

7. Interview Sheets to Hospital/Dispensaries/Centers

7. Interview Sheets to Hospitals/Dispensaries/Centers

Check ?

First of all, the interviewer explain the purpose of visit, introduce himself, interview time, contents of interview and confirmation of respondents who are the answer.



冒頭に、調査者は訪問目的、自己紹介、インタビュー時間、内容、回答者の確認を行う。

次に、配布した質問票について不明点等があるかどうかをたずねる。

1. OUTLINE

1 Medical facility

1-1 Name of facility / 施設名 [_____]

1-2 Location of facility / 所在地 [Region: _____ District : Navoi City _____]

1-3 Year of establishment / 設立年 [Established in _____]

Describe history or outline :

2. MANAGEMENT 運営体制

2a. Policy of Medical Care 診療方針

2a-1 Department and Number of Beds

2a-2 Mainly where do patients come from? (リファーよりSani. Aviationという現状から、ほとんどがナボイでは?)

Percentage of referred patients

2a-3 Number of outpatients

Number of inpatients

Major diseases

Frequency of Sanitary Aviation

Number of ambulances including for S.A.

2b Guideline of medical treatment for selected diseases below /
下記の選定疾病に対する治療指針

- 2b-1 Regarding the following diseases:
- 1) Is it treated in your facility?
 - 2) What kind of treatment?
 - 3) If not treated, what will be done?
 - 4) Any death cases?

A Myocardial infarction (MI) / 心筋梗塞 :

B Unstable angina / 不安定狭心症 :

C Diabetic coma / 糖尿病性昏睡 :

D Hepatic coma / 肝性昏睡 :

E Breast cancer / 乳がん :

F Prolonged labour / 遷延分娩 :

G Pediatrics pneumonia with respiratory failure / 呼吸不全を伴う小児肺炎 :

H Cerebrovascular accident (CVA) / 脳血管障害 :

I Head injury / 頭部外傷 :

J Renal biopsy / 腎生検 :

K Low birth-weight infants by weight / 体重別の低出生体重児 :

3. ORGANIZATION STRUCTURE 組織体制

3a. Medical Partnership with other medical facilities / 他の医療機関との医療連携

例えば、ある特定の疾病について、地区中央病院を超えて取り組んでいこうというのが医療連携

3a-1	How is medical partnership?	
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3b. Intra-facility networking 院内ネットワーク

3b-1	How is intra-networking ? / 医療連携の状況 : 患者情報の共有、治療方針について 診療科間で協議する、等	(Very well-- 3, not very--2, bad--1, None--0)		
		Between medical departments / 診療科の間	1	<input type="text"/>
		Inpatient and Outpatient/ 入院・外来	2	<input type="text"/>
		Sharing of medical facilities/ 施設の共有	3	<input type="text"/>
		Sharing of medical equipments/ 機材の共有	4	<input type="text"/>

3b-2 What kinds of facilities are you sharing? / 共有している施設は何ですか？

3b-3 What kinds of equipments are you sharing? / 共有している機材は何ですか？

3b-4 Is there any problem? / 問題はありますか？

4. HUMAN RESOURCES 人員配置・人事評価

4a. Shifting 勤務形態

4a-1	Working hours per week 週間勤務時間	Doctors 1 <input type="text"/> hours Nurses 2 <input type="text"/> hours
(3 shift--3, Day/night 2 shift--2, other--1)		
4a-2	Working shift of weekday 平日の勤務シフト	Doctors 1 <input type="text"/> Nurses 2 <input type="text"/>
(3 shift--3, Day/night 2 shift--2, other--1)		
4a-3	Working shift of weekend & holiday 週末・祝日の勤務シフト	Doctors 1 <input type="text"/> Nurses 2 <input type="text"/>
4a-4	Other comments / 自由記入欄 :	

4b. Performance evaluation 人事評価

4b-1	Is there staff performance evaluation system? / 人事評価の有無	Skill 1 <input type="text"/> Management 2 <input type="text"/> Salary 3 <input type="text"/>
(Yes--1, No--0)		
4a-2	Other comments / 自由記入欄 :	

4c. Training

4c-1	Number of doctors	<input type="text"/>
4c-2	Number of doctors trained at Tashkent Institute of Postgraduate Medical Institute (TIPME) for the last five years	<input type="text"/>
4c-3	Number of doctors/nurses trained at foreign countries	<input type="text"/>

5. USER FEE 有料化サービス

5a. Criteria of fee collection and exemption 対象者の基準、免除者の基準

5a-1	Services subject to user fee	
5a-2	Percentage of patients actually paid	<input type="text"/> %
5a-3	Future plan and prospect on paid services	

6. DRUG SUPPLY MANAGEMENT 医薬品供給体制

6a. Waiting length from out of stock (days) 供給システム

6a-1 Outline of drug supply system 医薬品システムの概要

Ex) Drugs flow from the request to delivery, Payment flow /
申請から納品までのフロー、支払いのフロー

6a-2	Is there periodical supply system? / 定期配送の有無	(Yes--1, No--0) <input type="text"/>
6a-3	How often per month / 定期配送の 頻度	(Yes--1, No--0) <input type="text"/> times per month
6a-4	length of days for principal drugs / 主な医薬品の供給必要日数	
	Drugs name: _____ Length of days	<input type="text"/>
	Drugs name: _____ Length of days	<input type="text"/>
6a-5	Is there pharmaceutical refrigerator? / 冷蔵庫の有無	<input type="checkbox"/> enough <input type="checkbox"/> not enough <input type="checkbox"/> none
6a-6	Is there drugs freezer? / 冷凍庫の有 無	<input type="checkbox"/> enough <input type="checkbox"/> not enough <input type="checkbox"/> none

6b. 輸血用血液

6b-1	Acquisition of blood for transfusion 入手経路	
6b-2	Length of day to acquisition 入手にかかる日数	
6b-3	Blood check system before transfusion 輸血前の血液テストシステム	(Yes -- 1, No --2) ABO & RH test / 血液型・RH試験 1 Cross matching test / 交差試験 2 HIV/AIDS test 3 Syphilis / 梅毒 4 Hepatitis B (HBs-ag) / B型肝炎s抗原試験 5 Hepatitis C / C型肝炎試験 6 Others [.] . . . 7

7. MEDICAL EQUIPMENT 機材関連

7a. Existing medical equipment 現有医療機材

7a-1 The most insufficient medical equipment / 最も不足している医療機材

7a-2 Principal medical equipment due to age deterioration / 老朽化している主な医療機材

7a-3	Procurement condition of consumables and spare parts / 消耗品・交換の入手状況	
	X-ray film	<input type="checkbox"/> enough <input type="checkbox"/> normal <input type="checkbox"/> lack <input type="checkbox"/> none
	Laboratory reagents	<input type="checkbox"/> enough <input type="checkbox"/> normal <input type="checkbox"/> lack <input type="checkbox"/> none
	Anesthetic gas	<input type="checkbox"/> enough <input type="checkbox"/> normal <input type="checkbox"/> lack <input type="checkbox"/> none
	Medical oxygen gas	<input type="checkbox"/> enough <input type="checkbox"/> normal <input type="checkbox"/> lack <input type="checkbox"/> none
	Paper for ECG & Ultrasound	<input type="checkbox"/> enough <input type="checkbox"/> normal <input type="checkbox"/> lack <input type="checkbox"/> none
	Surgical instruments & consumables	<input type="checkbox"/> enough <input type="checkbox"/> normal <input type="checkbox"/> lack <input type="checkbox"/> none
7a-4	If select "lack" in 7a-3, the reason why? / 不足の場合、その理由は？ (消耗品等の入手ルートをあわせて尋ねる)	
7a-5	Maintenance system / メンテナンス体制	
	X-ray apparatus	<input type="checkbox"/> contract with agent <input type="checkbox"/> on call <input type="checkbox"/> none
	Laboratory auto analyzer	<input type="checkbox"/> contract with agent <input type="checkbox"/> on call <input type="checkbox"/> none
	Respiratory ventilator	<input type="checkbox"/> contract with agent <input type="checkbox"/> on call <input type="checkbox"/> none
	Gastrofiberscope / colonofiberscope	<input type="checkbox"/> contract with agent <input type="checkbox"/> on call <input type="checkbox"/> none
	Patient monitoring apparatus	<input type="checkbox"/> contract with agent <input type="checkbox"/> on call <input type="checkbox"/> none
	Daily check system / 日常点検体制	
	Laboratory auto analyzer	<input type="checkbox"/> maintenance staff <input type="checkbox"/> operation staff <input type="checkbox"/> none
	Respiratory ventilator	<input type="checkbox"/> maintenance staff <input type="checkbox"/> operation staff <input type="checkbox"/> none
	Patient monitoring apparatus	<input type="checkbox"/> maintenance staff <input type="checkbox"/> operation staff <input type="checkbox"/> none
	Baby incubator	<input type="checkbox"/> maintenance staff <input type="checkbox"/> operation staff <input type="checkbox"/> none

7a-7 Describe principal problem about maintenance & daily check system /

7a-8 Management of inventory of medical equipment

8. FACILITY AND BUILDINGS 施設関連

8a. Actual condition of facility and buildings **施設の状況**

8a-1 Outpatients flow / 外来患者の動線（病院に入ってから出て行くまで）

8a-2 Main problem & features of outpatients flow / 外来患者動線の施設上の問題点と特徴

8a-3 Inpatients flow / 入院患者の動線（入院の手続きから退院の手続きまで）

8a-4 Main problem & features of inpatients flow / 外来患者動線の施設上の問題点と特徴

8a-5 改修や建替えをする場合の留意事項

8a-6 Problems of electricity, gas and water supply

Oxygen

Air

Vacuum

8b. Maintenance of facility and buildings **施設の維持管理**

Technical problems?

Problems of electricity, gas and water supply

9. RESPONDENT(S) / 回答者

9a-1 Name & position (representative) [① /]

Name & position (sub person) [② /]

Name & position (sub person) [③ /]

9a-2 Telephone [/]

9a-3 Facsimile [/]

9a-4 E-mail address [/]

INTERVIEWER'S COMMENTS

Interviewer's Name : _____

DATE : _____

8. Template of Data Collection of Mortality Cases

8. Template of Data Collection of Mortality Cases

Death Case 1 Personal data of Heart diseases

No.1

Date of Record		Code No	
Name of Hospital		Address/city	
Recorder		Evaluation	

(1) Death record	<input type="checkbox"/> yes / <input type="checkbox"/> no		
1. Decedent name			
2. Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3. Date of birth	Y / M / D	Age	years old
4. Date of death	Y / M / D		
5. If neonate (from 6 days to 1 month old)	<input type="checkbox"/> mature / <input type="checkbox"/> immature		
6. Birth weight (infants from 6 days to 1 years old)	g		
7. Decedent residence	nationality	/ province	/ <input type="checkbox"/> urban/ <input type="checkbox"/> rural
Address/city			
8. Place of death	<input type="checkbox"/> hospital/ <input type="checkbox"/> decedent home/ <input type="checkbox"/> others		
Address/city			
9. Cause of death	<input type="checkbox"/> disease/ <input type="checkbox"/> accident/ <input type="checkbox"/> accident during job/ <input type="checkbox"/> homicide/ <input type="checkbox"/> suicide/ <input type="checkbox"/> unknown		
10. Verifier on cause of death	<input type="checkbox"/> Physician who examined corpse / <input type="checkbox"/> physician who treated the patient / <input type="checkbox"/> pathologist / <input type="checkbox"/> forensic scientist		
11. Declaration by physician	Name	Title	
Evidence	<input type="checkbox"/> examination of corpse/ <input type="checkbox"/> medical record of previous consultations / <input type="checkbox"/> previous medical examination / <input type="checkbox"/> autopsy		
I .a) Direct cause of death			
I .b) Underlying diseases			
II .Other diseases	c	→b	→a →dead
12. Accidental death	Date of accident		
	Kind of accident		
	Place of Accident		
	Situation		
13 Issue of death certificate	Name of institution		
	Signature of physician		
14 Registration of residence	Signature of officer		
	Date of signature		

Death Case 1 Personal data of Heart diseases

No.2

Date of Record		Code No	
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(2) Medical record	<input type="checkbox"/> yes (How many ?)/ <input type="checkbox"/> no		
Number of medical record 1	No.	/ name of disease	
Number of medical record 2	No.	/ name of disease	
Number of medical record 3	No.	/ name of disease	
1.Decedent name			
2.Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3.Date of birth	Y / M /D	Age	years old
4.Date of death	Y / M /D		

(3) other information on heart disease			
Complications	<input type="checkbox"/> Hypertension <input type="checkbox"/> Diabetes <input type="checkbox"/> Hypercholesterolemia <input type="checkbox"/> Others()		
Onset of acute	date	/place	
Duration of transport	hours since start of transport		
Method of transport	<input type="checkbox"/> ambulance/ <input type="checkbox"/> private car / <input type="checkbox"/> walk / <input type="checkbox"/> public transportation/ <input type="checkbox"/> the other		
Oxygen during transport	<input type="checkbox"/> No / <input type="checkbox"/> Yes		
Dead on arrival	<input type="checkbox"/> No(→ go to next question) / <input type="checkbox"/> Yes (→ end of study)		
Use of thrombolytic agents	<input type="checkbox"/> No / <input type="checkbox"/> Yes	If yes, give name:	
Clinical course after admission	<input type="checkbox"/> died within 72 hours / <input type="checkbox"/> died after 3 days or more		

Death Case 1 Personal data of Patients with CVA

No.1

Date of Record		Code No	
Name of Hospital		Address/city	
Recorder		Evaluation	

(1) Death record	<input type="checkbox"/> yes / <input type="checkbox"/> no		
1. Decedent name			
2. Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3. Date of birth	Y / M / D	Age	years old
4. Date of death	Y / M / D		
5. If neonate (from 6 days to 1 month old)	<input type="checkbox"/> mature / <input type="checkbox"/> immature		
6. Birth weight (infants from 6 days to 1 years old)	g		
7. Decedent residence	nationality	/ province	/ <input type="checkbox"/> urban/ <input type="checkbox"/> rural
Address/city			
8. Place of death	<input type="checkbox"/> hospital/ <input type="checkbox"/> decedent home/ <input type="checkbox"/> others		
Address/city			
9. Cause of death	<input type="checkbox"/> disease/ <input type="checkbox"/> accident/ <input type="checkbox"/> accident during job/ <input type="checkbox"/> homicide/ <input type="checkbox"/> suicide/ <input type="checkbox"/> unknown		
10. Verifier on cause of death	<input type="checkbox"/> Physician who examined corpse / <input type="checkbox"/> physician who treated the patient / <input type="checkbox"/> pathologist / <input type="checkbox"/> forensic scientist		
11. Declaration by physician	Name	Title	
Evidence	<input type="checkbox"/> examination of corpse/ <input type="checkbox"/> medical record of previous consultations / <input type="checkbox"/> previous medical examination / <input type="checkbox"/> autopsy		
I .a) Direct cause of death			
I .b) Underlying diseases			
II .Other diseases	c	→b	→a →dead
12. Accidental death	Date of accident		
	Kind of accident		
	Place of Accident		
	Situation		
13 Issue of death certificate	Name of institution		
	Signature of physician		
14 Registration of residence	Signature of officer		
	Date of signature		

Death Case 1 Personal data of Patients with CVA

No.1

No.2

Date of Record		Code No	
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(2) Medical record	<input type="checkbox"/> yes (How many ?)/ <input type="checkbox"/> no		
Number of medical record 1	No.	/ name of disease	
Number of medical record 2	No.	/ name of disease	
Number of medical record 3	No.	/ name of disease	
1.Decedent name			
2.Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3.Date of birth	Y / M /D	Age	years old
4.Date of death	Y / M /D		

(3) other information on patient with CVA			
Complications	<input type="checkbox"/> Hypertension <input type="checkbox"/> Diabetes <input type="checkbox"/> Hypercholesterolemia <input type="checkbox"/> Others()		
Onset of acute	date	/place	
Duration of transport	hours since start of transport		
Method of transport	<input type="checkbox"/> ambulance/ <input type="checkbox"/> private car / <input type="checkbox"/> walk / <input type="checkbox"/> public transportation/ <input type="checkbox"/> the other		
Oxygen during transport	<input type="checkbox"/> No / <input type="checkbox"/> Yes		
Dead on arrival	<input type="checkbox"/> No(→ go to next question) / <input type="checkbox"/> Yes (→ end of study)		
Use of thrombolytic agents	<input type="checkbox"/> No / <input type="checkbox"/> Yes	If yes, give name:	
CT	<input type="checkbox"/> No / <input type="checkbox"/> Yes		
Operation	<input type="checkbox"/> No / <input type="checkbox"/> Yes		
Clinical course after admission	<input type="checkbox"/> died within 72 hours / <input type="checkbox"/> died after 3 days or more		

Death Case 1 Personal data of Hypertensive diseases

No.1

Date of Record		Code No	
Name of Hospital		Address/city	
Recorder		Evaluation	

(1) Death record	<input type="checkbox"/> yes / <input type="checkbox"/> no		
1. Decedent name			
2. Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3. Date of birth	Y / M / D	Age	years old
4. Date of death	Y / M / D		
5. If neonate (from 6 days to 1 month old)	<input type="checkbox"/> mature / <input type="checkbox"/> immature		
6. Birth weight (infants from 6 days to 1 years old)	g		
7. Decedent residence	nationality	/ province	/ <input type="checkbox"/> urban/ <input type="checkbox"/> rural
Address/city			
8. Place of death	<input type="checkbox"/> hospital/ <input type="checkbox"/> decedent home/ <input type="checkbox"/> others		
Address/city			
9. Cause of death	<input type="checkbox"/> disease/ <input type="checkbox"/> accident/ <input type="checkbox"/> accident during job/ <input type="checkbox"/> homicide/ <input type="checkbox"/> suicide/ <input type="checkbox"/> unknown		
10. Verifier on cause of death	<input type="checkbox"/> Physician who examined corpse / <input type="checkbox"/> physician who treated the patient / <input type="checkbox"/> pathologist / <input type="checkbox"/> forensic scientist		
11. Declaration by physician	Name	Title	
Evidence	<input type="checkbox"/> examination of corpse/ <input type="checkbox"/> medical record of previous consultations / <input type="checkbox"/> previous medical examination / <input type="checkbox"/> autopsy		
I .a) Direct cause of death			
I .b) Underlying diseases			
II .Other diseases	c	→b	→a →dead
12. Accidental death	Date of accident		
	Kind of accident		
	Place of Accident		
	Situation		
13 Issue of death certificate	Name of institution		
	Signature of physician		
14 Registration of residence	Signature of officer		
	Date of signature		

Death Case 1 Personal data of Hypertensive diseases

No.2

Date of Record		Code No	
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(2) Medical record	<input type="checkbox"/> yes (How many ?)/ <input type="checkbox"/> no		
Number of medical record 1	No.	/ name of disease	
Number of medical record 2	No.	/ name of disease	
Number of medical record 3	No.	/ name of disease	
1.Decedent name			
2.Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3.Date of birth	Y / M /D	Age	years old
4.Date of death	Y / M /D		

(3) other information on hypertensive disease			
Complications	<input type="checkbox"/> Hypertension <input type="checkbox"/> Diabetes <input type="checkbox"/> Hypercholesterolemia		
Other Complication	1		
Other Complication	2		
Other Complication	3		
Onset of acute	date	/place	
Duration of transport	hours since start of transport		
Method of transport	<input type="checkbox"/> ambulance/ <input type="checkbox"/> private car / <input type="checkbox"/> walk / <input type="checkbox"/> public transportation/ <input type="checkbox"/> the other		
Oxygen during transport	<input type="checkbox"/> No / <input type="checkbox"/> Yes		
Dead on arrival	<input type="checkbox"/> No(→ go to next question) / <input type="checkbox"/> Yes (→ end of study)		
Clinical course after admission	<input type="checkbox"/> died within 72 hours / <input type="checkbox"/> died after 3 days or more		

Death Case 1 Personal data of Cancer patients

No.1

Date of Record		Code No	
Name of Hospital		Address/city	
Recorder		Evaluation	

(1) Death record	<input type="checkbox"/> yes / <input type="checkbox"/> no		
1. Decedent name			
2. Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3. Date of birth	Y / M / D	Age	years old
4. Date of death	Y / M / D		
5. If neonate (from 6 days to 1 month old)	<input type="checkbox"/> mature / <input type="checkbox"/> immature		
6. Birth weight (infants from 6 days to 1 years old)	g		
7. Decedent residence	nationality	/ province	/ <input type="checkbox"/> urban/ <input type="checkbox"/> rural
Address/city			
8. Place of death	<input type="checkbox"/> hospital/ <input type="checkbox"/> decedent home/ <input type="checkbox"/> others		
Address/city			
9. Cause of death	<input type="checkbox"/> disease/ <input type="checkbox"/> accident/ <input type="checkbox"/> accident during job/ <input type="checkbox"/> homicide/ <input type="checkbox"/> suicide/ <input type="checkbox"/> unknown		
10. Verifier on cause of death	<input type="checkbox"/> Physician who examined corpse / <input type="checkbox"/> physician who treated the patient / <input type="checkbox"/> pathologist / <input type="checkbox"/> forensic scientist		
11. Declaration by physician	Name	Title	
Evidence	<input type="checkbox"/> examination of corpse/ <input type="checkbox"/> medical record of previous consultations / <input type="checkbox"/> previous medical examination / <input type="checkbox"/> autopsy		
I .a) Direct cause of death			
I .b) Underlying diseases			
II .Other diseases	c	→b	→a →dead
12. Accidental death	Date of accident		
	Kind of accident		
	Place of Accident		
	Situation		
13 Issue of death certificate	Name of institution		
	Signature of physician		
14 Registration of residence	Signature of officer		
	Date of signature		

Death Case 1 Personal data of Cancer patients

No.2

Date of Record		Code No	
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(2) Medical record	<input type="checkbox"/> yes (How many ?)/ <input type="checkbox"/> no		
Number of medical record 1	No.	/ name of disease	
Number of medical record 2	No.	/ name of disease	
Number of medical record 3	No.	/ name of disease	
1.Decedent name			
2.Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3.Date of birth	Y / M /D	Age	years old
4.Date of death	Y / M /D		

(3) other information on cancer patientse			
First diagnosis as cancer	Date Y /M	Name of hospital	
Referred from		Name of hospital	
Referred to		Name of hospital	
Metastasis	<input type="checkbox"/> No / <input type="checkbox"/> Yes	If yes, whereve name:	
Onset of acute	date /place		
Duration of transport	hours since start of transport		
Method of transport	<input type="checkbox"/> ambulance/ <input type="checkbox"/> private car / <input type="checkbox"/> walk / <input type="checkbox"/> public transportation/ <input type="checkbox"/> the other		
Dead on arrival	<input type="checkbox"/> No(→ go to next question) / <input type="checkbox"/> Yes (→ end of study)		
Radiation therapy	<input type="checkbox"/> No / <input type="checkbox"/> Yes		
Operation	<input type="checkbox"/> No / <input type="checkbox"/> Yes		
Clinical course after admission	<input type="checkbox"/> died within 72 hours / <input type="checkbox"/> died after 3 days or more		

Death Case 1 Personal data of Diabetic diseases

No.1

Date of Record		Code No	
Name of Hospital		Address/city	
Recorder		Evaluation	

(1) Death record	<input type="checkbox"/> yes / <input type="checkbox"/> no	
1. Decedent name		
2. Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female	
3. Date of birth	Y / M / D	Age years old
4. Date of death	Y / M / D	
5. If neonate (from 6 days to 1 month old)	<input type="checkbox"/> mature / <input type="checkbox"/> immature	
6. Birth weight (infants from 6 days to 1 years old)	g	
7. Decedent residence	nationality / province / <input type="checkbox"/> urban / <input type="checkbox"/> rural	
Address/city		
8. Place of death	<input type="checkbox"/> hospital / <input type="checkbox"/> decedent home / <input type="checkbox"/> others	
Address/city		
9. Cause of death	<input type="checkbox"/> disease / <input type="checkbox"/> accident / <input type="checkbox"/> accident during job / <input type="checkbox"/> homicide / <input type="checkbox"/> suicide / <input type="checkbox"/> unknown	
10. Verifier on cause of death	<input type="checkbox"/> Physician who examined corpse / <input type="checkbox"/> physician who treated the patient / <input type="checkbox"/> pathologist / <input type="checkbox"/> forensic scientist	
11. Declaration by physician	Name	Title
Evidence	<input type="checkbox"/> examination of corpse / <input type="checkbox"/> medical record of previous consultations / <input type="checkbox"/> previous medical examination / <input type="checkbox"/> autopsy	
I .a) Direct cause of death		
I .b) Underlying diseases		
II .Other diseases	c →b →a →dead	
12. Accidental death	Date of accident	
	Kind of accident	
	Place of Accident	
	Situation	
13 Issue of death certificate	Name of institution	
	Signature of physician	
14 Registration of residence	Signature of officer	
	Date of signature	

Death Case 1 Personal data of Diabetic diseases

No.2

Date of Record		Code No	
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(2) Medical record	<input type="checkbox"/> yes (How many ?)/ <input type="checkbox"/> no		
Number of medical record 1	No.	/ name of disease	
Number of medical record 2	No.	/ name of disease	
Number of medical record 3	No.	/ name of disease	
1.Decedent name			
2.Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3.Date of birth	Y / M /D	Age	years old
4.Date of death	Y / M /D		

(3) other information on diabetic disease		
First diagnosis as diabetes melitus	Date Y /M	Name of hospital
Referred from		Name of hospital
Referred to		Name of hospital
Complications	<input type="checkbox"/> Diabetic nephropathy <input type="checkbox"/> Diabetic foot <input type="checkbox"/> Diabeitic retinopathy	
Other Complications		
Onset of acute	date	/place
Duration of transport	hours since start of transport	
Method of transport	<input type="checkbox"/> ambulance/ <input type="checkbox"/> private car / <input type="checkbox"/> walk / <input type="checkbox"/> public transportation/ <input type="checkbox"/> the other	
Oxygen during transport	<input type="checkbox"/> No / <input type="checkbox"/> Yes	
Dead on arrival	<input type="checkbox"/> No(→ go to next question) / <input type="checkbox"/> Yes (→ end of study)	
Consciousness level on arrival	<input type="checkbox"/> Diabetic coma <input type="checkbox"/> Hypoglycemia (low blood sugar)	
Clinical course after admission	<input type="checkbox"/> died within 72 hours / <input type="checkbox"/> died after 3 days or more	

Death Case 1 Personal data of Kidney diseases

No.1

Date of Record		Code No	
Name of Hospital		Address/city	
Recorder		Evaluation	

(1) Death record	<input type="checkbox"/> yes / <input type="checkbox"/> no		
1. Decedent name			
2. Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3. Date of birth	Y / M / D	Age	years old
4. Date of death	Y / M / D		
5. If neonate (from 6 days to 1 month old)	<input type="checkbox"/> mature / <input type="checkbox"/> immature		
6. Birth weight (infants from 6 days to 1 years old)	g		
7. Decedent residence	nationality	/ province	/ <input type="checkbox"/> urban/ <input type="checkbox"/> rural
Address/city			
8. Place of death	<input type="checkbox"/> hospital/ <input type="checkbox"/> decedent home/ <input type="checkbox"/> others		
Address/city			
9. Cause of death	<input type="checkbox"/> disease/ <input type="checkbox"/> accident/ <input type="checkbox"/> accident during job/ <input type="checkbox"/> homicide/ <input type="checkbox"/> suicide/ <input type="checkbox"/> unknown		
10. Verifier on cause of death	<input type="checkbox"/> Physician who examined corpse / <input type="checkbox"/> physician who treated the patient / <input type="checkbox"/> pathologist / <input type="checkbox"/> forensic scientist		
11. Declaration by physician	Name	Title	
Evidence	<input type="checkbox"/> examination of corpse/ <input type="checkbox"/> medical record of previous consultations / <input type="checkbox"/> previous medical examination / <input type="checkbox"/> autopsy		
I .a) Direct cause of death			
I .b) Underlying diseases			
II .Other diseases	c	→b	→a →dead
12. Accidental death	Date of accident		
	Kind of accident		
	Place of Accident		
	Situation		
13 Issue of death certificate	Name of institution		
	Signature of physician		
14 Registration of residence	Signature of officer		
	Date of signature		

