face of Russian-speaking coordinators in the country of treatment. To guarantee the support of the agency in Kazakhstan in the event of any problem.
- For those who do not trust and doubt the quality of treatment, financial aspects and organization of the trip: lengthy personal interviews, actual arguments such as the accreditation of the hospital, information about the clinic, doctors, sometimes - the opportunity to directly contact the hospital

Many people say that in such a delicate business as medical tourism it is better not to impose an opinion on the client and work as transparently as possible, in order to exclude further claims from the client, for example, the client was 'forced' to make a particular decision. To give the client the choice of hospital from at least 2-3 choices. The client himself must take responsibility for his decision about the trip, the choice of the country and the hospital.

2) Complaints and claims from clients

About half of the experts state that the process of referring tourists for treatment abroad is well arranged, there are no serious problems with the provision of services and complaints from clients.

'Perhaps, there is not such a thing. We have long been on the market and it's easy to move.' I18, city of Astana

'Nobody is spiteful. Everyone is happy. If you look at China, then our finicky customers may not be satisfied with a hotel, somewhere they felt damp, somewhere there was a gnat. You can find fault with hotels, but there was nobody who dislikes something about medicine.' I13, Almaty

Another half of experts, on the contrary, notes that sometimes customers are still unhappy and the main reasons for this are the following:

- The patient does not always agree with what the hospital proposal (methods of treatment), the hospital cannot always meet the patient's wishes if this contradicts the treatment regimen, diagnosis, etc.
- The patient sometimes violates regulations on diet, movement, etc., which leads to a worsening of the condition, but the patient refuses to acknowledge his responsibility in this, accusing the hospital
- Individual complaints about short consultations of the professor, doctor and the fact that the main questions of the patient are answered by the nurse in the hospital

3) Problems with clients that complicate cooperation with foreign hospitals

Experts say that the problems that make it difficult to work with foreign clinics are:

- Difficulties in promptly referring patients to certain countries: long-term preparation of visas for certain countries (Israel, European countries, China)

'Most often they are visas to certain countries, in Europe. Especially when you refer the patient in an indefinite period and do not know how long he will stay there, how much treatment will be required. The embassy does not understand how you do not know how long it will take.' 116, city of Almaty

- Overstated customer requests, demands for closer attention
- Financial constraints of clients
- Some clients tend to think long, make decisions for several months, ask the same questions over and over again, which significantly delays the process and terms of negotiations
- Clients with a severe diagnosis may be in an unbalanced psychological state, which affects the quality of negotiations

'Sometimes clients apply in this mentally unbalanced state. They are always in anxiety, they have just been diagnosed, they do not fully understand themselves, inadequately regard the whole situation. Many do not want to understand that they can indeed be cured, that it is curable; they just have to do their best. Many are suffering morally, and we cannot help them' 119, city of Astana

4.7. Needs and requirements of travel agencies and their clients

Needs and requirements of clients in the field of medical tourism

Experts somewhat differently understand the needs of the client in terms of medical tourism: for some representatives of travel agencies, the needs of clients are reduced to the quality of medical services - qualitative diagnosis assessment, effective treatment, improvement of health (which, actually, is supposed for an agency of this kind as an obligatory condition)

Several more reflexive experts look at the needs of the client somewhat more broadly and highlight the following aspects:

- The patient is interested in the completeness of the information provided at the stage of the trip approval - it is important to provide complete information about the hospital, the cost and the course of treatment in the primary response of the hospital

*'Initially, people are guided by what looks cheaper. The most expensive options are thrown back. Also, people look at the quality of answers, if they answered him with one sentence, then he will not make a choice. A person, when he arrives with his illness, more or less understands his illness. He considers the answers he has been given, and what treatment options are offered to him. He reads studies.'*116, city of Almaty

- Providing the necessary package of services to the travel agencies: the possibility of providing references for at least 2-3 clinics so that the patient could choose the most suitable option

*'They need to fly, to get a visa, to find a hotel, to get a transfer, and what else will you think up? I offer them 2-3 clinics, and they will choose themselves.'*114, city of Almaty

*'Flight, transfer, accommodation. Nobody goes for super comfort, they want to be near, somewhere to live near the hospital, so they do not have to travel far.'*110, city of Almaty

*'... a tourist flies away, on the first day he can undergo a doctor's examination, take some tests, he has from five to seven days for this, everywhere it differs. What does a person do all these days abroad? Of course, they are beginning to look for some guides, attractions, in order to combine a medical trip with tourism, that is, to visit some sights.'*113, city of Almaty

- The duration of treatment – it is sometimes a fairly critical criterion. Hospitals cannot always name actual terms, especially in case of serious illnesses.
- Reasonable price proposal (most customers do not choose the most expensive options)
- Quality of services provided
- Sometimes - accompanying patients to shopping, possibility of organizing tours
- Ability to solve the language barrier problem by providing an interpreter or a Russian-speaking assistant

*'They want to have translators, because there is a language barrier. They worry about how they will explain themselves.'*110, city of Almaty

- Often, customers prefer to be provided with a full package of services, including transfers, breakfasts, all types of examination and actually the treatment itself
- Often clients ask for certain accommodation conditions - the location of the hotel or apartment (which is the best option for the price) as close as possible to the clinic

*'Many customers want to live in apartments to be comfortable, but cheaper than hotels.'*119, city of Astana

- There is also a relation with the purpose of travel: the combination of recreation or classical tourism with treatment, diagnosis assessment, rehabilitation
- Rarely: availability of guarantees for the fulfillment by the agency and hospital of its obligations through the conclusion of a service agreement
- Rarely, in very severe cases - special conditions of flight, transportation of the patient

'The latter child who flew had a special apparatus where the drug had to drip constantly to be received by the child. Vials with medications, the apparatus itself. It was necessary to negotiate with all airlines, airports. Because it's not easy for him to go through with it. The liquid cannot be brought to the plane.' 116, city of Almaty

Agency needs for organization of work in the field of medical tourism

The needs of agencies for providing medical tourism services to a certain country are rather modest:

- Availability of partners in this country for the purpose of cooperation
- Quality medical service
- Possibility to provide the client with a full service for medical services such as transfer, accommodation, interpreter, comfortable conditions in the country

'You know, several times I was in info tours and visited maternity hospitals. They do not look like maternity hospitals. That is, a mother who has given birth to a child or who is going to give birth completely feels like she is at a resort. Such a home environment, everywhere flowers, everywhere salons. At hospitals, there are smart parks. That is, wherever you turn, the beauty is everywhere. Very many people go there to give birth.' 117, city of Almaty

5. Existing customers of medical tourism

5.1. Reasons / medical diagnose of existing medical tourism users

Table 28. Diagnosis/reason for treatment abroad

Interview number	Diagnosis	Prehistory of application to medical tourism services (from the in-depth interview)
II1 (through travel agency)	Cancer disease (removal of the tumor on the leg)	<i>There was a lump on the leg. Doctors in Kazakhstan (Almaty) were unable to make an accurate diagnosis. I applied to South Korea first of all for diagnosis, and when they diagnosed cancer, I immediately decided to be operated on the same site</i>
II3	Cerebral cyst	<i>There was a trauma when I was 17 and a long ineffective treatment in Kazakhstan for 7 years, a long state of feeling unwell. The neurosurgeon recommended trying treatment abroad. Prior to the treatment in Israel, there was also experience in treatment in Georgia (Tbilisi), Russia (Moscow).</i>
II4	Mammoplasty	<i>I decided to do breast augmentation and immediately began to look for overseas hospitals. I did not consider the operation in Kazakhstan due to the lack of confidence in medicine. I searched for information in the Internet - forums, hospitals, prices.</i>
II5	Coronary heart disease	<i>For a long time they could not make a diagnosis, then - ineffective treatment in Kazakhstan. Lack of service and human attitude towards patients, the disease was not seriously taken. Doctors in Astana advised me to apply to foreign clinics (they advised Israel, but very persistently, which repulsed me), because they didn't have adequate equipment for the treatment of such diseases.</i>
II11	Dentistry, implantation	<i>I considered treatment abroad without more ado. It was interesting to get acquainted with international experience, references from my friends, who did the same procedure, also influenced my decision. I was also attracted by the chance to go to Israel, get acquainted with the country, visit the Dead Sea, Tel Aviv, etc.</i>
II12	Obstructive jaundice, decontamination of bile ducts	<i>I underwent the operation to remove the gallbladder, after which obstructive jaundice began. Six months of treatment in Kazakhstan did not help. On television, I saw an interview with an actor who had the same problem, and he recovered in Turkey - he had the bile ducts cleansed.</i>
II20 (through travel agency)	Pleuritis, pneumonia	<i>I got sick, started to suffocate, doctors could not make a diagnosis, later they diagnosed pleuritis, pneumonia and referred me to outpatient treatment to the TB dispensary. I refused it for fear of contracting tuberculosis. I was treated as an outpatient, they pumped out fluid from the lungs, but there was no improvement. I decided that I need a higher level of qualification of doctors and services. There are relatives and former co-workers in Germany, I contacted them. I was looking for information on the Internet.</i>
II22 (through travel agency)	Gallstone disease	<i>Strong abdominal pains began. I was diagnosed with gallstone disease, cholecystitis. They suggested abdominal operation, but I wanted methods that are more sparing. I knew that there was a method of laparoscopic removal of the bile ducts through three small incisions; I was suggested to queue up for such an operation in Kazakhstan, which required time to wait. I did not want to wait. I remembered that my friends recommended China for treatment.</i>

II23 (through travel agency)	Cervix cyst	<i>In Kazakhstan, they diagnosed me with cervical cyst. I refused pointblank to consider treatment in Kazakhstan and immediately began to look for options abroad. I asked for responses from friends, searched for information on the Internet. I chose the hospital and myself conducted negotiations with the clinic about treatment.</i>
II24 (through travel agency)	Rhinoplasty	<i>I had an unsuccessful emergency operation in Kazakhstan, after which I could not look at myself in the mirror. I decided to do plastic surgery to correct the shape of the nose abroad due to mistrust of the Kazakhstan plastic surgery.</i>
II25 (through travel agency)	Stomach cancer	<i>I went to the hospital where I was diagnosed with stomach cancer, I was immediately operated, and my stomach was removed. After discharge, I refused to undergo chemotherapy in Kazakhstan, and immediately started looking for options abroad. Friends recommended a clinic in Turkey. I immediately contacted the clinic, sent there all the tests and results of the survey.</i>
II26 (through travel agency)	Lymphoma	<i>Pain in the throat began, the doctors first treated the sore throat, then a tumor appeared, and the diagnosis was lymphoma. The voice completely disappeared. I went through two courses of chemotherapy in Aktobe, but the treatment gave little results, the voice did not appear. I decided to look for treatment opportunities abroad, in South Korea; the voice appeared after the first course of chemotherapy.</i>
II29 (through travel agency)	Third-degree stomach ulcer	<i>Pain have started to torment me since 2010, it's over 7 years by now. I swallowed different types of bougies, food tests have been done, different acidity tests, gastrointestinal tract test. During these 7 years, there was conservative treatment, that is, antibiotics, injections, and nothing helped. At the beginning of 2017, ulcer opened and there was bleeding. After 3 months, it repeated. Treatment in Kazakhstan does not help; I began to think broadly and thought about going to Korea.</i>
II31 (through travel agency)	Prostate adenoma	<i>Well, I suffered about how and what to do, then read the Internet: how, where, what, where better to do, I read the reviews. That is, they found out which company is engaged in it, there, too, you need to make a request. It turns out that they send an invitation, that is, it's a company, we went there to Astana, then back, then we bought tickets through Moscow, and we went there.</i>

Personal profile of existing medical tourism customers:

General profile of the users of medical tourism services: 27-65 years old, working in commercial organizations or own a business. They take control of their health; they don't want to be just cured, but to increase the life expectancy and its quality. They are attentive to their needs. Many respondents actively spend their leisure time, travel to the mountains, go swimming, play tennis, train in the gym, and do fitness. As for their marital status, most respondents are married with children. The majority of participants like to travel abroad; some of them often go abroad for work.

Table 29. Characteristic profile of the existing users of medical tourism services

Interview number	Age	City of residence	Gender	Profession	Country of treatment	Diagnosis
1	33	Almaty	M	Freight manager	South Korea	Cancer disease, tumor on the leg
2	27	Almaty	F	Realtor, sole-proprietor	Israel	Cerebral cyst
3	35	Almaty	F	Accountant	Thailand	Mammoplasty
4	39	Almaty	F	History teacher, private school	Germany	Coronary heart disease
5	29	Astana	F	Accounting services, sole-proprietor	Israel	Dentistry, implantation
6	65	Aktau	M	Director of the Plastic Factory	Turkey	Obstructive jaundice, decontamination of bile ducts
7	48	Shymkent	M	Long-distance driver	Germany	Pleuritis, pneumonia
8	44	Shymkent	F	Clothing trade, sole-proprietor	China	Gallstone disease
9	45	Astana	F	Logistics, freight manager	China	Cervix cyst
10	48	Karaganda	F	Accountant	South Korea	Rhinoplasty
11	28	Karaganda	F	Sales Manager	Turkey	Stomach cancer
12	27	Atyrau	M	Trade	South Korea	Lymphoma
13	35	Pavlodar	F	Teacher of the Kazakh language	South Korea	Third-degree stomach ulcer
14	45	Pavlodar	M	Food trade, sole-proprietor	Germany	Prostate adenoma

5.2. Decision making process

Among the respondents, two main models of participants' behavior can be distinguished:

1) Group 1: 'Desperate' - the patient tries to undergo examination or treatment in Kazakhstan, he does not receive the desired result and only then begins to learn other possibilities, including treatment abroad. Often at this stage, there is someone who advises a certain country or clinic (a doctor, a friend, a neighbor in the ward, a relative). This type of behavior was typical for such diagnoses as: cancer, cholecystitis with the need to clean bile ducts, pleuritis, cyst of the brain.

'In Almaty they could not determine the disease ... then in Astana we were diagnosed Yes, ischemic disease, why worry, we have half of Kazakhstan living with this. I explain to them that I faint, begin to suffocate, I can go outside and faint. Do we have half of the population of such people in the country? Is it so? The attitude is, roughly speaking, brutish.' II5, f, city of Almaty

'I came to Korea, they reassured me, guaranteed that if I am treated by them, they will cure me completely. I received a course of chemotherapy there, after which, incidentally, my voice erupted immediately.' II26, m, city of Atyrau

2) group 2: 'Mistrustful' - the desire to be treated or undergo any procedures abroad arises immediately after a) determining the need or b) diagnosing if implantation is necessary, plastic surgery, and diagnosing diseases (cancer, cholelithiasis). All participants with similar needs immediately began to look for options abroad due to high level of mistrust in the quality of Kazakh medicine, and some were also attracted by the opportunity to see other countries (Israel, Thailand).

After making a decision to travel for treatment abroad, customers consecutively undergo several steps:

1. Selection of the country for treatment: as a rule, a choice of at least 2-3 countries is considered
2. Search and selection of a travel agency (relevantly only for half of the study participants - uses of tourism agency services)
3. Selection of the hospital
4. Obtaining necessary medical procedures in the hospital
5. In severe cases (cancer, brain cyst) - follow-up support, consultations, repeated visits

As a rule, those who use the agency's services and those who organize the trip themselves first conduct preliminary monitoring of the countries, which treat the desired profile on the Internet.

- **Those who use the services of agencies** more than in half cases have already chosen the country for the trip. In two of the 14 interviews with users, the respondent did not choose the country, but stopped immediately on the one recommended by relatives with positive experience of treatment in this country (China, Turkey).
- **Those who independently organize a trip without involving agencies** actively ask the references from friends and relatives who were treated abroad earlier. The main factor in making a decision about the country is the most relevant experience of treatment for a similar disease or similar profile, but just a positive experience of treatment in a certain country is considered. Often personal recommendation is more significant than information on the Internet or in other sources of information.

