The Republic of Uzbekistan
Ministry of Health

Data Collection Survey on Health Sector in the Republic of Uzbekistan

Final Report

August 2014

Japan International Cooperation Agency(JICA)
System Science Consultants Inc.

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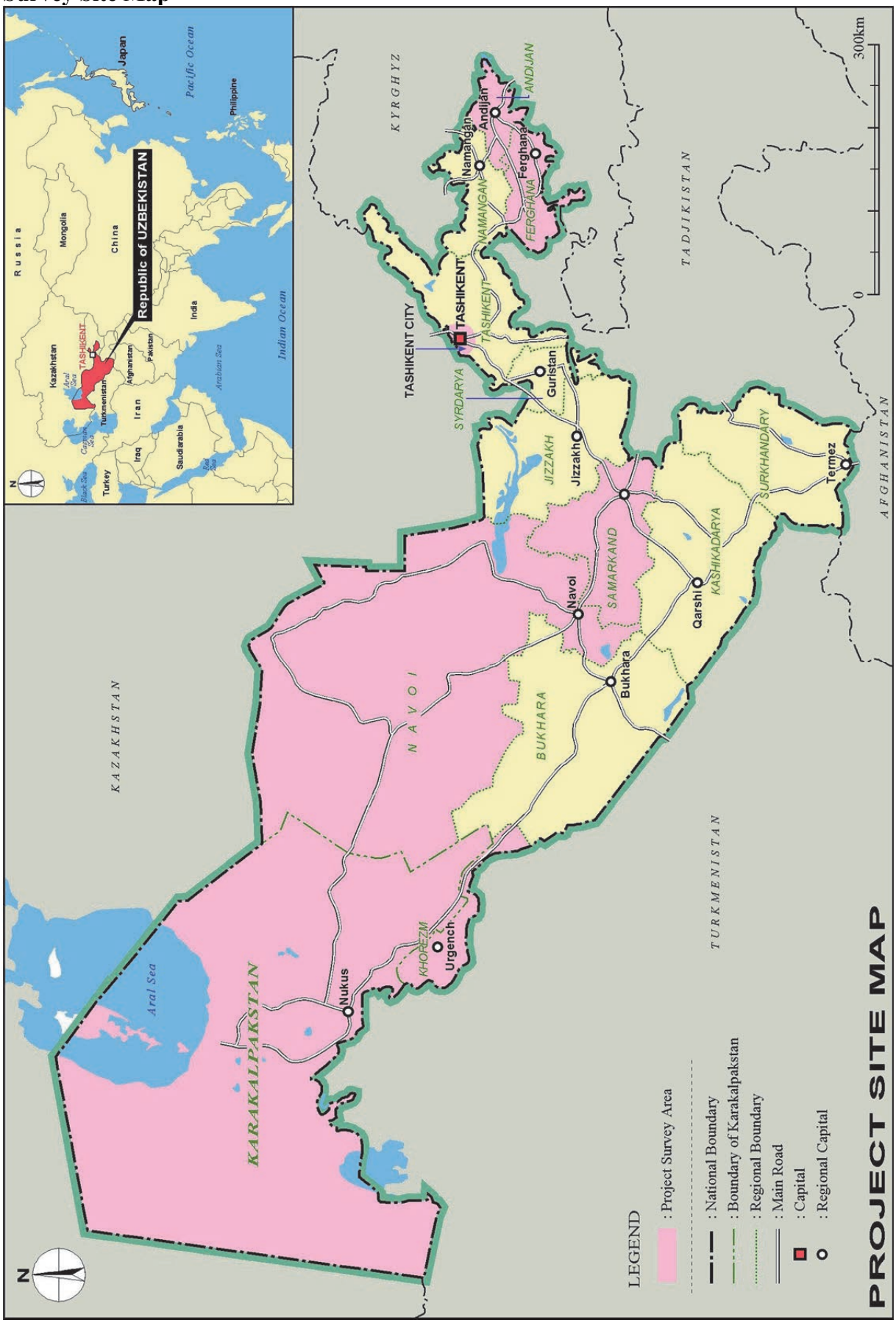
Survey Site Map



P i c t u r e s

Tashkent City

Ministry of Health

First Round Table Meeting
(JICA Uzbekistan Office Meeting Room)

Sanitation Epidemiological Station (SES)

Institute of Health and Medical Statistics (IHMS)

Republican Perinatal Center

Incubator and Premature Baby
(Republican Perinatal Center)

Republic Scientific Center of Urology

Dialysis Treatment Room, There are six dialyzers.
(Republic Scientific Center of Urology)

Navoi Oblast

Group Health Checkup at Primary School at Rayon Level (Karmana District)

Patients' files are managed by the date of birth (Madaniyat SVP)

Weight & Height Meter at Rahtoabad SVP
(Equipment provided by JICA was utilized will.)

NCD Database Management by Staff
(Rahtoabad SVP)

Andijan Oblast (Andijan City)

City Family Clinic

Patient Consultation at Outpatient Department
(City Family Clinic)

Republic of Karakalpakstan (KKP)

Ministry of Health (Nukus City)

KKP Oncology Dispensary

Facility of Rural Medical Union

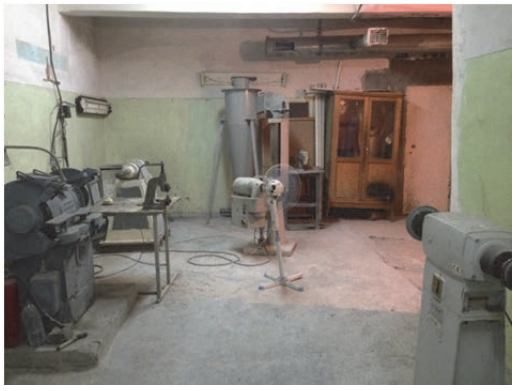
Delivered Equipment provided by the Health III Project (Rural Medical Union)

National Rehabilitation Center (Tashkent City)

Portable X-ray Imaging Machine provide by the Grant Aid Project

Equipment for Operating Room provide by the Grant Aid Project

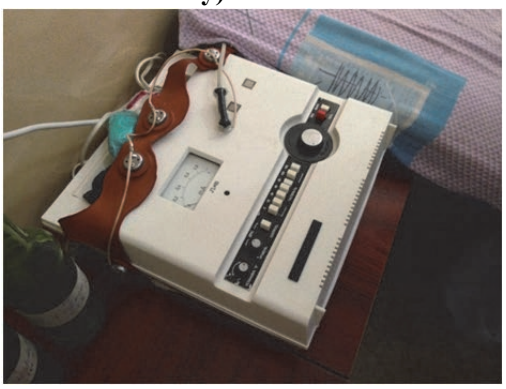
Making Prosthetic Limbs (1)



Making Prosthetic Limbs (2)

Regional Rehabilitation Center (Samarkand Oblast, Samarkand City)

X-ray Imaging Machine made in 1978



Electrical Therapy Device

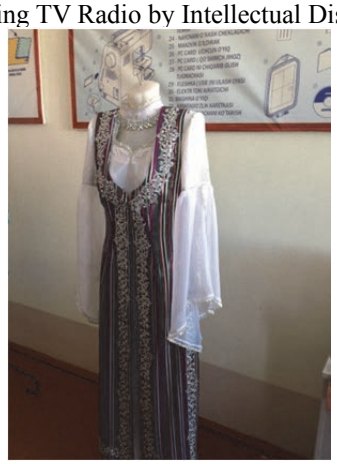
Vocational School (Fergana Oblast, Fergana City)

Dressmaking Class (Physically Disabled Persons)

Manufacturing Shoes by Deaf Students

Repairing TV Radio by Intellectual Disability

Training School Materials (Nationally Common)



Dress made in Dressmaking Class

Items made in Dressmaking Class

Republic of Karakalpakstan

Facility for Female Psychiatric Disability Persons
(30-minute drive far from Nukus city)

Psychiatric Disability Persons who are knitting and dressmaking

Abbreviations and Acronyms

ADB	Asian Development Bank
AIDS	Acquired immune deficiency syndrome
APCD	Asia-Pacific Development Center on Disability
ART	Antiretroviral Therapy
ARVP	Antiretroviral Prophylaxis
C/P	Counterpart
CBR	Community-based Rehabilitation
CIS	Commonwealth of Independent States
COPD	Chronic Obstructive Pulmonary Disease
DET	Disability Equality Training
DPO	Disabled People Organization
ESC	Employment Support & Social Protection Center
EU	European Union
FAO	Food and Agriculture Organization of the United Nations
GFATM	The Global Fund to Fight AIDS, Tuberculosis and Malaria
GIZ	Deutsche Geselischaft fur Internationale Zusammenarbeit
GP	General Practitioner
HIV	Human immunodeficiency virus
IDF	International Diabetes Federation
IHMS	Institute of Health and Medical Statistics
IMCI	Integrated Management Childhood Illness
IMF	International Monetary Fund
IMR	Infant Mortality Rate
IRP	Individual Rehabilitation Program
ISCED	International Standard Classification of Education
IUD	Intrauterine Device
JDF	Japan Disability Forum
JICA	Japan International Cooperation Agency
JOCV	Japan Overseas Cooperation Volunteers
KfW	Kreditanstalt fur Wiederaufbau (Reconstruction Credit Institute)
KKP	Republic of Karakalpakstan
MCC	Medical Consulting Commissions
MDGs	Millennium Development Goals
MDR-TB	Multidrug resistant tuberculosis
MICS	Multiple Indicator Cluster Survey
MLEC	Medical Labor Expert Commissions
MLSSP	Ministry for Labour and Social Security of Population
MMR	Maternal Mortality Ratio
MOH	Ministry of Health
MRI	Magnetic Resonance Imaging
NCD	Non-Communicable Diseases
NGO	Non-governmental Organization
NHA	National Health Account
OJT	On the Job Training
OPD	Outpatient Department
PEN	Package of Essential Noncommunicable diseases interventions for primary health care in low-resource settings
PHC	Primary Health Care
PWDs	Person with disabilities
RKKP	Republic of Karakalpakstan
RMU	Rayon Medical Union
SCOS	State Committee of the Republic of Uzbekistan on Statistics
SES	Sanitation Epidemiological Station
STEPS	STEP wise approach to chronic diseases risk factor Surveillance
SVP	Selsky Vrachebny Punkt (primary health care facility)

TB	Tuberculosis
UHES	Uzbekistan Health Examination Survey
UN ESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's
USAID	United States Agency for International Development
WB	World Bank
WHO	World Health Organization
WIS	Welfare Improvement Strategy

Exchange rate in the report (As of May, 2014)
1 USD = 102.58 JPY
1 UZS (som) = 0.045JPY

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Chapter 1 Outline of the Survey

1.1 Background of the Survey

The Republic of Uzbekistan (hereinafter referred to as "Uzbekistan") is located in Central Asia with a population of 28.54 million (2012, WHO), being almost half of the total population of the Central Asia countries, and plays a key role in those regions. In recent years, the economic growth has remained strong (annual growth rate was 8.3% in 2011, IMF), and national health expenditure shows high growth. The percentage of the national health expenditure was 8.5% in 2011 (1.264 billion US$) which amount is almost three times that of 427 million in 2002 (2002-2012, WHO). Although 49%[1] of the total population lives in rural areas, the poverty rate there is higher than urban areas and provision of social services is also lower than in urban areas.

The basic strategy of the country assistance policy for Uzbekistan is "implementation of assistance aimed at promoting economic growth and adjusting the development gap". One of the priority areas of the policy is to assist the restructuring of the social sector (agricultural reform, rural development and health care), and it emphasizes the assistance for health care services to poverty-stricken and vulnerable people in rural areas. The Japan International Cooperation Agency's (hereinafter referred to as "JICA") Country Analysis Paper describes a priority issue as being one that necessitates improving the quality of health care in rural areas. Moreover, Japan's Strategy on Global Health Diplomacy was approved at the 4th Economic Cooperation Infrastructure Strategic meeting in May 2013. As a result, the expectations are growing; i.e. those of the role of Japan for global health improvement, and contributions using Japanese advanced health systems and technologies.

The Government of Uzbekistan promulgated a presidential decree on the "National Program of Health Care Reform (1998-20005)" in 1998, which aimed at strengthening the medical and health care system. Moreover, the former also promulgated a presidential decree on the "Basic Directions for the further Development of Reforms and Realization of a Governmental Program of Public Health service Development". The Government of Uzbekistan carried out a health reform in accordance with these national strategies.

As important aspects of future health reform, the Government of Uzbekistan identifies improvement of the health system, innovation of health institutes, allocation of qualified staffs, establishment of a nationwide diagnostic network, strengthening the importance of addressing infectious diseases, improvement of women and child health care in rural areas, human resource development and private sector support.

In terms of health issues, although mother and child health care has not achieved the indicators of the Millennium Development Goals (MDGs), the Government of Uzbekistan has carried out intensive measures in cooperation with donors. As for the infectious diseases of HIV/AIDS, tuberculosis, etc., whose trends are expanding, the Government of Uzbekistan has tackled improvement of them. In terms of Non-infectious Diseases (NCD), cardiovascular disease, etc., are a major cause of death of people in Uzbekistan, however the patients cannot receive integrated medical services due to a sub-divided and vertically-divided health system. The existing health system, with complicated referral and insufficient budget allocation, may be the cause of regional disparities of the health budget, budget shortage of health facility in rural areas, inequitable access to medical services, the decline of physicians' motivation, and deterioration of medical equipment. In addition, there are other issues for entering the health system, such as incomplete knowledge and skill of health staffs, insufficient accuracy of health information and a low level of information used for decision-making.

Japan International Cooperation Agency (hereinafter referred to as "JICA") has supported Uzbekistan and implemented grant aid projects, master plan studies, technical cooperation projects and placement of Japanese experts. On the other hand, Japan's Strategy on Global Health Diplomacy was promulgated last year. Therefore, according to Japan's strategy and changes of disease structure of Uzbekistan, it has to consider development of its future assistance policy and the possibility of new projects for strengthening the health sector (including social security, such as support to disable persons) and its quality.

[1] Statistical data on activities of health care facilities 2012, Institute of Health and Medical Statistics

In views of these circumstances, JICA decided to conduct the Data Collection Survey on the Health Sector in the Republic of Uzbekistan (hereinafter referred to as the "Survey"). The Survey will be implemented from March 2014 to August 2014.

1.2 Objective of the Survey

The objective of the Survey is to collect and analyze the information regarding the current situations and problems of the health sector in Uzbekistan (including welfare services for disabled persons), and to develop JICA's strategy of future cooperation and ideas for new projects.

1.3 Survey areas

A field survey was carried out in the capital, Tashkent City, and several rural oblasts. The target oblasts may be (may be or were?) Fergana, Andijan and Namangan (which are located in populous Fergana valley) ; Navoi (where they conducted the master plan study "Study on the Reform of Health Care Services in Navoi Region" and technical cooperation project "Project on Preventive Care Measures for Non-Communicable Diseases") ; Samarkand (it is a core city in Uzbekistan, has a large population and development need of the health sector is high) ; and Karakarupakustan, Holism and Kashkadarya (where the grant aid proposal "Modern Equipment for Regional Rehabilitation Center" was submitted).

1.4 Approach of the Survey

The basic approach to the implementation of the Survey, such as work in Japan, field survey, analysis and development of plan, is shown in the following flow chart:

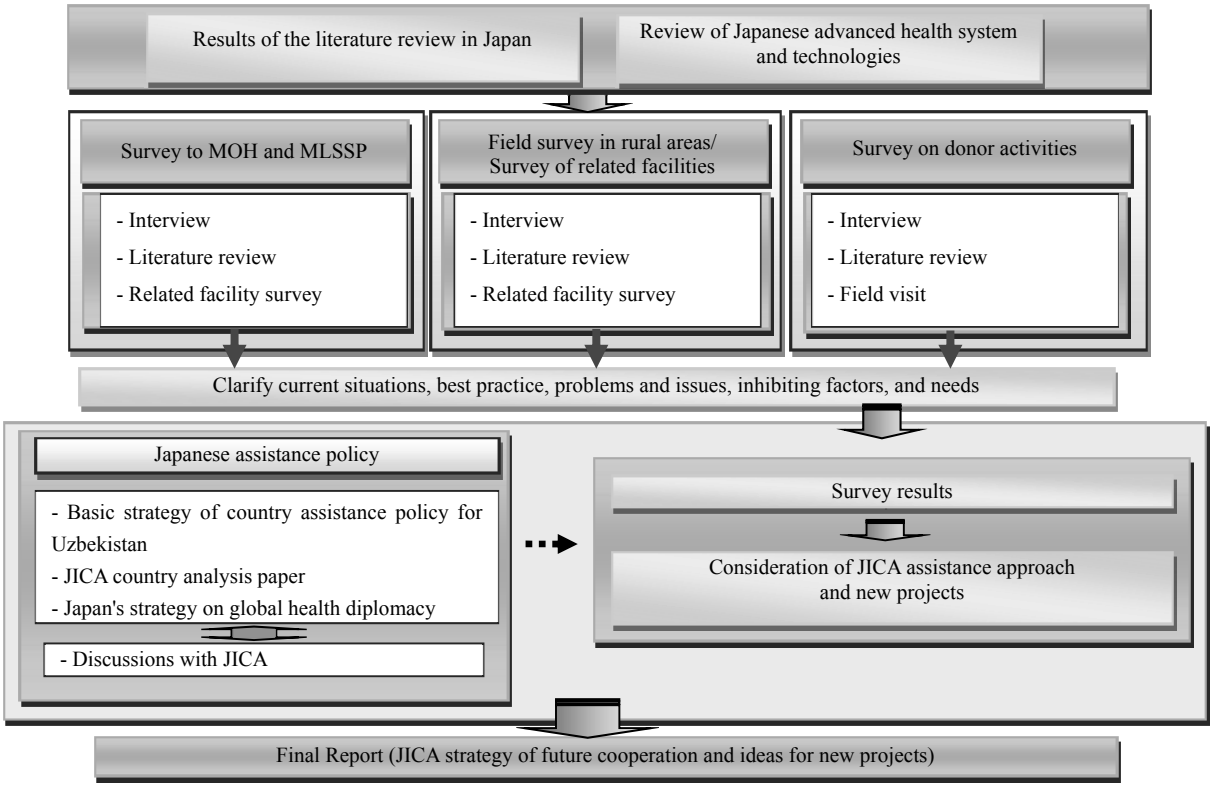


Figure 1-1 Flow chart of the Survey

1.5 Members of the Survey Team

The list of the Survey Team is shown below:

Table 1-1 Members of the Survey Team

Name	Position	Activity
Mr. Hiroshi Abo	Team Leader/ Health Strategy (1)	The following activities to be managed as a Team Leader: Survey, contents of plan, Survey approach, management of schedule, final decision of important aspects, facilitation of Survey, negotiation with Uzbekistan side, preparing and supervising reports
Ms. Chie Honda	Deputy Team Leader/ Health Strategy (2)	Management of the Survey and support to Team Leader as a Deputy Team Leader. Survey on situations and direction of future cooperation for health sector (health issues, sub-sectors), and preparation of related reports.
Ms. Yoshiko Akiyama	Health Strategy (3)	Conduct field survey on situations and direction of future cooperation for health sector (health issues, sub-sectors)
Mr. Hisao Chiba	Analysis of Social Services	Survey on social service strategy and social welfare improvement strategy (WIS), legislation and system. Analysis of situations of social security and direction of future cooperation, and preparation of related reports.
Dr. Nadira Muratova	Analysis of Health System	Survey on situations and direction of future cooperation of health system (human resources, finance, donor coordination, health information, health management) and UHC, and preparation of related reports.

1.6 Main Interviewees

The following interviewees contributed to this research (refer to the attachment).

・JICA Uzbekistan Office
・GIZ, UNFPA, WHO, UNCEF, WB, UNDP, Embassy of USA
・Ministry of Health, Ministry of Labor and Social Protection, Ministry of Finance
・Tashkent City: Republic Specialized Hospitals, Facilities related to disabled people and so on
・Tashkent Oblast: Health facilities
・Navoi Oblast: Navoi Oblast Health Department and so on
・Fergana Oblast: Fergana Oblast Health Department, Facilities related to disabled people and so on
・Samarkand Oblast: Samarkand Oblast Health Department, Facilities related to disabled people and so on
・Andijan Oblast: Andijan Oblast Health Department
・Karakarupakustan: Karakarupakustan Ministry of Health, Facilities related to disabled people and so on

1.7 Survey Schedule

This survey was conducted from March 2014 to August 2014 as follows (refer to the attachment).

Table 1-2 Survey Schedule

Date	Activities
1 March ～ 12 April	(1) Preparatory work in Japan, submitting Inception Report (IC/R)
13 April ～ 4 June	(2) Field survey in Uzbekistan
5 June ～ 15 July	(3) Work in Japan, Preparation and discussion of the Draft Final Report
16 July ～ 8 August	(4) Work in Japan, Preparation and submission of the Final Report

<Field survey in Uzbekistan>
Mr. Abo: 13 April～7 May, 26 May～4 June
Ms. Akiyama: 2 May～4 June
Mr. Chiba: 29 April～28 May

Chapter 2 Country Situation

2. 1 Natural Condition and Economy

Uzbekistan has approximately 440,000 km^2 land area (1.2 times that of Japan). It is bordered by Kazakhstan to the north, Turkmenistan to the southwest, Kyrgyzstan and Tajikistan to the southeast and Afghanistan to the south. Uzbeks constitute 78.4% of the population including minorities, such as Russians (4.6%), Tajik (4.8%) and Tatar (1.2%). Islam is the dominant religion in Uzbekistan. The official language is Uzbek, and Russian is also spoken as a common language. It comprises 12 provinces (Oblasts), Tashkent city (Independent city) and Karakarupakustan (autonomous republic) with 121 cities and 163 districts (Rayon).

Uzbekistan declared independence after the Soviet Union was dissolved in 1991; President Karimov was elected as the first president and he has maintained his position ever since. After independence, Uzbekistan undertook economic reforms and minimized the economic downturn among the CIS[2] countries. GDP growth rate has been kept at a high level of 7-9% since 2004. Major industries are cotton, food processing, manufacturing, gold, oil and natural gas. Primary industries are the main industry and this is a development issue[3].

Table 2-1 Major Socioeconomic Indicators of Uzbekistan

Indicators	Amount	Year
Population (1,000 people)	28,540	2012
Population growth rate	1.5%	2012
Life expectancy at birth (years)	68	2012
Crude birth rate (per 1,000 population)	21	2012
Crude death rate (per 1,000 population)	5	2012
Per capita GNI	US$3,670	2012
GNI growth rate	8.2%	2012
Total enrollment, primary	93%	2011
Human development index /rank out of 187 countries	0.654/114*	2012
Population living below the poverty line (US$1.25/day)	NA	2012

Source: World Development Indicators (June 2014),*Human Development Report 2013 (UNDP)

2. 2 Social Situation

In Uzbekistan, as a characteristic social situation, there is a community organization called “Mahala”. Mahala plays the role of a traditional human network and life assistance, supporting as well as sharing values with each other. A Mahala is similar to “Chou-nai-kai” in Japan although its function and structure is different. Both of them are neighborhood associations. There is a mosque in each Mahala and most people pray there; as a result, people become closer. Also, there is the teahouse (Chaikhana), which is culturally important and is where people exchange information

The Uzbekistan government aims to give people public management and operation of each region as a part of the administrative reform and to involve Mahala as a part of government institutions. Mahala is located at the end of each administrative division, i.e. "Oblast", "Rayon", “City” and “Ward”. The steering committee of Mahala conducts a meeting at least once a month and its functions and roles are regulated by the law[4]. Mahala has become increasingly important in the system that provides the social security with receipt of such benefits and Mahala supports the efficient allocation of government budget[5].

[2] CIS: Commonwealth of Independent States
[3] Basic data of the Republic of Uzbekistan (Minitry of Foreign Affairs of Japan, 2013)
[4] Uabekistan Autonomous Operation Article
[5] “Mahala -Traditions and Changes in Central Asian Society” (Timur Dadabae, 2006)

Chapter 3 Development Policies and Plans

3.1 National Development Policies

3.1.1 Positioning of the Health Sector in the National Development Policies

The Government of Uzbekistan promulgated the "Welfare Improvement Strategy Paper 2008-2010" (WIS-I) in 2007 as a comprehensive national development plan. WIS-I aims at the improvement of national living standards and poverty reduction by income increase, improvement of accessibility of services in medical services, education, appropriate better environment, and social protection.

Based on the commitment toward the establishment of Uzbekistani economic development model and the improvement of social value and globalization, WIS-I stresses on keeping and strengthening the national characteristics, and promoting the national reforms. Four (4) main strategies in WIS-I are; a) achievement of sustainable economic growth, b) enhancement of human development and social protection, c) reduction of the regional disparities, and d) environment improvement. Also, WIS-I incorporates the Millennium Development Goals (MDGs) which aims at reducing under 5 child mortality rate and maternal mortality rate, etc.

The Government of Uzbekistan decided to develop the next Welfare Improvement Strategy Paper 2013-2015 (WIS-II) and promulgated in March, 2013, in order to ensure the continuity and sequence of ongoing reforms. Regarding health sector, WIS-II aims to optimize both heath care organizations' network and the related system of financing and management. Strengthening of the medical infrastructure of district (rayon) and regional (oblast) level of health care institutions, as well as specialized medical centers is mentioned.

The following development priority areas are envisaged in the WIS-II; a) increase of the quality of health care services through the introduction of renewed standards of diagnosis and treatment, b) enhancement of the population awareness regarding establishment of healthy life, c) provision of free medical services to low income groups, elderly, children and person with disabilities, d) health care reforms through the improvement of maternal and child health care (MCH), e) prevention and reduction of socially significant diseases, f) increase the efficient of oncology services, and g) introduction of modern medical technologies and medical equipment. Details are shown below:

Table 3-1 Priority Areas and Activities in Welfare Improvement Strategy Paper 2013-2015

Enhancing the population access to medical services	
Increase accessibility of free medical services to low income groups, elderly, children and person with disabilities	
Strengthening of the primary health care (PHC)	Establishment of Rural Medical Union (RMU), provision of modern medical equipment
Strengthening of the emergency medical services System	Provision of modern medical equipment
Increase quality of medical services	
Modernization of district and regional level health care institutions	Provision of modern medical equipment, introduction of international standard of medical technologies
Increase the population awareness regarding healthy life	
Strengthening of activities of reproductive health	Improvement of system of reproductive health activities, strengthening of activities, strengthening of MCH, increase qualification of health care personnel, development of blood transfusion system
Prevention and reduction of socially significant diseases	
Treatment of tuberculosis (TB) patients	Preventive activities for high-risk groups, effective treatment, immunization, increase social support
Improvement of oncology services	Provision of modern medical equipment for oncology institutions
Reduction of HIV/AIDS	Implementation of preventive interventions, education of youth regarding basics of healthy lifestyle
Strengthening of endocrinology	Provision of modern medical equipment for endocrinology

	institutions
Improvement of sanitary and epidemiological welfare	Isolation and prevention from dangerous diseases, improvement of capacity of laboratories, provision of equipment and tools, improvement of monitoring systems
Social protection	
Improvement of pension system	Development of an accumulative system of pension provision
Improvement of welfare for person with disabilities	Provision of rehabilitation, creation of jobs and adjustment for the needs of disabilities, inclusion of children with disabilities into educational programs, strengthening of insurance principle

The Constitution of the Republic of Uzbekistan was promulgated in 1992. The constitution stipulates the rights of social vulnerable groups (patients, person with disabilities, elderly, unemployed people, etc.) regarding social welfare. The right of disabilities for social protection is stipulated in Article 39, and the right to receive medical care is stipulated in Article 40.

3.2 Health Sector Development Plan

3.2.1 Health Sector Reforms

The Government of Uzbekistan formulated a presidential decree No.2107 on the "National Program of Health Care Reform (1998~2005)", which aimed at strengthening the medical and health care system for the people of Uzbekistan in November, 1998. The main concept and objectives of health care reform are:

1) Better quality of health services and social protection
2) Equal access to health and medical services
3) Introduction of market principles and mechanisms to the health system
4) Effective system for mother and child health care services
5) Development of preventive health services
6) Improvement of health financing system
7) Provision of PHC in guaranteed quality
8) Strengthening of the emergency medical system
9) Improvement of referral system
10) Improvement of the effective health management system
11) Establishment of a legal base for health reform
12) Improvement of quality of training for medical personnel

The Government of Uzbekistan particularly focused on "7) Provision of PHC in guaranteed quality" and "8) Strengthening of the emergency medical system", and has been implementing the health reforms.

On the other hand, the Government of Uzbekistan developed the 3rd priority reform program for specialized medical services, formulated the presidential decree No.3214 on the "Measures for Future Reforming of Health Care System", and launched the reform of specialized medical services at four (4) republican specialized centers (Surgery, Cardiology, Urology, and Eye Microsurgery). At the same time, the said 4 specialized centers introduced the chargeable medical services (40% self-income, 60% governmental budget). Presently, this system has been applied at all ten (10) specialized centers (Obstetrics and Gynecology, Pediatrics, Therapy and Rehabilitation, Dermatology and Venereology, phthisiology and pulmonology, and Endocrinology), and the ratio of chargeable medical services has been increased in 80% since 2008.

Based on the results of the "National Program of Health Care Reform (1998~2005)", the Government of Uzbekistan promulgated the new presidential decree on the "Further Development of Reforms and Realization of a Governmental Program of Public Health Service Development" in September 2007. It

emphasizes on the necessity of prevention of diseases, and the further improvement of health care at district and regional level. As important aspects of health care reforms, the decree focuses on the improvement of health care system, reforming the medical technologies and appointment of appropriate medical personnel at specialized medicinal institutes, establishment of country-wise diagnostic network, strengthening of the prevention of socially significant diseases (including HIV/AIDS), woman and child care particularly in rural areas, human resources development, and support to the private sector.

3.2.2 Progress of Health Sector Reforms

The Government of Uzbekistan has carried out the national health reforms according to the above-mentioned Presidential Decrees in cooperation with multi-trilateral donors. The priority areas for the national health reforms from 1998 to 2015 are shown below. Also the progress and issues of the national health reforms that the Ministry of Health showed, as of May 2014 are shown in the following table:

Table 3-2 Priority Areas and Progress of Health Sector Reforms

Priority Areas	Progress	Issues
1) Reforming PHC	Restructuring of referral system : establishing the SVP (Rural Medical Focal Point), educating the GPs	Optimizing the number of facilities, improvement of the 2nd level facilities
2) Creation of the national model of MCH protection	Improving maternal complexes and children's facilities, strengthening network of both of facilities, decrease Infant Mortality Rate (IMR) and MMR	Difficulty in achieving MDGs' indicators, optimizing the number of beds
3) Strengthening of emergency medical health care system	Establishment of new emergency medical care system, improvement of facilities and equipment	Provision of modern equipment, strengthening of services by ambulances
4) Development of specialized medical care	Establishment of 10 Republican Specialized Centers, introducing chargeable medical care	Strengthening of network with each Republican Specialized Center, strengthening capacity of regional level, introducing modern equipment and medical technologies
5) Measures on socially important diseases	Strengthening of infection control (TB, HIV/AIDS, etc.), improvement of related institutions	Difficulty in achieving MDGs' indicators, strengthening of measures for nun-communicable diseases (NCD)
6) Advanced system for medical education and training	Establishing new medical education system, implementing training/in-service training to medical staffs	Formulating related legislations, revising curriculums

3.1 Policy and Plan for Disability Sector

3.3.1 Government Agencies for Disability Sector

Since the independence of Uzbekistan in 1991, the social protection for vulnerable people is one of the five principles in the national reform toward a market economy. Therefore, social protection for PWDs has been an important political issue. The Ministry of Labor and Social Security of Population is a main responsible agency for disability issues, and also the Ministry of Health, Ministry of Finance, the Ministry of Public Education and Ministry of Higher Education are involved. Besides, Cabinet Ministry has the authority to adopt legislation and national plans. The main role of those related agencies is as follows.

Table 3-3 Government Agencies for disability issues & its Responsibility

Agencies	Responsibility
Cabinet of Ministries	To adopt national program and legislations to provide social service and social security.
Ministry for Labor and Social Security of Population	1. Social security for Persons with Disabilities (PWDs) 2. Organization and management of social welfare 3. Management of medical and social services and rehabilitation for PWDs 4. Orthopaedic aid for the population 5. Formation of employment program and occupational adaptation
Ministry of Heath	1. Medical aid and prevention of illnesses for PWDs 2. Organization of rehabilitation services for PWDs 3. Creation of rehabilitation, medical, and diagnostic center 4. Training of specialists for medical and prevention services.
Ministry of Finance	After 2009, Medical-Labor Expert Commissions (MLEC), and Medical-Consulting Commissions (MCC), which examine degree of disabilities. Social allowance and pension
Ministry for Higher and Secondary Special Education	Specialize Vocational College for PWDs
Ministry of Public Education	Special School for PWDs and Home based Education
National Center on Human Rights	Public coordination body for international convention regarding the human rights. Ratification, implementation and monitoring for international conventions in Uzbekistan. In charge for the Convention of the Rights of PWDs

Source：Add and modified from Uzbekistan Country Profile, JICA

There is no National Coordination Committee for PWDs in Uzbekistan, which is actually recommended by United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP)

The Central Government System in Uzbekistan is as below.

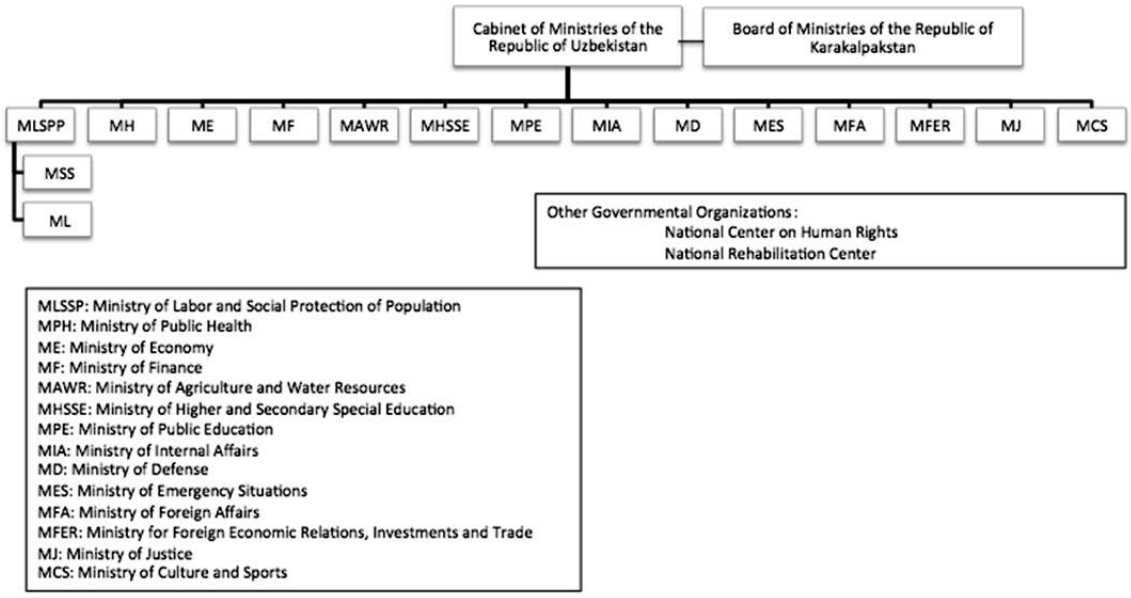


Figure 3-1 Central Government System

The organization chart of the Ministry of Labor and Social Protection of Population is organized as shown in Figure 3-2.

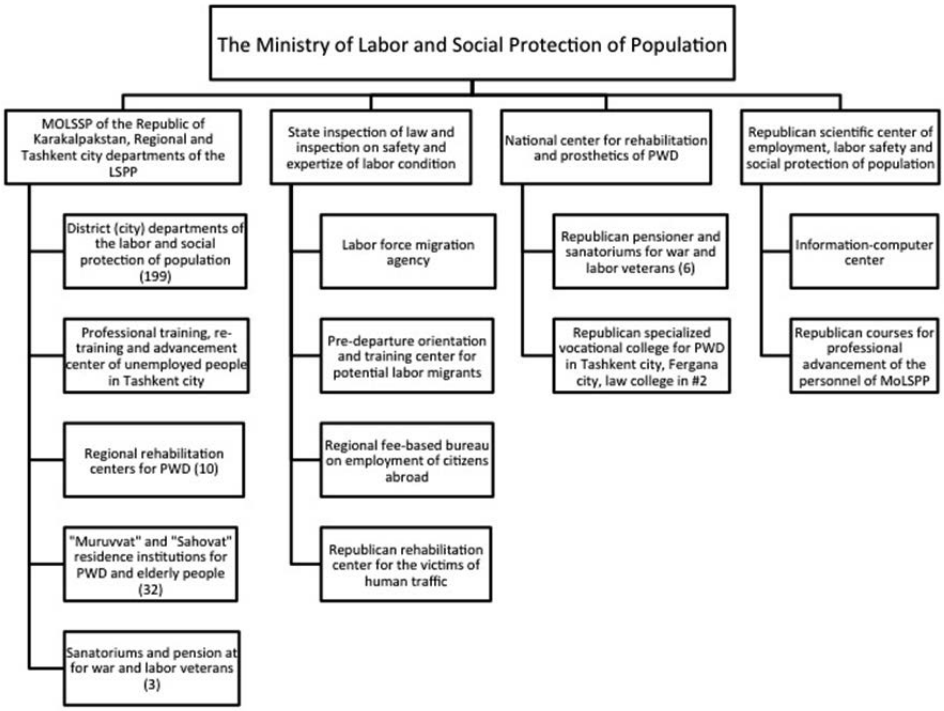


Figure 3-2 Organization Chart of the Ministry of Labor and Social Protection of Population

3.3.2 Law and International Convention on Disability

Major laws on disability in Uzbekistan are 1) The Constitution of the Republic of Uzbekistan, and 2) The Law on Social Protection of Disabled People in Uzbekistan, hereafter, "Law on Social Protection".

Title	The Constitution of the Republic of Uzbekistan
Year legislated	December 8, 1992
Description	The constitution defines constitutional rights, freedoms, and legitimate interests, including the right of a socially disadvantaged population to social security (person with disabilities, elderly, sick, unemployed, etc.). Article 39 of the constitution refers to the right of PWDs: "Everyone shall have the right to social security in old age, in the event of disability and loss of the main income earner as well as in other events specified by law."

Title	The Law on Social Protection of Disabled People in Uzbekistan
Year legislated	November 18, 1991, (Amended July 11, 2008, August 22, 2013)
Purpose	Regulate the relations associated with social protection of disabled people
Description	Consisting of 8 chapters and 36 clauses, it regulates the government policy, social protection and social security for PWDs. Social protection means that a government guarantees the system of economic, social and legal assistance interventions directed to prevention and compensation of limitations in the life of disabled people, and to provide opportunities for disabled people to equally participate in the society as other people Rights of disabled people are defined with clause 6; - Provision of the rights, freedom and legal benefits of disabled people; - Prevention of discrimination of disabled people; - Protection of disabled people's dignity and self-esteem; - Provision of equality in rights and opportunities for disabled people, etc.

3.3.3 Promotion of the Convention on the Rights of Persons with Disabilities in Uzbekistan

The Government of Uzbekistan has signed the Convention of the Rights of Persons with Disabilities (CRPD) on 27 February 2009. It was after the amendment of the Law on Social Protection in 2008 by which the rights of PWDs were secured. At the present, the Government is preparing for the ratification.

The Government of Uzbekistan established an intergovernmental working group under the Ministry of Justice, which is responsible for the process of ratification, implementation, and monitoring of UN conventions on human rights. The working group is also in charge of the CRPD. In fact, translation of CRPD into Uzbek language, review of criteria for disabled grouping, and improvement of rehabilitation services have been done in order to ratify CRPD. According to the National Center for Human Rights (NCHR), since the independence of the Republic of Uzbekistan, the Government has been respecting international societies including conventions of human rights. Therefore, the Government has ratified 6 major human rights conventions[6], plus other 73 international treaties including 35 reports. In this respect, NCHR is very much interested in the ratification of CRPD.

On the other hands, several obstacles are recognized for the ratification of CRPD. In fact, budget allocation for the implementation of CRPD has been a serious concern for the Government. Thus, the Government is now trying to estimate the necessary budget for providing accessible environment of building and public transportation, and sign language interpretation, etc. Responsible government agencies are now in charge of such budget estimation. Second, establishment of monitoring mechanism is also the concern for the Government. NCHR is now eager to learn such mechanism from foreign countries. Besides, NCHR also feels it necessary to advocate CPRD since the public awareness on CRPD is not strong enough in Uzbekistan.

At the same time, Disabled People Organizations (DPOs) have been quite active for the ratification of CPRD. The Consultative Council of NGO for PWDs, hereafter "the Council" was established in 2012 in order to promote CRPD. There are more than 20 organizations which joined the Council, and the establishment was supported by UNDP and JICA. The Council has made the National Action Plan for the implementation of CPRD and it was submitted to the government.

The Council is not yet registered as a non–profit organization. And the member organizations are only coming from Tashkent. Therefore, it is still difficult to say that the Council is representing disability sector as a whole. Besides, an official mechanism to discuss CRPD among the Council and government agencies is not yet established and therefore it is still difficult for the Council to further promote the National Action Plan. The representative of the Council is unable to participate in the intergovernmental working group under the Ministry of Justice, although the chairperson of Uzbek Disability Organization is a member of the working group.

In such a situation, the Government of Uzbekistan and DPOs are both eager to learn case studies of foreign countries such as Japan in order to prepare for the ratification and implantation of CRPD.

3.3.4 Policy and Action Plan on Disability

(1) Welfare Strategy

Welfare Improvement Strategy (WIS) I and II regulate a welfare strategy for socially vulnerable people including PWDs. The principal strategy is to develop social welfare for the population through liberalization of economy and enhancement of economic system. With this economic development, national income will be increased and social services such as education and health will be also improved. However, there is no particular strategy for PWDs in WIS. The disability issue is just included in a big framework of social welfare.

[6] 1) International Convention on Civil and Political Rights
2) International Convention on Economic, Social and Cultural Rights
3) Convention on Elimination of All Forms of Discrimination against Women
4) Convention on Elimination of All Forms of Racial Discrimination
5) Convention against Torture, and Other Cruel, Inhuman or Degrading Punishment
6) Convention on the Rights of the Child

Title	Welfare Improvement Strategy -II
Year /Period	2013-2015
Description	This strategy is developed to continue social welfare reform based on WIS-I. The main goal is to identify the most effective measures and methods both in the action priority areas and the socio-economic policy in order to achieve the sustainable and quality growth of population.

Title	Welfare Improvement Strategy -I
Year /Period	2008-2010
Description	The objectives are improving living standards based on the robust and inclusive economic growth, forming a modern and diversified economy to be able to compete in world markets, the comprehensive development of the whole country, a fair distribution of income as well as further development and significant improvement in the quality of services in education, health, and other socially significant sectors.

The Order of Cabinet Ministries and Presidential Decree also defines the policy and action plan related to the social welfare of PWDs such as criteria of social allowance and pension as well as the degree of disabilities. A list of such orders and degrees are as below.

(2) Pension/Social Allowance

Policy/Program Title	Presidential Decree: On increasing the salaries, pensions, stipends and allowances December 2, 2013 N 4582 – UP
Year/Period	2013
Description	Based on the minimum wage, pensions and social allowances for PWDs and elderly are defined. According to this decree, retirement pensions and allowance for PWDs are 187,970 som monthly, and the allowance for elderly and PWDs without required work experience is 115,340 som monthly.

Policy/Program Title	Presidential Decree: Enhancement of Social Security for Elderly, Pensioner, and PWDs (2011-2015) (Decree 229, No. 22-23, 2011)
Year/Period	20 May 2011
Description	The following measure is added for single elderly people, pensioners and PWDs to enhance social security, legislation of social service, quality of social service, care and rehabilitation, care for elderly and improvement of the life environment

Policy/Program Title	Program for 2000-2005 on the increase of social aid for single elderly people, pensioners, and PWDs in Uzbekistan (The Resolution of the Cabinet of Ministries of the Republic of Uzbekistan from December 7, 1999 No. 520)
Year/Period	December 1999
Description	This program designs and takes measures for providing a comprehensive aid for single pensioners and PWDs, including medical and patronage services, provision with board and medicine, provision with vouchers to sanatoriums and medical health care institutions.

(3) Rehabilitation

Policy/Program Title	【Cabinet of Ministers】 Regulation on the procedure for examination of citizens in medical labor expert committees ANNEX number 1 of the Cabinet of Ministers on July 1, 2011 № 195
Year/Period	July 2011
Description	This Regulation defines the order of examination of citizens and determination of disability, as well as the degree of occupational disability by MLEC Based on this law, the main types of disabilities are as below; 1) Disorders of mental functions, 2) Disorders of language and speech functions, 3) Disorders of sensory functions, 4) Motility Disturbance, 5) Disorders in the blood circulation, respiration, etc., 6) Disorders caused by physical deformity There are three degrees for disabilities, 1) Moderate impairments, 2) Expressed impairments, 3) Significantly expressed impairments, which is defined by following seven criteria; 1) Ability of self-service, 2) Ability of independent movement, 3) Ability of orientation, 4) Ability to communicate, 5) Ability of behavior control, 6) Ability to learn, mastering and usage of knowledge, 7) Ability to work

Policy/Program Title	【Cabinet of Ministers】 Measures for further improvement of the efficiency in medical, social and professional rehabilitation of PWDs Cabinet of Ministers of 23 December 2010 No. 307
Year/Period	December 2010
Description	It is to improve the management structure and organization of MLEC services and defines the procedure for the development and implementation of individual rehabilitation program (IRP). Definition of Rehabilitation is following, Medical rehabilitation: Regenerative therapy, reconstructive surgery, prosthetics and orthotics; Professional rehabilitation: Vocational guidance, vocational training, vocational and industrial adaptation and employment of disabled persons; Social rehabilitation: Socio environmental orientation and social adaptation, aimed at restoring the ability of the PWD to self–service, orientation, communication, behavior control, education, etc.

Policy/Program Title	State program for the medical/social rehabilitation of disabled children for 2001-2005 (The Resolution of the Cabinet of Ministries of the Republic of Uzbekistan, 10.06.1999 No. 296)
Year/Period	1999
Description	Medical, social, educational and occupational rehabilitation for children with disabilities. Sports and cultural activities for children with disabilities.

