



Ministry of Foreign Affairs

Health Care in Ukraine

Commissioned by the Netherlands Enterprise Agency

*>> Sustainable. Agricultural. Innovative.
International.*



Orange
Health
Consultants

APPEARING ON THE HORIZON

HEALTH CARE IN UKRAINE

Opportunities for Doing Business

Orange Health Consultants – Understanding Health Care

November 2018

Acknowledgements

This report about opportunities for doing business in the health care sector in Ukraine was commissioned and financed by the Embassy of the Kingdom of the Netherlands in Ukraine in cooperation with the Netherlands Enterprise Agency (RVO).

This report has been prepared by Orange Health Consultants (OHC) an advisory firm based in Rotterdam, The Netherlands, with extensive exposure to the health sector in Ukraine through various assignments. The report was prepared in the period October and November 2018 and included interviews with stakeholders and policymakers in Ukraine during a visit to Kiev in October 2018..

OHC would like to thank all interviewees and respondents who contributed their time, knowledge and experience to the this market scan. In particular we would like to mention here a.o. :

Ministry of Health
World Bank
USAID
EBRD
UNDP
World Health Organization
State Agency for E-health
Kiev City Health Department
American Chamber of Commerce
Standing Committee on Health Care of the
Ukrainian Parliament



Disclaimer

Orange Health Consultants considers the sources used to prepare this report as authentic and reliable. OHC is not responsible for the information being correct, accurate and complete. OHC does not take responsibility for any damages that may result from information contained in this report, which has been prepared with utmost care. OHC does not take responsibility or liability in any form for errors in facts or opinions stated

TABLE OF CONTENT

- I. Introduction
- II. Basic Information on Ukraine
- III. Health Care System of Ukraine
- IV. Health Policy & Reforms
- V. SWOT Analysis
- VI. Business Opportunities
- VII. Procurement
- VIII. Contact Details

Executive Summary

The health sector in Ukraine is beginning to change in recent years. The sector, based on a system of health care (Semashko) originating from the Soviet Union, had been stagnant for many years. Remarkably little had changed since Independence and the health care system is as of today still characterized by a very hierarchical and territorial system with large numbers of beds in institutional care settings. At the same time the Government of Ukraine has only limited resources available that are spread thin over the existing infrastructure.

The population of 42 million is shrinking and pays almost as much as the government directly to public and private providers as out-of-pocket payments for consultations, diagnostics and lab-tests. These types of services are typically provided by private sector providers that are relatively small. Private hospitals are still few but increasing. Financial access to services is skewed. Cardiovascular diseases, alcohol disorders, HIV/AIDS and TB and injuries and accidents have a relatively large impact on the health of the Ukrainian population.

In recent years important health reforms have been approved by Parliament. These reforms are being implemented at great speed and promise to deliver on much needed changes a.o. by altering the financing incentives in primary health care, introducing a National Health Service (NHS), e-Health and making hospitals autonomous (2019). To a large extent these reforms are considered irreversible even if upcoming elections would change the government in 2019 .

The reforms will strengthen primary care and are expected to open up and relieve the secondary care sector, which itself will be able to attract financing and decide on contracting of services, including from the private sector. The Ministry of Health has started promoting Public Private Partnership models to improve service delivery and stimulate investment in the sector. Transparency and predictability will increase once the National Health Service (2018) has become fully operational as a contracting agency. The installation of the E-health State Company will streamline the introduction of information technology in the Ukrainian health sector.



Executive Summary

The development of the health sector in Ukraine opens up new business opportunities for Dutch health care organizations and companies.

Advisory services to be (partly) funded by international development partners and IFIs. Priority topics include:

- Health financing
- Development of primary care
- Rehabilitation
- Standardization and quality in the area of Public Health
- Planning and design of infrastructure
- Public Private Partnerships

Medical goods and consumables

- High value products e.g. diagnostic imaging
- Private sector for diagnostics and imaging. Few public sector investment projects
- Dental market (stomatology) is booming
- Development partners investing in health care technology through ongoing programs include a.o. World Bank, USAID, JICA, DfID.
- UNDP and two other organization in charge of procurement for medicines & medical devices also in the conflict areas for Government of Ukraine

e-Health is picking up fast. IT-services in general is one of Ukraine's strong local economic assets. The new system is using open source solutions. This creates opportunities in :

- Systems and software solutions for patient registration
- Solutions on scoring data to calculate likelihood of illness and other risks
- Pharmaceutical solutions for stocking, distribution and prescription
- Health data analysis for use in policy, prescriptions services, HTA
- Data security services – EU's GDPR is reference point

Medical education will be crucial element determining speed and success of reform of Ukrainian health system.

Collaboration and partnerships will be necessary in particular in:

- Curriculum development both for doctor's and nursing education
- Standardization and introduction of protocols both in primary care and for hospital care
- Ukrainian medical universities will come to seek partnerships with established international universities in search for exchange programs of students and staff and possibly accreditation



Executive Summary

The speed and quality of implementation of health reforms as well as macro-economic progress will be crucial for further market opportunities to arise for Dutch companies active in Ukraine. **Indicative fields that are expected to become interesting in the medium to longer term future include:**

- **Construction and equipping of new health infrastructure** country-wide. Existing infrastructure is too old to last much longer in many cases
- To alleviate pressure on hospitals additional infrastructure will be needed in the areas of **long term care, elderly care and hospices**
- **PPP-construction** (e.g. Turkey-model) of hospitals may become feasible in longer term once experience has been gained with contracting out of services and legal framework is considered robust
- **Mental health care** is still very institutionalized, but will require attention both in terms of de-institutionalized infrastructure and in treatment protocols, education
- **Prevention and treatment of alcohol and drug abuse** will gain further prominence and the Dutch health sector is well-known for its expertise in these areas



Ukraine is about as large and nearby as Spain but needs much more thorough introduction in NL

Some basics:

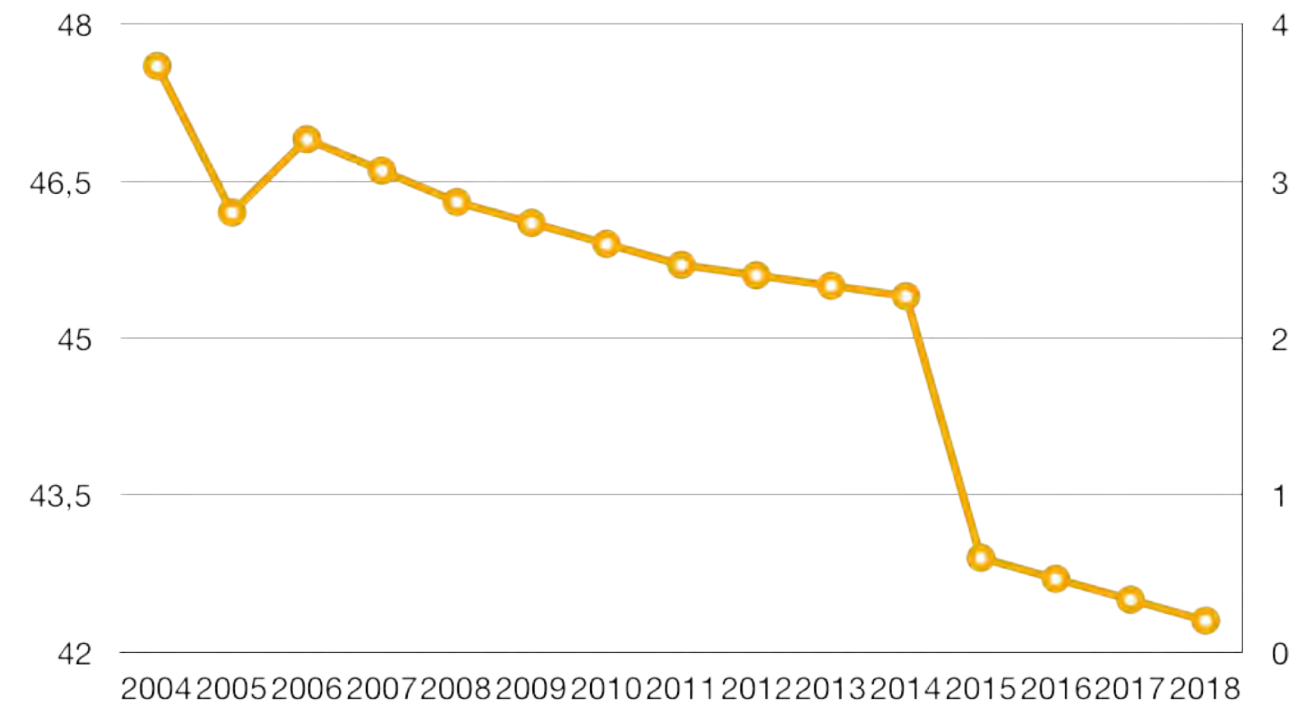
- Current population of Ukraine is 42,3 million
- GDP per capita is USD 2,600 or 8,600 (PPP)
- Relative low income inequality (formal)
- GDP growth between 2-4 %
- Well educated workforce
- Ukrainian official language
- Proficiency in English is limited
- Difficult political situation as a result of ongoing military conflict in parts of Eastern Ukraine



