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ANALYSIS OF ARMENIA RURAL HEALTH POST ACTIVITIES

TECHNICAL REVIEW

AUGUST 2007

This publication was produced by Gohar Jerbashian Policy/Knowledge Management Team Leader at Project NOVA for review by the United States Agency for International Development.

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CONTENT

ACRONYMS	4
PREFACE.....	5
CHAPTER 1. ACCESS TO HEALTHCARE IN ARMENIA	7
1.1. Access to healthcare in Armenia.....	9
1.2. Measures to increase access to healthcare in Armenia.....	12
CHAPTER 2. Health Posts in the USSR – AN HISTORICAL OVERVIEW	13
2.1. Rural health districts in the former Soviet healthcare system	13
2.2. Health Posts in the Healthcare System of the USSR.....	14
CHAPTER 3. ECONOMIC PECULIARITIES OF HEALTH SYSTEMS.....	17
3.1. Demand for healthcare services.....	17
3.2. Supply of healthcare services.....	19
CHAPTER 4. CURRENT STATE OF HPs IN ARMENIA.....	21
4.1. Goals and objectives of HPs and the basis of their activities.....	21
4.2. Legal status	23
4.3. Services provided in the HP	24
4.4. Human resources	24
4.5. HP physical infrastructure, technical and medical equipment.....	27
4.6. Cost and compensation of healthcare services.....	29
4.7. Management and control.....	32
RECOMMENDATIONS	34
LITERATURE.....	37
ANNEXES	39

ACRONYMS

BBP	Basic Benefit Package
CIS	Commonwealth of Independent States
CRRC	Caucasian Research Resources Center
DHS	Demographic and Health Survey
DTP	Diphtheria, Tetanus, and Pertussis
EU	European Union
FAP	Feldsher-Akousher Post
FM	Family Medicine
GDP	Gross Domestic Product
GOA	Government of Armenia
HAG	Health Action Groups
HIV	Human Immunodeficiency Virus
H/H	Household
HP	Health Post
HPIU	Health Programs Implementation Unit
NHDS	National Human Development Survey
MTEF	Midterm Expenditure Framework
NIH	National Institute of Health
OSCE	Organization for Security and Cooperation in Europe
PHC	Primary Health Care
PHCR	Primary Health Care Reform
PROST	Pension Reform Options Simulation Toolkit
PRSP	Poverty Reduction Strategy Program
RA	Republic of Armenia
RA MOH	RA Ministry of Health
RA MSE	RA Ministry of Science and Education
RA NSS	RA National Statistical Service
RHD	Rural Health District
RH/MCH	Reproductive Health and Mother and Child Health
SHA	State Health Agency
SOW	Scope of work
SY	Statistical Year-book
TB	Tuberculosis
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USSR	Union of Soviet Socialist Republics
WHO	World Health Organization
YSMU	Yerevan State Medical University
Նիւ	Նախնական Ինժեներական Ինստիտուտ

PREFACE

Healthcare system reforms in Armenia during the past ten years have significantly changed the structure, technical equipment, financing mechanisms, accountability relations, and availability of resources within the Armenian healthcare system. Currently, the Armenian healthcare system is developing in conditions of incomplete decentralization, partial privatization, as well as opaqueness of ownership, obligations, and responsibilities at different levels of management and provision of health care services.

Primary health care services in rural areas of Armenia are provided at 625 Health Posts (HP) also known as FAPs (Feldsher-akousher post), operating in the most remote areas of the country. HPs do not have an independent legal status, and are attached to a supervising healthcare facility: e.g. rural medical ambulatory, polyclinic, or health center. Usually rural HPs, are located in communities with populations under 1,000 and are staffed with one or two Health Post nurse(s). The norms and standards for HP operations have been only partially reviewed during Armenia's transition period, and HPs continue to be somewhat neglected under the terms of the healthcare reforms.

Due to optimization¹ of the healthcare system in Armenia during the last fifteen years, inpatient departments of many rural Health Centers were closed, and some rural ambulatories were turned into HPs. HP buildings are in poor condition, the equipment is worn out, and the majority of nurses have not had professional development opportunities for the past 15 years. In fact, many HPs do not meet the minimum requirements and conditions defined by the Government of Armenia (GOA)². Most of the HPs fail to meet the requirements of the former USSR sanitary-hygienic provisions that are still in force, as new ones have not been adopted yet. Furthermore, taking into account the fact that the roads in high mountainous rural communities are impassable in winter, which usually lasts five to six months, the lack of access to quality health care in rural areas becomes obvious.

Women's reproductive and child healthcare issues are a focal point of the Poverty Reduction Strategy Program (PRSP), serving as a guiding document for reforms in all spheres in Armenia and formation of state-funded targeted health programs. In the meantime, reproductive health and mother and child health (RH/MCH) issues in rural communities require more attention. Infant mortality is especially high in rural areas. Generally, the rural population has poor access to quality healthcare.³

PRSP and State Midterm Expenditure Framework (MTEF) programs approved by the Government of Armenia emphasize the need to increase access to and quality of health care services, especially when it relates to the provision of PHC services to the rural population⁴. According to a 2003 GOA Decree, primary health care reforms envisage establishment of the institute of Community Nursing⁵.

Project NOVA, together with other organizations, has demonstrated to the Government of Armenia that HPs and primary healthcare workers can play a more significant role in meeting the health needs of the rural population. Project NOVA, with the assistance of a national experts group conducted a comprehensive analysis of rural health posts, revealing the obstacles hindering their proper functioning, and developed a set of policy recommendations targeted to improve the quality of health care and to increase utilization of health services at

¹ In 2003 the GOA announced a Health System Optimization Program to reduce hospital beds (which were under-occupied -- some 40.0 % -- due to significant reduction in the number of population as well as the under-consumption of health services due to unaffordability and low demand for health services), and cut down the staff of all hospitals and primary health care institutions.

² GOA Decree No.1936 as of December 5, 2002 "On approving the requirements and conditions of technical and professional qualifications necessary for health care provision in ..., and HPs"

³ Human Poverty and Pro-Poor Policies in Armenia, UNDP, 2005, p. 26 <http://www.undp.am/docs/publications/2005publications/propooreng.pdf>

⁴ PRSP, page 82, MTEF 2006-2008, page 101

⁵ GOA Degree No.1533 as of November 13, 2003 "On approving health care strategy for 2003-2008 and the pilot program of 2003-2004 on organization and new methods of financing of primary health care system of the Republic of Armenia

HPs. Members of the national group included Robert Dilbaryan, Ruben Khachatryan, Donara Hakobyan, Samvel Kharazyan, Knarik Ghonyan, Suren Abgaryan, Geghanush Stepanyan.

Numerous laws, legal acts, and regulations regarding HPs, education of mid-level healthcare providers (nurses), organization of health services at rural HPs were reviewed and recommendations developed on how HPs will comply with the perspective Armenian primary health care model (proposed by GOA Decree N1533 as of November 13, 2003).

Overall, the findings from this in-depth analysis indicate that there are many systemic and structural gaps that hinder the provision of quality healthcare services at HPs and impede access to healthcare in rural communities. The team of experts involved in this analysis strongly believes that proposed adjustments in the PHC system would result in high level of healthcare access, efficiency, equity, and quality.

CHAPTER 1. ACCESS TO HEALTHCARE IN ARMENIA

Results of the health system reforms implemented according to the national PRSP and MTEF programs indicate that the efficiency of the healthcare system and key health indicators in Armenia have improved significantly since 1989. During 1989 to 2003, child mortality rates have decreased substantially: infant mortality by 26%, mortality of children under 5 by 50%, mortality of children ages 5-14 by 48.5%, and adolescent mortality (ages 15-19) by 30.7%. Positive trends have been recorded with respect to mortality rates in other age groups as well⁶.

Table 1- 1. Infant and Child Mortality Rates per 1,000 live births (1999-2003)

	1999	2000	2001	2002	2003	2004	2005	2006
Infant mortality rates by NSS*	15.4	15.6	15.4	14.0	11.8	11.5	12.3	13.8
Child mortality rates (ages 0-4 male)**	20.8	22.9	21.9	17.8	14.9	15.2	15.0	17.1
Child mortality rates (ages 0-4 female)**	17.3	16.4	15.2	15.2	11.9	10.4	12.2	13.2
Infant mortality rates (under 1) by DHS***	-	30.0	-	-	-	-	26.0	-
Child mortality rates (ages 1-4) by DHS ***	-	36.1	-	-	-	-	30.0	-

*RA Statistical Year-book – 2005, p. 40, Social-economic situation in RA, 2005, NSS, p. 148, Social-economic situation in RA, 2006, NSS, p. 135

**RA Statistical Year-book – 2005, p. 37, Social-economic situation in RA 2005, NSS, p. 148, Social-economic situation in RA, 2006, NSS, p. 135

*** Armenia Demographic and Health Survey- DHS, 2000, p. 115, 2005, p. 15

According to the *Statistical Yearbook of Armenia - 2004*, in 2000 the infant mortality rate was 15.6 per 1,000 live-births, whereas the *Armenia Demographic and Health Survey (DHS) 2000*⁷ has shown a higher rate of 30.0 (Table 1-1). One of the critical reasons for this significant difference is that the health facilities registering births and infant deaths had been using old Soviet methods for recognition of live-births and infant deaths before 2005, while DHS had been using the WHO approach. Since then the registration of live-births and infant deaths has been implemented according to World Health Organization (WHO)⁸ definitions and a significant reduction of the difference is to be expected. Additionally, a 22.3% increase in still-births in 2005 (356) compared with the previous year indicator (290) should also be attributed to the new order of live-birth registration⁹. It is certain that some non-compliance should always be expected between the mortality indicators presented by Republic of Armenia National Statistical Service (RA NSS) and DHS as it is also conditioned by the difference between mortality assessment methods used by the RA NSS and the sample survey used in the DHS. Namely, NSS provides information on the registered deaths during the given year, whereas DHS combines the deaths (inclusive non-registered ones) of three years preceding the study. In addition, there is a natural lag between childbirth/death and its registration, and the system of registration of births and child deaths needs improvement.

Life expectancy in Armenia is relatively high. In 2004 it was 69.3 years for men, 75.8 years for women, and 72.3 years for both sexes. As a result of reduction in the overall mortality rate during 1989-2003, life expectancy in Armenia has increased (see Table 1-2.).

Table 1- 2. Life expectancy in Armenia (1989-2005)

	1989	1990	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Men	69.0	68.4	68.9	69.3	70.3	70.8	70.7	70.5	70.0	69.8	69.9	70.3	70.3
Women	74.7	75.2	75.9	76.2	77.3	78.1	75.5	74.5	76.1	75.9	75.8	76.4	76.5

Source: TransMonee 2005: Data, Indicators and Features on the Situation of Children in CEE/CIS and Baltic States, Innocenti Research Center, UNICEF <http://www.unicef-icdc.org/resources/transmonee.html>, Social-economic situation in RA, 2006, NSS, p. 135

It is anticipated that life expectancy will continue to increase and by 2077 life expectancy at birth for women will be 79.7 years, and 72.9 years for men in 2077 (see Table 1-3).