Chapter 4 Health Status of the People

4.1 Overview

According to health statistics in 2012, 51% of the total population lives in the urban area. Rayons, where most of the population lives in the rural areas, are Khorezm (67%), Bukhara (62%), and Samarkand (61%). The percentage of children aged under 14 is 29% of the population nationally and the lowest percentage is 23% in Tashkent.

Table 4-1 Population in each Oblast, Rayon, and Children aged under 14 (Year 2012)

Areas	**Population (1,000)**	**Rural (1,000)**	**Children aged under 14 (1,000)**
Tashkent	2325,9	-	542,3
Andijan	2735,4	1290,3	774,0
Bukhara	1718,6	1068,2	466,4
Djizzak	1195,8	625,1	370,1
Kashkadarya	2804,1	1589,9	879,8
Navoi	884,8	456,2	240,8
Namangan	2439,6	879,0	699,5
Samarkand	3353,5	2046,4	1019,7
Surkhandarya	2239,7	1426,1	704,9
Syrdarya	745,0	437,6	223,0
Tashkent	2683,5	1359,1	722,7
Fergana	3305,2	1413,9	920,8
Khorezm	1641,6	1094,5	493,9
Karakarupakustan	1702,3	859,4	511,0
The Republic of Uzbekistan	**29775,0**	**14545,7**	**8568,9**

Source: Statistical data on activities of health care facilities 2012, Institute of Health and Medical Statistics

The average population growth rate during 2002-2012 was 1.5%. Life expectancy was 68 years based on the World Development Indicator (WB, 2012), however the Ministry of Health (Ministry of Health) indicated that it was 73.1years.

According to the Global Health Observatory Country Statistics (WHO, 2012), age-adjusted mortality per 100,000 of infections, perinatal period and nutritional conditions was 104, that of Non-communicable Diseases (NCDs) was 838 and that of injuries was 44. Based on the Ministry of Health statistics in 2013, NCDs accounted for 81% among total deaths, followed by infections (2.1%). The leading causes of death were cardiovascular diseases (61.6%), cancer (7.6%), respiratory diseases (5.9%) and diseases of the digestive system (5.8%) according to the Ministry of Health Round Table Meeting. “Highlights on Health in Uzbekistan” (WHO, 1999) indicated that the causes of death among people aged below 65 were cardiovascular diseases (39%), cancer (11%), respiratory diseases (14%), injuries (10%) and infections (5%). Therefore, the rate of death from cardiovascular diseases had increased from 1999 to 2012.

The following table shows the prevalence in Uzbekistan.

Table 4-2 Prevalence in Uzbekistan (Year 2012)

	Diseases (ICD-10)	Percentage among all diseases (%)	Prevalence (per 100,000 population)
1	Diseases of the blood and blood-forming organs and certain disorders involving the immune	22.19	17,974
2	Diseases of the respiratory system	21.12	17,106
3	Diseases of the digestive system	11.41	9,240
4	Endocrine, nutritional and metabolic diseases	7.06	5,719
5	Diseases of the circulatory system	6.75	5,464
6	Diseases of the genitourinary system	5.66	4,584
7	Injury, poisoning and certain other consequences of external causes	4.13	3,347
8	Diseases of the nervous system	3.33	2,694
9	Diseases of the skin and subcutaneous tissue	3.14	2,541
10	Diseases of the eye and adnexa	3.05	2,471

Source: Statistical data on activities of health care facilities 2012, Institute of Health and Medical Statistics (IHMS)

Ranked 11th in order of prevalence was infectious and parasitic diseases, followed by diseases of the ear and mastoid process; mental and behavioral disorders; diseases of the musculoskeletal system and connective tissue; pregnancy, childbirth and the puerperium; certain conditions originating in the perinatal period; neoplasms and congenital malformations, deformations and chromosomal abnormalities. Anemia was largely composed of the diseases related the blood, which ranked first, because most patients suffering from anemia were recognized through antenatal care.

According to the MDGs, the maternal mortality ratio was 28 per 100,000 live births (20.9 (Ministry of Health, 2013)), the infant mortality rate was 34.4 per 1,000 live births (10.6 (Ministry of Health, 2013)) and under-5 mortality rate was 39.6 per 1,000 live births.

4.2 Mother and Child Health

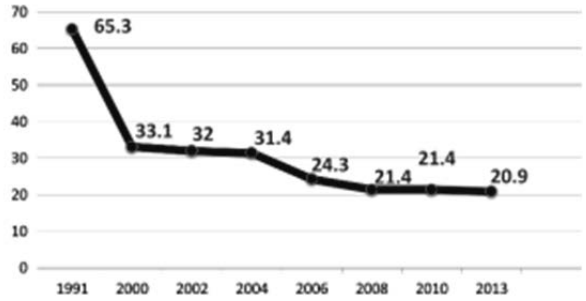
According to the MDGs Indicators, the indicators, such as maternal mortality ratio, infant mortality rate and under-5 mortality rate decreased as shown in the table below.

Table 4-3 Maternal, Infant and Under-5 Children Mortality Rate

Year	1990	1995	2000	2005	2010
Maternal Mortality Ratio	59	36	33	32	28
Infant Mortality Rate	60.5	56.9	51.3	43.1	36.7
Under-5 Mortality Rate	73.8	69.0	61.4	50.8	42.5

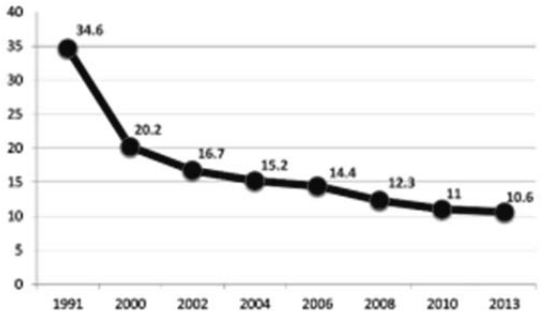
Source: MDGs Indicators

The following figures were based on the HOH statistics.



Source: Ministry of Health

Figure 4-1 Maternal Mortality Ratio (per 100,000 live births)



Source: Ministry of Health

Figure 4-2 Infant Mortality Rate (per 1,000 live births)

The Health Sector Reform Program (1999-2005) focused on mother and child health and strengthened the emergency obstetric care system, as well as the reproductive health services at primary level. Also, the Ministry of Health made efforts with regard to infrastructure development, capacity building of health staff and raising awareness for mother and child health. As a result, the indicators, such as contraceptive usage, antenatal care coverage rate, hospital delivery rate, and immunization coverage improved. Consequently, the number of maternal and children's deaths declined.

4.2.1 Family Planning

The State of the World's Midwifery (UNFPA) indicated that women of reproductive age (15-49 years) accounted for 29% of population and there were 551,000 deliveries in 2011. All of the deliveries were registered and the number of maternal mortality was 170. The Multiple Indicator Cluster Survey (MICS) showed that 65% of women who were married used birth control and the most comment contraceptive method was the IUD. Also, MICS pointed out that contraceptives were available for 89% of women. Therefore, both health workers and donors recognized that there were no particular issues regarding family planning in Uzbekistan.

4.2.2 Antenatal Care

Antenatal care was conducted for 99% of pregnant women in Uzbekistan[7]. Eight antenatal care visits are regulated in Uzbekistan. The factor that influenced most pregnant women being able to receive antenatal care was an establishment of the system, in which the staff working at PHC facilities frequently contacted community people and when they found pregnant women, they encouraged the latter to receive antenatal care.

During antenatal care, the following examinations were conducted, namely: measuring weight and blood pressure, blood test, and urine test including an HIV test. In addition, pregnant women gained information regarding healthy delivery. Furthermore, multivitamin and iron tablets were distributed through antenatal care. "Health week" was set up every month and the health check-up was especially focused upon during this period. More than 2,500 SVPs nationwide utilized vehicles equipped for physical check-ups and conducted health check-ups targeting women of reproductive age as well as children.

The national program "Mother and Child Screening", conducted since 1998, detected congenital diseases, such as deformity. If detected, artificial abortion was conducted. 535,700 pregnant women in total were examined and 8,680 out of their pregnancies were terminated from 2011 to 2013.

4.2.3 Mother-to-Child Transmission of HIV

UNDP implemented the Prevention of Mother-to-Child Transmission of HIV (PMTCT) by using Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM). Antiretroviral prophylaxis (ARVP) was given to 501 pregnant women for PMTCT during 2011-2012 (referred to the UNDP website). PHC facilities played an important role in finding HIV cases as well as in treating pregnant women infected with HIV. PHC facility staff followed them up by regular home visits and to conduct antenatal care. Consequently, 97% of babies delivered from 304 pregnant women infected with HIV in year 2013 were not infected with HIV in the year 2014 according to the Ministry of Health.

4.2.4 Childbirth by Skilled Birth Attendance

The hospital delivery rate was 99% in Uzbekistan, under the assistance of doctors. Family Clinic and SVP provided antenatal care, however childbirth was not conducted at those facilities. Therefore, normal pregnant women went to a "Maternity House" and abnormal pregnant women went to hospitals.

The network of mother and child health hospitals was developed and, at the same time, emergency obstetric care was improved. Under the ADB support, modern equipment, such as incubators, anesthesia, ultrasound apparatus, patient monitors and respirators were provided in the maternity units of all of the rayons as well as the cities. Maternity hospitals at oblast level, dividing into four regions, were also equipped, assisted by the German government. The Obstetrics and Gynecology Research Institution was provided with medical equipment by Japan (the Ministry of Health Round Table Meeting).

There was the Republican Perinatal Center (135 beds, 78 doctors), whose functions were the top referrals. The number of deliveries increased from 2,300 (2003) to 4,700 (2012). 60% of patients were referred from rural oblasts and 60% of all of deliveries were abnormal. The percentage of premature births, defined as less than 32 weeks of pregnancy, was increased from 4% (2003) to 15% (2012). One of the reasons was an increase of patient referrals from rural oblasts. Other reasons were uncertain, for example, an increase of pregnant women suffering from hypertension, diabetes, kidney disease or infections, because the survey to identify the reasons has not yet been conducted. According to the Republican Perinatal Center, the neonatal mortality rate was 17 per 1,000 live births (The State of the World's Midwifery showed the same number). The leading cause of death was premature birth, followed by congenital malformation and infections.

The common causes of maternal death were hemorrhage (28%), hypertension (14%), indirect causes (18%), unsafe abortion (10%), obstetric embolism (10%) and sepsis (7%).

[7] The governmental staff recognized that 99% meant the percentage of pregnant women who received 8 antenatal care visits. However, MDG indicators showed 99% was the percentage of pregnant women who received at least one antenatal care.

4.2.5 Immunization

According to the MICS in 2006, 96% of children had an immunization record card. The coverage of BCG was 99.2% at 12 months. The coverage of first, second and third doses of DPT were 98%, 95% and 90% respectively. Regarding polio, the first dose was given to 96% of children at 12 months and the second dose to 87%. 96% of children at 15 months received measles vaccination. 81% of children received 8 kinds of vaccinations recommended.

"Childinfo" UNICEF and WHO indicated the immunization coverage as being: BCG: 99%; DPT first dose: 99%; DPT third dose: 99%; third dose of Hepatitis B virus: 99%; Haemophilus influenza b type: 99%; measles: 98% and polio third dose: 99%. Therefore, Uzbekistan can ensure high immunization coverage.

The reliability of these data was high because the record of children's immunization was kept and managed well, based on the observation of PHC facilities. Also, vaccines were stocked under appropriate temperature in a vaccine room and where vaccination was conducted.

4.3 Infection

The Sanitation Epidemiological Station (SES) is an organization to manage infections in Uzbekistan. SES is organized at republican, oblast and rayon levels. The SES at republican and oblast levels is structured by five scientific institutions (epidemiology, microbiology and infectious; sanitation; parasitology; virology and prophylactically) and the AIDS center. There are three kinds of laboratories, such bacteriology, sanitation and parasitology at rayon level. Nationally, 4,000 doctors belong to SES, however the fulfilment rate of doctors was 65%. On the other hand, there were 12,000 nurses which were adequate. The SES is responsible for infection control strategy and conducts monitoring. The data related to infections is sent from PHC level to the rayon SES then integrated at the republican SES through to the oblast SES.

The following table shows the number of patients of each of the infections and parasitic diseases in 2013.

Table 4-4 Number of Patients of Infections and Parasitic Diseases (Year 2013)

	Total	Of which Women	Of which Children aged under 14	Of which People living in rural areas
Typhoid Fever	70	32	22	14
Other Salmonella Infection	654	329	410	282
Shigellosis due to Shiga Toxin	2,244	1,136	1,126	1,107
Bacterial Intestinal Infection, Bacterial Food Poisoning	7,068	3,287	5,684	4,193
Other Acute Intestinal Infection	25,554	11,822	18,618	14,386
Brucellosis	572	137	30	498
Varicella	4,270	1,999	3,177	1,471
Scarlet Fever	403	171	370	99
Acute Viral Hepatitis (Type A)	41,103	20,088	36,914	25,223
Acute Viral Hepatitis (Type B)	445	194	17	269
Acute Viral Hepatitis (Type C)	164	69	20	69
Chronic Viral Hepatitis Type B	9,757	5,862	75	6,347
Acute Upper Respiratory Inflammation Infection (Total)	380,199	175,987	248,102	108,386
Influenza	773	373	371	390
Tuberculosis (All Types)	15,360	6,396	1,931	9,991
Respiratory Tuberculosis	13,519	5,337	1,531	8,716
Syphilis	2,085	731	2	1,082
Gonorrhea	4,566	1,613	18	2,621
Enterobiasis	212,250	96,819	190,921	154,697

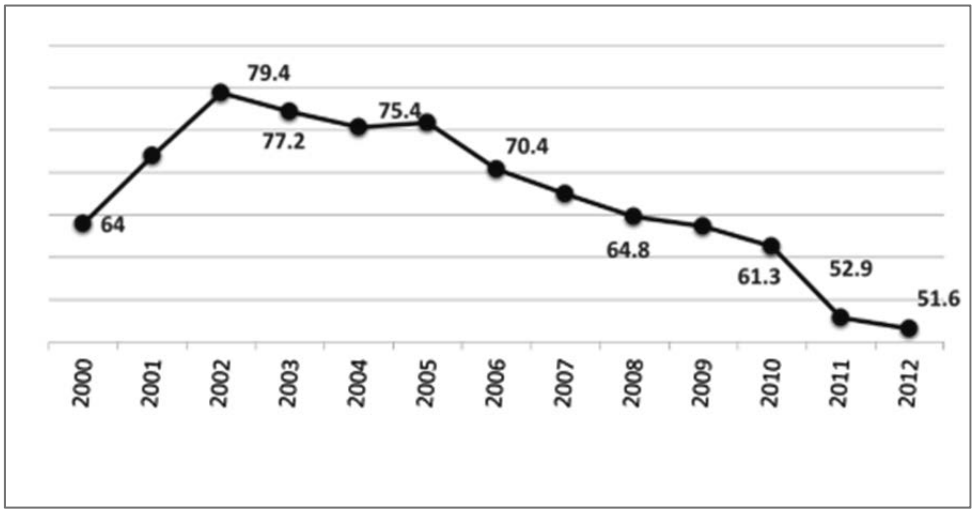
Source: SES

Infections, which can be prevented by vaccinations, were an unnecessary issue to be addressed in Uzbekistan due to the high coverage of immunization. The prevalence rate of pertussis was 0.1-0.2 per 100,000 population during the period 2004-2012 and the number of pertussis patients was 62 in 2012.

Regarding measles, although the prevalence rate was approximately 30,000 per 100,000 population from 2005 to 2007, this dropped to 0 in 2008, 2009 and 2012.

4.3.1 Tuberculosis

According to the WHO, Uzbekistan is specified as a necessary country to be addressed regarding tuberculosis, especially Multidrug Resistant Tuberculosis (MDR-TB). The WHO Tuberculosis Country Work Summary indicated that there were approximately 50,000 tuberculosis patients, (28,000 new tuberculosis patients) and that the number of tuberculosis deaths was 1,700 in 2011. The number of tuberculosis patients, new patients and deaths were 177, 101, and 6.1 per 100,000 population respectively. The detection rate of tuberculosis was low at 52% and the completion rate of treatment was 81% of sputum-positive patients in 2010. The following table presents the tuberculosis incidence based on the Ministry of Health, which is different from the data of the WHO Tuberculosis Country Work Summary.



Source: Ministry of Health

Figure 4-3 Transition of Tuberculosis Incidence (Number of new patients per 100,000 population)

The government of Uzbekistan defined tuberculosis as one of the "Socially Important Diseases" and issued the regulation to decrease the tuberculosis incidence from 2011 to 2015. The Directly Observed Treatment, Short-Course (DOTS) was conducted by the Republican DOTS center as well as the branches of 14 oblasts and cities supported by GFATM and Médecins Sans Frontières (MSF).

The issue of MDR-TB was common among former Soviet Union countries. One of the reasons was the inappropriate use of anti-tuberculosis medicines, which were available without prescriptions. Others were insufficient diagnosis ability and difficulties in obtaining second selection medicines, when standardized medicines were ineffective. Uzbekistan was the highest MDR-TB among former Soviet Union countries. 13-15% of new patients and 40-60% of patients who were recognized as completing treatment were MDR-TB after 2001. The first large-scale survey was conducted regarding MDR-TB prevalence in 2010-2011[8]. The risk factors identified from 1,000 tuberculosis patients were persons who were younger than 45 years, no accommodation, unemployed, imprisoned or hospitalized during the past 10 years.

4.3.1 HIV

AIDS is also defined as one of the "Socially Important Diseases" in Uzbekistan. According to the UNAIDS (2012), the HIV infection rate among men and women aged 15-24 was 0.1%. The number of persons infected with HIV was 30,000 (27,000 persons were aged 15 or more and women were 7,200 among them); the number of deaths was 2,400.

According to the statistics of the Ministry of Health, the number of persons who received an HIV test was

[8] D.J.Ulmasova, et al. "Multidrug-resistant tuberculosis in Uzbekistan: results of a nationwide survey, 2010 to 2011" Eurosurveillance. Volume 18, Issue 42, 17 Oct 2013.

1.9 million in 2012 and 2.2 million in 2013. Although migrant workers to Russia or other countries were recognized as comprising a high risk group of HIV infection, the number of them who took an HIV test was 190,000 in 2012 and 280,000 in 2013. The number of new HIV-positive patients was 4,247 in 2013 and had increased by 369 compared with 2012. In particular, the following oblasts had increased; Syrdarya: 2.7 times; Navoi: 2.5 times; Khorezm: 1.6 times; Kashkadarya: 1.5 times; and Surkhandarya, Djizzak and KKP: 1.2 times. Due to an increase of the number of new patients, the Ministry of Health will continuously strengthen the prevention of HIV and sexually transmitted diseases.

Regarding the knowledge of HIV prevention, 96% of women heard of AIDS in 2006 - an increase from 74% (2000) according to the MICS. In terms of three basic HIV preventions, such as monogamy, using a condom and abstinence, 49% of all of respondents answered correctly whilst 14% of them could not answer any. The accuracy rate of other knowledge was that HIV cannot be contracted from mosquito bites: 68%; persons infected with HIV look healthy: 71%; sharing food with a person living with HIV cannot transmit HIV: 67%; and HIV can be contracted from sharing needles: 93%. Generally, most people had accurate knowledge and this was the outcome of health education for community people.

In terms of HIV testing, 55% of people knew of a HIV testing site and 33% of women took an HIV test (MICS, 2006). The results differed from region to region and 81% of people in the middle-east knew the HIV testing place; on the other hand, it was only 30% in the south. 35% of young people knew of it. It was rare in Uzbekistan that unmarried women had sex or several sexual partners, the percentage of being 4%. The government encouraged having correct knowledge, taking an HIV test, receiving Anti-Retroviral Therapy (ART) and preventing mother to child transmission of HIV, supported by GFATM.

4.4 Noncommunicable Diseases (Lifestyle-related diseases)

4.4.1 Overview

NCDs target four diseases, i.e. cardiovascular diseases (hypertension, myocardial infarction, and stroke); diabetes; cancer (lung cancer, breast cancer, cervical cancer); and chronic respiratory diseases (Chronic Obstructive Pulmonary Disease: COPD and bronchial asthma). This is based on the NCD strategy as well as being confirmed to the NCD responsible person of the Ministry of Health. “Prevention and Control of Noncommunicable Diseases in the Republic of Uzbekistan in 2014-2020” (hereinafter referred to as “NCD strategy”) will be implemented as a national program to reduce and control risk factors, such as smoking, drinking, unhealthy food, less physical exercise, overweight, hypertension, hyperglycosemia, and hypercholesterol in order to prevent target diseases.

The program aims at a 15% reduction in premature mortality among people under 60 years of age by 2025. It plans to achieve the following overall outcomes. The baseline survey will be conducted in May, 2014 by WB through the Health System Improvement Project Phase III (hereinafter referred to as “Health III project”). The results will be shared after August, 2014.

Table 4-5 Objectives and Outcomes (Indicators) on the NCD strategy

1) Reduction in the spread of NCD risk factors among individuals older than 18 years of age
・Tobacco use by 15%
・Harmful use of alcohol by 10%
・Physical inactivity by 10%
・Reduction in salt consumption by 20%
・Increase in consumption of fruits and vegetables by 20%
・15% increase in the proportion of pregnant women, infants, and children under five in line with main WHO/FAO principles of healthy nutrition
2) Halt the growing spread of obesity among individuals older than 18 years of age
3) Improvement in quality of preventive and medico-social care
・Achieving an 80% supply of health facilities with basic diagnostic tests, equipment, and medications required for treatment of priority noncommunicable diseases
・Providing, at least, 50% of high risk patients and NCD patients with adequate drug therapy and counseling to prevent strokes and heart attacks
・Increasing detection rate of arterial hypertension among persons aged 18 and older by 25%

by 2017 ・Halting the spread of arterial hypertension (0% increase) among individuals aged 18 and older by 2020

The available latest risk factors survey was the Uzbekistan Health Examination Survey (UHES) undertaken in 2002, shown as the table below. The percentage of hypertension was nearly the same in both men and women. However, a higher percentage of men were unaware of hypertension and a lower percentage of men could control this condition with treatment. Also, a higher percentage of men indulged in the smoking habit. A higher percentage of women had a BMI of 30 or higher. In addition, a larger percentage of women ate fried food and added oil to food. This year's risk factor survey will be useful to identify more appropriate NCD preventions compared with 2002 and 2008.

Table 4-6 Results of Health Check-up (Year 2002)

(( ) is the estimated numbers in 2008)

	Men (aged 15-49)	Women (aged 15-49)
Percentage of people who have hypertension	8.3% (36.7%)	7.6% (32.1%)
Of which Percentage of people who were unaware of hypertension	63%	38%
Percentage of people who were aware but not treated	19%	7%
Percentage of people who could control with treatment	10%	37%
Percentage of people having smoking habit	21% (17%)	1% (3%)
Percentage of people whose BMI 25, more or less than 30 (Overweight)	27% (45%)	21% (43%)
Percentage of people whose BMI 30 or more than 30 (Obesity)	5% (13%)	7% (17%)
Number of days in a week to eat the meat	5.0	5.0
Number of days to eat green vegetables	5.1	7.0
Number of days to eat the fruit	7.0	7.0
Number of days to eat the sugar product	7.0	7.0
Number of days to eat fried food	3.6	6.0
Percentage of people who add salt to food	13%	13%
Percentage of people who add the oil to food	6%	18%

Source: Uzbekistan Health Examination Survey, Analytical and Information Center, Ministry of Health

The Concept and the Activity Plan will be implemented in two phases, namely Phase One: 2014-2017 and Phase Two: 2018-2020. The main activities in Phase One is the revision and amendment of the current legal and regulatory framework, enhancement of the organizational structure and financing mechanisms, enhancement of the health statistics, and the recording and reporting on NCDs and risk factors, the development and introduction of mechanisms for coordination of scientific research in the area of NCD prevention and control, and the enhancement of the system of monitoring and control over prevention and management of NCDs.

Phase Two includes in the activities the encouragement of exercise and sports, the development of a system for training managers for all sectors for coordination and implementation of NCD prevention and control, creating a healthy environment, the introduction of the following initiatives: "a healthy city", "a healthy village", and "a healthy Mahala", enhancing the system of managing, organizing and quality assurance of health and preventive care for risk groups and NCD patients.

Table 4-7 Action Plan for Prevention and Control of Noncommunicable Diseases in the Republic of Uzbekistan for 2014-2020

1. Legal, Regulatory and Intersectoral Programs and Interventions for Key NCD Factors
1) Enhancement of the Legal and Regulatory Framework to Reduce Tobacco and Alcohol Use
2) Enhancement of Legal and Regulatory Framework to Encourage Healthy Nutrition
3) Enhancement of Legal and Regulatory Framework to Encourage Physical Activity, Regular Exercise and Sports
4) Enhancement of Organizational Structure and Financing Mechanisms for NCD Programs
5) Ensuring a Legal and Regulatory Framework and Mechanisms of Control for Advertising,

Trade, Sponsorship in Relation to Key Risk Factors and NCDs
2. Enhancement of Information, Education and Communication (IEC) Activities on NCD Prevention
3. Development of the National NCD Surveillance Information System (Monitoring, Evaluation and Control)
4. Development of Human Resource and Research Capacities of all Stakeholder Sectors for NCD Prevention and Control
5. Strengthening the Role of Civil Society and Creating a Healthy Environment
6. Enhancing the System of Preventive, Medical and Social Care to Risk Groups and Patients with NCDs

Source: Action Plan for Prevention and Control of Noncommunicable Diseases in the Republic of Uzbekistan for 2014-2020

The data obtained through the survey are presented below. Regarding disease-specific mortality in Andijan, there were 14,188 deaths in total in 2013 and the leading cause of death was cardiovascular diseases (8,960, 63.2%), followed by cancer (918, 6.5%), gastrointestinal diseases (756, 5.3%), accidents/injuries (705, 5.0%), respiratory diseases (696, 4.9%) and infections (208, 1.5%). In KKP, there were 8,134 deaths in 2013. The leading cause of death was cardiovascular diseases: 46.2%, respiratory diseases: 13.9%, cancer: 9.9%, traumatic injury: 7.9% and gastrointestinal diseases: 4.4%. National prevalence and incidence of cardiovascular diseases and respiratory diseases increased on the other hand, the prevalence of malignant neoplasm remained unchanged for the last 10 years.

Table 4-8 National Prevalence Rate per 100,000 population

Diseases/ Year	2010	2011	2012
Neoplasm	587	567	557
Endocrine diseases	6,314	5,727	5,719
Cardiovascular diseases	5,066	5,134	5,464
Respiratory diseases	15,741	16,207	17,106

Source: Statistical data on activities of health care facilities 2012, IHMS

Table 4-9 National Incidence Rate per 100,000 population

Diseases / Year	2010	2011	2012
Neoplasm	150	139	131
Endocrine diseases	2,792	2,493	2,585
Cardiovascular diseases	1,580	1,574	1,846
Respiratory diseases	11,679	12,340	14,101

Source: Statistical data on activities of health care facilities 2012, IHMS

The definition of the incidence rate mentioned above is the number of new patients per population.

In Japan, the crude incidence rate of all cancers in 2008 was 703 (men) and 477 (women) per 100,000 population, respectively (Foundation for Promotion of Cancer Research “Statistics of Cancer, 2013”).

Table 4-10 Cancer Prevalence Rate per 100,000 population

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Prevalence Rate	68	66	69	71	68	68	68	66	65	66

Source: Statistical data on activities of health care facilities 2012, IHMS, Ministry of Health, Republic Research Center for Oncology

The definition of the prevalence rate mentioned above is the number of registered patients per population. For reference, the number of neoplasm patients receiving treatment in Japan was 295 per 100,000 population in 2011. This number was the national estimated number of patients, who received treatment on the day of the survey, per population (Foundation for Promotion of Cancer Research “Statistics of Cancer, 2013”).

Table 4-11 Number of Cancer Patients and Discovery Rate

Year	2009	2010	2011	2012	2013
Number of Patients Registered	93,058	96,756	99,853	104,983	108,260
Number of New Patients	19,005	19,115	19,339	19,215	20,003
Discovery Rate through Health Check-up (%)	22	23	27	22	23

Source: Republic Research Center for Oncology

Table 4-12 Number of Cancer Patients according to the Parts

Diseases / Year	2012	2013
Breast cancer	2,639	2,678
Stomach cancer	1,642	1,777
Cervical cancer	1,323	1,312
Lung cancer	1,245	1,303
Skin cancer	1,134	1,084

Source: Republic Research Center for Oncology

In Japan, the number of stomach cancer patients was the largest, followed by colon cancer, lung cancer, breast cancer and prostate cancer in 2008. On the other hand, breast cancer is the largest in Uzbekistan. This is because breast cancer screening was more developed compared with other cancer screening. The cancer screening system was unclear but ultrasound was utilized for cancer screening at rayon level. Then, if finding a positive case, the patient was referred to oblast dispensary and received mammography and diagnosis. The screening method and equipment were established, therefore many target women received the screening. In order to cover women who were missed from the screening, activities raising awareness for breast cancer were often implemented, for example, a marathon race.

The five year survival rate of cancer was 42% in Uzbekistan (2013). In Japan, it was 59% on average during the period 2003-2005 (Foundation for Promotion of Cancer Research "Statistics of Cancer, 2013").

The data regarding diabetes was obtained from the Republican Specialized and Scientific and Practical Medical Center of Endocrinology. The number of registered patients (Type 2 diabetes) and patients (total of Type 1 and Type 2 diabetes) is presented on the table below; these numbers increased annually. During the period 2009-2013, the number of patients with Type 2 diabetes increased in all of the oblasts. However, the number of deaths from diabetes was different from oblast to oblast, and year to year, so it was difficult to identify the tendency.

Table 4-13 Number of Registered Patients of Diabetes Type 2

	2009	2010	2011	2012	2013
Number of Registered Patients (Diabetes Type 2)	97,741	103,049	108,912	116,517	127,341
Number of Patients (Total of Diabetes Type 1 and 2)	117,240	122,460	128,968	135,751	145,618

Source: Republican Center for Endocrinology

The number of Type 2 diabetes patients in 2013 per 100,000 population was 391. According to the "The Global Burden Diabetes and Impaired Glucose Tolerance, Diabetes Atlas 4th Edition" issued by the International Diabetes Federation (IDF), the estimated number of diabetic patients (all of types) was 673,800 and the prevalence rate was 4,000 per 100,000 population in 2010. Actually, the number of registered patients was approximately 100,000 and the number of diabetic patients was 120,000 in 2012. Therefore, the detection rate was only 18%. Additionally, IDF estimated the number of diabetic patients in 2030 would reach 1.4 million.

4.4.2 NCD Preventions

The Institute of Health and Medical Statistics (IHMS) is an organization to conduct disease prevention, which was established in 2001 as a health statistics and information department. The Republican Information and Analytical Center (RIAC) added the department of health promotion in 2005 then changed the current organizational name in 2008. The IHMS has Healthy Life Promotion & Health Education divisions, and a Medical statistics division. There are branches at each oblast, at rayon level. The Healthy Life Promotion & Health Education division provides activities at schools and Mahala.

Health education at schools was conducted by IHMS staff in the second week every month known as

"Health Week". In the 7th grade, health education is included in the curriculum. In other grades, health education was conducted for approximately 10 minutes. The topics are mainly hygiene and the harmful influences of mobile phones and computers at primary level. Topics such as HIV prevention, early marriage and reproductive health were taken at junior high school level. The national program "Healthy Child" was implemented in 2014 therefore the multimedia teaching materials using animations will be developed.

Health education in Mahalas is conducted by a General Practitioner (GP) or a nurse belonging to the PHC facility, which covers its Mahala, as well as the person responsible for every day health in the Mahala. The topics were defined according to each day of the week, such as Monday: health for elderly people, Tuesday: health for pregnant women, Wednesday: health for children and youths, Thursday: ecology and hygiene at home, Friday: health for women, and Saturday: health in general.

According to the hearing from IHMS in Andijan, there are 28 staff members in the division and 6 staff members in the Medical Statistics division. The Healthy Life Promotion & Health Education division listed the diseases and its symptoms regarding colds, diarrhea, hepatitis, HIV, respiratory diseases, cancer, and obesity etc. They conducted promotion to increase the knowledge level for those diseases. For example, they taught refraining from tobacco and alcohol in order to prevent cancer, encouraged receiving screening for breast cancer, and reducing the amount of carbohydrate and fat intake for prevention of obesity. Community activities are usually conducted with rayon IHMS. One of the Japan Overseas Cooperation Volunteers (JOCV) worked at the IHMS in KKP and supported material development, such as a picture story show, for healthy lifestyle, mother and child health, breastfeeding, internal medicines, and infections.

Picture: Health education material developed by JOCV

The Medical Statistics division of IHMS issued a booklet to feed back to oblast healthcare facilities regarding necessary indicators. Although it was different from the Republican booklet containing 300 pages, it contained approximately 40 pages and indicated tables. The contents of the booklet were data for tuberculosis, mental disorders, cancer, sexually transmitted diseases, and mother and child health in each rayon. The committee was organized by each RMU director, the chief doctor, specialists at rayon level as well as at the Ministry of Health, and the IHMS director in order to analyze the health statistics. They analyzed the transition of common diseases, the leading causes of death and so on.

Healthcare facilities also conducted activities for prevention. "The order of Health Minister in Uzbekistan for SVP improvement" issued in 2009, was regulated to conduct health education for the target population, counselling through home visits, early detection of chronic diseases and health check-ups as health promotion activities of the SVP.

Health education and counselling through home visits are conducted by a visiting nurse. Regarding NCDs, a health check-up is conducted for those persons, who cannot come to the hospital, as well as advice on healthy lifestyle for the persons with risk factors. According to the interview from Family Clinic and SVP directors, the health check-up was welcomed by people, however advice for a healthy lifestyle was difficult, especially men who were reluctant to be advised. In that case, a visiting nurse collaborated with the Mahala, and a Mahala leader talked to them in order to accept advice.

Mother and child health services are defined protocols and conducted for a long time; there might be some difficulties in providing services. However, NCDs have not been managed yet thus activities depended upon the abilities of GPs and nurses, as well as the fact there were various cases. As general health promotion for NCD prevention, health education materials, such as leaflets were developed, however integrated educational materials and training in order to instruct patients with each risk factor were not identified during the survey.

It was supposed that the knowledge for NCDs and approaches were insufficient based on the interviews with GPs at PHC facilities in spite of not being based on a structured questionnaire because they said diabetes was a genetic disease so unable to be prevented, there was no response regarding the conducting of nutritional advice during home visits, they did not take care of sugar intake although taking care of fruit and vegetable intakes, were unable to respond to the percentage of hypertensive patients and obese among the covered population and were unable to respond to the analysis of the results of health check-ups. These were the same at the PHC facilities in Andijan and KKP.

However, the oblast health department considered that addressing NCDs was necessary. For example, Andijan Health Department director said that NCD prevention was started in December, 2012. Currently, this activity was conducted in the pilot rayon (Hajabato) composing 37 Mahalas. The budget was subsided by both oblast and rayon. The contents of activities were run by a selection of four responsible persons for health (2 men and 2 women), who received training regarding NCD prevention, nutrition, and how to use money at home, instructed by an oblast doctor, nutritionist and economical staff. This activity aims to change the minds of both the community people and health workers from the previous mindset, in which treatment was given by a doctor when people got sick. Therefore, this activity intended people to recognize that prevention is more important than treatment. More specifically, people should take care of nutrition and spend money saved from tobacco and alcohol on vegetables and fruit instead, and consequently they might keep healthy. Also, health workers should actively raise awareness among people rather than just waiting for patients to arrive.

4.4.3 Diagnosis

The general health check-up is conducted for community people who receive it once a year at their Family Clinic/SVP. The examination includes measuring height, weight and blood pressure, a urine test, a blood test and a stool test. The following table shows the contents of a urine test.

Table 4-14 Contents of a urine test conducted in health check-up in Uzbekistan

	Item	Possible Diagnosis
1	pH	Around pH6: Normal, Alkali: Urinary Tract Infection, Acidic: Respiratory Diseases when it is not possible to exchange gas.
2	Protein	Positive: Kidney Diseases, Glomerular Inflammation due to Upper Respiratory Tract Infection
3	Glucose	Positive: Diabetes
4	Ketone body	Positive: Influenza Infection, Diabetes
5	Bilirubin	Positive: Jaundice due to Hepatitis
6	Occult blood	Positive: Acute Glomerulonephritis, Urinary Tract Stones, Cancer
7	Urobilinogen	Positive: Hepatic Failures
8	Bile acid	Positive: Biliary Obstruction
9	Epithelial cell	Positive: Urethritis, Tubulitis
10	Red blood cells	Increase: Nephritis, Urethra Inflammation, Renal Tumors, Kidney Stones
11	Leukocyte	Increase: Urethra Inflammation
12	Cylinder	Positive: Nephritis
13	Salts	Positive: Gout
14	Bacteria	Positive: Escherichia coli, Hemolytic streptococcus, Staphylococcus, Salmonella, Candida and etc.

Source: Andijan Health Department (Possible diagnosis is written by the Survey Team)

As shown in the table below, many items related to a hematopoietic system are conducted in a blood test because of the issue of anemia. On the other hand is a lipometabolic test (total cholesterol, triglyceride,

HDL cholesterol, LDL cholesterol etc.), glucose tolerance test (blood glucose, hemoglobin A1c and etc.)[9].

Table 4-15 Contents of a blood test conducted in health check-up in Uzbekistan

	Item	Possible Diagnosis
1	Hemoglobin	Anemia or polycythemia
2	Red blood cell count	Anemia or polycythemia
3	Mean corpuscular hemoglobin concentration	Anemia
4	Reticulocyte count	Anhematopoiesis
5	Platelet count	Decrease: Liver Dysfunction
6	White blood cell count	Increase: Infection or Inflammation
7	Myelocyte	Anhematopoiesis
8	Metamyelocytes	Anhematopoiesis
9	(Neutrophils) stab cell	Increase: bacterial infections, rheumatic fever, leukemia and etc. , Decrease: viral infections, anemia
10	(Neutrophils) segmented neutrophils	
11	Eosinophil	Increase: Allergic Diseases, Parasitic Diseases
12	Basophil	Increase: Thyroid Disease
13	Lymphocyte	Increase: Leukemia, Lymphoma, Decrease: AIDS, Cancer, Hereditary Diseases
14	Monocyte	Increase: Infections, Decrease: Pernicious Anemia
15	Plasma cell	Increase: Cancer
16	Erythrocyte sedimentation rate	Increase: Inflammations, Infections, Cancer, hematologic diseases

Source: Andijan Health Department (Possible diagnosis is written by the Survey Team)

The results are categorized into 3 groups, namely Group 1: healthy (there are no abnormal test results, but including people with mild risks), Group 2: almost healthy (people suffering from some diseases before but not getting worse) and Group 3: requiring medical care. People categorized into Groups 1 and 2 are managed at PHC level, and Group 3 people are referred to hospital. There was no answer regarding the percentages of each group at the Number 7 Family Clinic in Andijan and Darsan SVP in Nukus Rayon, KKP, when visiting.

The Ministry of Health in KKP explained that the results analysis of the health check-up was conducted based on a quarterly report regarding some indicators, such as the number and percentage of new patients. Feedback was conducted by two teams organized by 13 specialists (6 of them coming from Nukus and Tashkent respectively and a representative of SES). To give feedback to GPs, each team visited 2 target rayons twice a month and covered all rayons for three and half months.

According to the hearing from Andijan and KKP, a regular health check-up was not conducted during the year 2014 because of the presidential order "About additional measures on further strengthening social protection of lonely elderlies, pensioners and invalids for 2011-2015" as well as the national program "Healthy Child", which largely conducts an "In-depth Medical Examination". This aims to give an opportunity to well-known specialists to conduct medical examinations of, and counselling to the population, and at the same time, to conduct OJT (on-the-job training) for GPs at PHC level. The Ministry of Health order was issued on 13 January, 2014. After that, the order from the oblast health department was issued. Then implementation will be scheduled to cover all of the population by August, 2014.

[9] In Japan, the test items standardized by the national health insurance system are: measuring obesity and hypertension, a blood test for lipometabolism, diabetes, gout, kidney and liver function and anemia, a urine test for the bladder urinary system, electrocardiogram for cardiac function and ophthalmoscopy-fundoscopy for state of arteriosclerosis. The results are categorized into "healthy (no problem)", "requiring observation (mild abnormality)", "requiring medical care (doctors recommend to receive hospital consultation if not improving the number after changing lifestyle)" and "requiring immediate medical care".

The following table presents the targets, specialized areas and contents of examinations.

Table 4-16 Targets, Specialized areas, Examinations of in-depth Medical Examination

Targets	Specialized areas	Examinations
1-5 years old	Pediatrics, Neurology, Ophthalmology, Otolaryngology, Orthopedics, Dental, Speech Therapist (for children up to 3 years) Psychiatry (for children up to 3 years)	Blood test, Urine tests, Stool (Parasite) Examination, Anthropometry
6-7 years old	Pediatrics, Neurology, Ophthalmology, Otolaryngology, Orthopedic, Dental, Speech Therapist, Psychiatry, Endocrinology	Blood Test, Urine tests, Stool (Parasite) Examination, Anthropometry
2-8 grade	Pediatrics, Neurology, Ophthalmology, Otolaryngology, Orthopedics, Dentistry, Endocrinology, Gynecology (9 or more than 9 years old)	Blood Test, Urine tests, Stool (Parasite) Examination, Anthropometry
14-15 years old	Pediatrics, Neurology, Ophthalmology, Otolaryngology, Orthopedics, Dentistry, Endocrinology, Gynecology	Blood Test, Urine tests, Stool (Parasite) Examination, X-Ray, Ultrasound (women only), Anthropometry
16-17 years old	Therapist, Neurology, Ophthalmology, Otolaryngology, Orthopedics, Dentistry, Endocrinology, Gynecology	Blood test, Urinalysis, Stool (Parasite) Examination, X-ray, Ultrasound (women only), Anthropometry
Women of Reproductive Age	Therapist, Gynecology, Ophthalmology, Otorhinolaryngology, Dentistry, Surgery, Neurology, Endocrinology, Dermatology, Sexually Transmitted Disease	Blood tests, Urine tests, X-ray, ECG (once in every 3 year for persons aged 15 or older, every year for persons aged 40 or older), Mammography (once in every 2 year for persons aged 35 or older), and Cervical Cancer (for persons aged 18 or older), Ultrasound, Anthropometry
18 or more than 18 years old	Therapist, Gynecology, Ophthalmology, Otorhinolaryngology, Dentistry, Surgery, Neurology, Endocrinology, Dermatology, Sexually Transmitted Disease	Blood tests, Urine tests, X-ray, ECG (once in every 3 year for persons aged 15 or older, every year for persons aged 40 or older), X-ray (only risk group), Anthropometry

Source: Ministry of Health order No.11 (Jan 13, 2014), Andijan Health Department order No.19 Annex1 (Jan 30, 2014)

Screening test for each disease is conducted at the oblast dispensary (special hospital) [10] level. According to the hearing from Andijan and KKP, the breast and cervical cancer screening were conducted by using ultrasound at rayon level. Then, mammography or cytological diagnosis was conducted at oblast dispensary level for referral cases, which were suspected as cancer. Andijan conducted 11,000 screening tests and found 150 pre-cancerous stage (stage 0) cases and 3 initial stage of cancer cases in 2013. If the oblast dispensary cannot diagnose, the patients will be referred to the Republic Research Center for Oncology. There were 32 cases in 2012 and 40 cases in 2013. Cytological diagnosis was started in 2012 but immunohistochemistry has not been conducted yet. KKP was in almost the same situation. The issues to be addressed were raised as improvement of screening test at rayon level as well as out-of-pocket costs for cancer treatment (chemotherapy), which was basically free of charge, however 60% and 70% of patients paid costs in Andijan and KKP respectively.

Diabetes screening was conducted for the high risk group (460,000 persons in 2013) at a dispensary in Andijan. The implementation rate against the planned number of persons was 85%. The population aged more than 20 was approximately 2 million in Andijan. Therefore, the number of people categorized as high risk might be more, however it was limited as only one dispensary in the oblast provided the examination. KKP also conducted 250 examinations (including both glucose tests in blood and urine) on average per day at a dispensary. KKP defined 5% of the population as a high risk group and 70% of patients were associated with diabetes complications, or became severe when finding diabetes patients. As a result, most of the

[10] Dispensary is a special hospital at oblast level. Dispensaries in all of the oblasts are set up for specified diseases, such as tuberculosis, cancer, dermatology and sexually transmitted disease, psychiatric, endocrine and narcotic drugs.

patients resulted in amputation of the lower limbs or renal failure, thus the director emphasized screening at PHC level was more important in order to prevent these cases.

4.4.4 Treatment

When patients are found at PHC level, such as Family Clinic/ SVP, there are three options regarding a referral, i.e. 1) going to the Central Multiple Outpatient Clinic (there are more than 30 types of specialists) in order to receive more detailed examinations and diagnosis, 2) hospitalizing at the Rayon/City Medical Union (secondary level) if already identified as having the disease, and 3) going to a dispensary to receive the treatment of a specialist.

The secondary and tertiary hospitals, except emergency hospitals, principally refuse the patients without a referral sheet issued at PHC level, however those hospitals actually provide counselling to those patients because of the humanitarian aspect.

The patients who have a chronic disease with minor symptoms are usually managed at PHC level. However, a registration system regarding NCDs has not been established yet and the number of patients managed at PHC level was unclear. In addition, the medical examinations for early detection of NCDs at PHC level are only a glucose urine test or measuring blood pressure, and if patients require other medical examinations, they are referred to secondary or tertiary hospitals. Therefore, it is difficult to establish a systematic system for early detection at PHC level under the current situation. Additionally, the patients treated at a dispensary tend to prefer to receive continuous treatment there so that it is difficult to conduct counter referrals.

For example, Uzbekistan missed calculating the group of people categorized into the first stage “unhealthy lifestyle (inappropriate nutrition, such as too high an intake of calorie, salt and fats, insufficient physical exercise, excessive smoking, drinking and stress”; the second stage “borderline diseases (obesity, hypertension, hyperlipemia, and hyperglycemia)”; and the third stage “people suffering from some diseases”, which are defined as the process of lifestyle-related diseases in the “National Health Promotion” issued by the Ministry of Health, Labour and Welfare in Japan. Then, after suffering from myocardial infarction/angina pectoris/cerebral hemorrhage/cerebral infarction/diabetes complications, most of the people of the fourth stage are firstly identified and registered as patients.