For the Dutch Ukraine **feels much farther away than other European countries** whereas actual distance and effective travel times are as good as popular destinations within Europe: Utrecht – Lviv is appr. 1500 kilometers which is equal to travelling to Barcelona or Croatia and less than Rome

The population of Ukraine is declining

Million people



* According to the State Service of Statistics of Ukraine

Age structure

0-14 years: 15.76% (male 3,57/ female 3,36)
 15-24 years: 9.86% (male 2,22/ female 2,11)
 25-54 years: 44.29% (male 9,57/ female 9,92)
 55-64 years: 13.8% (male 2,60/ female 3,46)
 > 65 years: 16.3% (male 2,40/ female 4,77)
 (2017 est.)

Huge difference in male and female also in life expectancy:

Male: 67.6 years
 Female: 77.1 years
 Average: 72.5 years

Low life expectancy attributed to unhealthy lifestyle, alcohol consumptions, smoking, psychological stress, etc.

In recent years migration is contributing as well. In particular to Poland

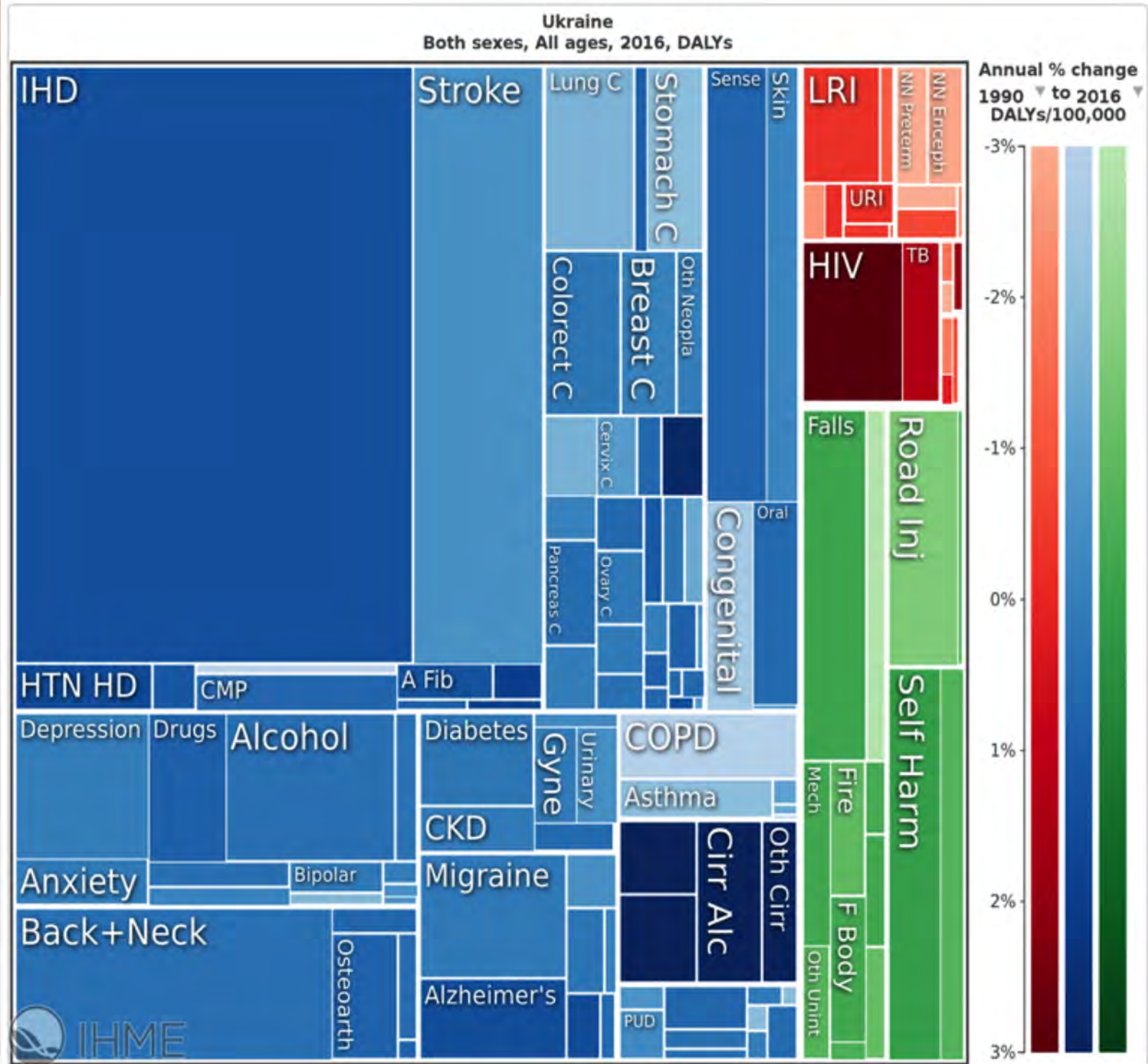
Note: starting 2015 territories of the Autonomous Republic of Crimea, the city of Sevastopol and part of the anti-terrorist operation zone are not included in Demographics of Ukraine. This can be seen on the scale. During 2015-2018 years population rate is between 43 to 42 million of people with a declining tendency.

Burden of Disease

Ukraine 2016

Relative importance of impact (BOD) of diseases and injuries shows a.o.:

- Importance of cardiovascular diseases (e.g. IHD & Stroke)
- Impact of HIV/AIDS and TB
- Alcohol disorders are a major factor
- Relative large impact of injuries, accidents and self-harm



Organization of the health care system

The health care system is divided into three levels: **national, oblast and sub-oblast (local)**

National

Presented by the Ministry of Health and other state entities accountable directly to the Ministry of Health, Central Executive Organs and the National Academy of Medical Sciences

1

Oblast (Province)

Presented by the Ministry of Health, health authorities at Oblast state administrations and public health care institutions and public health institutions that are jointly owned by territorial communities. For example, oblast hospitals, diagnostic centers, etc.

2

Sub-oblast (local) level

Presented by the oblast state administrations, authorities of the rural and local self-government, and health facilities that are subordinated to these bodies on communal property rights (control object).

3



Decentralization

In Ukraine, the health system is a complex, multi-layered, sometimes parallel systems in which responsibilities in the health care sector are fragmented.

Responsibility is shared between the central government (the Ministry of Health, other ministries and public authorities), 27 oblast administrations and numerous administrative bodies at oblast, municipal, district and community levels.

State **regulation** of health care providers is concentrated at the national level, with few regulatory activities under the authority of lower level government

The **Ministry of Health** develops and approves state quality standards and clinical protocols, and is responsible for the organization and implementation of the mandatory accreditation of health care facilities and the issuing of licenses:

- to legal entities
- Individuals engaged in the delivery of medical services
- production and sale of pharmaceuticals and
- medical equipment

Oblast and local health authorities are responsible for health care facilities in their territory and are functionally subordinate to the Ministry of Health, but managerially and financially answerable to regional and local government.

At the **community level**, these responsibilities are delegated to councils and their executive bodies, which are by law also responsible for managing the local health care facilities

Local governments face a division of accountability – to the Ministry of Health for compliance with norms and standards, and to the local administrations for funding and management.



The three functional layers of the health care system are organized in their own way

Functional Organization

Primary & preventive care

is provided mainly by general practitioners (since 2018 - family doctor).

According to the Article 49 of the Constitution of Ukraine «Everyone has the right to health protection, medical care and medical insurance; ... State and communal health protection institutions provide medical care free of charge...».

Management of the entities provides:

- City hospitals - Health Care Department of the Executive Committee of the City Council;
- Hospitals in small towns/villages - the chief rayon physician.

Secondary care

can be received in separate departments of city hospitals, central rayon hospitals or partially in oblast hospital.