⁶ TransMonee 2005: Data, Indicators and Features on the Situation of Children in CEE/CIS and Baltic States, Innocenti Research Center, UNICEF <http://www.unicef-icdc.org/resources/transmonee.html>

⁷ Armenia Demographic and Health Survey (ADHS), NSS, MOH, ORC Macro, Yerevan 2001, Table 9.2, p. 115

⁸ ROA Governmental Decree No 949 June 16, 2005 on "Measures to Improve the Situation with Child Mortality and Births Classification and Registration"

⁹ Socio-Economic Conditions of ROA in 2005, NSS, Yerevan, 2005, p. 148

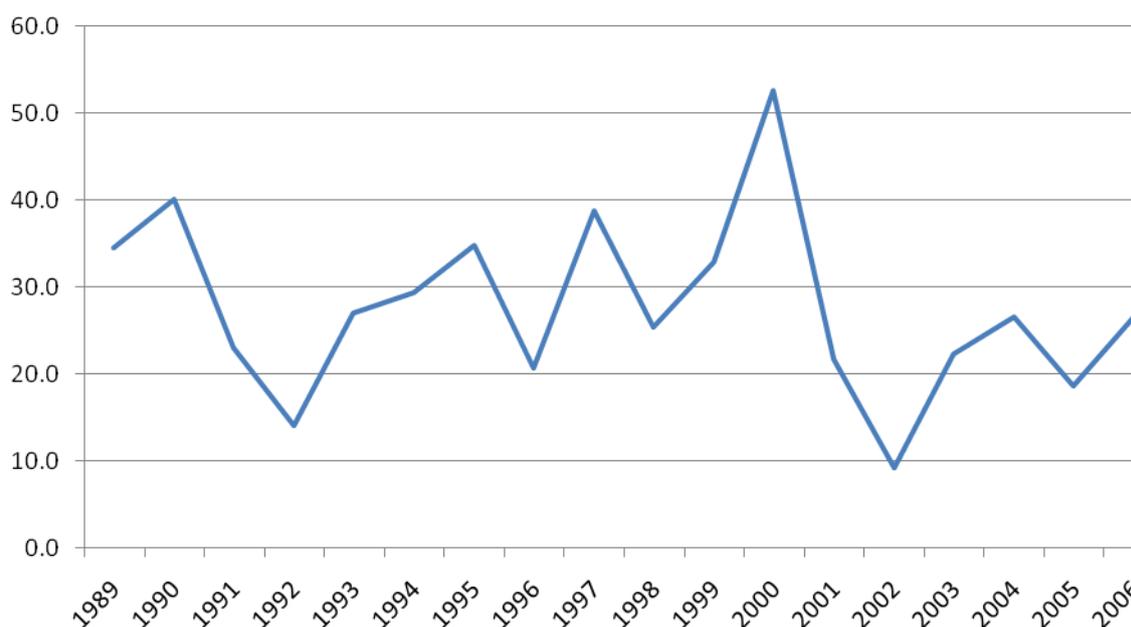
Table 1- 3. Life expectancy at birth

	2004	2005	2006	2009	2012	2015	2020	2030	2040	2050	2060	2070	2077
Men	70.3	70.3	70.3	70.4	70.5	70.6	70.8	71.1	71.5	71.8	72.2	72.6	72.9
Women	76.4	76.5	76.5	76.6	76.9	77.3	77.4	77.8	78.2	78.6	79.0	79.4	79.7

Source: Own calculations by PROST software

Due to measures taken by the GOA to improve reproductive and child healthcare, maternal mortality in Armenia has been decreasing steadily. During the period of 1989-2006 maternal mortality dropped from 34.6 in 1989 to around 26.6 in 2006 (see Figure 1-1).

Figure 1-1. Maternal Mortality in Armenia



Source: TransMonee 2005: Data, Indicators and Features on the Situation of Children in CEE/CIS and Baltic States, Innocenti Research Center, UNICEF <http://www.unicef-icdc.org/resources/transmonee.html>, Social-economic situation in RA, 2006, NSS, p. 135

In Armenia young children are vaccinated against the main infectious diseases. During 1989-2004 the DTP (Diphtheria, Tetanus, and Pertussis) vaccination rate among children under two years increased from 83.7 to 93.5 percent, polio vaccination increased from 90.3 to 93.8 percent, measles vaccination from 91.9 to 93.0 percent and TB vaccination from 82.6 to 95.8 percent¹⁰.

Despite of the GOA efforts and implementation of many state health target programs, some indicators characterizing the health status of Armenian population are far from satisfactory. Indicators of morbidity due to some transmissible diseases have particularly increased. During 1990-2005, morbidity due to active tuberculosis increased from 85.5 to 200.5 per 100,000 inhabitants¹¹. The increase in the number of HIV-infected individuals is also significant¹². During 1998-2005, the number of HIV-positive persons increased almost 13 fold and was

¹⁰ See TransMonee 2005: Data, Indicators and Features on the Situation of Children in CEE/CIS and Baltic States, Innocenti Research Center, UNICEF <http://www.unicef-icdc.org/resources/transmonee.html>

¹¹ RA MOH "Official statistical bulletin", 2005, page 51

¹² According to RA NSS data from the beginning of 1988 up to August 31, 2005 356 HIV carriers have been registered in Armenia, from which 337 are citizens of Armenia. 78% of HIV carriers are men, 22% are women, 1.8% are children. The majority of HIV carriers belong to the 20-39 age group. From January 1 to August 31, 2005 52 new HIV carriers were registered in Armenia, from which 49 were citizens of Armenia., "Republic of Armenia", September 10, 2005, N 163 (3779)

estimated at the rate of 2.33 per 100,000 inhabitants in 2005¹³. Partially this is due to better diagnostics, but primarily due to spread of the virus. In general, the increase in the number of patients suffering from tuberculosis, diabetes, acute heart-attack of myocardium, as well as malignant formations continues to be a serious public health problem in Armenia.

1.1. Access to healthcare in Armenia

The main reason for worsening of some health indicators in Armenia is, perhaps, the reduction of access to quality health care. The number of home deliveries without skilled attendants after increasing steadily to almost 9.0% has dropped recently to 2.2%¹⁴. In general, the rural population has had a difficult situation in having their health needs addressed. The *National Human Development Survey*¹⁵ clearly mentions that “the highest priority need of households is health care both in general, and by rural-urban-Yerevan categories... and the need for health care is more critical in rural areas”. In general, users of healthcare services view the inability to ensure good health status as the main problem (see Table 1-4) in meeting their healthcare needs. In Armenia, good health maintenance is a serious problem even for 56.1 percent of the richest quintile households.

Table 1- 4. Inability to ensure good health is a major concern for health care consumers in Armenia

	Poorest quintile	2 nd	3 rd	Richest quintile
Cannot ensure good health				
- Main issue	64.8	61.6	65.1	56.1
- Not a main issue	35.2	38.4	34.9	43.9

Source: Social Snapshot and Poverty in Armenia, 2004, page 115

Note: Users of health care is defined as those households that at least one member received any kind of health treatment during the 12 month period preceding the survey.

Recent two-digit economic growth registered in Armenia has had a limited effect on public expenditures on health. Table 1-5 shows that in 2001 public expenditure on health care was 1.3 percent of GDP and slightly improved by 2005. It also shows that private healthcare spending is 3.5 times higher than public expenditures. However, it is not clear whether private expenditures include only official payments for healthcare services or informal payments as well. It is also necessary to take into account aid provided by international donors and the Armenian Diaspora, i.e. medicine, equipment, supplies, and professional development opportunities for practicing healthcare providers. According to some estimates, humanitarian aid constituted 50.1 percent of health public expenditures in 2000 and 63.3 percent in 2001¹⁶. Table 1-5 shows that cumulative public expenditures and private spending on health comprised 5.85 percent of GDP in 2004.

In Armenia, the proportion of GDP spent by the public sector on health has slightly increased during the recent years. But it remains low, and, for instance, in 2002 the state treasury allotted fewer funds for health than were budgeted¹⁷. Since 2002 following the earlier establishment of the State Health Agency (SHA) and expansion of its activities, the situation with actual GDP spending has improved significantly¹⁸. Nevertheless, Armenia is far from the 5% GDP target for public health spending defined by the WHO as a minimum standard.

¹³ RA MOH "Official statistical bulletin", RA NIH, 2005, p. 45

¹⁴ Armenia Demographic and Health Survey - 2005, Yerevan, 2006, pp. 116-117

¹⁵ Human Poverty and Pro-Poor Policies in Armenia, UNDP, Yerevan, 2005, p. 81 <http://www.undp.am/docs/publications/2005publications/propooreng.pdf>

¹⁶ MTEF 2003-05, p. 92

¹⁷ IBID, p. 87-88

¹⁸ State Health Agency (SHA) is responsible for the implementation of programs funded by the State and included in BBP (Basic Benefit Package). It signed contracts with and supervised the contracted health facilities' performance.

Table 1- 5. Health Indicators for Armenia (1998-2005)

	1998	1999	2000	2001	2002	2003	2004	2005
Public spending on health, % of GDP	1.4	1.4	1.0	1.3	1.2	1.2	1.3	1.4
Public spending on health, % of state budget	6.7	5.8	4.4	6.4	6.0	6.3	7.4	8.2
Private spending on health, % of GDP	N/A	N/A	N/A	N/A	N/A	N/A	4.55	N/A
Number of hospital beds (per 10,000 population)	66.5	62.0	54.7	42.5	43.5	44.2	44.3	44.6
Number of doctors of all specialties (per 10,000 population)	34.3	33.2	32.3	30.3	35.8	36.5	35.4	37.6
Number of mid-level health providers (per 10,000 population)	68.0	64.9	59.5	53.8	59.9	57.2	55.6	56.6
Number of hospitals	179	174	146	142	135	137	140	145
Number of healthcare facilities (outpatient facilities and dispensaries)	497	504	503	460	446	452	448	458

Source: http://www.edrc.am/project.html?cat_id=82, *Social Snapshot and Poverty in Armenia, NSS, 2005*, page 114

Per capita expenditures on healthcare increased significantly over the past six-year period (see Table 1-6). In 1999 public per capita expenditures on health constituted \$8.4, which however was 150 times lower than per capita spending on health in OSCE countries¹⁹. By 2005 per capita public spending on health increased almost two-fold to \$15.3 in Armenia. Nonetheless, it still is on average 167 times lower than per capita spending on health in OSCE countries (2550 USD in 2004)²⁰.

Table 1- 6. Allocations and Per Capita Amounts Spent on Health by the Armenian State Budget

	1999	2000	2001	2002	2003	2004	2005
Public expenditures on health (bln ADM)	13.6	9.8	15.7	16.0	19.6	24.7	31.1
Average dram exchange rate	535.1	539.5	555.1	573.4	578.8	533.5	457.7
Population of Armenia (<i>de facto</i>) (thousands)	3,007.9	3,004.7	3,002.6	3,009.5	3,012.6	3,017.9	3,021.5
Public spending on health per capita (USD)	8.4	6.0	9.4	9.3	11.2	15.3	22.5

Source: MTEF 2003-2005, p. 87, EDRC, http://www.edrc.am/project.html?cat_id=68 and own calculations.

For the purposes of comparison below are presented public expenditures on health in the richest countries of the world (see Table 1-7).

Table 1- 7. Per capita GDP and expenditures on health care in select countries (2005)

	France	Italy	Spain	Great Britain	Canada	USA
Per capita GDP (USD)	28,700	27,700	23,300	29,600	31,500	40,100
Per capita health expenditures (USD)	2,903	2,258	2,258	2,231	3,003	5,635
Health expenditures, GDP %	10.1	8.4	7.7	7.7	9.9	15.0

Source: Democratic SPACE, <http://democraticspace.com/blog/category/canadian-politics/healthcare>

The proportion of the health expenditures in the state budget was reduced from 7.7 percent to 4.0 percent in 1990-2000, but since then the state's allocations for health have been increasing gradually. In 2003 it formed 6.3 percent of the state budget, in 2004 it was 7.4 percent²¹, and by 2006 it was 8.2 percent²². According to the RA MOH 2005-2007 mid-term expenditure

¹⁹ MTEF 2003-2005, p. 87

²⁰ <http://debates.oireachtas.ie/Xml/29/DAL20060704A.PDF>, p. 300

²¹ MTEF 2005-2007, p. 105

²² EDRC, http://www.edrc.am/project.html?cat_id=68

framework plans, the proportion of the state expenditures on health within the state budget will continue to grow. It is envisioned that by 2008 public health expenditures will be 10.6 percent of the state budget²³. Local public expenditures on health constituted only 17.2mln Drams or 0.1 percent of community budgets in Armenia in 2004²⁴.