'My brother went there to be treated by himself. He offered me to go there. When the doctor removed everything and showed that the cause of the disease is in this channel. He said that there are several doctors in Istanbul who can do such operations. If you go to Germany or Israel - this is a very expensive operation. He said that through his friends this operation would be cheaper. It was he who sent me there. I called the professor in Istanbul, gave all the papers. I went straight home to him, he met us at home, did examination. The next day he prescribed an operation for me.' II12, m, city of Almaty

'... while I was at the Oncology Center in Almaty, I ran into a woman and got acquainted by chance. She advised me to apply to foreign clinics, in particular to South Korea, to choose one of the clinics, because she had previously applied there. South Korean doctors were able to deliver the most accurate diagnosis. Accordingly, she was able to undergo a normal course of treatment, which later helped her.' II1, m, Almaty

5.3. Trip organization: travel agency services

Reasons for using travel agency services

Half of participants in qualitative research of actual users of medical tourism used the services of a travel agency.

Motives for using services of the travel agency:

- 1) Efficiency: if the problem needs urgent solution, there is no time for a long search. For example, if you need an urgent surgery to remove the gallbladder. Often in such a situation, even the physical condition of the patient does not allow for a long search for the country and the clinic, the organization of the trip; when there is no one who would help with these issues. The agency can urgently offer clinic options and issue a visa faster than the client would have done on their own
- 2) Confidence in the agency's competence, that is, this agency has experience in the sphere of cooperation with the best clinics
- 3) Convenience and time saving, namely, in cases when the client is busy at work or simply does not want to spend time on independent searches and especially on the organization of the trip - finding a hotel, a guide, etc.
- 4) Full consultation on all matters related to the choice of the country and the clinic
- 5) Prompt delivery of services at the right time
- 6) Qualitative and timely fulfillment of the undertaken obligations on the provision of the package of services abroad – the arrangement of transfer and accommodation, the provision of a guide
- 7) Friendly staff, careful attitude and careful approach to the client, interest in the needs and wishes of the client
- 8) Offer additional services - for example, city tours, shopping
- 9) Offer of a wide range of countries
- 10) Competence in counseling when choosing a hospital
- 11) Taking by the agency the responsibility for conducting preliminary negotiations with clinics about treatment and cost of services

'They explain, connect, consult, they themselves deal with tickets, that is, everything. There, the patient only needs a financial component. You pay and you will have everything on a silver platter.' I126, m, city of Atyrau

'Well, Skyline in general, are well done! Just before that, I called them many times and thanked them. Well, well done! They ask you, they say: "What would you like?" What kind of help is needed? Excursion? Well, anything, anything! Please.' I120, m, city of Shymkent

'I did not see another opportunity to find, because, firstly, I do not have time to do it myself, and secondly, because of my health, it was practically impossible. You need to be sure you are helped. If the travel agency specializes in treatment, then why not?' I122, f, city of Shymkent

Travel agency selection criteria

- 1) Specialization in the field of medical tourism - the agency deals only with medical tourism (ideally) or has extensive experience in this field
- 2) Providing by the agency with a large selection of countries and clinics for treatment
- 3) Providing by the agency with complete information at the stage of choosing the country and the clinic, professional consulting the client about the advantages and disadvantages of each country
- 4) Providing assistance to the client with the choice of the clinic, namely sending out the request with the client's analysis to various clinics, translating (if necessary) all necessary documentation and information, providing answers to the client, negotiating with clinics
- 5) Attentive and caring attitude to the client, high level of service
- 6) Promptness of document registration, visas
- 7) Possibility of providing a full package of services, including a translator / guide in the host country (it is very important, as many are concerned about the language barrier)
- 8) Recommendations of friends or relatives who used previously a certain agency

'First of all, the important thing is that they specialize in medical tourism, and are not just a travel agency. Because we have many travel agencies, where you just buy tickets and that's it. It was important for me to find a travel agency, which

would specialize, in medical tourism. Secondly, that they get to know my problem from the very beginning. That is, they found exactly the clinic and those doctors who would have dealt exactly with the specifics of my disease. I went through many agencies, asked around, found out what and how. I have taken away some at once, some hospitals were still in doubt, in question, where I would like to return. But then I found a more optimal option, for myself, and stopped at one travel agency.' I122, f, city of Shymkent

'You see, I really liked them, they offered a complete insurance. Well, it is good there. Well, I liked Skyline, to be honest.' I120, m, city of Shymkent

'Again, it's a word of mouth, my friends advised me. I126, m, city of Atyrau

Many participants cannot remember the name of the agency they used. The named ones are: 'Medical tour, 'Asia tour', 'Skyline'.

Reasons for not using travel agency services

Respondents, who have not used the travel agency services have stated the following reasons:

- 1) Previous independent experience in organizing trips abroad, namely the experience of using the services for buying air tickets and booking accommodation (e.g. booking.com)
- 2) Having relatives or friends in the host country – they can help with the visa (send an invitation), accompany instead of taking a guide (or help find a guide on the spot), help with accommodation
- 3) The wish to save money, the confidence that the cost of services will always be more expensive in the agency than with the independent organization of the trip
- 4) A trip on the specific recommendation of friends, to a certain clinic – 'shared all the contacts, including a guide' (single response)

'... you see, when I travel, I try to travel myself, without a travel agency. I buy tickets, for example, in Aviata; they offer good prices, without cheating, without anything.' I14, f, city of Almaty

'No, honestly, without much thinking. If you thought about going to some country and there would not have been anybody there, maybe that's why he or she would have taken advantage of it. And so she (the aunt) sent us an invitation, we went to the Israeli Embassy, here in Kazakhstan, took permission, everything, we entered into an agreement for entry, because we went there for some period, we booked tickets and flew.' I13, city of Almaty

'We were searching directly, through our friends, since our friends also went to that clinic. They recommended the guide who organized everything. We made agreement with the clinic, on certain date to arrive. We organized a place where we can spend the night, that is, the hotel was booked for us.' I111, f, city of Astana.

5.4. Critical decision-making factors (in terms of destination country and hospital)

Medical tourism destination country selection

- Healthcare sophistication level in the country in general (image and reputation of the country as a medical services provider) and according to the disease profile - cancer, gastrointestinal tract, plastic surgery, etc.
- Price / fee (price-quality ratio, if there is a choice, the best possible option is chosen). For example, Israel is often the winner in terms of the price policy when choosing between Israel and Germany, while South Korea wins in this category when choosing between Israel and South Korea.
- When traveling using the travel agency services, the agency's ability to provide a full package of services in this country - hospital selection, getting visa, flight organization, guide services, transfer, hotel booking, etc. - is taken into account
- When traveling on their own: availability of relatives/friends who can help at place with translation, transfer, and accommodation is taken into account; the possibilities of the hospital for organizing a trip (except for air travel) are also considered.

"This is a well-known fact that medicine is better developed in Germany, Israel and Korea. It turned out that friends and acquaintances advised, namely, Korea. In terms of the price, I compared, Korea is more profitable." I126, m, Atyrau

"I called there, and I called to Germany, then I looked through the Internet searching for all sorts of hospitals. At first, of course, I thought about Israel. For some reason, I had such thoughts, I don't know why... Israel... At first, it was just stuck in my head. Then I realized that Germany would be more convenient for me. There will not be a language barrier. I have a lot of friends, acquaintances, and relatives there" I120, m

Hospital selection criteria

1. Reliability of the hospital, its reputation in the country and abroad
2. Availability of modern equipment and highly qualified doctors
3. Price policy; often the less expensive option from the offered ones is chosen, which meets all the requirements in terms of quality, comfort and service level
4. Client-focused approach, providing the patient with comfortable conditions, for example - the possibility of single room during the post-operation period
5. Efficiency and speed of response of the hospital to requests, which is an indicator of loyal attitude to the client
6. Use of modern technologies and materials (for example, laparoscopy, laser surgery, modern drugs for chemotherapy, international dental implant systems)
7. Specialization and/or extensive experience of the hospital in the treatment of the relevant spectrum of diseases (for example, a hospital with narrow specialization in this direction or a multidisciplinary hospital with extensive experience in this field). In specific cases investigated, the specialization in cancer, gynecology, cardiology, liver and gall bladder diseases, plastic surgery were needed.
8. Sometimes (in case if surgical intervention is needed), patients choose not only the hospital, but also the doctor; in such cases extensive work experience as a surgeon (hospitals send a list of doctors and their CV's) plays an important role
9. Sometimes the territorial location in the host city is important due to purely tourist interests (it would be nice to walk around the city while the results of analyzes are being prepared)
10. For South Korea only: the clients want it to be a state or university hospital

In case of independent search, such criteria are added:

11. Possibility of the hospital to provide a Russian-speaking guide or the presence of an international department working with foreign clients
12. Possibility of the hospital to provide a transfer and accommodation (booking a hotel with a discount or accommodation in the hospital itself)

"When choosing a hospital, I had no special criteria. Most important was to get appropriate treatment and that was it. I needed to get some guarantees that I would be cured, and be confident about this hospital" I126, m, Atyrau

"In any case, I would not be happy if someone was lying next to me in the room, I need peace and quiet, and in that hospital (which I did not like) there were 3-4 people in the room, that is, it is acceptable for them even under contract, for a huge amount of money, so we did not like it. And in ON-hospital in Israel they created all conditions for the coziness and comfort that were required" II3, Almaty

"Quality, name of exactly those services we needed, convenient treatment. Again, you see, we had an allergic reaction to chemotherapy, so they provided us with an alternative, in the form of medications. If in our country we could take only drugs of chemical production, they could give us their own production drugs on a more natural basis." II25, f, Karaganda

"First and foremost, I needed them to specialize in my disease. Secondly, I needed the qualification of doctors to be at the highest level. Then, I would like to have not a surgical intervention, but the recommended solution to this problem." II22, f, Shymkent

"Basically, at that time I had a requirement related to specialists - cardiologists. Another thing was that it was a 'turnkey' hospital, so that they met me at the airport, accommodated, provided a simultaneous interpreter, and there was a male nurse, who accompanied me. He was from Petropavlovsk, a German; I was so lucky; he helped me and explained the things. The package of services was exactly as I wanted. And in terms of money: it will be expensive, but not as expensive as in other German hospitals. In Israel, it is even more expensive" II5, f, Almaty

"I found about 10 hospitals in South Korea, and I started to study the feedback of the patients who were treated there. The hospital of Samsung, where I was treated, seemed to me the best choice." II1, m, Almaty

5.5. Expectations and satisfaction of treatment abroad

Worries and emotional state of clients before the trip

Most participants experienced anxiety and worries before the trip. The main reasons for experiencing negative emotions indicated by respondents were the following:

- 1) If surgery is necessary, the most typical fear is the fear of the operation itself, anesthesia, complications, worries about the surgery outcome
- 2) When traveling alone - the language barrier, and as a consequence the difficulty of communication with the doctor
- 3) Fears and anxiety related to the disease itself (in cases of a serious diagnosis - cancer, cyst of the brain), a real threat to life
- 4) Fear of financial risks, for example, if the treatment does not bring the expected result and the large amount is spent in vain; or the fear that there will not be enough money for the full course of treatment (hospitals do not always announce the exact amount, because it is impossible to predict the course of treatment and all sorts of nuances). Also a case of treatment in Germany was mentioned when the hospital required to deposit € 28,000, which raised doubts as to whether this amount would be sufficient for treatment and, if this amount was excessive, whether the money would be returned after treatment
- 5) In the case of extremely poor health - the fear of a rough flight, feeling ill during the flight
- 6) Lack of trust to the host party - the anxiety about whether they will meet at the airport, whether preliminary agreements will be fulfilled (whether there will be a guide, transfer, etc.), sometimes even more - fear of lies and fraud

"Certainly, of course. In any case, it was there, because you do not know what and how, especially after 11 years of treatment in Kazakhstan, in Moscow there was some fear anyway. You think, what if suddenly it will go wrong and then it will be even worse, and then they will say that it is impossible to use a laser and it is necessary to cut. It's just as scary as the anesthesia itself, I'm generally terribly afraid." I13, f, Almaty

"I am fed up with this. Either die or recover. Well, really, I even had such thoughts" I13, f, Almaty

Overall satisfaction of using medical tourism services

Respondents rated highly, at 80-100% the satisfaction with the receipt of medical services in selected hospitals

The main expectations were met: the treatment was provided, the guide accompanied customers, and all works were performed in a quality way. All participants notice an improvement in their well-being and a positive result of treatment. In some cases (cancer), subsequent home treatment and repeated visits to the hospital were required. Some clients received long-term medical support after the completion of the main stage of treatment during the rehabilitation period (cyst of the brain, 5 years) - the possibility of counseling, the appointment of additional treatment based on the results of analyzes conducted in Kazakhstan.

"In general, I am happy, because they cured me. They made an accurate diagnosis; I was welcomed and served. I am 100% satisfied. My trip was very successful. I am content with everything. I have no complaints about the quality of care and medical personnel of this hospital" I11, m, Almaty

"Well, first of all, I wanted to get qualified specialists. Secondly, I needed a good relationship, so that they greeted me warmly. And my expectations were met." I14, f, Almaty

"They received me well, performed carefully the analyses, checked everything, and did not immediately send me to the operation. In general, before going there, I learned everything well and was prepared. I was aware of what was waiting for me there. I really liked the hospital, the city, and the hotel where I stayed. Everything went well." I123, f, Astana

"I got what I wanted from them. The whole maximum. As I said, my voice was buried in Kazakhstan and in Korea they began to doubt, but, nevertheless, everything recovered, everything is fine." I126, m, Atyrau

"I have a rehabilitation period of 5 years, and they told that they support their patients for 5 years. Well, they could just promise and forget. I left, I was operated. The main is that the operation was performed. But they support me; if there are any questions they answer in 3-4 days, they can give me some prompts something. It's just cool, beyond words." I13, f, Almaty

"On a ten-point scale, I would give all fifteen points" I126, m, Atyrau

"In fact, I got even more than I expected. Yes, I really liked it. It was so sterile, clean, that the air could be checked, as the saying goes. There was not a single speck of dust. There, patients with the lungs disease lie. The air is so pure. Wet cleaning is performed almost every 2 hours. Perfect! Very clean, neat and beautiful! And the doctors are very friendly. I liked it" I1, m, Shymkent

"We did rehabilitation gymnastics for 1 hour in the morning and after lunch. I did not want to do this. My expectations were not met, but not for the worse, on the contrary, for the better. Only some time later, upon arrival, I realized that it was necessary." I15, f, Almaty

A small dissatisfaction of some respondents was due to such reasons as:

- 1) I did not like the food (South Korea, China) - too spicy and/or fatty food
- 2) Too formal, business relation of staff with patients (Germany)
- 3) The cost of treatment at the end was too big (Germany, Israel)
- 4) Single: imposing traditional oriental medicine by the staff of the hospital as additional services (China) - acupuncture, wrapping, etc.
- 5) Individual: the desire to continue treatment in order to consolidate the result, however, the financial resources did not allow this.

"They were constantly imposing some herbs, wrapping, or something else." I122, f, Shymkent

Readiness of customers to use medical tourism services again

All the surveyed participants, the users of medical tourism services, are ready, if necessary, to use the medical tourism services in the future and will consider treatment abroad in case of a serious diagnosis.