The following tables present the overview of healthcare facilities at each level, based on the field survey.

Table 4-17 Health Facility at Primary Level

	City	Rayon
Name of Facility	Family Clinic	SVP
Area	Capital of Andijan	Republic of Karakalpakstan, Nukus
Coverage Population	41,000	3,607
Number of Staff: Doctor	15	1
Number of Staff: Nurse	44	9
Distance from the farthest household	5.5km	17.0km
Average Number of Out-Patient Visit per day	250	20
Budget (Year 2013)	1,148,000,000 som	74,802,000 som

Source: Heard from the Head Doctor of the Andijan City Family Clinic No.7, GP of Darsan SVP

Table 4-18 Health Facility at Secondary Level

Rayon Level	
Name of Facility	Nukus Rayon Central Hospital
Area	Republic of Karakalpakstan
Coverage Population	44,200
Number of Coverage SVP	8 SVP
Number of Beds	140 Beds
Number of Staff: Doctor	30
Number of Staff: Nurse	150
Distance from the farthest household	40km
Average Number of Out-Patient Visit per day	350
Number of In-Patients (as of the time survey team visits)	135
Average Number of Operation per day	2
Average Number of Delivery per day	2
Clinical Department	Outpatient, Internal Medicine, Surgery, Obstetrics And Gynecology, Pediatrics, Infections Department, ICU
Specific activity	In-depth health checkup is conducted in out-patient department. GP and Specialist conducted in-depth health checkup for approximately 100 and 200 persons, respectively.
Prevalent diseases among patients	Cancer, Cardiovascular, Diabetes
Number of Maternal Mortality (Year 2013)	1 (placental abruption)
Number of Infant Mortality (Year 2013)	7 (premature delivery is the most frequent cause)
Number of pharmaceutical stock	150 items
Issues which should be addressed	Shortage of doctors, vacant for Cancer department and ophthalmology, there was only one doctor to utilize ultrasound even though there were 6 ultrasound apparatuses.

Source: Heard from the Deputy Head Doctor of Nukus Rayon Central Hospital

Table 4-19 Health Facility at Tertiary Level (Example 1)

Oblast Level	
Name of Facility	Andijan Oblast General Hospital for Adults
Area	Andijan
Coverage Population	2.8 million
Number of Beds	323 Beds
Number of Staff: Doctor	102
Number of Staff: Nurse	268
Average Number of Out-Patient Visit per day	250
Number of In-Patients (as of the time survey team visits)	255
Average Number of Operation per day	10
Average Number of Delivery per day	NA (not provide service itself)
Clinical Department	Department of Cardiology, Rheumatology, Gastroenterology, Neurology, Nephrology, Endocrinology, Physical Therapy, ICU, Thoracic Surgery, Proctology Department, ENT, Urology, Orthopedics, Trauma Department, Neurosurgery, Ophthalmology
Specific activity	Specialists go out for conducting In-depth health checkup.
Prevalent diseases among patients	Cardiovascular, urinary, gastrointestinal diseases, neurological diseases, surgery
Number of death (Year 2013)	13 (The cause of all of deaths was cardiovascular)
Number of pharmaceutical stock	300 items
Budget (Year 2013)	Oblast government: 1.4 billion som, Hospital Income: 1.6billion som, Total: 3 billion som
Example of cost	Consultation: 5,000 - 7,000 som Blood Examination: 3,000 - 4,000 som One bed for in-patient: 37,000 - 45,000 som/ day (including examinations, consultation and others)
Others	Young people suffering from NCDs are increasing every year. When finding diabetes, patients tended to suffer from complications.

	Although technical training is conducted regularly, targets are only hospital director and insufficient to share with other staff. Provision of ultrasound apparatuses was duplicated (provided by Health III project as well as send from China without pre survey). There were some patients who were unaffordable for paid treatment. Due to increasing the number of patients of cardiovascular patients, they have to wait for 50 days for hospitalization but it was 30 days before. There were approximately 10 cases per month 10 years ago to conduct surgery of limb amputation due to necrosis of diabetes complications but currently there are approximately 40 cases.

Source: Heard from the hospital head doctor mentioned above

Table 4-20 Health Facility at Tertiary Level (Example 2)

Oblast Level	
Name of Facility	Andijan Oblast Endocrinology Dispensary
Area	Andijan Oblast
Coverage Population	2,8 million
Number of Beds	120 Beds
Number of Staff: Doctor	14
Number of Staff: Nurse	54
Average Number of Out-Patient Visit per day	50
Number of Patients referred to higher level of facilities in 2013	45
Common diseases among patients	Diabetes, Goiter
Screening System	Health checkup of endocrine disorders is conducted. The table below shows the number of plan and actual Number of cases.
Situation of Diabetes Type 2	The number of patients Diabetes Type 2 increase annually such as 7,356 in 2009, 7,669 in 2010, 8,150 in 2011, 8,699 in 2012, and 9,509 in 2013.
Others	Patients who bring referral documents and emergency patients is free of charge and if patients condition is mild, they receive counseling and let them go home. Patients have to wait to be admitted into the hospital for 2-3 weeks. The number of diabetes patients becomes 2 times comparing 7-8 years ago.

	2009	2010	2011	2012	2013
Number of Plan	495,540	509880	514,593	542,836	546,734
actual Number of cases	436,075	455,167	460,560	441,418	463,933
Implementation Rate	88 %	89.2 %	89.5 %	90 %	84.8 %

Source: Heard from the hospital head doctor mentioned above

Table 4-21 Health Facility at Tertiary Level (Example 3)

Oblast Level	
Name of Facility	Karakalpakstan Republican Endocrinology Dispensary
Area	Republic of Karakalpakstan
Coverage Population	1,7 million
Number of Beds	100 Beds
Number of Staff: Doctor	21
Number of Staff: Nurse	53
Average Number of Out-Patient Visit per day	100
Common diseases among patients	Diabetes, Goiter
Others	70% of diabetes patients had developed complications and came to this dispensary so that their treatment was too late. Health checkup is conducted by free of charge to find diabetes. The urine test is 3,200 som and the blood sugar test is 3,700 som.

Source: Heard from the hospital head doctor mentioned above

Table 4-22 Health Facility at Tertiary Level (Example 4)

Oblast Level	
Name of Facility	Karakalpakstan Republican Oncology Dispensary
Area	Republic of Karakalpakstan
Coverage Population	1,70 million
Number of Beds	160 Beds
Number of Staff: Doctor	33
Number of Staff: Nurse	90
Average Number of Out-Patient Visit per day	50
Number of In-Patients (as of the time survey team visits)	160
Common diseases among patients	Cervical cancer, Breast cancer, Stomach cancer
Others	Since rayon hospitals cannot conduct breast and cervical cancer screening, this dispensary has to conduct examinations for all of people in the oblast. In the current situation, patients with certain symptoms are referred to this dispensary then mammography or cytology examination is conducted. There are 5,000 registered patients and the number of new patients is 1,200 annually.

Source: Heard from the hospital head doctor mentioned above

Table 4-23 Health Facility at Tertiary Level (Example 5)

Oblast Level	
Name of Facility	Andijan Oblast Oncology Dispensary
Area	Andijan
Coverage Population	2,8 million
Number of Beds	180Beds
Clinical Department	Breast cancer, Head/Neck cancer, Gynecological cancer, Chest/abdominal Cancer, childhood cancer, Urinary cancer, Rectal cancer, Chemotherapy, Radiotherapy, ICU, Outpatient
Number of Staff: Doctor	46
Number of Staff: Nurse	93
Average Number of In-Patient per month	587
Average Number of Out-Patient Visit per day	18
Annual Budget	1,438,862,000 som
Equipment	Mammography: 1 (Number of tests in average: 6.8 per day) X-ray: 1 (Number of tests in average: 7.1 per day) Ultrasonic Diagnostic Apparatus :1 (Number of tests in average: 56 per day) Endoscope, Proctoscope and so on
Situation of Chemotherapy and its Issues	Standardized chemotherapy is 6 courses (1course is 10 days hospitalization). Even though cancer treatment is free of charge, in overall, 35%-40% of all of patients can receive treatment by free of charge due to the limitation of budget. The highest priority patients are low-income and those who are determined by Mahala enable to receive treatment by free of charge. Other patients have to pay 4, 2 million som in total by themselves and high treatment fee is pressing household budget.

Source: Heard from the chief oncologist of oblast health department

Table 4-24 Health Facility at Republican Level (Example 1)

<table>
<tr><td>Name of Facility</td><td>Republic Research Center for Oncology</td></tr>
<tr><td>Number of Beds</td><td>370 Beds (2,165Beds in total including Oblast Oncology Dispensary)</td></tr>
<tr><td>Referral System of Cancer</td><td>Suspected by GP (PHC level) ⇒ Cancer specialist in Rayon ⇒ Oblast Dispensary⇒ Republican</td></tr>
<tr><td>Situation of Oncology Hospital across the country (based on the President Decree in 2012)</td><td>Construction: Syrdarya, Djizzak, Navoi
Reconstruction: Tashkent city, Tashkent Oblast, Fergana, Surkhandarya, Bukhara, Kashkadarya, Namangan, Khorezm
Renovation: Andijan, Samarkand, KKP</td></tr>
<tr><td>Equipment (based on the President Decree in 2012)</td><td>Equipment for radiation therapy (donation from the Islamic Bank), X-rays, Ultrasound diagnostic equipment, Endoscope and so on.</td></tr>
<tr><td>Number of Patients by Parts</td><td>
<table>
<tr><th></th><th></th><th>2012</th><th>2013</th></tr>
<tr><td>1</td><td>Breast cancer</td><td>2,639</td><td>2,678</td></tr>
<tr><td>2</td><td>Stomach cancer</td><td>1,642</td><td>1,777</td></tr>
<tr><td>3</td><td>Cervical cancer</td><td>1,323</td><td>1,323</td></tr>
<tr><td>4</td><td>Lung cancer</td><td>1,245</td><td>1,245</td></tr>
<tr><td>5</td><td>Skin cancer</td><td>1,134</td><td>1,084</td></tr>
</table>
</td></tr>
<tr><td>Other</td><td>Prevalence per 100,000 population
<table>
<tr><th>Year</th><th>2005</th><th>2006</th><th>2009</th><th>2010</th><th>2011</th><th>2012</th><th>2013</th></tr>
<tr><td></td><td>66.2</td><td>68.5</td><td>68.4</td><td>67.7</td><td>65.4</td><td>64.5</td><td>66.1</td></tr>
</table>
Number of new patients
<table>
<tr><th>Year</th><th>2009</th><th>2010</th><th>2011</th><th>2012</th><th>2013</th></tr>
<tr><td></td><td>19,005</td><td>19,115</td><td>19,339</td><td>19,215</td><td>20,003</td></tr>
</table>
Detection Rate of Cancer (%)
<table>
<tr><th>Year</th><th>2009</th><th>2010</th><th>2011</th><th>2012</th><th>2013</th></tr>
<tr><td></td><td>21.8</td><td>22.5</td><td>26.8</td><td>21.8</td><td>23.1</td></tr>
</table>
Number of registered patients
<table>
<tr><th>Year</th><th>2009</th><th>2010</th><th>2011</th><th>2012</th><th>2013</th></tr>
<tr><td></td><td>93,058</td><td>96,756</td><td>99,853</td><td>104,983</td><td>108,260</td></tr>
</table>
</td></tr>
<tr><td>Screening System</td><td>There is no established screening system. Breast cancer and cervical cancer screening will be conducted from 2015. After that, colon cancer and stomach cancer screening system will be introduced. There is a need to learn screening system from other countries.</td></tr>
</table>

Source: Heard from the hospital director mentioned above

Table 4-25 Health Facility at Republican Level (Example 2)

Name of Facility	Hematology and Blood Transfusion Science Research Institute
Number of Beds	Blood cancer ward: 90 beds, Three dialyzers will be installed in September, 2014.
Others	Hospitals which provide dialysis treatment are all public hospitals. Dialysis treatment is categorized into emergency medical care so that patients receive dialysis treatment by free of charge. The clinical criteria on dialysis treatment do not exist. There are spaces for dialysis treatment room: 16.5 m^2, water management room: 10 m^2 and dialyzer cleaning room: 7.5 m^2. They have a plan to purchase a set of equipment for dialysis treatment from the German company, Fresenius Medical Care.

Source: Heard from the institute Director mentioned above

The statistics related to hemodialysis in Uzbekistan shows in Table 4-26.

Table 4-26 Statistics of Hemodialysis in 2013

No	Oblast/ Hospital	No of Kidney disease Pt	No of Chronic renal failure Pt	No of requiring dialysis Pt	No of dialysis facilities	No of Pt undergoing regular dialysis	No of total Pt receiving dialysis in 2013	No of dialysis in 2013	No of Pt who died of renal failure	No of dialyzer	Of which, functioning	Of which, requiring repair	Of which, not working but repairable	Of which, not working and irreparable
1	KKP	12,849	238	58	2	27	82	1,717	41	5	5	0	0	0
2	Andijan	8,813	588	99	2	59	81	4,048	21	8	7	2	0	1
3	Bukhara	4,500	700	210	2	33	120	2,218	21	6	5	2	0	1
4	Djizzak	4,873	168	103	1	46	87	4,024	24	2	2	2	0	0
5	Kashkadarya	44,672	2,800	150	2	150	69	5,339	27	4	4	2	0	0
6	Navoi	5,676	2,012	98	1	35	78	2,257	12	4	2	0	0	2
7	Namangan	8,630	715	159	2	61	118	7,343	32	8	7	3	1	0
8	Samarkand	6,618	182	140	1	58	110	6,298	51	8	5	2	1	2
9	Surkhandarya	1,426	48	27	1	30	55	4,390	13	4	2	2	0	2
10	Syrdarya	14,000	1,870	48	2	42	50	1,785	22	5	5	2	0	0
11	Khorezm	32,298	605	70	2	44	130	3,070	19	4	3	1	1	0
12	Fergana	18,231	3,015	120	2	72	132	8,181	39	8	6	2	0	0
13	Tashkent	9,575	4,250	220	2	220	344	21,700	66	15	15	0	0	0
14	Tashkent City	16,120	880	183	1	230	282	26,297	3	28	27	5	1	0
Total by oblasts		188,281	18,071	1,685	23	1,107	1,738	98,667	391	109	95	25	4	10
15	Scientific Institute of Epidemiology and infectious diseases	0	0	0	1	102	142	11,170	3	12	9	3	3	0
16	Republic scientific center of urology	0	0	0	1	22	36	3,292	5	10	6	4	0	4
17	Republic scientific center of surgery	0	0	0	1	21	60	1,924	9	6	6	0	0	0
18	Republic scientific and practical center of emergency	0	0	0	1	0	242	3,291	13	6	2	1	2	2
19	Republic scientific and practical center of endocrinology	0	0	0	1	50	106	4,902	0	5	5	0	0	0
20	Republic clinical hospital No.1	0	0	0	1	64	91	7,119	8	10	8	5	1	1
Total by republican		0	0	0	6	259	677	31,698	38	49	36	13	6	7
Total		**188,281**	**18,071**	**1,685**	**29**	**1,366**	**2,415**	**130,365**	**429**	**158**	**131**	**38**	**19**	**17**

Source: Republic Scientific Center of Urology

Table 4-27 Health Facility at Republican Level (Example 3)

	Republican Specialized and Scientific and Practical Medical Center of Endocrinology

National Data of Diabetes
Number of New Patients

Oblast	2009	2010	2011	2012
KKP	643	924	733	716
Andijan	814	1,097	1,110	1,212
Bukhara	991	991	1,082	1,091
Djizzak	611	680	564	687
Kashkadarya	549	646	601	571
Navoi	412	438	440	413
Namangan	723	696	698	1,055
Samarkand	1,568	1,573	1,611	1,500
Surkhandarya	553	555	529	461
Syrdarya	342	727	699	700
Tashkent	1,215	1,672	1,280	1,526
Fergana	1,005	1,127	1,492	1,555
Khorezm	943	836	803	769
Tashkent City	2,074	2,404	1,995	2,633
National	**12,443**	**14,366**	**13,637**	**14,889**

National Data of Diabetes
Number of Registered Patients

Oblast	2009	2010	2011	2012	2013
KKP	4,913	5,521	5,850	6,052	6,666
Andijan	8,554	9,021	9,592	10,136	10,952
Bukhara	8,991	9,483	10,038	10,570	11,052
Djizzak	5,709	6,123	6,457	6,900	7,442
Kashkadarya	5,178	5,184	5,363	5,600	5,801
Navoi	2,987	3,247	3,622	3,858	4,069
Namangan	8,540	8,909	9,280	10,025	11,082
Samarkand	11,710	12,162	13,071	13,572	14,407
Surkhandarya	3,938	4,167	4,471	4,729	5,250
Syrdarya	3,595	4,109	4,275	4,585	4,761
Tashkent	12,912	13,313	14,103	14,857	16,100
Fergana	13,577	13,439	14,200	15,173	16,248
Khorezm	7,669	7,976	8,272	8,273	9,215
Tashkent City	18,967	19,806	20,374	21,421	22,573
National	**117,240**	**122,460**	**128,968**	**135,751**	**145,618**

National Data of Diabetes
Number of Registered Patients
(Diabetes Type 2)

Oblast	2009	2010	2011	2012	2013
KKP	4,470	4,976	5,299	5,458	6,130
Andijan	7,356	7,669	8,150	8,699	9,509
Bukhara	7,591	7,975	8,516	9,056	9,538
Djizzak	5,223	5,584	5,933	6,382	6,884
Kashkadarya	3,121	2,895	2,977	4,168	4,243
Navoi	2,738	2,998	3,352	3,570	3,777
Namangan	6,973	7,310	7,632	8,345	9,417
Samarkand	9,162	10,028	10,936	11,465	12,738
Surkhandarya	3,263	3,455	3,744	3,980	4,440
Syrdarya	2,875	3,427	3,551	3,871	4,073
Tashkent	10,840	10,942	11,242	11,924	13,198
Fergana	11,420	11,600	12,259	13,182	14,253
Khorezm	5,829	6,171	6,501	6,511	8,126
Tashkent City	16,880	18,019	18,820	19,906	21,015
National	**97,741**	**103,049**	**108,912**	**116,517**	**127,341**

National Data of Diabetes Number of Death caused by Diabetes	
Issues related to diabetes	1. Patient compliance for treatment is not good. There are many cases worsening conditions. 2. Early detection system has not been established yet therefore approximately 60% of diabetes new patients suffered from complications when diagnosed. 3. Regarding free of charge for insulin, first priority is diabetes type 1 and second priority is diabetes type 2. Approximately 60% of diabetes type 2 patients received free of charge for insulin.

Oblast	2009	2010	2011	2012
KKP	90	122	82	57
Andijan	289	295	308	665
Bukhara	316	163	445	234
Djizzak	182	186	230	212
Kashkadarya	163	165	117	140
Navoi	20	30	16	103
Namangan	226	324	327	303
Samarkand	466	464	702	465
Surkhandarya	114	136	129	131
Syrdarya	154	148	148	375
Tashkent	345	345	453	376
Fergana	226	555	629	388
Khorezm	155	143	485	511
Tashkent City	670	797		516
National	**3,416**	**3,873**	**4,071**	**4,476**

Source: Heard from the institute mentioned above

4.5 Other (Nutrition)

4.5.1 Children's Nutritious Condition

According to MICS2006, nutritional condition was significantly improved between the years from 1996 to 2006. The percentage of underweight children (less than 2,500 gm at birth), stunting and wasting decreased from 19% to 5%, from 31% to 15%, and from 12% to 3%, respectively, as per the table below.

Table 4-28 Percentage of Malnutrition (middle level)

Year	1996	2002	2006
Wasting (Weight/Height)	11.6%	7.1%	3.3%
Stunting (Height /Year)	31.2%	21.1%	14.6%
Underweight (Weight/Year)	18.8%	7.9%	5.1%

Source: Findings from the Uzbekistan Multiple Indicator Cluster Survey 2006

Although children's malnutrition was already solved in Uzbekistan, there was a difference between regions based on MICS 2006. There was 6% wasting (acute malnutrition) in children in the middle area, which was higher than the national average (3.3%). Regarding stunting (chronic malnutrition) in children, the western area (18%), the eastern area (17%), the southern area (16%) and the eastern-middle area (15%) had a higher percentage than the national average (14.6%). The middle area and Tashkent city had a lower percentage. In terms of underweight children, the southern area (7%) and eastern area (6%) were higher than the national average (5.1%).

Regarding breastfeeding, 85% of children were breastfed on the day of birth and 98% of children were breastfed in the Republic of Karakalpakstan. However, the percentage dropped according to the time spent and only 26% of children were still being breastfed at the age of 6 months, which is the recommended age span for exclusive breastfeeding by WHO/UNICEF. When children reached 4 months, the percentage of exclusive breastfeeding was approximately 10% and weaning had commenced. When children reached 8 months of age, there were fewer children breastfed only. A half of children were given both of breastfeeding and feeding weaning and the rest of them were given weaning food only.

4.5.2 Micronutrients

The official data regarding micronutrients did not exist after MICS 2006 because the survey has not been conducted. Therefore, the following situations regarding Iron, Iodine and Vitamin A are based on the information received from the Ministry of Health and donors as well as other available sources.

1) Iron

The "National Flour Fortification Program" was started in 2005 and ended in 2009. This program was then restarted and is implemented at present. Women diagnosed with anemia was 74.4% in 2005, however it dropped to 30% in 2008 according to staff of the "National Flour Fortification Program".

In 2010, iron-fortified wheat flour was legalized, then iron-fortified wheat flour was obligated and the percentage of fortification was standardized. Consequently 95% of first grade wheat flour fortification with iron was produced nationally. It contains not only iron but also zinc and Vitamin B complex (B1, B2, B6, B12, nicotinic acid, pantothenic acid, biotin, and folic acid). The price of iron-fortified wheat flour per 1 ton is 4,000 times higher than that of non iron-fortified wheat flour. The price can be suppressed because there is a revolving fund system that a flour company pays the government for the cost of using additive substances against basic ingredients. Quality assurance is carried out regularly.

2) Iodine

According to the "Global Database on Iodine Deficiency (Vitamin and Mineral Nutrition Information System)" of the WHO, 4,200 (300 samples in each oblast) urine samples were studied in 14 oblasts and cities in 2005. As a result, the median of urinary iodine excretion was 141.2μg/L, moderate deficiency (less than 50μg/L) was 20% and severe deficiency (less than 20μg/L) was 12% among samples. The highest percentage of severe deficiency was Kashkadarya (31.3%) and there were approximately half of samples diagnosed as iodine deficiency if including moderate deficiency. The Uzbekistan government legalized iodized salt in 2009 and promoted producing and selling iodized salt.

3) Vitamin A

The Uzbekistan government followed the UNICEF/WHO guideline and distributed Vitamin A to children aged 6-11 months (once) as well as children aged 12-59 months (every 6 months). The Ministry of Health has conducted the project for the prevention of Vitamin A deficiency, in collaboration with UNICEF, since 2003. The percentage of children who have never been given Vitamin A was 8% and it was highest in Tashkent city (35%). However, according to UNICEF, 98% of children in the country received Vitamin A and Tashkent city is also in the same situation.

Chapter 5 Health System

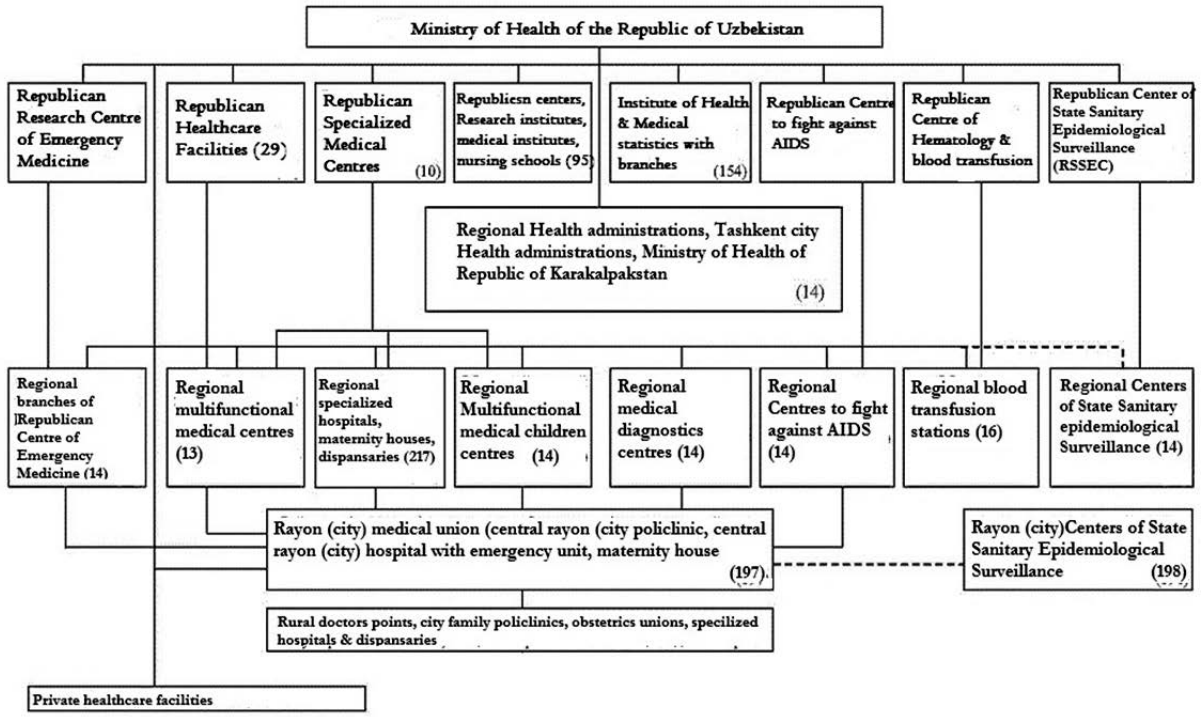
5.1 Service Delivery, Referral System

5.1.1 Service Delivery

(1) Health Facility

According to the State Committee of the Republic of Uzbekistan on Statistics (SCOS) in 2012, there are 1,225 in-patient medical facilities and 6,389 out-patient medical facilities. 743 (60.6%) in-patient and 4,154 (65%) out-patient public medical facilities among them are under the jurisdiction of the Ministry of Health. In the private sector, there are 414 (33.8%) in-patient medical facilities and 2091 (32.7%) out-patient medical facilities, and they are partly managed by the Ministry of Health, and mostly by the licensing of health care providers. The others are under the jurisdiction of other national agencies and ministries (Ministry of Defense, Internal Affairs, Ministry of Labor and Social Protection, National Airlines Company and etc.).

Although there is a private health sector, more than 90% of patients receive public health services and public health facilities play an important role. Health service provisions can be categorized into primary, specialized, and "socially important diseases" and emergency care. The public healthcare structure in Uzbekistan is shown in the figure below.

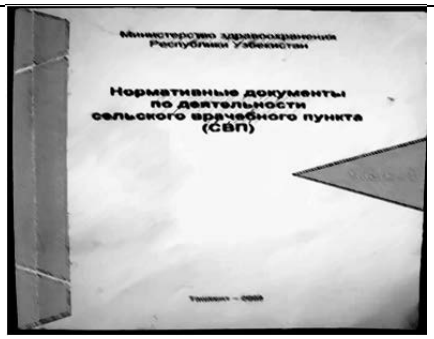


Source: Website of the Ministry of Health

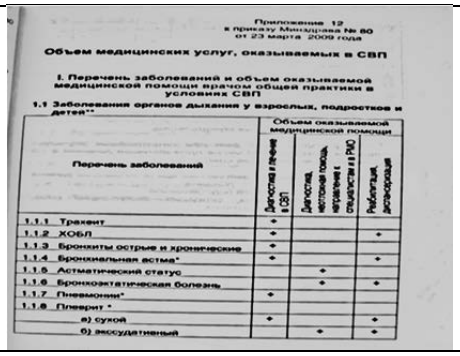
Figure 5-1 Public Health Care Structure

Reorganizing PHC facilities (SVP) in the new structure was conducted in Health I and Health II projects supported by WB. Management of infrastructure and equipment were conducted. In the on-going Health III project, it is planned to reorganize RMU (refer to '7.2 donors cooperation')

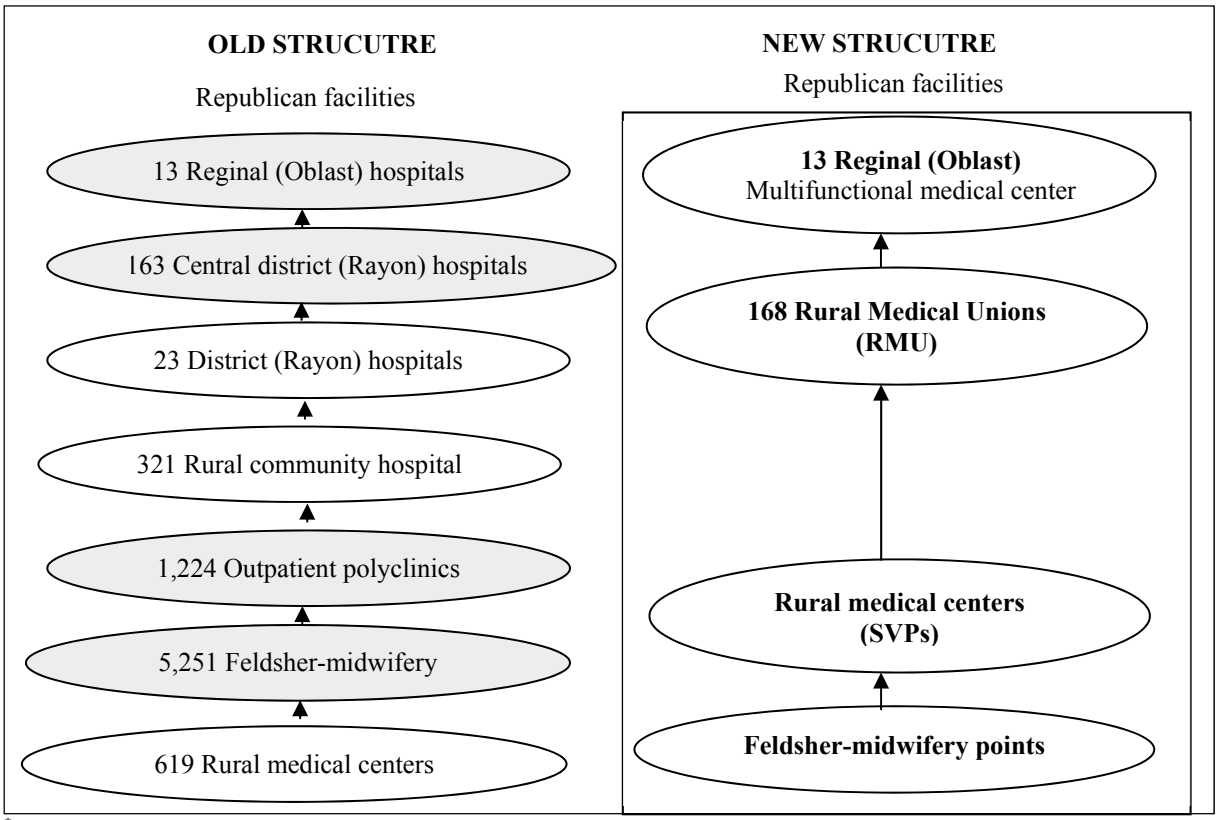
"The order of the Health Minister in Uzbekistan for SVP improvement" issued in 2009 defined the functions and activities of SVP. This order also defined the duties of SVP directors, financing staff and GP as well as the contents of health service provision and activities for prevention. Furthermore, it presents the number of target community people, health workers and indicators of main activities.



Picture: Document that defines the role of SVP



Picture: Table that defines which diseases should be treated at which health facility level



* Navoi oblast hospital is under construction and equipment will be procured by JICA and KfW.

** Most of the rural hospitals will be closed or reorganized, but some will most likely remain in remote areas such as mountains and semi-desert regions.

*** Most of the feldsher–midwifery posts will be closed or reorganized, but some will remain in remote areas.

Source: Survey team

Figure 5-2 Health Care Delivery & Reforms in Rural Areas

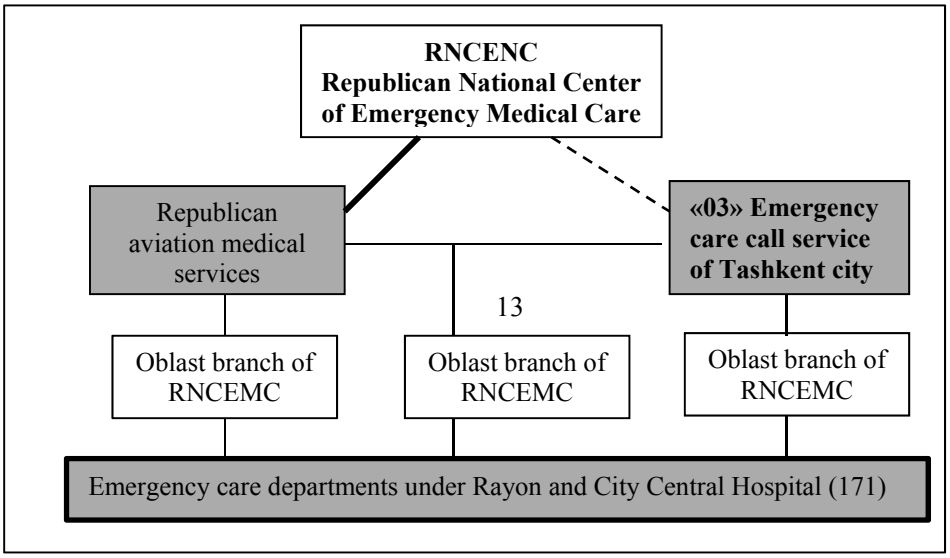
As the new structure simplified the primary level facilities and introduced a GP system, patient referral is now conducted more effectively from lower to higher level of facilities comparing to the old structure. The higher level facilities also technically support the lower level facilities by supervising and dispatching a special doctor. On the other hand, the RMU directors are responsible for health in their rayon at rayon level. The information from SVP to RMU is summarized at RMU then the information is used for making a strategy for SVP, as well as shared and reported during regular meeting at oblast health department, which is conducted every week.

According to the decree of the President of the Republic of Uzbekistan dated 28.11.2011. No.1652 a gradual decrease of number of budget beds in medical facilities (rayon level – 13 221 beds, oblast level – 2 527 beds republican level – 360 beds) is planned during 2012-2015 years. 45 low efficient and inefficient TB treatment facilities and 1,830 beds will be eliminated to optimize the network and bed use. In general,

according to the network and bed optimization schedule 77 healthcare facilities were eliminated, 288 buildings and areas of health facilities were vacated, and 6,626 beds were reduced during 2011-2013 years.

(2) Emergency medical care services

Emergency medical care services are organized as shown in the figure below. Emergency medical care is provided to 635,000 patients on average per year. To strengthen the material and technical base of the ambulance service, 320 specialized cars and resuscitation ambulance cars on the amount of 8.1 billion som were procured during 2011-2013. The procurement of 120 items of ambulance car and additional 758 specialized cars allowed to increase the coverage of transportation services from 78.8% to 92% and provided emergency medical care services to more than 330.000 people. The operation time after a patient admitted to a hospital was reduced from 6 to 1 hour on average as well as the average hospital stay reduced from 6.1 to 5 days compared to 2011 according to the presentation slides of the Ministry of Health. Therefore, the quality of emergency medical care services is improved.



Source: Ministry of Health

Figure 5-3 Structure of the Emergency medical care services

(3) Republican specialized hospital

In Tashkent city, there are following specialized hospitals at republican level. These hospitals were established based on the presidential decree on "Measures for Future Reforming of Health Care System" in 2003.

- Surgery
- Urology
- Eye Microsurgery
- Cardiology
- Obstetrics and Gynecology
- Pediatrics
- Therapy and Rehabilitation
- Dermatology and Venereology
- Tuberculosis an Pulmonology
- Endocrinology

These specialized hospitals developed diagnostic and treatment standards for more than 1000 diseases and implement these standards. More than 20,000 of high-tech and complex surgical interventions are performed in the hospitals annually. Out-patient departments of the hospitals provide services to more than 580,000 patients annually. Additionally, the hospitals provide highly qualified specialized medical care for over 85,000 patients with the most difficult types of diseases. These specialized hospitals developed clinical guidelines as well as learned new technology in cooperation with the European Society. Currently, the specialized hospital for cardiology conducted catheter treatment for 2-3 cases every day. The specialized hospital for urology carried out laparoscopic surgery for approximately 10 cases every day. In addition, these hospitals are required to take care of their each specialty of medical care of all hospitals nationwide and it was regulated in 2007.

5.1.2 Referral System

The referral system was reorganized based on the national health care reforming (1998-2005) and emphasized on the PHC level. However, the system implemented from the former Soviet Union era is still remained, which completely separates between out-patient treatment and in-patient treatment as well as complicates the referral system. General hospitals at tertiary level especially provide in-patient treatment and follow-up of discharged patients will be conducted at our-patient department (policlinic). However, the collaboration between specialists at general hospitals and GPs at out-patient department is insufficient and it is difficult to provide continuous care. Also, despite a strong focus on each specialty, mechanism that links each specialty with other is weakened. Additionally, there is less incentive to reduce the medical cost and hospitalization is selected easily[11]. Therefore, the Health III project has implemented construction, reconstruction and rehabilitation of RMU in order to integrate out-patient and in-patient departments. Furthermore, this integrated concept proceeds at oblast level (tertiary level) as the Oblast Multifunctional Medical Center.

Table 5-1 Referral System in Uzbekistan

Level	Administration	Health Facility
Fourth	National (Ministry of Health)	Republican Hospital
Tertiary	Oblast (Oblast Health Department)	Oblast Multifunctional Medical Center, Emergency Center, Specialized Dispensary (special hospital)
Secondary	Rayon	Rayon (City) Medical Union
Primary		City: Family Clinic, Rayon: SVP, Feldsher-Midwifery Points

Source: developed by the Survey Team

5.2 Leadership/ Governance

The public health care system in Uzbekistan can be categorized in to 3 levels such as republican (national), oblast and rayon/city.

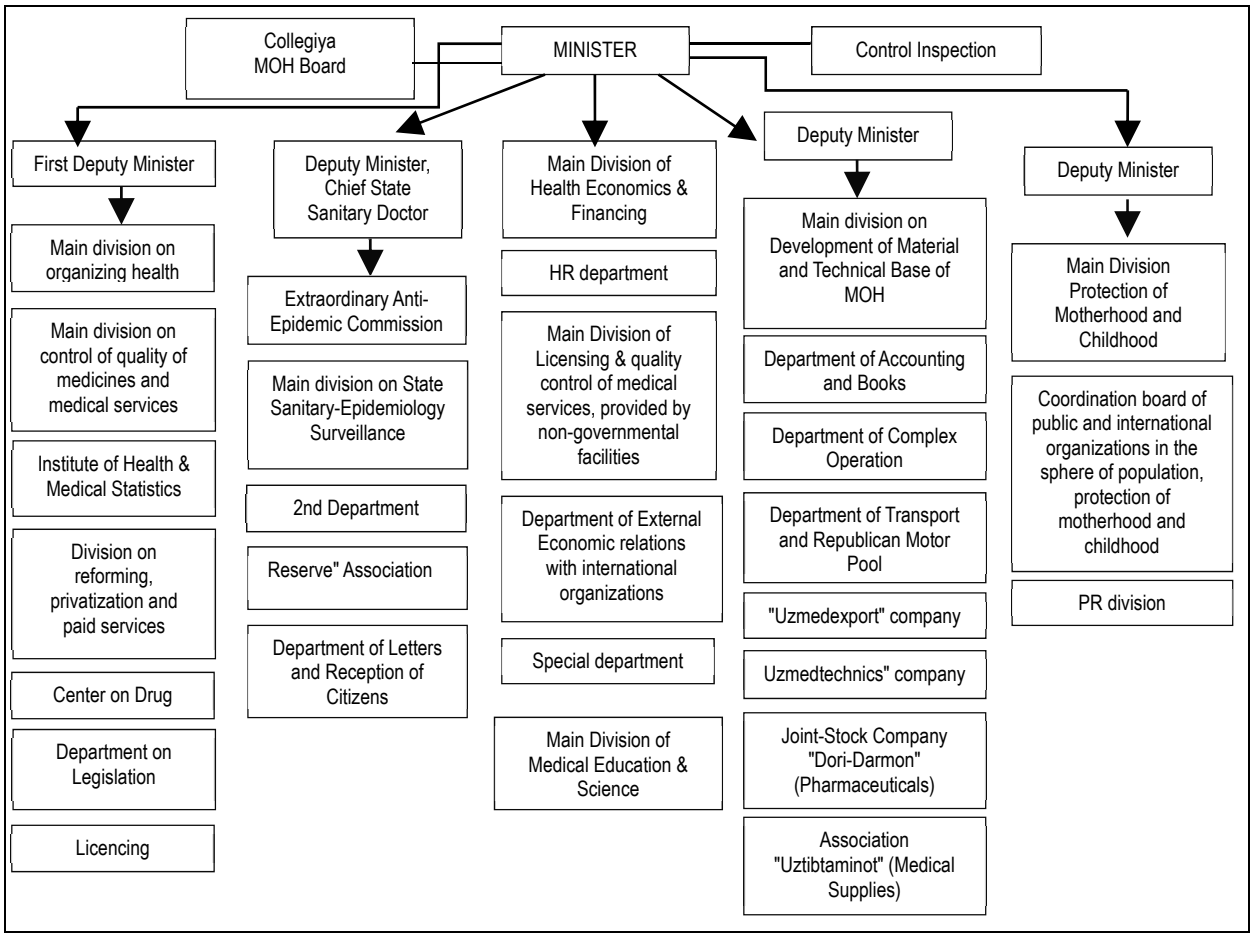
(1) Republican

The highest hierarchical layer is formed by the Ministry of Health and other national institutions. The Ministry of Health is the major player in organizing, planning and managing the Uzbek health system. The central decision-making body of the Ministry of Health is called the "Collegiya". Appointed members of the Collegiya are: the Minister of Health (who is also the head of the Collegiya), the deputy ministers, an adviser to the minister, the head of the health department of the Tashkent city administration, and other members of the Collegiya need to be approved by the Cabinet of Ministers. The Ministry of Health provides guidance to the Minister of Health of the autonomous KKP and acts as the supervisory authority for oblast, city and rayon health departments. The structure of the Ministry of Health of Uzbekistan has changed frequently. Since the first years of independence, there has been a substantial reduction in the number of departments and staff. The names of departments have also changed frequently[12]. The current structure of the Ministry of Health is as shown in Figure 5.4.

The Ministry of Health develops plans in cooperation with donors and the ability of planning is not good enough. According to the interview with the minister of the Ministry of Health, the national conference regarding management, which was conducted on 2 June, 2014, confirmed that training, knowledge and skills of management were necessary to be improved. Approximately 750 managers in oblasts and rayons attended this conference. The minister mentioned that improvement of management skills were necessary so that skilled managers could manage well in spite of the limited resources.

[11] Final Report of the Study on the Reform of Health Care Services in Navoi Region: Summary (2008、JICA)

[12] Ahmedov M, Azimov R, Alimova V, Rechel B. Uzbekistan: Health system review. Health Systems in Transition, 2007; 9(3): 1–210.



Source: Ministry of Health

Figure 5-4 Structure of the Ministry of Health

(2) Oblast

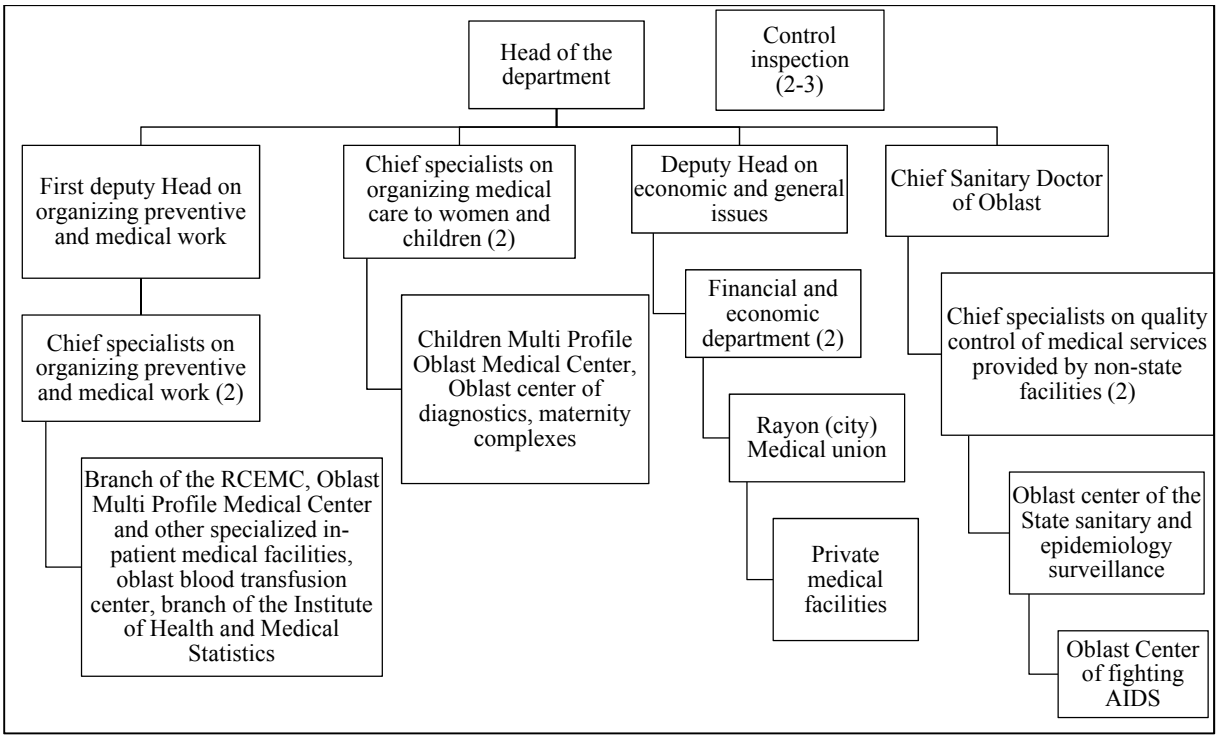
The oblast develops plans by integrating the plans made by each rayon. On the other hand, the Ministry of Health indicated 79 planning items and the plan of oblast has to cover them. Therefore, the plan of oblast includes in both of 1) republican program and 2) project within the oblast.