The management of the institutions of the secondary level carries out:

- Central rayon hospital - the chief rayon physician;
- City hospitals – Health Care Department of the Executive Committee of the City Council;
- Oblast hospitals - Health Care Department of the Oblast State Administration.

Tertiary care

can be received in specialized republican hospitals, republican dispensaries, specialized sanatoria, clinics at research institutes, subordinated to the Academy of Medical Sciences of Ukraine and the Ministry of Health of Ukraine, clinical health care institutions (city, oblast hospitals), in which work the corresponding academic departments of medical academies, institutes and universities, institutes of improving doctor's qualification.

The management of the institutions of the tertiary level is carried out:

- City hospital – Health Care Department of the Executive Committee of the City Council;
- Oblast hospitals - Health Care Department of the Oblast State Administration;
- Central specialized hospitals, clinics, medical universities, academies and institutes of improving doctor's qualification - the Ministry of Health of Ukraine.



Changes in Primary Health Care

Since Independence (1991) Ukraine hasn't been able to change its healthcare system much so as to provide the population with quality and affordable medical services.

In 2017, after years of debates and gridlock, major steps towards health care reform in the primary care sector was made. On 19 October, Ukraine's Verkhovna Rada approved the draft law No. 6327 "On state financial guarantees for the provision of medical services and medicines. The reform focusses on primary care, making a shift from financing a medical institutions to financing (the services provided to) the patient.

At the same time the model of a National Health Service was confirmed and the National Health Service of Ukraine became the main central executive organ which administers budgetary funds allocated for financing the services, contracts providers of health care and controls quality of services.

As of November 2018 more than 20 million of Ukrainians chose and contracted a family doctor, the first step in the reform.

2017

- GP's practice provided in policlinics;
- Financing of institutions;
- Number of patients for one family doctor: 1500 – 4000;
- Financing according to the number of registered patients on a specific territory.

2018 (April)

- Introducing family medicine: patients can chose and contract family doctor by themselves;
- Financing based on actual registered patients by doctor
- Number of patients for one family doctor: 2000 – 2500;
- Introduction of the principle "money follows patients";
- For one patient a family doctor receives payment of:
 - for children: 0-5 – UAH 1480
 - 6-17 – UAH 814
 - for adults: 18-39 - UAH 370 (appr. 12 euro)
 - 40-64 – UAH 444
 - > 65 – UAH 740

Secondary Care

The hospital sector in Ukraine is in many aspects quite uniformly organized as a result of past practices. According to the State Statistics Service of Ukraine as of end of 2017 year in Ukraine the following providers are in Ukraine:

1,700

medical entities in Ukraine and an additional 10,400 polyclinics.

309,000

beds, calculated as 73,1 for 10,000 people.

Many hospitals combine large physical (bed) capacity with limited capacity utilization, although formal utilization figures do not reveal this.

The health system still relies heavily on hospital based treatment of patients

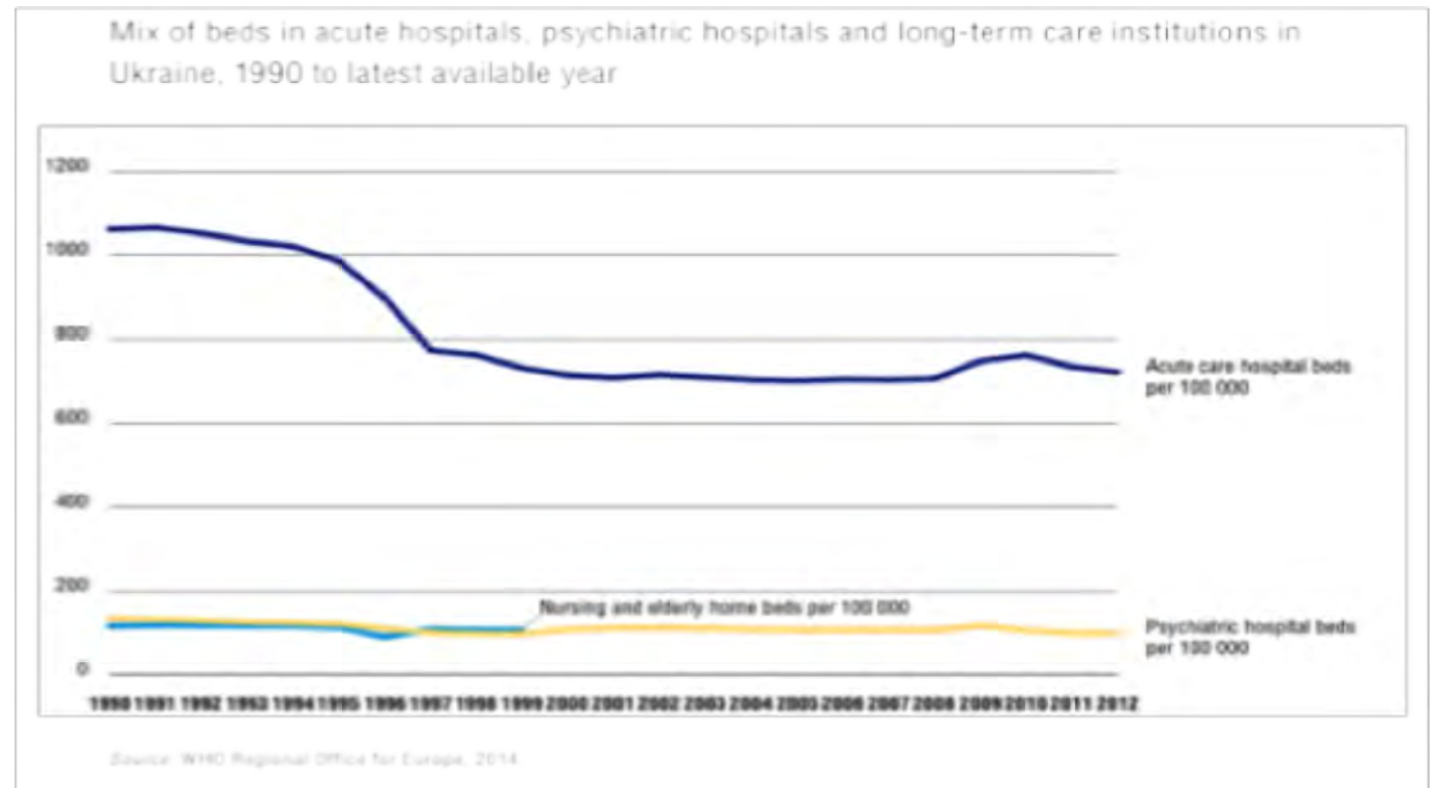
Existing standards and practices for hospital planning and financing stifle quality and innovation in the sector

Secondary care - bed comparison

Country	Curative care beds per 100k pop. 2013
Lithuania	640
Germany	615
Austria	587
Bulgaria	573
Romania	495
Poland	494
Slovakia	492
Serbia	453
Hungary	432
Czech Republic	431
Slovenia	425
France	423
Croatia	396
Switzerland	382
Estonia	367
Netherlands	361
Greece	352
Latvia	350
Portugal	332
Denmark	300
Italy	275
Turkey	263
Sweden	240
Spain	236

After initial reforms in the mid 1990s when the bed capacity was axed, in rural areas in particular, the availability of beds has not changed much, while it is still very high compared to countries in the European Union.

As the graph and table indicate, the **bed capacity is almost double the bed capacity in some countries of the EU.**



F inancing

Health Care

Under Article 49 of the Constitution of Ukraine of 1996, Ukrainian citizens are entitled to a comprehensive guaranteed package of health care services, provided free of charge at the point of use, as a constitutional right. However, this broad **commitment to universal coverage free at the point of use for all citizens has not been backed by sufficient financing.**

Officially the system is financed by general taxation (VAT, business income taxes, international trade and excise taxes). At the same time, due to chronic underfunding of health services out-of-pocket payments constitute a considerable proportion of the expenditures in Ukraine, reaching approximately up to 3% of GDP. **About 55 % of all health expenditure in Ukraine consist of private out-of-pocket payments.**

Patients are used to pay for everything—exams, diagnostic tests, hospital stays, pharmaceuticals, even linens, bandages, and soap.

Recent survey “Cost(less) medicine” made by CF “Patients of Ukraine” in partnership with USAID showed that every other patient in Ukraine **refuses treatment or postpones it because of money shortages.** High cost of medications is considered by 94% of patients involved in the focus-group discussions as the major problem.