A comprehensive analysis of selected health data implemented under the terms of the *National Human Development Survey* by UNDP indicates poor access to healthcare services and lack of proper medicine as main health care system issues in Armenia²⁵. According to the findings from the analysis, 34.3% of 6,000 household members interviewed had been sick during the 12 months period preceding the survey and needed health care, but 42.8% of them did not visit a physician (41.6% - urban population, and 44.2% - rural population). More than 97.0% of those who were sick did not see a doctor due to lack of access to healthcare services and almost 90% named lack of financial resources as the main reason for not seeing a doctor. The remote distance from the health facility (geographical access) was a hindering factor for only 1.2 percent of respondents and 3.5 percent of all respondents did not see a doctor due to lack of time²⁶.

Parallel to continuous low level public expenditures in the health sector there was an increase in non-official payments which amplified the high cost of health care services. According to the report *Armenia Reproductive Health System Review: Structure and system inefficiencies that hinder access to care for rural populations*, the most significant obstacle of health system efficiency in Armenia is the tolerance towards non-official payments²⁷. According to the World Bank 2000 study, Armenia is the worst among CIS countries with respect to non-official payments for health care: 91.0 percent of study respondents mentioned that doctors required non-official payments for their services²⁸. According to the World Bank calculations, non-official payments accounted for 10-12% of health facilities income and were 3.5-4.0 times higher than state budget allocations²⁹.

Spending on healthcare among Armenian households continues to constitute the largest proportion of their financial burden. Calculations using Caucasian Research Resources Center (CRRC) Armenia Data Initiative (2004-2005) show that high health-related expenses is a number one reason for taking a loan by a household (See Table 1-9).

Table 1- 9. The Main Reasons for Financial Loans as Reported by Households

	Yerevan		Kotayk	
	HHs with children	HHs without children	HHs with children	HHs without children
Health expenses	24.0	31.3	44.9	32.8
Educational expenses	16.3	8.3	15.1	10.9
Business expenses	10.6	2.1	11.7	9.4
Purchase of apartment/build/repair	6.7	8.3	11.7	9.4
Purchase assets	6.7	8.3	10.2	10.9
Pay back previous debts	3.8	2.1	12.7	9.4

Source: Own calculations on the basis of CRRC 2004-2005 data. Total numbers do not add up to 100% as not all respondents answered the question and there was an opportunity to select several options.

²³ MTEF 2005-2007, p. 105

²⁴ Social-economic situation in the Republic of Armenia in January 2005, RA NSS, 2005, page 53

²⁵ Poverty and Pro-Poor Policies in Armenia, National Human Development Survey (NHDS), UNDP, 2005, p. 26

<http://www.undp.am/docs/publications/2005publications/propooreng.pdf>

²⁶ Human Poverty and Pro-Poor Policies in Armenia, UNDP, 2005, p. 26 <http://www.undp.am/docs/publications/2005publications/propooreng.pdf>

²⁷ A.Pereira, G.Jerbashian, A.Benton, R.Kohler, "Armenian Reproductive Health System Review", Project NOVA, USAID, 2005, p. 4

http://www.nova.am/Publications/Armenian%20Reproductive%20Health%20Sector%20System%20Review_eng.pdf

²⁸ Maureen Lewis, Who is paying for Health Care in Europe and Central Asia? Issues, Trends and Policy Implications, WB, 2000, p. 17

<http://lnweb18.worldbank.org/eca/eca.nsf/0/EE346EC2B3DCCA578525695B006C2F1E?OpenDocument>

²⁹ European Observatory of Health Care Systems - Armenia, 2001, p. 34 <http://www.who.dk/document/e73698.pdf>

1.2. Measures to increase access to healthcare in Armenia

The Government of Armenia plans to allocate 39.4 billion drams to the health sector in 2006, which is estimated at 1.6% of the anticipated GDP. Due to this, the share of public health expenditures in the total state budget will increase by 0.8% compared to the previous year and will make 8.2% of the state budget. The amounts allocated towards this sector in 2006 exceed the adjusted amount of 2005 by 25.5% or by about 8.0 billion Armenian drams³⁰. Public expenditures on primary health care (ambulatory-polyclinic level) will increase by 24.0% or 2.6 billion Armenian drams compared with public expenditures on primary health care in 2005. In the same period the increase by 6.0% will make up in-patient public expenditures 14,785.5 million drams³¹.

Since January 2006 outpatient healthcare services are free to the entire Armenian population. Exceptions are made for the specialized dental care which is free only for socially-vulnerable population, adults over 65 years old and children under 8. It is also envisioned to increase average monthly salary of physicians to 58,400 drams vs. 46,800 drams in 2005 and the salary of med-level healthcare providers – up to 37,400 drams vs. 29,900 drams in 2005³². According to Mid-term Expenditure Framework 2006-2008, it is envisaged to increase the state health expenditures up to 2.06 percent of GDP by 2008.

³⁰ "Simplified state budget of 2006 health sector", "Budget analysis" program, Economic Development Research Center" NGO, Yerevan, 2005, pp. 5, 17, http://www.edrc.am/user_files/266.pdf

³¹ MTEF 2006-2008, pp.103-104

³² Since 2006, in Kazakhstan the salary of a high category doctor is 75000 tenge (about USD 650) and the salary of a high category nurse is 45000 tenge (about USD390). See <http://www.pharmnews.kz/cgi-bin/news/>

CHAPTER 2. Health Posts in the USSR – AN HISTORICAL OVERVIEW

Under the terms of the former Soviet Union healthcare system, primary healthcare was implemented by the district attachment principle and the Rural Health District (RHD) served the rural population in a predefined catchment area.

2.1. Rural health districts in the former Soviet healthcare system

The RHD included a network of medical facilities and institutions providing health and health related services and played a primary role in the provision of healthcare services to the rural population. The district hospital or ambulatory, health post(s), feldsher health posts of industrial enterprises, medical seasonal and permanent day-nurseries and kindergartens and milk kitchens comprised the building blocks of the RHDs³³.

The main tasks of the health district were: provision of medical-preventive services to the attached population; organization and implementation of preventive activities targeted at the reduction of morbidity and trauma, disability and mortality; improvement of mother and child health care; organization of dispensary control of the population (focusing on children), adolescents, women, as well as people suffering from cardio-vascular, oncological and other diseases; implementation of anti-epidemiological activities; organization and implementation of hygienic education of the population; and advocacy for a healthy lifestyle.

The size of the rural health district depended on the number and density of the population, and conditions of roads and service areas. Rural health districts having a population of five to seven thousand with a service coverage area of 7-10 km were considered optimal. But, the actual territory and size of population were not equally distributed in different administrative regions. The number of villages served by the rural health district also differed depending on the distribution of population, and development of the road network.

The rural health district played a great role in the provision of primary health care services. Pre-medical aid was provided by the medium-level health provider of HPs and medical ambulatories. Activities implemented by the local health districts in regards to women's health care were targeted at the early detection of pregnancy; surveillance, registration, and regular control of the pregnant women; treatment of gynecological diseases; provision of legal-social assistance, and counseling on family planning. The HP midwife played a significant role in the surveillance of pregnant women and women in labor, as well as gynecological patients. In case there was no obstetrician-gynecologist (OB/GYN) in the district hospital, medical-consulting and organizational-methodological assistance, as well as surveillance of pregnant women and gynecological patients were provided by the ob/gyn of the central regional hospital.

District hospitals and ambulatories regularly organized admission of patients in the HPs. For the provision of professional health care, narrow specialists of central hospitals periodically visited the rural patients via mobile health care groups, as well as delivered other services on the spot: for example, dental, stomatologic-technical, fluorography, and bacteriologic-laboratory services.

The sanitary-epidemiological service was implemented under the supervision of the regional sanitary-epidemiological station and central hospital. Health providers were responsible for implementing daily control of preschool institutions and schools: services food, industrial and other units, water supply and cleaning organizations, detecting infected patients, informing the sanitary-epidemiological station, and providing vaccinations.

³³ Gavrilov N.I. and Fofanov V.P., Organization of health care services to rural population, Moscow, 1982; Gajiev R.S., Rural health post, M., 1988; Golyachenko A.M. Rural Health Ambulatory, Kiev, 1985; Guidelines of social hygiene and organization of health care under the edition of Yu.P.Lisitsin, v. 2, page 177, Moscow, 1987 <http://medarticle33.moslek.ru/articles/37111.htm>

District doctors and mid-level health staff implemented home visits and emergency health care. Ambulance stations of the central hospital provided ambulance service and the rural drug-stores and drug-store posts organized the provision of medicine to the rural population.

Health providers of district health posts worked according to a joint work plan approved by the Chief Doctor of the region. District health providers submitted regular reports on the activities implemented according to adopted rules. Annual reports of the HPs were submitted to the Chief Doctor of the district hospital and afterwards together with the annual report of the RHD were submitted to the Chief Doctor of the region.

2.2. Health Posts in the Healthcare System of the USSR

The HP, as a part of the RHD, implemented medical-preventive and sanitary-epidemiological activities in a designated rural area. The HP was the primary level facility in the health care system operating in rural areas. As a rule, HPs were located in areas far from district hospitals/policlinics. Health Posts were established in areas having 700 dwellers if there were no other medical-prophylactic facilities within a two km radius. If the area was located within the distance of four km from other health facilities, the HP could be established in a village having 300 dwellers. If the distance was more than six km, the HP could be organized also in case of a smaller population. HPs were under the supervision of the district hospital or ambulatory (if there were no health facilities in the given district, it was under supervision of the central regional hospital).³⁷ The HP received funding from the village Council of National Deputies budget.

HP personnel consisted of a head-feldsher (or midwife having a mid-level medical education), midwife (patronage nurse), as well as a nursing aid. HP staff implemented pre-medical care (within the frames of the skills and responsibilities of mid-level health provider and the midwife) during the ambulatory and home visits, referring the patients to the doctor, and implementing the instructions of the doctor in a timely manner. During agricultural work, HP staff provided health care immediately on the spot.

The district hospital or ambulatory prepared the time-schedule of doctors' visits to HP. The doctors of the district hospital or ambulatory visited the HP on specified days. The HP feldsher or the nurse informed the community about the doctor's visit, beforehand. This gave an opportunity to the population of remote areas to utilize health care services without going to the district hospital. The supervising doctors' visits aimed at checking the HP performance, providing counseling and preliminary diagnosis for patients, and implementing regular control over the quality and timely provision of health care. It was very important for the feldsher to be present during the provision of counseling to the patients by the doctor; this greatly contributed to the increase of feldsher's qualification.

During Soviet times among the most important activities of the HP were pregnancy and delivery care and medical-preventive care for children. HP staff implemented active regular surveillance of infants and patronage control of 1-3 years old children. The HP provided health care to sick children, referred them to the doctor or district/regional hospital, and invited a doctor for home visits, referring the patients to the regional hospital. While visiting the HP, as well as during the visits of healthy children, the doctor checked the patients and the patronage nurse performance. Another important duty of HP health providers was the provision of health care to preschool institutions which did not have health providers.