"You see, if I need the similar treatment again, I will definitely go there. I also received treatment here, but this was different from that treatment, it had no results" I112, m, Almaty

"It is rather possible that I will use their services again (travel agency)" I122, f, Shymkent

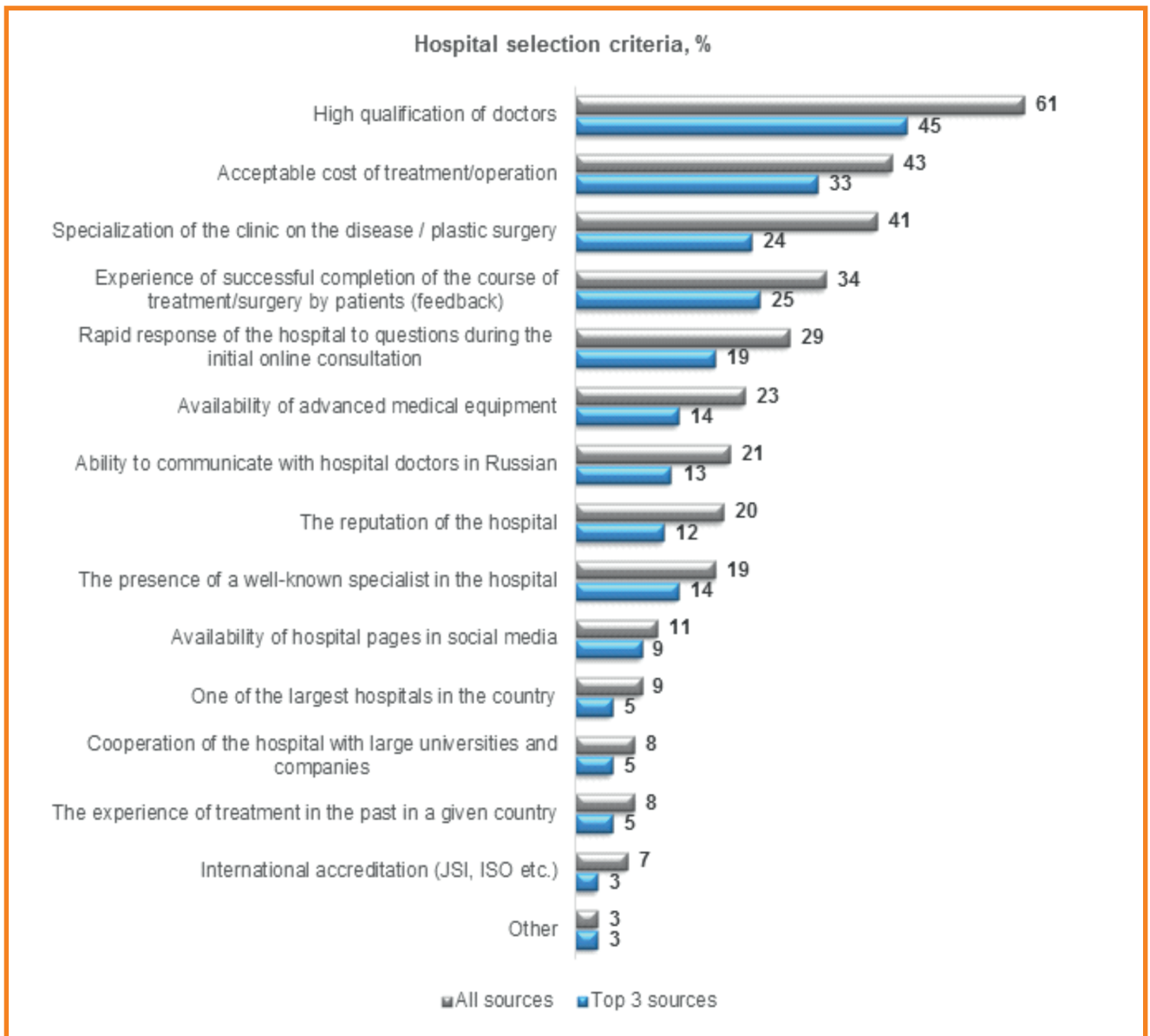
Respondents are also ready to recommend the country and the hospital where they were treated. Some of them (about half) already actively recommend treatment abroad to their friends, and some cases are recorded when their friends were treated exactly in the country and in the hospital they advised. Respondents give their recommendations, as a rule, in cases when friends have a similar disease profile, and local doctors cannot diagnose or there are no positive results of treatment.

"Already 3 friends left to be treated in South Korea on my advice. All of them were satisfied" I126, m, Atyrau

"I have already and immediately given my recommendations. As they say, I made free advertising" I14, f, Almaty

5.6. Statistics: key aspects of organization (pre-treatment) phase

Figure 12. Hospital selection criteria

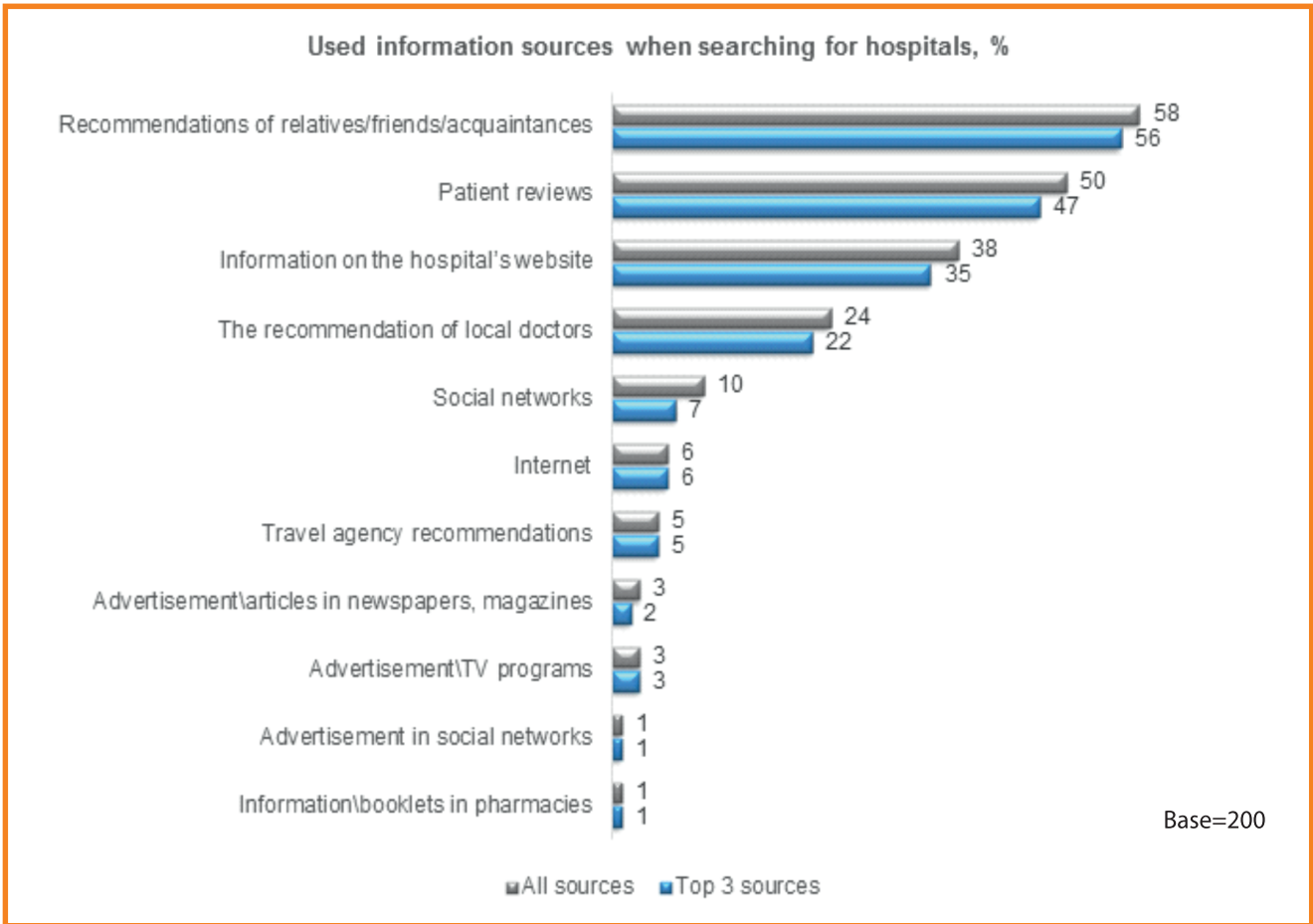


A18. What criteria did you use when choosing a hospital abroad to undergo treatment/plastic surgery?

A19. Name three main criteria in order of importance starting with the most important one

When looking for hospitals, the respondents mostly listen to the recommendations of people from their environment (58%) and to the reviews of patients who underwent treatment or surgery (50%), and they study information on the hospital's website (38%). Moreover, these sources are the top three main sources of information for actual users.

Figure 13. Used sources of information when searching for hospitals

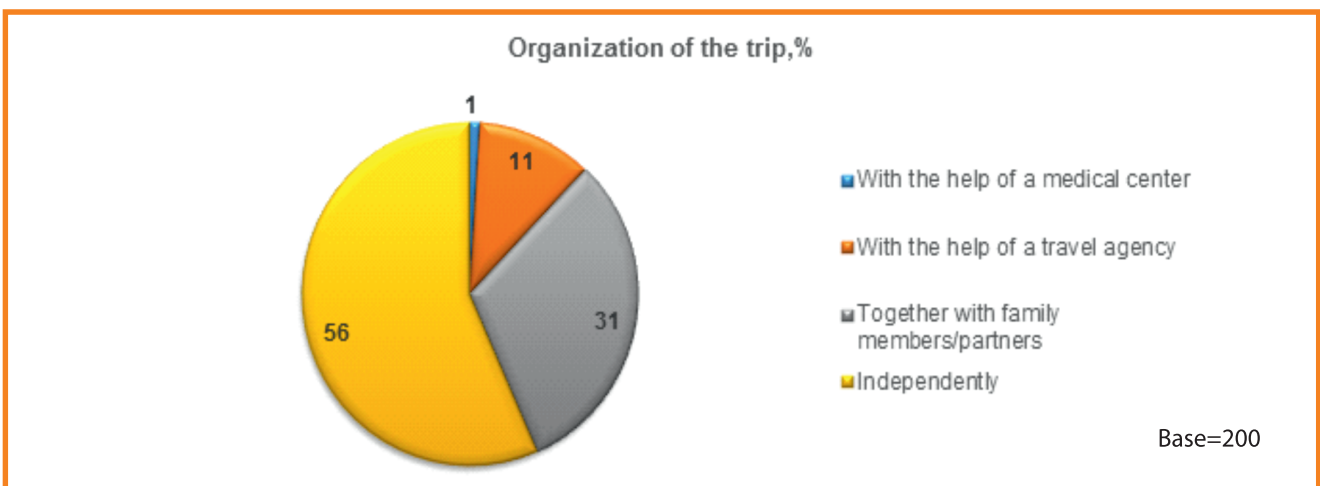


A16. What sources of information do you use to find specific hospitals?

A17. Name three main sources of information about the hospitals, starting with the most important one.

The users of medical services independently (56%) or together with other family members (31%) organize a trip to get the treatment in foreign countries.

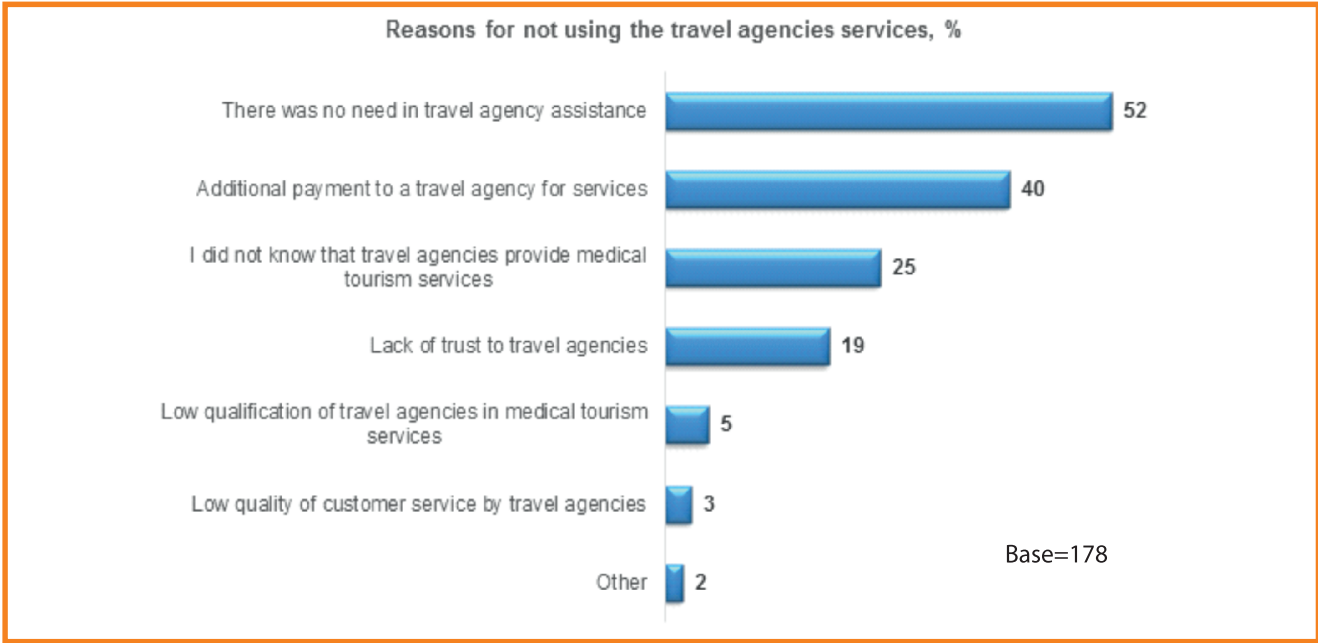
Figure 14. Organization of the trip



A21. Who was the organizer of your trip to get the treatment/plastic surgery?

The respondents did not use the services of travel agencies for medical tourism, because: they did not need assistance since they independently managed the travel arrangements (52%); they were reluctant to incur additional costs paying to the travel agency for services (40%); and a low level of awareness, that travel agencies are engaged in providing medical tourism services (25%).

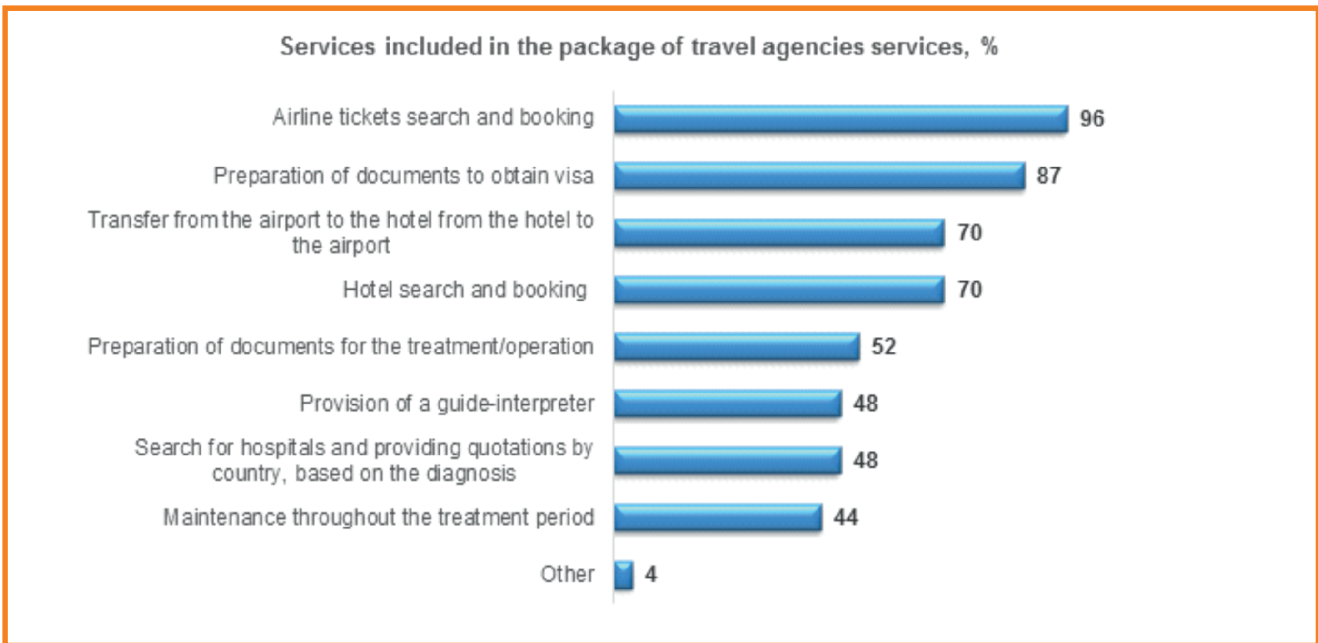
Figure 15. Reasons for not using travel agency services



A22. Why did not you use the services of a travel agency?