Death Case 1 Personal data of Kidney diseases

No.2

Date of Record		Code No	
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(2) Medical record	<input type="checkbox"/> yes (How many ?)/ <input type="checkbox"/> no		
Number of medical record 1	No.	/ name of disease	
Number of medical record 2	No.	/ name of disease	
Number of medical record 3	No.	/ name of disease	
1.Decedent name			
2.Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3.Date of birth	Y / M /D	Age	years old
4.Date of death	Y / M /D		

(3) other information on Kidney disease		
First diagnosis as kidney disease	Date Y /M	Name of hospital
Referred from		Name of hospital
Referred to		Name of hospital
Complications	<input type="checkbox"/> Hypertension <input type="checkbox"/> Diabetes <input type="checkbox"/> Hypercholesterolemia	
Regular dialysis	<input type="checkbox"/> No / <input type="checkbox"/> Yes	
Onset of acute	date	/place
Duration of transport	hours since start of transport	
Method of transport	<input type="checkbox"/> ambulance/ <input type="checkbox"/> private car / <input type="checkbox"/> walk / <input type="checkbox"/> public transportation/ <input type="checkbox"/> the other	
Oxygen during transport	<input type="checkbox"/> No / <input type="checkbox"/> Yes	
Dead on arrival	<input type="checkbox"/> No(→ go to next question) / <input type="checkbox"/> Yes (→ end of study)	
Clinical course after admission	<input type="checkbox"/> died within 72 hours / <input type="checkbox"/> died after 3 days or more	

Death Case 1 Personal data of Liver diseases

No.1

Date of Record		Code No	
Name of Hospital		Address/city	
Recorder		Evaluation	

(1) Death record	<input type="checkbox"/> yes / <input type="checkbox"/> no		
1. Decedent name			
2. Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3. Date of birth	Y / M / D	Age	years old
4. Date of death	Y / M / D		
5. If neonate (from 6 days to 1 month old)	<input type="checkbox"/> mature / <input type="checkbox"/> immature		
6. Birth weight (infants from 6 days to 1 years old)	g		
7. Decedent residence	nationality	/ province	/ <input type="checkbox"/> urban/ <input type="checkbox"/> rural
Address/city			
8. Place of death	<input type="checkbox"/> hospital/ <input type="checkbox"/> decedent home/ <input type="checkbox"/> others		
Address/city			
9. Cause of death	<input type="checkbox"/> disease/ <input type="checkbox"/> accident/ <input type="checkbox"/> accident during job/ <input type="checkbox"/> homicide/ <input type="checkbox"/> suicide/ <input type="checkbox"/> unknown		
10. Verifier on cause of death	<input type="checkbox"/> Physician who examined corpse / <input type="checkbox"/> physician who treated the patient / <input type="checkbox"/> pathologist / <input type="checkbox"/> forensic scientist		
11. Declaration by physician	Name	Title	
Evidence	<input type="checkbox"/> examination of corpse/ <input type="checkbox"/> medical record of previous consultations / <input type="checkbox"/> previous medical examination / <input type="checkbox"/> autopsy		
I .a) Direct cause of death			
I .b) Underlying diseases			
II .Other diseases	c	→b	→a →dead
12. Accidental death	Date of accident		
	Kind of accident		
	Place of Accident		
	Situation		
13 Issue of death certificate	Name of institution		
	Signature of physician		
14 Registration of residence	Signature of officer		
	Date of signature		

Death Case 1 Personal data of Liver diseases

No.2

Date of Record		Code No	
----------------	--	---------	--

(2) Medical record	<input type="checkbox"/> yes (How many ?)/ <input type="checkbox"/> no		
Number of medical record 1	No.	/ name of disease	
Number of medical record 2	No.	/ name of disease	
Number of medical record 3	No.	/ name of disease	
1.Decedent name			
2.Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3.Date of birth	Y / M /D	Age	years old
4.Date of death	Y / M /D		

(3) other information on Liver disease		
First diagnosis as Liver disease	Date Y /M	Name of hospital
Referred from		Name of hospital
Referred to		Name of hospital
Complications	<input type="checkbox"/> Esophageal varices <input type="checkbox"/> Ascites <input type="checkbox"/> Hepatorenal syndrome	
Other Complications		
Onset of acute	date	/place
Duration of transport	hours since start of transport	
Method of transport	<input type="checkbox"/> ambulance/ <input type="checkbox"/> private car / <input type="checkbox"/> walk / <input type="checkbox"/> public transportation/ <input type="checkbox"/> the other	
Oxygen during transport	<input type="checkbox"/> No / <input type="checkbox"/> Yes	
Dead on arrival	<input type="checkbox"/> No(→ go to next question) / <input type="checkbox"/> Yes (→ end of study)	
Hepatic coma on arrival	<input type="checkbox"/> No / <input type="checkbox"/> Yes	
Branched amino acid solution	<input type="checkbox"/> Not given / <input type="checkbox"/> Yes, given	
Clinical course after admission	<input type="checkbox"/> died within 72 hours / <input type="checkbox"/> died after 3 days or more	

Death Case 1 Personal data of Childhood ARI

No.1

Date of Record		Code No	
Name of Hospital		Address/city	
Recorder		Evaluation	

(1) Death record	<input type="checkbox"/> yes / <input type="checkbox"/> no	
1. Decedent name		
2. Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female	
3. Date of birth	Y / M / D	Age years old
4. Date of death	Y / M / D	
5. If neonate (from 6 days to 1 month old)	<input type="checkbox"/> mature / <input type="checkbox"/> immature	
6. Birth weight (infants from 6 days to 1 years old)	g	
7. Decedent residence	nationality / province / <input type="checkbox"/> urban/ <input type="checkbox"/> rural	
Address/city		
8. Place of death	<input type="checkbox"/> hospital/ <input type="checkbox"/> decedent home/ <input type="checkbox"/> others	
Address/city		
9. Cause of death	<input type="checkbox"/> disease/ <input type="checkbox"/> accident/ <input type="checkbox"/> accident during job/ <input type="checkbox"/> homicide/ <input type="checkbox"/> suicide/ <input type="checkbox"/> unknown	
10. Verifier on cause of death	<input type="checkbox"/> Physician who examined corpse / <input type="checkbox"/> physician who treated the patient / <input type="checkbox"/> pathologist / <input type="checkbox"/> forensic scientist	
11. Declaration by physician	Name	Title
Evidence	<input type="checkbox"/> examination of corpse/ <input type="checkbox"/> medical record of previous consultations / <input type="checkbox"/> previous medical examination / <input type="checkbox"/> autopsy	
I .a) Direct cause of death		
I .b) Underlying diseases		
II .Other diseases	c →b →a →dead	
12. Accidental death	Date of accident	
	Kind of accident	
	Place of Accident	
	Situation	
13 Issue of death certificate	Name of institution	
	Signature of physician	
14 Registration of residence	Signature of officer	
	Date of signature	

Death Case 1 Personal data of Childhood ARI

No.2

Date of Record		Code No	
----------------	--	---------	--

(2) Medical record	<input type="checkbox"/> yes (How many ?)/ <input type="checkbox"/> no		
Number of medical record 1	No.	/ name of disease	
Number of medical record 2	No.	/ name of disease	
Number of medical record 3	No.	/ name of disease	
1.Decedent name			
2.Sex	<input type="checkbox"/> male/ <input type="checkbox"/> female		
3.Date of birth	Y / M /D	Age	years old
4.Date of death	Y / M /D		

(3) other information on childhood ARI		
First diagnosis as ARI	Date Y /M	Name of hospital
Basis of diagnosis	<input type="checkbox"/> Chest X ray / <input type="checkbox"/> Respiration rate / <input type="checkbox"/> Others	
Onset of acute event	date	/place
Duration of transport	hours since start of transport	
Method of transport	<input type="checkbox"/> ambulance/ <input type="checkbox"/> private car / <input type="checkbox"/> walk / <input type="checkbox"/> public transportation/ <input type="checkbox"/> the other	
Oxygen during transport	<input type="checkbox"/> No / <input type="checkbox"/> Yes	
Dead on arrival	<input type="checkbox"/> No(→ go to next question) / <input type="checkbox"/> Yes (→ end of study)	
Oxygen after admission	<input type="checkbox"/> No / <input type="checkbox"/> Yes	
Intravenous antibiotics	<input type="checkbox"/> No / <input type="checkbox"/> Yes	
Clinical course after admission	<input type="checkbox"/> died within 72 hours / <input type="checkbox"/> died after 3 days or more	

9. Points of Mortality Cases Study

9. Points of Mortality Cases Study

	At hospitals in Navoi	At Ryon-level hospitals
Common to every diseases	<p>When symptoms began?</p> <p>When consulted to a doctor?</p> <p>When admitted?</p> <p>What kind of treatment given?</p> <p>Why not let the patient go home before dying?</p> <p>Referred from other health facilities? If yes, →</p>	<p>When symptoms began?</p> <p>When consulted to a doctor?</p> <p>When admitted?</p> <p>What kind of treatment given?</p> <p>Why not referred to a specialized hospital?</p> <p>Do they know the treatment/referral standard approved by MOH?</p> <p>Criteria used to refer the patient to a specialized hospital?</p> <p>Why not let the patient go home before dying?</p> <p>→collect detail patient data from that particular Ryon CH.</p>
Ischemic heart disease	<p>Direct cause of death: power failure, arrhythmia, or else.</p> <p>Patient monitor applied?</p> <p>Plasminogen activator / Urokinase given?</p>	<p>Direct cause of death: power failure, arrhythmia, or else.</p> <p>Patient monitor applied?</p> <p>Plasminogen activator / Urokinase given?</p>
Cerebro-vascular attack	<p>CT study performed?</p> <p>How do they differentiate between hemorrhage and infarction?</p> <p>Criteria to refer the patients to a neurosurgeon?</p>	<p>CT study performed?</p> <p>How do they differentiate between hemorrhage and infarction?</p> <p>Criteria to refer the patients to a neurosurgeon?</p>

	At hospitals in Navoi	At Ryon-level hospitals
Liver diseases	<p>Long-term follow up has been done?</p> <p>Is ultrasonography applied to check liver cirrhosis?</p> <p>Is interferon therapy available?</p>	<p>Long-term follow up has been done?</p> <p>Is ultrasonography applied to check liver cirrhosis?</p> <p>Is interferon therapy available?</p>
Kidney diseases	<p>Long-term follow up has been done?</p> <p>Criteria to refer the patients to a nephrologists/urologist?</p> <p>Is hemodialysis a realistic choice of treatment for the local patients?</p> <p>Is renal biopsy study applied to confirm diagnosis?</p>	<p>Long-term follow up has been done?</p> <p>Criteria to refer the patients to a nephrologists/urologist?</p> <p>Is hemodialysis a realistic choice of treatment for the local patients?</p>
Diabetes	<p>Long-term follow up has been done?</p> <p>Which indicator is used as target of control?</p> <p>Is oral antidiabetic available?</p> <p>Is insulin available?</p>	<p>Long-term follow up has been done?</p> <p>Is oral antidiabetic available?</p> <p>Is insulin available?</p>
Childhood ARI	<p>When oral antibiotics are started?</p> <p>Diagnosis based on respiration ratio, X-ray, or both?</p> <p>When i.v. antibiotics are started?</p> <p>Is oxygen available anytime?</p> <p>Is mechanical ventilator available anytime?</p>	<p>When oral antibiotics are started?</p> <p>Diagnosis based on respiration ratio, X-ray, or both?</p> <p>When i.v. antibiotics are started?</p> <p>Is oxygen available anytime?</p>
Cancers	<p>Is the patient followed up at your hospital or at some other hospital?</p> <p>Is the surgical resection of cancer available?</p> <p>Is chemotherapy available</p>	<p>Is the patient followed up at your hospital or at some other hospital?</p>

10. Guideline and Questionnaire for Care Seeking Behavior Survey

10.1 Guideline for Care Seeking Behavior Survey in Navoi Region

JICA STUDY TEAM FOR
THE DEVELOPMENT STUDY ON
THE REFORM OF HEALTH CARE SERVICES
IN NAVOI REGION

1. Selection of the family to be interviewed.

Target areas (Rayon/City/Village(SVP)) are presented in “Route Map Card” for each team. SVP to be visited shall be finally decided with a chief doctor or his designated personnel of the Rayon Central Hospital (RCH).

In city place, surveyors shall ask consultation to the chief doctor to select microrayons (coverage area of each patronage nurse) to be visited.

In the target villages/ microrayons surveyors shall select the target family as follows:

- (1) Surveyors shall ask a patronage nurse the member of families in the target area in Census paper; and
- (2) Surveyors shall divide the above number into the target number of families in the area and define an interval of random sampling.

For example: the team is going to interview 10 families in the particular area where total number of families are 120. Then the team shall select every 12th family.

2. Introduction and Informed Consent.

Surveyors should visit every family accompanied by health visitor or GP nurse.

When you see a member of the target family, you shall explain the objective and acceptability of the interview.

If he/she does not accept to be interviewed or is not a usual resident, (de jure)

Surveyors just say “thank you” and move to next family.

If he/she accepts to be interviewed, ask other adult family members to join the interview as a second interviewee. Ideally, if the head of the household is the main interviewee and the secondary is his/her spouse.

Surveyors shall explain to the interviewees that the information will be used by the Study team within the framework of this study and personal information never be disclosed to other parties.

3. Administrative information

- Date
- Area of research Urban- 1, Rural - 2.
- City/Rayon Code: See the following table

Area	Code	Area	Code
Navoi city	101	Navbakhor rayon	251
Tinchlik city place	102	Nurata city	161
Zarafshan city	111	Gazgan city place	162
Muruntau city place	112	Rural area of Nurata rayon	263
Karmana city place	121	Tamdi rayon	271
Malikrabad city place	122	Uchkuduk city	181
Rural area of Karmana rayon	223	Shalkar city place	182
Kanimekh city place	131	Uchkuduk rayon	283
Rural area of Kanimekh rayon	232	Yangiabad city	191
Kiziltepa city place	141	Langar city place	192
Rural area of Kiziltepa rayon	242	Rural area of Khatirchi rayon	293

- You must write the code of the family interviewed (write the serial number for your team)
- Write the code of your team (A, B, C, D, E, F, G)
- Write the interviewees surnames and initials of given names.
- Write the name of the place where you visit (makhalla, village, city microrayon name)
- Write the address of the interviewed householders (family)
- Write the family contact information (phone number)
- Sometimes, you need to return to the interviewees to ask/confirm their answer.

4. Questions

Section A: General characteristics of the family

A1. Ask how many years the family has lived here? (**A2**). You can see the type of building and then ask how many square meters their house occupies (**A3**). Put down the code of building type and (**A4**) ask who is the head of the household.

Section B: General characteristics of family members

You shall ask the following questions about the family members: who usually lives in this house.

Start with the main interviewee and then, fill the information about the other family members.

- B1.** Name: Write the first name and the first letter of the patronymic for the personal identification.
- B2.** Family role: Relation to the head of the family: Is he/she, for instance, the daughter, parent of the head of the family?

B3. Sex **B4.** Age **B5.** Nationality

B6. Education (more than 6 years old): what institution they finally graduated from or where they study presently.

B7. Level of education:

If he/she goes to school or studies in educational institution, ask the class (course) and write the appropriate code. If he/she did not complete (dropped out), write -T, if completed all the classes/ courses of the institution, write 99

B8. Marital Status

B9. Occupation:

What kind of job does he/she usually do? If he/she has worked for the last 12 months, ask what kind of job she/he did, if he/she did not work, ask what he/she has done last 12 months.

B10.

01. Manager , Businessman and Entrepreneur	Person who works in government agency/ organization or private company dealing with administrative activity.
02. Professional	Person who deals with intellectual/ creative work which needs higher education such as: poets, writers, doctors, teachers, professors etc.
03. Paraprofessionals	Person, who deals with work, which needs special education/ training such as: nurse, feldsher, laboratory worker, day care center worker; etc.
04. Office workers	Supplier, accountant, secretary in private or government agency.
05. Trade and Services	Salesman or service providers in private or government agency/ organization, retailers and service job.
06. Skilled manual labor	Skilled manual labor in private or state enterprise
07. Unskilled manual labor	Unskilled manual labor in private or state enterprise
08. Agriculture	Farmers working in agriculture and forestry, and fisherman
09. Stockraising	Cattle or other animal raising

Section C: Living Standard

C1. Find out who makes decisions for expensive purchase in the family, such as: house or vehicle.

C2. Ask if the family reads newspapers regularly.

C3. Ask if the family use mass media (radio, TV, telephone, internet)

C4a Where does the family usually buy food, clothes, medicines and home appliances?

C4b How do they usually get there?

Item	Description
Food	Food items the family eats regularly
Clothing	Shirts, underwear, pants, etc. for family members
Medicines	Medicines the family uses regularly or not
Home electric appliances	As TV sets, radio, computer, washing machine, lights

Section D: Care seeking behavior for acute illness, trauma (accident) and chronic disease for the last 12 months

D1. Health problems for the last 12 months

“Disease” includes any acute ((D1b) and chronic (D1c) disease, and trauma or accident (D1a) and if there is no disease or trauma, go to section F.

D2 - D4. Care seeking behavior for the health problems

D2a, D3a, D4a Find out who was the provider of health care service?

D2b D3b, D4b Where was the health care service provided?

D2c D3c, D4c How did the person get there to seek care?

D2d, D3d, D4d Was the family satisfied with the service provided?

D2e, D3e, D4e If the answer for D2a, D3a, D4a «01 – nobody, nowhere», . ask the reason

D2f, D3f, D4f If the answer for D2d, D3d, D4d is «02» or «03» ask the reason

D5 - D7. Access to the medicine

D5a, D6a, D7a Where did he/she get the medicine?

D5b, D6b, D7b How did they get the place?

D8 - D10. Referring

D8a, D9a, D10a Did someone advice him/her to go to other Health facilities?

D8b, D 9b, D10b Did the health personnel explain him/her the above?

D8c, D9c, D10c Did he/she follow the advice?

D8d, D9d, D10d Which health facility did he/she go?

D8e, D9e, D10e If the answer for D8c, D9c, D10c is «No», ask the reason

D8f, D9f, D10f Was the family satisfied with the care?

D8g, D9g, D10g If the answer for D8f, D9f, D10f is “02” or “03” ask the reason.

SECTION E. Care seeking behavior for chronic diseases, mentioned in D1c.

Write the code of family member, who has chronic disease.(see D1c)

E1 How long has he/she had the disease?

E2 Where does he/she go to seek care?

E3 How does he/she get there?

E4a If he/she has changed his/her behavior, where he/she had sought care before ?

E4b The reason for above change

E5 If the answer for E2 is “D”, ask the reason

E6 Does the patient have medicine?

E7 Where does he/she currently get the medicine?

E8 How does he/she get there?

E9a Is he/she satisfied with the health service?

E9b If the answer for E9a is “02 or “03” ask the reason

E10 Who takes the final decision about treatment?

SECTION F Care seeking behavior for maternal woman for last 5 years

F1 Previous pregnancies

F1a The result of the first pregnancy.

F1b The result of the second pregnancy

F2 Present pregnancy

F2a Period of present pregnancy. If the woman is not pregnant, write "00"

F2b The status of present pregnancy.

F3, F4, F5 for the last/present pregnancy

If there is a woman in the family, who has been pregnant for the last 5 years, ask details of prenatal care and delivery.

In this section, surveyors shall write the code of family member, of the above woman.

F3a Care seeking behavior for prenatal care.

F3b Frequency of the prenatal care.

F3c Access to the care

F3d If she has changed care seeking behavior, ask the reason.

F3e Satisfaction about the care.

F4a Second care seeking behavior for prenatal care.

F4b Frequency of the above care

F4c Access to the care.

F4d Satisfaction about the care.

F5a Third care seeking behavior for prenatal care

F5b Frequency of the above care

F5c Access to the care.

F5e Satisfaction about the care.

F3g, F4g, F5g If the answer for F3e, F4e, F5e is "02" or "03", ask the reason.

F6, F7 Ask about the last pregnancies for the last 5 years

Don't forget to write the delivery code of the family member

F6a Find out where the woman had the first delivery .

F6b Who attended the delivery?

F6c Who among family members participated in delivery?

F6d Was the woman satisfied with the health service?

F7a Find out where the woman had the second delivery?

F7b Who attended delivery ?

F7c Who among family members participated in delivery ?

F7d Was the woman satisfied with health service?

F8 Who made decisions for care seeking behavior for pregnancy and delivery?

F6e, F7e If the answer for F6d, F7d, is «02» or «03» ask the reason.

Section G Health care service for children under 6 for the last 12 months

If the family has children under 6 years old, ask the details of care seeking behavior for health checkup and immunization. Surveyors shall write the code of the child.

- G1** Is the child checked up regularly?
- G2a** Who provides the regular checkup?
- G2b** How often?
- G2c** How does the family take the child there?
- G3a** Who provides regular checkup of the child at home?
- G3b** How often?
- G4** Does the child get necessary vaccination?
- G5** Are the parents satisfied with the health service?
- G6** Who usually takes the final decision regarding care seeking behavior for children?
- G7** If the answer for **G1** is "01", ask the reason.
- G8** If the answer for **G5** is "02" or "03", ask the reason.

Section H Information about death cases for the last 5 years (including information about infant and child death)

The information for this section should be obtained in a delicate manner, so that the family members will not be depressed! Surveyors should apologize and tell the family that the given information is very important for the research.

- H0** If the family have had any death cases for the last 5 years, ask the name of the person.
- H1** Age of the person
- H2** Sex of the person.
- H3** Category of cause of the death.
- H4** If they can specify cause of the death, write.
- H5** The death cause in **H4** is coded according to ICD 10.
- H6** Ask where the person died.
- H7** Ask the family's opinion about the possibility of avoiding death if health care service had been better.

Section I Attitude and opinion about Health Facility.

In this section is necessary to learn the attitude of the family members to health facilities and background of care seeking behavior.

- I1** Ask if the family visits the nearest polyclinic/SVP not to seek care?

- I2. If “yes”, ask the purpose of visit.
- I3 Ask how often the family has visited the health facility for the last 12 months.
- I4 If the family needs health care service, which criteria do they use to choose health care service?
- I5 Which information sources do they use to select health care service?
- I6 Which information sources do they access to know that SVP or hospital has started new services?
- I7 Do health personnel visit any family member regularly?
- I8 Do health personnel visit family members on call?
- I9 Do the family members use services of private doctors or clinics.
- I10 If “yes”, ask the reason.
- I11 What do the family expect from the health care services? (Top 3)

Section J Knowledge of Health (most often diseases)

This section is necessary to clarify general knowledge of the people about the most common diseases. Surveyors shall get the answers to the questions regarding hypertension and anemia prevention and complications. The interviewees’ answers should be written in **J1, J2, J3, J4** accordingly even if they are wrong or absurd. Then surveyors shall evaluate the answers whether it is-“right” or “wrong”.

At the end of the interview, surveyors shall ask if the family members have any wishes to improve healthcare services. Then surveyors shall appreciate them for their kind cooperation and remind that it will be used only within the framework of this study.

10.2 Questionnaire for Care Seeking Behavior Survey

Район: Urban-1 Rural-2	Code:	Family No	Team No	Inter-viewer
Place	Add-ress		Tele- phone	

A: GENERAL CHARACTERISTICS OF THE FAMILY

A1. How long has this family lived here? _____ years	A2. How many square meters is this house? _____
A3. Which type of house does this family live? _____	1. Separate flat in the brick building 2. Separate flat in the block building 3. Separate flat in the cottage 4. Communal flat 5. Separate brick house 6. Separate mud brick house 7. Other (specify)
A4. Who is the owner of this house? _____	1. A member of the household 2. Other relative 3. Other person 4. Employer

B: GENERAL CHARACTERISTICS OF FAMILY MEMBERS

Family member	Family, name, patrinomic (first, initial of the father)	Relationship with the head of household	Gender	Age	Nationality	Education	Level of education	Marital status	Work	What has he/she been doing
	B1	B2	B3	B4	B5	B6	B7	B8	B9	B10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										

- | | | | | |
|--|---|--|--|---|
| B2. Relationship with the head of household
01 Head of household
02 Wife/Husband
03s/3d – Son/ Daughter
04s/04d - Son/ Daughter-in-law
05 Grandchild
06 Parent
07 Parent in law
08 Brother/ Sister
09 Other | B3. Gender
M Male
F Female | B5. Nationality
01 Uzbek
02 Russian
03 Karakalpak
04 Tadjik
05 Kazakh
06 Tatar
07 Other | B6. Education
00 No formal education
01 School/Gimnazium/ Liceum
02 PTU/SPTU (vocational education)
03 Technikum/ College
04 University/ Institute
05 Degree
06 Boarding school
07 Other | B7. Level of education
For 01-04 in B06 – figures
From 1 till 11 (grade)
For 05
C – Candidate of science
D – Doctor of science
T – Education is not completed
99 – Education completed |
| B8. Marital status
01 Never married
02 Married
03 Divorced
04 Widowed | B9. Work: What kind of work does he/she usually do?
01 Manager, supervisor, businessperson
02 Intellectual or creative worker with higher education
03 Specialist with secondary (special) education
04 Office work (secretary, accountant)
05 Sales and services
06 Skilled manual works
07 Unskilled manual works
08 Agriculture/ farming
09 Stock raising
00 Do not work | B10. What has he/she been doing for the last 12 months?
01 Studied (school, institute etc) or worked
02 Has been looking for job
03 Has not been doing anything
04 Couldn't work (disability)
05 Retired, does not work
06 Maternity leave
07 Other | | |

C: LIVING STANDARD

C1: Who usually makes decision regarding expensive purchase in the family, such as car or house?	01 Head of household	05 Grandchild
	02 Wife/Husband	06 Parent
	03s/03d – Son/ Daughter	07 Parent in law
	04s/04d - Son/ Daughter-in -law	08 Brother/ Sister
		09 Other

C2. Does your family buy newspapers regularly? Yes – 01 No - 02	C3. Does your family use the following equipment? (please, circle)	01 Radio	04 Mobile
		02 TV	05 Computer
		03 Phone	06 Internet

C4	Things	C4-a Where does your family usually purchase those things?	C4-b How do you usually get there?
C4-1	Food products		
C4-2	Clothes		
C4-3	Pharmaceuticals		
C4-4	Home electric appliances		

C4-a
01 Here, in this place
02 The nearest town, rayon center
03 Other city (specify)
04 Bukhara/ Samarkand
06 Tashkent
07 Other (specify)

C4-b
01 On foot
02 Bicycle
03 Bus
04 Fixed route taxi
05 Taxi
06 Private car, motorcycle
07 Animal drawn cart
08 Other (specify)

D: CARE SEEKING BEHAVIOR (FOR THE LAST 12 MONTHS)

D1. Health problems (for the last 12 months)

Family member	Trauma, accident	Acute disease	Chronic disease
	D1-a	D1-b	D1-c
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

D2-D4. Medical care for the health problems (for the last 12 months)

Family member	Trauma, accident				Acute disease				Chronic disease			
	Provider	Where was the care provided?	How did you get there?	Satisfaction	Provider	Where was the care provided?	How did you get there?	Satisfaction	Provider	Where was the care provided?	How did you get there?	Satisfaction
	D2-a	D2-b	D2-c	D2-d	D3-a	D3-b	D3-c	D3-d	D4-a	D4-b	D4-c	D4-d

D2-a 01 Nobody, nowhere 05 Nearest rayon center/city hospital 06 Other regional hospital 11 "03" services
D3-a 02 Traditional healing 06 Oblast health facility/ emergency center 09 Private clinic 12 Other (specify)
 03 SVP/ FAP of city polyclinic in Navoi 10 Private doctor
D4-a 04 SUB 07 NGMK hospital

D2-b 01 – Provider's place D3-b 02 – Home D4-b 03 – Work place 04 – Outside home, workplace or the health care facility	D2-c 01 On foot 05 Taxi D3-c 02 Bicycle 06 Private car, motorcycle D4-c 03 Bus 07 Animal drawn cart 04 Fixed route taxi 08 Other (specify) 09 Ambulance	D2-d 01 Yes D3-d 02 Almost yes, but have some comments D4-d 03 No 04 Other (specify)
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D2e-D4e. If the answer for D2-a, D3-a, D4-a is "01- nobody, nowhere", please ask the reason.