HP staff actively participated in the dispensary care of the rural population, implementing regular surveillance of the population of the attached area. HP health staff examined patients for referral, prepared the card-file of dispensary registration, treated the patients according to the instructions of the doctor, invited the patients for regular examination and implemented preventive activities, and observed work and home conditions of the dispensary patients.

HP health providers implemented broad-scale sanitary-epidemiological activities. They detected infected patients through regular visits. HP health staff was obliged to invite a doctor

when they had infected patients. For each case of infectious disease the feldsher prepared an urgent notification, sending a copy to the sanitary-epidemiological station, and another one to the district hospital. In case of diagnosing acute infectious disease, the patient was immediately referred to the hospital. Before the hospitalization of the patient, HP health providers implemented epidemiological activities and final disinfection of the infectious area was performed by the district hospital or sanitary-epidemiological station.

HP health providers maintained sanitary control in the inhabited areas, water supply system, production and utility sites, schools and other institutions for children, as well as in enterprises of production, maintenance, and use of chemicals. The HP notified the regional sanitary-epidemiological station authorities when there was non-proper maintenance of sanitary norms and unsatisfactory sanitary situation in the above-noted institutions.

The HP staff, under the supervision of the doctor, participated in the analysis of morbidity and trauma, and planned measures for their reduction. The HP staff was responsible for the organization of sanitary units in production sites. They actively participated in the activities of local Red Cross offices. One of the most important objectives of the HP was advocacy for a healthy lifestyle. The feldsher together with the community leader prepared an annual plan of health activities, which besides including preventive measures envisaged improvement of the community territory, water supply, sanitary conditions of industrial units and institutions. These plans were approved by the community leader.

The feldsher having a professional specialization could work as a medical-physical exercise instructor, X-ray laboratory technician or clinical laboratory assistant, masseur, etc. In case of good medical-preventive and sanitary-epidemiological performance, the feldsher could undergo attestation (certification) by his/her specialization after working not less than five years, of which three years were in the same health care facility. For the purposes of attestation (certification), a consistent increase of qualification through special trainings and presentations at conferences and seminars for mid-level health care providers was also taken into account. The feldsher who passed the attestation successfully received a first or second level of qualification and a significant supplement to the salary. First level of qualification was given to the feldsher in case of having not less than eight years of relevant service. The feldsher was obliged to improve his or her professional skills and knowledge, regularly read medical literature and study the modern achievements of medical science and practice. The feldsher could be sent by the head of the health facility (to which the HP was attached to) to training courses for advanced professional development and specialization. Depending on the proposed specialization, the duration of training courses was from one to six months. The large health facilities, marz, urban and regional hospitals having general clinical departments, scientific-research institutions, institutions of professional development of medium health providers and pharmacists, and/or medical-sanitary units or industrial enterprises served as educational-clinical sites.

The feldsher's work-day duration was defined according to the work complexity, workload, and work conditions. It could last from four to six hours in case of six working days per week scheme. The duration of HP health providers' vacation also depended on the workload. The feldsher had a supplement to his or her salary in case of having relevant years of service. In the case of working in rural areas, the feldsher was given a free-of-charge apartment with heating and electricity (these privileges were maintained also after retiring if the feldsher had worked in the village for not less than 10 years). The feldsher living in the village in his/her own house had privileges of free-of-charge electricity and heating.

The HP occupied at least three rooms. Many HPs had beds for women in labor, as well as beds in a separate building for the isolation of infected patients, and a separate room for the examination and sanitary cleaning of women in labor. The description of the equipment and supplies required for HP work and the organization of the second level drug stores at HPs is presented in Annex 1.

The HP feldsher working independently under the control of the doctor signed certificates on birth and vaccinations, as well as death certificates, if the patient had been examined and treated on the spot. The feldsher had the authority to issue medical histories and the right to prescribe medicine in quantities not exceeding the maximum doses of one time use defined by the Ministry of Health of the USSR. These documents and receipts would have been signed by the feldsher, whose position would have been mentioned on the certificates, which in addition should have the HP or the supervising health facility stamp. The HP carried out its documentation and prepared statistical reports which were submitted to the district hospital (ambulatory or polyclinic) in pre-defined terms. The HP medical staff actively participated in conferences organized for the health providers of district and regional hospitals.

In the early 1960s, narrow specialization was introduced in policlinics in the result of which district therapists became “dispatchers” referring the patients to the narrow specialists³⁴. One of the weaknesses of the former USSR health system was the weak link between the polyclinics and hospitals, primary and specialized health care. Although the structure of the health system assisted in the strengthening of these links, they were lacking in reality. Ambulatory health care in the polyclinic and treatment of the patients in the hospital existed independently. This means that treatment of the patient who was referred from the polyclinic to the hospital and then discharged from the hospital to be under the supervision of the district therapists or narrow specialist, very often was inconsistent. Quite often the doctors of different health facilities referred the patients wrongly and repeated each other because of uncoordinated work. Finally, instead of the primary health care providers, narrow specialists were implementing surveillance of the patients, which hampered the efficiency of the system³⁵.

³⁴ “Have you called a doctor? First family doctors appeared in the village”, “Trud” newspaper, No 004, 13.01.2004, <http://www1.trud.ru/Arhiv/2004/01/13/200401130040503.htm>

³⁵ E. Tragakes and S. Lesoff, Health systems in transition period, European observatory on health systems, 2003, p. 119

CHAPTER 3. ECONOMIC PECULIARITIES OF HEALTH SYSTEMS

Armenia is experiencing lack of access to healthcare, although in 2005 the average number of physicians of all specialties was estimated at 38.2 per 10,000 inhabitants³⁶. The average number of physicians in EU-10 countries is 27.8 per 10,000 inhabitants³⁷. Overall, the Armenian healthcare system is characterized by oversized and overstaffed hospitals with utilization below 50%³⁸, patients self-referring to hospitals, significant differences in the access to healthcare in rural vs. urban areas, and a high level of unmet need for healthcare. In spite of high level of geographical access to healthcare and inclusion of a wide scope of healthcare services in the Basic Benefit Package (BBP) of state guaranteed free of charge healthcare services, 40.3% of sick people do not seek medical services due to financial constraints³⁹, and health indicators are far behind those of the European countries.

There has been an erroneous belief in Armenia in the capability of the healthcare services free market as a mechanism for rational resource allocation. In spite of almost 25% reduction in the size of Armenian population due to immigration and substantial cutback in the number of hospital beds (50.0%) due to the Governmental optimization of the health system in 1995-2005⁴⁰, medical workforce stayed unaffected. An excessive number of physicians in the capital coupled with the improper distribution of physicians across the country (75.8 physicians per 10,000 inhabitants in capital city Yerevan vs. 17.6 elsewhere⁴¹) threaten the viability of public health in Armenia.

Worldwide experience shows that health outcomes do not always correlate with health spending and the number of physicians. The increases in the doctor supply above certain level increases medical fees and does not improve health outcomes⁴². In this chapter we intend to touch upon this phenomenon, as understanding the distinctions of the health economics will allow the Armenian health policy makers to establish equitable and efficient healthcare system in Armenia.

3.1. Demand for healthcare services

From many points of view the market for health care services is similar to the market of other services. It supplies services in response to consumer demand based on health needs. But, the demand of health care services essentially differs from the demand of other goods and services. The first reason for this is that the majority of people do not pay directly for these services; instead, the state budget and/or private insurance companies pay for most of these services⁴³. Consumers of health care services rely on the information received from service providers. In addition, many people think that all people should have the right and opportunity to receive health care services. It is mainly due to these reasons that people use

³⁶ Social Conditions in Armenia, NSS, 2005, http://www.armstat.am/arm/Publications/2006/SOC_05/SOC_05_8.pdf, p.156

³⁷ http://www.euro.who.int/document/e88202_ukraine.pdf, p. 232

³⁸ RA MOH "Official Statistical Bulletin", 2005, p. 137

³⁹ Human Poverty and Pro-Poor Policies in Armenia, UNDP, 2005, p. 26 <http://www.undp.am/docs/publications/2005publications/propooreng.pdf>

⁴⁰ RA MOH "Official Statistical Bulletin", 2005, p. 137

⁴¹ Social Conditions in Armenia, NSS, 2005, http://www.armstat.am/arm/Publications/2006/SOC_05/SOC_05_8.pdf, p. 156 and own calculations

⁴² Bob Carbaugh, Health Care: Why Costs are so High, <http://www.cwu.edu/~carbaugh/Health%20care%20costs.htm>,

Jeff Richardson, Does an Increase in the Doctor Supply Reduce Medical Fees, <http://www.buseco.monash.edu.au/centres/che/pubs/wp145.pdf>

Financing Health Care: Short Term Problems, Long Term Options, <http://www.buseco.monash.edu.au/centres/che/pubs/wp138.pdf>

Funding and Future Options for the Reform of Medicare, <http://www.buseco.monash.edu.au/centres/che/pubs/wp79.pdf>

Reconsidering theories and evidence of supplier induced demand, <http://www.buseco.monash.edu.au/centres/che/pubs/rp13.pdf>

Supply and Demand for Medical Care: Or, Is the Health Care Market Perverse?, <http://www.buseco.monash.edu.au/centres/che/pubs/wp123.pdf>

Alexandra Sidorenko, Stochastic Model of Demand for Medical Care with Endogenous Labour Supply and Health Insurance, <http://rspas.anu.edu.au/economics/publish/papers/wp2001/2001-08%20Sidorenko%20WP.pdf>

⁴³ Here we mean developed countries but in the majority of countries in transition the mandatory (state) or private medical insurance is widespread. In Armenia also private medical insurance is becoming popular.

more healthcare services than is necessary, even though an additional (marginal) health care service does not give an essential additional effect.

Costs and prices of health care services increase mainly because of higher increased rates of health care services demand versus their supply. The price elasticity of demand for medical care is low (or inelastic), which results in health care providers having essential influence on the prices of services⁴⁴. Price inelasticity of health services demand partially explains why the doctors and health facilities are interested in increasing their prices. In the condition of inelasticity of demand, the income of a health provider increases when the service price increases. For example, if price elasticity of demand is 0.2, a 10% increase of health service price will result in only a two percent reduction of the demand and as a result the income of the health care provider will increase.

In addition to price inelasticity of demand, the demand of health care services has significantly increased during the last years. The main reasons for this include:

1. Increasing incomes. Worldwide economists can see a direct link between the income of H/H and expenditures on health care: e.g. a four percent increase of income results in approximately a four percent increase of health service expenditures. Just to mention, during 2000-2005, the incomes of H/Hs have significantly increased in Armenia by some 15.0 percent on the average in a year⁴⁵, thus boosting the spending on health care by some 25.9 percent on the average in a year (see Table 1-6).

2. Population aging. One of the most significant factors influencing the health care and social assistance state programs is the increase in lifespan. Like developed countries, the population aging trends in Armenia are obvious. In 1990, people more than 65 years old were 5.6 percent of the total population, whereas according to 2001 census data their share reached the level of 9.7 percent and 10.2 percent in 2004 (see Table 3-1).