For the 2018 year UAH 86 billion was allocated from the budget for health care. It means - 9,1 % from the whole budget - 2,6 % from GDP. According to official estimates in 2018 calculations per capita amount to USD 75 per person.

Size of the healthcare market in 2016

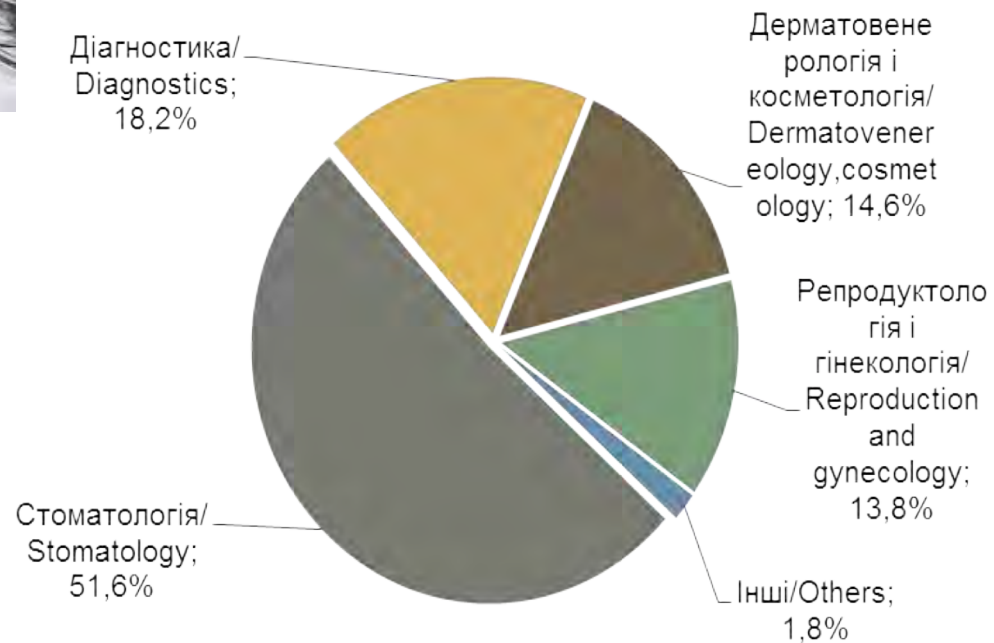
Total healthcare market in Ukraine, 2016	More than UAH 131 billion
of which:	
Budgetary funds (state and local budgets)	UAH 75.5 billion / ~EUR 2.5 billion (UAH 12.5 billion and UAH 63 billion, respectively)
Cash paid by patients for health services provided	UAH 55.8 billion (~ 1.8 billion EUR)
Only one third of the above amount relates to the private healthcare sector	approximately UAH 18–19 billion (600 mln EUR), of which UAH 3.6 billion are income of private practitioners
Number of new Medical Practice Licenses, Ukraine (2016)	Approximately 860 (of which 260 are for legal entities and 560 – for physical persons, mostly private practitioners at private offices)
Relative share of private facilities in the healthcare sector of Ukraine	8-10%
Shadow health market (Pro-Consulting, 2015)	45-50%
<i>Source: Data provided by the State Treasury Service, MedExpert Company</i>	

Estimated Health Market in Ukraine, 2016 (only cash flow from patients)

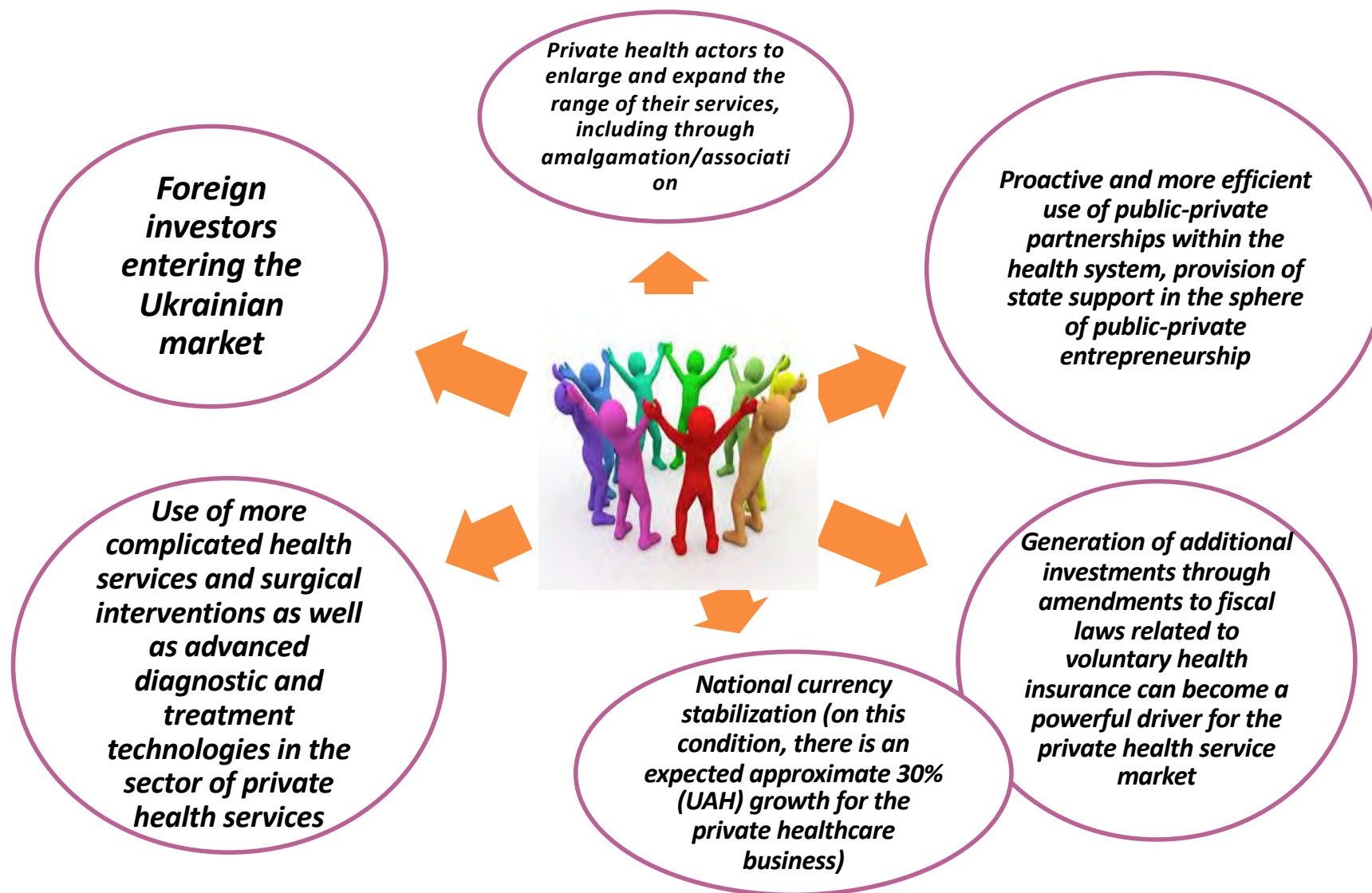
	Amount, UAH, million
“Live” flow to private health centers	
Official income of market participants	10,573
Non-declared income of market participants	4,758
Private practitioners	3,567
TOTAL – to private health centers	18,899
“Live” flow to state health centers	
Doctor’s appointments	13,927
Inpatient interventions	8,004
Inpatient stay	5,081
Outpatient interventions	2,974
Deliveries	1,511
US examinations	2,745
X-Ray examinations	2,505
CT examinations	167
MRT examinations	58
TOTAL – to state health centers	36,972
GRAND TOTAL	55,871

Comparing to 2015, the cash flow to private centers has increased by more than UAH 1.5 billion, as preliminary estimated, but analytics claim actual growth of at least 15%