Monitoring is conducted based on monthly and quarterly reports. Each medical specialty at oblast and rayon is vertically supervised by specialists. Facilities at primary level have many opportunities to be supervised and facilities at rayon level receive some supervision every week.

While monitoring and data collection are conducted, the analysis of those results is insufficient. The plan of oblast is developed according to the plan indicated by the Ministry of Health. Therefore, the plan of oblast lacks characteristics and issues in each oblast itself.

The oblast health department conducts a general meeting every Monday. All of section chiefs and rayon chiefs attend this meeting. They discuss about the next week plan and report it to the mayor of the oblast.

The structure of Andijan Health Department is shown in Figure 5.5. The structure and organization are regulated by the Cabinet Decree No. 84 issued in 2008 and the structure and organization of each oblast are basically the same.



Source: Andijan Health Department

Figure 5-5 Structure of the Oblast Health Department

(3) Rayon/City

Rayon government has more responsibility to manage finance for social welfare, health and social service at primary level. RMU and SVP are included in rayon level and the director of RMU is responsible for the health of the rayon population and its health care services.

City health authorities, very similar to rayon health authorities, are responsible for the management and monitoring of the health care institutions within their urban territorial unit. The director of City Medical Union is the highest responsible person at city level.

(4) Decentralization and centralization

Decentralization has been promoted gradually and administrative functions have been delegated to oblast health authorities. On the other hand, centralized decision-making has been retained at national level in order to prevent the emergence of unregulated markets, ensure guaranteed access to health care and implement reforms. Devolution in the system is largely reflected in the delegation of budgetary responsibilities from the national level to the oblasts, while keeping a strictly vertical structure and tight national guidelines and norms, on which decisions at oblast level are based. Although oblast health departments are a part of oblast governments, they are mainly considered to be a quasi-independent branch of the Ministry of Health.

5.3 Health Workforce

5.3.1 Basic Education System

There are 3 categories of medical personnel in the health care system of Uzbekistan based on their educational qualifications. The highest level of medical personnel, comprising mainly physicians, refers to the specialists, who finished a postgraduate course (master of doctor degree) or completes a specific course such as cardio-surgery. Then next level is the high level medica1 personnel refers to the bachelor who graduates from an institute (university), such as the Institute of Medicine or Tashkent Institute of Pharmaceuticals, comprising mainly physicians, pharmacists and nurses. Other category is the middle level medical personnel, which refers to the graduate of a medica1 college or vocationa1 school. The middle level is equivalent to the level of graduation from high school in Japan. The middle level of medical personnel is a nurse, midwife, feldsher (assistant doctor), and laboratory assistant.

(1) Medical Education System

Figure 5.6 presents the structure of the undergraduate and postgraduate medical education, set against international standards contained in the ISCED of UNESCO.

<table>
<tr><th>Level by ISCED</th><th colspan="2">Type of education</th><th>Level of education</th></tr>
<tr><td rowspan="3">6</td><td colspan="2"></td><td></td></tr>
<tr><td colspan="3">Labor market</td></tr>
<tr><td colspan="2">PhD study (duration none less than 3 years)</td><td>Post- higher education Level (Doctor)</td></tr>
<tr><td colspan="4">Labor market</td></tr>
<tr><td>4-5</td><td>Master of Public Health (MPH) Course</td><td>ISCED 5a
Magistrate (Master degree)
(2-3 years)</td><td>Post-graduate higher education level (Master)</td></tr>
<tr><td colspan="4">Labor market</td></tr>
<tr><td>4-5</td><td>NURSING
(Higher educated nurses)
3Years</td><td>Physicians Medical education
(dentists, physicians, sanitary doctors and hygienists, pediatricians)
(5-7Years)</td><td>Under-graduate higher education level</td></tr>
<tr><td colspan="4">Labor market</td></tr>
<tr><td>3
Compulsory</td><td>ISCED 3a
• Professional college (3 years)
• Nursing school (3 years)</td><td>ISCED 3a
• Academic lyceum (3 years),
• Professional college (3 years)
• Nursing school (3 years)</td><td>Secondary professional education level</td></tr>
<tr><td>9
Compulsory</td><td colspan="2">↑Compulsory Education</td><td>Primary and Junior high school level</td></tr>
</table>

*The compulsory education is from 7 up to 18 years old but grade-skipping is many. From 7 up to 15 years old, children receive primary and junior high school education consistently for 9 years. After that, children have to study at "Lyceum" (general education) or "College" (Vocationa1 School) for 3 years. 12 years in total is a compulsory education.

Source: developed by the Survey Team

Figure 5-6 Medical Education System in Uzbekistan

(2) Education of Doctors

The training of physicians or doctors is conducted in 7 Higher Education Institutions (HEIs) and its 3 branches, as well as in the Tashkent Institute of Post-graduate Medical Education. The faculties under these HEIs are outlined below. There are 2 stages in physician training: the Bachelor's degree, training for 5 (stomatology) or 7 years; and the masters' or magistrate training for 2-3 years depending on the profile of the department. Residency takes place at clinical levels for 3 years or more training in medical facilities.

1) Tashkent Medical Academy (faculties – curative, medical and pedagogical, stomatological, medical nurses with higher education, sanitary-hygiene, medical nurses with higher education);
2) Tashkent Pediatric Medical Institute (faculties – pediatric, medical and pedagogical, medical nurses with higher education);
3) Tashkent Pharmaceutical Institute (faculties – pharmaceutical, bio-technological, agro-ecological, pharmacy-pedagogical, industrial pharmacy);
4) Samarkand Medical Institute (faculties – curative, pediatric, medical and pedagogical, medical nurses with higher education, skills improvement faculty);
5) Bukhara Medical Institute (faculties – curative and stomatological, 2 departments – medical and pedagogical as well as for nurses with higher education);
6) Andijan Medical Institute (faculties – curative, pediatric, skills improvement faculty and the department for nurses with higher education);
7) Fergana Branch of Tashkent State Medical Institute-2 (medical and pedagogical faculty, sanitary & hygiene);
8) Nukus Branch of Tashkent Pediatric Medical Institute (pediatric faculty);
9) Urgench Branch of Tashkent State Medical Institute-1 (curative, pediatric and medical-pedagogical)
10) Tashkent Institute of Post-graduate Medical Education (faculties – therapeutic, pediatric, surgical, medical and preventive)

Advanced medical training is fulfilled in the system by the Tashkent Institute of Postgraduate Medical Education (TIPME), which trains 15,000-16,000 doctors annually. Training is also conducted in the departments of advanced medical training of doctors of Samarkand and Andizhan medical institutes. In addition, several international organizations (WHO, UNICEF, USAID, etc) organize trainings and workshops for health care workers. Initially, advanced medical training system was voluntary. Presently, by the Decree of the Ministry of Health, the medical doctors must get 288 credit-hours in compulsory training every 5 years. The percentage of doctors who receive the training is approximately 22% every year based on the health statistics 2009 and 2012.

(3) Education of Middle-level Personnel

According to the National Educational Standards approved in the Republic, colleges and vocational schools educate on 11 specialties, which are considered as the lower-level medical personnel. At present, there are about 70 secondary-vocational educational institutions (SVEI). In 1999, part of the health reform initiatives started the nursing training at higher education levels in the HEIs. It is the second stage of the middle-medical personnel training. Studying 3 more year nursing education established at the medical college is the same level as the graduate from college.

5.3.2 Distribution of Workforce

(1) Doctor

Based on the data provided by Ministry of Health, the ratio of doctors has been gradually declined from 29.6 per 10,000 population in 2000 to 24.2 per 10,000 population in 2012. The number of doctor (GP) and the number of doctor per 10,000 population for the last 3 years are indicated in the table below. The distribution is uneven among oblasts.

Table 5-2 Number of Doctor (GP) and Number of Doctors per 10,000 population (2010-2012)

	Number of Doctor (including all specialty)				Number of Doctor per 10,000 population			
	2010	2011	2012	(GP)	2010	2011	2012	(GP)
Tashkent city	8,175	8,178	8,053	704	35.8	35.5	34.6	3.03
Andijan	6,267	6,274	6,221	904	23.7	23.3	22.7	3.30
Bukhara	4,888	4,691	4,734	719	29.2	27.7	27.5	4.18
Djizzak	1,949	1,923	1,956	198	16.8	16.3	16.3	1.66
Kashkadarya	5,164	5,115	5,044	474	19.2	18.6	18.0	1.69
Navoi	1,654	1,679	1,711	258	19.1	19.1	19.3	2.92
Namangan	4,668	4,627	4,622	592	19.8	19.3	18.9	2.43
Samarkand	7,728	7,774	7,699	867	23.8	23.6	22.9	2.59
Surkhandarya	3,633	3,609	3,568	429	16.9	16.4	15.9	1.92
Syrdarya	1,460	1,465	1,435	190	20.2	20.0	19.3	2.55
Tashkent	5,337	5,187	5,103	624	20.3	19.5	19.0	2.33
Fergana	6,405	6,464	6,504	981	20.0	19.9	19.7	2.97
Khorezm	4,116	4,365	4,324	500	25.9	27.0	26.3	3.05
KKP	3,749	3,750	3,727	467	22.4	22.2	21.9	2.74
Republican hospital	7,329	7,446	7,306	59	-	-	-	-
National	72,522	72,547	72,007	**7,966**	25.1	24.7	24.2	**2.68**

Source: Health Statistics, 2012, Institute of Health and Medical Statistics

According to the SCOS, the total number of doctors in all health facilities was 81,337, including 72,007 specialists registered in the Ministry of Health system in 2012. The fulfillment rate at all health facilities was 92.3% (2012) and the rate has remained higher than 90% since 2004. There were 38,184 (53%) female doctors in 2012.The lowest percentage of female doctors was in the Djizzak region (37.6%), whereas the highest number was in the Tashkent city (75.3%). The distribution in terms of working experience indicates some decline since 2000 in the number of physicians with working experience of less than 5 years, from 4.7 in 2000 to 3.6 in 2012 per 10,000 population.

(2) Nurse

The statistics issued by the Ministry of Health indicated 310,313 were a nurse in 2012. However, it included other different qualifications such as paramedics, dentists, optometrists, laboratory technicians, X-ray technician and so on. According to this statistics, the number of nurses increased from 228,000 in 2001 to 310,313 (2012). The population density of nurses was increased from 100.5 per 10,000 population in 2000 to 104.2 per 10,000 population in 2012. When compared to other CIS countries, this density is higher than those countries and comparable with Japan. The fulfillment rate was 97.1%～99.0% for the period of 2004-2007 and it is considered as high. The following table presents the number of nurses excluding other jobs. Nurses qualified as a nurse accounted for approximately 76% of the total number of nurses and other qualifications was 24%.

Table 5-3 Number of Nurses and Number of Nurses per 10,000 population (2012)

	Nurses with higher education		Nurses		Total	
	Number	Per 10,000	Number	Per 10,000	Number	Per 10,000
Tashkent city	241	1.04	14,725	63.31	14,966	64.34
Andijan	103	0.38	19,461	71.14	19,564	71.52
Bukhara	117	0.68	15,021	87.40	15,138	88.08
Djizzak	18	0.15	8,564	71.62	8,582	71.77
Kashkadarya	37	0.13	21,939	78.24	21,976	78.37
Navoi	18	0.20	7,276	82.23	7,294	82.44
Namangan	82	0.34	18,679	76.57	18,761	76.90
Samarkand	106	0.32	20,027	59.72	20,133	60.04
Surkhandarya	38	0.17	16,002	71.45	16,040	71.62
Syrdarya	25	0.34	7,490	100.54	7,515	100.87
Tashkent	77	0.29	23,030	85.82	23,107	86.11
Fergana	85	0.26	31,618	95.66	31,703	95.92
Khorezm	103	0.63	11,239	68.46	11,342	69.09
KKP	90	0.53	11,820	69.44	11,910	69.96
Republican hospital	161	-	8,405	-	8,566	-
National	**1,301**	**0.44**	235,296	79.02	236,597	79.46

*Nurses complete 3 year vocationa1 school education. Nurses with higher education complete 3 year education at the nursing faculty of the medical college.

Source: Health Statistics2012 Institute of Health and Medical Statistics

(3) Medical engineers and technicians

During the survey, the lack of medical engineers and low qualification of this category of specialists were mentioned as the main issues. According to the data of State Committee on Statistics, the workforce of medical engineers is about 68 persons totally in the country. Since 2004, there is a special master degree course to educate medical engineers in Tashkent State Polytechnic University. The middle level technicians used to be trained in Chilanzar Electro-technic College in Tashkent. In the regions, most of these engineers and technicians are not considered as specialists as they are informally trained on the job by the equipment suppliers or pharmaceutical companies only when the new equipment is installed.

5.3.3 Structure of Employment and Human Resource Allocation

The graduates of the medical institutes can be hired as doctors only at PHC level facilities. In accordance with the regulation, all of them need to take master degree courses or work at clinical level whether they are self-funded or receive governmental scholarship. However, approximately 90% of them do not follow this regulation. Human resources are not evenly allocated according to the facility level and the age. Another important issue is the outdated personnel standard. The Ministry of Health recently developed the workload standards for the SPV level. The number of health workers is estimated to be declined in general because of the reduction in facilities, especially hospital units and beds.

The Ministry of Economy data shows that medical personnel are among the lowest-paid workers in the

labor market, despite the highest education costs (monthly salary is approximately 100US$ for a nurse and 500US$ for a doctor according to the interview). Therefore, some medical personnel change jobs, move to the private sector or move to other countries. There is a need for the wage adjustments in the sector. According to the Ministry of Health presentation slides, the Decree No.50 of the Cabinet of Ministers "Measures of further optimization and efficacy of SVP activities" issued on 5 March 2014 indicates the rise in wages with the range of 20-40% for patronage nurses of SVPs for continuous work. Also, monthly salary markup for medical personnel of SVPs increases the range from 5-15% to 10-20% and parallel increase of share of the fund of financial incentive and development of medical organizations from 25 to 50% aimed to develop financial promotion. In some areas, introduction of special salary markup in the amount of 25 % to the tariff rate for SVP staff for special working conditions. The SVP coordinator position in multi profile central outpatient polyclinic will be introduced to coordinate and manage primary rural health care.

5.3.4 Policy Issues

The wide-ranging health care reforms which began in 1998 has brought about major changes that have prompted radical restructuring of the organization of care in the country, especially strengthening of the PHC in the country. The immediate effect of these reforms have been the massive undertaking of GP (General Practitioner) training and developing a new field of educational specialization, family medicine or general practice through the Health Project I and Health Project II supported by WB. GP training is continuously conducted through Health Project III. At the same time, GPs graduating from medical institutions do not have specialization and they are employable only in ambulatory poly-clinic facilities. According to the interview in oblasts, administrators are still worried about the deficit of specialist personnel in outpatient facilities, such as obstetrics and gynecology (3.61), gastroenterologist (0.07), teen-age physicians (2.37), district pediatrician (8.17), otolaryngologists (0.49), cardiologists (0.40) (indicated number in () is the number of each specialist per 10,000 population based on the Health Statistics 2012). Additionally, the different levels of skills and the absence of approved qualification requirements and health care standards make it impossible to define the range of medical services needed for the estimation of human resource requirements. Moreover, current manpower deficits and facility reduction have led to re-training and re-education for many. There is another issue that the abolition of regional enrolment quota has restricted the access to education of applicants from the rural areas. Consequently, it has led to ineffective allocation of doctors between urban and rural areas.

5.4 Financing

5.4.1 Financing

The General government expenditure on health in Uzbekistan was 1,599 million US$ as shown in Table5.4. This amount is three times as large as that of 2007 (512 million US$). Total health expenditure in 2012 as a percentage of GDP was 5.9. General government expenditure on health was increased year by year from 7.9% in 2007 to 9.7% in 2012.

Table 5-4 Transition of Health Financing Indicators

	2007	2008	2009	2010	2011	2012
General government expenditure on health (million US$)	512	706	899	1,094	1,261	1,599
Health expenditure, total (% of GDP)	5.5	5.6	5.2	5.7	5.6	5.9
Health expenditure, public (% of GDP)	2.3	2.5	2.6	2.8	2.9	3.1
Health expenditure, private (% of GDP)	3.2	2.6	2.7	2.6	2.8	2.8
General government expenditure on health (% of General government expenditure)	7.9	7.6	8.4	8.6	8.5	9.7
Health expenditure, public (% of THE)	42.2	49.1	48.8	51.9	50.9	53.1
Health expenditure, private (% of THE)	57.8	50.9	51.2	48.1	49.1	46.9
Out of pocket expenditure as % of PvtHE (%)	94.0	93.9	94.0	94.0	94.0	94.0
Out of pocket expenditure as % of THE (%)	54.4	47.8	48.1	45.2	46.2	44.1
External resources on health as % of THE (%)	1.5	2.3	1.8	1.8	2.0	1.5
Health expenditure per capita, public (current US$)	16	19	26	33	43	-
Households out of pocket spending on health (current US$)	24	28	33	37	39	-

THE: Total Health Expenditure
Source: WHO Uzbekistan Statistics 2013Year, Global Health Expenditure Database (http: //apps.who.int/nha/database)

On the other hand, the cost of households out-of-pocket spending on health was increased as 39 US$ in 2011, which was 1.6 times higher than in 2007. This amount is almost the same as public health expenditure per capita (43US$). This is because of the installation of the paid medical care (user charge system) in accordance with the Presidential Decree of “Measures for Future Reforming of Health Care System”.

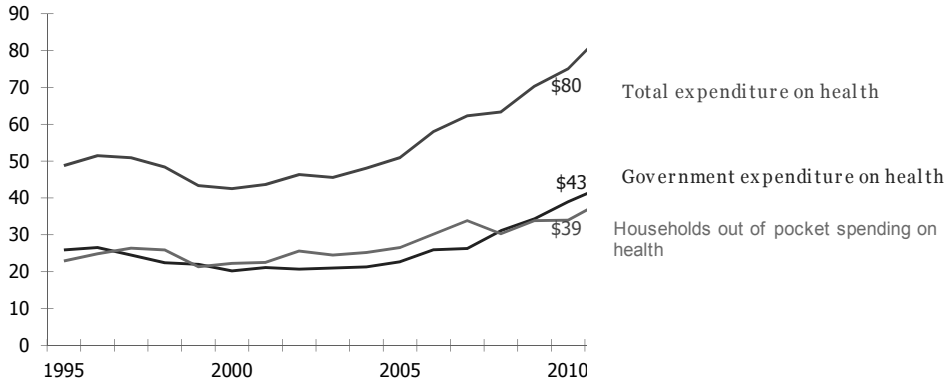
Uzbekistan is a Lower middle income country in the Europe & Central Asia region. Uzbekistan's Total Health Expenditure (hereinafter referred to as “THE”) per capita at an average exchange rate (US$) was 80 in 2010, as compared to the regional average of 3,373, and the average for Lower middle income countries of 72[13]. Public health expenditure of THE was 53.1% while private health expenditure of THE was 46.9% in 2012. In 2007, these percentage was the opposite. The public health expenditure of THE was 42.2%, while private health expenditure of THE was 57.8%. However, the percentage of out-of-pocket expenditure was stable as approximately 94.0% for the period of 2007-2012. This is higher than an average of 68.7% in Europe & Central Asia and also 87.8%[14]among Lower middle income countries. Regarding the out-of-pocket expenditure of THE, it was 44.1% in 2012 and it is higher than neighboring countries such as Kazakhstan (41.7%), Turkmenistan (36.8%), Kyrgyzstan (34.8%). In 2012, households in Japan financed 14.1% of their THE through out-of-pocket spending at the time of service[15]. Therefore, out-of-pocket spending is burden for household in Uzbekistan. It means that households need to have funds available at the time of seeking care most of the time, which can be a barrier to care and can threaten the financial status of the household.

Since there is a limit for individuals to pool their private resources for health spending, it is required to establish a mechanism of pooling public resources[16]. The president decree in 1998 indicated an installation

[13] World Health Statistics 2013 (WHO, 2013)
[14] World Health Statistics 2013 (WHO, 2013)
[15] Global Health Expenditure Database, WHO（http://apps.who.int/nha/database）
[16] According to the interview with the director of finance department of the Ministry of Health, Country Cooperation

of health insurance as one of the options of health financing. However, the regulations regarding the mandatory public health insurance has not been formulated yet whereas the private health insurance has been introduced. In order to introduce a public health insurance system, it requires the system planning in terms of the development of regulations, insurance premium collection system as well as the payment system and so on. Thus, the finance department of the Ministry of Health, which takes main initiatives, has started to discuss these issues.

Due to the increase of NCDs, per capita total expenditure on health is estimated to become 1.95 times higher in 2012, 3.20 times higher in 2017, 4.78 times higher in 2022 on the basis of the amount of 2007. Accordingly, the government expenditure on health is estimated to be 2.03 times higher in 2012, 3.42 times higher in 2017, 5.18 times higher in 2022 as well as the private health expenditure also will be increased such as 1.87 times higher in 2012, 3.00 times higher in 2017 and 4.39 times higher in 2022 in comparison with 2007[17].



Source: WHO, Health System Financing Profile by country, 2012

Figure 5-7 Per Capita expenditure in US$ (constant 2012 US$)

The basic benefits package guaranteed by the Government includes primary care, emergency care, care for "socially important diseases", and specialized care for groups of the population classified by the Government as vulnerable. "Socially important diseases" composes tuberculosis, cancer, sexual transmitted infections, mental disorders, drug addiction and endocrine disease. The population groups approved by the government can receive also health care free of charge. However, when the budget becomes short, some of them have to pay by themselves. Poor families defined by Mahalla are the highest priority among them. Pharmaceuticals are not free of charge.

Table 5-5 Population groups eligible for free of charge

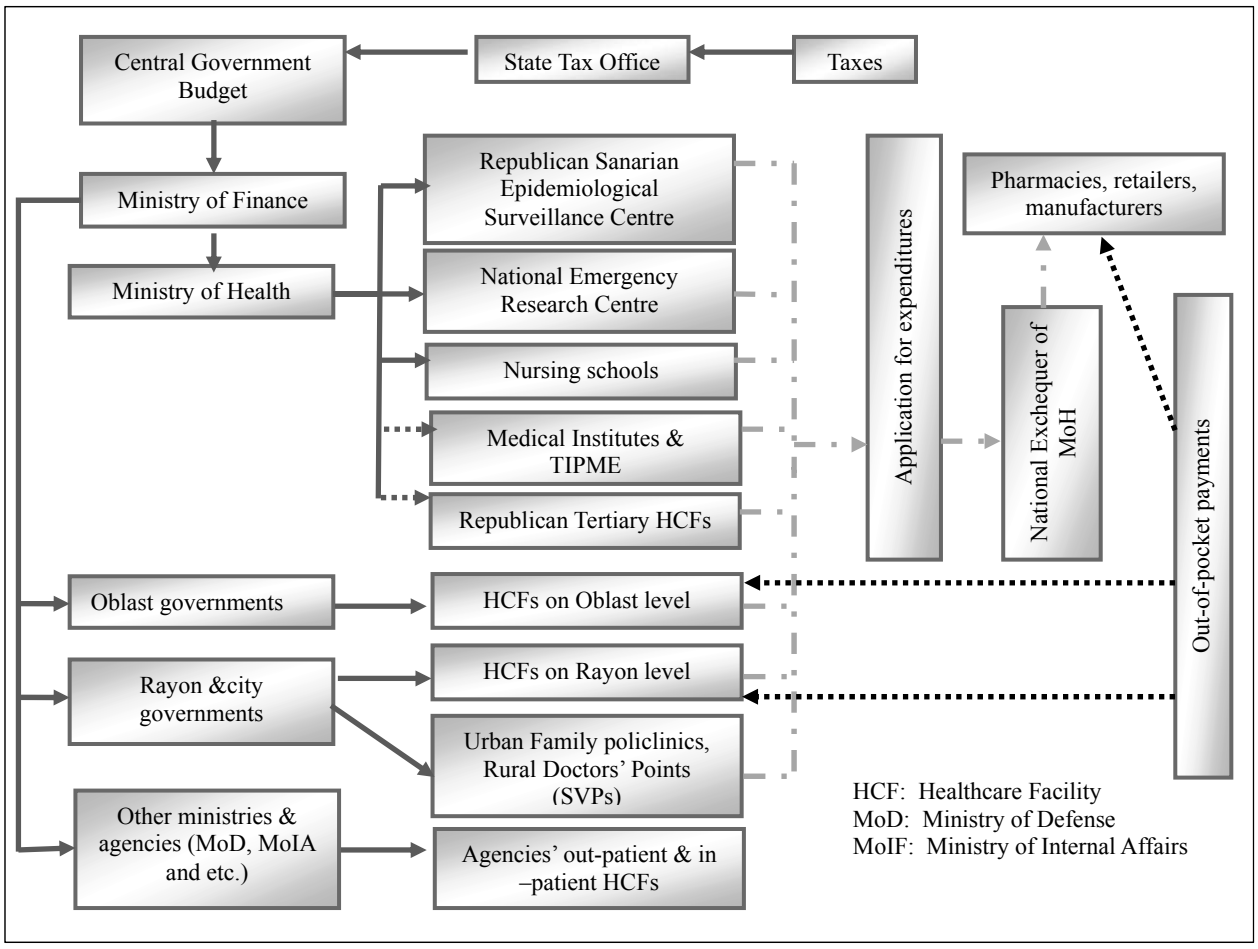
1. People with disabilities of categories I and II
2. Orphans (none of both parents)
3. Victims of Chernobyl
4. Veterans and disabled veterans of the Second World War and Participants of international wars such as the war in Afghanistan
5. Poor Families receiving social support defined by Mahalla
6. Pensioners

5.4.2 Financial Flows

The system of health financing and finance flows are presented in Figure 5.8. The Ministry of Health directly allocates the budget to hospitals, institutions and educational organization at republican level while oblasts, city/rayons receive the budget from each regional administrative government.

Strategy (WHO, 2011)

[17] Study on the Reform of Health Care Services in Navoi Region (summary) (JICA, 2008)

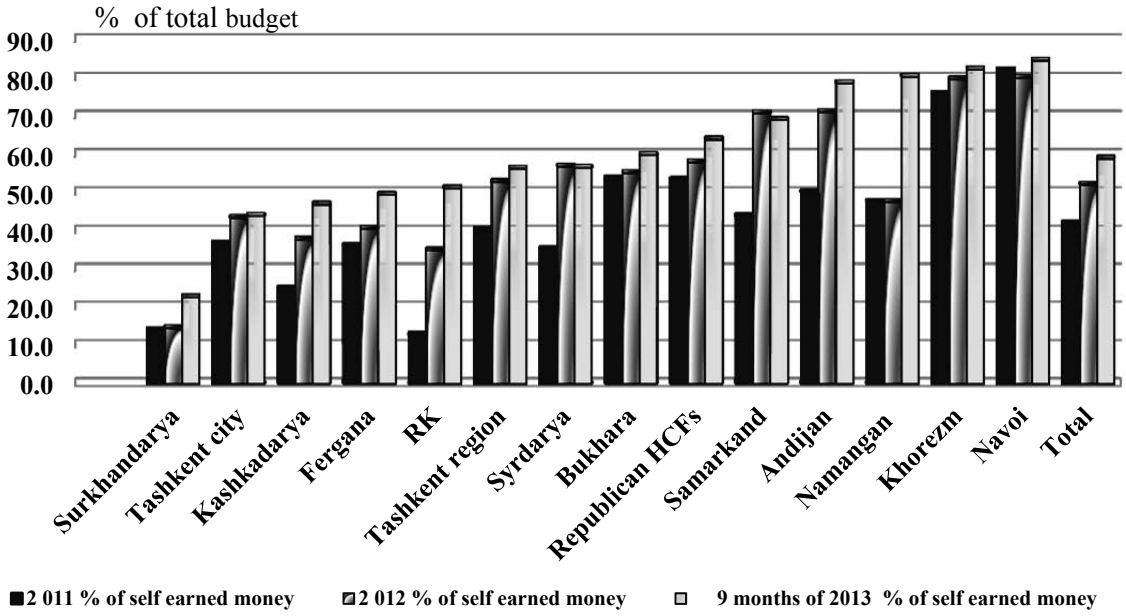


Source: developed by the Survey Team

Figure 5-8 Financial Flows

The conventional budget allocation is performed according to the budget item by following the past budget sheet. The main indicator of budget allocation was the number of hospital beds. The fiscal reform is underway with the support of WB. SVP take a capitation allocated budget system. At the rayon level, an expenses-based budgeting system is trying to be installed (refer to "Chapter 7 (2) WB"). The budget of the oblast level is developed based on the population size. Therefore, the oblast with a small population receives relatively small health budget. The managers of the oblast and rayon health department submit the budget plan to the oblast and rayon government, and the Ministry of Health finally puts all together. However, the managers of the oblast and rayon health department are doctors and their budget planning and developing abilities are not good enough. They tend to follow the previous budget planning without any analysis.

The budget of Navoi Health Department has continued to increase for the last 5 years because the mining manufacturing is thriving there. However, an increase of budget is for labor costs while the budget for maintenance, fuel, food, pharmaceuticals has not been changed. Therefore, user fees are expected to make up for the budget shortfall, while the situation of the introduction is poor in Navoi. Navoi General Hospital which is currently under construction is expected to become a facility capable to introduce the user fees system most easily. On the other hand, Samarkand General Hospital in Samarkand, whose oblast has a large population following Tashkent city, has introduced user fees. Consequently, 70% of the operating budget of the hospital has been managed by the funds collected through this system. Additionally, the hospital can procure the equipment.



Source: data obtained by the Survey Team

Figure 5-9 Percentage of self-earned money in republican and oblasts

5.4.3 Health Insurance System

Only very few companies in the country offer voluntary health insurance although there is no reliable national data. One of the voluntary health insurance services is that private medical providers provide their own health services available within the clinic, and MDS (Medical Diagnostics Services) is widely known as such private medical providers. Another type is that the state joint insurance company Uzbekinvest National Export-Import Insurance Company (UNIC) is an example of an insurance company involved in the health insurance sector. Uzbekinvest was established by the Uzbekistan government in 1994, and then reorganized to UNIC in 1997. It provides services for individuals as well as corporate client[18].There are no regulations with regard to the price setting of voluntary health insurance policies. The small number of sales, the small risk pool, and the selection bias seem to result in high prices for voluntary health insurance policies. Annual policies at MDS cost between US$ 500 (individual policy without surgical interventions) and US$ 875 (family policy with surgical interventions) (as of 2004). UNIC's most comprehensive polices cost between 24% of the insured amount for the lowest risk group and 42% for the highest risk group[19]. The existing policy prices are designed to appeal to high-income groups.

Insufficient health insurance system has led to high out-of-pocket payments described above and this is a factor that restricts the equal access of health services.

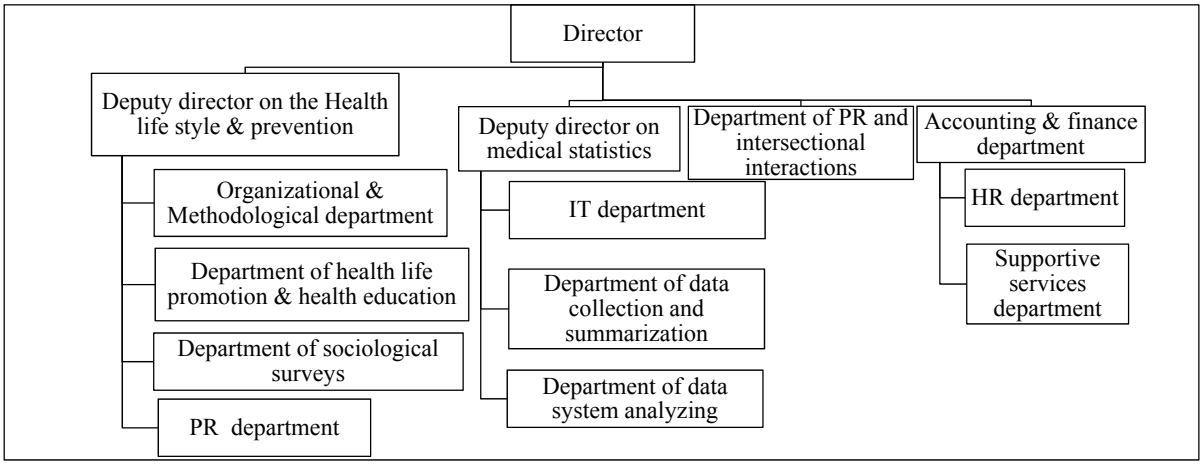
According to the interviews with the relevant people, the health insurance system is considered as a measure to protect themselves from the high treatment cost. The director of finance department of the Ministry of Health, who received the training in Japan, has organized a working group to introduce a health insurance system for the future. In addition, the director of Andijan Health Department has a thought of installation of a health insurance system after attending the training in Germany. Furthermore, he asked for the cooperation and gained approval from 30 companies in the oblast (there are car-body assembly plants of South Korea in the oblast).

[18] Uzbekinvest homepage (http://en.uzbekinvest.uz/)
[19] Uzbekistan:Health System Review 2007 (Mohir Ahmedov et.al, 2007)

5.5 Health Information

5.5.1 Legislation and regulation

In Uzbekistan, data collection on health statistics is regulated by the special law named "State statistics", which was issued in 2002 and revised in 2012 by the Cabinet of Ministers Decree No.183. The Cabinet of Ministers Decree No 351 issued "About approval of state statistical work scope on 2014" on December 30, 2013. In the system of the Ministry of Health, the statistical accounting processes are regulated by the Ministry of Health order No 287, issued on June 26, 2006. The State Committee of the Republic of Uzbekistan on Statistics and the Institute of Health and Medical statistics (IHMS) under the Ministry of Health are responsible for data collection. The structure and human resources are as shown below.



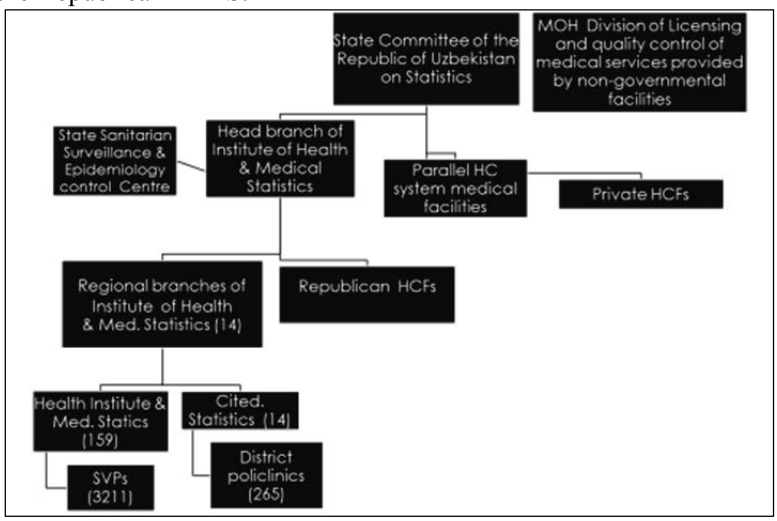
Source: developed by the Survey Team

Figure 5-10 Structure of the Institute of Health and Medical statistics

Table 5-6 Human recourses of the Institute of Health and Medical Statistics

	Healthy life promotion & Health Education division	Medical statistics division	Total
Doctors	521	408	929
Nurses	552	1860	2412
Others	792		

There are the branches of IHMS at oblast and rayon level. Statistical information is collected quarterly and annually reported through SVP⇒Rayon IHMS ⇒ Oblast IHMS⇒ Republican IHMS. Republican hospitals report directory to the Republican IHMS.



Source: developed by the Survey Team

Figure 5-11 Health Information System

5.5.2 Situation of Health Information System

The current data collection system is fragmented and too many collected data are poorly processed. In accordance with the Ministry of Health order, there are 299 accounting indicators for medical curative care facilities, 138 indicators for sanitarian surveillance control system facilities and about 30 reporting forms. Public, private and parallel system health care facilities are required to report the data to different data-collection agencies. Six major data-collection flows are identified as follows. However, these data collecting system function independently. Therefore it is unclear how much the data is duplicated at different level.

1) **State statistics**: The State Committee of the Republic of Uzbekistan on Statistics requires separate reporting of health data through its oblast and rayon branches. This data-collection system covers indicators on morbidity, mortality, births, medical health facilities functioning and logistics. There are 3 statistical forms, which should be prepared and submitted on-line through the web-site regularly:
   Form 1: Medical facilities activities (capacity of inpatient and outpatient departments, staff, incidence and prevalence)
   Form 2: Health care for children
   Form 3: Health cares for pregnant, women in labor and puerperant

2) **Institute of Health and Medical statistics**: The data from all the public health facilities through so-called Rayon Organizational and Methodological Units of District Medical Unions is collected through IHMS. The collected data are then pooled at the oblast branches of the Institute of Health, and then aggregated at its central branch in Tashkent.

3) **Sanitary and Epidemiological System**: Data collection for the sanitary and epidemiological services operates separately from the IHMS system. It is mainly concerned with data related to infectious diseases and hygiene. It is often used for decision making purposes at all levels. Data are collected from all public health care facilities. They are first pooled at the sanitary and epidemiological units at rayon level, and then at the oblast and national sanitary and epidemiological departments.

4) **Programs**: National programs develop their own reporting systems for monitoring and evaluation purposes. Examples of such data collection systems are the Tuberculosis Research Institute with its nationwide dispensary system and the nationwide HIV/AIDS network. The other examples are the collecting data on neonatal death database at the Republican Perinatal Centre, developed with support of UNICEF. The collected information is limited and available only on the top level of the Ministry of Health.

5) **Parallel health systems**: The National Security Service, the Ministry of Internal Affairs, Uzbek Airlines and other ministries and companies use separate reporting systems. Depending on the regions, some of the data collected in this parallel system might not be incorporated into the data collection systems of the Ministry of Health. It is varied by different regions. Some data are used to be submitted to the State Committee of the Republic of Uzbekistan on Statistics.

6) **Private Health system**: The private medical facilities and other facilities run by NGOs submit the data to the State Committee of the Republic of Uzbekistan on Statistics and to the Ministry of Health Division of Licensing and quality control of medical services. Moreover, each service department such as Urology, Cardiology, Ophthalmology, Endocrinology, Obstetrics & Gynecology, Pharmacy and others collect their own data and accumulate them in the head of Tashkent facility without sharing them with the IHMS.

5.5.3 Transition of Health Information System in Uzbekistan

In 1999, the Department of Statistics at the Ministry of Health was merged with the Information Centre and the Computing Centre at the Ministry of Health to form a new department with expanded responsibilities, the Republican Information and Analytical Centre. In addition to data collection, the Centre was responsible for the development of information systems, IT and data analysis. It has played an important role in establishing national strategies and policies with regard to data collection and the development of IT

in the public health care system. The Centre and all its responsibilities were incorporated into the Institute of Health in April 2005.

In a few years later, a new commercial structure "UZMEDINFO" for IT development in Health care system was established. It was equipped by the WB project "Health II". At the present time, all data on Inflectional Epidemiology Surveillance and database on donors and donation are collected and integrated through this structure.

All data-collection systems function independently from each other. It is not entirely clear how far the data-collection systems are coordinated or if any data are pooled at the different levels. The IHMS is the primary data-collection agency for the Ministry of Health. Although the Sanitary and Epidemiological Services forms a part of the Ministry of Health, they collect data relevant to infectious diseases control and health promotion separately from the Ministry of Health system.

Based on the collected data, the IHMS produces a number of different regular reports, which are distributed to relevant agencies within the Ministry of Health. All these reports are designed to facilitate decision- and policy-making at national or oblast levels, with less attention to local (rayon and facility) levels. Due to lack of analytical and statistical training for policy and decision-makers, as well as within the IHMS, use of the collected data might be limited.

Data collection within the IHMS system is mostly carried out manually, especially on the ground levels, at national level all data pooled from the oblasts and entered into an electronic database. The data-collection process conducted by the IHMS is currently limited to the public sector. Currently, there are no effective tools or systems to ensure accurate collection of data in the private sector. However, in the view of the recent expansion of the private sector, there is a need to collect data from the private sector because the government has to identify out-of-pocket payments and pharmaceutical coverage.

In accordance with the work plan of "Health III" project, the system of National Health Accounts (NHA) will be established in order to strengthen health financing and management. And the pilot survey of households on the evaluation for the family budget on medical services was conducted. One of the obstacles of the implementation of this component is the unclear situation with the main owner of the data collection and analyzing process for further distribution. At the present stage, the IHMS does not have recourses and power in collecting data of finance flows from all sources, including state, non-governmental sources and household (out-of-pocket money), spent on the medical services.

5.5.4 Main Issues on Information System

There are following issues and needs on the information system based on the summary of the above-mentioned issues.

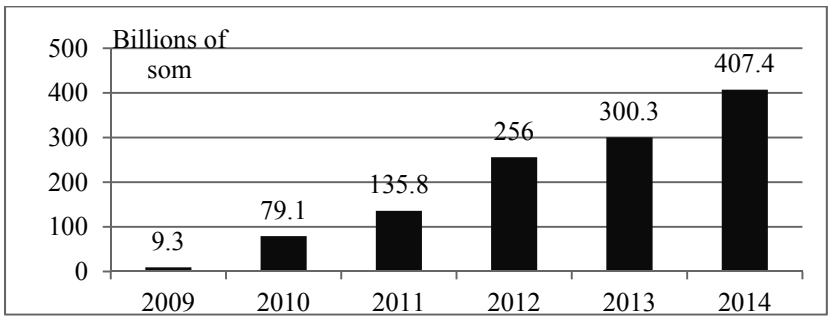
1) Too many indicators, accounting and reporting forms, required from the medical facilities
2) A lot of manual work in filling the reporting forms (high risk of errors because of the human factor)
3) Absence of the unified software tool for collected information, which results in the overload in filling the data form filing and losing some information in the aggregation process
4) Lack of IT specialists for the overall management of hardware and software, especially in regions
5) Poor system and no effective tools to ensure the accurate collection of data
6) Poor technical skills of the IHMS branches in some regions
7) Poor integration and sharing information between different divisions and institutions of the Ministry of Health sector and intersectional information exchange
8) Poor cooperation between the Institute of Health and Chief specialists of the Ministry of Health
9) Lack of knowledge and skills of statisticians on modern statistical analysis tools and methods including forecasting
10) Lack of knowledge and skills of mangers and policy makers on modern statistical analysis tools for forecasting and planning, especially on the NCDs
11) The information from the private sector, parallel health care system and commercial data from the public sector facilities are not provided to the Institute of Health

12) Lack of coordination between two sections (health life promotion and health education and medical statistics) regarding collecting and analyzing the data

5.6 Facility/ Equipment/ Pharmaceuticals

5.6.1 Facility

Health I and Health II projects were implemented to reorganize SVPs and the budget has increased significantly as shown in Figure 5.12. In 2013, 42 new facilities were built and 101 facilities were reconstructed. The total capacity increased to 10,338 beds at 143 facilities. During the Health I project, facilities at PHC level which used to have several different types were integrated into SVP. In addition, the Ministry of Health adopted the recommendations of "the Study on the Restructuring of Health and Medical System" which was conducted by JICA, and the integration of facilities at oblasts and rayons as general hospitals or RMU is in process. In accordance with "Measures of further optimization and efficacy of SVP activities" issued in 2014, the SVP network is optimized by eliminating ineffective SVPs, which do not meet the standard designs, building specifications and standards as well as the requirements of operating safety. Integrating examinations and medical treatments is effective for the cost reduction by sharing laboratory equipment. These activities will improve the quality of medical services and reduce the burden of patients.



Source: Ministry of Health

Figure 5-12 Building, reconstruction and renovation of medical facility buildings (Year 2009-2014)

There are the Ministry of Health standards regarding the floor space, room size, building services and so on, which are required at each facility and each ward. The current proceeding constructions are conducted based on these standards.

5.6.2 Equipment

The standard of medical equipment at each health facility is regulated by the Ministry of Health. The equipment manufacturing company, name of product and type should be registered at the Ministry of Health. Equipment and amount of it at secondary level facility are regulated by Central district hospital and Central district of multidisciplinary clinics based on the number of beds or outpatients (Type I: 150 beds (visits), Type II: 150～300 beds (visits), Type III: more than 300 beds (visits)). Equipment at SVP was procured and provided through the Health I and Health II project. The Health III project will provide equipment at secondary level (RMU) in accordance with the list of equipment standardized by the Ministry of Health[20]. In addition, basic medical equipment and modern medical equipment are provided by other donors (refer to "Chapter 7, (5) GIZ").

Through the visit of hospitals, the provided medical equipment was found appropriately maintained and utilized at the all levels from PHC to higher health facilities. For example, Navoi pediatric hospital received medical equipment (2.5 million US$) through the Japanese grant aid in 1999 and malfunctioned equipment

[20] Main division on control of quality of medicines and medical services of the Ministry of Health developed. Standard equipment of RMU is X-ray imaging apparatus, ultrasonic diagnostic apparatus, sterilizer, syringe pumps, centrifuge and etc. In addition, the necessary equipment in each department of diagnosis, examination, testing, and treatment are determined.

is only one autoclave and two patient monitors for 15 years after the provision. The supply of the components of malfunctioned equipment had been completed, therefore, it is impossible to repair. The rest of the provided equipment is fully utilized and can contribute to health care providers.

The hospitals which can secure stable income such as Samarkand General Hospital update and purchase equipment by themselves.

Regarding the equipment, lack of maintenance and management system and ambiguity about the quantity of existing equipment were pointed out as issues in the interviews. In addition, the improvement of daily maintenance and management system that enables to find and respond to the failure or malfunction of equipment is needed.

Under the current system, if users (doctor, nurse, etc.) find abnormal condition or breakdown, they have to report to the repairing division of the hospital and a director. Then they request UZmedtechnicas[21] of the Ministry of Health or agents of the provided equipment. However, there are some problems such as many of the hospital budgets is labor costs and the technology of UZmedtechnicas has not reached the level of current equipment. In addition, although there is an equipment distributor of German products, the purchase of spare parts require the foreign currency and sometimes exchange from the UZS to U.S. dollar and the euro is difficult. Also, spare parts are not available when needed.