Family member	Trauma, accident	Acute disease	Chronic disease
	D2-e	D3-e	D4-e

D2f-D4f. If the answer for D2-d, D3-d, D4-d is "02" or "03", please ask the reason.

Family member	Trauma, accident	Acute disease	Chronic disease
	D2-f	D3-f	D4-f

D5-D7. Access to medicine

Family member	Trauma, accident		Acute disease		Chronic disease	
	Where did you purchase medicine?	How did you get there?	Where did you purchase medicine?	How did you get there?	Where did you purchase medicine?	How did you get there?
	D5-a	D5-b	D6-a	D6-b	D7-a	D7-b

D5-a 01 Provider (same as care)
 D6-a 02 Pharmacy
 D7-a 03 Traditional healer
 04 Other (specify)

D5-b 01 Provider (same as care) 05 Taxi
 D6-b 02 Pharmacy 06 Private car, motorcycle
 D7-b 03 Traditional healer 07 Animal drawn cart
 04 Other (specify) 08 Other (specify)

D8-D10. Refer to the Other Health care facilities

Family member	Trauma, accident				Acute disease				Chronic disease			
	Who advised you to go to the Other health facility?	Did the health care personnel explain the reason of referral?	Did he/she follow the advice?	Where did he/she go to seek care?	Who advised you to go to the Other health facility?	Did the health care personnel explain the reason of referral?	Did he/she follow the advice?	Where did he/she go to seek care?	Who advised you to go to the Other health facility?	Did the health care personnel explain the reason of referral?	Did he/she follow the advice?	Where did he/she go to seek care?
	D8-a	D8-b	D8-c	D8-d	D9-a	D9-b	D9-c	D9-d	D10-a	D10-b	D10-c	D10-d

D8-a 01 Doctor 05 Non-medical personnel
 D9-a 02 Feldsher 06 Decided by himself
 D10-a 03 Nurse 07 Other (specify)
 04 Family members

D8-b,c 01 Yes
 D9-b,c 02 No
 D10-b,c 03 Do not know

D8-d 01 Nobody, nowhere 05 Nearest rayon center/city hospital 09 Private clinic
 D9-d 02 Traditional healing 06 Oblast health facility in Navoi 10 Private doctor
 D10-d 03 SVP/ FAP of city polyclinic 07 NGMK hospital 11 *03* services
 04 SUB 08 Other regional hospital 12 Other (specify)

D8e-D10e. If the answers for D8c, D9c, D10c is «No», please ask the reason

Family member	Trauma, accident	Acute disease	Chronic disease
	D8-e	D9-e	D10-e

D8f-D10f. Satisfaction with the care in the other health care facility

D8g-D10g. If the answer for D8f- D10f is "02" or "03", please ask the reason

Family member	Trauma, accident		Acute disease		Chronic disease	
	D8-f	D8-g	D9-f	D9-g	D10-f	D10-g

D8-f 01 Yes
D9-f 02 Almost yes, but have some comments
D10-f 03 No
 04 Other (specify)

E: CARE SEEKING IN THE CASES OF CHRONIC DISEASES (MENTIONED IN D1-C)

Family member	How many years has he/she been sick?	Where does he/she receive care at the moment?	How does he/she get there?	Did he/she use different health care facility before?	What was the reason of change of the health care facility?	If he/she does not receive any health care now (answer for E2 is "01"), please ask the reason
	E1	E2	E3	E4-a	E4-b	

E2 01 Nobody, nowhere E4-a 02 Traditional healing 03 SVP/ FAP of city polyclinic 04 SUB	05 Nearest rayon center/city hospital 06 Oblast health facility in Navoi 07 NGMK hospital 08 Other regional hospital	09 Private clinic 10 Private doctor 11 "03" services 12 Other (specify) 13 Didn't change	E7 01 Provider (same as care) 02 Pharmacy 03 Traditional healer 04 Other (specify)
E4-b 01 Dissatisfaction with treatment at the previous health care facility 02 Higher professional level of the medical personnel 03 More modern medical equipment	04 Recommended by medical personnel 05 Recommended by friends, relatives	E9-a 01 Yes 02 Almost yes, but have some comments 03 No 04 Other (specify)	

Family member	Does he/she currently have medicine? (Yes -01, No-02)	Where does he/she purchase medicines?	How does he/she get there?	Is he/she satisfied by the medical care received at the health care facility?	If the answer for E-9a is "02" or "03", please ask the reason.	Who makes the final decision regarding the treatment?
	E6	E7	E8	E9-a	E9-b	E10

6 E3 01 On foot 02 Bicycle E8 03 Bus 04 Fixed route taxi	05 Taxi 06 Private car, motorcycle 07 Animal drawn cart 08 Other (specify)	E10 01 Husband 02 Wife 03 Parents of husband 04 Parents of wife	05 Himself/herself 06 Parents of child 07 Other (specify)
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F: MATERNAL AND CHILD HEALTH CARE RECEIVING (FOR THE LAST 5 YEARS)

F1 Previous pregnancy/ F2 Present pregnancy/ F3 – The last or present pregnancy

Family member	First pregnancy in the last 5 years	Second pregnancy in the last 5 years	Present pregnancy		The last or present pregnancy				
			Week of pregnancy (if not 00)	Development of pregnancy	Which health care facility did she go firstly?	How many times did she visit this health care facility?	How does she usually get there?	Reasons for changing the health care facility	Satisfaction with the care received
	F1-a	F1-b	F2-a	F2-b	F3-a	F3-b	F3-c	F3-d	F3-e

F1 01 Delivery of alive baby
02 Delivery of alive twins
03 Delivery of twins (one-alive, one –died)
04 Medical abortion
05 Miscarriage
06 Stillbirth
07 Stillbirth of twins

F2-b 00 – No pregnancy
01 – Normal development of pregnancy
02 – Some problems of pregnancy
03 – Pregnancy with complications

F3-c 01 On foot
F4-c 02 Bicycle
F5-c 03 Bus
04 Fixed route taxi
05 Taxi
06 Private car, motorcycle
07 Animal drawn cart
08 Other (specify)
09 ambulance

F3-d 01 According the plan
02 Because of health problems
03 Dissatisfaction with care
04 Other (specify)

F3-e 01 Yes
F4-e 02 Almost, but have some comments
F5-e 03 No
04 Other

F4-F5 – The last or/and present pregnancy

Family member	Which health care facility did she go secondary?	How many times did she visit this health care facility?	How does she usually get there?	Satisfaction with the care received	Which health care facility did she go thirdly?	How many times did she visit this health care facility?	How does she usually get there?	Satisfaction with the care received
	F4-a	F4-b	F4-c	F4-e	F5-a	F5-b	F5-c	F5-e

F3-a	F6-a	01 Nobody, nowhere	05 Nearest rayon center/city hospital	09 Private clinic
F4-a	F7-a	02 Traditional healing	06 Oblast health facility in Navoi	10 Private doctor
F5-a		03 SVP/ FAP of city policlinic	07 NGMK hospital	11 '03' services
		04 SUB	08 Other regional hospital	12 Other (specify)

If the answer for F3-e, F4-e, F5-e is "02" or "03", please ask the reason

Family member	F3-g for F3-e	F4-g for F4-e	F5-g for F5-e

F6-F7 – Delivery for the last 5 years (first and second)

Family member	Where did you give the birth for the first time?	Which health personnel attended the delivery?	Who in your family supported her delivery at that time?	Was she satisfied with the care provided?	Where did you give the birth for the second time?	Which health personnel attended the delivery?	Who in your family supported her delivery at that time?	Was she satisfied with the care provided?	Who makes decisions regarding prenatal care and deliveries?
	F6-a	F6-b	F6-c	F6-d	F7-a	F7-b	F7-c	F7-d	F8

F6-b 01 Doctor
02 Feldsher
F7-b 03 Midwife
04 Nurse

05 Traditional birth attendant («enaga»)
06 Other (specify)

F6-c 00 Nobody
F7-c 01 Mother
02 Husband
03 Sister

04 Mother-in-law
05 Brother
06 Other (specify)

F8 01 Husband
02 Herself
03 Parents of husband

04 Parents of wife
05 Other (specify)

F6-d 01 Yes
F7-d 02 Almost, but have some comments

03 No
04 Other

If the answer for F6-e, F7-e is "02" or "03", please ask the reason.

Family member	F6-e for F6-d	F7-e for F7-d

G: PROVIDING MEDICAL CARE TO CHILDREN UNDER 6 YEARS OLD FOR THE LAST 12 MONTHS

Family member	Do you have regular check up for your child? 01-Да 02-Нет	Who provides the regular check-up for the child at primary health care facility?	How often does your child have the regular check up?	How does your child get there?	Who provides regular check up of the child at home?	How often does your child have the regular check up?	Has your child received the necessary vaccination? 01-Yes, 02-No	Is mother satisfied with care?	Who usually makes decision regarding health care for your children?
	G1	G2-a	G2-b	G2-c	G3-a	G3-b	G4	G5	G6

G2-a 00 Nobody
G3-a 01 Doctor
02 Feldsher
03 Patronage nurse
04 Nurse
05 Nurse at kindergarten

G2-b 01 Twice a week
G3-b 02 Once a week
03 Once a month

04 Once a quarter
05 Other (specify)

G2-c 01 On foot
02 Bicycle
03 Bus
04 Fixed route taxi
05 Taxi

06 Private car, motorcycle
07 Animal drawn cart
08 Other (specify)
09 Ambulance

G5 01 Yes
02 Almost yes, but have some comments
03 No
04 Other

G6 01 Father
02 Mother
03 Parents of father
04 Parents of Mother
05 Parents of child
06 Other (specify)

Specify for G1 and G8

Family member	If the answer for G1 is "01", please ask the reason	If the answer for G5 is "02" or "03", please ask the reason.

H: INFORMATION REGARDING DEATH FOR THE LAST 5 YEARS

(INCLUDING INFORMATION REGARDING THE DEADS IN THE LAST YEAR, AND REGARDING INFANT AND CHILD MORTALITY)

Family member	First name and initial of the person	Age	Sex M Male F Female	The direct reason of death	Specify the cause of death (if possible)	ICD-10	Where did he/she spend the last moment?	Do you think the death could have been avoided if medical care had been better?
	H0	H1	H2	H3	H4	H5	H6	H7
L1								
L2								
L3								
L4								
L5								
L6								
L7								

H3
 01 Acute disease/symptom
 02 Trauma, accident
 03 Long disease
 04 Do not know
 05 Other (specify)

H7
 00 The death could not be avoided.
 01 Medical personnel was not able to help the patient avoid death.
 02 If there had been all necessary medical equipment and medicines, medical personnel could have saved the patient.
 03 If the qualification of health personnel had been higher, the death could have been avoided.
 04 The health personnel could save the patient, but did not want it.
 05 Do not know.

H6
 01 Nobody, nowhere
 02 Traditional healing
 03 SVP/ FAP of city policlinic
 04 SUB
 05 Nearest rayon center/city hospital
 06 Oblast health facility in Navoi
 07 NGMK hospital
 08 Other regional hospital
 09 Private clinic
 10 Private doctor
 11 "03" services
 12 Other (not at home, not at the street, not at the job)

I: ATTITUDE AND OPINION REGARDING HEALTH CARE FACILITIES

I 1. Do you or your family members visit the nearest polyclinic/SVP not for treatment of disease or trauma?	_____	Yes – 01	No - 02
I 2. If “01 Yes” for I1, what is the purpose of the visit?	_____	01 Health check up 02 Health promotion	03 Document regarding the health status 04 Other (specify)
I 3. How often did you and your family member visit the nearest polyclinic/SVP for the above purpose for the last 12 months?	_____	00 None 01 Twice a week 02 Once a week	03 Once a month 04 Once a quarter 05 Once a year
I 4. When you need the medical care, which criteria do you use to choose the health care facility? (Top three)	_____	01 Distance 02 Cost 03 Reliability/ safety 04 Qualification of personnel	05 Modern equipment 06 Other (specify)
I 5. When you need the medical care, which criteria do you use to choose the health care facility? (Top three)	_____		01 Family member 02 Neighbors 03 Friends 04 Medical personnel 05 Leaflets, posters 06 Mass media 07 Other (specify) 08 Do not know
I 6. Which information source(s) do you use to choose the health care facility? (Top three)	_____		
I 7. Does medical personnel visit your family regularly?	_____	Yes – 01	No - 02
I 8. Does medical personnel visit any member of your family on call?	_____	Yes – 01	No - 02
I 9. Do you use private clinics or doctors’ services?	_____	Yes – 01	No - 02
I 10. If you use private clinics or doctors’ services (answer for I9 is “01”), what is the reason? (Top three)	_____	01 Distance 02 Cost 03 Reliability/ safety 04 Qualification of personnel	05 Modern equipment 06 Attention to the patient/ treatment with respect 07 Other (specify)
I 11. What do you expect from health service provider? (Top three)	_____	01 Distance 02 Cost 03 Reliability/ safety 04 Qualification of personnel	05 Modern equipment 06 Attention to the patient/ treatment with respect 07 Other (specify)

J: KNOWLEDGE REGARDING HEALTH (ABOUT WIDELY SPREAD (PREVALENT) DISEASES)

J 1. What will happen if the arterial hypertension is not treated?	_____	Correct - 01 Incorrect - 02
J 2. What will happen if anemia is not treated?	_____	Correct - 01 Incorrect - 02
J 3. How to prevent the development of arterial hypertension?	_____	Correct - 01 Incorrect - 02
J 4. How to prevent anemia?	_____	Correct - 01 Incorrect - 02

11. Concept of Navoi Medical Complex, Oblast General Medical Center (OGMC) and Oblast Diagnostic Center (ODC) by NOHA

11.1 Navoi Medical Complex

11.2 Layout Plan for OGMC and ODC

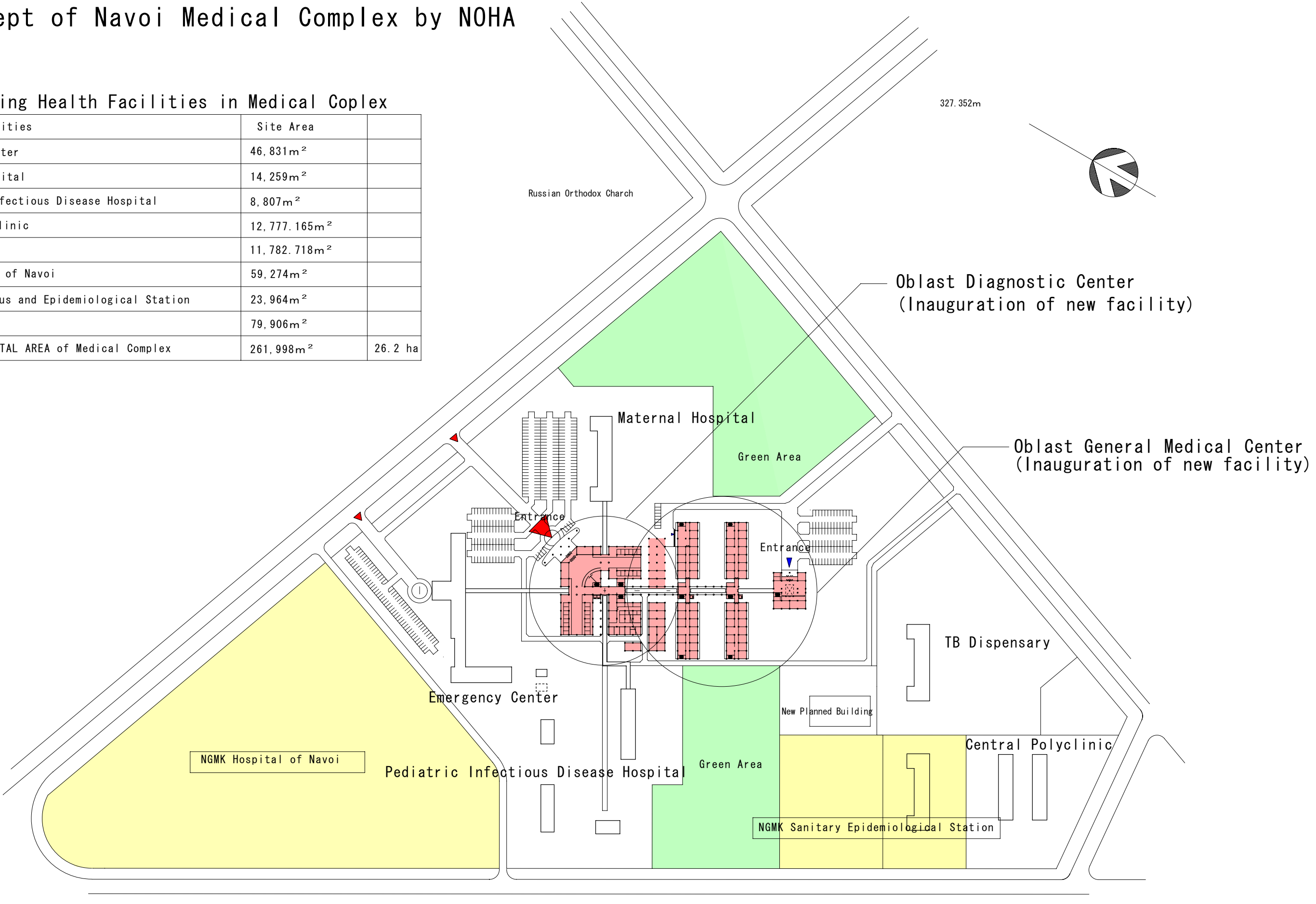
11.3 Equipment Plan for OGMC and ODC

11.4 Typical Ward Plan for OGMC

11.1 Concept of Navoi Medical Complex by NOHA

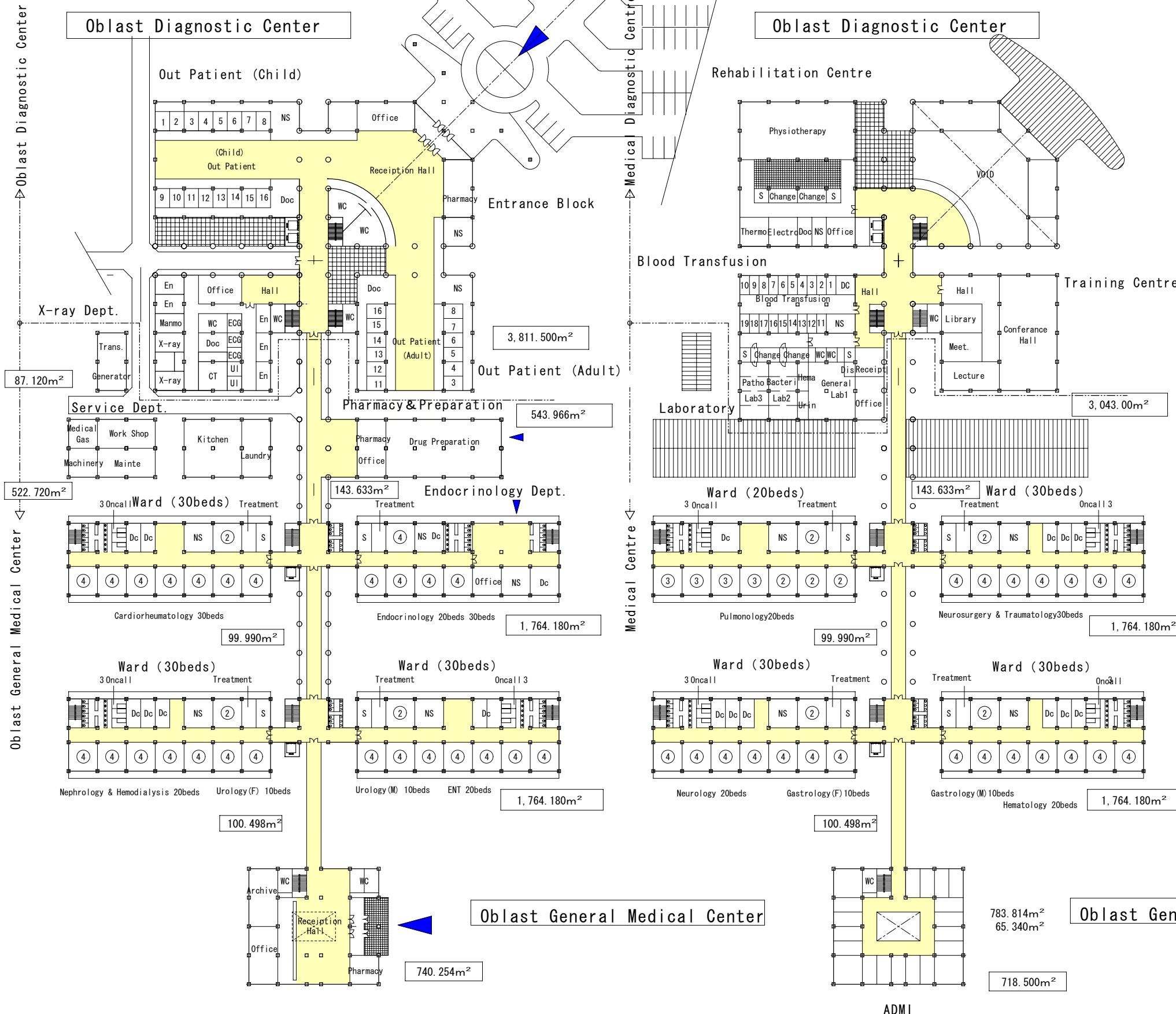
List of Existing Health Facilities in Medical Coplex

No.	Name of Facilities	Site Area	
1	Emergency Center	46,831m ²	
2	Maternal Hospital	14,259m ²	
3	Pediatrics Infectious Disease Hospital	8,807m ²	
4	Central Polyclinic	12,777.165m ²	
5	TB Dispensary	11,782.718m ²	
6	NGMK Hospital of Navoi	59,274m ²	
7	NGMK Infectious and Epidemiological Station	23,964m ²	
8	Green Area	79,906m ²	
Rough TOTAL AREA of Medical Complex		261,998m ²	26.2 ha



NAVOI MEDICAL COMPLEX S=1:3000

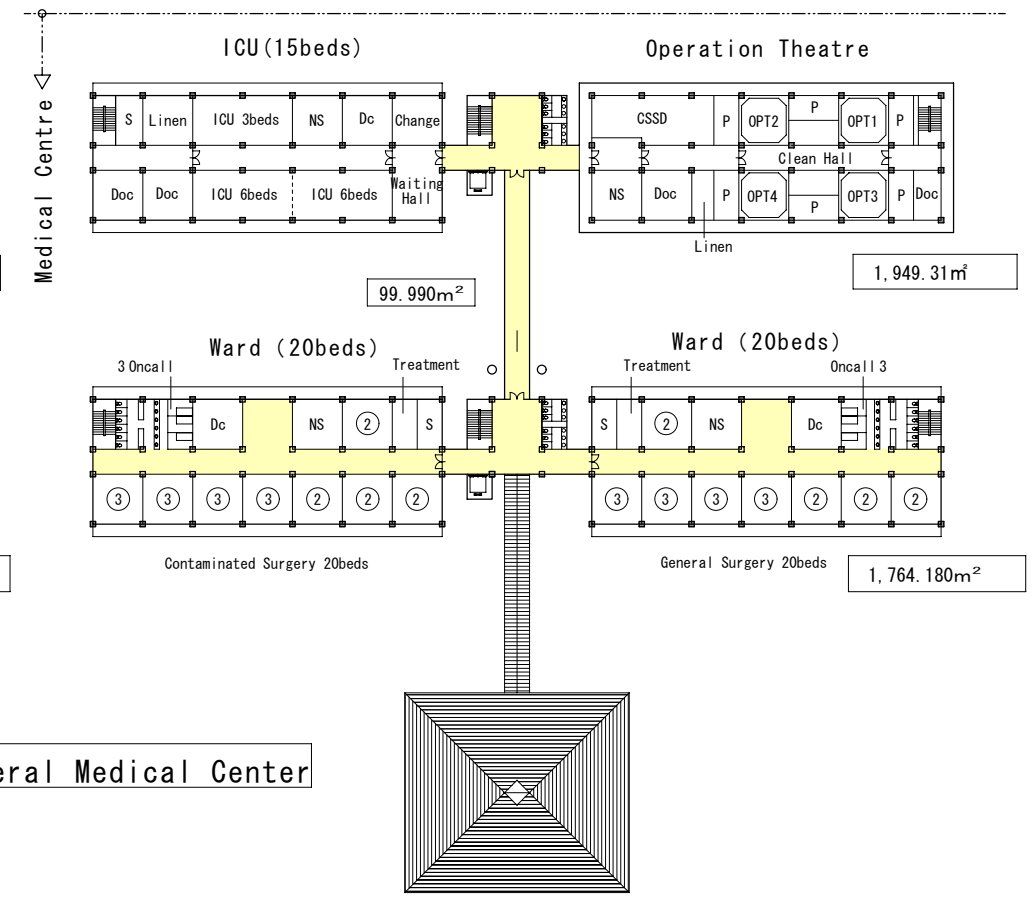
11.2 Concept of Layout Plan for OGMC and ODC by NOHA



	Total Floor Area	ODC	OGMC	
BF				Mechanical Pit
1F	9,590.00m ²	3,820.00m ²	5,770.00m ²	
2F	7,640.00m ²	3,050.00m ²	4,590.00m ²	
3F	3,820.00m ²	0m ²	3,820.00m ²	
Total	21,050.00m²	6,870.00m²	14,180.00m²	(6.6m Span)

NOTE: ODC (Oblast Diagnostic Center), OGMC (Oblast General Medical Center)

In case (6.3*6.3) Span=18,850m²
 In case (6.0*6.0) Span=17,170m²
Minimization of Area



1F Plan

2F Plan

3F Plan

Oblast General Medical Center (282 beds) and Oblast Diagnostic Center

S=1:1000

11.3 Concept of Equipment Plan for OGMC and ODC by NOHA

Equipment List of Oblast General Medical Center (OGMC) [1/3]

No. Dept	Target Diseases	Beds	Therapeutic Equipment / Diagnostic Equipment	Quantity	Remarks
0	General equipment for all dept.		Portable X-ray apparatus	2	
			Ultrasound (portable)	2	
			Patient beds	250	
			Sphygmomanometer & stethoscope	30	
			Suction pump, table top	20	
			Syringe pump	20	
			Infusion pump	20	
			Treatment cart with materials	30	
			Instrument cabinet	30	
			Refrigerator	15	
			Stretcher	15	
			Wheel chair	15	
			Personnel computer	15	
			Other equipment	1	
1	Cardioreumatology <i>IHD (Ischemic heart disease)</i> <i>Arrhythmia</i> <i>Congestive heart failure</i>	30	Patients monitor	3	
			Defibrillator	1	
			Pulse oximeter	3	
			ECG	1	
2	Gastroenterology <i>GI bleeding, Hepatic failure, Colon polyp</i>	20	Gastro-fiberscope (diag. & therap)	0	Use ODC equipment
3	Pulmonology & Allergology <i>COPD (Chronic Obstructive Pulmonary Disease)</i> <i>Pneumonia</i> <i>Chr. respiratory failure</i>	20	Ventilator	2	
			Oxygen mask & laryngoscope set	5	
			Oxygen concentrator	2	
			Spirometer	0	Use ODC equipment
			General X-ray apparatus	0	Use ODC equipment
			Blood gas analyzer	0	Use ODC equipment
4	Neurology <i>Epilepsy, Post-stroke sequela,</i> <i>Parkinson's disease</i>	20	EEG	0	Use ODC equipment
			CT	0	Use ODC equipment
5	Nephrology & Hemodialysis <i>Acute renal failure, Chr.</i> <i>Renal failure,</i> <i>Glomerulonephritic</i>	20	Hemodialysis apparatus	2	
			Water system for hemodialysis	1	
			Peritoneal dialysis	2	
6	Hematology <i>Anemia, Leukemia, Hemophilia</i>	20	Hematology analyzer	0	Use ODC equipment
			Bone marrow test equipment	0	Use ODC equipment
			Blood coagulation analyzer (PT/APTT)	0	Use ODC equipment
7	General Surgery & Operation Theater <i>GB stone, Lung cancer,</i> <i>Diabetic gangrene</i>	20	Laparoscope (diag. & therap.)	0	Use ODC equipment
			Ultrasound (general purpose)	0	Use ODC equipment
			Broncho-fiberscope (diag. & therap.)	0	Use ODC equipment
8	Contaminated Surgery & Colopr <i>Hemorrhoid, Colon polyp,</i> <i>Colon diverticula</i>	20	Rectoscope	0	Use ODC equipment
			Colono-fiberscope (diag. & therap.)	0	Use ODC equipment
			X-ray fluoroscopy apparatus	0	Use ODC equipment