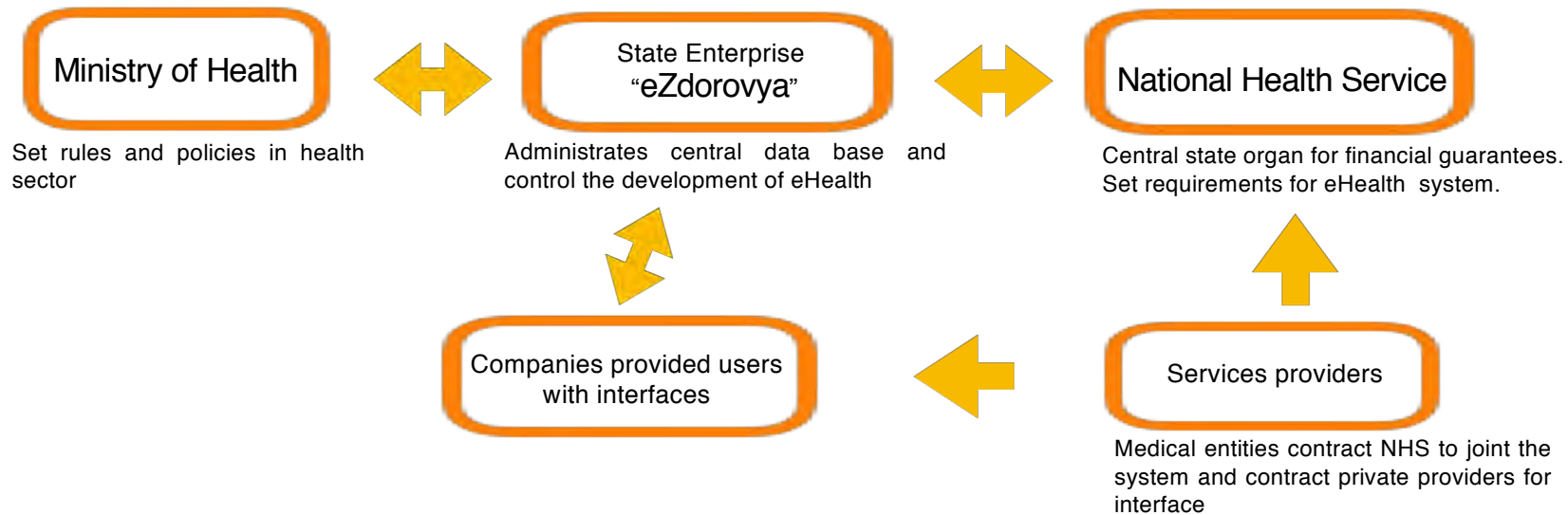
Structure of private health services (in monetary terms), %, 2016



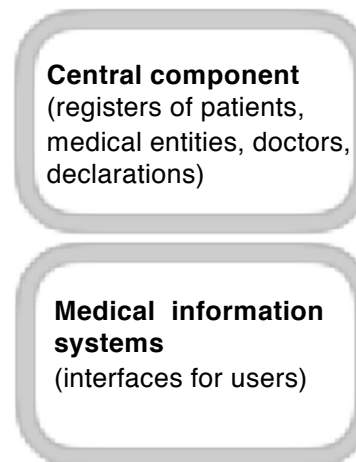
Expectations private health service market development



Organization of E(lectronic) Health in Ukraine



eHealth structure



Medical Education

Ukraine's higher medical education is 41st in a world ranking

Capacity today in Ukraine:

- 20 higher education institutions (under the Ministry of Health)
- 4 Medical faculties in simple universities (under the Ministry of Health)
- 3 Academies of Postgraduate Education
- 130 medical colleges

~ 95,000 students in institutions of higher education and medical faculties

~ 12,000 teachers

~ 59,000 students in medical colleges

On September 12, 2018 on the Development of Medical Education, with the main aim to raise the quality of medical care in Ukraine, was published on the official web-site for public discussion.

U21 Ranking 2015

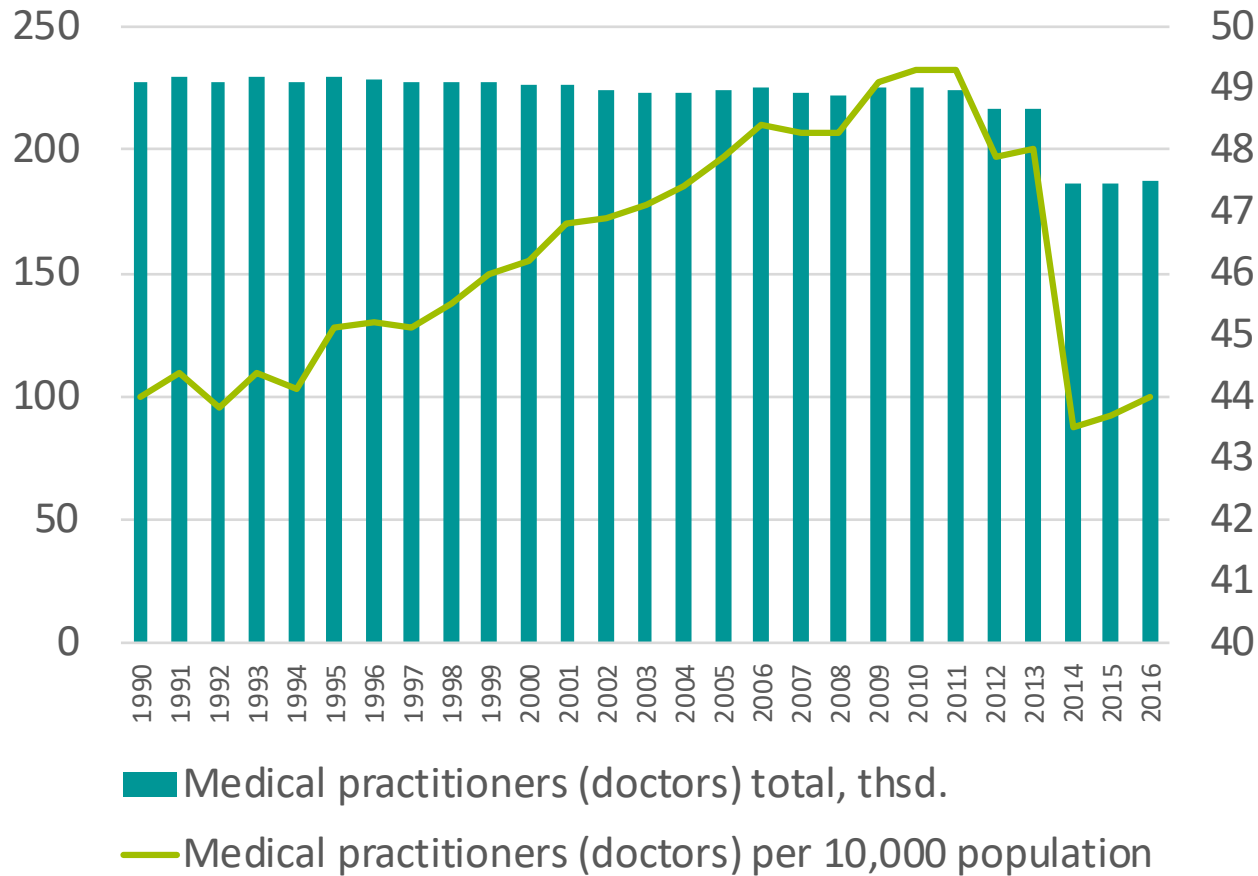
Rank	Country	Score
1	USA	100
2	Switzerland	87,1
3	Denmark	85,3
4	Finland	85,2
5	Sweden	84,7
41	Ukraine	43,8

Observations:

- Specific medical specialism are considered more prestigious and profitable (e.g. gynaecology and surgery) whereas others are not (such as care of patients with tuberculosis or pediatrics)
- Students choose their medical specialization based on the return expectations and are willing to pay the universities to get submitted to the most promising specialism (or are children/relatives of medical leaders)
- Nursing education is not so popular as doctors



Falling number medical doctors in Ukraine, however... growing per capita.



- Note: the years 2014-2016 exclude the temporarily occupied territories of the Autonomous Republic of Crimea, the city of Sevastopol and part of the anti-terrorist operation zone. From 2013 onwards also dentist are excluded.
- Source: State statistics service of Ukraine, the ministry of Health of Ukraine.