In the package of services provided by the respondents who used the travel agencies services, medical tourism included such services as searching and booking air tickets (96%), preparing documents and getting visa (87%), transfer from the airport to/from the hotel (70%), search and booking the hotel (70%).

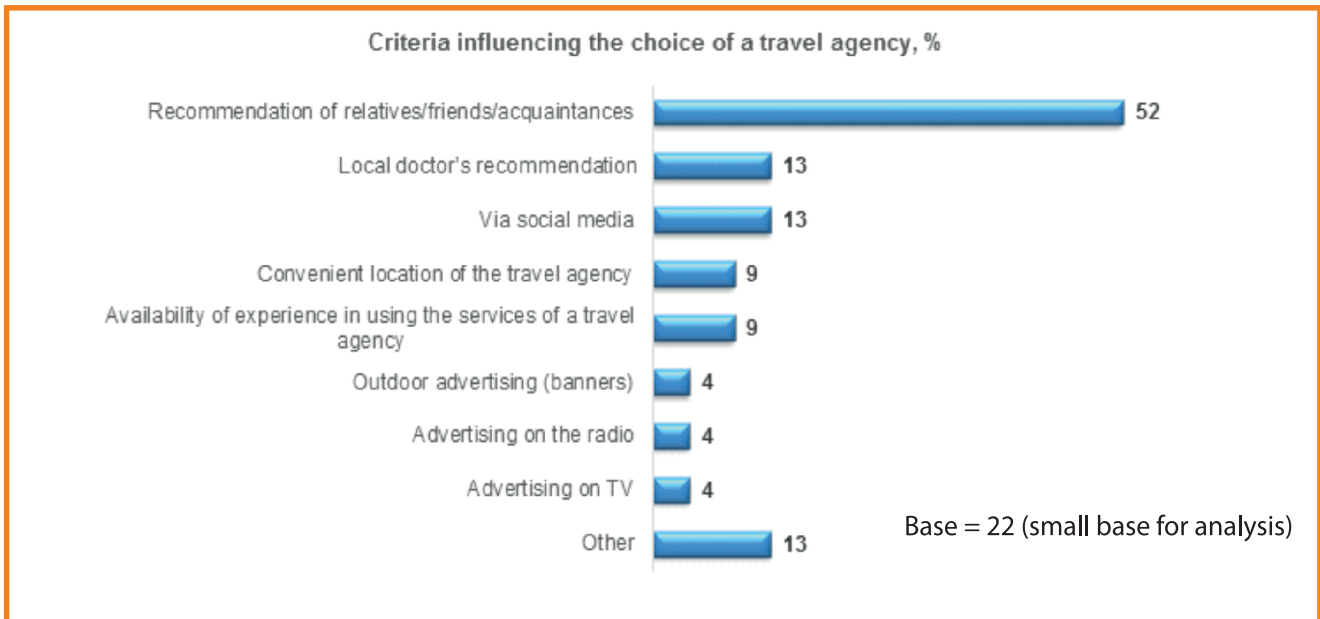
Figure 16. Services included in the package of travel agencies services



A23. What was included in the package of services provided by the tour agency?

Users mainly used the travel agencies services for medical tourism following the recommendations of relatives, friends or acquaintances (52%).

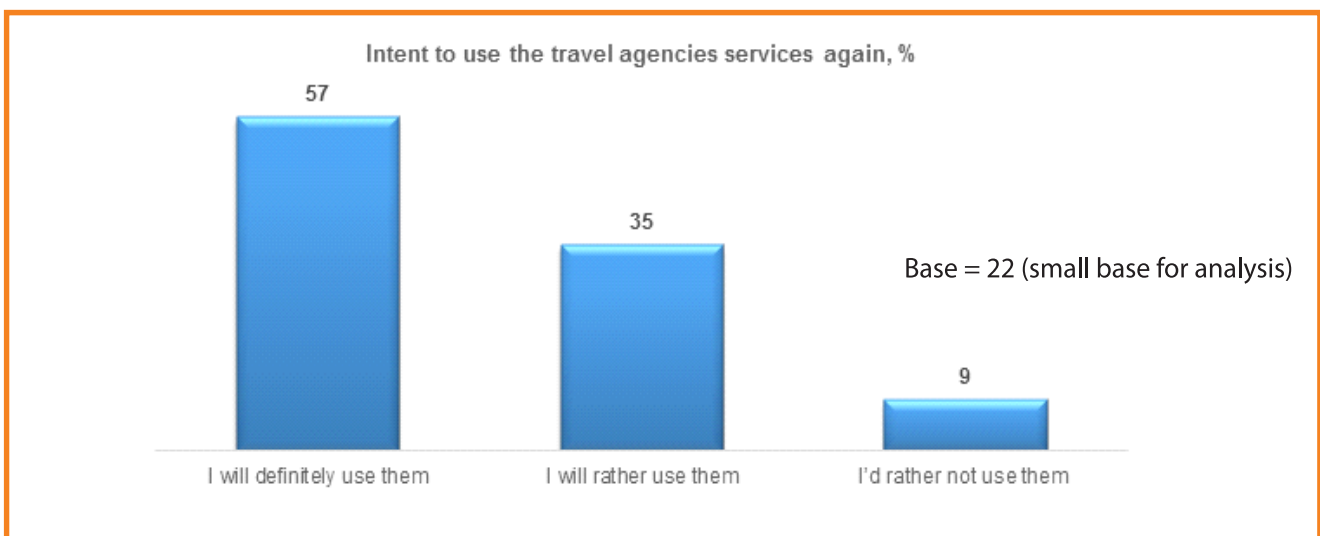
Figure 17. Criteria for choosing a travel agency



A25. How did you find this travel agency?

Most users of medical tourism services, who previously used the services of travel agencies, intend to use the services of travel agencies again in the future (92%).

Figure 18. Intention to use the travel agencies services again

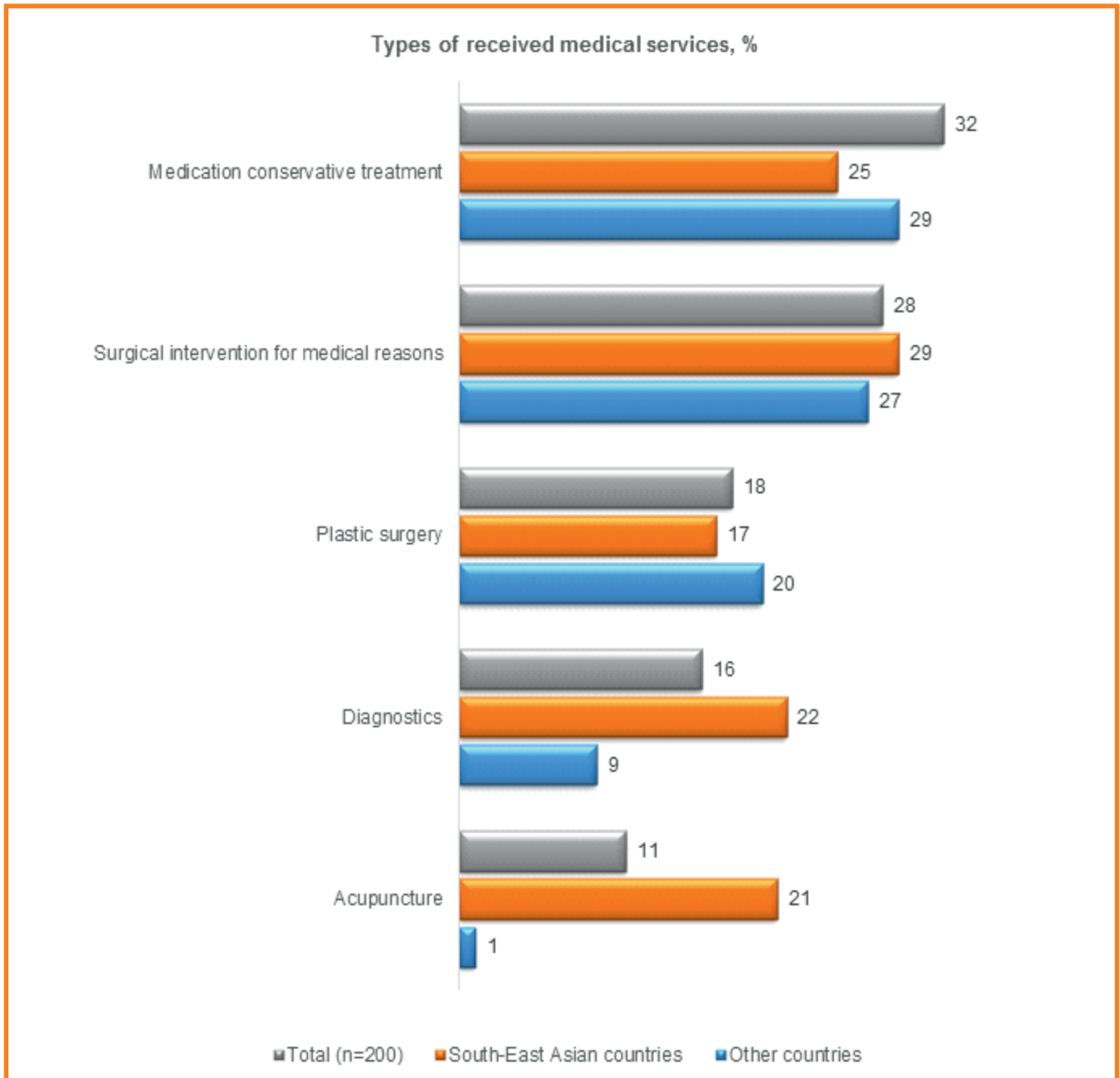


A26. Please estimate the likelihood that you will use the services of this travel agency again in a similar situation: 1 - I will never use them, and 4 - I will definitely use them. Also you can use intermediate estimates.

5.7. Statistics: key aspects of trip for medical tourism

In general, respondents visited foreign countries to obtain the following types of treatment: medical conservative treatment - 32% of respondents, surgical intervention - 28%, plastic surgery - 18%, and diagnostics - 16%, and acupuncture - 11%. In terms of the countries visited, the countries of South-East Asia are popular among respondents for such treatments as diagnostics - 22% and acupuncture - 21% in comparison with other countries except CIS.

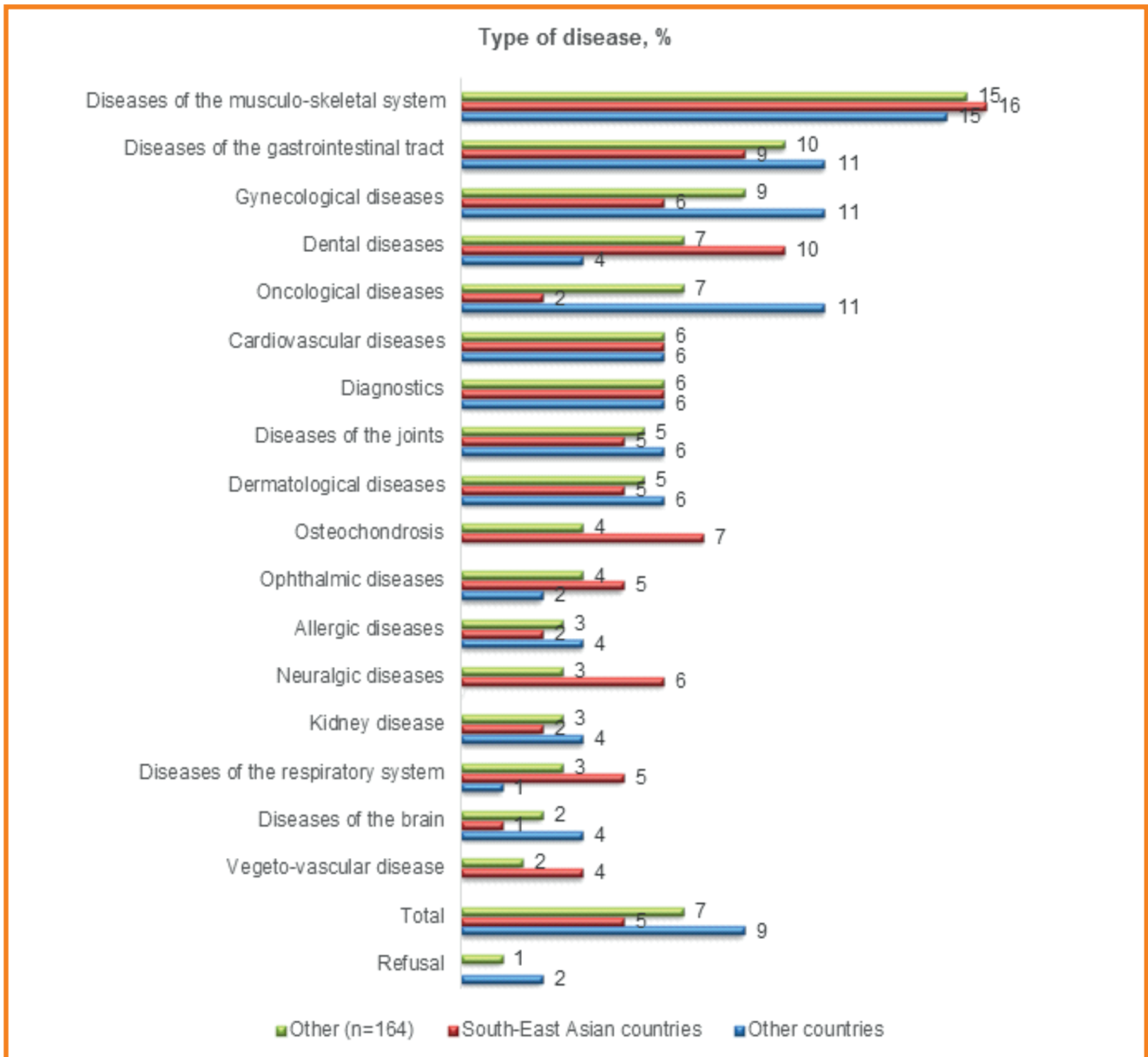
Figure 19. Types of received medical services



M1.What kind of treatment did you use the last time?