Equipment List of Oblast General Medical Center (OGMC) [2/3]

No. Dept	Target Diseases	Beds	Therapeutic Equipment / Diagnostic Equipment	Quantity	Remarks
9	ENT <i>Tonsillitis, Sinusitis, Laryngeal cancer</i>	20	Otoryno-laryngoscope	2	1
10	Urology <i>Kidney stone, Complicated UTI (urinary tract infection), Bladder cancer</i>	20	X-ray apparatus (Pyelogram) Cystoscope (diag. & therap.) Urine culture (bacteriology lab)	0 0 0	Use ODC equipment Use ODC equipment Use ODC equipment
11	Traumatology- neurosurgery <i>Head injury, Spinal injury, Brain tumor</i>	30	Traction bed CT	15 0	1 Use Emergency Cente equipment
12	ICU <i>Acute respiratory failure, Shock, Septicemia</i>	15	ICU beds Ventilator Patient monitor Defibrillator Pulse oximeter Other related equipment Blood gas analyzer Blood culture (bacteriology lab)	15 2 3 1 2 1 0 0	Use ODC equipment Use ODC equipment
13	Rehabilitation <i>Post-stroke paresis, Post- trauma, Neuromuscular disease</i>	0	Exercise machine for rehabilitation Electrical therapy unit Traction unit Other related equipment EMG & evoked potential	2 4 2 1 0	Use ODC equipment
14	Liaison Psychiatry <i>Psychological stress, Psycho-somatic disease, Alcohol withdrawal</i>	0			
15	Hospitalist <i>Perioperative management, Fever workup, Coma workup, Control of diabetes, ANA positive patients</i>	0			
16	Operation Theatre <i>General surgery Contaminated Surgery</i>	0	Electro surgical unit Anesthesia machine Patient monitor Operating table, general propose Operating table, orthopedic Operating light Suction unit Laparoscopy system Surgical instrument set Surgical microscope for ENT Surgical microscope for Neurosurge Oxygen mask & laryngoscope set Other related equipment	4 4 4 3 1 4 4 1 8 1 1 4 1	
17	CSSD (Central Sterile Supply Department)	0	Steam sterilizer (Autoclave) Hot air sterilizer Stainless steel materials Other related equipment	2 2 30 1	
18	Laundry	0	Laundry equipment	1	

Equipment List of Oblast General Medical Center (OGMC) [3/3]

No. Dept	Target Diseases	Beds	Therapeutic Equipment / Diagnostic Equipment	Quantity	Remarks
19	Kitchen	0	Kitchen equipment	1	
			Refrigerator	3	
			Freezer	1	
			Meal cart & dishes	4	
			Other related equipment	1	
20	Maintenance center & medical g	0	Maintenance center equipment	1	
			Medical gas equipment	1	
			Personnel computer	2	
21	Administration	0	Personal computer	4	
			Printer & copy	1	
			Storage cabinet	10	
			General furniture	1	
			Other related equipment	1	
22	Reception & medical record	0	Personnel computer	1	
			Printer & copy	1	
			Shelves	30	
23	Pharmacy	0	Electronic balance	1	
			Refrigerator	2	
			Freezer	1	
			Tablet conter	1	
			Packing machine for powder medicir	1	
			Medicine cabinet	5	
			Safety box for narcotics	1	
			Shelves	30	
			Cabinet for perscription	3	
24	Drug preparation for injections and infusions	0	Steam sterilizer (Autoclave)	2	
			Refrigerator	2	
			Bottle washer	1	
			Hot air sterilizer	2	
			Shelves	20	
			Electronic balance	1	
			Vial filling machine	1	
			Medicine cabinet	2	
25	Institute of Blood Transfusion	0	Balance	1	
			Blood bank refrigerator	2	
			Bed for blood donor	20	
			Centrifuge for blood bag	1	
			Plasma separator material	1	
			Sphygmomanomater set	5	
26	Endocrinology Dispensary	20	Related equipment	1	
TOTAL		255			

Equipment List of Oblast Diagnostic Center (ODC) [1/2]

No.	Department	Major Equipment	Quantity	
			Plan A: Full Q'ty	Plan B: Minimum Q'ty
1	Radiology/ Imaging diagnostics	CT scanner	1	0
		Fluoroscopy apparatus	1	1
		General X-ray apparatus	1	1
		Mammography apparatus	1	0
		Film processor	1	1
		Ultrasound apparatus (Color doppler)	1	1
		Ultrasound apparatus (B/W)	1	0
		Other related materials & equipment	1	0
2	Physiological examination	ECG	2	0
		ECG ergometer/tradmil test	1	1
		EEG	1	1
		Spirometer	1	1
		Audiometer	1	1
		EMG & evoked potential	1	1
		Other related materials & equipment	1	1
3	Endoscopy	Gastroduodeno-fiberscope	1	1
		Colono-fiberscope	1	1
		Rectoscope	1	1
		Laparoscope	1	1
		Cystoscope	1	1
		Broncho-fiberscope	1	1
		Bronchoscope, rigid	1	1
		Endoscope TV system	2	2
		Other related materials & equipment	1	1
4	General purpose	Table top centrifuge	2	0
		Medical refrigerator	3	0
		Freezer	1	0
		Analytical balance	1	0
		Water bath	2	0
	Hematology	Hematology analyzer	1	1
		Blood coagulation analyzer	1	1
		Bone marrow test materials	1	0
	Biochemistry	Microscope	3	0
		Biochemical analyzer, semi-auto	1	0
		Spectrophotometer	1	0
	Immuno-serology	Blood gas/electrolyte analyzer	1	0
		Immunology analyzer	1	1
	Urine & feces	Laboratory incubator	1	0
		Microscope	2	0
	Bacteriology & TB	Laboratory autoclave	2	2
		Laboratory incubator	2	2
		Hot air sterilizer	2	2
		CO2 incubator	1	1
		Microscope	2	2
		Clean bench	2	2

Equipment List of Oblast Diagnostic Center (ODC) [2/2]

No.	Department	Major Equipment	Quantity	
			Plan A: Full Q'ty	Plan B: Minimum Q'ty
	Histopathology	Tissue processor	1	1
		Microtome	1	1
		Microscope	2	2
		Other related equipment for all lab.	1	1
5	Outpatient / Polyclinic	Diagnostic set (Otoryno-laryngoscope)	10	10
		X-ray film illuminator	10	10
		Examination table	10	10
		Examination light	10	10
		ENT treatment chair unit	2	2
6	Others			
	Maintenance Section	Equipment for maintenance workshop	1	1
		Personnel computer	2	2
	Reception & medical record	Personnel computer	3	3
		Printer	3	3
		Copy machine	1	1
		Shelves	10	10

11.4 Typical Ward Plan for OGMC



Typical Ward Plan (6.0m × 6.0m) for OGMC 1,311.113m²

(In case 6.6m × 6.6m Span, Ward area is 1,764.180m²)

12. Detailed Plan of Activity 4.2

“Procurement of Medical Equipment
for RCHs”

12 Detailed Plan of Activity 4.2 "Procurement of Medical Equipment for RCHs"

Department	Equipment	Quantity (Total)							
		Uchkuduk	Tomdi	Karmana	Navbakhor	Nurata	Khairchi	Kizirtepa	Kanimekn
Radiology/ Imaging	Fluoroscopy apparatus	1	1	1	1	1	1	1	1
	General X-ray apparatus	1	1	1	1	1	1	1	1
	Mammography apparatus	1	1	1	1	1	1	1	1
	Film processor	1	1	1	1	1	1	1	1
	Ultrasound apparatus (B/W, general purpose)	1	1	1	1	1	1	1	1
	Ultrasound apparatus (portable)	1	1	1	1	1	1	1	1
Functional diagnostic	ECG	2	1						
	Spirometer	1	1						
	Gastroduodeno-fiberscope	1	1	1	1	1	1	1	1
	Colono-fiberscope	1	1	1	1	1	1	1	1
	Laparoscope	1	1	1	1	1	1	1	1
	Cystoscope	1	1	1	1	1	1	1	1
	Broncho-fiberscope	1	1	1	1	1	1	1	1
Therapeutic equipment	Patient monitor	2	2	2	2	2	2	2	2
	Pulse oximeter	2	2	2	2	2	2	2	2
	Ventilator (adult)	2	2	1	1	1	1	1	1
	Ventilator (infant)	2	2	1	1	1	1	1	1
	Syringe pump/Infusion pump	4	2						
	Infant incubator	2	1						
	Infant wamer	2	1						
Operation theater	Electro surgical unit	2	1						
	Anesthesia machine	2	1						
	Patient monitor	2	1						
	Operating table	2	1						
	Operating light	2	1						
	Suction unit	2	1						
	Surgical instrument set	4	4						

13. Proposed System of FRP
(Fiberglass Reinforced Plastic)
Septic Tank for Improvement of the
Toilets

13. Proposed System of FRP (Fiberglass Reinforced Plastic) Septic Tank for Improvement of the Toilets

13-1 New concept of the improved toilets with FRP Septic Tank

Renovation of the Toilet for Regional Center Hospital

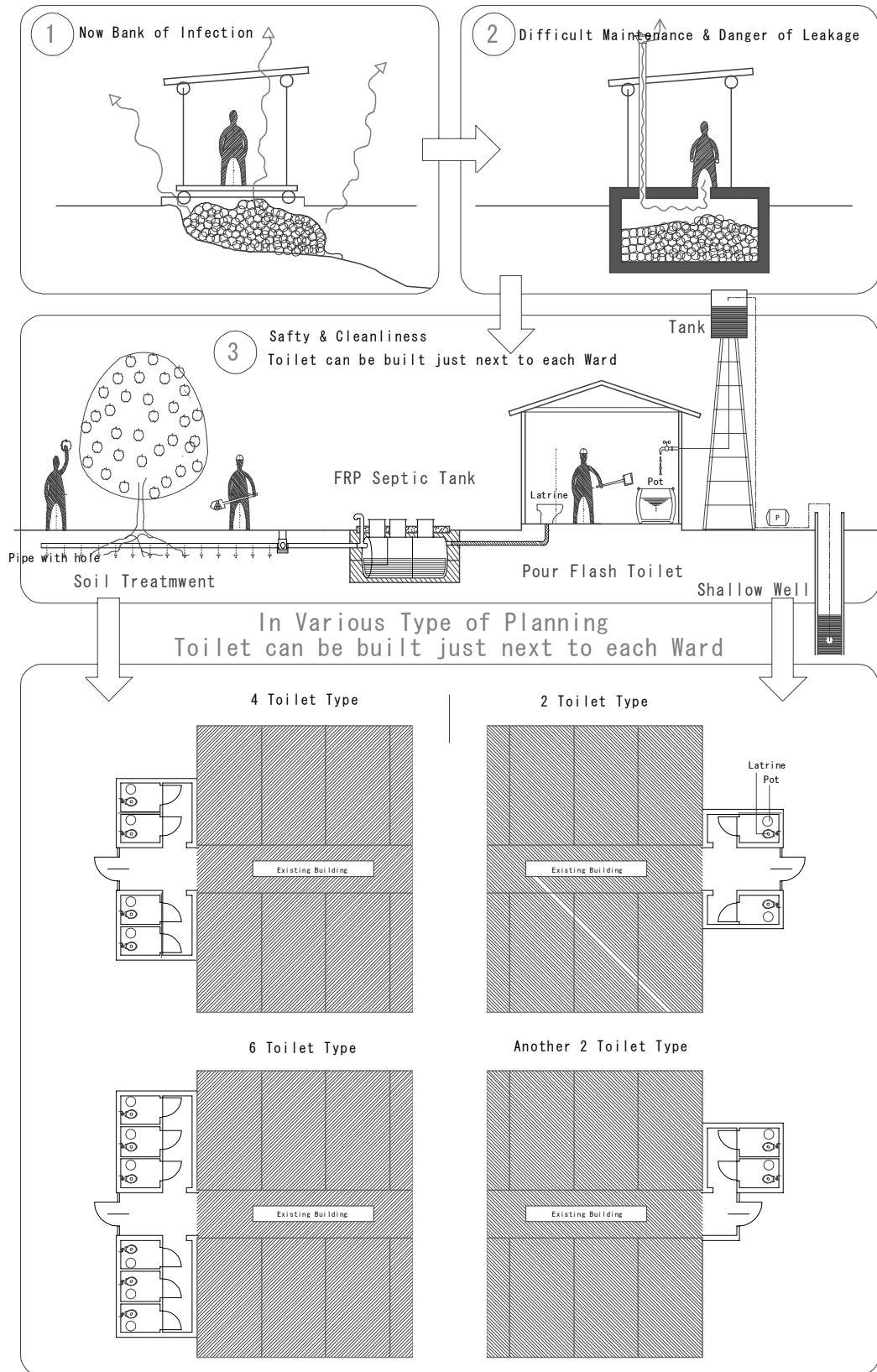


Figure 1. Proposed System of Latrine Toilets with FRP Septic Tank

13-2 Structure of FRP Septic Tank

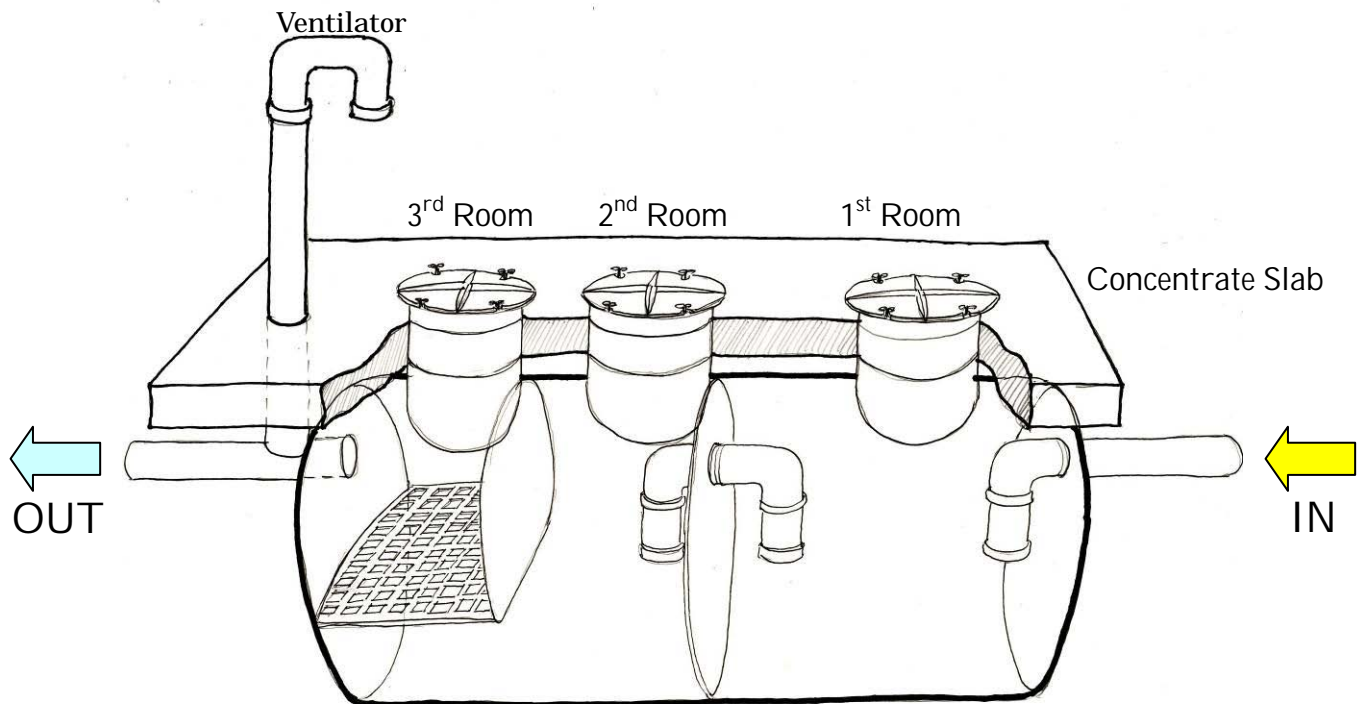


Figure 2. Structure of FRP Septic Tank

13-3 Function of Rooms on FRP Septic Tank

- 1st Room: To consume black water by Anti-aerobic bacteria.
To separate Scam up (light materials) and Sludge down (heavy materials).
To send treated water to 2nd Room.
- 2nd Room: To consume black water by Anti-aerobic bacteria, again.
To up-flow-out treated water to 3rd Room.
- 3rd Room: To filter treated black water by coral-rock-filter.
To send treated water to Main-pipe-line.

13-4 Preparation of Environmental Burden Reduction Enzyme for FRP Septic Tank

[Ingredients]

- 1) Natto-kinase – 3 g
- 2) Dry-yeast – 4 Kg
- 3) Yogurt – 50 Liter
- 4) Sugar – 50 kg
- 5) Water – 900 Liter

Note: The ingredients are developed by The Industrial Institute of Ehime Prefecture in Japan.

After mixing above ingredients well in mixer or bottle, incubate in tank with around 40°C in one week. While incubating, cap should be kept loose, unless produced gas would explode when someone open this cap and loose enzyme liquid. After incubating, dilute with water 2 ~ 10 times and bottling in 500ml or 1,000ml bottle deliver to each house. So 1 ton ingredients will be 2 ton ~ 10 ton Enzyme, it's enough for 340 households in 2 months. Daily usage volume of **Environmental Burden Reduction Enzyme** will be 100ml, monthly 3,000ml (3 liter). 340 households x 3 liter =1 ton. Cost of ingredients is less than 400 USD for 2 months. The Enzyme will activate treatment process and clean pipes and tanks with no harm for environment. Also it will help plantation growth.

13-1 Routine Maintenance by the User

- 1) To check water-flow from toilet bowl well or not
- 2) To check smell from ventilator stand nearby septic tank
- 3) To pour 100ml of **Environmental Burden Reduction Enzyme** into toilet once a week
- 4) To check manhole of No. 3 Room of septic tank whether scum come or not

14. Report on Workshops on Issues and Strategy

14. Reports on Workshops on Issues and Strategy

Table of Contents

- 1 Introduction
- 2 Workshop 1: Issues, Problem Analysis and Objective Analysis
- 3 Workshop 2: Strategies to Achieve the Objectives
- 4 Workshop 3: Basic Strategy

Attachments

- | | |
|---------------|--|
| Attachment 1: | List of Participants in Workshops in Navoi |
| Attachment 2: | List of Participants in Workshop in Tashkent |
| Attachment 3: | Categorized Problem Cards |
| Attachment 4: | Problem Tree |
| Attachment 5: | Objective Tree |

1 Introduction

In Field Mission 3, participatory workshops were held to analyze the issues identified and to establish strategy on improving health care services in Navoi Oblast. The series of workshops were organized under the principle and conceptual flow shown below.

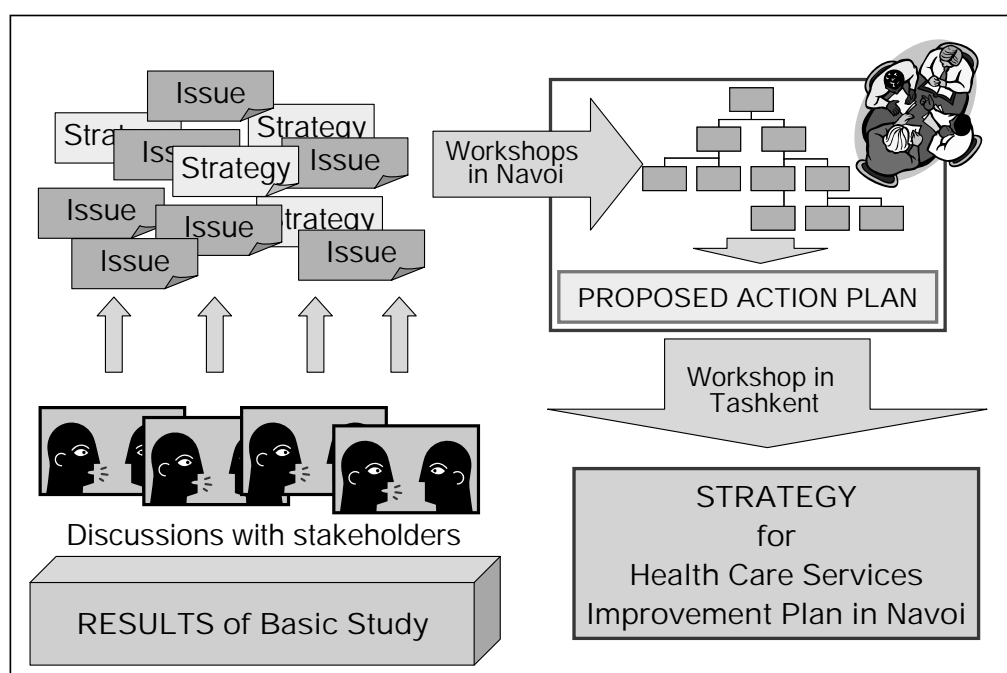


Figure 1: Flow of the Series of the Workshops

Principles of the participatory workshop

- Follow the facilitator's instruction.
- Every participant has equal opportunity to speak his/her opinion.
- Every opinion is important and worth to be considered.
- Listen to the person speaking till the end; do not interrupt him/her.
(However, the facilitator can ask the participants to finish some irrelevant/ too long/inappropriate speech.)
- Do not search the owner of the opinion.
- Do not hesitate to tell the objection.
- Do not get angry when your opinion is objected.
- Do not look down the other participants even if his/her opinion is based on wrong perception.
- If the discussion could take long time to reach the consensus, the facilitator leaves that topic to be discussed later to cool the participants down.

Table 1 shows the outline of workshops held during August 18 to September 4, 2007. Workshop-0, 1 and 2 were held in Navoi, and workshop-3, in Tashkent. Total 24 members participated in workshops in Navoi, and 28, in Tashkent. List of participants are shown in Attachment 1 and 2.

Table 1: Outline of the Workshops

	Purpose	Date	Place	Participants	(No.)
Workshop 0	- To understand method used in workshops - To share idea of workshop principle	09:00 – 12:00, 18-Aug 2007	Navoi	Selected personnel of NOHA and oblast health facilities	(10)
Workshop 1	- To identify issues and constraints - To establish rough framework of action plans	09:00 – 17:00, 20-Aug 2007	Navoi	Personnel of NOHA and health facilities concerned to the Study	(24)
Workshop 2	- To establish sector strategy	14:00 – 17:00, 22-Aug 2007	Navoi	(same)	(24)
Workshop 3	- To share the outputs of the workshops in Navoi - To discuss on the basic strategy	10:00 – 16:00, 04-Sep 2007	Tashkent	Personnel of MOH concerned to the Study	(28)

Based on the results of basic study, the Study Team had preliminary discussions with the stakeholders, and picked the current issues in the oblast health sector. Each issue was written on one card in Russian to be discussed by the participants in the workshops.

At workshop-0 held on 18-Aug, 2007, the method to be used in workshop was explained using the guideline and selected cards of issues prepared by the Study Team, and the idea on workshop principle was shared by the core members of NOHA and the Study Team. Although it was a trial, the participants had active discussion.

Table 2: Program of Workshop-0

Time	Item	In charge
9:00 – 9:05	1. Opening remark	NOHA ¹
9:05 – 9:20	2. Ice breaking	JST ²
9:20 – 10:00	3. Explanation about the workshop method and principles	JST ²
10:00 – 11:00	4. Exercises of KJ method ³ , problem analysis, and objective analysis	JST ² / Participants
11:00 – 11:15	Tea break	-
11:15 – 11:45	5. Exercises of action planning	JST ² / Participants
11:45 – 12:00	6. Feedback and closing remark	JST ² / NOHA ¹

Note: 1. NOHA= Navoi Oblast Health Administration; 2. JST= JICA Study Team

3. KJ method= Participatory method to categorize issues or ideas

Based on the feedbacks of participants in the workshop-0, the Study Team finalized the guideline and detail program of workshops 1 to 3, in order to make the following workshops most effective.



Figure 2: Active Participation in the Workshops

2 Workshop 1: Issues, Problem Analysis and Objective Analysis

The workshop-1 was conducted on 20 August 2007 with 24 participants from NOHA, oblast health facilities and some rayon central hospitals. Detailed program is presented in Table 3.

Table 3: Program of Workshop-1

Time	Item	In charge
9:00 – 9:05	1. Opening remark	NOHA
9:05 – 9:20	2. Ice breaking	JST
9:20 – 10:00	2. Explanation about the workshop method and principles	JST
10:00 – 10:30	Tea break	-
10:30 – 13:00	3. Problem analysis	JST/ Participants
13:00 – 14:00	Lunch break	-
14:00 – 17:00	4. Objective analysis	
	14:00 – 14:30 Guidance and forming small groups	JST
	14:15 – 15:30 Group work	Participants
	15:30 – 17:00 Presentation	JST/ Participants

Note: NOHA=Navoi Oblast Health Administration; JST=JICA Study Team

In the session of problem analysis, the participants categorized many issues or problems using the issue cards prepared by the Study Team. The categorized cards in the session is shown in Attachment 3. They categorized many issues or problems in “system, because some existing systems are not appropriate to actual situation in Navoi. For example, Health resources such as vehicle and fuel and

personnel are distributed according to the coverage population. However, in low population density areas, health personnel have to move much longer distance, and they need more fuel and time to carry out their duty than standard population density areas.

Then, they discussed logical linkage among the cards to create problem tree as shown in Attachment 4-1 and 4-2. Although some linkages between cause and problem in the problem tree shown in the Attachment do not seem to be logical or reasonable, these are the relationships agreed by the participants who understands the actual situations.

The participants had clear and logical ideas what they should do step by step when they discussed the objective tree as shown in Attachment 5-1 and 5-2. The participants found there are six approaches to improve the health care services in Navoi Oblast as summarized in Figure 3. "Tree 1" mainly focuses on the quality of treatment considering non-communicable diseases which will increase in Navoi Oblast near future, while "Tree 2" focuses on rather physical conditions such as facility or equipment.

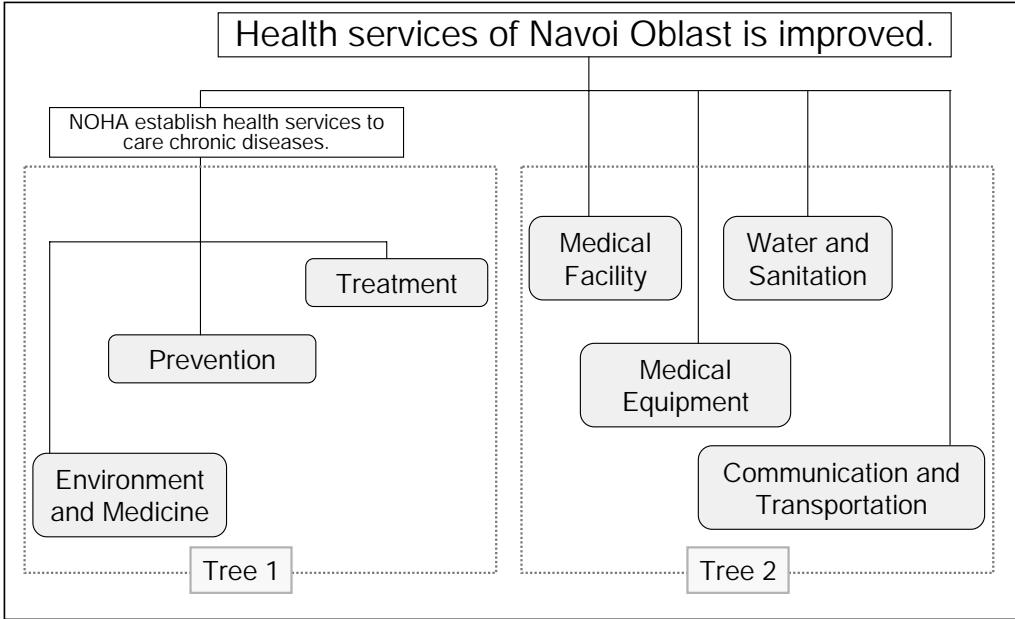


Figure 3: Summary of Objective Tree

Some participants tended to think if they have a general hospital, most of the problems could be solved or improved. On the other hand, some thought they need to improve the quality of medical services to correspond changing health needs. Most of the participants stated that they should start actions which they can do within their resources and then, expand the improvement to large scale activity.