The quality of higher medical education varies, criteria for re-accreditation are lacking

Physicians

- Higher medical education for physicians consists of undergraduate and postgraduate training provided by 18 state university-level medical schools and facilities
- Undergraduate medical education provides training in two main streams: medicine (general medicine, pediatric, disease prevention and dentistry) and pharmacy. Postgraduate medical training involves a main specialization by an internship.
- Admittance to higher educational medical institutions has fluctuated over the years, but overall it is growing, especially after tuition fees are permitted resulting into a large proportion of fee-paying students choosing particular specializations.
- All practicing physicians are subject to reaccreditation at least every five year. The Ministry of Health is planning to pass over the responsibility for accreditation of health workers to the Doctors' Association.
- Five out of the six additional nongovernmental institutes offering higher medical education lost their license and were closed due to the poor quality of training provided.
- There are no caps on the number of students (a law regarding state budgeted students and caps on the number of students allowed to enter different specializations has been canceled May 2017).
- Budgeted medical students (40% of the students which are paid by the government) can be placed by the government on specific jobs and specializations depending on the need. More than 50% of the students, which paid for their education are free to choose their jobs and specialization.
- Specializations which receive too many applications are: surgeons, dermatologists, gynecologists, neurosurgeons, dentists, ophthalmologists. Specializations which shortages include family physicians, infectious disease specialists, laboratory doctors, radiologists and neurologists.
- However, there are no clear appraisal criteria for the quality of the doctor's performance. Besides the absence of clinical audits and the lack of incentive factors most medical documentation is in handwriting making it difficult to control and check diagnostic and treatment processes.

The current system does not deliver qualified health care managers

Mid-level staff (nurses)

Mid-level staff are trained at the vocational medical schools, provided among 100, mainly public, schools across the region.

There are three categories of mid-level medical specialist. The schools can train for accreditation levels between I-II, III-IV up to degree level. Training takes up to three years for students with a general secondary education, and four years for student with a basis secondary education.

Health care managers

Health care managers must have a higher education degree in medicine and a specialization in health care organization and management.

- Limited opportunities for professional development
- The competitiveness and quantity of nurses is higher in Kiev resulting in to higher competency and skills compared to other regions in Ukraine. However there is a general lack of education and professional training for nurses.
- The duration of the specialist training and the content don't ensure high quality, therefore many managers take a second higher education degree in management.
- At the same time health care management is not officially recognized as a medical specialty, resulting in insufficient opportunities after graduation.

Health sector reforms – milestones

- The healthcare system reform has been dealing with adoption of new legal acts and amendments to the valid legal framework for the last 5-7 years, including:
 - Implementation of the **pilot project in the healthcare system reforming in Vinnytsya, Dnipropetrovsk, Donetsk oblasts as well as the city of Kyiv** was launched on 1 January 2012
 - Implementation of the “New Life” (new quality for maternity and child care) (perinatal care development in Ukraine) and “Timely Care” (establishment of integrated regional operating departments with the use of advanced GPS technologies to cut the arrival time for emergency care units to a patient)
- Further primary healthcare development in both pilots and other regions of Ukraine.
 - Establishment of PSHC centers, expansion of geographical access via expansion of outpatient facility networks.
 - Introduction of a referral and primary GP free choice system.
 - Concentration of financial resources for provision of the above on rayon and municipal budgetary levels, use of new financial mechanisms for healthcare service fees, introduction of contractual relations
- Introduction of an incentive-based remuneration system for medical workers engaged in primary care provision while considering the volumes and quality of the services provided in the pilot regions
- Forming legal opportunities for rearrangement of community healthcare facilities into community non-commercial businesses or establishments (autonomy for the above facilities).
 - This norm was implemented under the pilot project at primary and secondary outpatient facilities in the City of Kyiv. As a result, today PSHC centers as well as consulting and diagnostics centers (CDC) in Kyiv operate as community non-commercial companies
- Development of a **legal and regulatory framework to implement the hospital sector reform**, specifically, the order of establishing hospital districts and detailed criteria for intense care facilities
- Adoption of a **legal framework for organization and operations of an emergency healthcare (EHC) system**

Health sector reforms – milestones 2

- Adoption of the State Strategy for Sustainable Development “Ukraine – 2020”** (approved by the Edict of the President of Ukraine as of 12 January 2015), which defined the basic reforming directions till 2020:
 - raising personal public responsibility for personal health,
 - ensuring free choice of healthcare providers of proper quality and
 - providing target assistance for the most socially insecure layers of population for the above reason,
 - creation of a business-friendly environment on the healthcare market
- Decentralization of powers and implementation of the Local Self-Governance and Territorial Governance Reforming Concept in Ukraine
- Amending the public procurement legal framework in terms of international organizations engaged in medicine procurements (2015)
- Approval of the upper threshold for inpatient bed fund supply, which is estimated as no more than 60 beds per 10,000 people**** (enhancing the bed fund capacity and structure) (2015)
- Support to reforms provided by international organizations.
 - Specifically, the World Bank loan (USD 214.7 million) under the “Serving People, Improving Health” Project aimed at improving the quality of healthcare in 8 oblasts (Vinnytsya, Volyn, Dnipropetrovsk, Zakarpattia, Zaporizhzhya, Lviv, Poltava and Rivne)

Health sector reforms – Positive Results

- Primary care redefined
 - Legal, structural and financial delimitation between primary and secondary care in the pilot regions, establishment of a new type of primary healthcare (PHC) facilities, investments into development of an outpatient facility network, implementation of complete and current repairs, equipment, creation of automated workstations, transport, establishment of regional and territorial training centers
- Increased PHC expenditures (from 4-6% of the consolidated budget in the beginning of the reform to 18-22% in 2013-2014)
- Development of a transfer from cost estimated financing to contractual relations, which partially occurred at the PHC level
- Introduction of an **incentive-based remuneration system** encouraging for intense and high-quality work
- Positive dynamics in the sphere of providing the primary level with general practitioners (family doctors)
- Emergency healthcare reforming, establishment of regional systems for the above care provision, delimitation of emergency and urgent care, renovated vehicle fleet as well as provision of medicines for emergency care units
- Introduction of a **patient pathway system**
- Initiated process of concentrating technical and human resources at powerful hospitals (Dnipropetrovsk Oblast)

Health sector reforms – Risks

- Low level of managerial operability and efficiency
- Low level of officials' and medical staff's capacity to implement the bed fund rearrangement as well as redistribution and concentration thereof depending on the need in care intensity
- Lack of capacity within the primary and emergency care system to fulfill the functions allocated (preventive activities and pre-hospital care provision)
- Non-acceptance of the changes by the general public and healthcare workers, specifically, chief doctors
- Lack of sufficient number of healthcare organizers (trained in healthcare facility management within new financial conditions and structural changes) as well as a legal framework defining the competence thereof
- Low public awareness of the basic changes within the system and the essence of healthcare reforming
- Lack of a comprehensive communication system, which had a negative impact on the adherence to the reforming process

New hospital reforms

- A set of legal and regulatory acts related to hospital operations has been approved on the following:
 - legal regulation for acquisition of financial and managerial autonomy to ensure efficient use of financial as well as material and technical resources*
 - criteria for defining the contents and limits of a hospital district, service coverage (geographical accessibility within the 60 km range), structure and specialty of the above hospitals, general organizational and procedural basics for hospital district activities, development plans thereof while considering ultimate function allocation on health service provision between the participants
- The Government has approved the contents of hospital districts in 16 Ukrainian regions to establish hospital councils, 5-year district strategic planning and healthcare investment generation
- MOH Ukraine has drafted a set of guidelines:
 - on rearrangement of community healthcare facilities by reformation thereof from budgetary facilities into community-based non-commercial companies
 - framework requirements to the first- and second-grade multi-specialized intense care hospitals describing the functions thereof, functional capacity requirements

New requirements 1st & 2nd grade multi-specialty intensive care hospitals



Healthcare assistance, acute myocardial infarction	
Not available	<i>No less than 125 coronographic activities per year per 1 intervention surgeon, of which 75 procedures constitute urgent stenting</i>
Healthcare assistance, acute ischemic stroke	
Not available	<i>500 hospitalizations with a confirmed AIS diagnosis</i>
Treatment and diagnostic services for pregnant, maternity patients and newborns	
No less than 400 deliveries per year	<i>No less than 1,500 deliveries per year, no less than 200 deliveries per year per 1 ob/gyn</i>



Opportunities in the health sector in Ukraine

The health care sector in Ukraine is getting into flux as reforms start to kick in. How far will it go and how attractive is the sector to do business in? A SWOT analysis distinguishes between strengths and weaknesses inherent to the sector as well as the opportunities and risks that confront the sector. The analyses reflect inputs from discussions with sector specialist, policymakers and other stakeholders