Table 3- 1. RA total population, population more than 65 years old and their percent in the total population (thousand people, %)

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
Total population - <i>de jure</i>	3574.5	3633.3	3463.7	3356.7	3260.3	3248.8	3246.0	3238.2	3232.1	3226.9	3213.0	3212.9	3210.3	3212.2
Above 65	207.5	224.8	232.5	238.6	245.4	257.0	263.6	274.6	282.3	290.6	311.5	307.4	318.5	328.6
Above 65, % in the whole	5.8	6.2	6.7	7.1	7.5	7.9	8.1	8.5	8.7	9.0	9.7	9.6	9.9	10.2

Source: Collection of Demographic Data of Armenia, RA NSS, 2004 and own calculations.

As per the Employment and Social Policy Commission (European Council), in fifteen European Council member countries the ratio of population above 65 to the population from 20 to 64 will double during 2000-2050 and will increase from 26.7% to 53.4%⁴⁶. In this same period, in Armenia, a significant increase of the same indicator will also be registered: from 17.5 % it will grow to 29.0% (see Table 3-2)⁴⁷.

Table 3- 2. Ratio of more than 65 years old to the 20-64 age population in fifteen European countries and in Armenia, 2000-2050 (percent)

	2000	2010	2020	2030	2040	2050
European Union - 15	26.7	29.8	35.1	43.8	52.4	53.4
Armenia	17.5	17.7	18.1	25.9	24.5	29.0

Source: Eurostat and own calculations

⁴⁴ Under the conditions of non-elastic price demand, the price of the service increases together with the income of service provider.

⁴⁵ Statistical Yearbook of Armenia, NSS, 2005, p. 71

⁴⁶ Commission Communication on Modernizing and improving social protection in the European Union, COM (97) 102 adopted on 12 March 1997 http://europa.eu.int/comm/employment_social/social_protection/docs/com102_en.pdf p. 4-5

⁴⁷ A.Jerbashian, G.Jerbashian, "Future of Pension Systems in EU", Armenian Trends, AEPLAC, No Q3/05, pp. 51-54 (Eng.), Yerevan, 2006, p. 52

The change in the observed ratio is predicated on not only the decrease in birthrate, but also by the increase in life expectancy. It is worth mentioning that, in general, life expectancy at older ages increases at higher rates than life expectancy at birth: during the last decade, life expectancy at age 60 will increase by one to two years every 10 years as compared to life expectancy at birth which increases only by 0.5 years⁴⁸.

Along with the aging of the population, the demand for health care services is increasing as elderly people get sick frequently and the illness lasts longer. At the same time, while drafting and implementing health programs it is necessary to pay attention to the fact that 40-50 years ago elderly people were mainly suffering from acute diseases, whereas now, chronic diseases are widespread which require longer health care and a need for additional social assistance.

3. Medical insurance. Medical insurance, private or state, significantly influences the motivation of the insured patients. As they are guaranteed from paying the full cost of health care in case of sickness and injury, insured people have less motivation for limiting the expenses due to accidents or illness. People having medical insurance more often go to the doctor and undergo high cost medical examinations more frequently, thus contributing to the increase of health care services demand and hence giving rise to the growth of the health care prices.

4. Doctors' incentives. Doctors are more informed on health care than their patients and they usually order the types and quantities of medical examinations and prescribe different medical interventions and medicine for treatment. When doctors are paid for each health care service separately, they have clear motivation in addition to the main (essential) medical interventions to prescribe such non-essential diagnostic examinations and interventions. At the same time, such behavior guarantees the doctors from being accused of "careless" treatment or malpractice. To legally protect themselves, doctors prefer to conduct many diagnostic examinations (sometimes not necessary), diagnose complicated diseases, and prescribe more (exaggerated) interventions and expensive medicine.

3.2. Supply of healthcare services

The supply of health care services also essentially differs from the supply of other services. In Armenia, during 2000-2005 the number of doctors of all specialties (including dentists) per 10,000 inhabitants increased from 32.3 to 38.2, despite the substantial cutback (32.9%) of hospital beds in 1998-2005 (see Table 1-5 and Table 3-3). It is worth mentioning that in European countries the number of doctors of all specialties (including dentists) is approximately 28. Unequal distribution of doctors in Yerevan (75.8 physicians per 10,000 inhabitants) and marzes (17.6 physicians per 10,000 inhabitants) make this issue alarming.

Table 3- 3. Saturation of medical workers in Armenia (2000-2005)

	2000	2001	2002	2003	2004	2005
Number of doctors per 10,000 inhabitants	32.3	30.3	35.8	36.5	35.4	38.2

Source: Social Conditions in the RA, RA NSS, p. 156

In general, the increase of the supply of health care services' providers also contributes to the increase of the costs. In the short run, the supply of doctors is price inelastic, as general health education lasts at least six years and another three years to qualify for a narrow specialization. Under the conditions of existing increase of demand, a real increase of health

⁴⁸ Beyond Six Billion: Forecasting the World's Population (2000), Commission on Behavioral and Social Sciences and Education, National Academy Press, Washington D.C., 2000
<http://www.nap.edu/books/0309069904/html/125.html>

care services' supply (which would balance the increase of demand) is possible only in later years which results in increase of prices in the short run.

Another important reason for the growth of the health care prices is the low rate of increase in productivity in the health sphere. Health care is labor intensive and usually it is difficult to increase productivity in the health care system as in other areas of production or services. Technological progress in health care contributes to increasing the quality of health care and creates new opportunities for implementing new types of interventions or examinations. On the other hand, as the number of patients does not increase in conjunction with a greater number of doctors, the patient-doctor ratio drops, thus resulting in the decrease of the doctors' expertise, directly influencing the quality of the health care.

All the above deliberations allow us to conclude that in order to efficiently use scarce financial resources, GOA shall try to regulate the quantity of healthcare workers as well as their distribution across the country.

CHAPTER 4. CURRENT STATE OF HPs IN ARMENIA

Armenia has inherited from the Soviet health system a rich physical network of health institutions, a huge army of medical workers, as well as educational institutions to train medical specialists. The rural HPs play a significant role with respect to anti-epidemiological preventive activities and pre-medical care of the rural population. The GOA adopts health programs aiming at improving the health care in rural areas of Armenia. Recent active assistance of donor organizations targeted at the rehabilitation of primary health care facilities, particularly in rural areas, is remarkable. Nonetheless, there are many factors hindering the provision of quality health care to the rural population. For example, in Armenia per capita indicators are usually calculated not on the basis of the actual resident (*de facto*) population, but, on the basis of the permanent (*de jure*) population⁴⁹. This causes distortions in the valuation of different social-economic and health indicators and, therefore, is considered an obstacle in proper planning/budgeting/funding of health programs.

4.1. Goals and objectives of HPs and the basis of their activities

Main issues considered: What conditions are necessary for operating HP in the community? Is it stated legally when it is necessary to establish an HP (e.g. based on the size of the population)? What criteria (geographical location, number of population, health needs, social-economic conditions) are applied for establishing/closing an HP in a community? According to which regulation is it determined to which health facility the HP should be attached? Is the number of visits important for closing the HP? Does the number of visits play a role in continuing the HP operations?

An HP delivers primary health care in rural areas and its main objective is the provision of accessibility of health care services to the rural population. As a rule, the HPs operate in rural areas that are far from ambulatory-polyclinic health facilities. The HP health providers (working under the supervision of the ambulatory-polyclinic health facility, rural health center, or family doctor) implement medical-prophylactic and sanitary-epidemiological activities in a village(s). In Armenia, almost all rural communities had HPs during Soviet times and the rather abundant network of health facilities covered the whole rural population of the country. Besides, health posts were operating in all the production plants, schools, and kindergartens. A draft "Regulation of the HP Activities" is presented in Annex 2.

The main functions/tasks implemented in the HP are:

- provision of healthcare services in case of injuries, poisoning, emergency, acute, and active stage of chronic diseases;
- full-scale treatment of patients with prescription and instructions of the doctor;
- patronage of children and pregnant women;
- implementation of prophylactic and epidemiological activities targeted at the reduction of morbidity (mainly infectious and parasitic diseases, as well as trauma) under the supervision of the doctor;
- implementation of measures targeted at the reduction of maternal and child mortality;
- promotion of healthy lifestyle.

The following prerequisites are necessary for operating an HP in rural communities:

- satisfactory premises;
- adequate technical refurbishment and supplies of relevant medicine;
- mid-level health care provider.

⁴⁹ RA MOH "Official statistic report", 2004, page 13

The RA legislation does not define a minimal size of population in a community as a condition for establishing an HP. The majority of the currently operating HPs are those created during the Soviet times, some of them serving only 50-70 people (for example, in Syunik Marz). In fact, at present there are no clear criteria for opening or closing an HP. Marzpetaran or Community Mayors Office carries out the decision on opening or closing an HP and attaching those to a ambulatory-policlinic health facility, which usually is done on the basis of the proximity of the village (and the existence and conditions of roads) to the regional hospital or ambulatory/polyclinic. The availability of public transportation is not taken into account when deciding upon the attachment of HPs to a higher level health facility.

State funded health programs aim at increasing access to primary health care services in rural areas and contributing to larger numbers of visits of rural dwellers to ambulatory-polyclinic health facilities. However, there is no fixed minimum number of per capita visits for the continuation of HP activities and the small number of visits has not been a basis for closing an HP. After January 2006, primary health care is free-of-charge for the whole population. However, provision of paid services in the HPs is possible, for example, for 18 years and older persons who are not included in socially vulnerable and special groups, the procedures (IM, IV, etc.) implemented by the HP nurse in home are payable. Price-lists of paid services are submitted preliminary to the HP founder and approved by the Marzpet.

The rural HPs have no independent legal status and are operating as a subdivision of polyclinics, rural medical ambulatories or family doctor's offices to which they are attached to. There are 625 HPs in the Republic of Armenia (see Table 4-1). On average, two HPs are attached to each rural ambulatory.

Table 4- 1. Distribution of the HPs in Armenia (2004)

Marz	Size of rural population	No. of rural settlements	No. of health centers	No. of rural ambulatories	No. of HPs	Size of population served by HPs	Average population size served by HP
Lori	252,295	125	4	22	88	61,019	693
Shirak	69,876	126	7	9	96	69,876	736
Ararat	164,711	97	1	50	44	19,786	450
Kotayk	79,075	62	3	27	33	34,957	1,059
Syunik	145,340	115	6	11	95	28,339	298
Aragatsotn	122,639	115	3	14	95	54,488	574
Armavir	110,244	95	7	43	42	48,239	1,149
Vayots Dzor	50,597	53	3	3	37	24,899	553
Tavush	93,599	63	3	13	42	39,968	952
Gegharkunik	78,605	93	1	25	53	62,705	1,183
Total	1,166,981	950	38	217	625	444,276	711

Source: On the Basis of HPIU Data, 2004

According to the Project NOVA Baseline Assessment (2005) results, there are actually 83 HPs operating in Lori Marz, 98 HPs in Shirak Marz, 31 HPs in Kotayk Marz, 43 HPs in Tavush Marz, and 58 HPs in Gegharkunik Marz. Such a discrepancy between the data from different sources is also an obstacle for the improvement of health care system of Armenia. On average, as per Project NOVA baseline assessments (2005 and 2006), there were 1.47 HPs attached to rural health centers, 1.42 HPs attached to polyclinics and 1.17 HPs attached to rural medical ambulatories in the aforementioned marzes. On average, 2.42 mid-level health care providers work in each of the HPs of these five marzes. In Gegharkunik and Kotayk marzes the average distance of the nearest maternity hospital from a village is 15.4 km and the average distance from the nearest ambulatory health facility (where a doctor works) is 8.9 km.

4.2. Legal status

Main issues considered. Under whose ownership is the HP building or the rooms/offices? Who is responsible for the maintenance of the HP (current repair, capital repair, utility services)? What is the role of local authorities (village mayor, councilor) in management, funding and supervision of the HP? Is it an official responsibility or not? What are the opportunities and mechanisms for the expansion of marz and local authorities' responsibilities for the proper functioning of the HP?