The contents of the improvement activities for each branch of the objective tree were discussed in six small groups as shown in Attachment 5.

Finally, the participants proposed the following activities to improve health care services in Navoi Oblast. (Table 4).

Table 4: Proposed Activities

Group	Category and contents of the proposed activity
Group-1	Health Facility (Oblast General Hospital) <ul style="list-style-type: none"> - Establish and Operate Oblast General Hospital - Improve Quality of Medical Services in Oblast General Hospital - Improve Patient Satisfaction
Group-2	Medical equipment <ul style="list-style-type: none"> - Improve Use and Maintenance Skills - Establish Regular and Integrated Maintenance System - Ensure Financial Source for Equipment
Group-3	Sanitation, Transportation and Communication <ul style="list-style-type: none"> - Improve Sanitary Condition in Health Facility - Provide Appropriate Transportation Measures - Provide Communication Tools
Group-4	Medical services to prevent death by NCD <ul style="list-style-type: none"> - Ensure Qualified Human Resources in Health Facility - Enhance Interaction among Health Service Providers - Improve Diagnostics and Treatment
Group-5	Prevention (focusing on NCD) <ul style="list-style-type: none"> - Generate Additional Income in Health Facilities - Improve Access to New Knowledge - Update Patronage System - Organize Campaign on NCD Prevention and Health Promotion
Group-6	Medicines <ul style="list-style-type: none"> - Improve Access to Drug in Remote Areas

3 Workshop 2: Strategies to Achieve the Objectives

The workshop-2 was conducted on 22 August 2007 with almost same 24 participants from NOHA, oblast health facilities and some rayon central hospitals. Detailed program of the workshop-2 is presented in Table 5.

Table 5: Program of Workshop-2

Time	Item	In charge
14:00 – 13:05	1. Opening remark	NOHA
14:05 – 14:20	2. Review of the conclusion of the work shop 1	JST/NOHA
14:20 – 16:00	3. Group work	
	14:20 – 14:30 Guidance and forming small groups	JST
	14:30 – 16:00 Group Work	Participants
	16:00 – 17:00 General discussion	JST/ Participants
17:00 – 17:20	4. Conclusion	JST

Note: NOHA=Navoi Oblast Health Administration; JST=JICA Study Team

In the workshop-2, the participants discussed to propose detailed action plan considering the following points.

- To prioritize the activities suggested in the workshop-1 and its reason

- To breakdown the steps to achieve the goal and those schedule
- To maximum use of their existing resources (financial, human, hardware, etc.)
- To identify “who is responsible to initiate and implement” the particular activity
- To identify how they can evaluate the achievement of the activities

Finally, each group prepared seven proposed action plans as shown in Table 6 to 11. Because of the time constraint, some items require more detailed discussion to prepare the practical implementation program. However, they considered the above points, especially to maximize the existing resources. Also they were aware the importance of software. For example, they could utilize the existing hardware if health personnel use properly and maintenance system is enhanced. And even if they have a general hospital, they could not provide better services without improving the quality of health and medical services.

Table 6: Action Plan Proposed in Workshop-2 (1/6)

Group No. 1	Goal To establish the regional general hospital to satisfy the population requirements in health care services and providing services of better quality		
	Activity	Responsible	Time Frame
	1. To get approval of the main stakeholders on technical circumstances and architectural plan of the requirements	NOHA, Ministry of Finance, MOH, Navoi Oblast Government, Navoi Oblast telecommunication department, NGMK (Mining company municipal services), ObIPES (Oblast Power Station), OES (Oblast Heating Station)	First quarter of 2008
	2. To order the project design and identify cost sheet for the general hospital construction	Regional building planning agency, the nation agency UzTibLoiha (National Medical Project Agency)	First quarter of 2008
	3. To find funds for construction, hard and soft inventory	National and foreign investments	Third quarter of 2008
	4. To justify funds for the further finance and maintenance of the regional hospital	MOH, Ministry of finance, Regional finance department	First quarter of 2009
	5. Train medical providers such specialists as: CT specialist, Micro-surgeon, Cardio surgeon, Plastic surgeon (maxillofacial), TB surgeon and etc. 5.1. Re-train medical providers such specialists as: Neurosurgeon, Vascular surgeon, Endocrinologist, Oncology surgeon, Cardiologist, Gastroenterologist, Endoscope specialist, Pulmonologist	NOHA, MOH, Medical Advanced school	Second to Forth quarter of 2008
	6. To provide complete health care services to patients (planned and emergency)	The oblast general hospital	First quarter of 2009
Resources Construction – 5 billion sum, equipment – 7 billion sum, construction materials, human resources			
Evaluation <ol style="list-style-type: none"> 1. Decrease the rates of chronic diseases among population 2. Increasing the life expectancy of the people with chronic diseases 3. Increasing the average life expectancy of population 4. Improving the rehabilitation of the patients with chronic diseases 5. Decreasing death rates among elderly people 6. Improving the general health status of population 7. Improving planned treatment of patients 8. Improving of the providing emergency care services 9. Decreasing work load of emergency care center and increasing the quality of care 10. Provision of complete and quality care for patients 11. Survey of the patient satisfaction by provided care (questionnaires) 12. Improving the conditions for 13. To arrange meetings with people in communities 14. Evaluation reports can be done monthly, quarterly. 			
Other Remarks It is impossible to meet needs of patients and their satisfaction in the health care without creating the oblast general hospital. Oblast General Hospital staff can accept young required specialists and arrange some post graduate training courses.			

Table 7: Action Plan Proposed in Workshop-2 (2/6)

Group No. 2	Goal: To create the proper utilization system of medical equipment maintenance		
Activity	Responsible	Time Frame	
1. To create permanently working technical team under the order of NOHA (Including: the representative of NOHA, "Medservice" (Department of Equipment Acquisition), "Medtechnika" (Department of Equipment Maintenance in the oblast),	NOHA	September 2007	
2. To train the technical personnel on technical service and improve skills on equipment maintenance	"Medservice", "Medtechnika"	September 2007 to February 2008	
3. To train the medical personnel on skills of equipment correct maintenance	The chief doctor of the health care facility, "Medservice", "Medtechnika"	September 2007 to February 2008	
4. To create in each health care facility permanently acting commission on the defining the condition and the work load of the equipment	Chief doctor of Health Facilities	September 2007	
5. To make contracts with Equipment Acquisition and Maintenance Departments for regular maintenance (repairing) of the equipment and providing spare parts	Chief doctor of Health Facilities	September 2007	
Resources To use budget and sponsors funds, part of fee services resources.			
Evaluation <ul style="list-style-type: none"> - Analysis of work, work load of the medical equipment, the continuous use of medical equipment (without frequent break) - Long-term use of the equipment - Improving of the diagnostics and treatment 			
Other Remarks Group said " We have 3 problems and we have decided that we can't solve these problems without establishing the special system for equipment exploitation"			

Table 8: Action Plan Proposed in Workshop-2 (3/6)

Group No. 3(1)	Goal	
	To prevent infectious disease episodes among the population and hospital infections.	
Activity	Responsible	Time Frame
1. Establish working groups for monitoring of health facilities' current condition	RCHs, NOHA	6 months
2. Finance HF that need repair and have poor sanitary condition	RCHs, NOHA, Oblast Finance Department, Sanitary Epidemiology Station	1 year
3. Determine the expenses of activities, get approval of stakeholders.	RCHs, NOHA, Oblast Finance Department,	1 year
4. Evaluate the sewage system condition	RCHs, SES	
Resources Working group, NOHA statistics, reference documentation concerning vehicles, funds, specialists.		
Evaluation <ul style="list-style-type: none"> • % of infection diseases rate is decreasing, monthly, quarterly and annually evaluation. • Evaluate satisfaction of patients with health services, survey can be done in makhalla committees (community authority). • Evaluate improvement of working conditions of health providers 		
Other Remarks One of the prior and actual directions of NOHA is infectious and hospital diseases prevention		
Group No. 3(2)	Goal	
	Repair not operating transportation means. Purchase of new ones.	
Activity	Responsible	Time Frame
1. To assess the operational status of current transportations	RCHs, finance accountant, chief garage.	1-2 years
2. Purchasing and disseminating transportation means, to take into account the territory of the areas and the number of population.	NOHA,RCH, Oblast Finance Department	1-3 years
3. Sponsors and organs of finance will fund purchase of new transportation means and their spare parts.	NOHA,RCH, Oblast Finance Department	3 year
4. Issue the order on arranging steering committee, which will identify the operational status of current transportations in oblast.	RCH	1 quarter
5. Make request letter to MH according to the results of steering committee work on transportations needs.	RCH, leaders of steering committee	1 month
Resources steering committee, statistical data from engineering department of NOHA, reference documentation (concerning transportation means), finance, specialists		
Evaluation <ul style="list-style-type: none"> • Population's complains concerning visits at home will reduce. • Identify the satisfaction level of population with provided health care survey can be done in makhalla committees (community authority). • Evaluation of health care providers' work condition improvement 		
Other Remarks <ul style="list-style-type: none"> • Nowadays warranty period of transportations is spared; in addition many vehicles are broken. • To find the ways of maintenance of transportation means in not operational status and purchase new transportation means. 		

Table 9: Action Plan Proposed in Workshop-2 (4/6)

Group No. 4	Goal Improve quality of medical care services provided to community of Navoi oblast		
Activity	Responsible	Time Frame	
1. Ensuring with qualified human resources in health facilities:			
1.1. To encourage young people to have medical education based on grant, to make benefits for students from remote areas.	MOH, MOE, oblast government	2008-2015y	
1.2. To motivate young specialists to work in remote areas by financial incentives.	Ministry, MOH, MOE, Justice, Finance, oblast government.	2008-2010y	
1.3. To increase qualification of young specialists abroad.	MOH, NOHA, oblast government	2008-2010y	
1.4. Increasing qualification of oblast medical providers regularly: 1.4.1. Ensure internet connection 1.4.2. Ensure libraries with new literature	MOH, NOHA, oblast government, oblast health facilities	2008 Regularly	
2. Strengthening of diagnosis and treatment process:	MOH, NOHA, Finance, oblast government	2008	
2.1. Develop standards based on EBM to diagnose and treat the patients with chronic diseases	MOH	2008	
2.2. Provide Health facilities with modern diagnostic and treatment equipment	MOH, NOHA, Finance, oblast government		
2.3 Provide acute and emergency care departments with ambulance and reanimation vehicles taking into consideration the territory size and relief.	MOH, NOHA, Finance, oblast government	2008	
3. Strengthen the interaction of Health facilities between each other.	NOHA	2008	
Resources Sponsors, local governors, doctors and nurses associations, international organizations.			
Evaluation <ul style="list-style-type: none"> • The quality of medical care services provided to community of Navoi oblast will improve. • Oblast population will get seasonable care, emergency care, especially in remote areas. • Population's complains will reduce. 			
Other Remarks <ul style="list-style-type: none"> • This problem is prior, because if we improve medical services in Navoi, we will be able to provide proper health care and it will lead to the satisfaction of the population with provided health care. 			

Table 10: Action Plan Proposed in Workshop-2 (5/6)

Group No. 5	Goal: To improve preventive measures among the population of Navoi oblast	
Activity	Responsible	Time Frame
1. To upgrade patronage system 1.1 to develop real patronage load and financial motivation according to the results of work (in urban, rural and pilot facilities)	NOHA Branch of "Health" institute	Deadline: January 2008
2. To provide access to new information by self- education (to organize libraries, access to computers and Internet in CRH 2.1. To open training center equipped with computers for distance education in oblast specialized hospital. 2.2 Experience exchange among SVP by study tours.	NOHA Association of doctors and nurses, SVP, RCH, International organizations	Monthly according to the plan
3. To conduct disease preventive measures and healthy lifestyle promotion. 3.1 To inform the population about responsibility for their own health 3.1.1. to use mass media 3.1.2. distribute visual aids during outpatients services 3.1.3. during patronage 3.1.4. during dispensary	Primary health care facilities, makhalla (community authority) foundation, RCH, NOHA	Regularly
4. To develop extra income sources by efficient use of land, lease, it is necessary to make fee pay services legal for non residents, involve sponsors, collective farms, organizations-making agreements.	Primary health care facilities	Constantly
Resources leaders of makhalla (community structure).committee, Association of doctors and nurses, branch of "Health" institute, international organizations or sponsors, documents on patronage nurse activity, typical route list of patronage nurse, health providers involved in patronage activity, financial resources		
Evaluation according to the statistics, decrease of morbidity, mortality, disability and complains from the population, increase of health index (by survey, questionnaires); improvement of registration quality and health knowledge of the population, decrease of sick leaf rate F 16-2 (survey, questionnaires), improvement of equipment and health providers' knowledge, decrease of bed occupancy rate (statistics report).		
Other Remarks Prevention work in health care system is cost-effective comparing with treatment and diagnostics. Therefore primary health care facilities efforts directed to the improvement of prevention of both severe and chronic diseases compose an essential and actual part of health care in Navoi. All problems are important, but without proper system of preventive measures no other reforms are beneficial, as it is better to prevent diseases than cure them. Preventive measures are very important to reduce morbidity rate. In general oblast hospital, we can arrange post graduate training courses for health care providers from city and rayons. We can arrange theses courses in a room equipped with computers, connected to Internet. There will be opportunity to establish distance education with TIMPE and other medical associations.		

Table 11: Action Plan Proposed in Workshop-2 (6/6)

Group No. 6	Goal: To improve the drug supplies to the remote areas	
Activity	Responsible	Time Frame
1. To open small pharmacy or corner in each SVP and FAP for selling essential drugs	Health facilities' chief doctors, Dori Darmon (Main Pharmacy Department)	4-quarter 2007
2. In order to make medicines are more accessible to use involve agricultural firms funds (rural farms)	Health facilities' chief doctors, Oblast Government, Rural farms chiefs	4-quarter 2007
Resources Budget of SVPs and sponsors, medicine leasing by Main Pharmacy Department to SVPs		
Evaluation To conduct surveys among local communities.		
Other Remarks In our oblast (Uchkduk and Tomdi), we have very remote areas. It is a very complicated problem to build pharmacies there and find specialists to work there. But still our aim is to find the ways to provide populations with necessary medicines since this demand is very strong.		

4 Workshop 3: Basic Strategy

The workshop-3 was conducted on 4 September 2007 with 28 participants from MOH, Health institute, republican health facilities and NOHA. Detailed program of the workshop-3 is presented in Table 12.

Table 12: Program of Workshop-3

Time	Item	In charge
10:00 – 10:15	1. Opening remarks	MOH
10:15 – 10:45	2. Brief explanation about the study	JST/NOHA
10:45 – 11:15	3. Report on the outputs of the workshops in Navoi	
11:15 – 12:00	4. Guidance and forming small groups	
12:00 – 13:00	Lunch break	
13:00 – 15:00	5. Group works	Participants
	13:00 – 14:00 Group discussion	
	14:00 – 14:20 Tea Break	
	14:20 – 15:30 Presentation on Group discussion (2)	
15:30 – 15:45	6. Closing remarks	JICA

Note: MOH=Ministry of Health; NOHA=Navoi Oblast Health Administration; JST=JICA Study Team

The Study Team and NOHA jointly presented about the outline of this study and outputs of the workshops in Navoi. Generally, the participants agreed with the proposals from Navoi. Regarding problems in remote areas, MOH expressed that SVPs are allowed to operate by self-supporting accounting system to response needs in remote areas. However, NOHA explained that SVPs in remote areas in Navoi have not been able to financially independent because of various factors, especially economic difficulty.

After the guidance the participants formed three small groups to discuss the following topics raised by the Study Team (Figure 4).

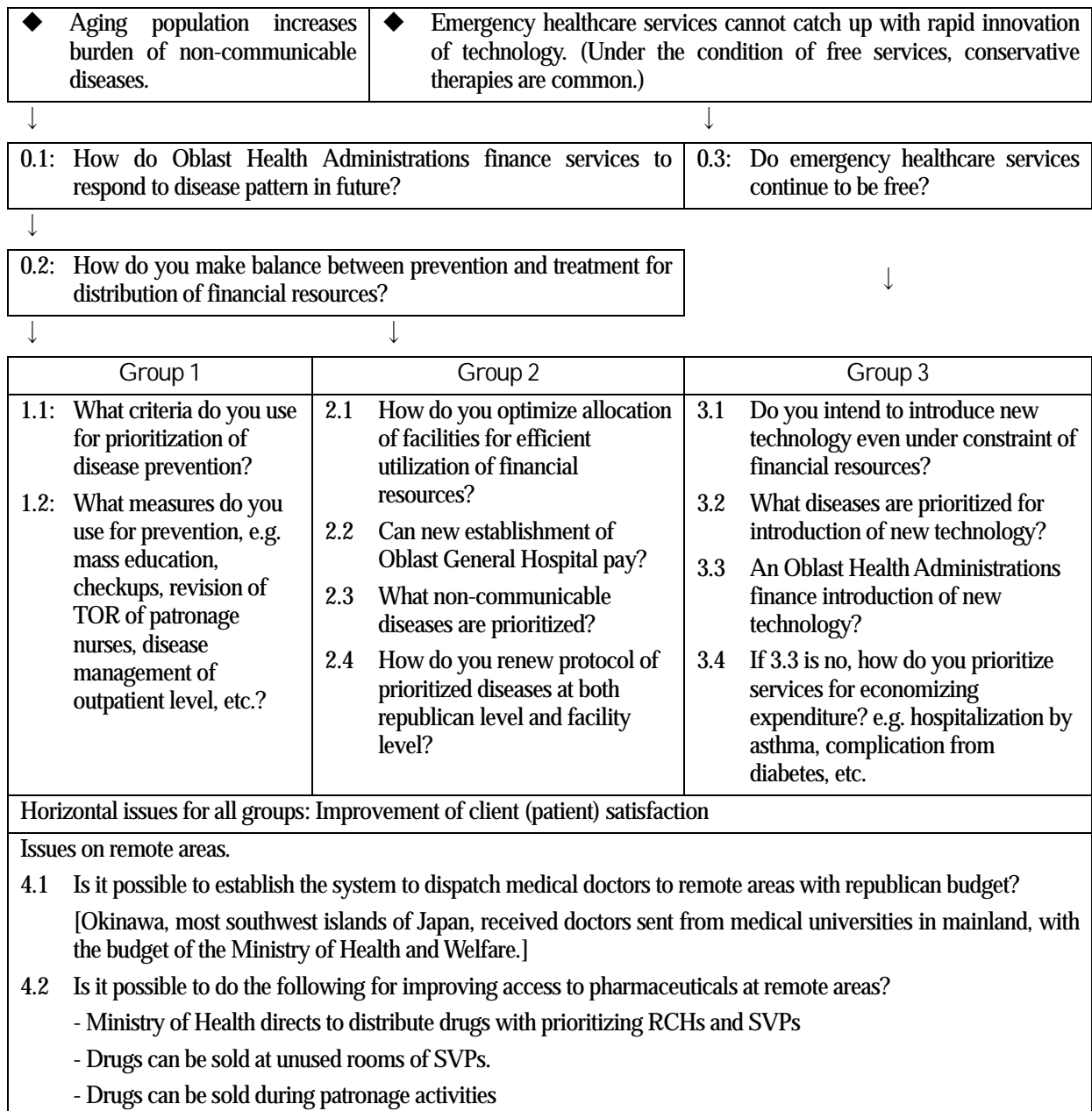


Figure 4: Topics of Group Discussion in Workshop-3

Participants were basically supportive and did not express objections or critical negative comments against the proposals from Navoi shown in Table 6 to 11. And the group discussions were taken in line with the concepts of those proposals.

As results of the group works, the following conclusions were presented by the participants as shown in Table 13 to 15.

Table 13: Conclusion of Group Work in Workshop-3 (1/3)

Group 1: Prevention
<p>I. Criteria to set priority in prevention activity</p> <ol style="list-style-type: none"> 1. Morbidity (infectious and not infectious) 2. Prevalence 3. Mortality 4. Vulnerability 5. Disability caused by the disease
<p>II. Prioritized approach of prevention activity</p> <ol style="list-style-type: none"> 1. Early detection by health check-up 2. Provide sufficient out-patient treatment 3. Improving of quality of patronage activity <ol style="list-style-type: none"> a. To develop the workload of health care providers, taking into account the area of service, result and stimulation b. To enable the population to choose primary establishment 4. Development among the population of comprehension of a healthy life style
<p>Remarks:</p> <p>With the purpose of prevention and treatments of chronic diseases to create a regional general hospital including rehabilitation centers.</p>

Table 14: Conclusion of Group Work in Workshop-3 (2/3)

Group 2: Health Care Services at Oblast Level (Oblast General Hospital)
<p>Non-communicable diseases to be prioritized</p> <ol style="list-style-type: none"> 1. Cardiovascular diseases (including heart attacks and insults) 2. Oncology 3. Endocrine diseases (a diabetes, diseases of a thyroid gland) 4. Gastrointestinal diseases 5. Renal diseases (including urolithiasis and chronic renal failure) 6. Chronic non-specific diseases of lungs
<p>Ways to combat diseases:</p> <ol style="list-style-type: none"> 1. Preventive measures (Promotion of a healthy life style, elimination of the causes – ecological, social factors, access to clean potable water, good sewage system, a balanced diet) 2. Prophylactic medical examination (routine inspections, early detection) 3. Early diagnostics of diseases 4. Qualified specialized treatment provided in timely manner 5. Rehabilitation, the active follow-up and frequent health check-ups
<p>Navoi regional general hospital consisting of the following branches:</p> <ol style="list-style-type: none"> 1) Therapy 2) Neurology 3) Ophthalmology 4) Nephrology 5) Urology 6) Scheduled surgery 7) Endocrinology (to liquidate a dispensary) 8) Cardiology 9) Rehabilitation branch 10) Advisory (consultative) polyclinic

Group 2: Health Care Services at Oblast Level (Oblast General Hospital)
<p>Effects to be expected :</p> <ol style="list-style-type: none"> 1) Rendering of the qualified specialized medical care 2) Improvement of continuity between health care facilities 3) Improvement of the advisory - diagnostic help to the population 4) Satisfaction of need of the population in the specialized inpatient care 5) Rendering of organizational - methodical help to other health care facilities (including a professional training) 6) Rational and an effective utilization of the limited budgetary funds
<p>Quality of treatment:</p> <p>Standards of diagnostics and treatment (SDT) of diseases have been developed on 23 directions (out of more than 800 diseases).</p> <p>↓</p> <ol style="list-style-type: none"> 1. Introduction of SDT <ol style="list-style-type: none"> 1) Training of the staff (on a vertical scheme) and certification 2) Maintenance with standards of all health care facilities 3) Maintenance of the control over introduction SDT (monitoring) 4) Periodic revision SDT in view of development of a science and technology 2. To develop clinical protocols with considering of DM
<p>Maintenance with drug supplies according to essential list of medicines (budget)</p> <ol style="list-style-type: none"> 1) Periodic revision of the essential list 2) Increase in financing for drug supplies 3) Rational use of budgetary funds 4) Improvement of quality of treatment
<p>Standards of medical equipment provision of health care facilities of all levels</p> <ol style="list-style-type: none"> 1) Development of standards of provision of medical equipment (Standard of medical equipment) 2) Equipment of health care facilities according to Standard 3) Correct operation (exploitation) and service 4) Effective and rational use of the medical equipment

Table 15: Conclusion of Group Work in Workshop-3 (3/3)

Group 3: Emergency Care
<p>Improvement of the emergency care services</p> <ol style="list-style-type: none"> 1. For alignment of a degree of quality of the care in the regional branches and in Tashkent there is a loan program of IBD (Islamic Development Bank) on which 13 branches will be equipped with the necessary equipment 2. Improvement of diagnostics at a level of a primary health care level and first aid will lead to the reduction of load on emergency care. The state document on the further reforming public health services under the approval process. It includes, in particular, development of diagnostic service at an outpatient level. 3. Rayon branches of the emergency help will be equipped due to the credit of the Kuwaiti Bank with the necessary medical equipment (according to standards) 4. The share of the state budget in paid medical establishments will be reduced, the released funds will be directed to the primary health care and the emergency care 5. Introduction of medical insurance is planned 6. Standards of treatment should be advanced. 7. Reduction of length of stay in a hospital 8. Observation of the stages of treatment

Group 3: Emergency Care

- | |
|--|
| <ol style="list-style-type: none">9. In Navoi it is impossible to observe areas all stages of treatment because there is no general hospital10. Improvement of professional skill of the staff, including nurses11. Work with the population (mass-media, Institute of health)12. Attraction of young specialists to work in Navoi region with introduction of material stimulus, apartments (the responsibility of Navoi Khokimiyat), payment of training in medical institute with required return to Navoi region, special clinical internship |
|--|

Before starting group works, the following solutions were suggested by participants: Because SVPs can be operated on self-paying basis; they could introduce additional income earning system or take other measurements to solve their difficulty which are suitable to their socio-economic conditions.

The workshop was concluded to encourage health care system reform in Navoi.

Attachment 1: List of Participants in Workshops in Navoi

Name	Title
Workshop-0	
N. Shodiev	First Deputy of Head of NOHA
I.R.Nodirov	Head of Information Statistical Department/ Deputy Director, Navoi Oblast Blanch, Health Institute
M.T.Murodova	Chief Nurse of NOHA
H. Nazarov	Head of Medical Prophylactic Department of ORHA
T. Kahhorov	Head of Technical Control Department of NOHA
B. Teshaev	Chief Pathologist of NOHA
H. Kaymokov	Head of Department, Navoi Region Sanitary Epidemiological Control Center
B. Yangiev	Director of Emergency Center
G.A.Aslonov	Chief Doctor of Oblast Maternity House
B.G.Gaffarov	Chief Doctor of Navbakhor RCH
Workshop-1	
N. Shodiev	First Deputy of Head of NOHA
L.U.Namozova	Deputy of NOHA's Chief on MCH
I.R.Nodirov	Head of Information Statistical Department/ Deputy Director, Navoi Oblast Blanch, Health Institute
S.SH.Shamsiyev	Chief therapeutic of NOHA
R.R.Kalimbetov	Chief pediatrician of NOHA
M.T.Murodova	Chief nurse of NOHA
H. Nazarov	Head of Medical Prophylactic Department of NOHA
T. Kahhorov	Head of Technical Control Department of NOHA
H. Kaymokov	Head of Department, Navoi Region Sanitary Epidemiological Control Center
H. Quvandikov	Deputy of Chief Doctor of TB dispensary
O. Azimov	Deputy of Director of Emergency Center
G.A.Aslonov	Chief Doctor of Oblast Maternity House
N.J.Sidikov	Chief Doctor of Oblast Child Hospital
B.A.Imomkulov	Chief Doctor of Navoi city Central Polyclinic
K.E.Sharipova	Chief Doctor of HIV/AIDS center
B. Niyazov	Deputy of Chief Doctor of Venereal Diseases Dispensary
J. Berdiev	Deputy of Chief Doctor of Infection Diseases Hospital
H. Temirov	Deputy of Chief Doctor of Navbakhor RCH
I.H.Himmatova	Deputy of Karmana RCH's Chief Doctor
H.K.Tuksanov	Chief Doctor of Kanimekh RCH
B.B.Saidov	Deputy of Navbakhor RCH's Chief Doctor
F.R.Usmonov	Chief Doctor of Hatirchi RCH
E.Arapbayev	Chief Doctor of Tomdi RCH .