As the modernization of tertiary medical facilities and specialized medical facilities proceeds, the introduction of the latest medical technology and medical equipment is desired. Specifically, image diagnostic apparatus, which contributes to the early detection of the NCDs and telemedicine, are required in order to diagnose and treat patients by using laparoscopy, Digital radiography and ultrasound apparatus. In addition, accurate diagnostic apparatus is required to obtain accurate information in response to an increase of NCDs, such as accurate diagnostic apparatus MRI and CT which enables to identify the tumor position and so on. Furthermore, catheter treatment using a guide wire is needed for NCDs treatment. Japan is dominant in this field[22].

5.6.3 Pharmaceuticals

There is an essential drug list regulated by the Ministry of Health and the list is kept well at each hospital. The number of items is 150 at rayon level and 300 (approximately 30% of them is injections) at oblast level.

Pharmaceutical materials are procured from the winning bidder after the bidding which should be conducted by a hospital. There are several pharmaceutical companies in the local and these companies apply to the bidding. Infusion solution is produced inside of a hospital as traditional method from the former Soviet Union era. Producing pharmaceutical materials inside of a hospital can save money. For example, physiological sodium chloride solution (500ml) is produced by 300- 500som while 3,000som has to be paid if purchased in the local pharmacy. Approximately 20 kinds of pharmaceutical materials are produced inside of a hospital at oblast level. The quality assurance is conducted by oblast SES[23]. Oblast hospitals conduct inventory management by computer.

[21] The joint-stock company by the Ministry of Health, main duties are sale, installation maintenance and repair of medical equipment, make a contract with the Ministry of Health and provide service. They have staff not only in Tashkent but also each oblast.

[22] Based on the interviews conducted at republic level hospitals (cardiology, urology, endocrine special hospital, oncology research centers and so on), MEJ is Medical care in Japan (http://www.medical-excellemce-japan.org), "Internationalization of medical care" (Ministry of Economy, Trade and Industry, May 2013), Medical equipment industry vision 2013 (Ministry of Health, Labour and Welfare, June 2013)

[23] Based on the interview from oblast and rayon hospitals

Chapter 6 Current Situation of People with Disabilities

6.1 Overview

6.1.1 Disability Statistics

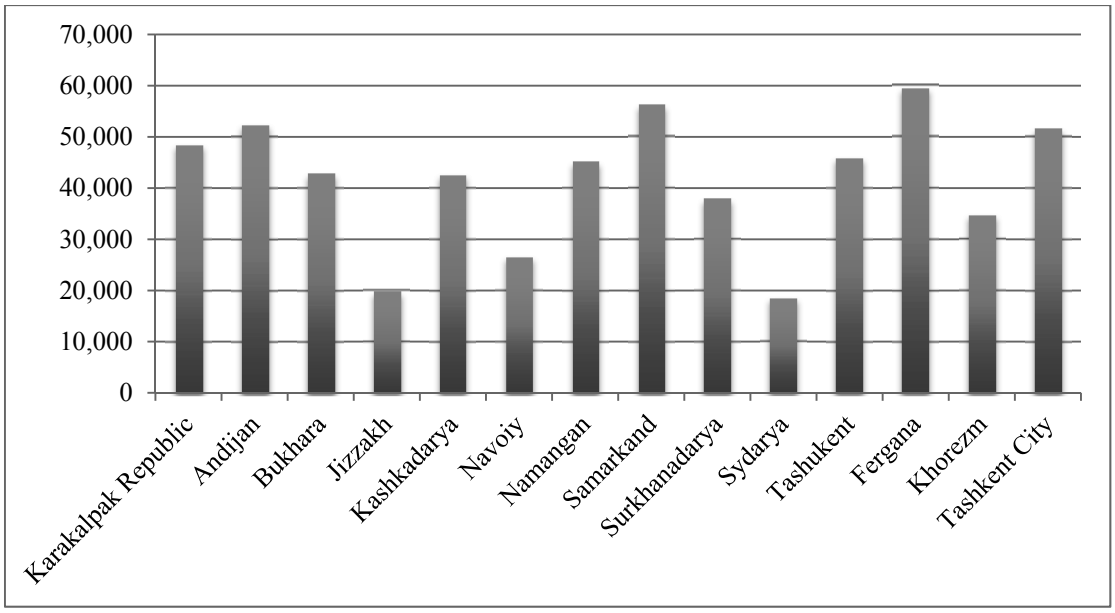
Based on the statistics of 1 January, 2014 from the Ministry of Finance, the number of PWDs in Uzbekistan 16 years old or more is 581,869, which is approximately 2% of the whole population. Among them, males are 348,937 and females are 232,932. A ratio of male and female is rather unbalanced, in other words, male is 60% and female is only 40%. The number of PWDs in each region is shown in Table 6.1. A region of the largest population of PWDs is Fergana, which is 59,480, while the smallest is Syrdarya, 18,451. And a region of the highest ratio of PWDs is Navoi, 3.2%, while the smallest is Kashkadarya, 1.7%.

Regarding the disability group, Group 1 is 56,365 (9.7%), Group 2 is 428,840 (73.7%), and Group 3 is 96,664 (16.6%) in the whole population. More than 70% of PWDs belong to Group 2, while Groups 1, the most severe group, is only less than 10%.

Table 6-1 Number of PWDs in Uzbekistan, above 16 y/o 【Gender・Region・Group】

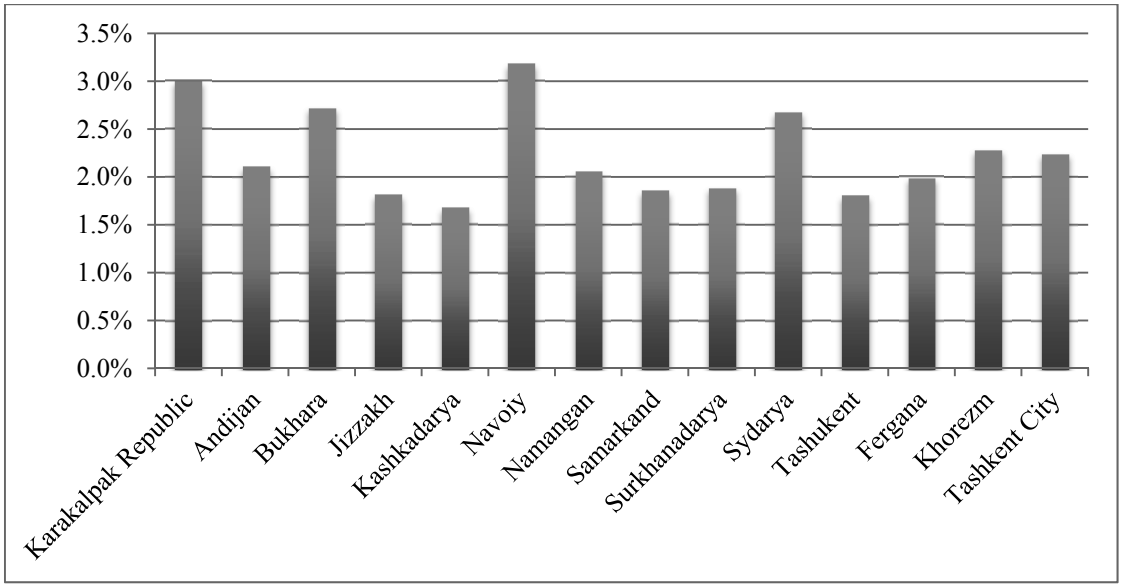
Region	PWDs above 16 y/o			Group		
	Number (Ratio)	Male	Female	1	2	3
KKP	48,379(3.0%)	28,798	19,581	4,646	39,212	4,521
Andijan	52,341(2.1%)	30,392	21,949	5,209	38,103	9,029
Bukhara	42,900(2.7%)	23,937	18,963	3,328	32,631	6,941
Djizzak	19,771(1.8%)	11,955	7,816	1,972	15,084	2,715
Kashkadarya	42,558(1.7%)	25,248	17,310	3,580	30,213	8,765
Navoi	26,530(3.2%)	15,136	11,394	2,589	20,820	3,121
Namangan	45,167(2.1%)	26,786	18,381	3,846	32,840	8,481
Samarkand	56,224(1.9%)	34,649	21,575	7,195	38,552	10,477
Surkhandarya	37,852(1.9%)	24,654	13,198	3,748	26,962	7,142
Syrdarya	18,451(2.7%)	10,934	7,517	1,296	15,553	1,602
Tashkent	45,883(1.8%)	28,146	17,737	4,196	31,794	9,893
Fergana	59,480(2.0%)	36,356	23,124	6,126	42,513	10,841
Khorezm	34,639(2.3%)	21,498	13,141	3,644	26,899	4,096
Tashkent city	51,694(2.2%)	30,448	21,246	4,990	37,664	9,040
Total	581,869	348,937	232,932	56,365	428,840	96,664

Source：Ministry of Finance (Obtained 15 May 2014)



Source: Ministry of Finance (Obtained 15 May 2014)

Figure 6-1 Number of PWDs in Each Region



Source：Ministry of Finance (Obtained 15 May 2014)

*General population of each region is referred from http://www.citypopulation.de/Uzbekistan.html

Figure 6-2 Ratio of PWDs in Each Region

6.1.2 Definition of Persons with Disabilities

Based on the Law on Social Protection, PWDs are defined as following,

A PERSON THAT IN ACCORDANCE WITH THE ESTABLISHED LEGAL REGULATIONS DEFINED AS DISABLED PERSON BECAUSE OF LIMITATIONS IN DAILY LIFE CAUSED BY PHYSICAL, INTELLECTUAL, MENTAL OR SENSOR DEFECTS, AND DEPENDS ON SOCIAL ASSISTANCE AND PROTECTION *(Clause- 3)*

6.1.3 Types of Disability

Based on the Degree of Cabinet Ministries No. 195, 2011, types of disabilities are defined as following,

1. Disorders of mental functions (perception, attention, memory, thinking, intelligence, emotions, will, consciousness, behavior, psychomotor functions);
2. Disorders of language and speech functions (oral disorders, rhinolalia, dysarthria, stuttering, alalia, and aphasia) and writing (dysgraphia, dyslexia), verbal and nonverbal speech disorders of voice;
3. Violations of sensory functions (vision, hearing, smell, touch, tactile, pain, temperature, and other kinds of sensitivity);
4. Violations of dynamic functions (motor functions of the head, trunk, limbs, statics, motor coordination);
5. Disorders in the blood circulation, respiration, digestion, excretion, blood, metabolism and energy, internal secretion, immunity;
6. Disorders caused by physical deformity (deformation of face, head, torso, limbs, leading to an external deformity, abnormal openings digestive, urinary, respiratory tract, impaired body size)

6.1.4 Criteria for Disability Examination and Responsible Agency

There are two agencies which are in charge of the examination of disability, 1) Medical-Labor Expert Commissions (MLEC), and 2) Medical-Consulting Commissions (MCC). MLEC is in charge of 16 years old and above, while MCC is responsible for less than 16 years old. (Law on Social Protection, Clause 4)

Examination of MLEC aims at the following,

- Determining the status of limitation in daily life, work ability, disability group, disability causes, starting point and duration of disability;
- Determining the degree of disability of persons who received employment injury or other damage to health associated with the performance of their work duties, as well as their needs in additional forms of assistance;
- Identifying measures of medical, social and professional rehabilitation of disabled persons, taking into account their health condition and work ability;
- Issuing recommendations on employment, training and retraining of disabled people.

People in Uzbekistan need to go either to MLEC or MCC in order to have a certificate of disability. For people above 16 y/o, there are 3 categories to identify the level of disability, group 1 is the most sever, and group 2 is moderate and group 3 is rather minor disabilities. People in group 1 & 2 are entitled to receive either pension or social allowance, while group 3 is entitled for only social welfare services[24].

Disability grouping will be made by MLEC based on following 7 check items[25], that are namely, 1) ability of self-service, 2) ability of independent movement, 3) ability of orientation, 4) ability to communicate, 5) ability to control their behavior, 6) ability to learn, mastering and usage of knowledge, and 7) ability to work. In each 7 check-item, there are 3 levels of disability. For example, in case of "ability to self-service", there are following degree,

Degree I	Long-term self-service ability , carrying out the parts of its implementation, reducing the use assistive technology as much as possible
Degree II	Self-service ability with a regular partial assistance by other persons, using assistive technology if necessary;
Degree III	Inability of self-service, needs in constant assistance by other persons and complete dependence on others;

In fact, there are 3 degrees for each 7 items and based on criteria, MLCE will examine the level of disabilities. Basically, degree III means Group 1, Degree II means Group 2, and Degree I means Group 3.

[24] Since December 2010, people in Group 3 are no longer a recipient of social allowance due to their sufficient work ability. (UNDP 2012)
[25] 1 July 2011, Order of the Cabinet Ministries No. 195

The MLCE committee consists of at least 3 doctors who have special qualification to be a member of MLEC. For example, the MECL committee in Samarkand region consists of 3 doctors; each of them has different expertise, such as surgery, neurology and counseling.

MCC is actually a medical clinic in a district. MCC also consists of at least 3 doctors. Usually, a head of district clinic will be a chairman of MCC, and the sub-head should be a vice-chairman. Then one more doctor should be included in the MCC. The role of MCC is to examine children with disabilities, to provide a disability certificate, to assist in applying social allowance, and to give advice on daily life, education, etc.

The MLEC and MCC are also in charge of Individual Rehabilitation Program (IRP). Based on the level and type of disability, IRP is developed. And based on the IRP, PWDs can receive free rehabilitation services.

6.1.5 Social Allowance and Pension for PWDs

In Uzbekistan, PWDs are entitled to either pension or social allowance (Clause 26, Law on Social Protection). PWDs who are under 16 years old are entitled to social allowance, while those above 16 years old can choose either social allowance or pension. Depending on the length of working experiences, the amount of pension would be different. The amount of social allowance and pension is as following,

Table 6-2 Monthly Amount of Social Allowance and Pension

	Social Allowance	Pension
Identified as disabled before 16 y/o	187,970 som Approx. 200% of minimum wage (Lifelong service)	None
Above 16 y/o but less than 2 years work experience	115,340 som Approx. 120% of minimum wage	None
Above 18 y/o and more than 2 years work experience	None	187,970 som or above (depends on years of employment)

Source：made by President Decree No.4582 issued on 2 December, 2013
* Minimum wage in Uzbekistan is 96,105 som monthly since 15 December, 2013
** Nation's average monthly wage is 476,400 som in 2010 in Uzbekistan (UNDP 2012)

In order to receive a pension, more than 2 years official working record is necessary. In Uzbekistan, there is a labor book for all the population in which working records are kept. In case if they become disabled due to working accidents, then they can choose either higher amounts between 55% of salary or minimum wage from the company. However, if a person is above 18 years old but has no 2 years working experience, then he or she can only receive social allowance, 115,340 som.

PWDs are able to receive pension or social allowance, while receiving salary from a company. This is special privilege for PWDs. The Government would like to motivate PWDs to work. Therefore, the Government decided not to take out benefits of social allowance or pension even after they get employed.

Financial source of social allowance is taxes, while pension is covered by a fund of social tax. Every employer needs to pay a social tax, the amount of which is 25% of each employee's salary. Among 25% of social tax, 24.8% is utilized for pension, 0.1% is for an employment support center, and the last 0.1% is for a labor party.

6.1.6 Welfare service

As welfare services for PWDs, medicine, technical or other types of devices, basic care services, transportation, necessary housing space, etc., will be provided for free or at a discount price (Clause 31 Law on Social Protection). A compulsory education is free of charge and special boarding schools provide food, accommodation and monthly stipends. However, during the schools age, children with disabilities

will not receive social allowance if they are in a boarding school.

6.2 Rehabilitation

There are three types of rehabilitation in Uzbekistan, which is 1) medical, 2) social and 3) professional rehabilitation. PWDs are able to have rehabilitation according to IRP (Clause 14 Law on Social Protection). On the other hand, there are no rehabilitation experts such as physiotherapist, occupational therapist, and prosthetist and orthotist. Rehabilitation is the responsiblity of doctors (physiatrician) and implemented by clinical nurses.

6.2.1 Medical Rehabilitation

All hospitals and medical clinics under the Ministry of Health provide medical treatment and rehabilitation. In Uzbekistan, there are 4,152 ambulatory care facilities, and 741 institutions of hospitalized care and among them, 520 institutions are hospital. In hospitals, a physiatrician gives rehabilitation order to nurses, who had a short time training of 3~4 months. Nurses provide rehabilitation service according to the instruction of the physiatrician. So the level of rehabilitation seems not so high. All the rehabilitation services are completed within hospital and it is difficult to provide support at home and communities.[26]

6.2.2 Social Rehabilitation

Social rehabilitation is given at 12 rehabilitation centers in Uzbekistan. The National Rehabilitation Center (NRC), divided into 2 facilities, is located in Tashkent city and other 10 rehabilitation centers are in the region. NRC has 130 beds and deliveres rehabilitation services for around 5,500 patients per year. NRC provides not only service of physiotherapy, exercise therapy, massage, prosthetics and orthotics, but also surgery, ultrasonic diagnostics, orthopedic surgery, neuropath logical diagnosis, cardiac electro gram, X-ray, ultraviolet phototherapy and dental clinic. In fact, social rehabilitation has a lot of medical treatment. Occupational therapists and social workers are not working at a rehabilitation center. Actually such occupation as well as license does not exist in Uzbekistan. Social rehabilitation basically takes place in a rehabilitation center but not at home and in the community.

There are only 10 prosthetists and orthotists in Uzbekistan and 7 of them are working in Tashkent. Among them, only one is trained at Russia and he actually trained 9 others on the job based training. So actually 9 prosthetist and orthotist did not go through the official training, and also there is no such license in Uzbekistan.

NRC received medical equipment such as X-ray tube, a set of mechanical brushes and blocking signal brush for the CT scanner through Japanese official development assistance (2009). All equipment given to NRC are carefully utilized and maintained but two machines are already broken down and not yet fixed due to the availability of spare parts.

NRC in Tashkent is conducting human resource training for doctors and staff of regional rehabilitation center almost every 3 months. NRC is trying to provide the same quality of rehabilitation service in the region. However, equipment in NRC is much modern compared to other regional centers so that the needs of such modern rehabilitation equipment are very strong from the region.

Regional rehabilitation centers are located at 10 different regions except Bukhara and Syrdarya, and services provided are basically the same as NRC in Tashkent. However, capacity of regional centers is usually smaller than NRC. Regional centers usually have 50 beds compared to 130 beds of NRC. And only Samarkand and Khorezm have a surgery room.

In fact, the Government of Uzbekistan provided the same medical equipment for all regional rehabilitation centers in 1988. However, additional equipment is not given since then so that each regional center must obtain new necessary equipment by their own efforts. For example, the rehabilitation center in Samarkand

[26] Interview with JOCV working at Fergana Regional Hospital as a physiotherapist（9 May 2014）

has 75 beds and bought new equipment such as a surgery bed. Actually the center is managing a Children hospital as well so that they have extra profit from patients. However, at the same time, their X-ray machine is so old as it is made in 1978. Another example is a rehabilitation center in Karakalpakstan. They received X-Ray machine from a grass-roots grant of the Japanese embassy. However, other equipment is very old.

Both rehabilitation centers in Samarkand and Karakalpakstan are very clean and well maintained. Even though equipment is old, it is carefully and functionally utilized. It is obvious that doctors and nurses are using such equipment and machines in very careful manner.

A rehabilitation center in Samarkand has 1,200 ~ 1,500 patients per year. It is rather smaller scale compared to Tashkent of 5,500 patients. However, they accept patients without disabilities and also patients from other regions. In fact, patients need to wait for 2 weeks to be hospitalized so that a director of the center has to run the center in efficient manner.

6.2.3 Professional Rehabilitation

Employment Support & Social Protection Center (ESC) is a responsible agency for professional rehabilitation. ESC has a similar function with a Japanese institution named "Hello Work". After medical and social rehabilitation, PWDs can go to ESC to look for a job. Actually the kind of job that PWDs can do such as accountant, teacher, factory worker, etc., is described in IRP issued at MLEC. Based on MLEC's recommendation, ESC will support PWDs to look for a job.

The criteria to decide workability of PWDs is written in Cabinet Decree 195, 2011 as below,

Degree I	Ability to perform work under normal working conditions at lower qualifications, complexity, pressure, and (or) a reduction in the volume of work, the inability to continue to work on the main profession while maintaining the possibility to perform in the usual working conditions with lower qualifications;
Degree II	Ability to perform work in a specific working conditions with additional technical assistance means and (or) with the help of others;
Degree III	Inability (or contraindications) to work.

If PWDs belong to Group 1, most severe group is examined as Degree I or II, those PWDs are actually considered that they have work ability. For example, the totally blind person basically belongs to Group 1, but if MLEC categorizes them as Degree I or II, then ESC can consider that they can work.

When PWDs go to an interview, a company needs to decide whether they will hire him/her within 5 days after the interview. If PWDs are Degree I or II, then a company is unable to reject him/her due to his or her disability. If a company rejected because of disabilities, then they must pay fine which is 5 to 7 times higher than minimum wage[27]. If a company does not pay fine, a court will involve the case and give the order to pay. On the other hand, if MLEC decides that PWDs are Degree III, unable to work, then ESC does not need to provide support, since a company does not have an obligation anymore.

According to MLEC, writing "Degree III, inability to work" is no longer common nowadays especially after Cabinet Decree No.195, 2011. MLEC is now trying to find ability of PWDs[28]. However, it is still not so clear how MLEC actually can find work ability of PWDs since they are medical experts but not employment expert of PWDs. On top of this, once PWDs are identified as Degree III, it is rather difficult to change it[29]. In fact, there are still a number of PWDs identified as Degree III.

According to ESC, it is not so difficult for PWDs of Group 3 to find a job since they can actually work like other citizens. And even Group 1 and 2 are trying to find ability of PWDs and connect them with any

[27] Minimum wage at December 2014, is 96,105 som (USD 41), it is therefore, fine is 480,525～672,735 som (USD 200~290)
[28] Interview with MLEC in Samarkand (2 May 2014)
[29] Interview with PWDs in Tashkent (14 May 2014)

potential employers[30].

6.2.4 Community Based Rehabilitation (CBR)

Community-Based Rehabilitation (CBR) is not widely known and not implemented in Uzbekistan. However, Japanese NGO, World Vision Japan, supported by JICA grassroot grant conducted CBR project in Tashkent city (2008-2010). The project was conducted in 10 different Mahara, local community, in Tashkent city. The objective is to promote participation of PWDs in the society through community support. In this project, 3 components were considered important which were 1) advocacy, 2) accessibility and 3) rehabilitation. Advocacy is important for community to understand disabilities, accessible environment is important for PWDs to go around the community, and providing appropriate rehabilitation and assistive devices is inevitable to empower PWDs. With those 3 components, the community understands the importance of empowerment and accessible environment. After this project, a several number of PWDs became a leader and are actively working even now.

6.2.5 Institution for PWDs

There are at least 20 institutions for PWDs in Uzbekistan, which are 8 institutions for male psychiatric disability, and 8 institutions for female psychiatric disability, and 4 institutions for children with disabilities.

In Karakalpakstan, there is an institution for female psychiatric and intellectual disabilities. It was established in 1984 and 168 PWDs are institutionalized in May 2014. Among them, Group 1 of PWDs is about 30%, and the rest of 70% is Group 2. The average age of PWDs is about 40-45 years old and a length of stay is from a few years to over 30 years. All programs such as dressmaking, weaving, and planting are conducted within the institution. PWDs need permission if they want to go out of the institution. And also a person from outside needs to have permission if they want to see PWDs inside, even family members. Only a few people usually can leave the institution per year. In order to leave the institution, PWDs need to have permission from a doctor as well as family members[31].

A few of persons with severe psychiatric disability are also staying in this institution but we could not see them during our visit. Inside of the institution such as corridor, canteen, work place, etc., is very clean. It looks that PWDs in the institution are behaving very well and conducting assigned work in order.

[30] Interview with Director of Samarkand ESC (2 May 2014)
[31] Interview at Institution at Karakalpakstan (19 May 2014)

6.2.6 License and Responsibility for Rehabilitation Workers

Title	Responsibility	Training/License
MLEC: Medical Labor Expert Commission MCC: Medical Council Commission	Examining level of disability, making individual rehabilitation program, providing advice/recommendations for employment	Need to have special education about disability after obtaining doctor license. Need to sit an examination in every 5 years. At least 5 years working experience as a doctor with special expertise such as surgery, neurology, or counselling, etc.
Medical Doctor	Medical and Social rehabilitation, such as surgery, counselling.	Doctor license, plus, further study of orthopaedic surgery, internal medicine, respiratory disease, neurology, psychiatry, etc.
Physiatrician	Provide prescription of exercise therapy, physical therapy, massage, etc.	Doctor license, plus further study and license of physiotherapy
Nurse (Physiotherapy)	Implement exercise therapy, physical therapy, massage, etc., based on the prescription.	Nurse license plus on the job training for exercise therapy, physical therapy, massage, etc.
Physical Therapist Occupational Therapist	None	No license system as rehabilitation expert.
Prosthetist and Orthotist	Making Prosthetics and Orthotics	No license system. One trained from Russia but other 9 persons are on the job training.
Social Worker	Providing social service to PWDs including medical and health services	No license system but there is bachelor and master degree for social work since 2006.

6.3 Employment and Vocational Training for PWDs

6.3.1 Employment of PWDs

According to Samarkand Disabled Organization, only 30% of PWDs above 18 years old are working. Among them, most of people are working in the informal sector like self-employment. And officially employed PWDs by companies are probably less than 5%. Although it depends on types of disability, visually impaired persons are rather better than other types of disabilities in terms of the condition of employment. However, it is rather difficult for persons with intellectual disability to work[32].

On the other hand, according to UNDP report in 2012, the recent trend of employment for PWDs is relatively improving. For example, in 2010, 7,559 PWDs were employed from the list of 18,555 job opportunities. The number of employment is more than 3.5 times higher than 2008, which was 2,032 PWDs.

It is probably true that the number of employments increased due to the amendment of "Law on Social Protection" in 2008, and Cabinet Decree of No. 186, "On Approval of Regulations on Reservations of Jobs for Vulnerable People in Need of Social Protection and Assistance in Employment". Especially 3% of employment rate for PWDs are driving force for companies to employ PWDs. If companies cannot meet 3% quata, the companies need to pay fine[33]. Therefore, a company cannot reject PWDs because of their disability[34].

[32] Assumption from Interview with Samarkand Society of Disabled, Society of the Blind, Deaf Culture Center, etc.,

[33] Clause – 25: Provision of jobs to disabled people: Three percent of workplaces in the organizations, institutions and enterprises that have over twenty employees are to be allocated for disabled people and it is secured by the local government. Disobeying the decree of local government on allocating the minimum number of job places for disabled people, the organizations, institutions and enterprises are to pay a penalty for every unallocated job place in the amount equal to the annual average wage of the employee of the organization.

[34] Clause – 24: Implementation of employment rights by disabled people disabled person has a right to work in ordinary

Besides, due to the order of regional governor every September, a company needs to provide an employment report to the government. In this report, employment ratio of PWDs needs to be described. Further, a company needs to provide a list of vacancy to the government every 3 months in which a company has to provide vacancy for PWDs in case if they did not meet the employment ratio. The job vacancy can be advertised at newspaper, etc., but if they hired PWDs, they need to report it to ESC.

According to UNDP (2012), an average monthly income of PWDs is about 265,000 som, which is nearly 50% of an average income of general population in Uzbekistan, which is 476,000 som. However, the income is better than social allowance, which is 189,000 som. Besides, actually PWDs are entitled to receive income as well as social allowance, even though they had a job. This is special treatment by the government so that if they combine income and social allowance, the amount would be nearly the same as the national average. Lastly, an average income is not much different between Groups 1 to 3, in case if they are working. The average of Group 1 is 248,000 som, while that of Group 3 is 285,000 som.

6.3.2 Vocational School for PWDs

There are 4 vocational schools[35] for PWDs in Uzbekistan, which can accommodate more than 1,500 students. The curriculum of such vocational schools is basically the same as following,

1) Dress making
2) Weaving
3) Shoe-making
4) Repairing radio and TV equipment
5) Craft making
6) ICT training
7) Accounting

It depends on the school but students with intellectual and hearing disabilities are the largest group, and physical disability is next, and some visually impaired students are studying as well.

In Samarkand Vocational School for PWDs, 77 students are studying dress making, and 75 are craftwork, 60 are shoe making among 256 students. In terms of the type of disabilities, 96 students are intellectual disability, 109 are hearing impairment or deaf, and 36 are physical disability. For deaf students, a sign language interpreter is provided. And in Fergana Vocation School for PWDs, Group 1 is 46 students (10%), Group 2 is 283 students (63%), and Group 3 is 97 students (22%).

Students with disabilities are able to study at a vocational school after graduation of 9 years compulsory education. The student age is around 16-18 years old. The duration of study is basically 2 years but if students wish to study more, they can extend one more year. The school is free of charge, and provides accommodation, food, and monthly stipend.

Graduates are basically able to get a job, however, there is no official statistics available. It is rather difficult to identify what kind of work that students have had, since many of them are going back to their hometown. Graduates are able to have employment service from ESC in their region so that they are either going to ESC or establishing their own small business. And only a few students from vocational school are able to go to the university.

It is just an impression that disabled students going to those vocational schools seem not to have severe disabilities. It was actually students called intellectual disability that they are taking a class of radio and TV repairing and learning about electrical circuit diagram. It is sometimes difficult even for those with non-

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workplaces, specialized organizations, workshops and fields for disabled people; moreover they are legally allowed to run individual enterprises or other activities which are not prohibited by law.
Disability must not be a reason for not signing employment contract, promoting to different work position, terminating employment contract with the initiative of the employer and moving disabled person to different position without his/her agreement.

[35] There are two vocational school in Tashkent, and one for Samarkand and Fergana

intellectual disability since it requires basic knowledge of mathematics, physics and reading. Only a few students using a wheel chair and/or crutches were observed. In fact, many students do not require any assistive devices.

6.3.3 Contribution of Disabled People Organizations

Disabled People Organizations (DPOs) are also playing an important role in promotion of employment for PWDs. For example, Samarkand Disabled Organization collaborates with ESC and supports PWDs to find a job. They will suggest potential work to any member of the organization. At the same time, they advocate employers who have negative impression of PWDs. They believe that it is better for employers to understand the merit of hiring PWDs in terms of tax, etc. Further, they will provide a short time on the job training session for PWDs in order to see whether then can work at a company. This is better for employers as well since they can see the ability of PWDs. Due to those efforts, there are several companies in Samarkand employing PWDs such as dress making companies.

On the other hand, they suggest self-employment and/or small business if working at company is difficult. In order to do this, they look for donation first, and if they get it, they provide a small grant to start a small business such as bakery shop, barber shop, small dress making shop, chicken or goad feeding, etc. This is actually better for PWDs who have difficulty in commuting. There are actually a number of DPOs supporting PWDs to find a job. For example, the Blind Association in Tashkent has been promoting self-employment of the blind who are producing some living products such as paper craft, plastic, sheet, mat, etc. Besides, the Blind Association, Millennium, Deaf Association, UzOI, Business Women with Disabilities are running their own factory and employing more than 200 PWDs. Those companies run by PWDs do not need to pay profit tax and social tax etc.

6.4 Education of PWDs

6.4.1 General Education System

In Uzbekistan, the education system is 1) Primary Education (Grade 1-4), 2) Basic Education (Grade 5-9), 3) Secondary Education (3 years) and 4) Higher Education (4 years). In 1997, compulsory education became 12 years. Compulsory education is basically free. One public school usually takes care of primary and basic education for 9 years, and there are 9,800 public schools in Uzbekistan, accommodating 5,690 thousands students (Fiscal year 2006-2007)[36]. For Secondary education, it is divided into two types; 1) Academic Lyceum, and 2) Professional College. There are 99 Lyceum schools with 49,600 students and 953 Professional Colleges with 587,600 students. In fact, only 8% of students are going to Lyceum[37]. Lastly, there is pre-schooling system for those between 3-6 as well.

6.4.2 Education for PWDs

According to a report of UNESCO, there are three types of schooling for PWDs in Uzbekistan, which are 1) Boarding school, 2) Home-based school, and 3) Regular school. And through this schooling system, PWDs in Uzbekistan can basically access to education[38]. On the other hand, education for PWDs is basically provided only for the primary and basic 9 years education. This is because the capacity of vocational school for PWDs is only 1,500 students. Besides, a number of PWDs going to university is very few.

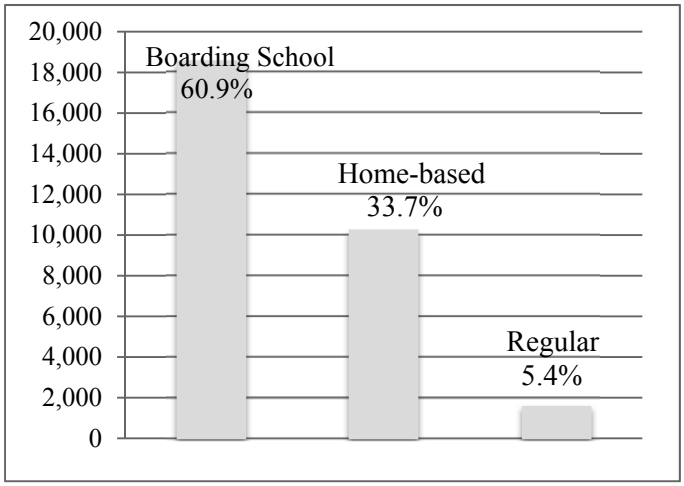
The uumber of children with disabilities receiving education is as below;

[36] p132, Central Asia Sub-Region EFA, Mid-Decade Assessment, Synthesis Report, UNESCO (2008)
[37] p134, Central Asia Sub-Region EFA, Mid-Decade Assessment, Synthesis Report,, UNESCO (2008)
[38] p136, Central Asia Sub-Region EFA, Mid-Decade Assessment, Synthesis Report,, UNESCO (2008)

Table 6-3 Number of Children with Disabilities receiving Education

	Boarding School	Home-based School	Regular School	Total
2000	20,853	3,316	879	25,048
2005	19,950	8,471	1,682	30,103
2010	19,147	11,055	3,353	33,555
2011	19,049	9,886	1,775	30,710
2012	18,559	10,268	1,631	30,458

Source：UNICEF-Central Asia Child Protection Forum-Uzbekistan 2013



Source: Made by UNICEF (2013)

Figure 6-3 Number of Ratio of Children with Disabilities 2012

Based on the above figure, the number of pupils attending a boarding school is about 20,000, among 30,000 pupils in compulsory education. And about 10,000 pupils are receiving home-based education, so that the number of pupils with disabilities who are attending a regular school is only around 1,600 to 1,700 (5%). A boarding school including tuition, food and accommodation is free, although they do not receive social allowance during their stay in the school.

There are 86 boarding schools in Uzbekistan in 2006, and Table 6.4 shows the number of schools and types of disabilities, such as intellectually retarded, blind, poor vision, deaf, poor and hard of hearing, polio and cerebral palsy, grave speaking disabilities, impaired psychological development, etc. The number of schools accommodating intellectual disabilities is 49, and 9 for the blind, 13 for the deaf. On top of this, sanatoria boarding schools are 23, where pupils with disabilities who need medical care are attending. There are several special teaching materials and textbooks, such as computers for the blind, in the boarding schools.

Table 6-4 Schools for Children with Disabilities, Sanatorium Schools

	2000/ 2001	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007
Schools for children with intellectual or physical disabilities - total	87	85	85	85	85	86	86
Including the children:							
Intellectually retarded (auxiliary schools)	52	52	53	50	51	49	49
Blind	8	8	8	9	8	9	9
Poor vision	2	3	3	3	3	3	3
Deaf (deaf and dumb)	12	12	11	13	13	13	13
Poor and hard hearing	6	6	7	5	5	5	5
Consequences of polio and cerebral palsy	1	1	1	1	1	1	1
Grave speaking disabilities	1	1	1	1	1	1	1
Impaired psychological development	1	1	-	2	2	4	4
Other	4	1	1	1	1	1	1
Sanatoria-forest schools	6	3	3	3	2	-	-
Sanatoria boarding schools for children with various illnesses	15	20	19	16	19	23	23

Source：Primary and Secondary Education in Uzbekistan – Statistical Bulletin (2000-2006)

Table 6-5 shows that the number of pupils with intellectual disabilities is larger than other types of disabilities, which is more than 10,000 among 20,000. And deaf pupils are about 3,500 and the blinds are 1,600.

Table 6-5 Number of Pupils at Schools for Children with Disabilities and Sanatorium Schools (Thousand persons)

	2000/ 2001	2001/ 2002	2002/ 2003	2003/ 2004	2004/ 2005	2005/ 2006	2006/ 2007
Total	19.8	21.8	21.0	19.2	18.8	19.0	18.8
Including in schools for:							
Intellectually retarded (auxiliary schools)	11.5	14.6	13.9	11.6	11.2	10.6	10.5
Blind	1.9	1.5	1.4	1.5	1.5	1.7	1.6
Poor vision	0.5	0.6	0.6	0.6	0.6	0.6	0.6
Deaf (deaf and dumb)	2.6	2.9	2.8	3.1	3.2	3.4	3.5
Poor and hard hearing	1.5	1.4	1.6	1.1	1.1	1.1	1.2
Consequences of polio and cerebral palsy	0.2	0.2	0.3	0.3	0.3	0.3	0.3
Grave speaking disabilities	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Impaired psychological development	0.2	0.2	-	0.5	0.4	0.8	0.7
Other	1.0	0.1	0.1	0.2	0.2	0.2	0.1
Number of students in the classes for children with intellectual or physical disabilities, established under general education schools	1.1	0.8	0.9	0.8	0.4		
Intellectually retarded children	0.3	0.4	0.5	0.3	0.4	0.3	0.3
Children with impaired psychological development	0.8	0.4	0.8	0.1	0.2	0.1	0.2
Students in Sanatoria – forest schools	1.8	0.8	0.9	0.8	0.4	-	-
Sanatoria and boarding schools for children with various illness	4.2	5.6	5.7	5.0	5.9	6.5	6.5

Source：Primary and Secondary Education in Uzbekistan – Statistical Bulletin (2000-2006)

It is said that the level of the education at boarding schools is the same as other regular schools, however, depending on types of disability such as intellectual, contents of education seems to be changed. Further, a sign language at deaf school is not allowed for deaf students so that they need to study by oral education. Speech exercise is included as compulsory subject so that according to deaf organization, deaf students lose their motivation to learn at school[39]. In Uzbekistan, deaf people generally use Russian sign language. A few number of sign language interpreters who were trained during the Soviet time is working. The sign language textbook made by JICA is still in use for deaf pupils and interpreters.

After graduation of the boarding school, pupils have mainly two choices of either going to a vocational college for PWDs or going back home and work. The capacity of 4 vocational schools is only 1,500 students, so that it will limit opportunities for them to have further study. Besides, the level of home-based school is actually low, in which a teacher would visit only a few times a week. It is, therefore, difficult for them to study upper level as well. Graduates of home-based schools are usually remaining at home even after the education. As a result of such education system, it is difficult for them to study at university level.

[39] Interview with Deaf Society in Karakalpakstan (20 May 2014)

6.4.3 Inclusive Education

The project of "Inclusive Education for Children with Special Needs" has taken place since March 2014 by human dynamics, a consultation company, supported by EU. This is a 2 year project in which they will train 670 teachers and 170 support staff, and provide consultation and support to at least 1,350 children and parents. The target area of the project is Tashkent, Samarkand, Namangan, Khorezm and Surhondaryo. As the outcome of this project, a resource center will be established and a long term strategy will be made as well.

According to the UNICEF (2013), there were other inclusive education projects taken places in Uzbekistan. However, it is still pilot based and not expanded to nationwide. On the other hand, Education Sector Plan 2013-2017 was made and the Ministry of Public Education, Ministry of Health, Ministry of Labor and Social Protection of Population, and Ministry of Higher and Secondary Special Education are interested in promoting inclusive education.

Asia Developing Bank (ADB) has actually implemented a project, "Basic Education for Children with Special Needs 2006-2009", which was inclusive education. However, an official report is not yet released so that the actual outcome of the project such as progress of inclusive education, establishment of model school and expansion it to nationwide, etc., is not clear to the public[40].

6.5 Information and Communication

Computers for visually impaired people which have JAWS screen reader (Russian version) are provided at vocational schools for PWDs. However, it is still difficult for the blind students to have a job with computer skill. Therefore, computers are used for reading textbooks and/or materials in class[41]. Audio books are not yet provided at vocational schools and the blind students are using portable voice recording machine in class.

6.6 Organization of/for PWDs

In Uzbekistan, Law on Social Protection defines a public organization of disabled people as following,

> Clause – 32: the concept of public organizations of disabled people
> The organizations established by disabled people for the purposes of protecting their rights, independence and legal benefits and providing equal rights as other people is named public organizations of disabled people.
>
> Clause – 33: the establishment of public organizations of disabled people
> Public organizations of disabled people can be founded in accordance with the regulations described in the legislation.

At the moment, 1) Uzbek Society of Disabled People, 2) Uzbek Blind People Society, and 3) Uzbek Deaf People Society are registered as a public organization.

6.6.1 Disabled People Organizations

The history of Disabled People Organizations (DPOs) in Uzbekistan is rather long. Deaf society and Blind society were established in 1930s[42], while an organization for physical disability was established in the late 1980's. Those organizations are centralized and PWDs who belonged to the organization were able to work in their own factories. This system was established during the Soviet time and is still remaining in Uzbekistan. The organization structure of those public organizations was made along with the Government system in which they have branches in regions and districts. For example, the Blind Society has branches in 14 regions and 184 districts, while Disabled Society has branches in 120 districts.

[40] Interview with human dynamics (13 May 2014)
[41] Interview with vocational school for PWDs in Samarkand and Fergana (3 & 10 May 2014)
[42] Katsui (2005): Soviet government established disabled people organizations in each region

In case of Samarkand Disabled Society, the objective is to promote rights of PWDs and equal participation in the society. They provide support to the members based on the objective. The number of their members is nearly 10,000 PWDs among 52,000 PWDs in Samarkand region. About a half of the members belong to Group 3 (minor disability), and Group 1 members are very few. Members using a wheel chair are only about 40-50 persons.

They provide support not only in employment but also in training and seminar for PWDs. They basically do not receive financial support from the government so that they must do fund raising by themselves. In fact, a large number of members are seeking a job so that they are in collaboration with ESC to promote employment of PWDs. They also organize seminars and training for employers to teach the merit of hiring PWDs such as tax exemption.

Actually a number of private organizations of/for PWDs have been established. Among them, active organizations are Millennium, DET Facilitator Group, Istiqbol, etc. Millennium is good at promoting employment and Istiqbol was established in 2009 right after CBR training held at Asia Pacific Development Center on Disability (APCD). They are promoting advocacy of the disabled. DET Facilitator Group has been conducting DET training more than 50 times, which was established by participants of DET facilitator training supported by JICA.

On the other hand, collaboration and unity among those public and private organizations are still in infancy. A national umbrella organization that can coordinate disability issues nationwide is not yet established. In 2012, Consultative Council of NGO for PWDs was established in order to promote CRPD and unit organizations for PWDs, however, it is not yet registered as NGOs. And the network and collaboration with other disabled organizations in the region is still weak.

The list of organizations of/for disabled is following,

1. Uzbek Society of Disabled People
2. Uzbek Blind People Society
3. Uzbek Deaf People Society
4. Consultative Council of NGO for PWDs
5. Millennium
6. DET Facilitator Group
7. Istiqbol
8. Opa-Singilar (Society of Disabled Woman)
9. STATUS – Social and Legal Support Center for Spinal Disabled People
10. Republican Association “Chernobyl People of Uzbekistan”
11. Republican Charity Fund of Afghan War PWD
12. Republican Fund of War PWD “Mehr-shavkat soglomlatirish sport”
13. Association of Disabled Athletes of Uzbekistan
14. Public Aid Centre “Umr” for Disabled Children and teenagers Suffered from Palsies
15. Anti Cancer Society of the Republic of Uzbekistan
16. “Panoh shulasi” Fund for Rehabilitation of Uzbek Children with Visual Disabilities
17. Association of business women of the Tashkent region “Tabdirkorael”
18. Children Fund
19. Namangan Regional Board of the Children Fund
20. Fergana Regional Centre for Social and Law Support of Females and Teenagers “Ishonch”
21. Deaf Cultural Center

Chapter 7 Development Assistenace and Partnership

7.1 Framework for donor coordination

7.1.1 Health Sector

For the health sector, many donors have provided assistance to Uzbekistan. The table below shows the main donors and their assistance area.

Table 7-1 Main Donors and their Assistance Area

	MCH	Nutrition	PHC/ community health	Emergency medicine	infections	HIV/ AIDS	Special Care	Human resources	NCD	Health /promotion	Water/sanitation	Governance	Logistics/facility/ equipment	Health finance
WHO	✔	✔	✔					✔	✔	✔		✔	✔	✔
UNICEF	✔	✔								✔		✔		
UNFPA	✔	✔				✔		✔						
UNDP								✔				✔		✔
WB	✔		✔					✔	✔	✔		✔		✔
ADB	✔													
Islamic Development Bank				✔							✔		✔	
USAID			✔		✔	✔	✔	✔						
EU	✔		✔											
GIZ/KfW	✔			✔			✔	✔					✔	
Switzerland	✔													
Finland													✔	
China													✔	
Kuwait			✔				✔						✔	
Saudi Arabia							✔						✔	
KOICA	✔						✔						✔	
MASHAV							✔	✔						
Global Fund					✔	✔								

Source: Interviews with the Ministry of Health and donors, developed by the Survey Team

Donor coordination meeting is not conducted on a regular basis. When the survey team conducted a round table meeting on 6 May, 2014, participating donors in the meeting requested for the regular donors' coordination meeting.

Currently, the Department of External Economic Relations with International Organizations within the Ministry of Health compiles all of the proposals. Foreign Economic Relations, Investment and Trade Department discuss and coordinate with the relevant donors for assistance. In addition, with respect to loan transactions, a request form is submitted to the Ministry of Finance. Once the Ministry of Finance receives it and decides donors, the consulation and coordination with the relevant donors are made.