The "Poverty Reduction Strategy Program" (PRSP) and "State Mid-term Expenditure Framework" (MTEF) emphasize the importance of increasing access to quality health care; nonetheless, rural health can be characterized by its deteriorated health facilities, lack of qualified doctors/nurses, and lack of relevant quality and quantity of medical supplies and medicine. Health system optimization programs envisage giving a status of independent legal entity to rural medical ambulatories currently operating under supervisory health facility. On the basis of these ambulatories independent practices of family doctors will be established. Privatization programs have bypassed the HPs that remain exclusively as state (or community) owned health facilities. New optimization programs envisage turning some HPs into rural medical ambulatories (for example, Aygut HP in Gegharkunik Marz). Closing of HPs is not planned by these programs⁵⁰. For ensuring access to primary health care, in some rural areas the communities undertake measures in the direction of establishing HPs by themselves, which in some cases is implemented with support from successful local businessmen, the Armenian Diaspora, and/or international donor organizations.

The role of local governance bodies in the health sphere: According to Article 42 of the RA law On Local Self-Governance; "in the sphere of public health, physical culture, and sports, the Mayor of a Community shall exercise the following mandatory power:

- Organize and manage the activities of health and sport enterprises and organizations under the community's governance.

In this sphere, the Community Mayor shall exercise the following voluntary powers:

- Enhance healthy environment and sanitary protection;
- Assist public health authorities in the conduct of sanitary, prophylactic and anti-epidemic measures."

This means that the Village Mayor's Office has a mandatory obligation to organize and manage only those HPs that are under community's ownership.

According to Article 48 of the same law "The property being in the administrative territory of the community belongs to the community, except the ones being under the ownership of physical and legal entities". By Article 49 the health facilities can be considered the property of the community. Until now, the HPs were mainly considered state organizations. Based on these two Articles of the RA law "On Local Self-Governance" some HPs have become community property. This was done under the condition that the supervising health facilities are almost exclusively state establishments. In this situation it is not clear who is responsible for current and capital repairs of HPs, and who should pay the utility service fees.

With the purpose of increasing the efficiency and quality of HP activities, many village mayors' offices with the participation of non-governmental organizations (in some cases also with the support of international donor organizations) assist in the renovation and refurbishment of HPs. There are a number of village mayor's offices, which define additional remuneration for the HP nurse on the account of the community budget or successful businessmen of the community and/or cover the HP utility expenses. Yet, in the conditions of voluntary responsibilities in the health sphere, assistance to the HP is not considered a mandatory responsibility of local authorities. Many Community Mayors don't pay sufficient

⁵⁰ Health optimization programs of the Government of Armenia mainly relate to the reduction of hospital capacities. Optimization in the health system aims at addressing the lack of financial resources and reducing the capacities that have been underutilized.

attention to community health issues and limit their involvement in supporting the organization of health care in their communities to approving the nurses' timesheets, on the basis of which the supervising health facility calculates and pays the nurses' salary.

4.3. Services provided in the HP

Main issues considered: What health care services (special attention should be paid to RH/MCH services) are provided and/or should be provided in the HP? How is and/or should the referral system be organized in the HP? How is the transportation of the patient organized in emergency cases requiring ambulance service, and who is responsible for it? What kind of health information is collected in the HP and how it is registered and kept? What are the gaps in the chain of data collection, maintenance, and exchange of information? Do the nurses conduct home visits? If yes, how is it registered and who is paying for home visits?

The main tasks of the health posts are:

- provision of primary healthcare services to the catchment area population;
- organization of preventive activities to reduce morbidity, trauma, disability and mortality;
- provision of basic maternal and child healthcare;
- organization of the dispensary;
- implementation of special programs for children, women and individuals suffering from cardio-vascular, oncological and chronic diseases;
- implementation of epidemiological activities;
- organization of health education activities; and
- promotion of healthy lifestyles.

The HP staff provides dispensary care of the rural population and is responsible for the epidemiological surveillance of the population in the attached area. The HP staff examines patients to provide appropriate referrals, handles the card-file of dispensary registration, treats the patients according to the instructions of the doctor, invites the patients for regular examination and implements preventive activities. HP health providers implement broad-scale sanitary-epidemiological activities. They detect infected patients through regular visits. HP staff is obliged to invite a doctor when they have infected patients. According to the Ministerial Order No. 1565-A (as of 12.29.2006) the supervising ambulatories/polyclinics' district catchment area general practitioners are required regularly (once a month) organize admission of patients in the HPs. For the provision of professional health care, narrow specialists of the ambulatory who supervise the HP, shall visit the rural patients twice a year, as well as deliver other services on the spot: for example, dental, stomatologic-technical, fluorography, and bacteriologic-laboratory services. However, hardly there are many rural dwellers fully benefiting from the state-guaranteed free-of-charge healthcare services included in the Basic Benefit Package (BBP). Details on the provided at HPs health care services that shall be available in an HP are presented in Annex 3.

4.4. Human resources

Main issues considered: What medical staff should work in the HP (nurse, midwife, feldsher)? What are the basic education requirements for HP health providers (diploma, certificate, etc.)? What are the requirements with respect to additional professional development education? What are the existing obstacles in the legislative field regulating mid-level medical education? What factors hinder the establishment of the community (HP) nurse institute?

Staffing of HPs and professional requirements for the HP personnel: Medical workforce planning, in Armenia, is implemented partially; in particular there is no normative of the health providers' number corresponding to the envisaged by BBP volumes of the hospital or primary health care. In ambulatory-polyclinic health facilities, especially in HPs, sometimes several nurses share one official nursing position.

In rural health posts the nurses and midwives perform duties corresponding to their general education. In general, each healthcare provider, including nurses and midwives, shall have a diploma from a medical educational institution licensed by RA MOH. Further professional development of medical specialists is mandatory and should be implemented in relevant educational institutions and clinics according to the curriculum and educational programs approved by MOH. However, it should be mentioned that there is lack of legal/normative environment regulating the mid-level medical specialized educational system.

Currently, HPs are mainly staffed by mid-level health providers who passed their education in nursing 20-30 years ago with very few opportunities for professional development. Since 1996, preparation of nurses in state nursing colleges has been implemented according to international standards. In Armenia preparation of mid-level medical specialists is implemented in 11 state and 40 private nursing colleges licensed by the MOH.

According to the Government of Armenia Decree N1936 as of 05.12.2002, "On approving necessary technical and professional qualification requirements and conditions for the provision of health care services in ..., and HPs", each HP shall be staffed by a mid-level health provider (nurse, doctor's assistant, midwife) and a nursing aid. As a rule, only one nursing position is envisaged in an HP and mainly one nurse with mid-professional education works there regardless of the number of population. Unlike the normative defining the size of the population to be served by a district physician or family doctor no normative of the population size is defined for an HP nurse position and one could hardly find an HP where a sanitary works. At the same time, there are cases in the marzes when more than one nurse work in an HP (for example, two nurses work in Kutakan village having only 230 dwellers and six nurses work in Lusakunk village with 1290 population) who share one nursing position. On the other hand, in large rural areas it would not be fair to put all the burden of the provision of health care services to the whole population on the shoulders of one nurse as far as the scope of nurse responsibilities has been substantially enlarged since 2006. So, defining a normative on the size of the population served by one HP nurse is an urgent task.

In case of the HP nurse being on holiday or ill, the nearest HP nurse or any nurse from the supervising ambulatory replaces her. However, according to current regulation no additional payment is provided for the replacing nurse who takes additional workload. In some health facilities that have several HPs attached (for example Dsegh Health Center which has 5 HPs under its supervision) with the purpose of increasing efficiency and quality of health care services, joint visits of HPs are envisaged - a visit to an HP in a month. During these visits, the nurses get acquainted with the activities implemented in the hosting HP. Joint discussions of the problems existing in the hosting HP and development of solutions to overcome the disclosed issues, contribute to the establishment of partnership between the health providers of HPs (being under the same administrative management) develop.

Development of mid-level health personnel in Armenia: According to Clause 10 of the Governmental Decree N1009 as of June 20, 2002, "On reorganization of vocational educational institutions and approving the sample charter for RA state vocational educational institutions", the vocational educational institutions are allowed to implement the following activities: "organization of vocational training/retraining courses, implementation of re-qualification and professional development courses, implementation of educational-production and production activities, and provision of services".

Preparation of health professionals is implemented in the educational institutions licensed by the RA MOH. They are authorized to conduct mid-level professional, higher and post-

graduate medical education. The National Institute of Health (NIH), Yerevan State Medical University (YSMU), three private medical universities⁵¹, 11 state and 19 private medical colleges are engaged in the preparation of different level medical professionals in Armenia.

According to Article 10 of the RA Law on Education⁵² the following educational programs are implemented in the Republic of Armenia:

1. general education (basic and supplementary);
2. professional education (basic and supplementary).

Professional educational programs are targeted at preparing properly qualified specialists through a sequence of basic and professional level educational programs, guaranteeing improvement of skills, expansion of knowledge and increase in qualifications. The main professional educational programs are split into:

1. primary specialization (apprenticeship);
2. medium specialization;
3. higher specialization;
4. post-graduate specialization.

Clause 5 of the Article 10 of the RA Law on Education defines that supplementary education for both basic and professional programs is targeted to satisfy the educational needs and increase the qualifications of the students. According to Armenian legislation “post-graduate education”, in fact, is identified as “supplementary education” about which the RA Law On Licensing does not contain any statements. Thus, it is assumed that any educational institution which has permission (or license) to conduct medical professional education can also deliver “supplementary educational” courses in the sphere permitted by the license. This should alarm the policy/decision makers as the licensed institutions might not have enough capacities to deliver advanced professional development courses (corresponding to the contemporary achievements of medical science and technologies) that require involvement of much higher level clinical sites and highly qualified faculty.

According to Sub-Clause 7, Clause 3, Article 43 of the RA Law On Licensing and GOA Decree N895 as of September 24, 2001 “On Provisions Ensuring the Implementation of the RA Law On Licensing, for the implementation of vocational and higher educational programs the license is provided by the RA Ministry of Health. According to Article 42 of RA Law On Education, state educational institutions and the specialties, as well as medical specialties (programs) of non-state educational institutions should undergo accreditation. State Licensing and Accreditation Agency of the RA Ministry of Education and Science is responsible for the implementation of the accreditation.

None of the private vocational medical institutions (nursing colleges) and vocational medical programs of licensed private higher institutions has passed accreditation. The accreditation, which usually lasts at least two years, of two vocational medical programs that exist in licensed private medical institutions, is not finished yet. The requirements of accreditation are so weak that the accreditation system would hardly implement any function of regulating the system. In addition, there is no requirement for the accreditation of re-training and additional medical educational programs.

Article 3 of the RA Law on Education which defines the main concepts used in the law, mentions only three educational institutions implementing additional education: (1) colleges which implement (basic and *additional*) public educational programs that combine traditional and alternative pedagogical methods; (2) universities implementing higher, post-graduate and additional education in natural and social sciences, science and techniques, different

⁵¹ “Haybusak”, Medical Institute of Traditional Medicine, Medical Institute named after Mehrabyan.

⁵² www.laws.am

directions of culture, organization of fundamental scientific research and education; and (3) educational centers which implement preliminary and additional professional educational programs. Then, Clause 1 of Article 26 (“Additional education”) of this law defines again that additional programs are implemented for the purpose of satisfaction of citizens’ educational needs. In the framework of each level of professional education the main goal of additional education is to increase the professional qualification of the individual. According to Clause 2 of Article 26 additional education is implemented in the educational institutions of general education, professional and additional education.