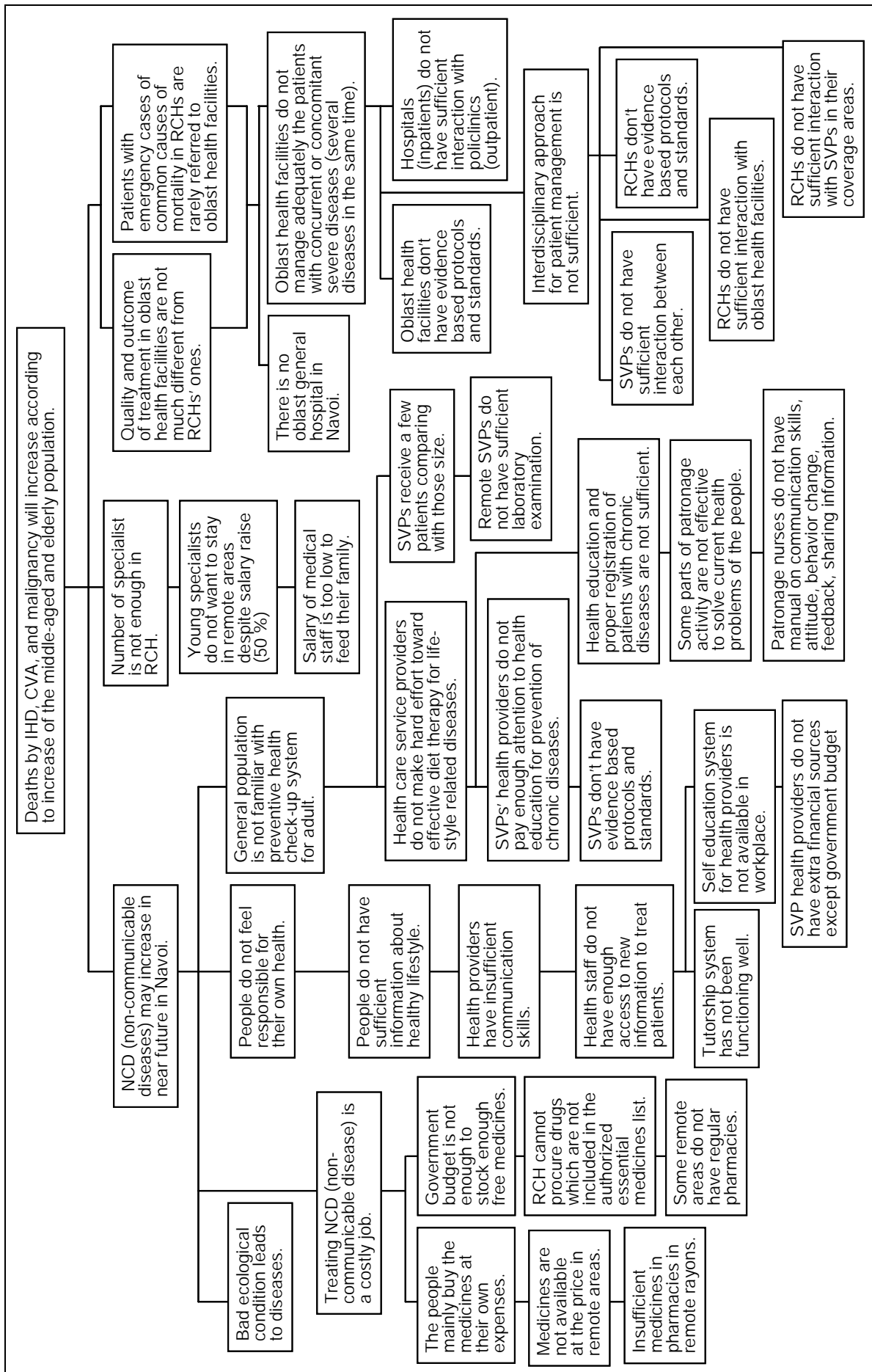
Name	Title
Yu. Yu. Kosimov	Director of "Health 2" Project
Workshop-2	
A.M. Nosirov	Head of NOHA
N. Shodiev	First Deputy of Head of NOHA
L.U. Namozova	Deputy of NOHA's Chief on MCH
I.R. Nodirov	Head of Information Statistical Department/ Deputy Director, Navoi Oblast Blanch, Health Institute
S.SH. Shamsiyev	Chief therapeutic of NOHA
R.R. Kalimbetov	Chief pediatrician of NOHA
M.T. Murodova	Chief nurse of NOHA
H. Nazarov	Head of Medical Prophylactic Department of NOHA
T. Kahhorov	Head of Technical Control Department of NOHA
H. Quvandikov	Deputy of Chief Doctor of TB dispensary
B.A. Yangiyev	Director of Emergency Center
G.A. Aslonov	Chief Doctor of Oblast Maternity House
N.J. Sidikov	Chief Doctor of Oblast Child Hospital
B.A. Imomkulov	Chief Doctor of Navoi city Central Polyclinic
B. Niyazov	Deputy of Chief Doctor of Venereal Diseases Dispensary
T.H. Mukimov	Chief Doctor of Infection Diseases Hospital
I.H. Himmatova	Deputy of Karmana RCH's Chief Doctor
H.K. Tuksanov	Chief Doctor of Kanimekh RCH
B.B. Saidov	Deputy of Navbakhor RCH's Chief Doctor
F.R. Usmonov	Chief Doctor of Hatirchi RCH
E. Arapbayev	Chief Doctor of Tomdi RCH .
E.U. Ahmedov	Chief Doctor of Uchkuduk RCH
Yu. Yu. Kosimov	Director of "Health 2" Project
Sh. Shoumarov	Department of Reformation and Fee-paying Services of MOH

Attachment 2: List of Participants in Workshop in Tashkent

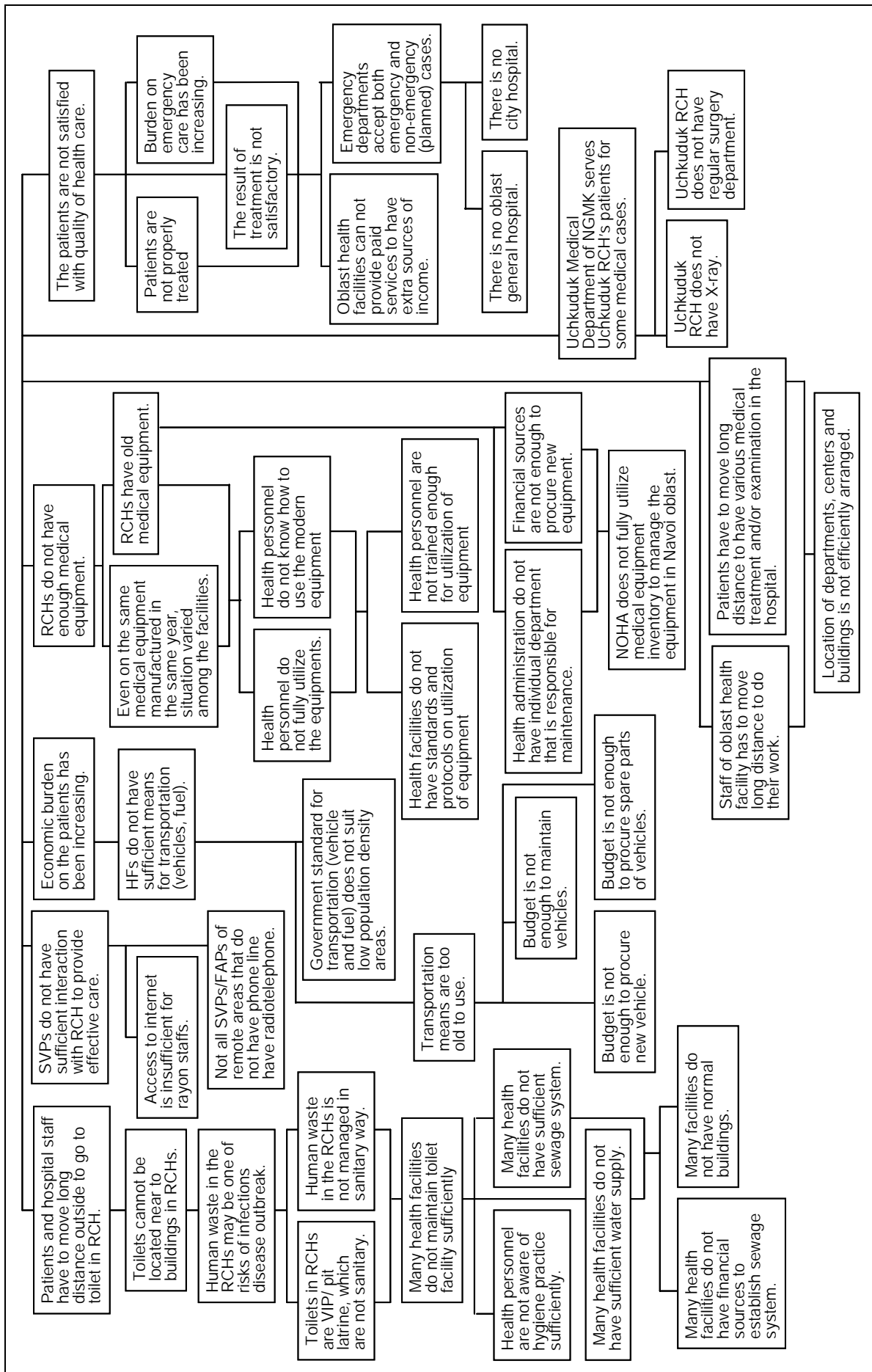
Name	Title
Khadjibaev A. M.	First Deputy Minister of Health
Sharapov N. U.	Deputy Minister of Health of Uzbekistan
Khoshimov Sh.	Head of Treatment Department, Ministry of Health of Uzbekistan
Khoshimov B. A.	Head of Main Economic Department, MOH
Atahanov Sh. E.	Head of Department of Science and Educational Institutions, MOH
Azamov A.	Head of Department of Reforming, Privatization, Paid Services, MOH
Siddikov A.E.	Head of International Department, MOH
Saidaliev S. S.	Head of Department of State Epidemiology Surveillance, MOH
Kalanov	Head of Main Department of Development of Material and Technical Base, MOH
Mutalova Z. J.	Director of the Health Institute
Alimova V.S.	Deputy of Head of Treatment Department, MOH
Arifjanova D.	Specialist of MCH Department, Ministry of Health of Uzbekistan
Saidov A.S.	Leading specialist, department of reforming, privatization, paid services MOH
Sabirov D.	President of Tashkent State Medical retraining institute
Alyavi A	Director TTRITI
Malikov Yu. R.	Director of the Republican Emergency Care Center
Daminov B. T.	Chief nephrologist of the MOH
Abdullaev S.	Chief therapeutist of the MOH
Sultanov S.	Chief OB/GYN of the MOH
Akbarov M.	Chief Surgeon of the MOH
Govorukhina I. Yu	Deputy Director on Nursing, the Republican Emergency Care Center
Nosirov A.M.	The Head of NOHA
Nodirov I. R.	Head of Information Statistical Department/ Deputy Director, Navoi Oblast Blanch, Health Institute
Gafurova D.N.	Deputy director of the Institute of health
Abdullaeva M.N.	Doctor –methodologist, Institute of Health
Alimardanov S. K.	Chief of medical statistics DPT, Institute of Health
Husanov Sh. Ch.	Chief of IT DPT, Institute of Health

Human Resources	Medical Services	Medicine	System		Communication and Transportation	Equipment	Facility	
Some parts of patronage activity are not effective to solve current health problems of the people.	SVPs' health providers do not pay enough attention to health education for prevention of chronic diseases.	The people mainly buy the medicines at their own expenses.	Community do not have enough information about healthy life-style	Some remote areas do not have sufficient pharmacies	Access to internet is costly for rayon staffs.	Even on the same medical equipment manufactured in the same year, situation varied among the facilities.	Some RCHs do not have sufficient water supply to maintain toilet sanitary.	Toilets in RCHs cannot be located near the hospital building.
Health providers take overbearing attitude to patients.	SVPs don't have evidence based protocols and standards.	Insufficient medicines in pharmacies in remote rayons.	"Tashkent delegation" suddenly stops regular important activities in Navoi	Medical Department of Zarafshan NGMK receive only emergency cases' patients from remote areas	Access to internet is insufficient for rayon staffs.	Uchkuduk RCH does not have X-ray.	Uchkuduk RCH does not have ICU department.	Location of departments, centers and buildings is not optimal
Health care service providers do not make hard effort toward effective diet therapy for life-style related diseases.	Deaths by IHD, CVA, and malignancy will increase according to increase of the middle-aged and elderly population.	Medicines are not available at the price in remote areas.	Oblast health facilities can not provide fee services and do not have additional income	The patients are obligated to pay for medicines and its transportation.	Not all SVPs/FAPs of remote areas that do not have phone line have radiotelephone.	RCHs have old medical equipment.	Human waste in the RCHs may be one of risks of infections disease outbreak.	Waiting room in health facility does not have sufficient sitting facility and comfortable space.
Health providers have insufficient communication skills.	Emergency hospitals may accept both emergency and non-emergency (planned) cases.	Treating NCD (non-communicable disease) is a costly job.	Some remote areas do not have pharmacies	PHC health providers do not have extra financial sources except government budget	Health facilities do not have enough tools for communication. (telephone, radio, etc.)	RCHs do not have enough medical equipment.	Patients have to move long distance to have various medical treatment and/or examination in the hospital.	
RCHs do not have individual maintenance department.	Not everywhere health education for reduction of smoking is taken care of.	RCH cannot procure drugs outside the authorized essential medicines list.	SVPs receive a few patients comparing with those size.	Even the patients with emergency cases should pay for health services in Uchkuduk NGMK Medical Department			Some facilities are left broken in some health facilities.	
No interdisciplinary approach to patient management.	RCHs don't have evidence based protocols and standards.	RCH does not open "paid department" smoothly.	Hospitals (inpatients) do not have sufficient interaction with policlinics (outpatient).	Health facilities do not have systematic and regular maintenance.			Many health facilities do not maintain toilet facility sufficiently.	
Remote SVPs do not have sufficient laboratory examination	People do not feel responsible for their own health	Lack of governmental budget for stoking of free medicines.	People do not have sufficient information on hygiene	Salary of medical staff is too low to feed their family.			Toilets in RCHs are VIP/ pit latrine, which are not sanitary	
Health personnel do not aware of hygiene environment such as toilet sufficiently.	General population is not familiar with preventive health check-up system for adult.		SVPs do not have sufficient interaction between each other.				Staff of oblast health facility has to move long distance to do their work.	
No system of self studies for health providers in workplace.	Patronage nurses do not have universal distribution of manual on communication skills, attitude, behavior change, feedback, sharing information		Administrative interaction is insufficient between MOH and NOHA				Uchkuduk RCH does not have surgery department.	
Lack of health providers in RCH	Health staffs do not have enough access to new knowledge to treat patients.		Health facilities do not have individual maintenance department.				Protection facilities are not enough for X-ray room, especially to the windows.	
Tutor system is not functioning well.	Patients with emergency cases of common causes of mortality in RCHs are rarely referred to oblast health facilities.		Bad ecological condition leads to diseases.				Some health facilities (pediatric hospital and cancer dispensary) do not have enough floor height to maintain proper function.	
Surgeons not regularly stationed in Tomdi RCH.	Oblast health facilities do not manage adequately the patients with concurrent or concomitant severe diseases (several diseases in the same time).		RCHs do not have sufficient interaction with SVPs in their coverage areas.				Many health facilities do not have sufficient sewage system.	
	Oblast health facilities don't have evidence based protocols and standards.		No adapted model of city patronage system				Many health facilities do not have sufficient water supply.	
	Treatments and outcomes quality of oblast health facilities are not much different from RCHs' ones.		RCHs do not have sufficient interaction with oblast health facilities.				Uchkuduk Medical Department of NGMK serves Uchkuduk RCH's patients for some medical cases.	
	NCD (non-communicable diseases) may increase in near future in Navoi.		Health administration do not have individual department that is responsible for maintenance.				Human waste in the RCHs is not managed in sanitary way.	
	The patronage activities in some areas are one-way and not interactive.		NOHA does not fully utilize medical equipment inventory to manage the equipment in Navoi oblast.				Patient and hospital staff have to walk long distance outside to use toilet in RCH.	

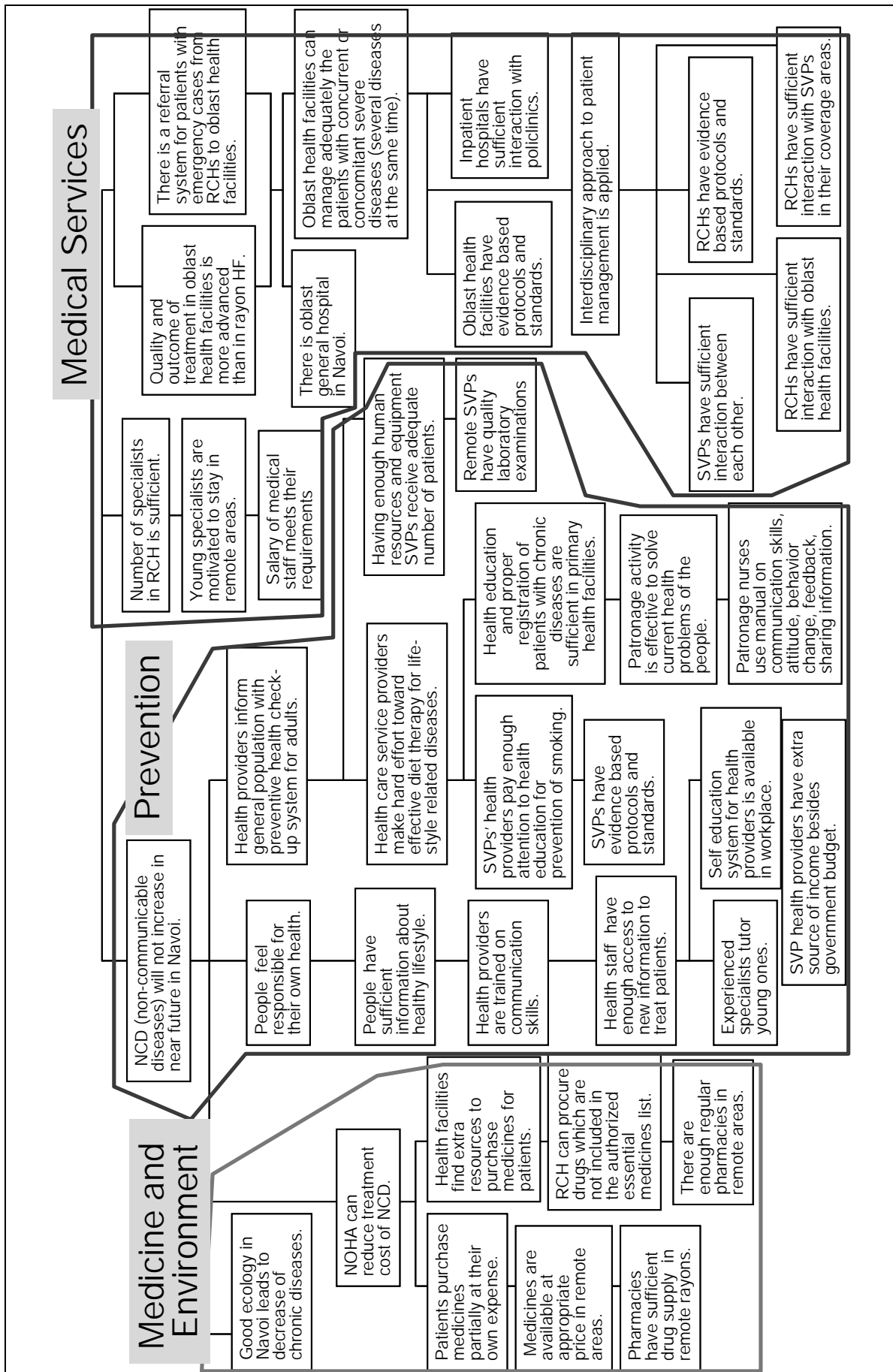
Attachment 3: Categorized Problem Cards



Attachment 4-1: Problem Tree (1)



Attachment 4-2: Problem Tree (2)



Attachment 5-1: Objective Tree (1)

15. Outline of Seminar on Draft Final Report

15. Outline of Seminar on Draft Final Report

The pre-seminar and the seminar on the draft final report were held as the following schedule.

Pre-seminar

Date: 11:00 – 13:00, Saturday, 19 January 2008

Venue: Conference Room of Ministry of Health

Agenda:

- Brief presentation on “Reinstate MOH budget as % of GDP”
- Brief presentation on “Health Problems Affecting Multiple Organs”
- Explanation on the draft final report and the seminar
- Discussion

Participants:

Name	Title
Ikramov Adham Ilhamovich	First Deputy Minister of Health
Kamilov Asamidin Iskhakovich	Deputy Minister of Health on MCH
Mutalova Zulhumor Jalolovna	Director of Health Institute
Ibragimova M.L.	Policy Center for medicines/materials
Atahanov Shuhrat Ergashevich	Head of Department of science and Educational Institutions
Baymuhamedov M.	Chief of information center, Tashkent Advanced school of doctors
Siddikov Abdunumon Ergashevich	Head of International Relations Department
Muminov B.M.	Head of Treatment Department
Kalanov N.B.	Head of Department of Reforming, Privatization, Paid Services
Fayzullayev Yo.	Chief of Economic and Finance Department
Saidaliev S.L.	Chief of Sanitary Epidemiological Control Department
Yadgarova K.T.	Head of MCH Department
Islamova N.A.	Main specialist of MCH Department
Chiharu Abe	JICA Study Team
Akihiro Yomo	JICA Study Team
Keiko Nagai	JICA Study Team
Naoki Take	JICA Study Team
Naoki Mimuro	JICA Study Team
Azam Kholmanov	Assistant for JICA Study Team
Nigora Muratova	Assistant for JICA Study Team

Seminar

Date: 10:00 – 16:00, Thursday, January 24, 2008

Venue: Conference room "Silk Road A" in Dedeman Silk Road Tashkent

Program:

9:30 – 9:55	Registration
9:55 – 10:00	Introduction
10:00 – 10:15	Opening Remarks
10:15 – 11:15	Session 1: Outline of the Study
11:15 – 11:45	~ Coffee Break ~
11:45 – 12:30	Session 2: Reinstate MOH budget as % of GDP
12:30 – 13:30	~ Lunch Break ~
13:30 – 14:00	Session 3: Spirits of Good Service and Health Care --- Topics in Japan
14:00 – 15:00	Session 4: Health Problems Affecting Multiple Organs
15:00 – 15:10	~ Coffee Break ~
15:10 – 15:25	Comments by Representative of Participants
15:25 – 15:40	Conclusion
15:40 – 16:00	Closing Remarks

Participants:

Name	Title
Ministry of Health	
Mutalova Zulhumor Jalalovna	Director of the Health Institute
Khayrullaev A. Ulugbek	Chief of Division, External Economic Activities Department
Islamova N. A.	Main specialist of MCH
Nematova Z.H.	Chief doctor of family polyclinic #53. Tashkent
Aitbaeva A.S	Environment sanitation specialist
Abdunazarova M.G.	Chief doctor of family polyclinic #1.
Rustamov M.A.	SECC (Sanitary Epidemiology Control Center) of Hamza rayon, Tashkent city. Head of Department
Salimova G.D.	SECC of Yunusabad rayon, Tashkent city. Immunologist.
Nurmuhamedova G.A.	SECC of MirzoUlugbek rayon, Tashkent city. Epidemiologist.
Ergashev T.E.	Chief doctor of family polyclinic #33.
Gulyamova N.C.	Chief doctor of family polyclinic #19.
Rasulova C.M.	Chief doctor of family polyclinic #30, Uchtepa rayon, Tashkent city.
Kasimova G.A.	Chief doctor of family polyclinic #31.
Sadriddinova G.R.	Chief doctor of family polyclinic #22, Shyhantaur rayon, Tashkent city.
Salibaeva N.M.	"Tashselmash" company-owned hospital, deputy chief doctor.

Name	Title
Ibragimova M.N.	Chief doctor of family polyclinic #50, Sergeli rayon, Tashkent city.
Kabildjanova Z.Sh.	SECC of Shayhantaur rayon, Tashkent city. Head of department.
Azizov N.M.	Chief doctor of family polyclinic #34, Sabir Rakhimov rayon, Tashkent city.
Hasanova H.M.	SECC of Uchtepa rayon, Tashkent city. Epidemiologist.
Ismatova D.A.	SECC of Mirabad rayon, Tashkent city. Epidemiologist.
Kabilova Sh.R.	Chief doctor of family polyclinic #2, Mirabad rayon, Tashkent city.
Kasimov Sh.C.	SECC of Sabir Rahimov rayon, Tashkent city. Doctor.
Abdurahmanov A.D.	Obstetrics and Gynecology SRI (Scientific research Institute)
Yugay A.V.	SECC of Sergeli rayon, Tashkent city
Halimova G.M.	Pediatrics SRI
Karimov Tulkun	IKS - Islohot consult service, manager
Sherova O.G.	Republican pediatrics poliomyelitis hospital
Yuldasheva N.S.	Republican pediatrics poliomyelitis hospital
Rahmatillaeva M.N.	Chief doctor of family polyclinic #35,
Kurbnov D.D.	Obstetrics and Gynecology SRI. Director.
Ahmedova I.M.	Pediatrics SRI
Gorshkov S.V.	Obstetrics and Gynecology SRI.
Yakubov R.R.	Obstetrics and Gynecology SRI.
Shakirova K.S.	Polyclinic #26
Shamsiev F.M.	Chief pulmonologist of Pediatrics SRI
Djatdaev I.I.	Obstetrics and Gynecology SRI.
Tuhtaeva G.A.	Deputy chief doctor of family polyclinic #49
Kambarova M.H.	"Health" Institute
Abdullaeva M.N.	"Health" Institute
Yusupbaev R.B.	Obstetrics and Gynecology SRI.
Mirvarisova Lobar	Tashkent Institute of Advanced Medical Education
Lee O.P.	Sarkor SVS
Miratov M.	Sarkor SVS
Durmanov B.D.	Tashkent Institute of Advanced Medical Education
Navoi Oblast Health Administration	
Nosirov Abdurahmon Mansurovich	Head of NOHA
Nodirov Isomiddin Ramazonovich	Head of Information Statistical Department/Deputy Director of Health Institute, Navoi Oblast Branch
Kaymokov Hayitboy Kulbaevich	Head of Department, Navoi Oblast Sanitary Epidemiological Control Center
USAID	

Name	Title
James Bonner	Country Director
Benjamin Mills (Nilufar Rakhmanova)	Health Advisor
WHO	
Michel Tailhades	Representative in Uzbekistan
Mavzhuda Babamuradova	National Professional Officer
UNFPA	
Khaled Philby (Fazilova F.)	Representative
World Bank	
Flora Salikhova	Human Development Operations Officer
Project Hope	
Abdunabi Kuchimov	Project Director
Embassy of Japan	
Mr.Takayuki KOIKE	Minister-Counselor
Toyama Mistuhiro	First Secretary
JICA Uzbekistan Office	
Nishimiya Noriaki	Resident Representative
Sonoyama Yuka	Assistant Resident Representative
Kusama Yuko	Assistant Resident Representative
Takemura Kazuko	Health Administrator
Yajima Kazue	Chief Advisor for Nursing Education Improvement Project
Iizuka Masaru	Project Coordinator for Nursing Education Improvement Project
Yamamoto Tetsuko	Japan Overseas Cooperation Volunteer (JOCV)
Sato Manami	JOCV
Nagae Akiko	JOCV
Azuma Asako	JOCV
Kawano Asuka	JOCV (TSPU)
Mass media	
Talipov N.	"Health Care in Uzbekistan"
Otakulv H.	Radio "Oriyat-Dono"
Kasimiv D.	Nespaper "Hamkor"
Yakubov A.	Website "UzReport.com"
Biryukov Igor	Radio "Poytaht"
Abdullaev A.	TV channel NTT
Begmtov B.	TV channel NTT
Serikov K.	Nespaper "Business partner"
Yorkulov T.	"Uzbek radio"
JICA Study Team	
Abe Chiharu	Team Leader
Akihiro Yomo	Medical Science
Keiko Nagai	Public Health
Take Naoki	Hospital Management

Name	Title
Mimuro Naoki	Hospital Management
Kholomanov Azam	Assistant
Muratova Nigora	Assistant
Ganzya Anastasiya	Interpreter/ Seminar staff
Yuldasheva Umida	Interpreter/ Seminar staff

Presentations are shown in the attachments.