7.1.2 Disability Sector

The Ministry for Labor and Social Security of Population (MLSSP) is the main responsible agency for disability issue, which is in charge for social and vocational rehabilitation as well as vocational schools for PWDs. The Ministry for Higher and Secondary Special Education is partly in charge for vocational schools as well. The Ministry of Health is responsible for medical rehabilitation, but social rehabilitation is actually including a part of medical rehabilitation in Uzbekistan. Medical Labor Expert Commissions (MLEC) has authority to decide for patients to take social or medical rehabilitation. MLEC used to belong to MLSSP till 2009. However, it is now under the Ministry of Finance. MLEC has authority to examine PWD's grouping. And depending on the group, the amount of social allowance is fixed. Therefore, MLEC now belongs to the Ministry of Finance. Lastly, National Center on Human Rights (NCHR) is in charge of international

convention including CRPD. NCHR will propose a policy and make a guideline for ratification and implementation of conventions.
Regarding donor agencies, there is no coordination body for disability issue. UNDP shows strong interest and commitment to support disability. And they are actually supporting the Consultative Council of NGO for PWDs so that UNDP often organizes meetings for CRPD with DPOs. UNDP is also collaborating with NCHR for implementation of CRPD.

7.2 Current situation of donors' assistance

7.2.1 Health Sector

(1) WHO
WHO Europe Regional Office publishes its cooperation policy to the target countries in a bllklet (not the name of "Country Cooperation Strategy"). The cooperation matters with the Ministry of Health are determined by the Biennial Collaborative Agreements (BCAs). According to the "WHO Country Office in Uzbekistan" issued by WHO Uzbekistan office, followings were addressed for the period of 2012-2013; 1) NCDs, 2) Infections, 3) Health system strengthening and Public health, 4) Health Information, Evidence, Research and Innovation and 5) European health policy "Health 2020".

According to the WHO Uzbekistan office, they will support the policy development regarding NCDs because NCDs are becoming particularly a serious problem, in accordance with "Health 2020".

Policy development is conducted for tax increase of tobacco in cooperation with the Ministry of Finance (custom), nutrition in collaboration with food companies and NCDs protocols (myocardial infarction, kidney disease, stroke, hypertension, diabetes guidelines, health education, asthma, prevention of COPD, cervical and breast cancer screening). WHO also cooperates in the Health III project in terms of implementing STEPS (STEP wise approach to chronic disease risk factor surveillance) and PEN (Package of Essential Noncommunicable disease interventions for primary health care in low-resource settings).

According to the interview, JICA's assistance in NCDs measures is highly expected. Their expectations based on the high evaluation of the JICA's approach on NCDs. When developing NCDs strategy, the data of "Study on the Reform of Health Care Services in Navoi Region" and "" (refer to Table7.3) as well as the activities of the trial of the health checkup system were greatly helpful and appreciated. In addition, Japanese experts closely exchanged views and shared the actual situation with the WHO during the ongoing project and it also helped to develop the NCDs strategy. Furthermore, other donors also highly evaluate JICA's project, which considered the Post 2015, and JICA is considered as a leading agency supporting NCDs measures.

(2) World Bank Health System Improvement Project (Health III Project)
The Ministry of Health has been conducting the Health System Improvement Project by loan from WB since 1998 and phase 3 is conducted currently. Health I was started in 3 rayons in Fergana and conducted PHC development, installation and implementation of per capita funding, GP training, curriculum development of undergraduate and postgraduate. After the pilot in Fergana, the project activities were expanded nationwide through Syrdarya, Navoi and KKP. Health II was started in 2005 and targeted 7,000 GPs who belonged to 3,195 SVP and conducted 10 month training. Also, PHC development system conducted at SVP was expanded to 25 Family Clinics in 4 cities of Tashkent, Fergana, Samarkand and Syrdarya.

The components of the Health III project are as follows;

Table 7-2 Components of Health III project

Component 1. IMPROVING HEALTH SERVICE DELIVERY	
1.1 Hospital Services Improvement	1. Monitoring of construction works in RMU
	2. Monitoring of construction works in RMU
	3. RMU waste management
	4. Functional planning and construction standards of RMU
	5. Functional planning and construction standards of RMU
	6. Functional planning and construction standards of RMU
1.2 Primary Health Care Development	1. Expanding the general practice primary health care model to all urban polyclinics of the Republic in the cities with population of 50,000 and over
	2. Continuation the ten-month general practice training programs
	3. Professional development of physicians and nurses of SVP under Continuous Professional Education (CPE).
1.3 Medical Services Quality Enhancement	1. Health Services Quality Enhancement
Component 2. STRENGTHENING HEALTH FINANCING AND MANAGEMENT REFORMS	
	1. Consolidation and institutionalization of PHC financing and management reforms
	2. Piloting of contract-based financing of hospitals
	3. Capacity building of the Ministry of Health in the development and implementation of health financing policy
	4. Analysis of expenditures in health care sector
	5. National Health Accounts (NHA) development
	6. Financial management training for specialists of the Ministry of Health, PHC facilities and RMU
	7. Health management information system development to support a finance system approbation in hospitals
Component 3. INSTITUTIONAL STRENGTHENING FOR NCD'S PREVENTION AND CONTROL	
3.1 Health promotion and NCD prevention	1. Capacity building in public health care facilities on health promotion
	2. Teaching of public health specialists on principles of basic health promotion, the epidemiology of NCDs, and effective health communication strategies
	3. Training of PHC providers on hypertension and diabetes screening and prevention
	4. A basic package of computer/multimedia equipment for the Institute of Health and Medical Statistics departments of two pilot oblasts and their rayon/city branches to be used in the development of health communication materials, monitoring of activity, and reporting.
3.2 Strengthening Health Surveillance Systems	1. Definition of indicators for routine surveillance and development of a national NCD monitoring and reporting system; - training of health statisticians (IHMS) in accurate data collection and analysis; provision of the necessary hardware and software.
	2. Baseline and follow-up population surveys (in the three oblasts) to collect data for the selected NCD indicators are also planned to be conducted during the lifetime of the project.
	3. Cooperation on NCD prevention and control

Source: Progress Report for the period of jan-Mar 2014, Health System Improvement Project, Health III Central Project Implementation Bureau, Ministry of Health

Each activity's progress as of March 2014 indicates as follows;

(1.1.1) Monitoring of construction works in RMU

The planned scope of construction work was completed in 36 RMUs, including 6 RMUs in 2011, 9 RMUs in 2012, and 21 RMUs in 2013. The breakdown by regions: 11 in KKP, 3 in Kashkadarya, 1 in Andijan, 6 in Samarkand, 2 in Khorezm, 4 in Navoi, 4 in Djizzak, 1 in Namangan, 1 in Surkhandarya, 1 in Fergana, 1 in Tashkent oblast, and 1 in Syrdarya. In 2014,

the Investment Program has been enlarged to 62 RMUs.

(1.1.2) Monitoring of construction works in RMU

"Uztibtechnika" performed the delivery and installation of medical equipment. The procurement of about 58 sets of X-ray equipment, 115 digitizers and 115 Ultrasound scanners, 355 autoclaves in set with sterilizing cases, 1150 syringe pumps, 470 dry-air sterilizers, distillers and centrifuges for laboratories, from 126 to 575 refrigerators of three kinds, 355 portable ECG devices, 460 monitors for patients, 920 pulse oximeters, 482 vaccine cool boxes, 115 sets for gastric fibroscopie has been completed.

(1.1.3) RMU waste management

The terms of references were developed for one international and two local experts. Procedures of consulting services procurement are under way.

(1.1.4) Functional planning and construction standards of RMU

Procedures of consulting services procurement are under way.

(1.1.5) Functional planning and construction standards of RMU

TIPME Evidence Based Medicine Center, four clinical guidelines on the NCDs (diabetes, urinary tract infections, chronic hepatitis, gastric and duodenum ulcer) were elaborated and approved by the Ministry of Health Order in March 2013. The clinical guidelines and protocols on prevention and management of basic NCDs were decided to be used in April 2013. In May-June 2013, clinical guidelines for RMU and SVP were prepared. In June and August 2013, workshops were conducted for cardiovascular diseases, diabetes, bronchial asthma and chronic obstructive respiratory diseases. In February 2014, WHO protocols of 4 diseases were adapted. In March, WHO protocols were introduced in pilot oblasts and rayons health departments and PHC physicians.

(1.1.6) Functional planning and construction standards of RMU

The Project has developed the model of medical equipment maintenance, and piloted it in PHC facilities of Fergana, Syrdarya, Tashkent, Andijan oblasts and Tashkent city. The survey identified the following issues.

- Poor knowledge regarding necessity for planning, organization and maintenance of medical equipment;
- Deficiency in the number of specialists and insufficient qualifications of engineering services staff, as well as poor infrastructure;
- Lack of well-tried model of financing for the system of medical equipment maintenance.

X-ray diagnosis training was conducted in February, 2014 and it identified the lack of basic computing knowledge. GIZ project, KfW Bank, "UzMedInfo" Center, "Uztibtechnika" conducted the workshop on the issues of piloting and introduction (by GIZ project) of the information system "MEDIS".

(1.2.1) Expanding the general practice primary health care model to all urban polyclinics

Within the framework of Health II, the new mechanisms of financing and transition to GP principles of work performance were piloted in 25 urban policlinics of Tashkent, Samarkand, Margilan and Gulistan cities. It expanded to cities with the population of and over 50,000. Within the framework of Health III Project 155 family policlinics will be equipped. A 10-month training course was conducted. 76 family policlinics received equipment such as freezer, cool box and sterilizing boxes.

(1.2.2) Continuation the ten-month general practice training programs

In June 2013, the ten-month training for 665 physicians was completed, which consisted of 385 physicians of family policlinics, 135 physicians of SVP, 123 physicians of CRMP RMU, and 22 teachers of Medical Institutes of Higher Education. In September 2013, 770 physicians were newly enrolled.

(1.2.3) Professional development of physicians and nurses of SVP under Continuous Professional Education

Local consultants conducted the monitoring of the status of RMU training rooms. The workshop on the subject "Management in Healthcare" was conducted. The educational books of nurses training on breast-feeding, reproductive health, growth and development of children under five, were replicated. In 2013, 1,210 GPs and 2,349 nurses received training through Continuous Professional Medical Education. The international consultant developed the education material for nursing personnel and introduced a new module.

(1.3.1) Health Services Quality Enhancement

Hospital IMCI (Integrated Management of Childhood Illness) and IMCHS (Improvement of Mother and Child Health Services) project conducted by EU-UNICEF will share all the expenses. Health III project conducted training in 8 regions (Andijan, Namangan, Syrdarya, Djizzak, Samarkand, Kashkadarya, Surkhandarya, Navoi) and EU-UNICEF conducted training in 6 regions: Fergana, Tashkent, Bukhara and Khorezm oblasts; the Republic of Karakalpakstan and Tashkent city.

(2.1) Consolidation and institutionalization of PHC financing and management reforms

On 13 February 2013, the Cabinet of Ministers Resolution No.37 on the implementation of pilot program approbated the financing system in pilot hospitals of Fergana oblast, and the expansion of the per capita financing to all family policlinics of the Republic was approved. In execution of the Cabinet of Ministers Resolution the Ministry of Health Order #43, dd. February 14, 2013 was issued. Monitoring of budget implementation in SVP and urban piloting policlinics for the year 2013 was conducted.

(2.2) Piloting of contract-based financing of hospitals

In 2013, 3 Rayons in Fergana started Contract-based financing at Central Rayon Hospital level.

(2.3) Capacity building of the Ministry of Health in the development and implementation of health financing policy

Professional qualifications for heads (Deputy Director on economic affairs, chief accountant, economist, accountant, and lawyer) were developed.

(2.4) Analysis of expenditures in health care sector

The evaluation of expenditures over the period of 2010-2012 was conducted. The meeting was held in the Ministry of Finance on the issues of information sharing between the Ministry of Finance and the Ministry of Health, within the frame of establishing the information systems on strengthening health financing and management reforms.

(2.5) National Health Accounts (NHA) development

The pilot survey on healthcare expenditure accounts as well as household survey based on the international standards of data collection and analysis was conducted in Yunusabad district of Tashkent city and Zangiota rayon of Tashkent oblast. Proposals and recommendations on the nationwide implementation of NHA system implementation were developed to be agreed with the Inter-Ministerial Methodological Commission.

(2.6) Financial management training for specialists of the Ministry of Health, PHC facilities and RMU

The schedule of training of leaders and specialists of finance and accounting departments on topical issues of financial planning was developed for family policlinics and rayon medical unions, which was approved at the Board of Academics of TIPME.

(2.7) Health management information system development to support a finance system approbation in hospitals

In cooperation with Fergana Health Department, health information system of RMU was discussed and computerized information systems and networking are now being prepared.

(3.1.1) Capacity building in public healthcare facilities on health promotion

It is carried out in cooperation with WHO. Planning activities of the target in the two oblasts were developed.

(3.1.2) Teaching of public health specialists on principles of basic health promotion

Under the assistance of WHO in July 2012, workshops were conducted with participation of specialists from NCDs prevention and control Department. NCD risk factors methodology based on STEPS was confirmed for the survey and training was conducted in October 2013. Study abroad tours on the NCDs prevention and control were organized for specialists.

(3.1.3) Training of PHC providers on hypertension and diabetes screening and prevention

The methodology, standards and instruments (indicators) for monitoring and evaluation of arterial hypertension and screening of diabetes type 2 in PHC facilities, recommendations on consulting individuals with the risk factors of arterial hypertension and diabetes type 2 were developed. In April 2013, a workshop for WHO Package of Essential NCD Interventions for Primary Health Care (PEN) was conducted. The evaluation of PHC facilities capacity in Kashkadarya and Fergana oblasts was carried out. The Ministry of Health decided to adapt WHO guideline on 4 diseases of cardiovascular diseases, diabetes type 2, bronchial asthma, and COPD. Development of action plan was started for target 2 oblasts in March 2014.

(3.1.4) A basic package of computer/multimedia equipment for the Institute of Health and Medical Statistics departments of two pilot oblasts and their rayon/city branches to be used in the

development of health communication materials, monitoring of activity, and reporting
In January 2013, the Ministry of Health decided to provide necessary equipment to the Valeology department of IHMS and TIPME in target 2 oblasts.

(3.2.1) Routine surveillance and development of a national NCD monitoring and reporting system NCD
In March, 2014, a meeting was held to receive technical assistance from CDC (Centers for Disease Control and Prevention) in the field of NCDs epidemiological surveillance system.

(3.2.2) Baseline and follow-up population surveys for the selected NCD indicators
NCDs risk factors survey is conducted based on the WHO STEPS methodology. The survey planning started in July 2012 and was approved by the Ministry of Health in August. 50 rayons/cities (Primary Sampling Unit), 148 PHC facilities (Secondary Sampling Unit) and 4,350 households (Third Sampling Unit) were selected with the use of special WHO software (December 2012 –June 2013). Contract on the arrangement of STEPS survey with the Sociological center "Sharh va Tavsiya" was signed in December, 2013. In January 2014, the Decree to conduct field works was issued by the Ministry of Health. Field survey was conducted from February to April and development of database and data clearance was conducted in May. The results will be issued in June.

(3.2.3) Cooperation on NCD prevention and control
In April 2013, the Law of "limiting distribution and consumption of alcohol and tobacco products" was amended and submitted to the Cabinet of Minister. The location of shopping facilities of alcoholic beverages in a radius of less than 500 meters from educational, sports and religious institutions was negotiated with the interested ministries and agencies. In November 2013, various sectors attended and developed the action plan for NCDs prevention and control in cooperation with WHO.

"Health Projects" have established the service delivery at PHC level and financing over the Phase 1 and 2 as described above. The project has undertaken the development of health service delivery in the secondary level, and will extend to the urban component of PHC services in the Phase 3. The NCDs measures are one of the major components of the Phase 3 and there are high expectations for JICA because JICA has accumulated a great deal of know-how in this field.

(3) UNICEF

Activities of UNICEF Uzbekistan are divided into 4 categories such as maternal and child health, nutrition, HIV and sanitation. The largest scale of assistance is conducted in the field of maternal and child health. They conducted Improvement of MCH Service project with collaboration with EU. Phase 1 was conducted from 2008 until 2011 and Phase 2 will be implemented until 2016.

1) Improvement of MCH Service project

The activities are conducted at the government level and oblast level.

Regarding the activity of government level, UNICEF supports the Ministry of Health to develop Regulates/ Orders related to health for mothers and youth in cooperation with the WHO. The activities regarding financing, documentation and IEC at republican level are supported by hiring a consultant each time. In addition, the Steering Committee of donor coordination of maternal and child health sector has been carried out quarterly, and UNICEF supports the Ministry of Health to coordinate the Steering Committee. In addition, UNICEF considers the quality of both aspects on technology and management is low because the number of newborn death is high even though the hospital delivery rate is high. Therefore, UNICEF creates an assessment tool of quality to be used in the field. At the same time, intervention to strengthen management is also required.

As for activities of the oblast level, the Phase 2 targets 5 oblasts and 1 City such as Tashkent city, Tashkent oblast, Bukhara, Fergana, Khorezm and KKP that were not targeted in Phase 1. The main activity is the capacity development through training. The contents of training are divided into two: 1) Newborn care and 2) Child care. 1) Newborn care includes perinatal care, neonatal care (such as resuscitation), essential newborn care, near-miss case review, analysis using BABIS tool and so on. BABIS is a tool that allows to analyze problems and to take the most appropriate treatment to the newborn. BABIS data are aggregated into the Republican Perinatal Center. 2) Child care composes IMCI (primary Out-patient Department-OPD-level, child hospital level, and community level-for patronage nurses), breastfeeding, growth monitoring

and so on. In addition, UNICEF cooperates with “Health system strengthening project” of the WHO as well as Health III project of the WB in Namangan and KKP. In particular, “Community behavior change component” will be started in the community from June and at first, situation analysis will be conducted in terms of health promotion at community level.

2) MICS

Although data was collected in 2010, it was unable to issue the results due to the insufficient contents. While MICS 2006 is the latest survey, there is no future plan to conduct a large scale survey such as MICS, which enables to compare the data internationally.

3) Micronutrient

The number of patients of anemia has decreased even though there is no recent data available. Regarding iodine deficiency, 34-41% of children are said to have some thyroid abnormality. 98% of children recently received Vitamin A.

(4) UNFPA

According to the “Country Program Action Plan” for the period of 2010-2015, UNFPA assisted 8.9 million USD (including co-financing 1.1 million USD). The breakdown of this fund was 64% for reproductive health, 15% for population and development, and 15% for gender. There are four activities for reproductive health:

1. Strengthen technical and institutional capacity of the national health-care system to develop and implement comprehensive reproductive health policies and provide an integrated package of essential sexual and reproductive health services;
2. Improved quality of emergency and essential obstetric and perinatal care in selected geographical areas;
3. Increased capacity of the health-care system to ensure contraceptive commodity security and provide high-quality family planning services;
4. Strengthened capacity of national institutions to provide high-quality, gender-sensitive, life skills-based education, information, and youth-friendly services for sexual and reproductive health and HIV and AIDS prevention.

The evaluation of this program has just started.

1) Statistics related to reproductive health

The maternal mortality ratio issued by the government is to some extent reliable. This is because the rate of contraceptive use is high, the rate of cesarean section is within the international standard value, the coverage of antenatal care is high and the rate of hospital delivery is high. In addition, PHC facilities are functioned even in the remote areas. However, there is room for some improvement such as 1) everyone can share the cause of maternal deaths, 2) definition of “maternal deaths” needs to be clarified, in particular the duration of death after delivery as "death of 42 days after delivery", 3) large-scale survey regarding the causes of maternal deaths needs to be carried out, and 4) it is necessary to ensure maternal death review conference is conducted.

2) Approach for anemia

The latest data for anemia that UNFPA has is the baseline data when starting the iron-fortified wheat flour project in 2005. The survey to identify the anemia status has not been permitted. When considering the current situation, approximately 50% of pregnant women suffer from anemia. The reason why the rate of anemia was high in KKP might be explained by poverty.

3) Approach for Prevention of Mother to Child Transmission of HIV (PMTCT)

PMTCT in Uzbekistan shows a good outcome and the HIV infection rate between mother and child is only 2-3% currently. The key factors to the success in PMTCT are high coverage of antenatal care, high detection rate of HIV testing, high compliance of ART and all of the components function well as a system.

4) Logistics and system for contraceptives

The software of “CHANNEL” developed by UNFPA is used for the improvement of logistics and system. This software is simple and easy to use at PHC level.

(5) GIZ

The project "Advanced Training of Doctors and Medical Staff to Work on Modern High-Tech Medical Equipment in Uzbekistan" is conducted from 2011 to 2014. This project aims to use effectively and efficiently the latest medical equipment such as medical imaging systems, magnetic resonance image diagnosis apparatus and endoscopes through provision of equipment, dispatch of experts, establishment of a training course, overseas training and so on.

Various donors are involved in the medical equipment field and information gets complicated. Therefore, when supporting equipment, it was advised to receive the check by Mr. Tiraiev Tikmat of the Coordination of Investment Project Department, the Ministry of Health. The recent information regarding medical equipment is that Magnetic resonance Imaging (MRI) will be provided in each oblast hospital with the assistance of China. In addition, the Korea Development Bank will provide a set of special equipment and training at Children's Hospital. KfW will also provide MRI and laparoscopy as well as train engineers as one of the components.

The challenges related to the equipment are there is no information system including the inventory of equipment, there is need to improve equipment maintenance system through daily check in order to find minor failures and repairs, and improvement of examination and diagnosis capabilities is required.

7.2.1 Disability Sector

There are several projects for PWDs implemented in Uzbekistan such as Inclusive Education Project. However, projects for PWDs are not so active. Nevertheless, there are several key projects.

UNDP shows strong interest in disability sector. They have been conducting a project for PWDs in the area of employment since 2008. They released informative report on the employment of PWDs, which is quite valuable for other organizations to learn. They also have network with disability related people and organizations, and provide support to the Consultative Council of Disability for NGOs as well. In the future, UNDP is planning to start a project for promoting a social worker, who will work for social aspect of disabilities. UNDP is also trying to establish strong connection with other organizations such as JICA in order to promote disability issues. Actually UNDP suggested that JICA could be responsible for Prosthetics and Orthotics, and an occupational therapy.

Further, a project for inclusive education support by EU through a consultation company of Austria started in March 2014. Target project areas are Tashkent, Samarkand, etc., and a term of project is only 2 years. In this project, they are planning to include 840 pupils with disabilities into mainstream schools, to train teachers, and to establish a resource center for inclusive education. On the other hand, several organizations such as ADB and USAID have been trying to promote inclusive education in Uzbekistan. A project of ADB has similarity with EU but a report of ADB project is not yet released.

On top of this, the US embassy has small grant projects to which maximum 15,000 USD will be given including disability. About 20-30 projects will be provided support per year and 2~3 projects are usually disability related such as support of sign language interpreter, business women with disabilities, employment for PWDs, and CBR.

The list of the project supported by donor agencies is shown below.

Table 7-3 List of Donor Agencies and Support Project (2000 - Present)

No.	Donor Agency	Project
International Organization		
1	EU 2014.3-2016.2	Promotion of Inclusive Education. Target areas are Tashkent, Samarkand, Namangan, Khorezm and Surhondaryo. Accommodating 840 pupils with disabilities into mainstream schools, and training teachers and establishing a resource center for inclusive education. (1.99 million EUR)
2	UNDP 2011.4- 2014.3	Inclusive Employment and Social Participation: Target areas are Tashkent, Samarkand, and Djizzak. Promotion of employment for PWDs through enhancement of collaboration between government and civil society. (1.2 million UDS)
3	UNPD- Uzbekistan 2008.8-2011.3	ACCESS: promoting accessibility, civic consciousness, employment and social support for PWDs http://www.undp.uz/en/projects/project.php?id=127
4	ADB 2006.4-2008.12	Basic Education for Children with Special Needs (1.5 million USD): (i) Improve the learning performance, social confidence, and social integration of children with special needs in selected pilot schools via inclusive and integrated approaches, (ii) develop teacher training modules and learning materials, (iii) demonstrate via the pilot schools the benefits of inclusive and/or integrated education approaches. http://www.adb.org/projects/38657-012/main
5	World Bank	US$ 30 million for reforming the primary health care sector, including disability prevention.
6	UNICEF	US$ 1 million (SIGIS program for home culture and hygiene in Kashkadarya region), US$ 95 thousand in cooperation with the World Bank (program on integrated treatment of illness among children), US$ 50 thousand (vaccination)
Bilateral Cooperation		
1	USAID 2009.10-2012.9	Inclusive Education: promote quality of life and social participation for children with disabilities through inclusive education.
2	USAID 2009.5-2010.5	Disability Support: Establish a training center for PWDs where training for accounting, computer, dressmaking, etc., will be provided for PWDs. Plus, lega advice would be provided.
3	USAID	Open a computer center where computer training for the blind would be provided in collaboration with community.
4	Finland	US$ 7.2 million (medical and clinical equipment), US$ 3.2 million (medical center and clinics of the Tashkent pediatric medical institute), US$ 2.8 million (rehabilitation center in Gulistan), US$ 1.2 million (maternity hospital in Nurata)
5	German	DM 5 million for disability prevention and social/medical rehabilitation (diagnostic equipment and special therapy), US$ 3.5 million (medical equipment and medicine for maternal institutions), US$ 70 thousand (program on fight against tuberculosis), etc.
Others		
1	SOS-Kinderdorf International	SOS-Kinder village Construction (12 million USD)

7.3 Japan's Assistance to Uzbekistan

Uzbekistan and Japan established diplomatic relations in 1992. Since 1993, Japan has received trainers and dispatched experts as Uzbekistan is one of the ODA (Official Development Assistance) target countries. The grant aid and loan aid projects started in 1994 and 1995 respectively. Medical equipment provision has been implemented in the health sector as shown in the following table. Japan has also been sending Japan Overseas Cooperation Volunteers (JOCV) to Uzbekistan since 1999. The Country Assistance Program was formulated in 2006.

In the country assistance program for Uzbekistan, Japan sets basic line (high target) "Support for Promoting Economic growth and to narrow disparity". 3 priority areas are set as the middle target as follows:

Priority Area 1: Renovation and improvement of economic infrastructure (transport, energy);
Priority Area 2: Support for human resources development and establishment of a system toward a successful market economy and the promotion of the economy and industry;
Priority Area 3: Support for restructuring social sector.

Regarding healthcare, there is a problem of declining medical care quality associated with declining skill level of healthcare professionals and the deterioration of medical equipment due to the degradation of the national budget since independence. It is necessary to shift the former Soviet-style services into the one based on the economic rationality by introducing a qualitative change and by slashing costs in this sector. At the same time, it is also necessary to help the socially vulnerable, who are disadvantaged in the market economy to become self-reliant. Japan's assistance policy is to provide technical cooperation with an aim to enhance the healthcare quality as well as to improve the healthcare system in the sector of preventive medicine as well as strengthening social welfare services of persons with disabilities.

Table 7-4 Japan's Assistance and Background/ Outcome/Recommendations (2000-present)

	Name of Project	Background/ Outcome/Recommendations
1.	Grant aid "The Project for Upgrading the Emergency Medical System in Tashkent City" 2001 793 million yen	It was conducted upon the request of funds for equipment improvement based on the plan to set up emergency medical center in 12 oblasts as well as to set up "Center of Emergency Medical Care" in Tashkent city as a core medical facility.
2.	Technical Cooperation for Development Planning "Study on the Reform of Health Care Services" November, 2002 - 2003	- After the independence, quality of health services decreased and the study was conducted for building a new health care system. - Examination of the current situation and issues for sub-sectors (specific health issues) was conducted and the improvement plan was proposed. - Master plan at the national level was developed for health system improvement
3.	Grant aid "Improvement Nursing Education" April 2003- March 2004 292 million yen	Necessary equipment was provided to 53 medical colleges and 6 nursing faculties of medical colleges in accordance with the "nursing model" to improve nursing education. This project was effective to utilize provided equipment in collaboration with the technical cooperation project as well as to allow a detailed follow-up. The nursing quality education was implemented as aimed in the project.
4.	Technical Cooperation "Nursing Education Improvement Project" July, 2004 – June, 2009 640 million yen	Client-oriented nursing (CON) was inrocuded in medical colleges throughout the country in order to improve the quality of medical service. According to the terminal evaluation in 2012, introduction of curriculum for nursing education based on the CON, maintenance of equipment and facilities, re-education and training of teachers were conducted in 78 medical

		colleges across the country in 2010. The government recognized its necessity and activities were performed quickly. However, there is a need to improve medical equipment for training at rural schools. In addition, ensuring budget of Nursing Education Center is required for the re-training of teachers.
5.	Grant aid "Improvement of Primary Health Care Facilities in Tashkent and Djizzak" June, 2005 - March, 2008	- Provide medical equipment to the non-target SVPs (total 114 SVPs in 4 rayons of Djizzak and Tashkent) based on the national development plan in order to improve health care services at each facility. - Procurement and provision of equipment for general consultation, treatment, vaccination, examination/laboratory, gynecology and sterilization -Maintenance of medical equipment has been carried out with the technical services of external companies on a contract basis who can back up when having problems. Therefore sustainability of the project outcomes is considred as high. - Each facility makes payment from the facility operating costs when requiring the costs for consumables and replacement parts repair. It is necessary to make a maintenance plan according to the provided equipment and to ensure the necessary budget.
6.	Grant aid "Basic Design Study on the Project for the Improvement for Medical Equipment of Obstetrics and Gynecology Research Institution" 2007 - 2008 367 million yen	- Improvements of the institution (top referral hospital) by medical equipment provision - Since the medical facilities at primary and secondary level are developed, the referral system is improved. However, the number of patients is estimated to decrease at the higher level of hospitals so that there is a need to consider the influence of management at lower level of hospitals. The indicators should be set at the higher level of hospitals to evaluate the health service provision.
7.	Technical Cooperation for Development Planning "Study on the Reform of Health Care Services in Navoi Region" January, 2007- March 2009	- This study was conducted by the recommendations of the project No. 2. - There is no General Hospital in Navoi and special hospitals do not function well to provide tertiary care. Therefore, it si necessary to reorganize a health care system at the oblast level. - Implementation of the plan in accordance with the activities of donors would increase the effect. - Construction and improvement of equipment is necessary on the basis of the plan.
8.	Technical Cooperation "The Project on Preventive Care Measures for Non-Communicable Diseases" October, 2010 - October, 2013	- Disease structure has shifted to NCDs and the Project was carried out to strengthen the preventive medicine. - Plan for NCDs prevention at the national level was developed and implemented in Navoi as a pilot. - There is a need to expand project outcomes into the national level.
9.	Non-Project Grant Aid "Provision of industrial supplies based on needs of developing countries" March, 2012 250 million yen	Exchange of Notes was signed in May 2012. Medical equipment such as Endoscope (Miyagi prefecture) and digital X-ray (Saitama prefecture) was granted to the National Oncology Center.

Source: Country Assistance Program for the Republic of Uzbekistan, JICA knowledge site, summary of terminal evaluation

The list of Japanese aid program for disability sector is shown below.

Table 7-5 Japanese Aid Program for Disability Sector

No.	Types of Support	Project
1	Dispatch of Individual Expert 2011.6.13-2014.3.31	Disability Support 1. Provide information, network and support to the Ministry for Labor and Social Security of Population for the ratification of CRPD 2. Capacity development for disabled people and network of disabled people organizations
2	Dispatch of Expert with Disability 2013.10	Experts with Deafblindness Increase Interaction : Advocacy of deafblindness and training for interpreter for deafblind. Dispatch deafblind expert.
3	Technical Training in Japan 2010-2012, 2013-2015	Mainstreaming and Empowerment of PWDs in Central Asian Countries : Study tour for Disabled People Organizations in Japan, Disability Policy, collaboration between government and DPOs, and an action plan for equal participation to the society for PWDs.
4	JOCV 2012	Japan Overseas Cooperation Volunteer for health sector (13 persons)
5	Grant Aid 441 million yen 2009	The Project for Improvement of Equipment for National Center of Rehabilitation and prosthesis of PWDs : In order to improve the diagnosis and rehabilitation of PWDs, Japan provided advanced medical equipment, such as E-ray tube, a set of mechanical brushes and blocking signal brush for the CT scanner, etc.,
6	Grass-roots Cooperation 2008/5～2010/3	Community Based Rehabilitation Project for People with Disability in Tashkent City (World Vision Japan) : Promotion of CBR through disability related organizations in Tashkent. Children and people with disabilities living in the community (Mahara) will be able to access community support.
7	NGO : Asia-Pacific Centre for UNESCO 2006-2008	Creation of Experimental Special Groups in Kindergartens and Secondary Schools for Introduction of Inclusive Education http://www.accu.or.jp/esd/projects/ip/ip01_uzbekis.shtml
8	Grant Aid for Japanese NGO's Project, Grant Assistance for Grassroots Human Security Project 2006	Nutritional Improvement for Children with Disabilities in Uzbekistan (37.5 million yen)(World Vision Japan, World Vision Uzbekistan)
9	Community Empowerment Project 2002.1-2004.12	Training for Sign Language Interpreter in Uzbekistan

Chapter 8 Priority Issues and Recommendations in the Health Sector and Disability Sector

8.1 Priority Issues in Uzbekistan

(1) Priority Areas for Health Status of the People

1) Issues on Mother and Child Health

The Ministry of Health and donors identify that there is no problems regarding access to contraceptives, antenatal care, hospital delivery and immunization, namely, health services at primary level are decent. However, reduction of maternal and infant mortality has slowed for the last 5 years. The reasons are estimated that the quality of emergency obstetric care as well as neonatal resuscitation care is still low at secondary and tertiary level. In addition, the causes of maternity deaths are hemorrhage and hypertension while the cause of neonatal deaths is premature births. Therefore, it is considered that management of emergency obstetric and newborn care is insufficient at secondary and tertiary level.

2) Issues on Infections

Uzbekistan succeeds in controlling infections which can be prevented by vaccinations. A surveillance system is also established by SES. The current challenge regarding infections is to control HIV and MDR-TB and a risk group has been identified respectively. The risk factors of MDR-TB are persons who are younger than 45 years old, have no accommodation, have been unemployed and imprisoned or hospitalized during the past 10 years. The risk group of HIV is persons who have migrated to Russia and other countries in the past. Risk groups of both of MDR-TB and HIV are persons who are difficult to get contact with or easily lose contact with others and it is difficult to manage them.

3) Issues on NCDs

As of May 2014, the NCDs strategy is in the stage of waiting for the approval from the Ministry of Justice. According to the WHO and Ministry of Health, it is highly likely that the NCDs strategy will be officially approved and it can be said that NCDs measures have just started in Uzbekistan[43]. However, it is necessary to respond to NCDs immediately because of an increase in NCDs prevalence, incidence and death rates. In addition, since a systematic early detection system and prevention for NCDs has not been established well, the NCDs patients tend to be in severe condition when they are found. Therefore, activities for prevention, early detection and treatment of patients with mild conditions are insufficient.

4) Issues on Nutrition

There is no latest data because a nationwide survey related to nutrition has not been implemented since 2006. The issues regarding children's underweight and malnutrition have improved for 10 years from 1996 and it is supposed nutritional status has been continuously good up to now. However, accurate information is necessary for micronutrients, especially iodine and iron.

To sum up, the prioritized issues on health status of the people are mentioned as follows;

- Mother and Child Health: Development of Emergency Obstetric and Newborn Care (EmONC) system at secondary and tertiary level
- Infections: Multidrug Resistant Tuberculosis (MDR-TB), HIV
- NCDs: Implementation of activities for prevention and establishment of its system, implementation of early detection and establishment of its system, management of mild patients
- Nutrition: Implementation of the survey to identify the current situation

[43] As a first step, raising the tobacco tax has been examined and it seems there are no objections from the Ministry of Finance and other related sectors but it is unclear for the next step during the Survey.

(2) Priority Areas for Health System

1) Issues of Health Administration and Governance

Total numbers of managers related to health administration and management are approximately 750 in Uzbekistan (including national, region and district level). However, most of these managers are medical doctors and their capacity and knowledge for financial management and administration are not always sufficient except some managers. Particularly under the decentralization, the regional health department and district health managers are responsible for developing health strategies and implementation plans for each area. Therefore, strengthening of capacity of personnel at manager level is essential for the improvement of health care services and effective utilization of medical resources.

2) Issues of Health Information System

Health information is collected in accordance with the “State statistics” law enacted in 2002. There are two systems; IHMS under the MOH and SES. The issues of information systems are; collection of a large number of information (437 indicators), several kinds of information systems (national statistics, IHMS, SES, vertical programs, other ministries, and private), overload of staffs at facility level for information collection, and these result in the low information accuracy. Feedback to district and regional level is not always conducted as well in a timely manner. Although IHMS provides reports, they are not always utilized for developing the strategies and plans at regional and district level. Therefore, the culture that promotes information use should be created for the effective utilization of limited medical resources and the provision of proper medical services corresponding to current disease pattern of each area.

3) Issues of Health Finance

The general government expenditure on health sector is increasing. In 2012, it was 1.599 billion US$ (WHO) which was approximately 3.1 times more in comparison with 2007. The out-of-pocket expenditure by patients is also increasing. Per capita out-of-pocket expenditure in 2011 was 39 US$ which was approximately 3.1 times in comparison with 2007. As an increase in NCDs is foreseen in the future, health expenditure is expected to increase accordingly. Therefore, securing the quality of health services and reducing the out-of pocket expenditure are future issues. There are four methods for securing the health finance; a) general tax, b) national health insurance, c) private health insurance and d) out-of-pocket payment. Health insurances are effective means for reducing a large amount of patients' expenses in the case of a sudden illness. However, in case of private health insurance, recipients are limited to high income groups. Therefore, it is necessary to consider the introduction of the national health insurance system, which collects funds from people in the name of insurance premium, and pools the health funds for financial risk aversion.

According to the staffs of the Ministry of Health, demands for the introduction of national health insurance are identified. However, the following issues should be taken into consideration for the introduction of national insurance system and the collection of insurance premium; the income level of the people is still low, the high quality of medical care services delivery to the people is prerequisite, the selection of services targeted for medical treatment fees (chargeable services and free services) is necessary, and the establishment of related organizations and development of relevant documents for the operation of national health insurance are required.

4) Issues of Introduction of Modern Medical Technologies and Medical Equipment

For the improvement of medical technologies in Uzbekistan, the introduction of the latest medical technology that is generally performed in developed countries and the introduction of modern medical equipment are issues. GIZ has been supporting the introduction of modern medical technologies and medical equipment for this purpose. With the increase of NCDs, it is foreseen that needs of the modern medical technologies and medical equipment both hardware and software sides are more and more increased. Although the needs of superior Japanese products like an endoscope are high in Uzbekistan, Japanese companies don't have local agents in Uzbekistan so that procurement of Japanese products is difficult in Uzbekistan. Therefore, the overseas business expansion by the private sector is desired.

The establishment of distance medicine (telemedicine) is an effective means in Uzbekistan because

there is a big medical technological gap between rural and central areas, and transportation infrastructure in rural areas is undeveloped. On the one hand, maintenance of medical equipment at medical facilities in Uzbekistan is appropriate in general, but on the other hand, the issues have been identified regarding the maintenance of modern equipment which has been introduced in recent years, particularly in high level medical facilities. JICA has provided the technical cooperation of 5S (Sorting, Setting-in-order, Shining, Standardizing, and Sustaining the discipline) and KAIZAN. In response to this issue, the strengthening of the operation and maintenance (O/M) system for modern equipment utilizing the know-how on the 5S and KAIZAN learned through JICA's technical cooperation is required[44].

The priority issues for health system are shown below:

1) Health administration and governance :	Improvement of the Ministry of Health staffs' capacity for development of strategies and plans, improvement of the capacity of managers of district and regional level for governance, establishment of the human resource development system
2 Health information system :	Review of the key indicators and collection tools, the database development, promotion of the data use
3) National health insurance :	Consideration of designated health care services to be paid by medical treatment fee, preparation of relevant documents, designing of legislations and insurance association
4) Introduction of modern medical technologies and medical equipment :	Implementation of the pilot activities for the trial of equipment and technical transfer, establishment of the O/M system (5S, KAIZEN), overseas business expansion by the private sector

(3) Priority Areas for Disability Sector

1) Ratification and Implementation of CRPD and Establishment of the National Umbrella Organization for Disability

The Government of Uzbekistan has signed CRPD in February 2009. However, as of June 2014, it is still unclear when they can ratify it. The Government seems to have concern on the financial resources for the implementation and probably they would not ratify it unless the cost estimation is finalized. At the same time, the Government is considering reforming the system of disability grouping as well as pension.

The Ministry of Justice and NCHR are eager to promote CRPD, however, they also notice some concerns that CRPD is not properly understood by even the disability related sectors. At the same time, it is important for the Government to include disabled people in the process of ratification, implementation and monitoring CRPD. In the reality, however, it is still difficult for DPOs to collaborate with the Government.

On the other hand, disability sector also has problem that there is no national umbrella organization for disability in Uzbekistan. So even if the government offered the position to discuss with disability sector, no one could officially represent the sector at the moment. However, DPOs in Uzbekistan already recognized this problem so that they established the Council with more than 20 organizations of/for disabilities. And they are now trying to expand it to the region and to unite DPOs and other disability related organizations for CRPD.

2) Employment of PWDs

It is a serious problem that a majority of PWDs in Uzbekistan do not have a job. Even though they have one, it is usually self-employment. The Government is trying to promote the employment of PWDs through professional rehabilitation, vocational training, and 3% quota system. However, the outcome is still

[44] JICA has been carried out the technical cooperation project of 5S/KAZIZEN for improvement of equipment O/M in Sri Lanka, Kenya, Eritrea, etc.

insufficient. Less understanding on the ability of PWDs and reasonable accommodation could be the largest obstacle for PWDs to access employment. Under the current system, it is actually medical doctors who identify the work ability of PWDs, and the social service will be provided based on doctor's judgment. Vocational training school provides only several training curriculums, which may also limit the ability of PWDs. A number of employers hesitate to hire PWDs since they think it would be the burden for the company.

3) Lack of Rehabilitation Experts (Physical and Occupational Therapist and Prosthetist and Orthotist)

At the present, rehabilitation experts such as an occupational therapist, prosthetist and orthotist are not trained and employed in Uzbekistan. Although a physiatrician gives a prescription for rehabilitation, actually a practitioner is a nurse who had only several months' rehabilitation training. Prosthetist and orthotist are only 10 persons in Uzbekistan and they are basically trained on the job. Although there is a bachelor degree for social worker, occupational field is not established. The government has recognized a lack of human resource in rehabilitation and they are eager to train them, however, the curriculum and license system for rehabilitation experts has not yet been developed.

8.2 Possibility of Japanese Cooperation

(1) Possibility of Japanese Cooperation for the Improvement of Health Status

The following options could be possible Japanese cooperation for the issues described above.

Field	Issue	Japan's Possible Cooperation
Mother and Child Health	Insufficient EmONC system at secondary and tertiary level	It is possible to take a part of activities which have been conducted in "Improvement of Mother and Child Health Service[45]project".
Infections	MDR-TB	Although Japan has abundant experience in TB control, most of people at high risk for MDR-TB are difficult to contact. The interventions to approach this risk group could be smoothly conducted through NGOs.
	HIV	A HIV risk group is migrants who once worked in Russia and other countries and the approach to this risk group is possibly not easy.
NCDs	Undeveloped prevention and early detection system and management of patients with mild conditions	Japanese experience is applicable to the system and activities for NCDs prevention. Although early detection system and activities require more detailed study on the examination system, it is possible to utilize Japanese experience of NCDs prevention as well as the screening method conducted at primary level. Since the project in Navoi is highly evaluated, it is possible to expand the project.
Nutrition	Implementation of the survey to identify the current situation	Since the survey is not allowed by the government, possibility to cooperate in this field is low.

Regarding the mother and child health, although the cooperation of Japan is considered possible, other donors have already conducted activities. Therefore, the effect of Japanese assistance is expected to be limited. In terms of infections, although a risk group has already been identified, most of them were imprisoned or migrant workers in the past. Since they are usually difficult to contact, they might be smoothly approached by NGOs. The current nutritious status is unable to be figured out without the large

[45] Refer to "7.2.1 (3) UNICEF". UNICEF has conducted to support policy development and training regarding mother and child health.

scaled survey and evidence to assist in this field is insufficient. Every donor is struggling to get permission to conduct a survey. In the aspects of health issues, NCDs is the area with high possibility of Japanese assistance where Japan can take advantage of its experience of NCDs. In addition, "the Project on Preventive Care Measures for Non-Communicable Diseases" in Navoi has a reputation from other donors and the Ministry of Health, which have not implemented the specific activities for NCDs yet. Therefore, other donors and the Ministry of Health expect to be shared with knowledge and outcomes obtained through the project as well as to continue and expand the project activities.

The NCD measures in Japan began the "First-Phase Measures for National Health Promotion" in 1978. Then "Second-Phase Measures for National Health Promotion (Active 80's Health Plan)" was launched in 1988. "National Health Promotion Movement in the twenty first century (Health Japan 21)" was started in 2000, and "The second term of National Health Promotion Movement in the twenty first century (Health Japan 21 (the second term))"is continuously conducted in 2013[46]. During the "First and Second -Phase Measures for National Health Promotion", following activities were conducted such as the establishment of a health checkup system including health education, construction of municipal public health centers and other centers, and activities to raise health awareness. In "Health Japan 21", health education, effective health checkups collaboration with industries, interventions based on the evidence, focusing on metabolic syndrome were implemented. These measures led to decrease the death rate of the three major causes in Japan (the deaths of cardiovascular diseases decreased from 1989, the deaths of cerebrovascular diseases and cancer declined from 1995). Regarding the obesity which has become a major health problem worldwide, the number of obesity has increased significantly for the last 20 years in many countries, while Japan succeeded in suppressing the increase.