Thus, post-diploma educational programs focusing on increasing the professional qualification of nurses can be characterized as additional educational programs. As the RA Law on Licensing does not require licensing of educational institutions providing additional education, any organization, which, according to its charter is entitled to implement “additional education”, may deliver “additional educational programs” in any profession including nursing, which is a serious concern with respect to preparing qualified medical specialists⁵³.

Many organizations implement training courses that are not always integrated in “post-diploma medical educational credit system” (approved by RA MOH Decree N417 as of April 23, 2004). Additional modern training programs aimed at developing clinical skills of HP nurses and implemented with the assistance of international organizations also are among those that have not been included in the “credit” system. Armenian “post-diploma medical educational credit system” is based on the provisions of the RA Law on Licensing Articles 13, 14, and 43 defining the conditions for licensing the “implementation of health care services by organizations or individual entrepreneurs” and “drug-store activities”. These licensing rules require regular professional development of health care providers and workers of drug stores. The concepts “continuous education”, “post-diploma education” and “accredited medical educational institution”, as well as “educational credit system” as they were used in the above noted Ministerial Decree were not defined in the laws and normative acts regulating the educational system before 2006 and, hence, were somehow non-legitimate. According to GOA Decree N2307 as of December 22, 2005 “On Introduction of Credit System in the RA Higher Educational System” a European standard credit system will be introduced in the higher educational system including the medical institutions. We believe that, for providing continuous educational opportunities to medical workers it is necessary to make the vocational educational programs relevant to the requirements of the mentioned decree and introduce credit system also in the nursing colleges.

According to the RA MOH Decree N417 as of April 23, 2004, those having mid-level professional medical education should acquire a minimum of 125 credits during every five years of service. Credits should be awarded also to nurses having mid-level professional medical education and successfully finishing training courses (which are approved by the MOH) organized by international organizations, making a special note about it in their “Credit Books”. Meanwhile, mechanisms should be developed for inclusion of the successful pilot medical educational programs implemented by the international organizations into the regular curriculum of medical colleges.

4.5. HP physical infrastructure, technical and medical equipment

Main issues considered: What are the standards for buildings and rooms, availability of water and sanitary toilet, and processing and removal of medical waste? What are the standards for the main medical equipment available at HPs? Is there a plan for its maintenance, current repair, who is responsible and who is paying for it? What kind of medicine, which should be available in the HP, has the State envisaged for the provision of health care services for the rural population? What are the

⁵³ RA scientific-research institute of Curortology and physical medicine also implements “post-graduate” (additional) education – “courses which are organized according to international criteria “one month (100 credit hours), two weeks (200 credit hours) and six weeks (600 credit hours). See <http://medinformnews.com/arm/hayt.htm>

procedures guaranteeing full provision of medicine from supervising health facility to the HP? Who is responsible for the provision of medical supplies? What are the procedures guaranteeing full provision of medical supplies by the supervising health facility to the HP? In which circumstances can the nurses prescribe medicine? What is the procedure of distributing the medicine provided by the State to the patients?

At present in many HPs there are no sufficient conditions for their efficient operation; the deteriorated physical infrastructure, worn out medical equipment and lack of supplies do not correspond to the expanded scope of HP nurse responsibilities. At the same time, according to the draft “The Community (HP) Nurse Job Description” the HP should have enough space to meet the mandatory sanitary-hygienic norms to address the HP objectives. During Soviet times, different level health facilities were established only after meeting specially adopted sanitary norms and rules⁵⁴. The Soviet gigantomanic norms envisaged huge spaces for the HPs which are unrealistic for Armenia nowadays⁵⁵. With the purpose of establishment and renovation of PHC facilities World Bank Health Project implementation Unit (HPIU) has developed construction norms for PHC facilities under which several HPs may operate. Yet, the mentioned norms do not specify construction standards for HPs which makes the work of international donor organizations (significantly supporting the renovation and reconstruction of rural HPs) very difficult.

HP medical equipment and supplies: According to the requirements of the GOA Decree N1936 as of 05.12.2002 shall be equipped as follows:

1. Sphygmomanometer;
2. Phonendoscope;
3. Disposable staples;
4. Tongue blades;
5. Height-meters (for adults and children);
6. Scale (for adults and children);
7. Thermometers;
8. Table for the nurse;
9. Chairs for the nurse and the patients;
10. Examination table for the patients;
11. First Aid kit;
12. Refrigerator (or refrigerator-bag) for keeping vaccines and other medical materials.

The rural nurses are required to perform some activities for which they don't have technical equipment, e.g. according to the standards on “Provision of primary health care in the frames of state order” approved by the RA MOH Decree N1373 as of 27.12.2005, twice a month, the HP nurse conducts blood tests (glucometry) of patients with diabetes. Nonetheless, the Ministerial Decree does not define a clear time-schedule for the provision of HPs with glucometers⁵⁶. Similar observations can also be mentioned in relation to the provision of other health care services. For example, the “trained HP nurses” are authorized

⁵⁴ Except the mentioned *Нієї* (Sanitarnie Normi i Pravila – sanitary norms and rules) in Russian Federation there were also many SumPin on sanitary-hygienic requirements for health facilities.

⁵⁵ The sanitary norms envisaged for the Ukrainian health facilities that were approved in 2001 are analogue to the old Soviet norms, see STATE CONSTRUCTION NORMS OF UKRAINE – HEALTH ORGANIZATIONS 2.2-10-2001, State Committee of construction, architecture and housing policy of Ukraine, Kiev-2001, approved by Gosstroy of Ukraine on January 4, 2001 by Decree № 2 and were entered into force on April 1, 2001 <http://instal.com.ua/tech/kiturami/norms/13.pdf>

⁵⁶ It should be mentioned that Project NOVA took an obligation to provide glucometers to some HPs and has already distributed glucometers to 99 HPs of Tavush, Lori and Shirak marzes. The HP nurses of these facilities were trained on their use.

to provide basic gynecological services, but there are no relevant conditions for the provision of these services.⁵⁷

Provision of medical equipment, supplies, medicine and materials to HPs: According to the RA MOH Decree N1373 as of 27.12.2005, ambulatory-polyclinic health facilities should be provided with the necessary medicine to meet their current needs. The medicine, medical supplies, and materials for all the specialists of primary health care in the framework of fixed per capita amounts is provided on the basis of approved lists. Rural HPs, which operate within the ambulatory-polyclinic health facilities, receive medicine, medical supplies, and materials from the supervisory ambulatory-polyclinic health facility. Provision of medicine to the population on a free-of-charge basis and by privileged conditions is implemented by the district therapist, district pediatrician and family doctor, and for some diseases – the relevant narrow specialist according to the Governmental Decree N396 as of June 8, 1999 “On approving the social groups of population eligible to and the list of diseases giving right to obtaining medicine free-of-charge or by privileged conditions” (by the edition of GOA Decree N 880 as of 27.12.2000) and RA MOH Decree N74 as of January 27, 2005 “On distribution order of medicine free-of-charge and by privileged conditions”. The dwellers of remote villages having the right to receive medicine free-of-charge or buy medicine under privileged conditions are forced to go to the nearest village/town where the drug-store (which has a contract with the health facility supervising the HP) is located. This significantly limits the opportunities of rural dwellers to exercise their rights to receive free-of-charge or buy medicine with privileged conditions.

The head of the supervisory health facility is responsible for supplying medicine and medical supplies to the attached HP and the material responsibility over these items lies with the HP nurse. According to RA MOH Decree N1373 as of December 27, 2005, polyclinics, medical ambulatories and health centers are obliged to provide the population served by the HP with medicine according to the needs identified during the supervising health facility doctor’s supportive visit to the HP. The provision of medicine to the HP is made based on the account of the amounts envisaged for the medicine through per capita financing. Medicine is supplied to the HP nurse who organizes the provision of medicine to the population (RA MOH Decree N1373 as of 27.12.2005). The HP should have stocks of first aid and emergency care medicine, which is provided by the supervisory health facility proportionate to the number of population of the rural community. The director/chief doctor of the supervising health facility is not obliged to submit relevant hand-over on receipt of the medicine by an HP nurse and does not report on this to SHA. This gives an opportunity to some head doctors to abuse the provisions set forth by the Ministerial Decree and provide less medicine than is envisaged (or not provide medicine at all) to rural HPs.

The draft “Community (HP) Nurse Job Description” has provisions allowing the HP nurse to administer medicines from the essential drug list for primary healthcare.. Meanwhile, according to RA MOH Decree N1183 as of 12.12.2005 adopted later, the HP nurse has only a right to distribute the medicine prescribed by the doctor, which means that they are not allowed to administer any medicine. The noted controversy between the provisions of these regulatory documents is a hindering factor for nurse work effectiveness.

4.6. Cost and compensation of healthcare services

Main issues considered: How much does the HP activity cost under different conditions? Who pays the HP operational expenses (utilities, salaries, medical supplies, materials, maintenance, and technical modernization)? Which are the mechanisms guaranteeing the flow of financial resources from the managing health facility to the HP? What are the financial relations between the supervising rural healthcare facility and the health post? Has a costing study ever been conducted at the HP level? How much is the HP health provider’s salary? Are there any opportunities to deliver paid

⁵⁷ According to the criteria of Chapter XX statements of RA MOH Decree N1373 as of 27.12.2005.

services at HP, provided that PHC services are free-of-charge starting from January 2006? If yes, are such services delivered and how are the revenues controlled and managed?

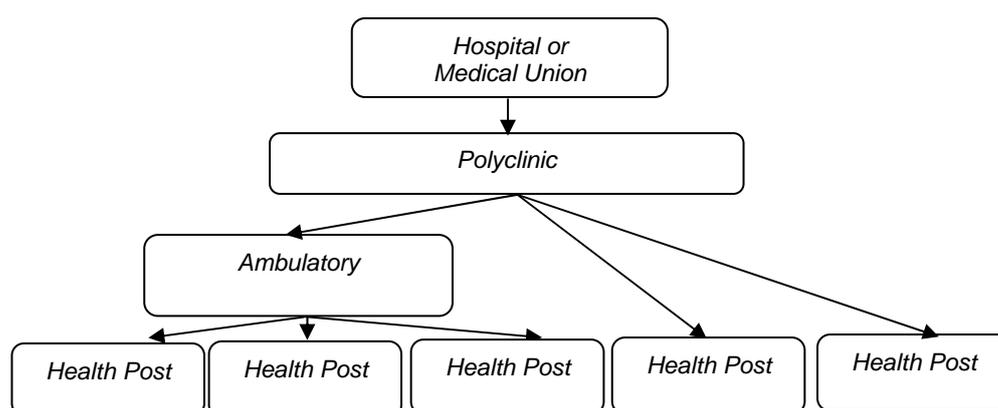
Funding of HPs is implemented according to the volumes of state guaranteed free-of-charge health care. An HP gets finances from the health facility to which it is attached. At the end of each year, next year's budget estimate (incorporating HP budget) is prepared and approved by the director.

Before 2006, narrow specialist consultations and laboratory-diagnostic services were paid services for everybody, except people belonging to socially vulnerable and special groups for whom health care services were free-of-charge. Since 2006, the PHC services, including laboratory-diagnostic examinations, narrow specialization consultations, home visits are free-of-charge for all Armenian citizens. Yet, exceptions exist for special and complicated laboratory-diagnostic examinations (the list is approved by a Ministerial Decree), which are paid for the people not belonging to the groups eligible to free-of-charge health services.