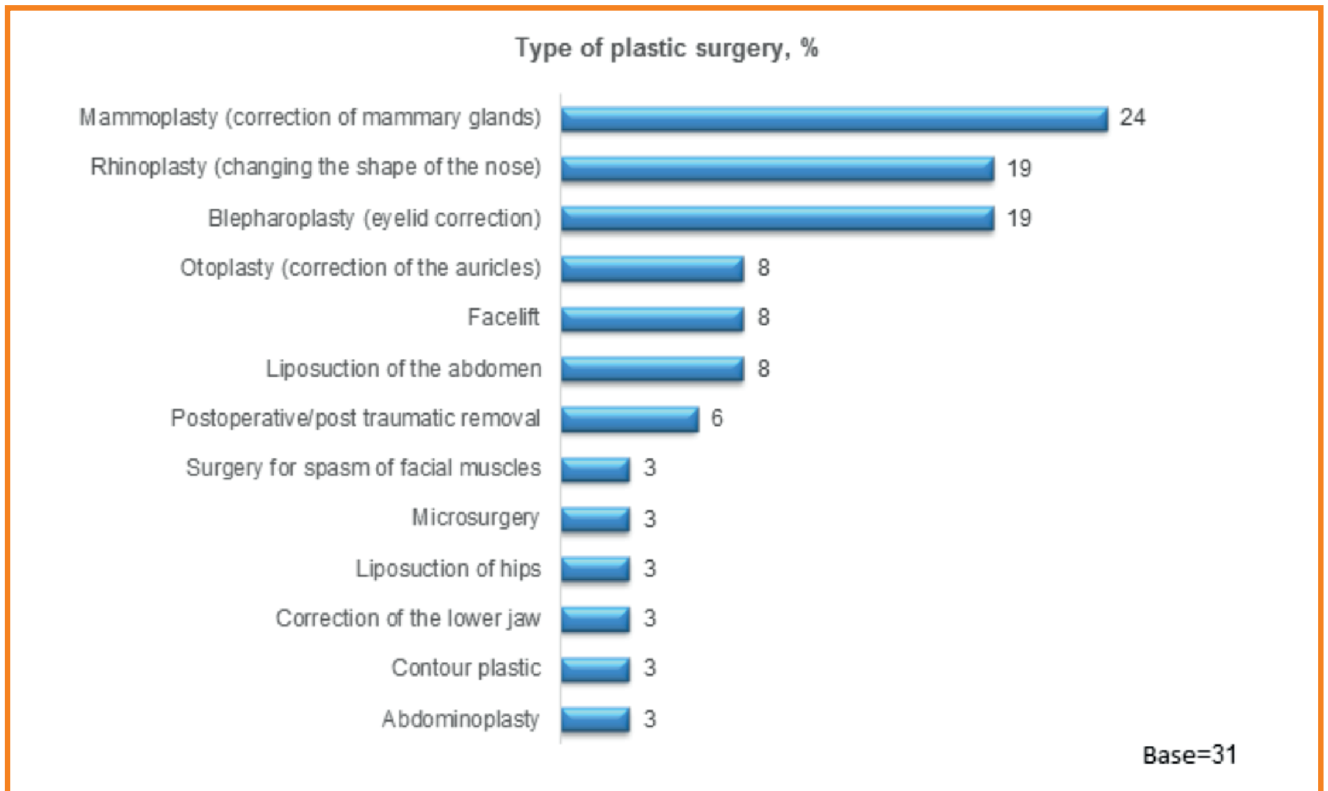
Respondents go to foreign countries to treat such diseases as musculo-skeletal disease - 15%, diseases of the gastrointestinal tract - 11% and gynecological diseases - 11%.

Figure 20. Type of disease



Among those respondents who traveled within medical tourism to obtain plastic surgery services, they performed such plastic surgeries as mammoplasty (24%), rhinoplasty (19%) and blepharoplasty (19%).

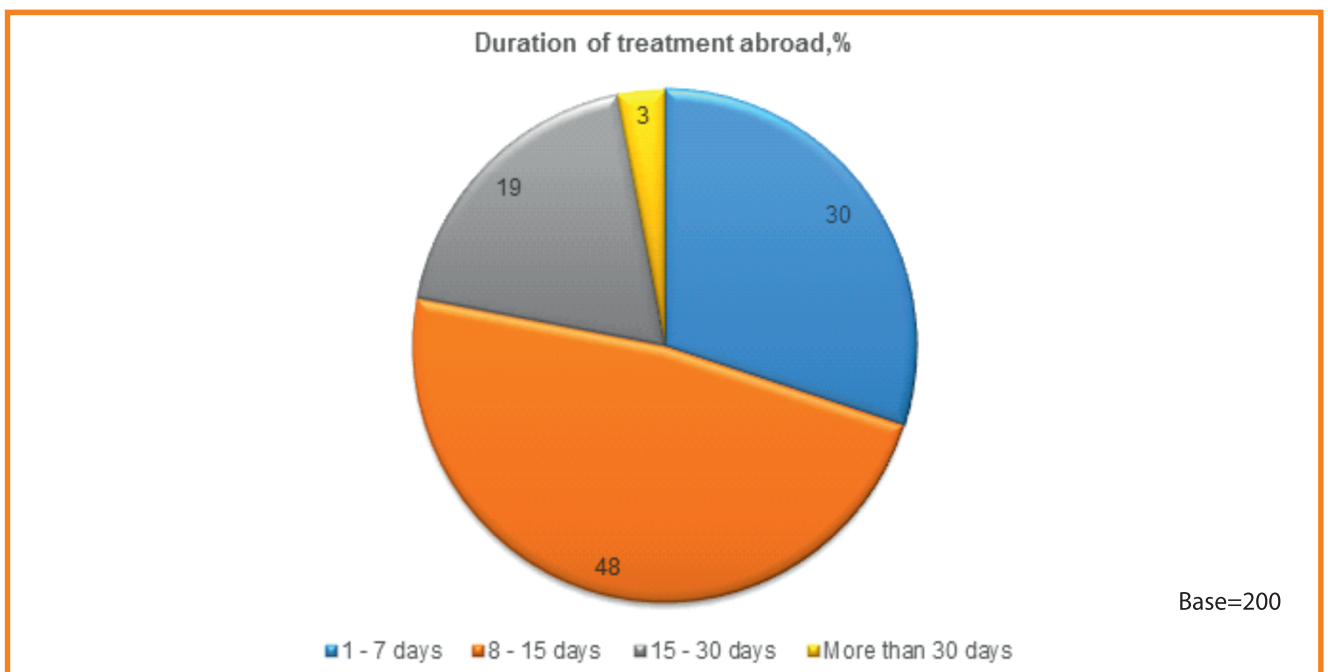
Figure 21. Type of plastic surgery



M4. Indicate the purpose of carrying out a plastic surgery you went abroad?

According to respondents, the duration of treatment abroad averaged 8-15 days for 48% of respondents, up to 7 days - for 30% of respondents and 15-30 days for 19% of users of medical tourism services.

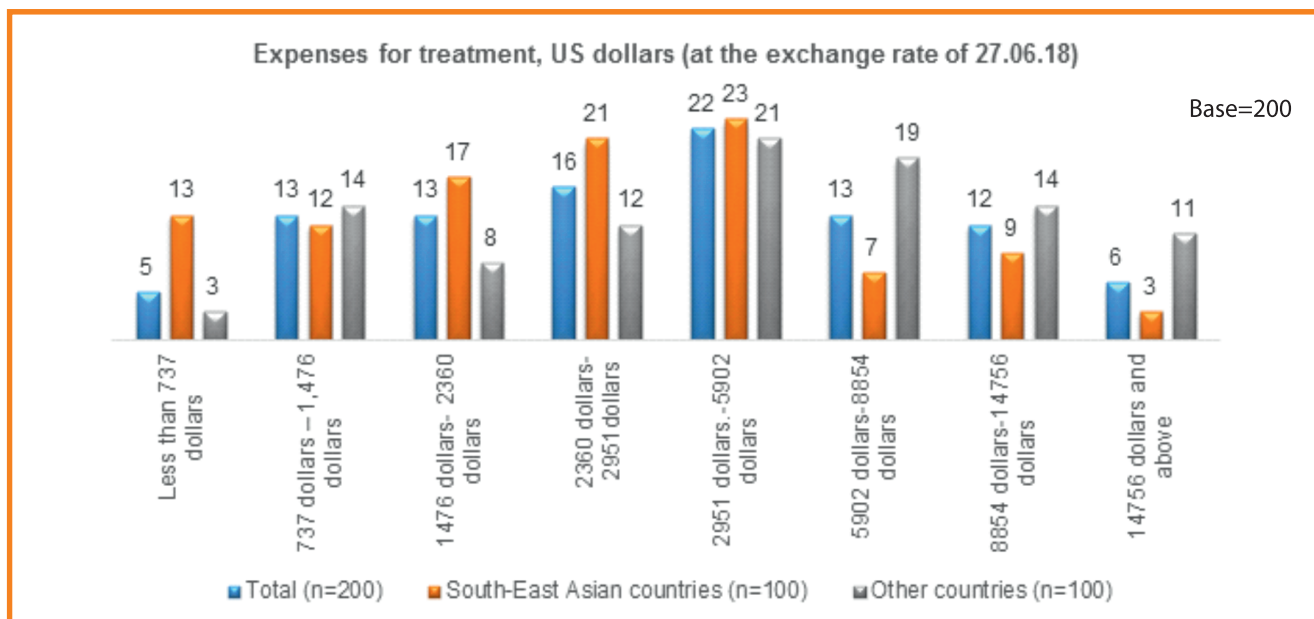
Figure 22. Duration of treatment abroad



M5. Indicate how many days has your treatment lasted abroad?

In general, for their last treatment abroad within the medical tourism the respondents incurred financial expenses starting from less than 250 thousand tenge to more than 5 million tenge, among which 64% spent from 500 thousand tenge to 2 million tenge on average for treatment. Expenditure on treatment in other countries is higher than in countries of South-East Asia.

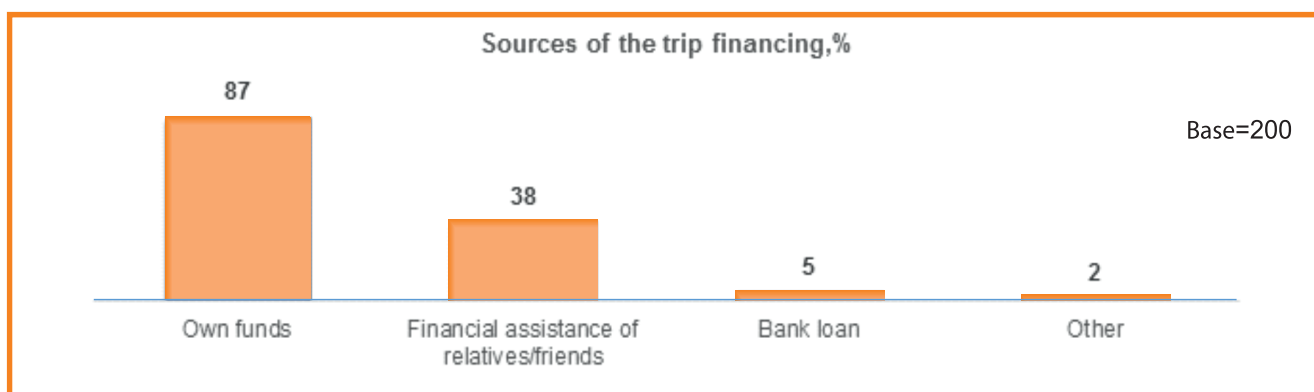
Figure 23. Costs of treatment



M6. Indicate the total cost of the treatment abroad incurred during your last trip

Users of medical tourism services mainly use their own funds for treatment (87%).

Figure 24. Sources of the trip financing



A27. Tell me, please, how the treatment/operation was financed?

It is worth noting that actual users of medical services rated highly the satisfaction with the criteria of treatment in hospitals abroad. However, there is a low level of satisfaction with such criteria as the possibility of accommodation of accompanying persons on the territory of the hospital (46%), living conditions outside the hospital (69%) and the services of a translator (68% in other countries except South-East Asia). At the same time, 95% of respondents were satisfied with the overall treatment abroad. Evaluation of the satisfaction with the services of an interpreter, the living conditions in the hospital, the location of the hospital in the city and the price/quality ratio is higher in the countries of South-East Asia than in other countries.

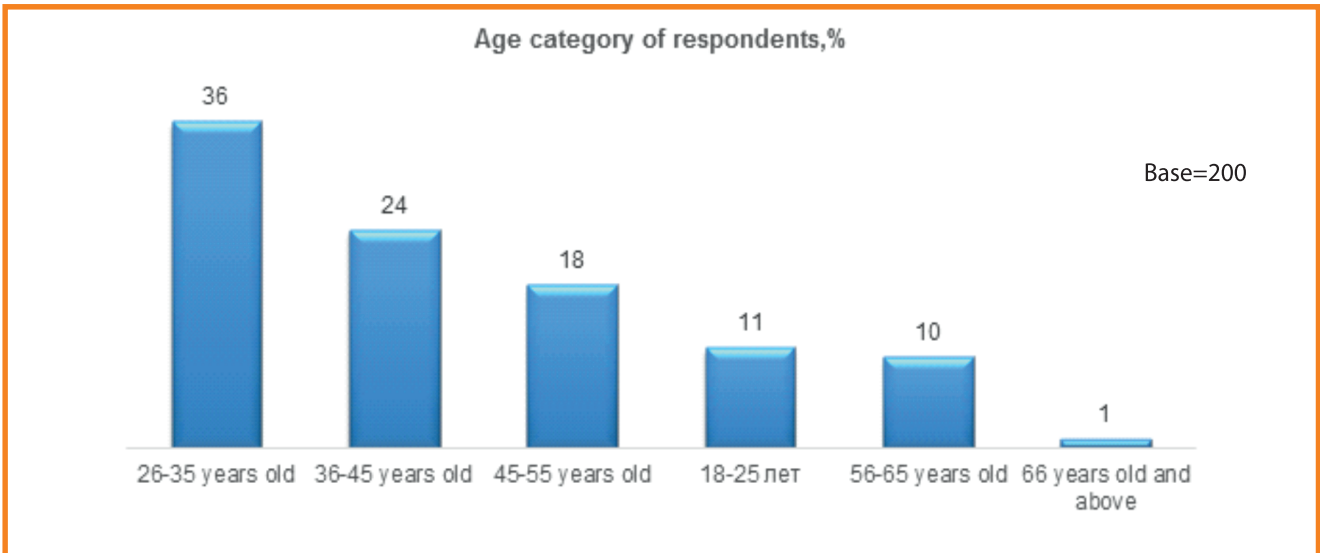
Figure 25. Satisfaction with the criteria of treatment



M7. Indicate how satisfied you are with the services provided below during your last treatment abroad, where 1 is not at all satisfied and 5 is very satisfied, you can use an intermediate assessment

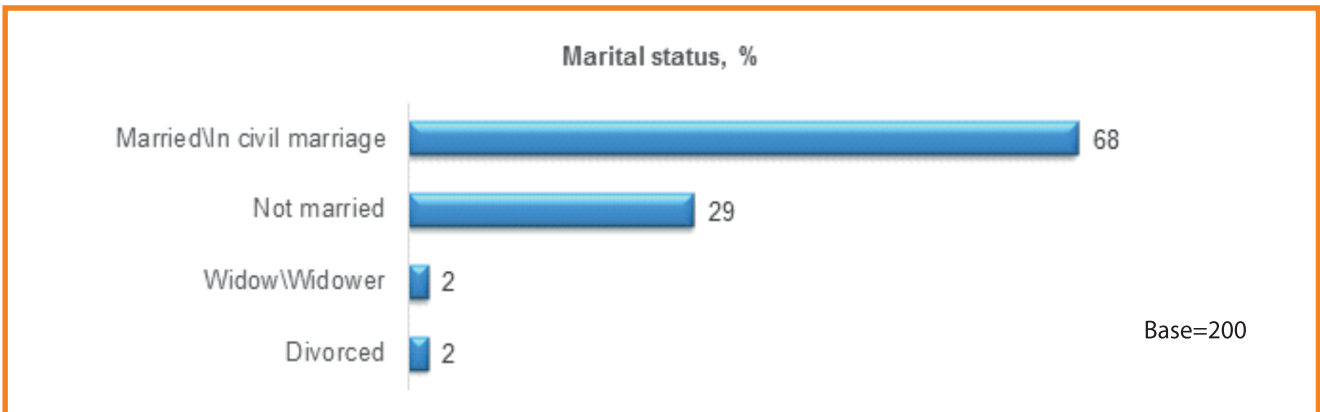
5.8. Statistics: Characteristic profile of medical tourism users