SWOT of The Ukrainian Health Sector Market

Strengths

- The government of Ukraine has adopted **far reaching reforms which are being implemented expeditiously since 2017** and many are considered irreversible
- Government reforms will **increase transparency of public health care market** and increase opportunities for contracting services
- Ukraine's economy stabilized, after heavy contraction of economy in 2014/15, and is **projected to grow at moderate growth levels of about 3 percent** in the coming years
- Ukraine is a large country with a **sizeable population and a workforce** with sound educational standards
- **IFI's continue to support** the health sector financially as well through technical support
- Ease of doing business in Ukraine is slowly improving again (WB Kiev)
- Myriad of small private diagnostic enterprises
- Increasing **alignment to EU-procedures and standards**, including conformity assessment for medical products and devices
- Visa-free travel to EU since 2017
- Increasing desire to change existing system and learn from other countries' systems and practices

Weaknesses

- The health sector is **fragmented** with a multitude of parallel systems and a diverse private sector, often directly linked to the public sector
- Ukrainian Governmental **bureaucracy** is substantial and authorities are rigid to change.
- Unrealistic expectations concerning implementation of change linked to standardized solutions: 'blueprint-thinking'
- **Corruption** is looming large over Ukraine including the health sector (Transparency International Perception Index: 130 out of 180 countries).
- **Limited understanding of the English language** compared to other countries (EPI ranking is #43 compared to #2 for The Netherlands, #32 for Spain and #16 for Poland)
- Condition of **health infrastructure is very poor** with outdated hospital designs and limited adoption of modern (medical) technology
- **Medical education is still to be reformed** and medical doctors are not fully exposed to modern medicine in traditional curriculum
- **Inequality in the health sector is high** as people have to pay substantial amounts for accessing health services including in the public sector.
- Physical access to health care facilities can be limited in rural areas

SWOT of The Ukrainian Health Sector Market

Opportunities

- The new reforms started in 2017 will strengthen primary care and are expected to **open up the secondary care sector**
- Many **hospitals will become autonomous** and will be able to attract financing and decide on contracting of services, including from the private sector
- The Ministry of Health is actively pushing **Public Private Partnership models to improve service delivery** and stimulate investment in the sector
- **Transparency and predictability** will increase once the National Health Service (2018) has become fully operational as a contracting agency
- The installation of the E-health State Company will **streamline the introduction of information technology** in the Ukrainian health sector
- Companies starting doing business may benefit from **first mover advantages** in terms of building networks and establishing partners
- An **increasing awareness and openness in the sector** for introducing and learning from health practices in other countries
- Enormous **need for renovation and upgrading of health care infrastructure** and introduction of new medical technologies
- Demand for infrastructure for chronic and elderly patients to accommodate reduction in hospital beds
- The fragmented and over dimensioned system provides large opportunities for **consolidation of capacity to reach scale economies**
- **Overhaul of Ukrainian building code** will be completed in 2019 diminishing restrictions on modern health facility design.

Threats

- The **ongoing conflict in Eastern part of Ukraine** and tensions around status of Crimea continues to feed uncertainty about strategic direction of Ukraine and stability of business environment
- **Macro-economic forecasts are moderate** and country will remain dependent upon IMF-support to maintain stability
- Financial resources within Ukraine will remain modest **and public spending is expected to remain constrained in short to medium term**
- Investments will be dependent upon **access to external financing** including from donor agencies and International Financing Institutes (IFIs)
- **Migration of younger generations** in particular may contribute to labor market shortages and slow readiness to modernize systems and practices in the sector
- In **2019 Presidential elections** are being held which could change the political landscape and influence speed and direction of health sector reforms
- Conditions for PPP such as a sound legal framework are not yet in place
- Choice for NHS-style model of public health service delivery may focus attention of policymakers on countries with similar systems as learning examples

Business Opportunities

The development of the health sector in Ukraine opens up new business opportunities for Dutch health care organizations

Opportunities are divided in:

- Short-term 2018-2019
- Medium term 2020-2024



Business Opportunities in The Ukrainian Health Sector - Short Term



Advisory Services

Expertise and experts will continue to be in short supply in Ukraine in the immediate and medium term.

International expertise will be (partly) funded by international development partners and IFIs. Priority topics include:

- Health financing in particular **hospital financing and costing (DRG)** to support making hospitals autonomous
- Primary care in particular towards **organization of general practitioners**
- **Rehabilitation**; both physical and psychological in particular in relation to people and soldiers affected by conflict in Eastern Ukraine
- **Standardization and quality in the area of Public Health** (e.g. Ongoing open EU tender)
- **Planning and design of renovation of existing infrastructure** and new infrastructure are requested. Potential PPP hospital in Kiev through financing by International Finance Corporation (IFC)
- Ministry of Health adopted active PPP policy in 2018 aiming to introduce PPPs as a major reform tool across the country

Medical goods and equipment



- Markets for medical goods and consumables are largely served through imports with a relative large reliance on non-EU markets for **cheap imports of consumables, medical furniture** etc.
- High value products such as for diagnostic imaging still largely focused on imports from the EU and the USA.
- **Short-term opportunities mostly in private sector for diagnostics and imaging**. Few public sector investment projects
- Dental market (**stomatology**) is booming and to a large extent privatized across Ukraine
- Substantial funds available through **ongoing WB-program including investment in hospitals**, clinics and medical equipment in 5 oblasts. (Details available in WB procurement plan)
- Other development partners investing in health care technology through ongoing programs include **USAID, JICA, DfID**.
- **UNDP** is in charge of procurement for medicines & medical devices in conflict areas for Government of Ukraine

Business Opportunities in The Ukrainian Health Sector - Medium Term



E-Health

The newly established e-health infrastructure is picking up fast. The database built and maintained as part of a Public Private Collaboration model, **eZdorovyaby**, already has more than 17 million patients, 24,000 doctors and 1,382 medical institutions. 14 medical information systems (all of them are representatives of business) are already connected to the central infrastructure. IT-services in general is one of Ukraine's strong economic assets. The system is using **open source solutions**. This creates opportunities in :

- Systems and software solutions for **patient registration and maintenance for patient records**
- Software solutions on **scoring data to calculate the likelihood** of illness and other risks. Also in relation to small but growing complementary health insurance markets
- **Pharmaceutical solutions** for stocking, distribution and prescribing medicines
- **Health data analysis services** for the use in public health policy, prescriptions services, HTA
- Data security services – Ukraine takes the EU's **GDPR** as its reference point



Medical Education

A key component for the success and speed with which the Ukrainian health system may reform is the **extent to which it can modernize its medical education system quickly**. Current curricula are still steeped in traditional practices and in a limited way expose students to more modern medicine practices and protocols and medical technologies. **Collaboration and partnerships will be necessary** in particular in:

- **Curriculum development** both for doctor's education and nursing education
- Standardization and introduction of **protocols** both in primary care and for hospital care
- Ukrainian medical universities will come to seek partnerships with established international universities in search for **exchange programs** of students and staff and possibly **accreditation**

Business Opportunities in The Ukrainian Health Sector – Future Directions



Strategic areas

The speed and quality of implementation of health reforms as well as macro-economic progress will be crucial for further market opportunities to arise for Dutch companies active in Ukraine.

Indicative fields that are expected to become interesting in the medium to longer term future include:

- Construction and equipping of **new health infrastructure country-wide**. Existing infrastructure is too old to last much longer in many cases
- To alleviate pressure on hospitals **additional infrastructure will be needed in the areas of long term care, elderly care and hospices**.
- **PPP-construction** (e.g. Turkey-model) of hospitals may become feasible in longer term once experience has been gained with contracting out of services and legal framework is considered robust
- **Mental health care** is still very institutionalized, but will require attention both in terms of de-institutionalised infrastructure and in treatment protocols, education
- **Prevention and treatment of alcohol and drug abuse** will gain further prominence and Dutch health sector is well-known for its expertise in these areas

International support to the Ukrainian Health Sector

Several international development partners are supporting the Government of Ukraine in the reform of the health sector. These include:



The **Worldbank** has been an active supporter of the health sector in Ukraine. In recent years it contributed through the project **Improving Health in the Service of People** which works in eight regions of Ukraine and helps provide quality medical care and prevention.