Based on the interview with JICA's NCDs project in Navoi, evaluations and opinions are summarized as follows;

Table 8-1 Evaluations and Opinions for "The Project on Preventive Care Measures for Non-Communicable Diseases" in Navoi

Ministry of Health	1) They learned the actual NCDs measures by receiving the training in Japan. 2) They learned specific NCDs measures through the JICA project in Navoi and it led to develop a national NCD strategy. 3) Suitable screening method for the primary level, appropriate training level for the staff, proper advice of Japanese experts, development of database and data collection with the steady approach of Japanese are highly evaluated. 4) The Ministry of Health can cover 2 oblasts (Fergana and Kashkadarya) by WB loan for the implementation of NCDs measures and expect other donors to cover other oblasts. Various activities will enable to examine which intervention is more effective and comparable. 5) The Navoi project implemented in 4 SVPs and it was too small scale. Implementation at oblast level is expected. 6) Japan has already established the system of NCDs prevention at PHC level and management at hospital level. To apply those systems in Uzbekistan is desired. Japanese cooperation has reputation because cultural background and values are sufficiently considered for the project implementation.
Navoi Oblast Health Department	1) They learned health checkup by receiving the training in Japan as well as to know it is possible to conduct effective health checkup even at primary level in Uzbekistan. 2) They learned and utilize the health promotion package of health checkup (advertisement, home visit at SVP) 3) The JICA project focused on diabetes and collected the data of not only diabetes patients but also its risk group. 4) When comparing, the number of diabetes patients and its risk group of people on the database is 1.7 times higher than current diabetes patients on IHMS data. This indicates the early detection of people who are likely to develop diabetes in 10-15 years. 5) The number of diabetes patients was found more than the previous data, which generated interest in other NCDs data

[46] "The second term of National Health Promotion Movement in the twenty first century (Health Japan 21 (the second term))" July 2012

	6) The easy method such as measuring height and weight and urine test strip enables to find diabetes at primary level. It motivated health workers at primary level. 7) Japanese experts carefully prepared and monitored those activities. These activities can be also expanded to other areas.
WHO	1) The data of "Study on the Reform of Health Care Services in Navoi Region" was useful to develop the NCD strategy in Uzbekistan 2) Japanese experts report regularly the actual situation during the JICA project in Navoi. It was valuable information for WHO because they cannot go to the field (the role of WHO is development of clinical guideline and strategic support) 3) How to materialize the developed NCD strategy is a next challenge. Although the number of covered SVP and diseases were limited, only JICA project has conducted NCDs interventions. 4) Japanese foresight to address NCDs is appreciated and the project expansion is expected.
Health III Project	1) Screening method suitable for the primary level, appropriate training level for the staff, proper advices of Japanese experts, development of database and data collection are evaluated. 2) While Health III is implemented in only 2 oblasts (Fergana and Kashkadarya), interventions should be promptly implemented in other oblasts in consideration of the scale of the NCDs problems. 3) A risk factors survey is STEPS and primary level facilities do not collect and analyze it regularly. Sharing the database developed by JICA project in Navoi is desired. 4) Current defined interventions are the risk factors survey and health promotion. Other interventions will follow WHO PEN[47]. However if JICA continuously implements NCD project, NCD measures will be accelerated in Uzbekistan by consulting effective interventions and approaches and sharing experience.

Source: based on the hearing from Ministry of Health NCD responsible staff, Navoi Oblast Health Department, JICA project counterpart, Director of WHO Uzbekistan Office, Health III project, NCD responsible staff

(2) Possibility of Japanese Cooperation for Health System Development

The followings are considered as possible Japanese cooperation for priority areas/issues of the health system development described in Chapter 8.1(2)

Priority Ares	Possibility of Japanese Cooperation
1) Health Administration and Governance	
Improving the capacity of MOH staffs for development of strategies and plans, improving the capacity of managers of district and regional level for governance, establishing the human resource development system	JICA has successfully carried out technical cooperation projects for improvement of health administration and governance, and achieved good results. Through the projects' activities, many kinds of manuals /guidelines were developed and training systems were established. The Ministry of Health, Labour and Welfare, and municipalities in Japan have developed many health improvement plans and conducted them. Monitoring and evaluation on their activities have been also implemented and the results have been reflected to further plans. Therefore, regarding the improving the health administration and governance in Uzbekistan, the expertise and knowledge of Japan and JICA can be fully utilized.
2) Health Information System	
Review of the key indicators and collection tools, developing the database, expanding/establishing the data use culture	Japan has a history of health information system that has been developed at the same time as the national insurance system. Also epidemiological data collection system through the public health centers has been developed. Those data/information are utilized for providing health care services and conducting health administration.

[47] WHO Package of Essential NCD Interventions for Primary Health Care in Low-Resource Settings, 2010 WHO

	On the one hand, JICA has an experience of projects on the development of health information system in Pakistan. The JICA projects have implemented the review of the previous information system, selection of new key indicators, the development of data collection forms and database, and training of staffs on the utilization of data/information. In Pakistan, information system developed by JICA has been used as a national health information system, and this experience is possible to use in Uzbekistan.
3) National Health Insurance	
Considering the chargeable health care services (case payment system), preparing relevant documents, considering/designing of legislations and insurance association	The history of national health insurance system in Japan has more than 70 years. This system is excellent in the world in equally providing health care services to people. The Japanese national health system has been revised several times according to the situations at those times, and on the bases of prior experiences. Therefore, it is possible to use the experience and knowledge of Japan to design such a national health insurance system that is suitable for Uzbekistan. Presently WB is implementing the Health III project, and supporting the capacity building at RMU for financial management. W/B is also piloting the case payment (performance based payment) system. Therefore, the sharing the experiences related to the case payment system and the accounting management (it is institutionalized as insurance points in Japan) is possible.
4) Introducing Modern Medical Technologies and Equipment	
Implementing the pilot activities for verification of equipment and technical transfer, establishing of the O/M system (5S, KAIZEN), business advances of the private sector	The advanced technologies of Japan such as endoscope and laparoscopic surgery, and telemedicine using ICT have superiority in the world. Japanese health care industry and those technologies can show the strength in these fields and they can contribute to improve the medical technologies in Uzbekistan. Japan has achieved a health longevity society in the world, where excellent medical technologies and medical equipment for NCDs are available. Therefore, not only introducing Japanese modern equipment, but also supporting the soft components such as the appropriate O/M system of equipment, 5S, KAIZEN and total quality management (TQM) can be the possible cooperation in Uzbekistan.

Regarding the health administration and governance, the capacity building of the Ministry of Health that is the central ministry in Uzbekistan should be carried out before supporting district and regional level. The most important aspect is strengthening of capacity for the development of health strategies and implementation of plans at the Ministry of Health level (some cases of development of strategies and plans are shown). Therefore, at the first step of the intervention, directly providing assistance to the Health Minister and Deputy Ministers who are key persons of strategies/plans development for the development of strategies and plans is desired. Therefore, the dispatch of a long term expert is considered as necessary.

Regarding the health information system, a scheme of technical cooperation project is preferable because it requires study on existing health information system, selection of key indicators, development of data collection tools and database software, training for use of information, etc., with assistance of several experts.

Regarding the national health insurance, there are many prerequisite conditions for introduction of insurance system. Particularly, the improvement of quality of health care services (this makes incentives to people for payment of insurance premium), and the increase in the national income to a level of insurance premium payment cannot be solved in the short term period. Therefore, interventions should be focused on the creation of foundation for introducing the national health insurance in the future. Rather than a large

scale of cooperation such as technical cooperation project, dispatch of individual experts is preferable.

Regarding the introduction of modern medical technologies and equipment, Japanese health care industry can who its strength with its products and technologies. Therefore, expansion of overseas business by private sector should be considered through schemes such as Public-Private-Partnership (PPP) and the pilot survey.

The support for establishment of O/M system (establishment of local agents, implementation of O/M trainings, etc.) by private investment and the technical transfer by individual experts are considered.

(3) Possibility of Japanese Cooperation for the Disability Sector

The following could be considered as Japanese overseas cooperation to Uzbekistan,

1) Support for the establishment of a national umbrella organization for disability and sharing experience of implementation of CRPD

It took 6 years for the Japanese government to ratify CRPD since the signature. The Government and disability sector established the Committee for Disability Policy Reform in order to ratify CRPD. Although both parties spent a long time and discussed on the necessary policy and legislations for the CRPD, this has become a valuable experience for both the Government and disability sector. In fact, UN ESCAP was impressed with such Japanese efforts[48]. It should be a valuable case study for other countries like Uzbekistan who wish to ratify and implement CRPD.

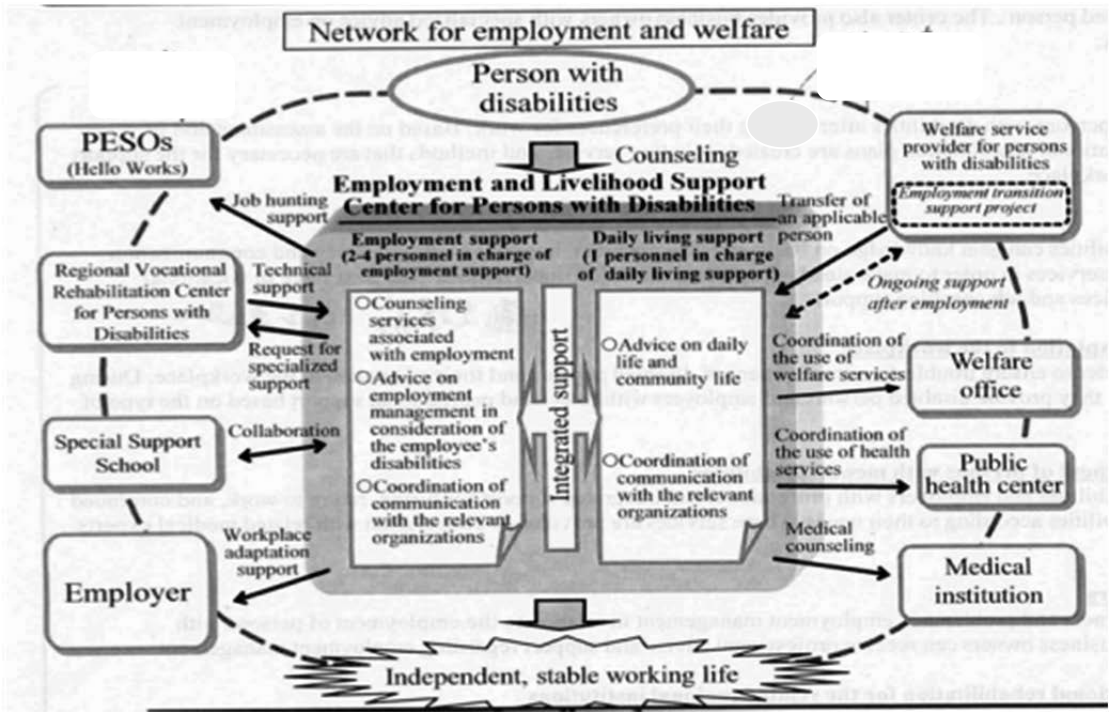
Further, there is no national umbrella organization for disability in Uzbekistan. So it is rather difficult for disability sector to identify who is the representative. It actually caused a serious problem for both the Government and the disability sector to start discussion in collaborative manner. On the other hand in Japan, Japan Disability Forum (JDF) was established in order to promote the Asia-Pacific Decade of Disabled and CRPD. JDF is a national umbrella organization for disability so that they chose representatives and started discussion with the Government in order to ratify and implement CRPD. The needs of disabled people have been brought up to the policy level through this mechanism. This experience and know-how should be shared with other countries like Uzbekistan. Then it could be possible for them to establish a national umbrella organization for disability and begin discussion with the Government in order to implement CRPD.

2) Learning Disability Employment Support System

Doctors have an authority to decide the work ability of PWDs in Uzbekistan, and companies and ESC are providing support for PWDs based on doctor's instruction. However, it must be difficult to see such ability only from the medical perspective. So the ability of PWDs in Uzbekistan may not have been fully utilized. In fact, a number of PWDs are not able to work and having difficulty to have independent life.

On the other hand, in Japan, the government established a network support system for the employment of PWDs in collaboration with a variety of agencies in both employment and welfare sectors. Besides, there are many kinds of good case studies for the employment of PWDs in Japan. For example, Japan Sun Industries[49] in Beppu city are employing more than 700 PWDs in collaboration with 12 companies such as Honda, SONY, Omron, etc. The Coco firm, an agricultural firm, Swan Café, a coffee shop, and Uniqlo, an apparel shop, are employing PWDs much more than 2% quota. It should be possible for Uzbekistan to learn such support system as well as examples of disability employment in Japan and modify it to the current support system in Uzbekistan.

[48] Comments from Ms. Nanda Krairiksh, Director, Social Development Division, UN ESCAP, 6 December 2011, in Japan at the seminar of CRPD
[49] http://www.taiyonoie.or.jp/eigo/



Source：Presentation Paper by Ministry of Labor

Figure 8-1 Network for employment and welfare in Japan

3) Human Resource Development of Rehabilitation Experts

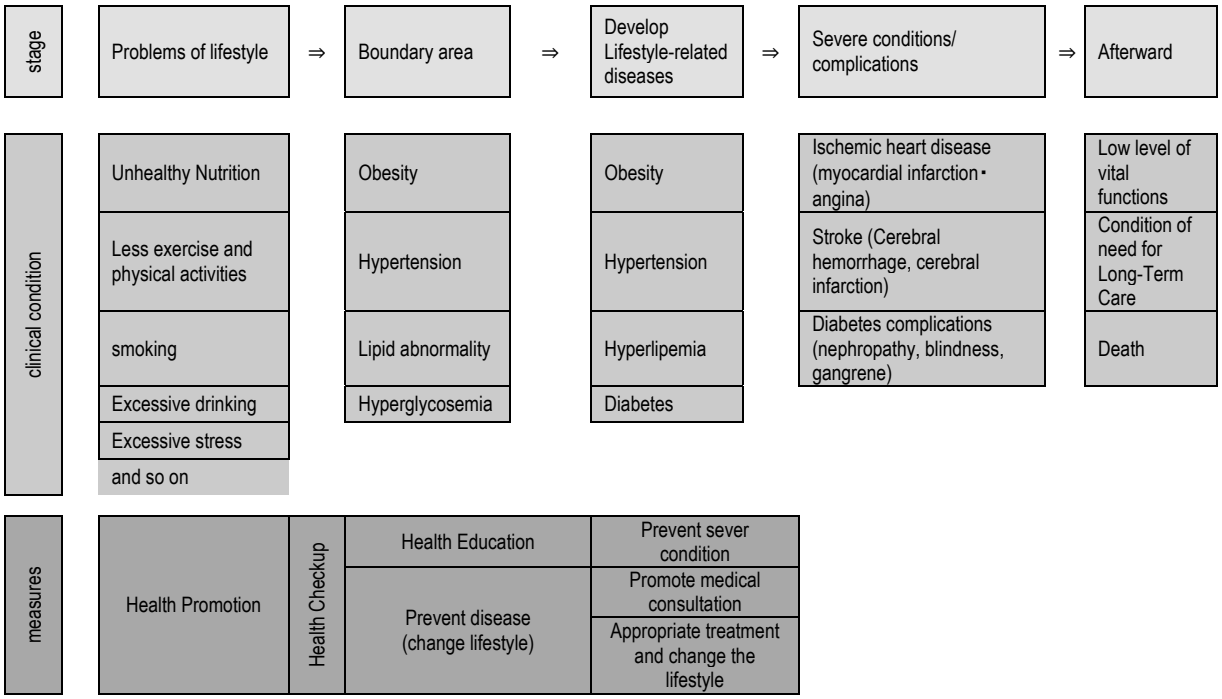
There is a variety of occupations for rehabilitation experts in Japan such as physiotherapist, occupational therapist, speech therapist, clinical psychotherapist, and prosthetist and orthotist. Training institution and license system for those experts is also established. Those rehabilitation experts are working in collaboration with doctors and nurses, and social workers in order to provide a comprehensive rehabilitation services. Those training institution, license system and comprehensive rehabilitation services could be utilized in Uzbekistan.

8.3 Priority Programs

(1) Priority Programs for Improvement of Health Status

Since an increase in the prevalence and mortality of NCDs has become a growing concern, the program designed for the prevention of NCDs as well as sever condition associated with NCDs is proposed.

Since it is highly likely that the NCDs control strategy will be approved in Uzbekistan, it is important to follow “Action Plan for Prevention and Control of Noncommunicable Diseases in the Republic of Uzbekistan for 2014-2020”. In accordance with the main activities, “1 Legal, Regulatory and Intersectoral Programs and Interventions for Key NCD Factors” are conducted by the Ministry of Health, WHO and 22 multi-sectors. Therefore, Japan’s involvement in this area is unlikely. Regarding “2 Enhancement of Information, Education and Communication (IEC) Activities on NCD Prevention”, “3 Development of the National NCD Surveillance Information System (Monitoring, Evaluation and Control)”, “4 Development of Human Resource and Research Capacities of all Stakeholder Sectors for NCD Prevention and Control”, “5 Strengthening the Role of Civil Society and Creating a Healthy Environment”, “6 Enhancing the System of Preventive, Medical and Social Care to Risk Groups and Patients with NCDs” proposed according to the “Health Japan 21” which is conducted by the Ministry of Health, Labour and Welfare in Japan.



Revised the model issued by the Ministry of Health, Labour and Welfare

Figure 8-2 Progress of Life Related Diseases and Measures with Risk Factors

1) To support health promotion activities for NCDs prevention (Meets NCDs Action Plan 2, 5)

The activities for health promotion are promoted in cooperation with IHMS. Republic IHMS has a plan to advertise NCDs prevention through the mass media. Oblast IHMSs, which have enough budgets, also will advertise through local mass media. The intervention of Japan will promote the activities in the community. As the idea of Andijan Health Department as described in "4.4.2 NCD prevention", health education will be conducted to increase knowledge through the approach of utilizing the function of Mahala.

2) To support the implementation of early detection and diagnosis. (Meets NCDs Action Plan 5)

It is a need to clarify the level of facilities to carry out screening as well as screening method for cardiovascular/ diabetes/ cancer/ COPD. In particular, there is a need to identify what can be implemented at a facility of the primary level such as measuring lipid metabolism and glucose metabolism functions. If the screening items are difficult to conduct at the primary level, those should be conducted at secondary level to benefit the entire population. To do so, it is necessary to adjust the medical examination practices in consultation with the Oblast Health Department. Before conducting intervention, the screening methods will be identified then target diseases will be defined according to the identified possible screening methods. When conducting health checkups, it is necessary to encourage people to receive health checkups in accordance with health promotion activities, as described in 1). The number of patients is estimated to increase temporarily after installing an early detection system and finding diseases. According to the Ministry of Health, capitation financing, which is conducted at primary level, could cover new patients. To conduct cost- effective intervention, disease prevention, treatment and management will principally follow “WHO PEN” (Package of Essential NCD Interventions for primary care in low-resource settings). WHO and the Ministry of Health will examine cost-effective intervention with the prospect of the health care costs for long-term as well as an increase of the number of NCDs patients referring to the research such as “Disease Control Priorities in Developing Countries”.

3) To support the implementation of measures that prevent the risk group from developing NCDs. (Meets NCDs Action Plan 6)

It is necessary to manage the risk group of people at primary level according to the results of health check. One of the methods to approach them is home visit conducted by visiting nurses at primary level. Currently there is a tendency the risk group of people is reluctant to receive health education at home. Therefore, there is a need to consider the methods which people can have an interest and accept health guidance.

4) To support the implementation of measures that prevent NCDs patients from becoming severe (Meets NCDs Action Plan 6)

Most of NCDs patients are managed at the dispensary. If the number of patients increases, dispensary will limit the number of patients and manage only sever cases. Patients who need to take medicine and check the progress, for example patients who need consultation and prescription once a month, can be managed at primary level and visit secondary or tertiary facilities regularly. It is necessary to establish such a system. To do so, doctors and nurses at primary level have to identify necessary knowledge and widespread the knowledge through the health education sessions. Currently, patients prefer to be managed by specialists rather than GPs because specialists have more sufficient knowledge and experience. If patients recognize GP also can manage and prevent severe condition, patients might consider it is acceptable to be managed by GPs.

5) To support the establishment of information system in order to identify accurate NCDs situation (Meets NCDs Action Plan 3)

It is essential to identify accurate NCDs situation in order to recognize the current situation as well as to measure the effectiveness of the intervention. There is a need to make a detailed plan to obtain when, how often and which information. Health III project will conduct the survey based on the STEPS and its results could become the baseline. However, continuous monitoring is desirable. At least to identify the risk group, to analyze the results of health check, indicators related to NCDs should be collected and analyzed on a regular basis.

6) To strengthen the capacity to make a plan, monitor, and evaluate the activities mentioned above at Oblast Health Department (Meets NCDs Action Plan 4)

Oblast Health Department needs to develop the capacity to analyse the NCDs data, make a plan based on its analysis, ensure budget and allocate it, and monitor the activities. There is a need to examine the current situation and consider the method of support. By clarifying the roles of relevant people such as director of Oblast Health Department, IHMS, prevention and treatment department, nutritionists of Oblast Health Department, the capacity of each specialist will be strengthened.

To effectively perform the support as mentioned, the following formulation is desirable. In addition, since the Ministry of Health plays a central role in NCDs measures in Uzbekistan, WHO supports policy development and WB implements NCDs measures in 2 oblasts such as Kashkadarya and Fergana, the cooperation of Japan could be effective to implement at the oblast level. It makes it easy to cooperate with other donors.

[Scheme]
Technical cooperation is effective because the measures for NCDs need long duration and various approaches.

[Aims of the project]
NCDs measures are strengthened, and the prevention for NCDs, improvement of unhealthy lifestyle and prevention of sever conditions related to NCDs are actively conducted in the target oblast.

[Outline of the Project]

Objectives: NCDs measures are strengthened such as the prevention for NCDs, the improvement of unhealthy lifestyle and prevention of sever conditions related to NCDs in the target oblast.

Outputs: Health promotion activities for prevention of NCDs are enhanced.
A health checkups system for the early detection is strengthened.
Prevention for a risk group as well as NCDs patients with mild conditions is strengthened.
Information system related to NCDs is developed.
Capacity of oblast health department is enhanced in order to make a plan, conduct monitoring and evaluation for NCDs measures.

Activities: Promotion of knowledge and health checkups in community
Implementation and clarification of screening for the target diseases

Technical support to home visit activities for prevention targeting risk groups
Clarification of patient management by the level of target diseases
Technical support to patient management at the primary level
Development of information systems for NCDs
Technical support to planning, implementation, monitoring and evaluation based on the information in the oblast health department
Technical support for capacity building and clarification of the role of relevant departments of NCDs (health promotion, prevention and treatment, nutrition, and each disease specialist)

Durations: 5 years
Recipients: Oblast Health Department, Oblast Health Facility
Inputs:
Experts: Team leader/Capacity building
Health promotion
Health checkup
Management of risk group and patients
Health Information
Planning and Monitoring (Total 120 MM)
Equipment: Necessary equipment
Training in Japan: Study of NCDs measures in Japan

(2) Priority Programs for Health System

1) Improvement of Health Information System

The project on the improvement of health information system in Uzbekistan for the effective utilization of health resources and provision of medical services is recommended.

[Scheme]
Several kinds of expertise for health information and a long period of time seem to be required for the establishment of the health information system. Therefore, the technical cooperation project, or dispatch of a long term expert in addition to short term experts are recommended.

[Aims of the project]
To establish the health information system through the review of the existing health information system, and improvement of information accuracy, that can be effectively used for health resource's decision making at district and regional level, and improved the capacity of health management such as planning, monitoring and evaluation.

[Outline of the Project]
Objectives: The implementation plans and budget plans are developed at district and regional level based on the evidence from health information system
Outputs: Key indicators are selected and tools and materials for information collection are developed.
Database for entry, analysis and preparation of reports are developed.
Data management staffs at each facility, district and regional health department are trained.
Trained staffs can make decisions and plan based on the collected information.
Activities: Review of the existing health information system, and implementation of the baseline survey
Selection of new key indicators (minimum indicators for management), consensus building regarding new integrated health information system
Development of forms (data sheet, etc.) and manual for data collection, etc.
Development of database software
Implementation of trainings (data collection, computer operation)
Development of data analysis and data use, and implementation of trainings for them
Implementation of monitoring and follow-up, and update of software

Durations: 5 years
Recipients: MOH, IHMS, each regional health department
Inputs:
Experts: Team leader/Health information system
Data collection
Data use
System engineer
Training coordinator
Monitoring (Total 120 MM)
Equipment: Computers and printers to pilot districts/regions, etc.
Third country training:
Study tour to the Pakistani District Health Information System (DHIS), Exchange the information and opinions with DHIS staffs (outline of DHIS, software, DHIC Cell (in-charge of DHIS management), and data use)

2) Policy Advisor for Health Administration and Governance

For the strengthening of health administration and governance of rural health managers, the technical cooperation for improving the capacity of the Ministry of Health staffs (decision makers) is recommended because the Ministry of Health instructs and trains district and regional health managers.

[Scheme]
The most important aspect of this technical cooperation is to improve the Ministry of Health's capacity for development of health strategies and implementation plans. Key persons (decision makers) of development of those strategies and plans are the Health Minister and the Deputy Ministers. Therefore, the dispatch of a long term expert (policy advisor) for giving advice to them directly for the development of strategies and plans can be an effective intervention.

[Aims]
This technical cooperation aims to support the Ministry of Health key persons (decision makers/administrative officers such as the Health Minister, Deputy Minister and directors) by giving advice through the on-the-job-training (OJT) for the development of health strategies and implementation plans, monitoring and evaluation, and implementation of training to district and regional health managers for the improvement of their capacities.

[Outline of the Cooperation]
Objectives: The capacity of the Ministry of Health for the development of health strategies and implementation plans is improved.
Outputs: The health strategies and implementation plans are developed.
The monitoring indicators are decided and tools and materials for monitoring are developed.
Monitoring for checking the achievement and progress of plans is carried out, and the results reflect to next plans.
Durations: 2 years
Recipients: Ministry of Health
Inputs:
Expert: Long term expert (Policy advisor)
Training in Japan: Study on the situations of strategy and plan development, monitoring and feedback in Japan

3) Introduction of Modern Medical Technologies and Medical Equipment

The support to improve medical technologies in Uzbekistan, as well as the expansion of Japanese superior medical technologies and medical equipment including the establishment of O/M system is recommended.

[Scheme]
Regarding the modern medical technologies and medical equipment, Japanese health care industry has comparative advantage of their products and technologies. Therefore, the expansion of overseas operation

by private sector should be strongly considered by using schemes such as PPP and pilot study. The dispatch of the short term experts is also effective from the viewpoint of the establishment of appropriate equipment O/M system.

[Aims]
- To promote and expand the Japanese superior medical technologies and equipment to Uzbekistan through the PPP and pilot study
- To establish O/M system (establishment of local agents and workshops, and implementation of O/M training) in Uzbekistan by private investment
- To increase the O/M capacity and to establish the O/M system with support by the short term experts

[Outline of the Cooperation]

Objectives: Japanese superior medical technologies and medical equipment are introduced in Uzbekistan

Outputs: The following medical technologies and medical equipment are verified.
- Diagnosis using Japanese superior medical equipment (i.e. endoscope, etc.) and advanced minimally invasive medical technologies (laparoscopic surgery, etc.)
- Examination of NCDs (cancer, cardiac disease, liver disorder, etc.) using X ray apparatus, CT and ultrasound apparatus, and medical care using catheter (guide-wire) for angina and myocardial stenosis
- Long distance medicine (telemedicine) using ICT

Sales channels for the above-mentioned equipment are established and the equipment introduced and expanded in Uzbekistan.

O/M system for the above-mentioned equipment is established (including private investment)

Duration: 1 to 2 years

Recipients: MOH, Republican Specialized Centers, General hospital at target district and region level

Input:

Implementation of PPP and pilot study: Before launching the cooperation, Uzbekistani market seminar will be organized for trading firms, medical corporations, and universities. The purpose of the seminar is for participants to recognize the needs of medical technologies and equipment in Uzbekistan.

Expert: Short term expert (Equipment O/M)

Training in Japan: As parts of PPP and/or pilot survey, the utilization of modern medical technologies/equipment, operation of equipment, O/M system, etc. will be learned.

Seminar in Uzbekistan: Inviting Japanese trainers to Uzbekistan and implementing seminars. The themes of seminars are the same as the training in Japan.

4) Improvement of Knowledge for National Health Insurance among related persons

For the national health insurance to be introduced in the future, the technical cooperation for the improvement of knowledge of national health insurance and for the preparatory works is recommended.

[Scheme]
Regarding the national health insurance, there are many prerequisite conditions, and it is difficult to solve them in a short period of time. Therefore, this cooperation focuses on the creation of foundation for introducing the national health insurance. The dispatch of a short term expert, training in Japan, and seminar in Uzbekistan are recommended.

[Aims]
To enhance the understanding about case payment (performance based payment), fund management, function/management of related organization (health insurance association, etc.), legislations and required documents among related persons of health insurance/health finance in Uzbekistan, and to promote the preparatory works for the introduction of national health insurance.

Objectives:	Understanding of national health insurance is deepened, and the preparatory works for introduction are promoted.
Outputs:	Related persons in Uzbekistan understand the national health insurance Required contents of works, documents, and legislations for introduction of national health insurance are clarified. Roadmap to the introduction of national health insurance is developed. Relevant documents required for the introduction of national health insurance are developed.
Duration:	2 years
Recipients:	Ministry of Health, Ministry of Finance
Input:	
Expert	Long term expert (National health insurance)
Training in Japan	To learn about the history of Japanese national health insurance, legislations, function/management of health related organization (insurance association, etc.), and required documents.
Seminar in Uzbekistan	Inviting Japanese trainers to Uzbekistan and implementing seminars. The themes of seminars are the same as the training in Japan.

(3) Priority Project for Disability Sector

The following three projects have a priority in the disability sector. Especially, “Implementation of CRPD” is the first priority, and “Improvement of Employment Support System for Disabled” is the second, and “Human Resource Development of Rehabilitation Experts” is the third priority.

Project 1 【Priority: First】	**Implementation of CRPD through Establishment of the National Umbrella Organization for Disability**
Objective	To strengthen the implementation mechanism of CPRD in collaboration with the Government and the National Umbrella Organization for Disability To empower PWDs and to enhance the equal participation of PWDs through implementation of CRPD
Outcome	1. The National Umbrella Organization for Disability will be established. 2. Implementation mechanism such as strategy, action plan and monitoring agency, through discussions between the Government and the National Umbrella Organization for Disability will be strengthened. 3. Guidelines and manuals for implementation of CRPD will be published.
Activities	1-1. Learn about purpose, objectives, function, management and structure of the National Umbrella Organization for disability through study tour and training in Japan and other countries 1-2. Organize seminars and workshops in order to understand CRPD and the National Umbrella Organization for Disability 1-3. Organize a National Disability Conference to establish the National Umbrella Organization for Disability 2-1. Learn about implementation mechanism for CRPD and collaboration between the government and disability sector through study tour and training in Japan and other countries 2-2. Discuss about strategy, action plan and monitoring agency for CRPD with the Government and the National Umbrella Organization for Disability 3-1. Prepare for publishing guidelines and manuals for implementation of CRPD through study tour and training in Japan and other countries
Duration	Three years
Partner	National Center for Human Rights, Ministry of Justice, Ministry of Labor and Social Security of Population, Ministry of Finance

Project 2 **Improvement of Employment Support System for PWDs**

【Priority: Second 】

Objective

To improve the current employment support system and to promote independent living of PWDs through training of related personnel for employment support of PWDs

Outcome

1. Criteria of work ability for PWDs will be reviewed.
2. Companies and related personnel for employment support system will understand reasonable accommodation and discrimination against PWDs.
3. Curriculum and training at vocational school for PWDs is reviewed.
4. Case studies of employment of PWDs and guidebook of employment support for PWDs will be published.

Activities

1-1. Representatives of DPOs, companies and employment related personnel learn about employment support system and case studies for PWDs through study tour and training in Japan and other countries
1-2. Seminars and workshops are held in order to share good case studies and employment support system of other countries.
1-3. Training for employment of PWDs including Disability Equality Training is held for employment related personnel.
2-1. Curriculum and training course at vocational schools for PWDs is reviewed from examples of other countries
3-1. Case studies and guidebook for employment for PWDs are published.

Duration

Three years

Partner

Ministry of Labor and Social Security of Population, Ministry of Finance

Input

Expert (1 person)	Employment Support of PWDs
Training in Japan	Employment support system for PWDs and role and responsibility of related agencies Good case studies of employment for PWDs and vocational training
Training in other countries	Case studies of employment for PWDs and vocational training in developing countries such as Thailand

Project 3 **Human Resource Development on Rehabilitation Experts**

【Priority : Third】

Objective

To improve the quality of rehabilitation service through human resource development

To promote social participation of PWDs through enhanced rehabilitation services

Outcome

1. Curriculum of human resource development for occupational therapist and prosthetist and orthotist will be developed
2. Training based on the updated curriculum will be conducted
3. Trainers for occupational therapist and prosthetist and orthotist will be trained

Activities

1-1. Curriculum and training is developed for occupational therapist and prosthetist and orthotist.
2-1. Training for trainers is conducted
3-1. Trained trainers conduct training for occupational therapist and prosthetist and orthotist

Duration

4 years

Partner

Ministry of Labor and Social Security of Population

Input

Japan Overseas Cooperation Volunteer

- Occupational therapist (1 person x 2 years x 2 times)
- Prosthetist and orthotist (1 person x 2 years x 2 times)

*JOCV should be an counterpart of responsible doctors for rehabilitation

Attachment

Attachment 1: Field Survey Schedule

Date			Abo	Akiyama	Chiba	Nadira
1	13-Apr	Sun	Arrived in Tashkent			
2	14-Apr	Mon	JICA Office, MOH - International Economic Affairs Division			←
3	15-Apr	Tue	MOH - Minister, Chief of Radiology			←
4	16-Apr	Wed	Preparation of document/letter for field visit			←
5	17-Apr	Thu	MOH - International Economic Affairs Division			←
6	18-Apr	Fri	Ms. Saimoto - JOCV			Mr. Morgunov E, IT consultant of Health - III WB Project
7	19-Apr	Sat	Data arrangement			Data arrangement
8	20-Apr	Sun	Data arrangement			Preparation of documents & questionnaire for survey/letter for field visit
9	21-Apr	Mon	Republican Specialized Center of Urology			←
10	22-Apr	Tue	MOLSPP - Deputy Minister			←
11	23-Apr	Wed	Medical exhibition (Specialized Center of Urology, Cardiology), Tashkent Pharmaceutical Institute			←
12	24-Apr	Thu	Preparation for field visit (Navoi)			←
13	25-Apr	Fri	Tashkent - Navoi, Navoi Multiple Hospital, Navoi Branch of Republican Research Center of Emergency Medicine, Ms. Kikuchi - JOCV			←
14	26-Apr	Sat	Navoi Health Department, Regional Medical Children Center, Madaniyat SVP			←
15	27-Apr	Sun	Navoi - Tashkent			←
16	28-Apr	Mon	Institute of Virology, Republican Cardiology Center			←
17	29-Apr	Tue	Health III, WHO		Arrived in Tashkent	←
18	30-Apr	Wed	MLSPP JICA Uzbekistan Office		←	Meeting with MoH

Date			Abo	Akiyama	Chiba	Nadira
19	1-May	Thu	Tashkent - Samarkand, Regional Rehabilitation Center		←	Meeting with the chief of Finance & Economical department
20	2-May	Fri	Samarkand Regional Multiple Hospital, Postargonskiy District Rural Medical Unit, Samarkand Health Department - Deputy Director	Arrived in Tashkent	Samarkand Regional branch of the National Society of the Disabled Sewing Factory for Women with Disability Samarkand Employment Support & Social Protection Center Samarkand MLEC of Smalkand City No.60	Preparation invitation letters and documents for 1-st round table and dissemination to partners
21	3-May	Sat	Samarkand Specialized Vocational College for PWDs, Samarkand - Tashkent	Preparation	Samarkand Specialized Vocational College for PWDs, Samarkand - Tashkent	Main division on organizing health care
22	4-May	Sun	Preparation for roundtable meeting	←	←	←
23	5-May	Mon	JICA Office	←	←	←
24	6-May	Tue	Roundtable meeting 1, Departure from Tashkent	←	←	←
25	7-May	Wed	Arrived in Tokyo		UNDP Round Table meeting Consultative Council of NGOs for PWDs Ministry of Finance	Review collected documents & information, preparation letters for field visits
26	8-May	Thu		Institute of Health	Tashkent-Ferghana	Meeting with the Deputy directors of the Institute of Health &Medical Statistics
27	9-May	Fri		Holiday (Data management)	Oblast Department of Labor and Social Protection, Regional Rehabilitation Center Ferghana Provincial Hospital	Review of collected documents & information, statistic data base of health sector
28	10-May	Sat		Data management	College for persons with disabilities under MLSP Factories produced wheelchairs	Working with collected materials, preparation and review the questionnaire
29	11-May	Sun		Data management	←	Working with collected materials, preparation and review the questionnaire
30	12-May	Mon		GIZ, WB Health III (finance), UNFPA	National Rehabilitation Center in Tashkent city College for PWDs	MoH, Deputy Minister Saydaliev

Date			Abo	Akiyama	Chiba	Nadira
31	13-May	Tue		UNICEF, SES	Human dynamics supported by EU in collaboration with National Inclusive Education for Children with Special Needs in Uzbekistan Uzbek Blind People Society	UNICEF, RSCSES
32	14-May	Wed		Tashkent-Andijan, Oblast health dept. (Head, Head of OPD, Institute of Health, Statistician, Dietician, Oncology)	DET Forum Uzbekistan	WHO Round table
33	15-May	Thu		Oblast General Hospital for Adults, City family clinic	Embassy of the United State of America DET Forum Uzbekistan	Ministry of Economics, GIZ
34	16-May	Fri		Endocrinology dispensary, Oblast health dept.	Consultative Council of NGO for PWDs Cultural Center of Deaf	TIPME, Rector Prof. Sabirov, Health management department Prof. Asadov
35	17-May	Sat		Andijan-Tashkent	Data management	MoH, Main division on organizing health care, Preparation to field trip to Khorezm region
36	18-May	Sun		Tashkent-Nukus (KKP)	Tashkent-Nukus (KKP)	Preparation to field trip to Khorezm region
37	19-May	Mon		KKP Republic MOH, Institute of health, Endocrinology dispensary	Ministry of Labour and Social Protection of Population, KKP Hojayli Mercy House of Female PWD KKP Rehabilitation Center for PWD	Departure to Khorezm region for field trip
38	20-May	Tue		Nukus Rayon hospital, Darsan SVP	KKP Society of Disabled KKP Society of Deaf	Urgench Meeting with regional branch of MoH Visit to regional branch of Regional Multifunctional Hospital, Pediatric Multifunctional Hospital
39	21-May	Wed		WB Health III project (NCDs, Clinical guideline), Flour Fortification Program	Medical Consulting Commission UNDP Uzbekistan	Regional branch of RSCU, Regional branch of Institute of Health, Regional branch of Republican Specialized Cardiology Centre, Urgench branch of TMA, Regional ER Hospital

Date			Abo	Akiyama	Chiba	Nadira
40	22-May	Thu		Institute of hematology and blood transfusion	Data management	Urgench Regional Oncology dispensary, departure to Tashkent
41	23-May	Fri		Republican center (Oncology), WHO	Human Resource Center	Republican Specialized Center of Pediatrics
42	24-May	Sat		Data management	←	Review of collected documents & information, statistic data base of health sector
43	25-May	Sun		Data management	←	Preparation for field visit Fergana
44	26-May	Mon	Arrived in Tashkent	Department of Valeology, TIMPE	Meeting with JICA Office	MOH - International Economic Affairs Division
45	27-May	Tue	Roundtable meeting 2 (Social Security)	Republican center (Endocrinology), NCDs in-charge, MOH	Roundtable meeting 2 (Social Security) Departure from Tashkent	Departure to Fergana region for field trip, Regional Urology Centre
46	28-May	Wed	Data arrangement, Team meeting, Preparation of document/letter for roundtable meeting	Republican perinatal center	Arrived in Tokyo	Oblzdrav Regional Endocrinology dispensary, Regional Multifunctional Hospital
47	29-May	Thu	MOH, Head of Department of Economy, Financing and Planning	Yuyori Chirchil Rayon, Tashkent Oblast (Rayon hosp. and SVP)		Regional Children hospital, Regional branch of Institute of HealthFergana district Rayon Medical Union
48	30-May	Fri	Meeting with JICA Office	←		Regional oncology dispensary, departure to Tashkent
49	31-May	Sat	Preparation for roundtable meeting	←		Preparation for roundtable meeting
50	1-Jun	Sun	Preparation for roundtable meeting	←		Preparation for roundtable meeting
51	2-Jun	Mon	Roundtable meeting 2 (Health)	←		Roundtable meeting 2
52	3-Jun	Tue	JICA, MOH, MOLSSP, Departure from Tashkent	←		MoH, Meeting with Minister
53	4-Jun	Wed	Arrived in Tokyo	←		Uztibtechnika (Medical Techniques supplies organization)

Attachment 2: Interviewees List

Position/ Organization	Name
Tashkent City	
Minister, Ministry of Health	Prof. Anvar V. Alimov
Head, International Economical Affairs Division, Ministry of Health	Mr. Sidikov
Head, Department of Economy, Financing and Planning, Ministry of Health	Mr. Bakhtiyor Orifijonovich Khashimov
Specialist, Department of treatment & preventive care, Nat. coordinator of WHO on NCDs, Ministry of Health	Ms. Gulbahor Pulatova
Director, Formation of Healthy Lifestyle in Population Dept. Institute of Health and Medical Statistics, Ministry of Health	Ms. Gulbahor Ibragimorha Abdullaeva
Chief of Radiologist, Ministry of Health	Dr. Damir Zaredinov
Deputy Minister, Ministry for Labour and Social Security of Population	Mr. Khalilov Furkat Kamalovich
Head of Department on Social Protection, Ministry for Labour and Social Security of Population	Mr. Sharapov Bakhodiv
Chief of National Inspection of Medical Labor Expert Commissions, Ministry of Finance	Mr. Sultanov Dilshod Shuhratovich
Chief of National Inspection of M Medical Labor Expert Commissions, Ministry of Finance	Mr. Mahmanazarov Umarali
Aid coordination department of Ministry of Finance	Mr. Ganiev Aziz
Project Team Leader, GIZ	Mr. Roger Schmitt
Project Administration Assistant, GIZ	Shomirzaeve Drire
Coordinator, GIZ	Raushau Atamiyazova
Project National Coordinator, Use of Modern Advanced Medical Technology, GIZ	Dr (Ms). Nigora Murotova
Representative, UNFPA	Mr. Karl Kulessa
Assistant Representative, UNFPA	Mr. Fuad Aliev
Representative, WHO	Dr. Asmus Hammerich
National Professional Officer, Non-communicable diseases unit, WHO	Ms. Elena Tsoyi
Chief of Health, UNCEF	Dr. Svetlana Stefanet
Advisor on special policy issues, UNCEF	Mr. Khayrulla Malikov
Advisor on special policy issues, UNCEF	Dr. Fakhriddin Nizamov
Executive Director, Health III, WB	Dr. Djamshed Djabriyev
Coordinator, Health III Project, WB	Ms. Sevil Abdurakhmanova
Consultant, Human Development Sector, WB	Mr. Iqbal son Ahadsonov
Coordinator on hospital service improvement, Health III, WB	Ms. Mukhamediyarova Roza Galievna
Head of Good Governance Unit, UNDP	Ms. Aziza Umarova
Project Manager, UNDP	Ms. Yana Chicherina
Program Associate of Gender, UNDP	Ms. Komila Rakhimove
Chief Representative, JICA Uzbekistan Office, JICA	Mr. Masao Shikano
Senior Representative, JICA	Mr. Iida Jiro
Representative, JICA Uzbekistan Office, JICA	Ms. Yuko Furuichi
Program Officer, JICA Uzbekistan Office, JICA	Mr. Malik Mukhitdinov
Program Officer, JICA Uzbekistan Office, JICA	Mr. Sharifzoda Sharipov
JOCV	Ms. Sanae Saimoto
JOCV (Nurse)	Ms. Tomoe Kikuchi
Deputy head doctor on Epidemiological issues, Sanitary Epidemiological Inspection (SES)	Mr. Karim Mamarahimov

Position/ Organization	Name
Chief Medical Officer, Sanitary Epidemiological Inspection (SES)	Bakhrom I. Arlmatov
Program Manager, National Flour Fortification Program	Mr. Shrzad Atahanov
Director, Hematology and Blood Transfusion Scientific Research Institute	Mr. Alonur Saidov
Medical Doctor, Transfusiologist, Hematology and Blood Transfusion Scientific Research Institute	Ms. Gulnoza Kayumova
Medical Doctor, scientific head of the children hematology department, Hematology and Blood Transfusion Scientific Research Institute	Ms.Sapura Ibragimova
Vice Director, National Research Center of Oncology	Yusurbekov Abrorbek Akhmedjanovich
Academic Secretary, National Research Center of Oncology	Dilshod M. Egamberdiyev
Director, Republican Specialized Scientific and Practical Center of Endocrinology	Mr. Said Ismailov
Director, Republican Specialized Center of Urology	Dr. FarkhadA. Akilov
Director, Republican Institute of Virology	Dr. Erkin I. Musbayev
Deputy Director, Neonatologist, Republican Perinatal Center	Ms. Dr Saida Khasanova
Chairman, Department of Valeology, Tashkent Institute of Postgraduate medical Education	Mr. Shukhrat B. Irgashev
Rector, Tashkent Pharmaceutical Institute	Dr. Yunuskhodjaev Akhmmad
Director, National Rehabilitation Center	Mr. Muminov Asqar
Head of social rehabilitation, National Rehabilitation Center	Mr. Qosimov Shokir
Head of prosthetic factory, National Rehabilitation Center	Mr. Jabbarbergenov Mahmud
Director, College for Person with disabilities (PWDs)	Mr. Boboqulov Ikrom
Deputy director, College for PWDs	Ms. Salaeva Rano
Deputy director, College for PWDs	Ms. Gazibaeva Dinara
Deputy director, College for PWDs	Ms. Turabaeva Nina
Human dynamics supported by EU in collaboration with National Inclusive Education for Children with Special Needs in Uzbekistan	
Team Leader,	Mr. Jurgen Becker
Communications Manager	Mr. Yuriy Sarukhanyan
Project Officer	Ms. Rebecca Olevskaya
Chairman, Uzbek Blind People Society	Mr. Abduqayum Abdunabiev
Deputy Chairman, Uzbek Blind People Society	Mr. Dilmurod Sobirov
Head of Department, Uzbek Blind People Society	Mr. Shavkat Yarmuhamedov
Disability Equality Training (DET) Forum Uzbekistan	Mr. Abduhalilov Abdullo Ms. Qosimova Shodiya Ms. Valijonova Shahlo Ms. Rahimova Muhabbat Ms. Mansurova Muyassar Ms. Shokirova Nazokat Ms. Akramova Safiya