Figure 26. Age category of respondents



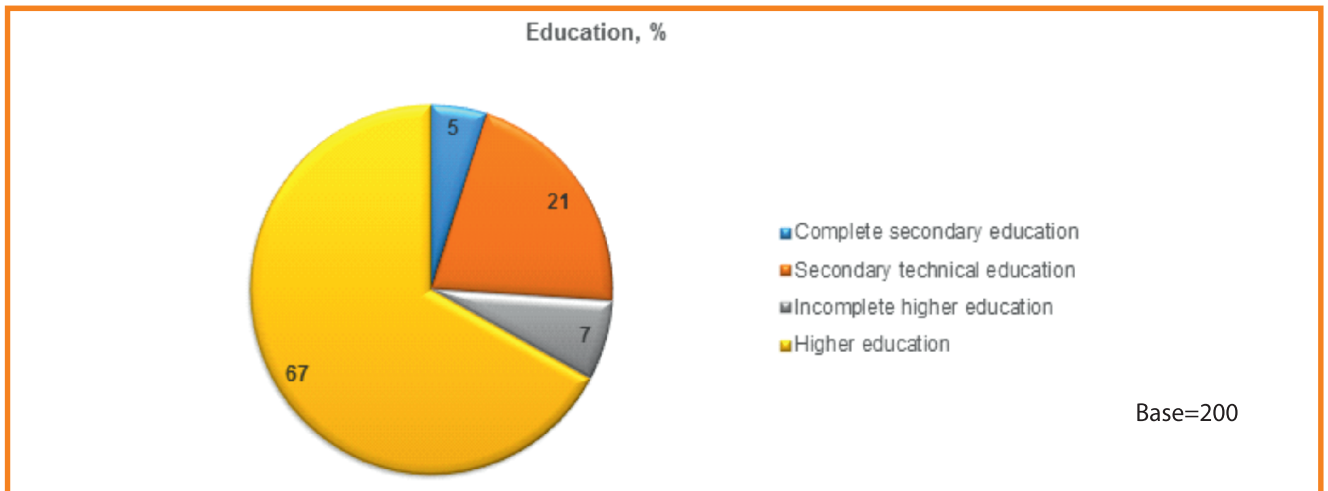
S7. Indicate your age

Figure 27. Marital status



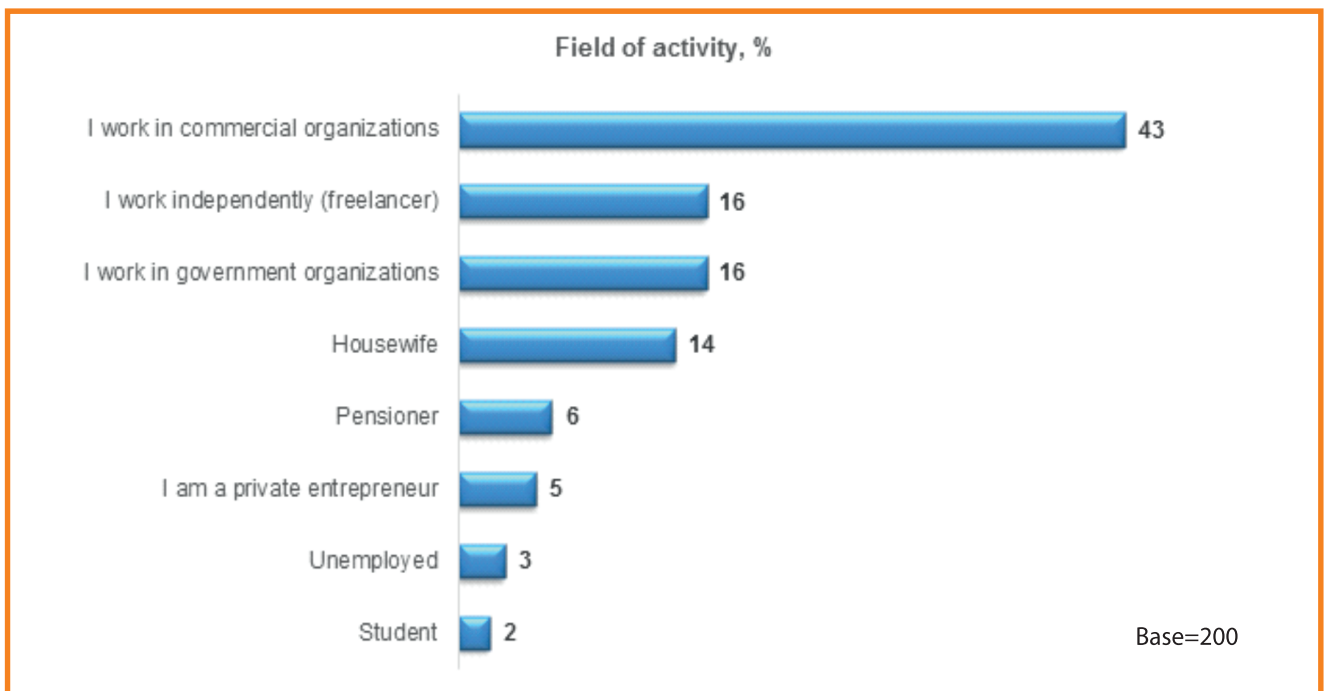
D1. Please indicate your marital status.

Figure 28. Respondents' education



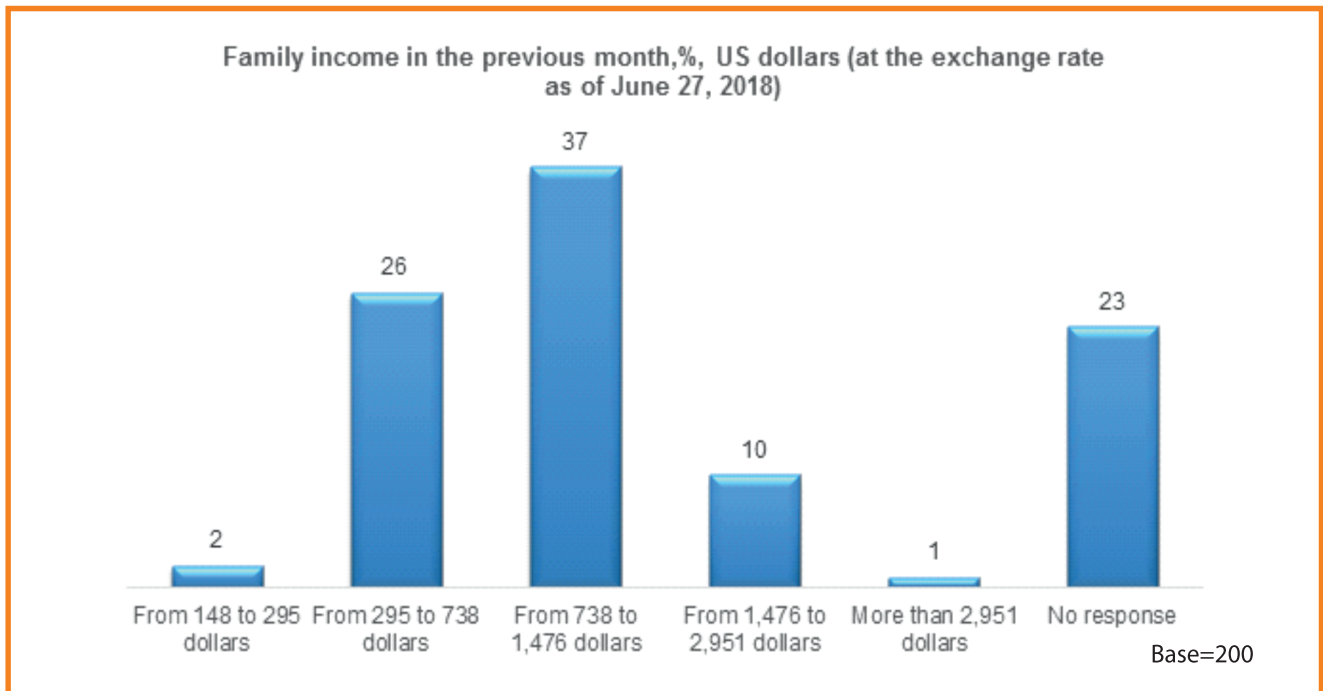
D2. Indicate your education.

Figure 29. Field of activity/occupation



D3. What is your main occupation at the moment?

Figure 30. Family income in the previous month



D5. What was your family's income last month - add up all incomes of family members for a month - salaries, pensions and other income?

5.9. Conclusions from existing customers of medical tourism

The experience of existing medical tourism users

In general, respondents visited foreign countries to obtain the following types of treatment: as a medical conservative treatment - 32%, surgical intervention - 28%, plastic surgery - 18%, also diagnosis - 16% and acupuncture - 11%. In the context of the countries visited, the countries of South-East Asia are popular among respondents for such treatments as diagnosis - 22% and acupuncture - 21% in comparison with other countries except CIS. Users of medical services go to foreign countries for treatment of such diseases as musculoskeletal disease - 15%, diseases of the gastrointestinal tract - 11% and gynecological diseases - 11%. Among those respondents who went to plastic surgery, 24% of them went to mammoplasty, 19% - to rhinoplasty and 19% - to blepharoplasty. At the same time, the duration of treatment abroad averaged 8-15 days for 48% of respondents, up to 7 days for 30% of respondents and 15-30 days for 19% of users of medical tourism services. As for the cost of the whole treatment for the last trip in the framework of medical tourism, 64% spent from 500 thousand tenge to 2 million tenge for treatment. It is worth noting that actual users of medical services rated highly the satisfaction with the criteria of treatment in clinics abroad. However, there is a low level of satisfaction with such criteria as the possibility of living accompanying persons on the territory of the clinic (46%), living conditions outside the clinic (69%) and the services of an interpreter (68% in other countries except South-East Asia). At the same time, 95% of respondents were satisfied with overall treatment abroad.

Decision-making process

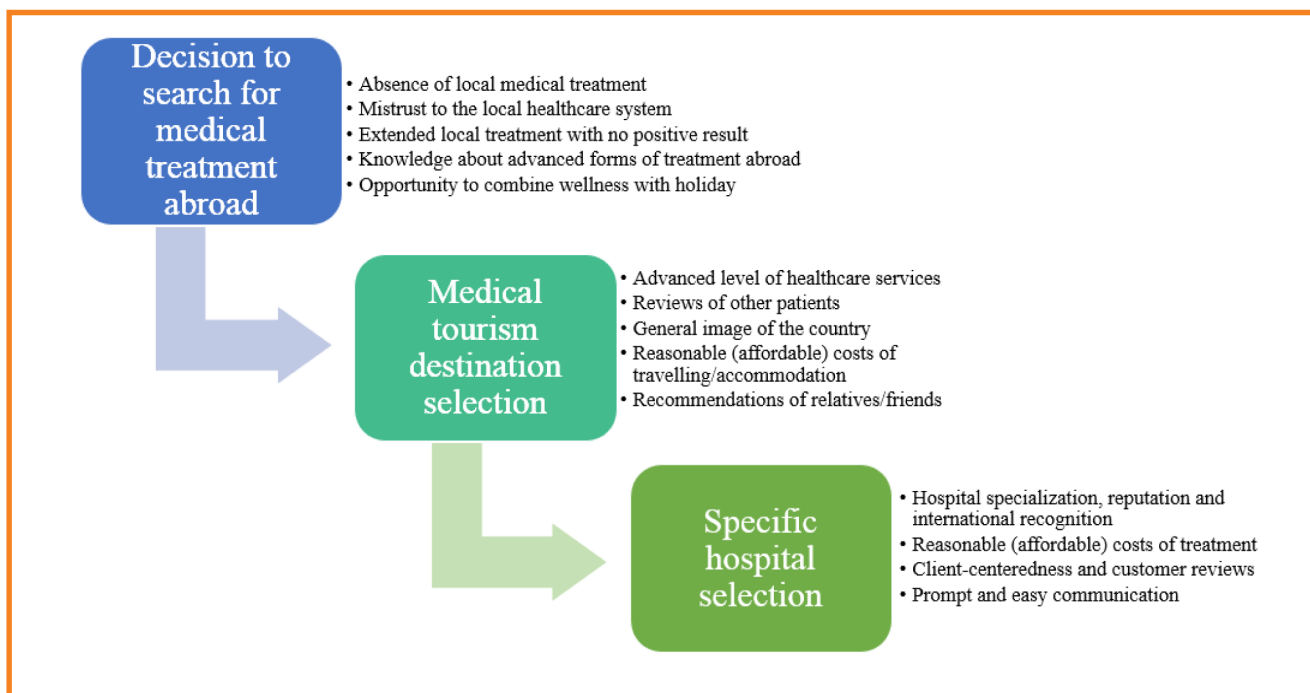
The main criteria for selection of clinics for actual users of medical tourism services are high qualification of doctors (61%), reasonable cost of treatment (43%), specialization of the clinic for this or that disease (41%) and experience of successful treatment or surgery of patients (34%).

When looking for clinics, respondents mostly listen to the recommendations of people from their social environment (58%) and to the reviews of patients who already underwent treatment or surgery abroad (50%) and also study information on the clinic's website (38%). Moreover, these sources are the top three main sources of information influence for actual users.

The users of medical services independently (56%) or together with other family members (31%) organize a trip for treatment abroad. The main reasons that respondents did not use the services of the travel agency were such factors as lack of need for assistance, as they independently managed to make travel arrangements (52%), also unwillingness to incur additional costs of payment to the travel agency for services (40%) and a low level of awareness that travel agencies are engaged in providing medical tourism services (25%).

The package of services provided by the respondents who used the services of travel agencies for medical tourism included services such as search and booking of flight tickets (96%), preparation of documents and obtaining a visa (87%), transfer from the airport to the hotel / from the hotel (70%), search and booking a hotel (70%). Respondents mainly used the services of a travel agency for medical tourism on the recommendations of relatives, friends or acquaintances (52%). Most of those who previously used the services of travel agencies. In the future they plan to use the services of the travel agency again (92%).

Figure 31. Typical steps for seeking treatment abroad and key-decision making factors



Socio-demographic portrait of actual users of medical tourism services

About 78% of respondents were from 26 to 55 years. About 67% have higher education. In the field of activity, they mainly work in private organizations and public institutions. The income for the last month for 63% of respondents was from 100 thousand to 250 thousand tenge per family, while 23% refused to answer the question about income.

6 Results: potential customers of medical tourism

6.1. Qualitative study: potential customers of medical tourism

General attitude towards medical tourism

All interviewed potential medical tourism users are positive about this service. They all intend to travel with medical purposes in the near future. At the moment of the interview, they were at different stages of making decisions about the treatment abroad, selection of the country and the hospital. The majority of the respondents are going to make a trip within the next 2-3 months, some within six months. The majority of respondents have already decided on the choice of the country, individual participants – have also chosen the hospital and travel agency.