Outline of questions and answers, and comments from participants are as follows.

<Questions and answers>

Q1. According to the presentation for session 2, the selected option requires the highest costs. Why did you select it and do you think it is feasible? At the same time, recurrent cost for the selected option seems to be large amount. Do you think it can be sustainable?

Human resources is also important to implement the recommended program and maintain the quality of services. However, in Navoi, good human resources tend to drain to NGMK hospitals. How do you think ensure quality and quantity of human resources for public sector?

In Navoi, NGMK hospitals seem to provide medical services for certain amount of population with good quality. Do you think the new oblast medical center can maintain enough number of patients?

A1. The JICA Study Team and stakeholders carefully discussed on feasibility and sustainability of each option according to data and information presented in session 2. However, after the Presidential Decree was issued in September 2007, the option adjusted in accordance with the new policy. However, we still take into account feasibility and sustainability of the recommended program and suggest improving efficiency and effectiveness of the health care service system.

Actually, equipments in NGMK hospitals are getting old and some are not functioning well. Regarding human resources, NOHA provides opportunities for training and education for NGMK hospitals. However, quality of services of NGMK hospital in remote area (Zarafshan) is better than the oblast health facilities and people generally seem to rely on it.

- Q2. Does MOH or JICA have any future plan to conduct similar study in other regions. It is important to formulate health development program considering characteristics of each area.
- A2. It usually requires long time and procedure to apply this kind of study. Therefore, there are not concrete plan to conduct similar study in other regions.

<Comments from the participants>

Mrs. Mutalova Z.J., Director of "Health" Institute

Good afternoon, dear participants. On the behalf of Uzbek side I would like to say that we are very grateful for JICA study team for conducting this survey. This survey dealt not only with health care facilities but also with the opinion of people about health care services. Care seeking behaviour survey was conducted for a month in households of Navoi Region. The researchers used questionnaires to collect data. I can say that the results of this survey proved to be very significant and we use these results as manuals in our work now. And these results I can assure will be very helpful in our future work of reformation of health care services. Presentation today covered all spheres of health care and I am glad that matters of prevention were also pointed out. We will beneficially use your recommendations concerning disease prevention and health promotion. I would like to express my gratitude again and thanks for your attention.

Mr. Atahanov Sh. E., Head of department of science and educational institution of MOH.

Good afternoon, dear participants of our seminar. Today all of us became introduced with very interesting presentations. You know that last year we finished the implementation of Education system improvement Program. Beginning from this year much attention is paid on health care system improvement which can be proved by Decrees of the President on health care system improvement. Until 2012 20mln soums will be allocated for health care. We have great plans on improving health care facilities, provide them with modern equipments and qualified specialists. Your survey will be significant guideline in our reforms. We greatly appreciate the scale of work done by you and look forward to the new cooperation. Thank you very much.

Mr.Siddikov A.E., Head of international affairs department of MOH

As all of us, I would like to thank our Japanese counterparts for the cooperation and good work. Today we all see the results of hard work done in cooperation, which became important step in reformation of health care system. We all have to consider the results of survey

presented today. The implementation of developed plan is responsibility of all of us. Results, recommendations and conclusions introduced today are very significant and they can be the basis of our future work on health care system improvement. Thanks a lot for all participants for finding time to come here.

Mr. Nosirov A.M., Director of Navoi Oblast Health Administration

Today you see the results of work done in cooperation with JICA study team. I would like to thank all participants for coming. While survey JICA study team had five field missions and each time we were very glad to meet them and work with them. I hope that our cooperation will continue and the developed plan will also be implemented in cooperation and we will have some exchange activities. Thank you for attention.

Dr. Michael Tailhades, WHO, Representative in Uzbekistan

Today a lot of things were said about the survey. We all became informed with the results of survey. We can observe from these results that strong analysis of health care system in Navoi was made. Such crucial issue as NCD was touched in presentation today. Responsibilities of all health care levels in treating NCD and the role of referral hospitals were fully identified. And I am very glad that the significance of IMCI was pointed in correspondence with WHO thinking. I hope that such surveys will continue in other regions of country too.

THE STUDY ON THE REFORM OF HEALTH CARE SERVICES IN NAVOI REGION

- Outline of Study -

Navoi Oblast Health Administration
JICA Study Team

The Study on the Reform of Health Care Services in Navoi Region has begun on the base of S/W signed by Nazirov F.G., Minister of Health and Kae Yanagisawa, Leader of JICA Preliminary Study Team on June 21, 2008.

Introduction

- In 2005, a preparatory study was conducted. The study objectives and scopes of work were agreed by MOH and JICA,
- In 2007, based on the agreement, a JICA study team was sent to Uzbekistan, and
- On January 25, 2007, NOHA and the study team met each other to work on the study.

JICA study team

<i>Team Leader</i>	ABE, Chiharu
<i>Medical Science</i>	YOMO, Akihiro
<i>Public Health</i>	NAGAI, Keiko
<i>Health Science</i>	SHINKAWA, Kanako
<i>Hospital Management</i>	TAKE, Naoki
	MIMURO, Naoki
<i>Equipment planner</i>	NAITO, Sakie
<i>Facility planner</i>	HORIGOME, Yasuo
<i>Coordinator</i>	SUWA, Hiromi
	YOSHIMURA, Kenji

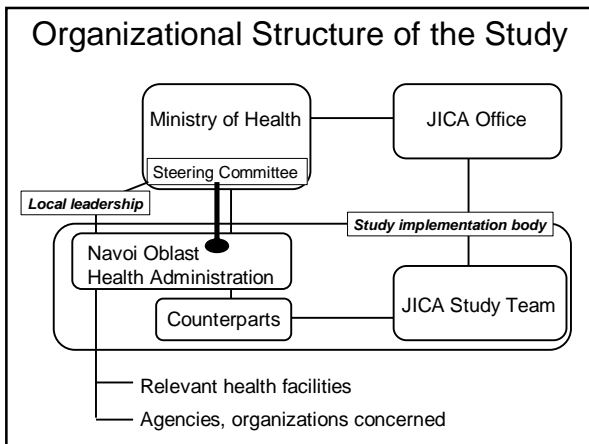
Scope of the Study

- Basic study
- Formulation of basic strategy,
- Selection of an improvement plan for health care services in Navoi
- Detailed plan on selected tertiary level health care services
- Workshops and seminars

S/W July 21, 2005 between JICA / MOH

Overall Flow of the Study

Field Mission 1 <i>Jan to Mar, 2007</i>	•Conduct Basic Study
↓	<ul style="list-style-type: none"> • Overview of Navoi Health Situation • Health Facilities Survey • Hospital Management Survey • Mortality Cases Review
Field Mission 2 <i>May to Jun</i>	<ul style="list-style-type: none"> • Care Seeking Behavior Survey • Comparison with other Oblasts
↓	
Field Mission 3 <i>Aug to Sep</i>	•Analyze Current Problems
↓	•Develop Basic Strategy
Field Mission 4 <i>Oct to Nov</i>	•Examine Components of Action Plan
↓	
Field Mission 5 <i>Jan, 2008</i>	•Finalize Components of Action Plan
↓	•Develop Details of Action Plan
	•Disseminate Information



- ### Challenges
- To maintain and expand the improved PHC services,
 - To optimize secondary- and tertiary-level health services,
 - To adapt the preventive and curative services to changing diseases (“the epidemiological transition”), and
 - To raise people's awareness on health promotion and healthy life style.

- ### Basic Strategy
- To organize an effective and efficient health care service system at oblast level
 - To mitigate difficulties of health care services in remote areas
 - To enhance secondary services in suburban rayons
 - To improve diagnostic skills in accordance with level of facilities
 - To optimize prevention activities

- ### Diseases to Be Prioritized
- Acute respiratory infections
 - Cardiovascular diseases
 - Diabetes mellitus
 - Hepatic and renal diseases
 - Cancers

- ### Health Care at Oblast-level
- To provide tertiary care in the oblast
 - To offer comprehensive health care for cases including non-emergency NCDs and complications
 - To lead follow-ups of patients with NCDs

- ### Health Care at Rayon level
- To provide secondary care in the oblast
 - To distinguish cases to be referred with reliable diagnoses
 - To encourage the follow-ups of back referred patients

Health Care at SVPs

- To provide reliable primary care
- To treat mild cases of common diseases
- To judge severity and urgency of cases
- To refer, when necessary, without any delay

Health Care as a whole oblast

- Adequate response at the first contact of patient, regardless of levels of service
- Accurate diagnoses and treatments of emergency cases and severe cases at tertiary level
- Effective follow ups afterward
- Prevention and rehabilitation

Short-term Objectives in 2010

- Preventive efforts of NCDs are initiated.
- Guidelines for diagnosing and treating NCDs are developed.
- In-service training scheme is arranged.
- Onset of establishing Oblast Medical Center and Diagnostic Center.

Mid-term Goals for 2012

- Preventive efforts are accelerated.
- Diagnostic skills of each level are improved.
- Trained doctors are assigned.
- Oblast General Medical Center and Diagnostic Center start operating and collecting users' fee.
- Oblast Emergency Center is optimized.

Long-Term Goals for 2017

- Preventive efforts are more accelerated.
- Excess mortality from NCDs remains low.
- Life expectancy is increased.
- Standard of emergency health care is upgraded.
- Oblast General Medical Center earns half of revenue from user' s fee.

Components and Activities

Improvement Program for
Health Care Service System of
Navoi Oblast

Components

1. Disease Prevention Focusing of NCDs
2. Diagnosis and Treatment Process for NCDs
3. Health Facility
4. Medical Equipment
5. Efficiency of Drug Supply
6. Sanitary Conditions of Health Facilities

Component 1:

Disease Prevention Focusing of NCDs

Activities

- 1.1 Enhancement of Prevention Activities against NCDs and Health Promotion
- 1.2 Upgrading of Patronage Activity

1.1 Enhancement of Prevention Activities against NCDs and Health Promotion

- ◆ Review and renew the contents of mass education on disease prevention
- ◆ Include target diseases to check-ups of target age group

Goal Incidence of major NCDs is contained.
 Purpose Adult population in Navoi Oblast is aware of responsibility of their own health.
 Cost Investment: 67,252.2 million soums
 Recurrent: 121,111.5 million soums (2008-2017)

1.2 Upgrading of Patronage Activity

- ◆ Analyze and evaluate current patronage activities
- ◆ Revise manuals for patronage nurses

Goal All chief nurses in RMA provide instruction to patronage nurses based on the revised manual from 2009.
 Purpose Patronage activity can respond to the latest actual health problems efficiently.
 Cost Investment: 30 million soums
 Recurrent: 173.5 million soums (2009-2017)

Component 2

Diagnosis and Treatment Process for NCDs

Activities

- 2.1 Standardization of Diagnosis and Treatment Process of NCDs
- 2.2 Coordination of Different Specialties
- 2.3 Personnel Plans and Regular Implementation of In-service Training Course

2.1 Standardization of Diagnosis and Treatment Process of NCDs

- ◆ Develop guidelines on management of NCDs
- ◆ Utilize developed guidelines in the whole oblast
- ◆ Revise guidelines periodically

Goal Diagnostic and treatment capacity of health care system is improved as a whole.
 Purpose Mechanism of updating practical guidelines is institutionalized.
 Cost Investment: 36.0 million soums
 Recurrent: 417.4 million soums (2009-2017)

2.2 Coordination of Different Specialties or Facilities

- ◆ Send selected doctors to learn actual examples of coordination
- ◆ Upgrade manuals at periodical revising

Goal Diagnostic and treatment capacity of health care system is improved as a whole.
Purpose Criteria of referring and back-referring NCD cases are defined. Internal coordination at OGMC and inter-facility coordination are improved
Cost Investment: 14.5 million soums
 Recurrent: 526.2 million soums (2009-2017)

2.3 Personnel Plans and Regular Implementation of In-service Training Course

- ◆ Renew personnel plan
- ◆ Implement in-service training at OGMC
- ◆ Train doctors working at rayon level facilities
- ◆ Upgrade service standards of rayon level

Goal Diagnostic and treatment capacity of health care system is improved as a whole.
Purpose Skills and knowledge of health personnel improve continuously.
Cost Investment: 35.1 million soums
 Recurrent: 222.1 million soums (2009-2017)

**Component 3:
Health Facility**

Activities

- 3.1 Establishment of General Medical Center and Oblast Diagnostic Center
- 3.2 Optimization of Oblast Emergency Center
- 3.3 Strengthening of Rayon-level Health Facilities

3.1 Establishment of General Medical Center and Oblast Diagnostic Center

- ◆ Establish OGMC and ODC
- ◆ Recruit necessary staff
- ◆ Operate OGMC and ODC in 2012

Goal OGMC and ODC are smoothly operated as centers of tertiary care and in-service staff training.
Purpose Proper management of non-emergency adult patients. Sophisticated diagnostic services to both adults and children.
Cost Investment: 20,500.0 million soums
 Recurrent: 32,552.1 million soums (2012-2017)

3.2 Optimization of Oblast Emergency Center

Oblast-level medical services including emergency care shall be optimized.

3.3 Strengthening of Rayon-level Health Facilities

Rayon-level medical services on common diseases shall be strengthened.

Component 4:
Medical Equipment

Activities

4.1 Improvement of Maintenance of Medical Equipment

4.2 Procurement of Medical Equipment for RCHs

4.1 Improvement of Maintenance of Medical Equipment

- ◆ Improve equipment inventory
- ◆ Upgrade usage of manuals
- ◆ Start “help-desk” services

Goal Medical equipment is kept functioning more.
 Purpose Medical equipment is maintained in efficient approach. Preventive maintenance is enhanced.
 Cost Investment: 32.6 million soums
 Recurrent: 109.9 million soums (2008-2017)

4.2 Procurement of Medical Equipment for RCHs

- ◆ Procure essential equipment for RCHs
- ◆ Train RCHs staff on operation and preventive maintenance
- ◆ Plan adequate budget for maintenance

Goal Diagnosis and treatment of common diseases are ensured in RCHs.
 Purpose Quality of diagnosis and treatment in RCHs is improved. Adequate medical services of RCHs mitigate the burden of remote areas.
 Cost Investment: 4,756.5 million soums (Procurement)
 Recurrent: 8,233.7 million soums (2009-2017)

Component 5:
Efficiency of Drug Supply

Activities

5.1 Centralizing of Medicine Preparation

5.2 Improvement of Access to Drugs at Remote Areas

5.1 Centralizing of Medicine Preparation

- ◆ Establish oblast medicine preparation unit and unified supply system
- ◆ Monitor effectiveness and efficiency of supply

Goal Efficiency of medicine preparation increases.
 Purpose Preparation of medicine (transfusions) is centralized in the oblast and distributed to RMAs on demand.
 Cost Investment: 30.0 million soums
 Recurrent: 182.0 million soums (2009-2017)

5.2 Improvement of Access to Drugs at Remote Areas

- ◆ Increase budget for drugs
- ◆ Review drug prescriptions and instruction on compliance
- ◆ Seek local entities that sell drugs at remote areas

Goal Inequality on people’s drug access mitigates.
 Purpose Budget for drugs is increased. Drug prescription and compliance is improved. Local entities start selling drugs at remote areas.
 Cost Investment: 720.6 million soums
 Recurrent: 9,666.6 million soums (2009-2017)

Component 6:
Sanitary Conditions of Health Facilities

Activities

6.1 Introduction of “self-pouring and self-flushing” toilet

6.1 Introduction of “self-pouring and self-flushing” toilet

- ◆ Establish “self-poring and self-flushing” toilet
- ◆ Establish system of adequate maintenance of improved toilet

Goal Infections caused by sanitary condition is avoided.

Purpose Sanitary condition in health facilities is improved in target rayons and facilities.

Cost Investment: 141.4 million soums
Recurrent: 25.4 million soums (2008-2017)

Total Cost of Activities

Investment cost: 32,996.8 million soums

Recurrent cost: 172,872.2 million soums

Total NOHA recurrent budget in 2008-2017:
433,377.5 million soums

NOHA recurrent budget required to be increased for implementation of 11 activities:
47,291.7 million soums

Activities

1.1	Enhancement of Prevention Activities against NCDs & Health Promotion
1.2	Upgrading of Patronage Activity
2.1	Standardization of Diagnosis and Treatment Process for NCDs
2.2	Coordination among Different Subspecialties
2.3	Personnel Plans and Regular Implementation of In-service Training Courses
3.1	Establishment of Oblast General Medical Center / Oblast Diagnostic Center
3.2	Optimization of Oblast Emergency Center
3.3	Strengthening of Rayon-level Health Facilities
4.1	Improvement of Maintenance of Medical Equipment
4.2	Procurement of Medical Equipment for RCHs
5.1	Centralizing of Medicine Preparation
5.2	Improvement of Access to Drug at Remote Areas
6.1	Introduction of “Self-filling and Self-flushing” Toilet

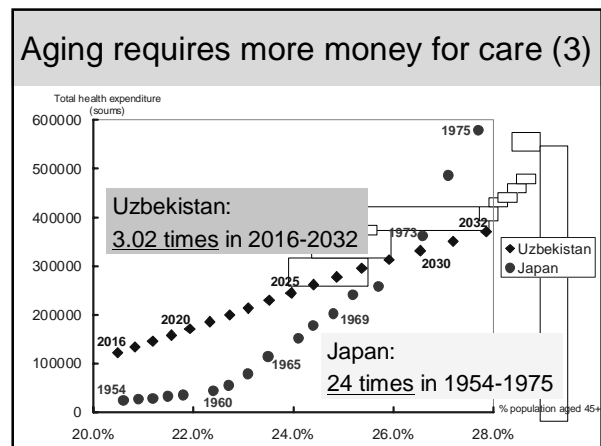
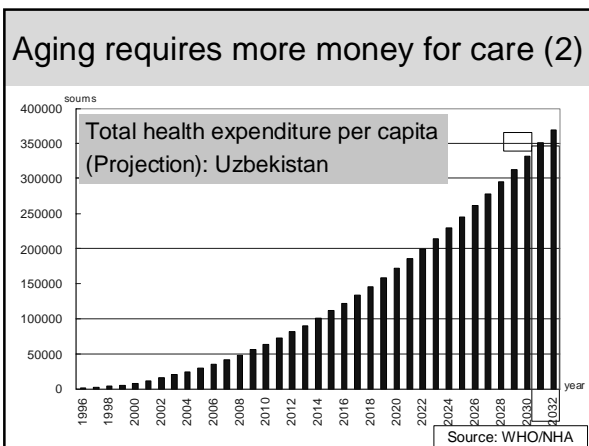
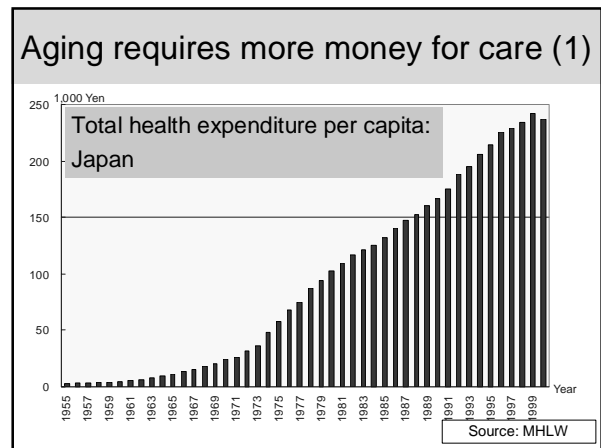
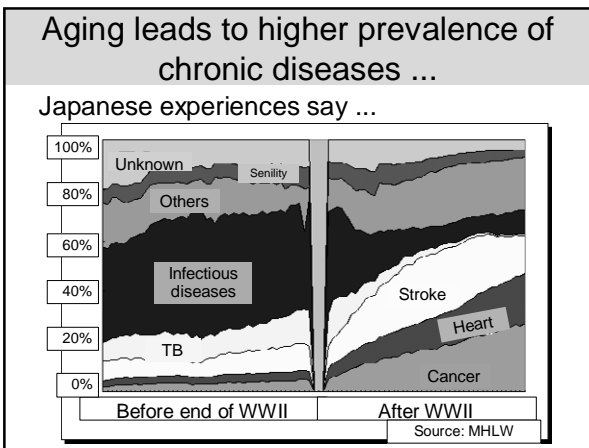
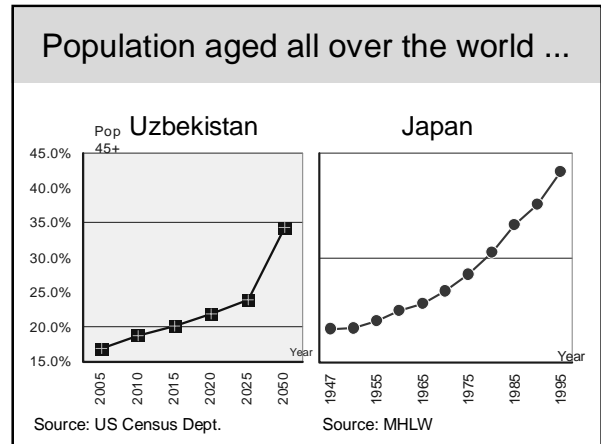
Navoi Oblast Health Administration

JICA Study Team

Reinstate MOH Budget (% GDP) in the Level at the Time of Independence

Tashkent, 24 January 2008

Naoki TAKE
JICA Study Team
Study on Reform of Health Care Services in Navoi
(Hosp. Management)



Aging requires more money for care (4)

Assumptions for Uzbek calculation:

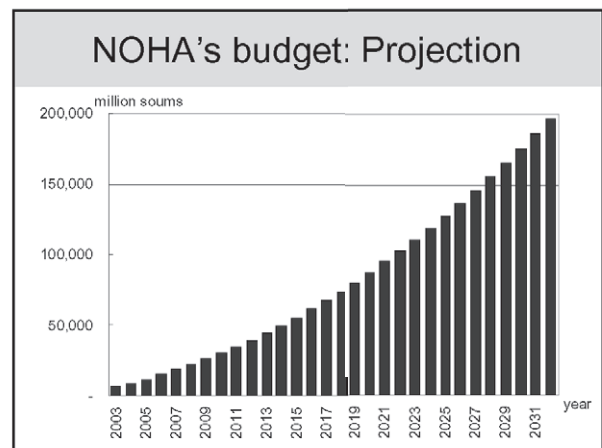
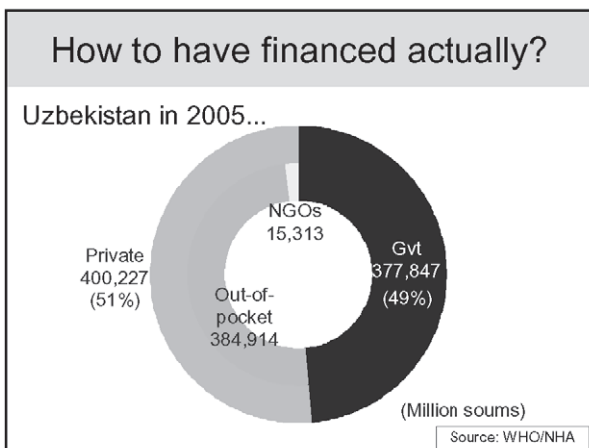
- Time trends (reflecting inflation) as only a factor
- Technological progress not considered at all

Health expenditures can skyrocket more like Japan if MoH seriously addresses NCD treatment according with new health reform policy.

How to finance?

Four modes of financing: Currently in Uzbekistan ...

- Government budget → Available
- Healthcare insurance → No
- Out-of-pocket → Available
- Donation → Uncertain



Program for Reform in Navoi

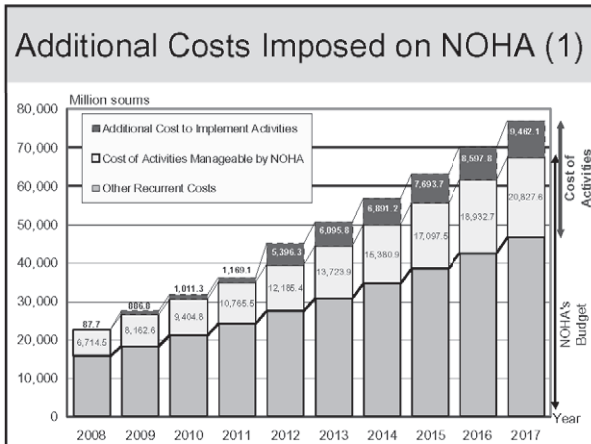
Duration: 10 years (2008-2017)

1. Prevention and health promotion
2. Diagnosis and treatment process for NCDs
3. Health facility
4. Medical equipment
5. Efficiency of drug supply
6. Sanitary conditions of health facilities

Total Costs for Reform in Navoi

(million soums)

Components	Investment	Recurrent
1. Prevention	6,755.2	121,285.0
2. Dx/Tx NCDs	60.5	817.5
3. Facility	20,500.0	32,552.1
4. Equipment	4,789.1	8,343.6
5. Drug	750.6	9,848.6
6. Sanitation	141.4	25.4
Total	32,996.8	172,872.2



Additional Costs Imposed on NOHA (2)

(million soums)

Components	Costs added
1. Prevention	244.3
2. Dx/Tx NCDs	878.0
3. Facility	32,552.1
4. Equipment	8,390.7
5. Drug	5,199.9
6. Sanitation	26.7
Total	47,291.7

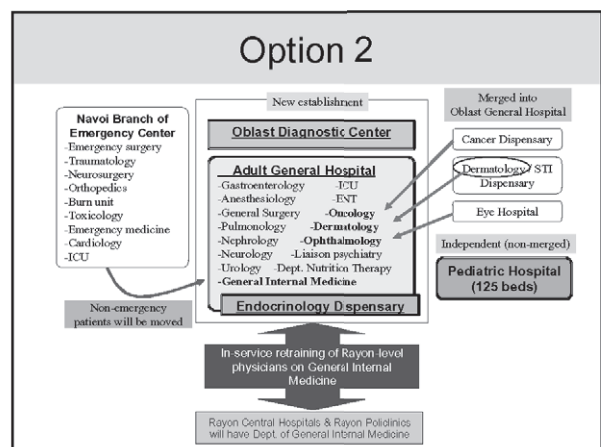
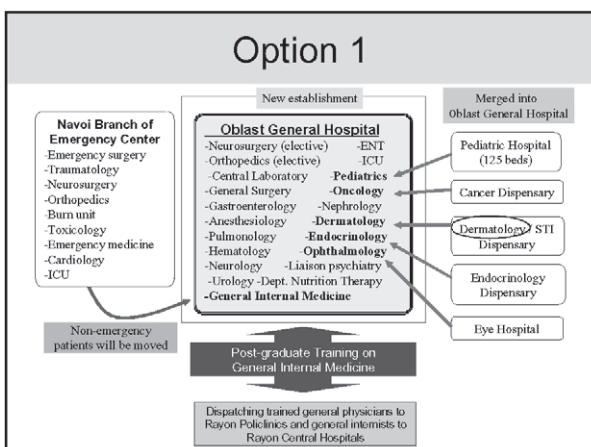
How to deal with additional costs?