Position/ Organization	Name
Small Grants Coordinator, Embassy of the United State of America	Ms. Dilbar Sulaimanova
Small Grants Program Assistant, Disability Equality Training	Ms. Nargiza Abdukadirova
Consultative Council of NGO for PWDs Chairman of Disabled People Organization (DPO)	Mr. Farkhad Abdurahmanov
DPO "Opa-Singillar"	Ms. Natalia Plotnikova
NGO "Mehribonlik"	Mr. Rayhona Nurmuhamedova,
DPO "Status"	Mr. Yuriy Aitov
Coordinator of Council, Deputy Chair of Uzbek Society of PWDs	Mr. Oybek Isakov
Cultural Center of Deaf	Ms. Guzal Shodieva Mr. Komil Shodiev
Senior Specialist of BTE of Ministry of Health, Medical Consulting Commission	Mr. Docent Turdiev Hnvar
Senior Adviser, Research & Analysis Department, Human Resource Center	Mr. Arslanova Kamola
Senior Adviser, Department for International Cooperation , Human Resource Center	Ms. Saipov Ikrom
Tashkent Oblast	
Head doctor, Yugori Chirchik Rayon Medical Unit	Ms. Eshimbetova Damira Ashimovna
Head, Kavardow SVP	Ms. Uzakova Sanobar
Navoi Oblast	
1st Deputy of Oblast Health Department, Navoi Oblast Health Department	Dr. Abdul Muhammad
Director, Navoi Branch of Republican Research Center of Emergency Medicine, Navoi Oblast Health Department	Dr. Yusuf Malikov
Ferghana Oblast	
Oblast Department of Labor and Social Protection, Regional Rehabilitation Center	Mr. Qosimov Fayzulla
JOCV(Physical Therapist, Ferghana Oblast Hospital)	Ms. Asuka Kimura
College for persons with disabilities under MLSP	Mr. Pulatov Mirzohid
Factories produced wheelchairs	Mr. Niyazov Abdurakhmon
Samarkand Oblast	
1st Deputy of Oblast Health Department, Samarkand Oblast Health Department	Dr. Djurev Aziz Tursunbawich
Head of External Affairs, Oblast Health Department, Samarkand Oblast Health Department	Dr. Yuldashev Rahim Ahmatovich
1st Deputy Director of Samarkand Multiple Hospital	Dr. Babakolaov Shuhrat Iboagimovich
Head of Administration, Pastargonskiy District	Mr. Kazakav Maksudjov
Director, Regional Rehabilitation Center	Mr. Jumaniyozov Davron

Position/ Organization	Name
Chairperson, Samarkand Regional branch of the National Society of the Disabled	Mr. Pardayev Dilmurod
Manager, Sewing Factory for Women with Disability	Ms. Feruza Hasanova
Director, Samarkand Employment Support & Social Protection Center	Ms. Nasiba Vafakulova
Samarkand Medical Labor Expert Commissions (MLEC) of Samarkand City No.60	
Surgery Expert, Chairperson	Mr. Isokov Ravshan
Neurotic Expert	Ms. Kayumova Mavjuda
Therapist	Ms. Matlatipova Nigora
Samarkand Specialized Vocational College for PWDs	Ms. Mahmudova Manzura Rakhimovna
Andijan Oblast	
Head, Oblast Health Department	Mr. Hakimov Vakihan Alihanovich
Director of Project Implementation Bureau, Oblast Health Department	Mr. Hurshid Mamathomov
Deputy head of Children's General Hospital	Ms. Vakasbva Lola
Head Doctor of Andijan Oblast General Hospital for Adults	Mr. Abdugani Yuldashev
Head doctor, Andijan oblast Endocrinology Dispensary	Mr. Hatamov Ergashboy
Head Doctor of the City Family Clinic № 7 (outpatient)	Mrs. Bahtierhon Abdullaeva
Head Specialist on Outpatient Clinics of Andijan Oblast	Mr. Vosiljon Nazarov
Director of Andijan branch of the Institute of Health and Medical Statistics	Mr. Rustam Ubaydullaev
Head of the Statistics department of the Institute of Health and Medical Statistics	Mr. Abdurahim Nosirov
Chief Dietician of Andijan Oblast	Mr. Isroiljon Fazilov
Chief Oncologist of Andijan Oblast	Mr. Valijon Husanov
Republic of Karakalpakstan (KKP)	
First Deputy Minister of Health	Mr. Kuralbay Kamalov
Temp. Director of the Institute of Health and Medical Statistics of the RKKP	Mrs. Tamara Rahmetova
Chief Specialist on organization of Medical and Preventive help	Mrs. Zulmurad Bekatova
Medical Doctor, Statistician of the Institute of Health and Medical Statistics of the RKKP	Mrs.Gulayim Yusupova
Deputy Head Doctor of Oncology Dispensary	Mr. Fahriddin Abdullaev
Head Doctor of Oncology Dispensary	Mr. Murod Kurbanov
Head Doctor of the 1st therapy Department of the Endocrinology Dispensary	Mr. Jenis Prniyazov
General Practitioner of the Darsan rayon SVP	Mrs. Raya Kaytnazarova
Deputy Head Doctor of the Central Rayon Hospital of Nukus Rayon	Mr. Seitmurat Jaksimov
Head of Nukus Rayon Outpatient Clinic, Deputy Head of OPD of Nukus Rayon RMU	Mrs. Gulbahor Murtazaeva
Director, Hojayli Mercy House of Female PWD	Ms. Halmuratova Mauzura
Director, KKP Rehabilitation Center for PWD	Ms. Gaipova Gulnara
Head, KKP Society of Disabled	Ms. Davletyarova Parshaeul
Chairperson, KKP Society of Deaf	Ms. Beknazarova Maya
Sign Language Interpreter, KKP Society of Deaf	Ms. Nasiba Najmiddinova

Attachment 3: First Round Table Meeting Minutes

Minutes of stakeholder meeting in the frame of JICA's survey in health and disability sectors

Date and time:	May 6, 2014, 10:00 – 13:00
Venue:	Conference room of JICA Uzbekistan, Business Center, 9th floor
Participants:	Ministry of Health (MoH), Ministry of Labor and Social Protection of Population (MLSPP), Ministry of Finance (MoH), WHO, UNICEF, UNDP, GIZ, World Bank

MoH presentation:

- There are 4 893 medical facilities through the country under the structure of MoH.
- Since 2009 the MoH has been reconstructing its medical facilities. The budget allocation for the reconstruction purposes has been growing year by year. According to the MoH statistics, the budget of 2009 reconstruction was 9.3 billion USD while for 2014 407 billion USD is budgeted for the reconstruction. The special decree on health care system reformation came out in 2009 (the details of the decree and reform directions are available in the presentation slides of the MoH speaker). The MoH has widely cooperated with "Healt-1" and "Health-2" projects of World Bank in implementing the reforms.
- The decree #50 of Cabinet of Ministers from March 5, 2014 came out for the regulation of further optimization and increasing the efficiency of Rural Medical Units (RMU). In compliance of the decree, 243 outdated RMU were demolished and new ones ordered to reconstruct.
- On a monthly basis, the doctors of various narrow specialties make health check visits to RMUs spending one week in various RMUs of regions. By now 2 534 RMUs were visited by the doctors.
- Since 2010 133 old style polyclinics are reformed into 115 family polyclinics. It is expected to form 180 family polyclinics by the end of 2016.
- As part of the health care reform, the MoH cooperated with German government in improving child and maternity care services where German government allocated 27 million Euros.
- State program "On screening of mother and child" has contributed to the reduction of congenital disease rate in the country. Statistically, since 1991 the ratio of maternal and child mortality decreased three times.
- In the area of emergency healthcare services, the priority areas for 2014 are: improvement of primary health care services, decreasing the causes of emergency service use, improvement of ambulance call centers (03), improvement of standards of diagnosis and treatment practices, and improvement of medical engineering.
- There are special attentions put on tackling with significant diseases such as TB, psychiatric illnesses and HIV. Each of these diseases is addressed through special state programs. For instance, decree # 207 of Cabinet of Ministers from 2013 regulates the interventions for psychiatric diseases.
- In 2013 "Health-3" project of WB started and it will mainly focus on improvement of RMUs within five years.
- Currently MoH is working on adoption of decree of Cabinet of Ministers on non-communicable diseases.

MLSPP presentation:

- Social protection measures of PWD are regulated by the Law on Social Protection of PWD and other international instruments in Uzbekistan.

- After the release of decree #433 in 1995 11 rehabilitation centers for PWD were founded in Uzbekistan. Annually approximately 17 000 persons receive rehabilitation services from one central and ten regional rehabilitation centers. The rehabilitation center in Tashkent has the capacity of 200 beds while regional rehabilitation centers can accommodate 50 persons at a time. Out of total 700 beds 80 are for children.

- In accordance with president's decree # 1542 complex reconstruction works in rehabilitation centers are underway.

- There is no formal education for professional rehabilitation. Therefore, we enhance our rehabilitation skills via partnership projects with JICA and UNDP. By now our rehabilitation staff received trainings in UK, Japan, Australia and China.

- Medical rehabilitation services are in sufficient condition at the moment, but need more assistance in social and vocational rehabilitation.

- Another area we need external assistance is improvement and provision of prosthetic and assistive devices.

- The legislation and implementation mechanisms for social rehabilitation also require further advancement. JICA's assistance in this area would be necessary, especially in regional rehabilitation centers.

- The cooperation with DPOs would foster social rehabilitation services provided by our rehabilitation institutions.

- There a nationwide system of supporting employment of PWD. The MLSPP has special database of quoted vacancies and employments of PWD, including deaf and blind.

- The major causes of unemployment of PWD are lack of motivation of PWD in employment and necessary professional qualification. To meet such needs MLSPP provides vocational education through specialized professional vocational colleges for PWD.

- NGOs also have been putting their efforts for the promotion of employment of PWD through vocational education and job referral services.

Free discussion:

MoF:

- the figures presented by Mr. Hisao Chiba are a bit outdated and need to be updated. We need assistance in reforming disability categorization criteria in partnership with MoH and MLSPP.
- We also need assistance in setting up information management system for treated case and system for quality control management.

UNDP:

- UNDP is now working on the development of a system for vertical validation of MLSPP's functions in comparison with financial resources allocated by MoF for social protection purposes.
- Compulsory health insurance system should be introduced considering current taxation system.
- Another issue that requires significant consideration is who will cover the expenses of health insurance of elder people and children? Is it employer or some other party?

- Currently UNDP in cooperation with UNICEF working on development of social work profession.
- Promotion of UNCRPD is also UNDP's high priority area.
- We would recommend JICA to cooperate with UNDP in promotion social services area through introducing OT profession.
- Another field where JICA could provide high quality assistance is development of assistive device production.

UNICEF:
- Equipment for cold chain vaccination would be helpful in health sector if JICA could provide.
- Results of the health financing, which is coordinated by UN will be issued in July.

WHO:
- Enhancement of quality assurance and management of healthcare services.
- NCD prevention and control.
- Support for health system issues.
- Health information related assistance.
- Social support for PWD.

GIZ:
- Provide assistance to MoH in improvement its systematic issues.
- Equipment base upgrade.
- We provide assistance to Blind society in professional development of Blinds.
- Suggestion to JICA is provision of assistance in improving health services in rural areas in cooperation with "Health-3" project of WB.
- Capacity development for nurses' pre- and –post formal education.
- Promotion of PWD's social inclusion.

World Bank
- Pilot on introduction of a kind of health insurance scheme has started through the Health III project.
- Health information system needs to be improved.
- Treatment quality needs to be improved.

List of Participants

Organization	Name	Position
MOH	Mr. Khashimov B.A.	Head, Financial Division
	Mr. Sidikov	Head, International Economical Affairs Division
	Dr. Mirazimov D. B.	Head, Dept. of Organizing Curative and Prevention Care
	Dr. Mutalova, Z. D.	Director, Institute of Health and Medical Statistics (IHMS)
	Dr. Ismailov U. S.	Head, Science and Medical Education Institutions Division
MOLSPP	Mr. Muminov Askar	Director, Republican Rehabilitation Center for Persons with Disabilities
	Mr. Kasimov Shokir	
	Mr. Djabberghenov Makhmud	
	Mr. Ruzibaev Dilmurod	
	Mr. Bekmurodov Zaynitddin	
MOF	Mr. Nazarmatov Umirali	Deputy head, Inspection on Medical Social Expertise Commission of MF
	Ms. Khodjaeva Shakhnoza	Chief specialist
GIZ	Mr. Roger Schmitt	GIZ Project Team Leader
	Shomirzaeve Drire	Project Administration Assistant
	Raushau Atamiyazova	Coordinator,
UNFPA	Mr. Karl Kulessa	Representative
	Mr. Fuad Aliev	Assistant Representative
WHO	Dr. Asmus Hammerich	Representative
UNDP	Ms. Flora Salikhova	Health Issues Division, GGU
	Ms. Yana Chicherina	Social Protection Issues, GGU
	Ms. Aziza Umarova	Head, Good Governance Unit
UNCEF	Dr. Svetlana Stefanet	Chief of Health
	Mr. Khayrulla Malikov	Advisor on special policy issues
WB	Ms. Sevil Abdurakhmanova	Coordinator, Health III Project
	Mr. Iqbal son Ahadsonov	Consultant, Human Development Sector
	Mr. Djabriev Djamshid	Director, Bureau of Joint Project Health III
JICA	Mr. Masao Shikano	Chief Representative, JICA Uzbekistan Office
	Ms. Yuko Furuichi	Representative, JICA Uzbekistan Office
	Mr. Malik Mukhitdinov	Program Officer, JICA Uzbekistan Office

Attachment 4: Second Round Table Meeting Minutes

Minutes

Round Table on discussion of the 2nd preliminary results of JICA survey team and future cooperation among national and international stakeholders on further development of "disability and development" sectors

Date and Time: 27 May 2014, 10:00-12:00

Venue: Conference room of JICA Uzbekistan, Business Center 9th floor

Agenda

10:00 Opening Speech (Mr. Shikano, Representative of JICA Office)

10:05 Introduction of the 2nd Preliminary Result (Mr. Abo, JICA Survey Team)

10:10 Presentation on the 2nd Preliminary Result on "Disability & Development" （Mr. Chiba, JICA Survey Team）

10:40 Discussion on future collaboration

11:40 Summary & Conclusion of the meeting

11:50 Closing Speech（Mr. Shikano, Representative of JICA Office）

Free discussion on Future Collaboration

Uzbek Disabled People Society : I agree with difficulty to find an expert for disabled employment in Uzbekistan. Accessibility of schools is also problem that slope is not provided. And actually only few PWDs, as log as I know only 15, are studying at University.

We used to make a report of "100 kind of occupations that PWDs can do". However, no one showed interest. As suggested in the Presentation, employment of PWDs should be promoted more, so that systematic and varieties of vocational training are necessary.

The Consultative Council : It is true that there are no official representatives of the Disabled People Organizations (DPOs) in Uzbekistan and it is the problem between the Council and the Government. In fact, discussion between the Council and the Government did not go well since there is no official representative of DPOs.

Therefore, we are now planning to establish an umbrella organization for disabled and bring up our voice to the Government. In this regard, if we could learn about Japanese experience, especially how to collaborate with the Government, what kind of social policy for disability are necessary and how to monitor implementation of CRPD, etc., would be very appreciated.

At the same time, I know rehabilitation is important but also habilitation is very important for Uzbekistan. Actually there is no expert on habilitation in Uzbekistan. Beside, experts on employment and mental counseling are also necessary for us. Lastly, we wish to learn more about social model and equal rights of disability.

Vocational Training Center: From our school, actually about 4 to 5 students every year go up to University. So we think level of education is rather sufficient. However, it may be true that training courses is limited sot that students have just a few choices. So we are now thinking of adding a new course, that is a training of prosthetics and orthotics. If JICA can support this plan, it would be very appreciated.

UNDP: In Uzbekistan, it is only 9 % of student (non-disabled) going to University. Actually it's not so easy even for non-disabled students going to the University. Plus, unskilled labor is still major working style in most of industries so that it is also difficult for PWDs to work. Unemployment is high in Uzbekistan so that many people go to Russia to work.

Regarding rehabilitation, there is no occupation for occupational therapist and prosthetist and orthotist, and there is no institution to train them. So that in this regard, JICA's support is very important, not only technical support but also advice to policy level. On top of this, industry of welfare devices such as wheelchair are not yet established so that if Japanese company can help this issue, that would be very meaningful.

UNDP in collaboration with UNICEF are supporting implementation of CRPD, and we think training for social worker is very important. If Japan can support training of occupational therapist and prosthetist and orthotist, we can work for social workers. And then our project can complement each other.

The Consultative Council：We also wish to learn about business enterprise of DPOs in Japan.

Ministry of Finance: We agree that there is no expert on vocational training and also no occupation for occupational therapist and social worker. We need collaboration from Ministry of Health in this regard. Probably we can set up new curriculum at university level. And also we are interested in learning from

other countries like Japan.

National Rehabilitation Center: We think we are strong at medical rehabilitation but actually no experts on vocational training and occupational therapist. Probably we can set up a new curriculum at postgraduate level.

Ministry of Finance: What kind of rehabilitation experts that Japan has?

Chiba: Physiotherapist, occupational therapist, speech therapist, social worker, etc., plus, peer counseling.

National Rehabilitation Center: Are there any criteria for measuring work ability of disabled? And who would actually judge such work ability of disabled in Japan?

Chiba: I think there are no official criteria in Japan to judge work ability and nowadays, medical doctors would not judge work ability of disabled as well. In the past, medical doctors gave advice on what kind of job that you (PWDs) can do or not, but nowadays, we realized that it is not appropriate that medical doctors judge work ability of disabled. Besides, we also realized that a kind of common belief, like intellectual disability can do only simple task, is not really true. So we try to find potential of disabled and avoid to judge work ability of disabled from medical perspective.

National Center for Human Rights: We agree with suggestions in the Presentation. Basically our policy is the same with the suggestion. Particularly we also think capacity development of DPOs is important. We would like to work together with Japan for implementation of CRPD.

End.

List of Participants

Name	Organization
Yarmuhaedov Sh.	Blinds society
Abdurakhmanov F.	Association of disabled entrepreneurs"Nur"
Aitov Yu.	NGO "Status"
Isakov O.	Uzbek society of PWD
Arslanova K.	National Human Rights Center
Tyan I.	Ministry of Finance
Umarova A.	UNDP
Bekmuradov Z.	National center of rehabilitation of PWD
Boboqulov I.	Vocational college for PWD
Turabaeva N.	Vocational college for PWD
Kasymov Sh.	National center of rehabilitation of PWD
Kasymova Sh.	SHG "Istiqbol"

Attachment 5: Third Round Table Meeting Minutes

Minutes of Stakeholder Meeting in the Frame of JICA's Survey in Health Sectors

Date and time: June 2, 2014, 11:00 – 13:00

Venue: Conference room of JICA Uzbekistan, Business Center, 9th floor

Participants: Refer to the Participant List

Opening remarks by the Chief Representative of JICA Uzbekistan Office, Mr. Shikano

Survey team presentation:

- Presentation regarding the survey results and proposed programs

Free discussion:

WHO:

- The survey results were transparent.
- To pay attention to a health system and NCDs which are the biggest problems in the Uzbek health sector is evaluated. I think the improvement of a health system is a challenging issue, but there is a need.
- I understand that TQM is a specialty of Japan. Strengthening and improving a health system in Uzbekistan are an ambitious attempt for all of us.
- WHO has been working on NCDs, and it is likewise for JICA. WHO also considers that support for UHC is important.

MOH:

- MOH appreciates JICA's cooperation so far.
- Regarding the improvement of a health sector, MOH implements some activities in collaboration with other donors. Currently, MOH is addressing MDGs as well as the Post 2015.
- The strategies and activity plans in future are developed based on Euro WHO "Health 2020".
- The NCDs strategy is highly likely to be approved. At first, controlling Tabaco and alcohol will be addressed.
- The number of beds is decreasing in order to use health budget efficiently and appropriately. From now on, MOH will consider a first step to install a public health insurance system.
- MOH would like to request all of donors to clarify their activities as well as to share their reports.

UNICEF:

- When JICA will approach NCDs issues, UNICEF would like to cooperate to address in healthy lifestyle for children in order to prevent NCDs in future.
- Regarding a health system, UNICEF has a plan to conduct a survey for health financing and its results and analysis will be useful. We will share it.
- (Question) How will you conduct training for health governance?
- (Answer by the Survey Team) Through training of trainers (TOT) method, republican officers will instruct the officers at oblast level.

WB:

- I would like to add the information as the majority of hospitals are installing and shifting to a self-financing system.

Survey Team Leader:

- I would like to thank everyone's comments and your comments will be reflected on the survey report. Again, I would like to appreciate all of you kindly cooperated to our survey.

Closing remarks by the Chief Representative of JICA Uzbekistan Office, Mr. Shikano

List of Participants

Organization	Name	Position
MOH	Mr. Rafael Krivleev	Deputy Head, Financial Division MOH
	Mr. Sidikov	Head, International Economic Affairs Division
	Dr. Gulbahor Pulatova	Specialist on NCD
	Mr. Alim Djabbarovich	Deputy, Institute of Health and Medical Statistics
MOF	Mr. Kazakov Zarif	
GIZ	Nigora Murotova	Project National Coordinator
	Umida Dusmatova	Project Assistant
UNFPA	Hudaykurova Dilafruz	
WHO	Dr. Asmus Hammerich	Representative
UNDP	Liya Perepada	Public Health program assistant
UNICEF	Dr. Svetlana Stefanet	Chief of Health
	Safaeva Kamole	
WB	Ms. Sevil Abdurakhmanova	Coordinator, Health III Project
JICA	Mr. Masao Shikano	Chief Representative, JICA Uzbekistan Office
	Mr. Malik Mukhitdinov	Program Officer, JICA Uzbekistan Office

Attachment 6: List of equipment provided by the Health III Project

List of equipment

RMU (Central district hospitals) per beds within the project "Health III"

№	Name of the equipment	Type I	Type II	Type III
		150	150 to 300	More than 300
	Diagnostic department			
1	X-ray diagnostic complex			
1а	Universal X-ray machine , type I (per workstation)	1	1	1
1б	Universal X-ray machine , type II (for two seats)	1	1	1
1в	digitizer (CR system)	1	1	1
2	Spirometer	1	1	1
3	Personal computer including printer	1	1	1
3а	UPS Voltage Regulator	1	1	1
4	Digital stationary ultrasonic diagnostic system with color Doppler and 3 sensors 1	1	1	1
5	Stress system with bicycle ergometer	1	1	1
6	Defibrillator with a monitor	1	1	1
	Admission department			
1	Medical Scales for newborns	1	1	1
2	Scales for adults and children	1	1	1
3	Bag Ambu, for children	1	1	1
4	Bag Ambu, for adults	1	1	1
5	Personal computer vkl. printer	1	1	1
6	Voltage stabilizer + UPS	1	1	1
7	Access with removable stretcher	1	1	1
8	Medical wheelchair	2	2	2
9	Changing table with heated	1	1	1
	Admission- diagnostic ward			
1	Electrocardiograph , 3 channel	1	1	1
	Laboratory			
1	Laboratory centrifuge	2	2	2
2	Binocular microscope with combined lighter	2	2	2
3	Refrigerator 220 L.	2	2	2
4	Laboratory furniture set with exhaust hood and laboratory washing set	1	1	1
5	Hematocrit centrifuge	1	1	1
6	RBS counter	1	1	1
7	RBC cell counter	5	5	5
8	ESR measurement device	3	3	3
9	Pipe dose measuring device setb (4 units)	2	2	2
10	Distillator 10 l/h	1	1	1
11	Semiautomatic Biochemical analyzer with the set of reagents+ electricity stabilizer	1	1	1
12	Oven-drying device	1	1	1
	Therapeutic department			
1	Electrocardiograph, 3-channel portable	1	1	1ав
	Chamber			

1	Functional bed with mattress	8	12	17
2	Medical wheelchair	1	1	1
3	Access with removable stretcher	1	1	1
	Treatment room			
1	Medical cabinet	1	1	1
2	Refrigerator 140 liter.	1	1	1
3	Ultrasonic Nebulizer (nebulizer)	1	1	1
4	medical suction	1	1	1
5	syringe pump	2	2	2
6	Pulse Oximeter	2	2	2
7	Bag Ambu, for adults	1	1	1
	Nurse station:			
1	Roller table for bandaging with shelves	2	2	2
	Children's department			
	Ward			
1	Child bed	24	30	36
2	Baby cot	4	5	6
3	Functional bed with mattress	2	2	3
4	Trolly	1	1	1
5	Changing Table	4	5	6
	Intensive care for children			
1	oxygen Concentrator	1	1	1
2	Baby cot	2	2	2
3	patient Monitor	2	2	2
4	Neoterm (children's table for intensive therapy)	1	1	1
5	Lamp for phototherapy	1	1	1
6	Radiant heat (mobile)	1	1	1
7	X-ray view box	1	1	1
8	Neonatal laryngoscope with a set of blades	1	1	1
9	Humidifiers gas mixture heated (water bath)	1	1	1
10	Medical Scales for newborns	1	1	1
11	Ultrasonic Nebulizer (nebulizer)	1	1	1
12	syringe pump	2	2	2
13	Pulse Oximeter	2	2	2
14	Ventilator	1	1	1
15	Bag Ambu, for children	1	1	1
16	Bag Ambu, for adults	1	1	1
17	Refrigerator 140 liter .	1	1	1
18	Bix metal for storing tools in a sterile condition	6	6	6
	Treatment room			
1	changing table	1	1	1
2	Medical cabinet	1	1	1
3	Stadiometer	1	1	1
4	Scales for adults and children	1	1	1
5	Medical Scales for newborns	1	1	1
6	Refrigerator 140 liter.	1	1	1
7	Ultrasonic Nebulizer (nebulizer)	1	1	1
8	medical suction	1	1	1
9	syringe pump	2	2	2
10	Laryngoscope	2	2	2
11	Pulse Oximeter	2	2	2

	Nurse station:			
1	Roller table for bandaging with shelves	2	2	2
	Consulting room			
1	Sphygmomanometer with cuffs for children and infants	2	2	2
	Infectious ward			
1	Medical wheelchair	1	1	1
2	Trolly	1	1	1
3	Scales for adults and children	1	1	1
4	Doctor's set	1	1	1
	Ward			
1	Functional bed with mattress	4	5	6
2	patient Monitor	1	1	1
	Treatment room			
1	Medical cabinet	1	1	1
2	Refrigerator 140 liter.	1	1	1
3	Ultrasonic Nebulizer (nebulizer)	1	1	1
4	medical suction	1	1	1
5	syringe pump	2	2	2
6	Pulse Oximeter	2	2	2
7	oxygen Concentrator	2	2	2
8	Bag Ambu, for adults	1	1	1
9	Bag Ambu, for children	1	1	1
10	Stand for injections	1	1	1
	Nurse station:			
1	Roller table for bandaging with shelves	2	2	2
	Retrofit resuscitation and operating			
1	patient Monitor	2	2	2
2	medical suction	1	1	1
3	syringe pump	2	2	2
4	oxygen Concentrator	1	1	1
5	A set of surgical instruments (large surgical suite)	1	1	1
	Branch centralized sterilization			
1	Autoclave 75 liters	3	3	3
2	drying cabinet	2	2	2
3	Metallic box for keeping sterile instruments	12	12	12
4	Distillator 10 l/hour	2	2	2
5	Device for hermetic packaging of medical instruments	1	1	1
6	Ultrasound washer	1	1	1
7	Metalic laboratory table (size 1200/600/750)	1	1	1
8	Two-door laboratory table with two washers (size 800/600/900)	1	1	1
9	Metalic laboratory table ceramics and granite (size 1200/600/900)	1	1	1
10	Metalic laboratory table ceramics and granite (размер 1500/800/900)	1	1	1
11	Laboratory shelves (size 1000/450/2200)	2	2	2
	Disinfection equipment			
1	Stationary disinfection chamber (capacity 5 м3) including hydro console panel and uniform	1	1	1
	Equipment for recycling			
1	Set of equipment for waste disposal	1	1	1
	supply Center			

1	Electric generator 3 phase at least 63 kVA diesel	1	1	1
	Laboratory *			
	ELISA analyzer	1	1	1
	Retrofit resuscitation and operating *			
1	Anesthesia apparatus	1	1	1
2	Portable lamp	1	1	1
3	Operating table	1	1	1
4	Operating lamp	1	1	1

*The following items will be procured in case of saving allocated money, based on the results of bidding for main equipment.

List of equipment Central district of multidisciplinary clinics (per visits)

№ пп	Name of the equipment	Type I	Type II	Type III
		150 per day	300 per day	More than 300 per day
	Diagnostic department clinics			
1	X-ray view box	1	1	1
2	Fibrogastroscope (with illuminator)	1	1	1
3	Stationary digital ultrasound diagnostic system withcolor Doppler and 2 sensors	1	1	1
4	Instrument table with shelves on wheels	3	3	3
5	Personal computer vkl.printer	1	1	1
5a	Voltage stabilizer + UPS	1	1	1
6	Electrocardiograph, 3 channel	1	1	1
7	EEG machine 16 channel	1	1	1
8	Dynamometer	5	5	5
9	Echo Encephalography	1	1	1
10	Stress system with bycicle ergometry	1	1	1
11	Defibrillator with monitor	1	1	1
	Registry			
1	Personal computer incl. printer	1	1	1
1a	Voltage stabilizer + UPS	1	1	1
	Otolaryngologist (ENT) room			
1	Forehear reflector	1	1	1
2	ENT set of instruments	1	1	1
3	ENT set of instruments 2	1	1	1
4	Set of camertones	1	1	1
5	Rolling instrument table with shelves	1	1	1
6	Otoscope	1	1	1
7	Audiometry device	1	1	1
8	Medical Cabinet	1	1	1
9	Special otolaryngological chair for patient	1	1	1
10	Laryngoscope	1	1	1
11	Negatoscope	1	1	1
	treatment room			
1	Medical cabinet	1	1	1
2	Changing table	1	1	1
3	Rolling instrument table with shelves	1	1	1

4	Refrigerator 140 liter.	1	1	1
5	Medical couch	1	1	1
6	Portable quartz lamp	1	1	1
	Traumatologist- orthopaedist room, rabiologist			
1	Set for removing plaster bandage (scissors, spin, saw for plaster works gipsorez)	1	1	1
2	Set of tools for removal of sutures (tweezers, scissors, clamps, etc.)	1	1	1
3	X-ray view box	1	1	1
4	Instrument table with shelves on wheels	1	1	1
5	dressing table	1	1	1
6	Big sterilizing box	1	1	1
7	Goniometer	1	1	1
	Surgeon room			
1	Bandage changing table	1	1	1
2	Portable lamp	1	1	1
3	Set of surgical instruments	1	1	1
4	Negatoscope	1	1	1
5	Rolling Instrument table with shelves	1	1	1
6	Medical suction pump	1	1	1
7	Medical bed	2	2	2
8	Big sterilizing box	1	1	1
	Urologist room			
1	Negatoscope	1	1	1
2	Set or plastib urethra bougies	1	1	1
3	Orchometr	1	1	1
4	Examination table	1	1	1
5	Set of urological instruments	1	1	1
6	Rolling instrument table with shelves	1	1	1
7	Portable lamp	1	1	1
	Neurologist room			
1	Set of camertones	1	1	1
	Oncologist room			
1	Examination table	1	1	1
2	Rectoscope	1	1	1
3	Negatoscope	1	1	1
4	Rolling instrument table with shelves	1	1	1
5	Set of gynecological instruments	1	1	1
6	Personal computer, incl. Printer	1	1	1
7	Electricity stabilizer + UPS	1	1	1
8	Medical bed	1	1	1
	Ophthalmologist room			
1	Adult Eyesight examination table	1	1	1
2	Stationary slit lamp with supplies and spare lamps and elevating table	1	1	1
3	Contactless tonometer	1	1	1
4	Contact tonometer	2	2	2
5	Direct ophtalmoscope	1	1	1
6	Specular ophtalmoscope	1	1	1
7	Perimetr for measuring eye fields	2	2	2
8	Set of eyeglass lenses	1	1	1
9	Table Examination lamp	1	1	1

10	Rabkin's polychromatic table	1	1	1
11	Autorefraction meter	1	1	1
12	Gonioscope	1	1	1
13	Rolling instrument table with shelves	2	2	2
14	Set of sciascopic liners	1	1	1
15	Magnifying glass	1	1	1
16	Binocular magnifying glass	1	1	1
17	Automatic projector of signs	1	1	1
18	Optotypes of Polyak	1	1	1
19	Control tables and signs of Polyak	1	1	1
	Pulmonologist/Tuberculosis specialist room			
1	Negatoscope	1	1	1
2	Spirometer	1	1	1
3	Peakflowmeter	1	1	1
	Endocrinologist room			
1	Weights Scales for adults and children	1	1	1
2	Height scales	1	1	1
3	Orchidometer	1	1	1
	Therapeutist/ Physician room			
1	Doctor's set	2	2	2
	Obstetrician-gynecologist (2 rooms – examination and treatment rooms)			
1	Gynecological chair with steps	1	1	1
2	Weight scales for adults and children	1	1	1
3	Fetal Doppler	1	1	1
4	Set of gynecological instruments	2	3	4
5	Colposcope	0	0	1
6	Rolling instrument table with shelves	1	1	1
7	Examination lamp	1	1	1
8	Height scale	1	1	1
9	Tray	2	2	2
10	Sterile big box	2	2	2
	Pediatrician's room			
1	Doctor's set	2	2	2
2	Tonometer with phonendoscope and cuffs for children	1	1	1
3	Weight scales for adults and children	1	1	1
4	Medical weight scales for newborns	1	1	1
5	Height scale	1	1	1
6	Height scale for infant	1	1	1
7	Negatoscope	1	1	1
8	Changing table with heater	1	1	1
	Vaccination room			
1	Rolling instrument table with shelves	1	1	1
2	Drug cabinet, metallic with glass doors	1	1	1
3	Refrigerator for vaccine storage 200 l.	1	1	1
4	Refrigerator bag	4	4	4
5	Changing table with heater	1	1	1
6	Ambu bag for children	1	1	1
	Laboratory of Central Rayon Outpatient clinic			
1	Semiautomatic analyzer with set of reagents + electricity stabilizer	1	1	1

2	Laboratory centrifuge	2	2	2
3	Refrigerator 220 L.	2	2	2
4	Laboratory furniture set with exhaust hood and laboratory washing set	2	2	3
5	Hematocrit centrifuge	1	1	1
6	RBS counter	1	1	1
7	RBC cell counter	4	4	4
8	ESR measurement device	2	2	2
9	Pipe dose measuring device setb (4 units)	1	1	1
10	Distillator 10 l/h	1	1	1
11	Semiautomatic Biochemical analyzer with the set of reagents+ electricity stabilizer	1	1	1
	Oven-drying device			
	For the outpatient GP catchment area			
1	Set of camertones	1	1	1
2	ECG 3 channel	1	1	1
3	Equipment for preparation of disinfection solutions	1	1	1
4	Stand for intravenous injection	4	4	4
5	Set of immobilization tires	1	1	1
6	Sterile metallic box of middle size	10	10	10
7	Sterile metallic box of small size	10	10	10
8	Mobile quartz lamp	4	4	4
	For the outpatient GP catchment area *			
1	Child vaginoscope	1	1	1

**The following items will be procured in case of saving allocated money, based on the results of bidding for main equipment.

Attachment 7: Major Health Indicators (Republic of Uzbekistan)

			Indicator	Sources		Year
0 General Information	0.1 Demography	0.1.01	Population, total	WDI	29,774,500	2012
		0.1.02	Population growth (annual %)	WDI	1.5%	2012
		0.1.03	Life expectancy at birth, total (years)	WDI	68	2012
		0.1.04	Birth rate, crude (per 1,000 people)	WDI	21	2012
		0.1.05	Death rate, crude (per 1,000 people)	WDI	5	2012
		0.1.06	Urban population (% of total)	WDI	36%	2012
	0.2 Economic/ Development Condition	0.2.01	GNI per capita, Atlas method (current US$)	WDI	3,670	2012
		0.2.02	GNI growth (annual %)	WDI	8.2%	2012
		0.2.03	Total enrollment, primary (% net)	WDI	93%	2011
		0.2.04	Ratio of female to male primary enrollment (%)	WDI	97%	2011
		0.2.05	Literacy rate, adult total (% of people ages 15 and above)	WDI	99%	2011
		0.2.06	Human Development Index	HDR	0.654	2012
		0.2.07	Human Development Index (rank)	HDR	114	2012
		0.2.08	Poverty gap at $1.25 a day (PPP) (%)	WDI	NA	2012
	0.3 Water and Sanitation	0.3.01	Improved water source (% of population with access)	HNP Stats	87%	2012
		0.3.02	Improved sanitation facilities (% of population with access)	HNP Stats	100%	2012
1 Health Status of People	1.1 Mortality and Morbidity	1.1.01	Age-standardized mortality rate by cause (per 100,000 population) - Communicable	GHO	104	2012
		1.1.02	Age-standardized mortality rate by cause (per 100,000 population) - Noncommunicable	GHO	838	2012
		1.1.03	Age-standardized mortality rate by cause (per 100,000 population) - Injuries	GHO	44	2012
		1.1.04	Cause of death, by communicable diseases and maternal, prenatal and nutrition conditions (% of total)	HNP Stats	15%	2012
		1.1.05	Cause of death, by non-communicable diseases (% of total)	HNP Stats	79%	2008
		1.1.06	Cause of death, by injury (% of total)	HNP Stats	6%	2012
		1.1.07	Distribution of years of life lost by broader causes (%) - Communicable	GHO	34	2008
		1.1.08	Distribution of years of life lost by broader causes (%) - Noncommunicable	GHO	55	2008
		1.1.09	Distribution of years of life lost by broader causes (%) - Injuries	GHO	10	2008
	1.2 Mother and Child Health	1.2.01	Maternal mortality ratio (modeled estimate, per 100,000 live births)	MDGs	28	2010
		1.2.02	Adolescent fertility rate (births per 1,000 women ages 15-19)	MDGs	25.5	2006
		1.2.03	Mortality rate, under-5 (per 1,000)	MDGs	39.6	2012
		1.2.04	Mortality rate, infant (per 1,000 live births)	MDGs	34.4	2012
		1.2.05	Low-birth weight babies (% of births)	HNP Stats	4%	2006
		1.2.06	Fertility rate, total (birth per woman)	HNP Stats	2.5	2012
	1.3 Infectious Diseases	1.3.01	a) Prevalence of HIV, male (% ages 15-24)	MDGs	0.1%	2012
			b) Prevalence of HIV, female (% ages 15-24)	MDGs	0.1%	2012
		1.3.02	Notified cases of malaria per 100,000 population, all ages	MDGs Database	13	2010
		1.3.03	a) Malaria death rate per 100,000 population, all ages	MDGs Database	0	2010
			b) Malaria death rate per 100,000 population, ages 0-4	MDGs Database	0	2010
		1.3.04	Tuberculosis prevalence rate per 100,000 population (mid-point)	MDGs Database	177	2011
		1.3.05	Incidence of tuberculosis (per 100,000 people)	MDGs	101	2011
		1.3.06	Tuberculosis death rate (per 100,000 people)	MDGs	6.1	2011
		1.3.07	Deaths due to tuberculosis among HIV-negative people (per 100,000 population)	GHO	6.1	2012
		1.3.08	Prevalence of HIV, total (% of population ages 15-49)	HNP Stats	0.20%	2012
		1.3.09	AIDS estimated deaths (UNAIDS estimates)	HNP Stats	2,400	2012
		1.3.10	HIV incidence rate, 15-49 years old, percentage (mid-point)	MDGs Database	NA	2012
		1.3.11	Partial Prioritization Score by the Global Fund (HIV)	GF	7	2012
			Partial Prioritization Score by the Global Fund (Malaria)	GF	4	2012
			Partial Prioritization Score by the Global Fund (TB)	GF	9	2012

			Indicator	Sources		Year
	1.4 Nutrition	1.4.01	Prevalence of wasting (% of children under 5)	HNP Stats	9%	2000
2 Service Delivery	2.1 Maternal and Child Health	2.1.01	Births attended by skilled health personnel, percentage	MDGs Database	99.9%	2006
		2.1.02	Birth by caesarian section (%)	GHO	6.3%	2006
		2.1.03	Contraceptive prevalence (% of women ages 15-49)	MDGs	64.9%	2006
		2.1.04	Pregnant women receiving prenatal care (%)	HNP Stats	97%	2000
		2.1.05	Pregnant women receiving prenatal care of at least four visits (% of pregnant women)	HNP Stats	NA	2012
		2.1.06	Unmet need for family planning, total, percentage	MDGs Database	13.70%	1996
		2.1.07	1-year-old children immunized against: Measles	Childinfo	98%	2010
		2.1.08	1-year-old children immunized against: Tuberculosis	Childinfo	99%	2010
		2.1.09	a) 1-year-old children immunized against: DPT (percentage of infants who received their first dose of diphtheria, pertussis and tetanus vaccine)	Childinfo	99%	2012
			b) 1-year-old children immunized against: DPT (percentage of infants who received three doses of diphtheria, pertussis and tetanus vaccine)	Childinfo	99%	2012
		2.1.10	1-year-old children immunized against: Polio	Childinfo	99%	2012
	2.2 Infectious Diseases	2.2.01	Condom use with non regular partner, % adults (15-49), male	MDGs	NA	2012
		2.2.02	Condom use with non regular partner, % adults (15-49), female	MDGs	NA	2012
		2.2.03	Men 15-24 years old with comprehensive correct knowledge of HIV/AIDS, percentage	MDGs Database	NA	2012
		2.2.04	Women 15-24 years old with comprehensive correct knowledge of HIV/AIDS, percentage	MDGs Database	28%	2000
		2.2.05	Ratio of school attendance of orphans to school attendance of non-orphans aged 10-14 years	MDGs Database	NA	2012
		2.2.06	Use of insecticide-treated bed nets (% of under-5 population)	HNP Stats	NA	2012
		2.2.07	Children under 5 with fever being treated with anti-malarial drugs, percentage	MDGs Database	NA	2012
		2.2.08	Tuberculosis treatment success rate under DOTS, percentage	MDGs Database	81%	2010
		2.2.09	Antiretroviral therapy coverage (% of people with advanced HIV infection)	MDGs	8.4%	2011
		2.2.10	People aged 15 years and over who received HIV testing and counselling, estimated number per 1,000 adult population	GHO	95.2	2010
		2.2.11	Testing and counselling facilities, estimated number per 100,000 adult population	GHO	33.1	2010
		2.2.12	Pregnant women tested for HIV, estimated coverage (%)	GHO	NA	2012
		2.2.13	Percentage of HIV-infected pregnant women who received antiretroviral drugs to reduce the risk for mother-to-child transmission (Mid point)	MDGs Database	95%	2011
		2.2.14	Tuberculosis case detection rate (all forms)	HNP Stats	52%	2011
		2.2.15	Tuberculosis treatment success rate (% of registered cases)	MDGs		2012
	2.3 Nutrition	2.3.01	Vitamin A supplementation coverage rate (% of children ages 6-59 months)	HNP Stats	99%	2012
		2.3.02	Consumption of iodized salt (% of households)	HNP Stats	NA	2012
	2.4 Quality and Coverage	2.4.01	Estimate of health formal coverage	ILO	NA	2010/2011
		2.4.02	Population not covered (%) due to financial resources deficit	ILO	73.9	2010/2011
		2.4.03	Population not covered (%) due to professional health staff deficit	ILO	0	2010/2011
3 Health System	3.1 Human Resources	3.1.01	Physicians (per 1,000 people)	HNP Stats	2.4	2012
		3.1.02	Midwives (per 1,000 people)	HNP Stats	12.0	2012
		3.1.03	Nurses (per 1,000 people)	HNP Stats		2012
		3.1.04	Dentistry personnel density (per 10,000 population)	GHO	1.8	2012
		3.1.05	Density of pharmaceutical personnel (per 10,000 population)	GHO	0.4	2012
	3.2	3.2.01	Health expenditure, total (% of GDP)	HNP Stats	5.9%	2012

			Indicator	Sources		Year
	Health Financing	3.2.02	Health expenditure, public (% of total health expenditure)	HNP Stats	53.1%	2012
		3.2.03	Health expenditure, private (% of total health expenditure)	HNP Stats	2.8%	2012
		3.2.04	Out-of-pocket health expenditure (% of private expenditure on health)	HNP Stats	94.0%	2012
		3.2.05	Health expenditure, public (% of government expenditure)	HNP Stats	9.7%	2012
		3.2.06	External resources for health (% of total expenditure on health)	HNP Stats	1.5%	2012
		3.2.07	Social security expenditure on health as a percentage of general government expenditure on health	GHO	NA	2012
		3.2.08	a) Health expenditure per capita (current US$)	HNP Stats	105	2012
		3.2.09	b) Per capita total expenditure on health (PPP int. $)	GHO	177	2010
			Per capita government expenditure on health at average exchange rate (US$)	GHO	87	2010
	3.3 Facilities/ Equipment and Supplies	3.3.01	a) Median availability of selected generic medicines (%) - Public	GHO	NA	
			b) Median availability of selected generic medicines (%) - Private	GHO	82.5	2012
		3.3.02	a) Median consumer price ratio of selected generic medicines - Public	GHO	NA	2012
			b) Median consumer price ratio of selected generic medicines - Private	GHO	2.0	2012
		3.3.03	Hospital beds (per 1,000 population)	HNP Stats	4.4	2012

<Sources>

WDI: World Development Indicators & Global Development Finance（http://databank.worldbank.org/ddp/home.do）

HDR: Human Development Reports（http://hdr.undp.org/）

HNP Stats:Health Nutrition and Population Statistics（http://databank.worldbank.org/ddp/home.do）

GF: Global Fund eligibility list for 2012 funding channels,the Global Fund to Fight AIDS, Tuberculosis and Malaria （http://theglobalfund.org/documents/core/eligibility/core_EligibleCountries2012_list_en/）

GHO: Global Health Observatory Country Statistics（http://www.who.int/gho/countries/en/）

MDGs: Millennium Development Goals（http://databan.worldbank.org/ddp/home.do）

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Childinfo: Childinfo UNICEF（http://www.childinfo.org/）

ILO: World Social Security Report 2010/11: Providing coverage in times of crisis and beyond. International Labour Office Geneva: ILO 2010.