"Right now I'm ready to go, because health is the most important thing, I already know this. I'll go as soon as I get a vacation in the summer." I12, Almaty

"Thanks to medical tourism, it is possible to take a trip and pass diagnostics, see the city itself and see the country. That is get a consultation and visit some new places. A lot of interesting things, I think, you can find out." I127, Karaganda

The main advantages of treatment abroad in terms of potential users:

- Modern technologies
- Experienced doctors, with high qualifications and specialization
- Precise diagnostics on innovative equipment
- Higher level of services
- Effectiveness of treatment, modern approaches to treatment
- Sometimes: guaranteed results, promise to completely cure
- Sometimes: safer methods for treatment, surgery

"I repeat that they have newer hardware, more equipment, better tests, we do not have so many. Doctors are qualified, with experience. I think the level is higher in how patients are approached, how they take it" G130, Aktau,

The main disadvantages of treatment abroad in terms of potential users:

- Key disadvantage: high cost (the costs for the trip itself are added)
- Language barrier
- Fear of being deceived / fraud and receiving poor-quality services (preferably use the services of a travel agency)
- Individual: Fear of being in an unfamiliar country

"Now we are looking for options. I read reviews, but there is fear in any case. A stranger has come, who needs you there?" G128, Pavlodar

General attitude towards travel agencies and willingness to use their services

Most of the participants plan to organize a trip independently and are considering using the agency's services only for visa processing. Participants who are ready to use the services of the travel agency have not yet decided on the exact choice; only one participant has already chosen the agency with which he is going to cooperate.

The main reasons for using the agency's services in terms of potential users:

- Convenience and time saving - providing full package of services and negotiating with hospitals
- High level of trust, as the agencies cooperate with verified hospitals

When searching for an agency, participants are guided by the following sources of information:

- First of all, recommendations from the people who had personal experience of treatment abroad
- Search on the Internet - several agencies (3-4) are considered and the choice is already made among these agencies
- Information on the website - experience of cooperation with different countries, customer reviews

Actual criteria for selecting an agency, which they plan to choose:

- Positive feedback from friends and relatives
- The experience of cooperation of the agency in a specific country or providing the client with a choice from several countries
- Competence of the agency staff, the ability to provide answers to all customer questions
- Friendliness and attention of the agency staff to the client
- Efficiency of work - agency employees can quickly draw up all the required documents and are able to reply very quickly to customer requests
- Ability of the agency staff to provide full information about a selected clinic, its specialists, the process of treatment

Decision-making process

Most of the participants have already decided on the choice of the country or are considering 2 countries (maximum) for the future trip. With the choice of the clinic, only single respondents were at this stage in the decision-making process. When choosing a country, potential users actively consult those who have already been treated abroad and sometimes these recommendations are of most influence. Also, the search for information about destinations and hospitals is extracted from internet sources - in which countries with the most developed treatment profile are chosen first. Further, the selection is made by price policy, presence / absence of visa requirements for a particular country.

The main criteria for destination selection amongst those who have already decided on the choice of the country or are at the final stage of the decision:

- Positive feedback from acquaintances, friends and relatives
- The image of the country in terms of healthcare development, the use of high-tech equipment and methods of diagnosis and treatment
- Experience and qualifications in the treatment of a particular disease
- Availability of a visa-free regime for citizens of the Republic of Kazakhstan or the ability to quickly issue a visa
- Affordable cost of travel (flight)
- Reasonable price policy for medical services

Countries that were selected by the respondents or are under consideration: Israel, Germany, South Korea, China.

When choosing a clinic, potential users also actively consult those who have already been treated abroad, but the opinion of the reference group is not always critical, except in cases of a similar diagnosis (for example, the opinion of a friend who treated prostate adenoma in a certain clinic in Israel). In any case, the respondents actively consider other options; compare prices and qualifications of doctors, experience of the clinic in a particular field, additional conditions (provision of accommodation within the hospital, a Russian-speaking coordinator, etc.). The search for information is usually carried out through the Internet: hospital websites and feedback on forums.

Clinics that have been selected by respondents or are under consideration:

- Israel: Suraski Medical Center, Assuta Clinic, Ichilov and Rambam
- South Korea: Grand Clinic

Criteria for choosing a clinic:

- Extensive experience of the clinic
- Presence of experienced, qualified doctors specializing in the necessary profile of diseases
- Modern technologies of treatment and diagnostics
- Pricing policy
- Ability to stay in the hospital (accommodation)
- Presence of Russian-speaking translators and doctors
- Efficient/prompt responses to requests, availability of online consultations (before coming to the hospital), provision of complete information about the hospital

"This is the clinic" Rambam ", in the city of Haifa, by the way the only clinic called Da Vinci, because it makes rare operations, according to the prostate adenoma. The "Assuta" clinic and the "Ichilov" clinic are also recommended; there I also had relatives and friends." I19, Almaty

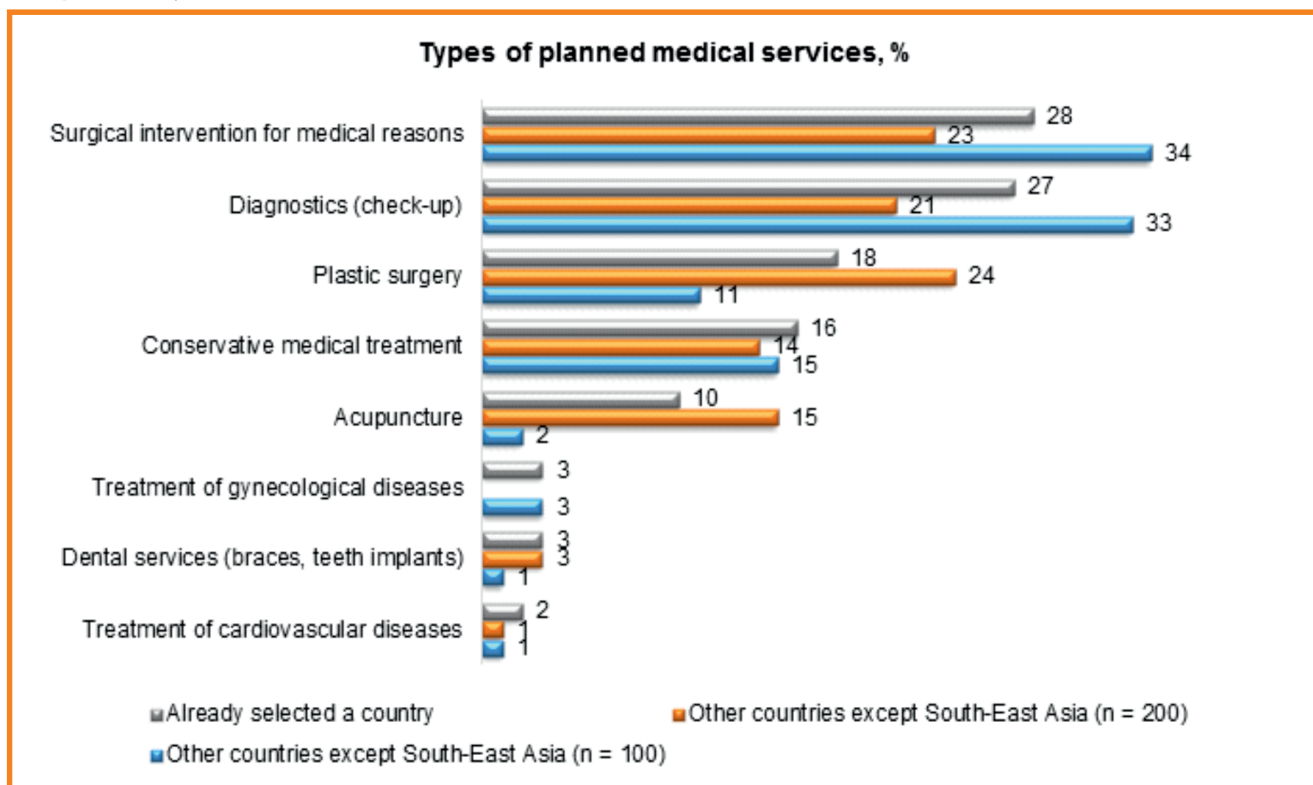
"Grand Hospital has advanced technology, they speak 6 languages there, including Russian" I127, Karaganda

"As soon as I wrote, they contacted me on WhatsApp. I got a call from the clinic, offered several treatment options, described what can be done, what cannot be done, how it will be, what it will be, I was actually shown a documentary about their clinic, techniques, equipment. Have conducted quite a competent presentation of their services." I115, Shymkent

6.2. Statistics: types of planned medical treatments

Potential users of medical services mainly plan their trip for surgery (28%), diagnostics (27%), plastic surgery (18%) and conservative medical treatment (16%). Among those who plan to receive plastic surgery services, most are planning to use these services in the countries of South-East Asia. Similarly, acupuncture services are also the most popular in the countries of South-East Asia.

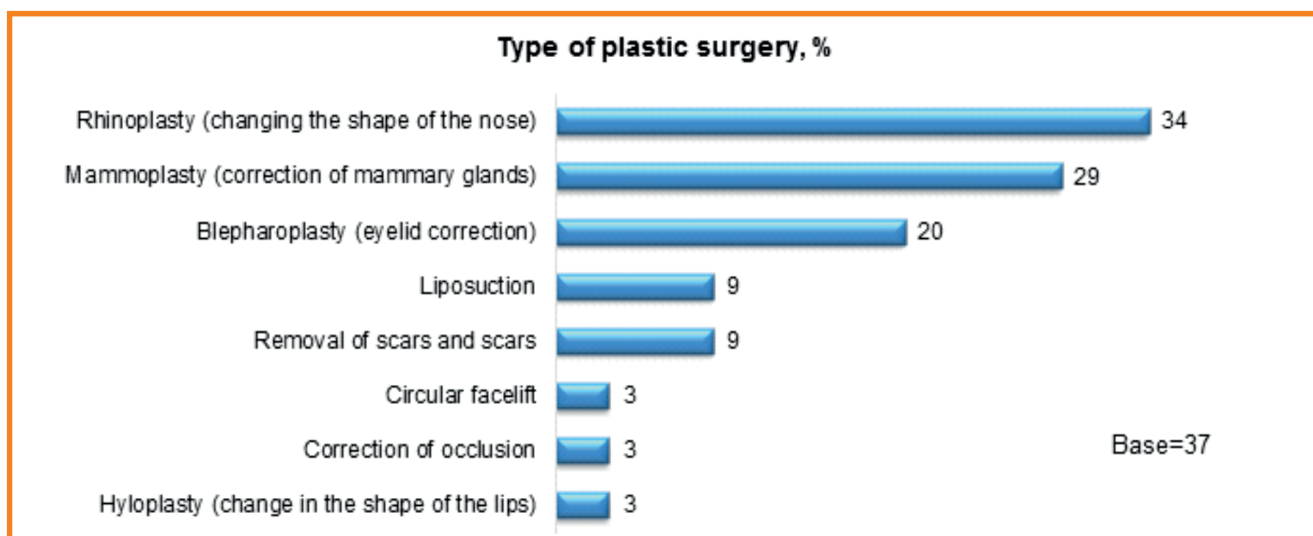
Figure 32. Types of planned medical services



M1 What kind of treatment do you plan to do?

Among those respondents who are going to go for medical tourism with the purpose of receiving plastic surgery services, they plan: rhinoplasty - 34%, mammoplasty - 29% and blepharoplasty - 20%.

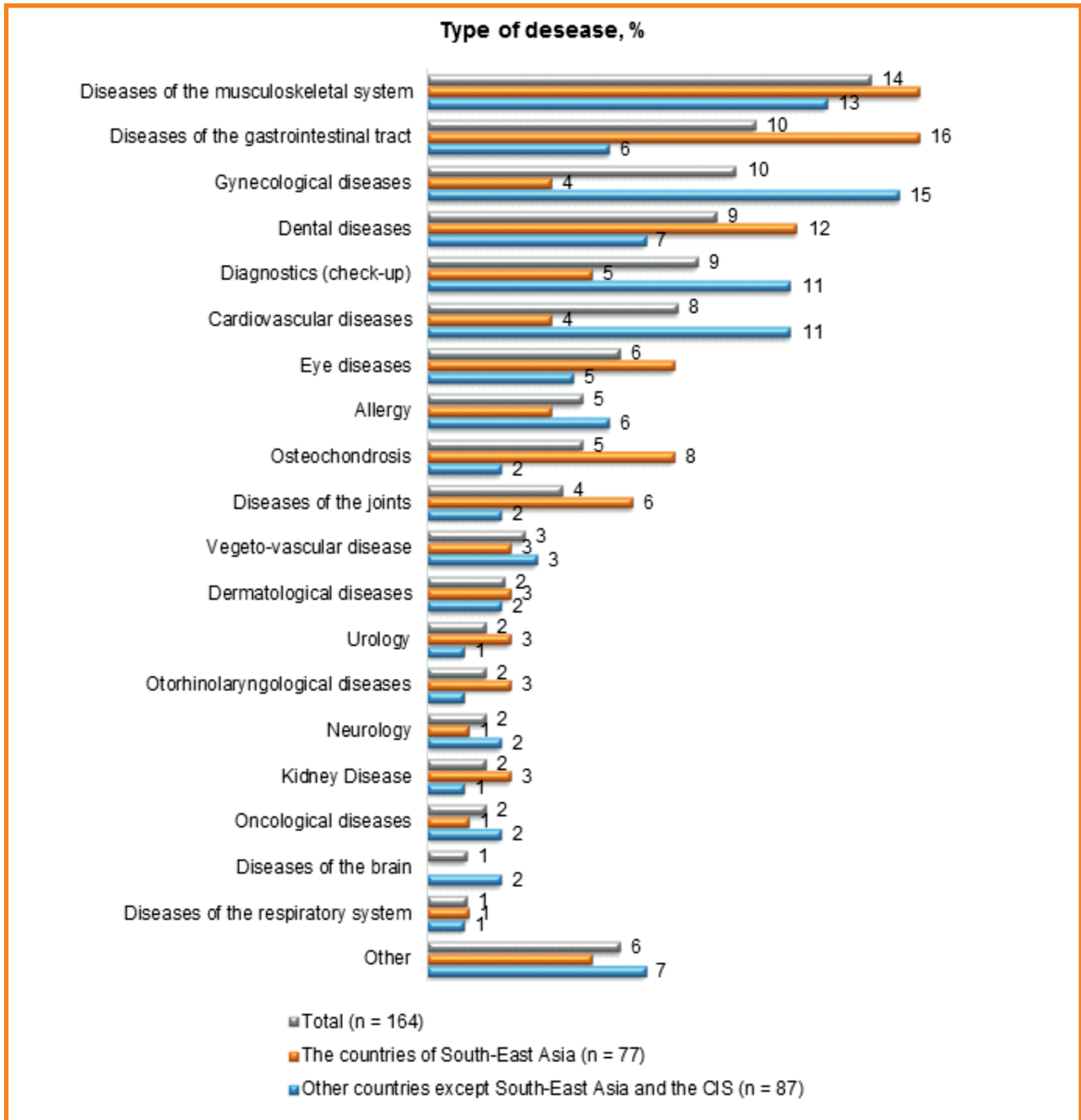
Figure 33. Type of planned plastic surgery



M3. Please indicate, for what kind of plastic surgery you are planning?

Respondents plan to go to foreign countries for treatment of various diseases, such as diseases of the gastrointestinal tract (10%), gynecological diseases (10%), dental diseases (9%), diagnostics (9%), cardiovascular diseases (8%), eye diseases (6%), etc.