The project started in 2015 and runs till 2020 with a total budget of USD 261 million. The project helps improve service delivery at the local level in eight oblasts by financing investments. In addition the project supports the governance by the MOH in the areas of Payment System Reform, e-Health24/Information Systems Development, Public Health, Information and Communication, and Capacity Building. A detailed procurement plan can be found at:

<http://documents.worldbank.org/curated/en/docsearch/projects/P144893>



USAID/Ukraine works with the Ukrainian government, civil society, non-governmental organizations, and other donors and partners to build Ukraine's overall health system. Specific areas of support include:

- HIV/AIDS & Tuberculosis
- Health Reform
- Mental Health
- Disabilities
- Immunization



The **WHO** Country Office, Ukraine is the focal point for WHO activities in Ukraine. The country team consists of 25 people, including 15 experts on: HIV/AIDS, immunization and vaccine preventable diseases, maternal and child health, noncommunicable diseases, tobacco control, tuberculosis, communications and IT.

The priorities for the Country Office are set out in the biennial collaborative agreement between WHO/Europe and the host country. The Office implements the agreement in close collaboration with national institutions and international partner agencies.

<http://www.who.int/countries/ukr/en/>



The **European Union** and its Member States have provided financial support to the most vulnerable people. Humanitarian aid totals €222 million, of which €88.1 million has been provided by the EU. This funding provides support to the most vulnerable people affected by the conflict in the non-government controlled areas and along both sides of the contact line. This assistance addresses the basic needs of those most affected by the conflict, wherever they are. This includes provision of shelters, health care, protection, food and non-food items, water, sanitation and other emergency aid.

https://eeas.europa.eu/delegations/ukraine/1937/ukraine-and-eu_en

Several other development partners are active in the Ukrainian health sector:

Swiss Development Cooperation:

<https://www.eda.admin.ch/countries/ukraine/en/home/international-cooperation/projects.html>

UNDP: <http://www.ua.undp.org/content/ukraine/en/home.html>

Procurement in Ukraine

Buyers –

state/local authorities, legal entities having specific features, including state/municipal ownership

Tenderer

individuals (incl. individual entrepreneurs), legal entities (residents/non-residents)

Types of public procurement procedure:

- Open tender
- Competitive dialogue
- Negotiated procedure

Ukraine's implementation of [e-procurement system](#) in August 2016 enhanced opportunities for domestic and international companies to participate in Ukrainian public tenders.

Public procurement thresholds:

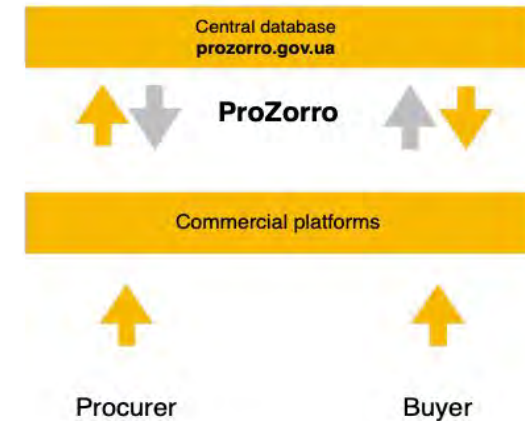
Buyer ≥ UAH 200,000 for goods/services / UAH 1,500,000 for works

Buyer ≥ UAH 1,000,000 for goods/services / UAH 5,000,000 for works

Announcements of a procurement procedure shall also be published in English on the Authorized Agency's Web Portal, provided that the estimated contract value exceeds the amount equivalent to: EUR 133,000 for goods/services contracts; EUR 5,150,000 for works contracts.

* State-owned companies, companies with state/municipal ownership exceeding 50% and companies enjoying dominant market position, which are active in sectors listed in Article 4 of the Law «On Public Procurement».

Everyone can see everything



Procurement and registration of medical products

Ukraine continues to move towards harmonization with European standards in the field of medical products/devices.

In 2016, a new **national conformity assessment procedure** governing the registration of medical devices was introduced.

New products can enter the Ukrainian medical device market if they conform with the technical regulations that based on the EU Directives for medical devices (see sources 1,2,3,4 from the List).The changes removed legislative barriers and ensured a smooth transition from the medical device registration procedure to the conformity assessment procedure.

The main state licensing and control organ for medicines and medical products is the

[State Service of Ukraine on medicines and drug control.](#)

The main state licensing and control organ for medical nuclear devices

[State Nuclear Regulatory Inspectorate of Ukraine.](#)

[Licensing conditions and rules for conducting activities on the use of sources of ionizing radiation in radiation therapy are developed in accordance with the Ukrainian legislation \(see sources 5,6 from the List\).](#)



Organization	Activity	Website	Contact details
Ministry of Health	The main healthcare body in the system of central government	www.moz.gov.ua	7 Hrushevskoho Street, Kyiv, Ukraine, 01601 +380 (44) 253-61-94 Fax: +380 (44) 253-40-17 moz@moz.gov.ua Hotline <u>0-800-801-333</u>
State Expert Center of the MoH of Ukraine	Specialized expert institution authorized by the MoH of Ukraine in the sphere of preclinical study, clinical trials and state registration of medicinal products	www.dec.gov.ua	Office 601, 40, K. Ushynskiy Str., Kyiv, 03151, Ukraine +380 (44) 498-43-01
State Service of Ukraine on Medicines and Drugs Control	National law enforcement agency of executive authority responsible for drafting state policy, legal regulation, control and monitoring in combating trafficking drugs, psychotropic substances, medications and their precursors.	www.dls.gov.ua	120A Peremohy Avenue, Kyiv, Ukraine, 03115 +380 (44) 422-55-77 +380 (44) 422-55-73 dls@dls.gov.ua
National Health Service of Ukraine	New governmental body that will manage the financial system of healthcare in Ukraine.	www.nszu.gov.ua	19, Stepana Bendery Ave, Kyiv, 04073 +380 (44) 426—67-77 info@nszu.gov.ua Head: Oleh Petrenko
E-zdrorovya	Administrator of e-health central data base	https://ehealth.gov.ua/	
The National Academy of Sciences	Organization responsible for medical education and running large tertiary care facilities	http://www.nas.gov.ua/	4, Volodymyrska Str., Kyiv, Ukraine, 01030 <u>+380442396444</u>
National university of Kyiv-Mohyla Academy	Well-known University in Kiev with influential Public Health Department	https://www.ukma.edu.ua/eng/index.php/kontakti	2 Hryhoriia Skovorody Str., Kyiv, 04070 <u>+380444256059</u> pr@ukma.edu.ua

Organization	Website	Contact details
The European Bank for Reconstruction and Development (EBRD)	www.ebrd.com	Kiev Resident Office 46-46A Antonovycha Str., Kyiv Phone: +380 (44) 277-11-00
American Chamber of Commerce in Ukraine	www.chamber.ua	Horizon Park Business Center, 12 Amosova Street, Kyiv, 03038 Phone: +380 (44) 490-58-00
World Health Organisation (WHO)	https://www.who.int/countries/ukr/	30, Borychiv Tik Street, Kyiv, Ukraine, 04070 Phone: +380 (44) 425-88-28 whoukr@euro.who.int
USAID	https://www.usaid.gov/uk/ukraine	4 Igor Sikorsky Street, Kyiv, Ukraine, 04112 Phone 380-44-521-5000 Fax 380-44-521-5245 Email kyvinfo@usaid.gov
UNDP	http://www.ua.undp.org/content/ukraine/uk/home.html	1 Klovskiy decent, Kyiv, 01021 Phone: +380442539363
World Bank	https://www.worldbank.org/en/country/ukraine	1, Dniprovskiy Uzviz, 2nd Floor, Kyiv 01010, Ukraine Email: ukraine@worldbank.org
Swiss Development Cooperation	www.eda.admin.ch/countries/ukraine/en/home/international-cooperation/projects.html	Embassy of Switzerland - International Cooperation vul. Kozyatynska 12, 01015 Kyiv, Ukraine Phone: +380 44 281 61 28 kyiv@eda.admin.ch



This is a publication of
Netherlands Enterprise Agency
Prinses Beatrixlaan 2
PO Box 93144 | 2509 AC The Hague
T +31 (0) 88 042 42 42
E <mailto:klantcontact@rvo.nl>
<http://www.rvo.nl>

This publication was commissioned by the ministry of Foreign Affairs.

(c) Netherlands Enterprise Agency | March 2019
Publication number: RVO-019-1901/RP-INT

NL Enterprise Agency is a department of the Dutch ministry of Economic Affairs and Climate Policy that implements government policy for Agricultural, sustainability, innovation, and international business and cooperation. NL Enterprise Agency is the contact point for businesses, educational institutions and government bodies for information and advice, financing, networking and regulatory matters.

Netherlands Enterprise Agency is part of the ministry of Economic Affairs and Climate Policy.