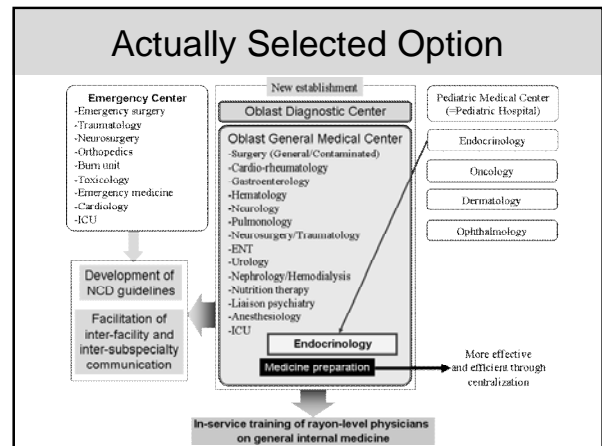
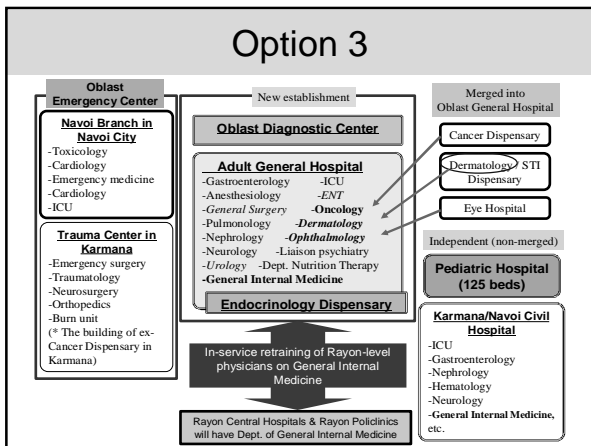
1. Seek more efficient system of service provision for containing costs
2. Increase MOH budget more than our projection

For containing costs ...

- Prioritize target diseases
- Focus on disease prevention
- Merge of small-scale dispensaries with Oblast Medical Center/Diagnostic Center

Three Options:

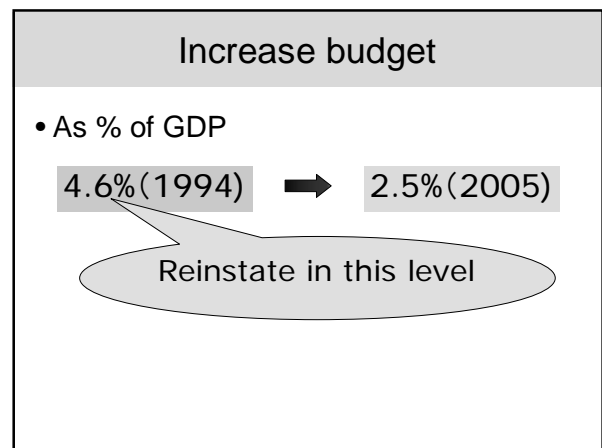




Comparison of Additional Costs

(million soums)

Option	Invest	Recurrent	Budget	Net
		2012-17 (1)	Shifted (2)	Additional Cost (1)-(2)
1	33,220	33,743.8	21,074.0	12,669.8
2	29,100	29,469.1	13,339.6	16,129.5
3	21,420	26,419.2	13,339.6	13,079.6
Selected	20,500	32,552.1	637.0	31,918.1



January 24, 2008
Tashkent, Uzbekistan

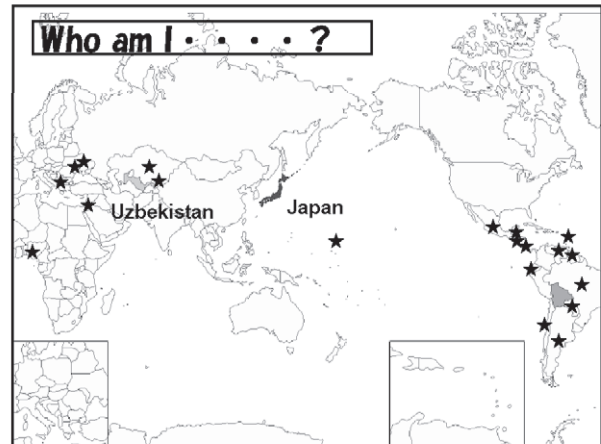
Spirits of Good Service and Health Care

-- Topics in Japan --



JICA Study Team
Naoki MIMURO

1



World Standard

- Health Care is one of Service Industry
- Health Care is not Free of Charge

3

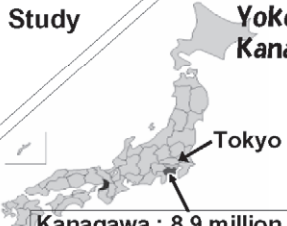
Japan' System

Universal Health Insurance

- Payroll tax every month withdrawal from salary
- Patients can choose any facility and pay 30% of the costs
- Medical fee and drug tariff are unified universally (Decided by MOH)

4


Study



Yokohama City, Kanagawa Prefecture

Tokyo

Kanagawa : 8.9 million



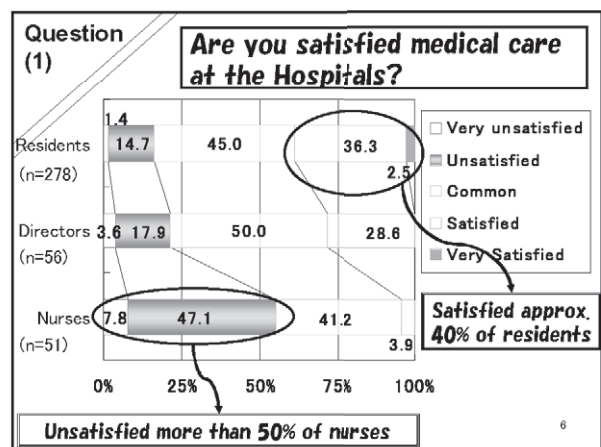
[Respondents]

Residents : 281

Hosp. director : 60

Chief nurse : 52

5



Question (2) **What are Major Reasons of peoples' un-satisfaction?**

1	71.5%	Long Waiting Time
2	45.3%	Insufficient Drs' explanation
3	32.0%	Too much tests & drugs
4	27.3%	Insufficient health information
5	26.7%	Low medical skills

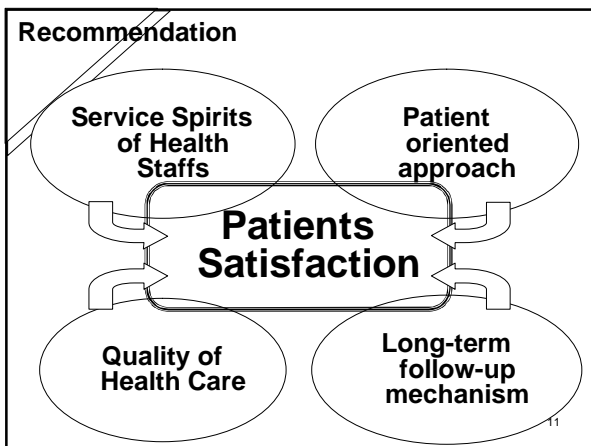
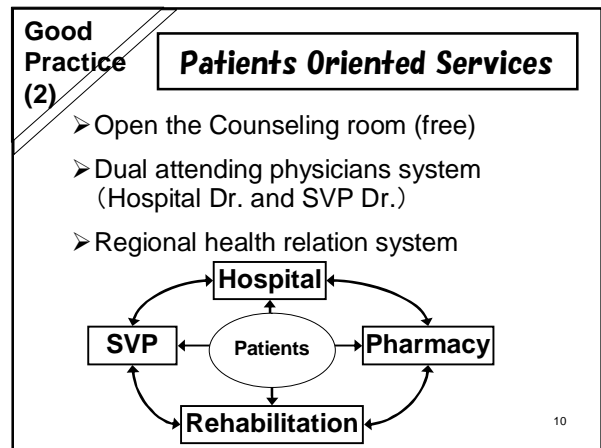
Waiting time is higher than medical skills

Question (3) **What do the residents expect from health facilities?**

1	31.3%	Affinity with Physician in charge
2	17.1%	Amenity (Comfortable atmosphere)
3	16.8%	Staffs' kindness
4	15.8%	New medical technology

New medical technology is lower than affinity, amenity and kindly.

- Good Practice (1)** **Shortening waiting time and relieving patients' stress**
- Advanced appointment system by telephone & reception
 - Indicate patient waiting number
 - Advanced call service to patient's mobile phone
 - Open patient library (free)
 - Open comfortable cafe (pay)



Satisfaction = Willingness to Pay

Thank You Very Much

An Integrated Approach to Adult Health Problems

How to strike a balance between effectiveness and efficiency

Akihiro YOMO, M.D., M.Trop.Paed.
JICA Study Team

Navoi Oblast need to strengthen its hospital services

- Diagnostic Center
- Adult General Medical Center
- Emergency Center
- Pediatric General Medical Center
- Maternal Hospital
- Specialized Dispensaries
- Emergency Center
- Pediatric Hospital
- Maternal Hospital
- Specialized Dispensaries

- It's not easy for the oblasts with smaller population to operate many tertiary hospitals.
- The health care system is expected to benefit the people's health (effectiveness) by utilising the limited resources (efficiency).

How to strike a balance between effectiveness and efficiency.

- Prioritize target diseases properly!
- Prevention is often better than cure.
- Optimal tasks are assigned to different-level facilities which are functionally linked to each other. (Vertical integration)
- Adopt multidisciplinary approach. (Horizontal integration)

Potentials of vertical integration of health care system

- Strokes
- Ischemic heart diseases (IHDs), esp. acute myocardial infarction
- Hypertension
- Diabetes mellitus
- Chronic renal diseases, etc.

Current management of strokes

- CT studies are rarely ordered.
- Guessed diagnosis between infarction and hemorrhage
- Empirically selected treatment
for infarctions: aspirin, heparin, etc.
for hemorrhage: hemostatic drugs.
both treatment may be tried on one patient

Installation of a CT scanner

- CT will offer the firm evidence.
- Quickly transfer the patients for CT study!
- Differential diagnosis between infarction and hemorrhage should be confirmed.
 - for infarctions: aspirin, heparin, etc.
 - for hemorrhage: hemostatic drugs, surgical drainage, etc.

Management of Strokes

Tertiary-level	<at Emergency C.> CT study -specific treatment for infarction, or -specific treatment for hemorrhage	<at OGMC> -rehabilitation -considering preventive antiplatelet surgical drainage?
Secondary-level	conservative treatment for too severe or very mild cases	
Primary-level	-refer to Em.C	-control of hypertension -regular medication
Patronage nurses		check: QOL, BP (in the future)

Management of IHDs

Tertiary-level	<at Emergency C.> -intensive care -thrombolytics (in the future)	<at OGMC> -rehabilitation -evaluation of cardiac function -medication plan -diet & exercise plan
Secondary-level	-intensive care	
Primary-level	-refer to EC	-regular medication -control of hypertension
Patronage nurses		check: QOL, BP (in the future)

An additional risk factor multiples the risk of myocardial infarction. **1+1=30!?**

Number of risk factors	Risk of morbidity
None	1
1 factor	5
2 factors	10
3-4 factors	30

Coronary risk factors are consequence of life-style.

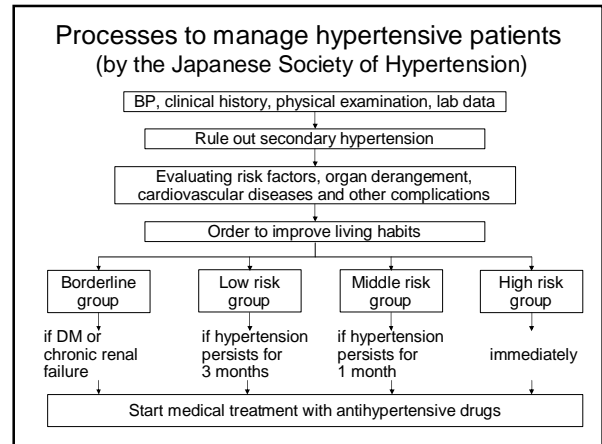
A Japanese material to increase people's awareness

Controlling coronary risk factors (obesity, hypertension, DM, etc.)

- will prevent strokes and myocardial infarctions, and reduce the future workload of hospitals.
- Controlling DM will prevent complications: nephropathy, retinopathy, neuropathy, gangrene, etc.

Management of DM

Tertiary-level	<at Emergency C.> -care for diabetic emergencies <at Eye Dispensary> -retinal exam	<at OGMC> -OGTT -check of HbA1c -check of renal function -medication plan -diet & exercise plan
Secondary-level	-OGTT (in the future)	-HbA1c (in the future)
Primary-level	-blood/urinary sugar	-control of blood sugar -regular medication -diet & exercise advice
Patronage nurses		-drug/ diet compliance



Stratification by risk

	Mild hypertension (140~159 /90~99 mmHg)	Moderate hypertension (160~179 /100~109 mmHg)	Severe hypertension (≥ 180 /≥ 110 mmHg)
No risk factor	Low risk	Moderate	High
1 or 2 risk factors other than DM	Moderate	Moderate	High
3 or more risk factors DM Organ derangement Cardiovascular dis.	High	High	High

Source: The Japanese Society of Hypertension

Management of Hypertension

Tertiary-level	<at Emergency C.> -intensive care for hypertensive crisis	<at OGMC> -management plan for high risk patients
Secondary-level	-rule out secondary hypertension -stratification by risk -management plan	-regular medication for high risk patients
Primary-level	-detecting high BP -consultation	-control of BP -regular medication -diet & exercise advice
Patronage nurses		check: BP, drug/ diet compliance

Vertical integration is effective, but not a panacea

- NCD patients often have multiple health problems: e.x.) myocardial infarction + hypertension + DM + mental depression + impaired exercise capacity
- Such a patient may require support from cardiologist, endocrinologist, psychiatrist, physiotherapist, etc.
- However, specialists are available only at tertiary-level facilities.

Horizontal integration of health services

- Examples
 - Integrated management of childhood illnesses (IMCI)
 - Integrated management of pregnancy and delivery complications (IMPAC)
- Integrated management of adult illnesses in Navoi Oblast

Key persons required for the integrated management of adult illnesses

1. General physicians for outpatients
 - examine the whole body of patients and refer them to the proper specialists.
 - follow up patients with multiple problems in consultation with specialists.
 2. General physicians for indoor patients
 - receive the undiagnosed patients who are referred from lower-level facilities.
 - offer the consultation services to surgical patients.
 - fill the gaps of specialists.
- = "hospitalists"

Surgical patients may need supports from a "hospitalist"

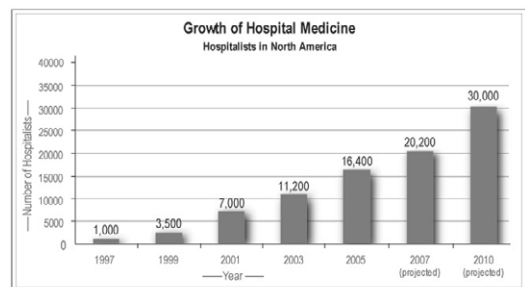
- Pre-operational evaluation
- Control of hypertension
- Control of blood glucose
- Fever workup
- Coma workup
- Post-operational consultation due to:
 - arrhythmia
 - chest pain
 - hypotension
 - delirium
 - anuria
 - dyspnea (ruling out pulmonary embolism and deep vein thrombosis)

The "hospitalist"

For patients with common inpatient diagnoses, the "hospitalist" model reduces length of stay and costs.

In Uzbekistan, senior internists who have experiences in a wide range of serious health problems can play the role of hospitalists.

Because hospitalists bring great benefit to hospitals and patients,



Conclusion

- Practical guidelines will be necessary for vertical and horizontal integration of health care system.
- The wisdom of the experienced doctors should be reflected in the guidelines.
- The guidelines should be understood by specialists, generalists and co-medicals.
- Equipment should be installed according to the guidelines.



Reference

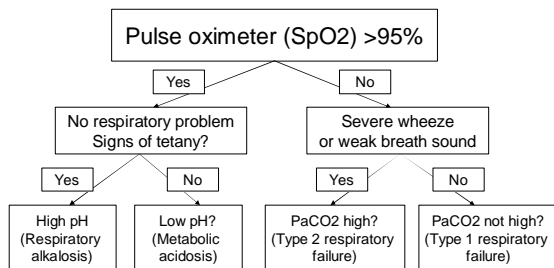
- an example of tachypnea -

- ARI program (included in IMCI) trains the PHC workers to count the respiratory rate on pneumonia-suspected children.
- Doctors at higher-level facilities should understand the different pathogenesis and pathophysiology of tachypnea.

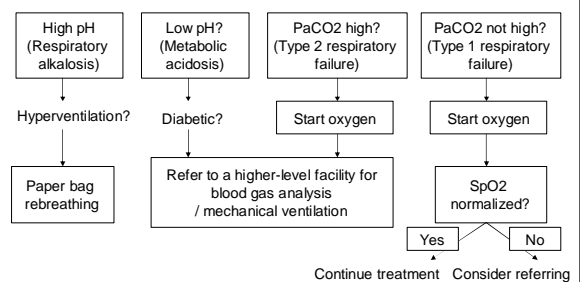
If an upgraded general physician is working for a secondary-level facility,

- 1) examine the whole body of a tachypneic patient
 - 2) make an assessment of respiratory function with the assistance of a pulse oximeter
 - 3) make a differential diagnosis between respiratory and non-respiratory problems
 - 4) start treatment or refer the patient to a proper specialist.
- General physicians with a broader perspective can cross the barriers between specialties.

Management of Tachypnea ± signs of respiratory distress



Management of Tachypnea (cont'd)



16. Basis of Cost Estimation

16 Basis of Cost Estimation

16-1 Expenditure on Health in Navoi and Uzbekistan (for Section 9-3 and Section 12-4)

16-1-1 Data

WHO's estimates on national health accounts in Uzbekistan include total expenditure on health in 1996-2005, consisting of general government expenditure and private expenditure. General government expenditure on health can be identical to the total recurrent budget of MOH, while private expenditure on health is divided into two parts: households' out-of-pocket payments and NGOs' funds. In Uzbekistan most of the private expenditure comes from out-of-pocket.

The percentage of budget allocation from MOH to NOHA is available from the report on preparatory study for the Study in 2005.

16-1-2 Assumptions

It is assumed that change of total, government and private expenditure on health since 2006 will depend only on time trend from 1996-2005 and that other factors like the level of technology and the capacities of health personnel will not influence significantly.

In addition, it is assumed that the magnitude of transition of NOHA's budget will be the same as MOH's at all times and that the percentage of budget allocation from MOH to NOHA since 2006 is the same as the level in 2005.

16-1-3 Estimation

Transition of total, government and private expenditure on health from 1996-2005 can be approximated by the following quadratic functions of time.

$$\text{Total expenditure on health} = 7674.2 x^2 - 178.69 x + 18856$$

$$\text{Government expenditure on health} = 4321.3 x^2 - 8268.1 x + 27139$$

where x is time (the year 1996 =1, 1997 =2, 1998 =3 ...).

As for the expenditures per capita, the following functions are used.

$$\text{Total expenditure on health} = 261.98 x^2 + 293.81 x + 484.45$$

$$\text{Government expenditure on health} = 151.57 x^2 - 190.96 x + 975.07$$

where x is time (the year 1996 =1, 1997 =2, 1998 =3 ...).

Private expenditure on health is defined as follows:

$$\text{Private expenditure on health} = \text{Total health expenditure} - \text{Government health expenditure}$$

When the number of year defined above is substituted for x, total, government and private expenditure of health since 2008 are projected in the following tables.

Table 1: Projection of Health Expenditures in Uzbekistan since 2008

Unit: Million soums	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total expenditure on health	1 313 473	1 520 498	1 742 871	1 980 592	2 233 662	2 502 080	2 785 847	3 084 962	3 399 426	3 729 238
General government expenditure on health	649 953	758 360	875 410	1 001 102	1 135 437	1 278 414	1 430 034	1 590 297	1 759 202	1 936 750
Private expenditure on health	663 519	762 137	867 461	979 490	1 098 225	1 223 666	1 355 813	1 494 665	1 640 224	1 792 488

Source: Estimation and projection from national health accounts in Uzbekistan compiled by WHO

Table 2: Projection of Health Expenditures per capita in Uzbekistan since 2008

Unit: Soums	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Total expenditure on health	48579	55946	63837	72252	81191	90655	100642	111153	122188	133747
General government expenditure on health	24108	28009	32214	36722	41532	46646	52064	57784	63807	70134
Private expenditure on health	24471	27937	31623	35531	39659	44008	48578	53369	58380	63613

Source: Estimation and projection from national health accounts in Uzbekistan compiled by WHO

Based on the growth of the government expenditure on health shown above, the budget allocation to NOHA is projected below.

Table 3: Projection of NOHA Budget since 2008

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
NOHA Budget (million soums)	22,667.8	26,509.8	30,543.9	34,962.2	39,572.6	44,567.2	49,946.0	55,516.9	61,472.0	67,619.2
Growth of Budget since 2007	18%	38%	59%	82%	106%	132%	160%	189%	220%	252%

Source: Estimation and projection by JICA Study Team

16-2 Recurrent Costs for Oblast General Medical Center/Oblast Diagnostic Center in Navoi (for Section 11-2 and Section 11-4)

16-2-1 Data

Data on allocation of NOHA budget to health facilities in the oblast were obtained from NOHA. From the view of similarity of capacity of beds, the budget for Navoi Branch of Emergency Center in 2007 was utilized for estimation of the recurrent costs.

16-2-2 Assumptions

Firstly, to make analysis simple, the Study Team estimates the recurrent cost of the Oblast General Medical Center mixing up with that of the Oblast Diagnostic Center. Both centers are expected to open in 2012.

The expenditure items of the centers are defined as follows:

- Personnel
- Utility
- Maintenance of buildings and facilities
- Maintenance of medical equipment
- Fuels
- Foods
- Drugs and other materials

- Depreciations for buildings and medical equipment
- Other expenses

Currently, there are no items for maintenance of medical equipment or depreciations, and the budgets for them are not allocated. However, it is particularly important to estimate them, considering the future reconstruction of buildings and replacement of medical equipment.

As for cost escalation, it is assumed that the costs of the two centers will increase by the same rates as the budget of NOHA.

16-2-3 Estimation

(1) Number of Beds for Oblast General Medical Center

Calculation of the number of beds for the Oblast General Medical Center at the time of inauguration is based on the numbers of inpatients of the Navoi Branch of Emergency Center and the Oblast Pediatric Hospital (only for Option 1 described in Section 11-2). It is done by the following formula:

$$\text{Number of beds} = (\text{Number of inpatients} * \text{ALOS}) / \text{BOR}$$

Target ALOS and BOR at the Oblast General Medical Center are defined as 7 days and 328.5 days (= Japanese BOR 90% * 365 days) respectively.

Under Option 1, the Oblast General Medical Center would receive both adults and children. Rough estimation of the inpatients in 2007 is 12,000 for the Emergency Center and 6,000 for the Pediatric Hospital. Given the annual growth of population in Uzbekistan 1.8%, the number of inpatients at the Medical Center in 2011 is estimated:

$$[(12,000 + 6,000) * 1.018^5] * 7 / 328.5 = 419$$

In case of the other options, the Medical Center would receive only adult patients. Given the annual growth of population aged 15 years and over 2%, the number of inpatients is as follows:

$$[(12,000 * 1.02^5) * 7] / 328.5 = 282$$

(2) Number of Personnel for Medical Center and Diagnostic Center

In Uzbekistan, allocation of health personnel is ruled by the national standard enacted in 1997. Roughly one doctor, three nurses/feldshers/technicians and one other staff are stationed at a department with 15-20 beds. Based on the assumption, the numbers of personnel required for the two centers are estimated below.

Table 4: Numbers of Staffs for General Medical Center and Diagnostic Center

	Option 1	Option 2	Option 3	Option Selected
Oblast General Medical Center				
Doctors	40	29	29	25
Nurses/Feldshers/Technicians	114	84	84	72
Others	52	38	38	30
Subtotal	206	151	151	127
Oblast Diagnostic Center				
Doctors	14	14	14	14
Nurses/Feldshers/Technicians	20	20	20	20
Others	5	5	5	5
Subtotal	39	39	39	39
Grand total	245	190	190	166

Source: Estimation by JICA Study Team

(2) Investment Cost for Construction of Buildings and Procurement of Equipment

According to the information from the Sanitary Epidemiology Station in Navoi Oblast, currently the unit cost for construction is around 650,000 soums per square meter. However, current situation of skyrocketing prices has to be taken into consideration. Assuming the annual inflation is 25%, the unit cost will soar to roughly 1,280,000 soums in 2010, the year of construction.

As for the cost of medical equipment, it is estimated based on the needs identified by the Study Team.

The result of estimation is as follows. Under Option 1, the cost for procurement is lower since the Medical Center would utilize some of equipment currently existing at the Pediatric Hospital. Concerning the selected option, the costs are estimated by the Uzbek side.

Table 5: Estimation of Investment Cost by Option

		Newly constructed m ²	Unit cost (1,000 cym)	Total cost (1,000 cym)
Option 1	Construction	24,000	1,280	30,720,000
	Procurement of medical equipment			2,500,000
Option 1: Total				33,220,000
Option 2	Construction	20,000	1,280	25,600,000
	Procurement of medical equipment			3,500,000
Option 2: Total				29,100,000
Option 3	Construction	14,000	1,280	17,920,000
	Procurement of medical equipment			3,500,000
Option 3: Total				21,420,000
Option Selected	Construction			12,500,000
Option Selected	Procurement of medical equipment			8,000,000
Option Selected: Total				20,500,000

Source: Estimation by JICA Study Team

(3) Recurrent Cost

i) Personnel

Based on the current situation at the Emergency Center, the monthly salaries of doctors, nurses and other staffs are defined as 364,000 soums, 218,000 soums and 109,000 soums respectively. Given

the number of personnel shown in Table 4, the annual cost of personnel for the two centers in 2012 is calculated as follows:

Table 6: Cost of Personnel in 2012 by Option

Option 1	Numbers	Annual Salaries (1,000 soums)	Total (1,000 soums)	Option 2	Numbers	Annual Salaries (1,000 soums)	Total (1,000 soums)
Doctors	54	4,944	266,976	Doctors	43	4,944	212,592
Nurses etc.	134	2,966	397,498	Nurses etc.	104	2,966	308,506
Others	57	1,483	84,542	Others	43	1,483	63,778
Total			749,016	Total			584,875

Option 3	Numbers	Annual Salaries (1,000 soums)	Total (1,000 soums)	Option Selected	Numbers	Annual Salaries (1,000 soums)	Total (1,000 soums)
Doctors	43	4,944	212,592	Doctors	39	4,944	192,816
Nurses etc.	104	2,966	308,506	Nurses etc.	92	2,966	272,909
Others	43	1,483	63,778	Others	35	1,483	51,912
Total			584,875	Total			517,637

Source: Estimation by JICA Study Team

ii) Utility, Fuels, Foods and Drugs and Other Materials

Judging from the capacity of beds, the costs of utility, fuels and drugs in 2012 are defined as double of the Emergency Center for Option 1, and as 40% more than the Emergency Center for the other options.

As for the cost of drugs and other materials in 2011, it is three times and 80% more than the Emergency Center for Option 1 and the others respectively.

iii) Maintenance

It is desirable to appropriate 2% of the construction cost and 10% of the equipment procurement cost as the annual budget for maintenance.

iv) Depreciations

The Study Team estimated the annual cost for depreciations with the methods used in Japan. It is said that the life of hospital buildings is 39 years and that of medical equipment is roughly 5 years. The annual rates of depreciation are 2.6% for the hospital buildings and 16.6% for the medical equipment. And the formula is as follows:

$$\text{Annual depreciations} = \text{Cost of construction or equipment} * 0.9 * \text{Rates of depreciations}$$

Given these assumptions, the costs of depreciations are estimated:

Table 7: Annual Cost of Depreciations in 2012 by Option

		(1,000 soums)
Option 1	Buildings	718,848
	Medical equipment	373,500
Option 1 Total		1,092,348
Option 2	Buildings	599,040
	Medical equipment	522,900
Option 2 Total		1,121,940
Option 3	Buildings	419,328
	Medical equipment	522,900
Option 3 Total		942,228
Option Selected	Buildings	292,500
	Medical equipment	1,195,200
Option Selected Total		1,487,700

Source: Estimation by JICA Study Team

v) Other Expenses

It is defined as 7% of the total recurrent cost.