Figure 34. Types of diseases (reasons for seeking medical treatment abroad)

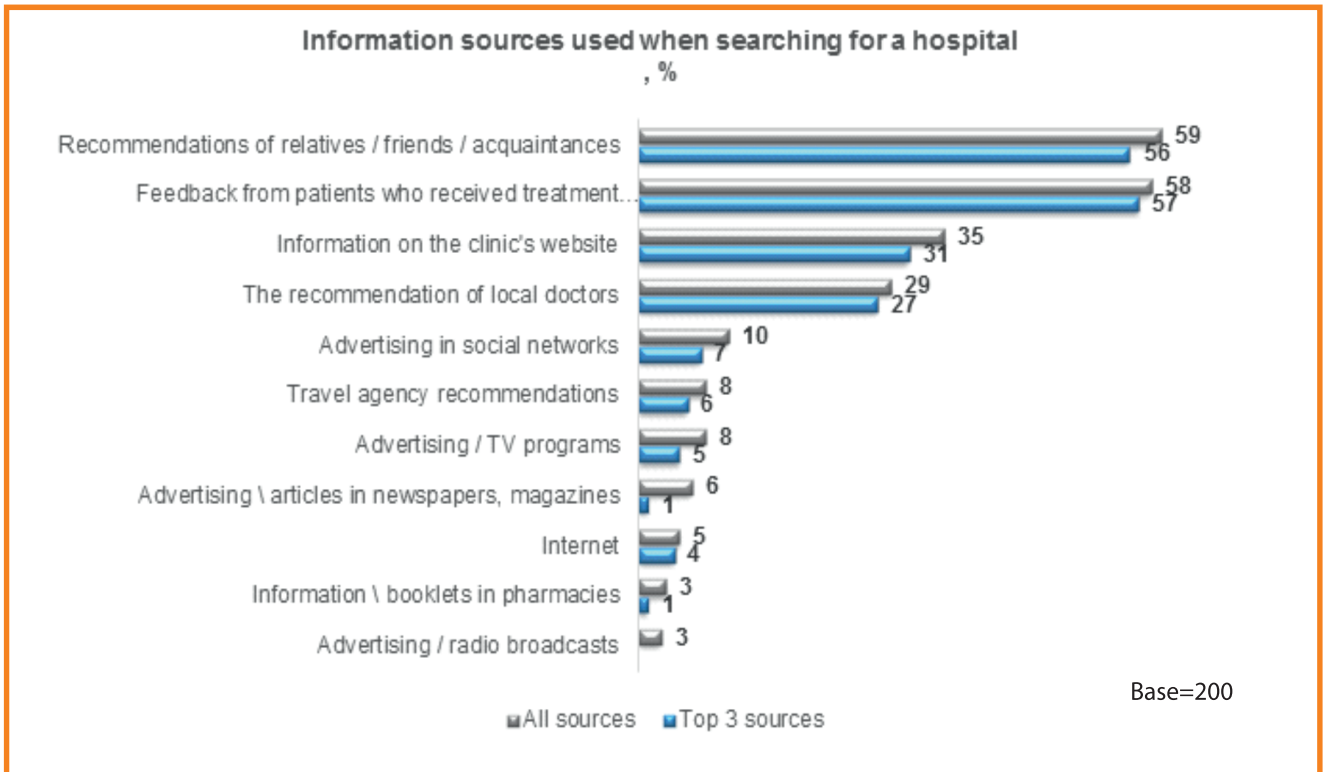


M2 What was the reason of your last trip within medical tourism?

6.3. Statistics: key aspects of upcoming trip organization

The main sources of information when searching for clinics for potential users of medical tourism services are recommendations of relatives, acquaintances or friends (59%), reviews of patients who received treatment at this clinic (58%), information on the clinic's website (35%) and recommendations of local doctors (29%).

Figure 35. Information sources used when searching for a hospital

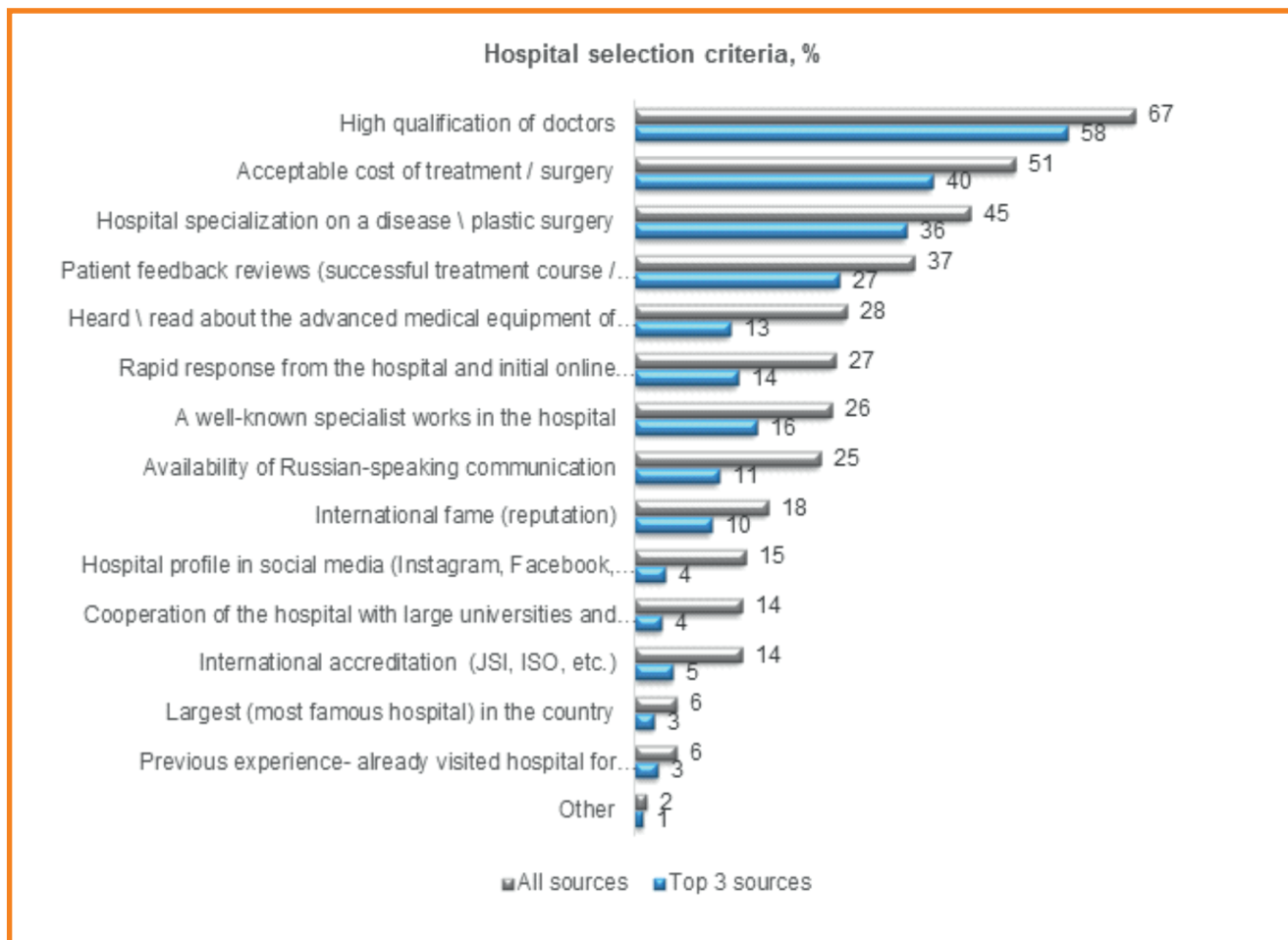


A11. What sources of information do you use when searching for hospitals?

A12. Arrange three main sources of information about the hospitals, starting with the most important.

When choosing a particular hospital, respondents mainly pay attention to such criteria as high qualification of doctors (67%), acceptable cost of treatment / surgery (51%), specialization of the hospital on a particular disease (45%) and experience of patients who have received successful treatments (37%).

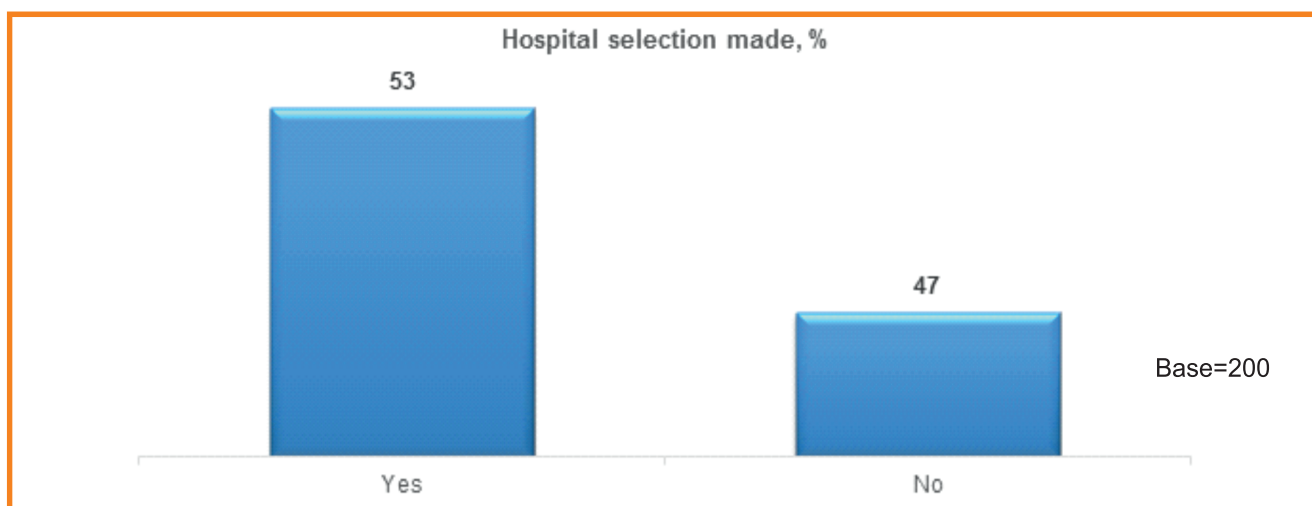
Figure 36. Hospital selection criteria



A11. What sources of information do you use when searching for hospitals?
 A12. Arrange three main sources of information about the hospitals, starting with the most important.

Potential users of medical services at the time of the survey have already chosen a hospital for treatment / operation (53%).

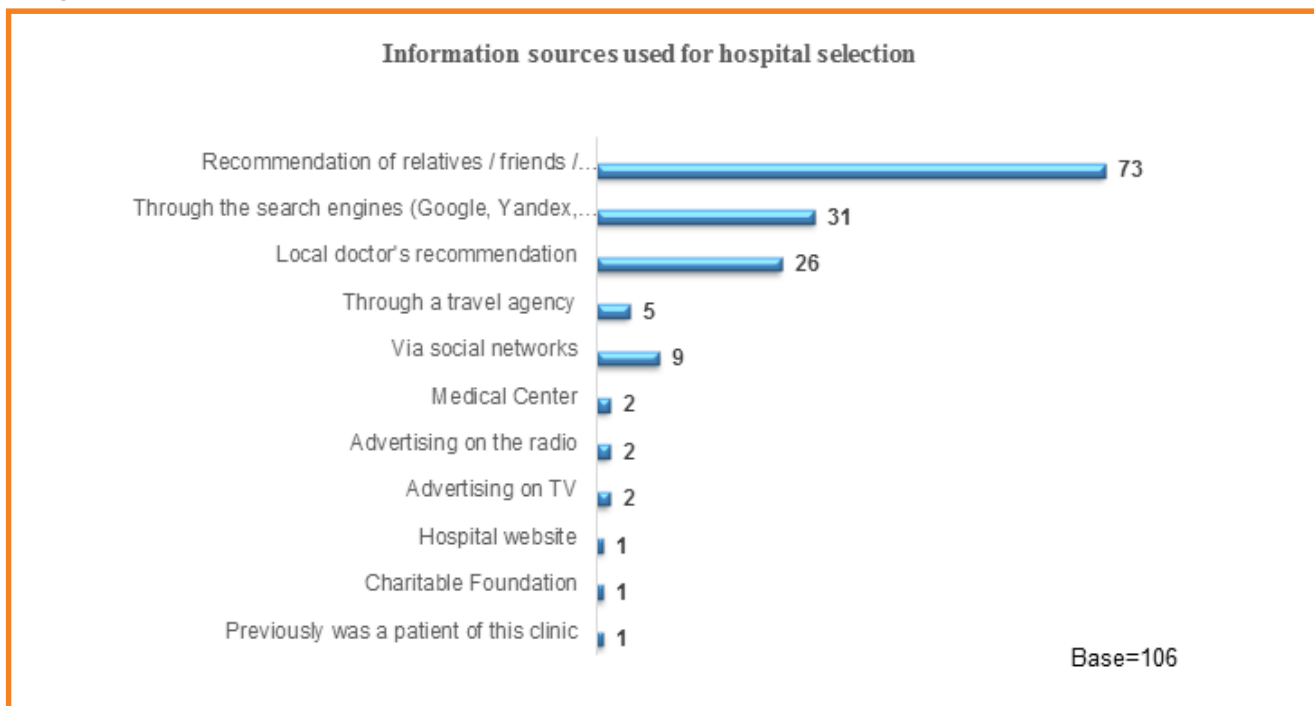
Figure 37. Hospital selection decision



A13. Have you already chosen a clinic for treatment /surgery?

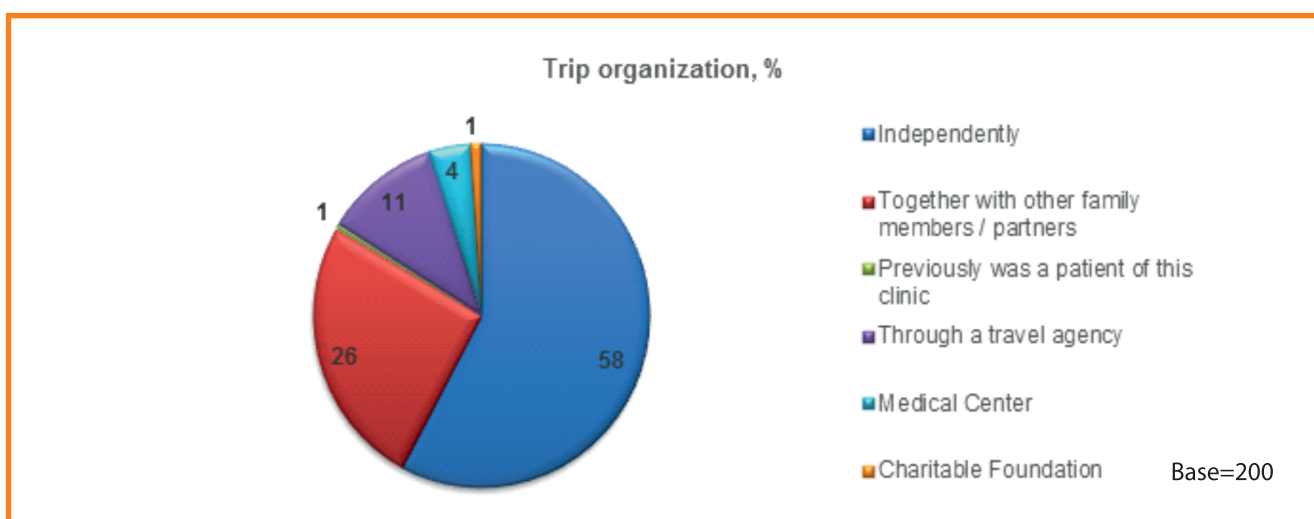
Potential users of medical services found a selected hospital through recommendations of friends, relatives or acquaintances (73%), through search requests on the Internet (31%) and from recommendations of local doctors (26%).

Figure 38. Used information sources of most influence for hospital selection



Users of health services independently (58%) or together with other family members (26%) organize a trip for treatment abroad.

Figure 39. Trip organization



How do you plan to organize a trip for treatment /surgery?

The respondents do not plan to use the services of travel agencies for medical tourism because they do not want to incur additional expenses in the form of payment to a travel agency for services (48%), they do not see necessity in using travel agency services (40%) are unaware that travel agencies are providing medical tourism services (28%), and generally distrust towards travel agencies (26%).