With the purpose of improving the PHC system financing, according to GOA Decree N291 as of February 9, 2006 "On making changes and amendments in GOA Decree N318 as of March 4, 2004", state funding of PHC facilities for January and February will be implemented by advance payment principle within the limits of 1/3 of the quarterly budget. After March the reimbursement will be implemented based on the volumes of reported actual activities within the frames of the contract. At the end of contract period, reconciliation will be made due to actually accepted work volumes.

Very often the marz population directly goes to a state or private hospitals in Yerevan instead of a marz hospital. This practice is exercised especially for the treatment within the framework of the state order. Due to this, the amounts that should have been transferred to the marz health facility and directed towards the rehabilitation of resources and modernization of health facilities in marzes actually go to the specialized health facilities of Yerevan city. In many cases, the patients do so for general diseases treatment which could be easily implemented in marz hospitals⁵⁸.

Financial efficiency of HP activities: When describing the HP current financing mechanisms, special attention shall be paid to the formulation of financial resources directed towards the PHC system and their flow to HPs, which might be implemented according to the scheme presented below:



Despite the stability and increase of state allocated financial resources, the operating financing schemes do not assure provision of PHC to the rural population in the volumes envisaged by the programs of state guaranteed free-of-charge health care services. There are certain objective and subjective reasons for this including:

1. Lack of legal-normative environment and in many cases its imperfectness.

⁵⁸ Human Poverty and Pro-Poor Policies in Armenia, UNDP, Yerevan, 2005, p. 33 <http://www.undp.am/docs/publications/2005publications/propooreng.pdf>

2. Apathy of the local governance bodies and community authorities towards health care issues of the local population.

3. Actual territorial distribution of HPs and unsatisfactory structure of attachments of HPs to the supervising health facilities.

The analysis of the current situation shows that access to PHC is also conditioned by the availability of transportation and telecommunications and the administrative-territorial divisions of the Republic of Armenia. Many remote rural places lack basic health care premises. Yet, in many communities located not far from urban areas, there are health ambulatories having relevant equipment and qualified staff, whereas urban polyclinic services could have been equally accessible for the population of these communities. There are cases when due to the administrative-territorial division the patients living in the catchment areas of rural health ambulatory or HP have to travel a long distance to reach the supervising (regional, marz) polyclinic, while there is much closer higher level health facility which is within other administrative-territorial region or marz.

4. In district polyclinics there is lack of narrow specialists, which by turn requires enlargement of HP nurses functions and solution of certain organizational and financial issues.

Currently, ambulatory-polyclinic health facilities are operating as closed joint stock companies; with all shares belonging to local authorities, i.e. Marzpetarans or the community. On the one hand, this gives an opportunity to implement financial supervision of health facilities and avoid certain misuse of resources. On the other hand, local authorities do not consider anything else concerning health care except financial issues. Many of the state guaranteed free-of-charge primary health care programs are not implemented or are implemented partially, which is attributable not only to the passiveness of local authorities but, also to much serious structural inefficiency. The amounts foreseen for rural medical ambulatories and HPs in many cases are misused for covering the costs of supervising polyclinics which is predicated on the following:

- the budgets of rural medical ambulatories and HPs are not segregated in the contracts signed between SHA and territorial polyclinics;
- budget estimates of the HPs are not separated in the supervising health care facility annual budget estimate;
- nurses of rural medical ambulatories and HPs have limited rights, unclear functions and remuneration rates: the distance from the district polyclinic, poor communication and transportation opportunities, no-regular working day, additional obligations as compared with the nurse of urban polyclinic are not taken into account;
- both general population and nurses are unaware regarding the spectrum of state guaranteed free-of-charge health care services.
- reimbursement mechanisms and the size of allocated financial resources should not be ignored as only through the clear definition of expected work volumes and quality versus the provided amounts it is possible to evaluate the efficiency of state funded health programs.

Cost estimate of HP activities and provided health care services: The WB Health Project Implementation Unit (HPIU) is implementing a costing study of health care services delivered in hospitals and ambulatory-polyclinic health facilities, without including HPs in the study frame. In order to have a cost estimate of provided health care services at and operational costs of rural HPs, the USAID-funded PHCR envisions implementing an independent study, the results of which will give a clear idea on the volume of financial means necessary for the rural HPs to work efficiently.

The salary of the HP nurses is calculated by ambulatory-polyclinic health facility on the basis of the reimbursement standards defined for the med-level health personnel:

Table 4- 2. Per capita compensation for the HP nurses (AMD)

<i>Nursing services</i>	<i>Monthly per capita compensation 2006</i>	<i>Monthly per capita compensation 2007</i>
- for adults < 18 years old	21.9	24.4
- for children	43.8	48.8

The reimbursement of HP nurses in small villages where the total compensation, calculated on the basis of the above matrix, might be less than minimum monthly wages (20,000 drams) defined in Armenia. In order to avoid such situations, the HP nurses of small communities are entitled a minimum salary.

The HP nurse has a right, along with the doctor, to participate in the treatment and care of, for example, gynecological patients. However, the reimbursement for narrow specialization health care and services implemented by HP nurses is not clear, as the HP nurse's salary is calculated on the basis of the above matrix and does not include payment for narrow specialization health care. Reimbursement for these services is envisioned for the nurses on the account of financial means allocated for these health care services (RA MOH Decree N1380 as of 27.12.2005) but, the real mechanisms do not exist for doing so.

Previously, a portion of revenues generated from the services delivered on a paid basis was directed to paying to nurses a bonus; the rest was used for covering HP operational expenses or addressing other HP needs. Since April 2005, all the health facilities delivering paid services are obliged to have cash-machines. Afterwards, the provision of paid services at HPs was ceased due to impossibility of providing all the HPs with these machines.

4.7. Management and control

Main issues considered: How should the HP be managed, in what frequency should the administrative/clinical supervisory visits be conducted, and who should do them? What are the responsibilities of the Chief Doctor of supervisory health facilities or the doctor attached to the HP? How many hours should the HP nurse work? Who is hiring and firing the HP employees? Who should supervise the HP and under what conditions? Under what kind of management do the HPs work more efficiently (under the supervision of the ambulatory or polyclinic)? To whom is the HP nurse reportable? What kind of health information is collected in the HP and how it is registered and kept? What gaps exist in the chain of information collection, maintenance and transfer? Is the rural nurse entitled to giving certificates and what type of certificates is she is authorized to sign? Does she have a register of certificates provided? Is the provision of certificates a paid service? If yes, how much is the service cost? How is it registered? What is this amount used for?

Usually tax/audit inspections by the relevant state agencies are conducted in the health facility supervising the HP and having the status of legal entity. SHA and Marz Finance Departments financial audits also are conducted in the supervising health facility which has contractual relations with the SHA. In addition, the marz center of RA MOH State Hygienic and Epidemiological Center conducts sanitary-epidemiological inspections in all health facilities including HPs. The health facility supervising the HP implements supporting visits and the doctors visit the attached HP to:

- see and examine the patients;
- supervise the nurse's work and give instructions; and
- assess the health needs of the community.

The administrative and clinical supervision of the health post implements the health facility to which the HP is attached. The head of the supervising health facility, therapist, pediatrician, or family doctor visit the HP once a month to see patients, make vaccinations, provide consultations for pregnant women, become familiar with the monthly activities of the nurse, check the accuracy of the submitted reports, check the implementation of the instructions given during the previous visit, give new instructions, learn about the necessary material,

medical supply and medicine needs of the HP. Meetings are conducted with the village mayor, members of village mayor's office and rural population. Their visits are verified by the community mayor via signing the special visits card.

Some experts assume that the management of HPs under the ambulatory is more effective and efficient as this structure is smaller and more easily supervised. The ambulatory is usually closer to the surrounding communities and the ambulatory doctor knows well the catchment area population and their diseases. Supervision of health posts is implemented through the monthly visits (according to preliminary approved schedules) and occasional visits. The community leader also conducts supervisory visits. At the end of the month the village mayor approves the HP nurse's timesheet, which serves as a basis for the calculation and payment of the salary. Evaluation of the HP nurse performance is implemented by PHC specialists from polyclinic, rural health ambulatory, or rural health center who oversees the HP nurse works.

The health post has a separate stamp, which besides the HP name shows the name of the health facility to which the HP is attached. The head of regional polyclinic or ambulatory to which the HP is attached hires and fires the HP nurse. The working hours and obligations of the HP nurse are defined by the supervising health facility according to the RA Labor Code. HP nurses work from 9⁰⁰ to 17⁰⁰. The working day of the HP nurse is not fixed. Sometimes there can be evening and night calls for which separate remuneration is not paid.

In addition to addressing the health issues of rural population, the HP nurse also deals with HP maintenance issues and assurance of relevant working conditions. Meanwhile, there are no statements describing the managerial duties for community (HP) nurse in the "Community (HP) Nurse Job Description". In the former USSR the feldsher carrying the HP head's responsibilities was entitled to an additional compensation. Now, the HP nurses do manage the HP; however, they are not paid for the additional duties that they have as managers.

The HP nurse is responsible for informing the population on the new state funded health programs as well as mother and child social security opportunities. Health active groups (HAG), Non-governmental Organizations (NGOs), the community, Marzpetaran, and international donor organizations can assist the nurse in addressing this issue.

Reporting on HPs: Statistical data on the HP performance is collected according to the provisions of the "Annual medical-statistic reporting form of PHC health facilities". The supervising health facility summarizes information received from all the attached HPs and submits the final aggregate report to relevant state agencies. The report besides the health data (classified according to the ICD-10) contains the following information: number of attached HPs and their names, number of physical persons served by the HPs, and number of annual visits (including home visits). In some HPs recommendations, notes, and remarks on the implementation of doctors' instructions are registered in a "Recommendations book". It is desirable that keeping of a unified register be obligatory for all HPs.

Provision of certificates by the HP nurse: According to Clause 3.1 of MOH Decree N56 as of February 6, 2001 "On approving the order of providing certificate verifying the fact of citizen's death in case of home deaths", mid-level health staff is allowed to fill out the form N106-1 used for the provision of medical certificate of death. However, according to the RA MOH Decree N1207 as of December 16, 2005 "Death certificate can be given only by the head of the district polyclinic based on the results of diagnostic-anatomical dissection implemented by forensic institution". Then, according to the RA MOH Decree N365 as of April 7, 2006 it is allowed to implement dissection of the corpse (who died at home) in diagnostic-anatomical sub-divisions of licensed health facilities". During Soviet times the feldsher working independently was entitled to give birth, vaccination, and death certificates, if the patient had been under the surveillance of and treated in the HP. The feldsher had also a right to give disability papers according to the defined order.

RECOMMENDATIONS

Different health programs adopted by the Government of Armenia emphasize the necessity of increasing access to quality healthcare services, especially when it relates to the provision of PHC services to the rural population. The current study reveals many factors that hinder access to and the provision of quality health care services at rural HPs in Armenia. Below are presented specific recommendations targeted to improve the current situation:

- In order to increase access to the state-guaranteed free primary health care services in rural areas **fully-operational Health Post needs to function in each rural community with more than 300 inhabitants.**
- Currently there are no unified legal requirements regarding the ownership/legal status of Health Posts. HPs are owned by ambulatories, polyclinics, Marzpetarans or Village Mayor's offices. Many key issues arise from the fact that Village Mayor has mandatory obligations to organize and manage Health Posts only if they are property of the Mayor's Office (Article 42 of the RA Law on Local Self-Governance). In order to establish more effective operations of the Health Posts and **unify its legal status we suggest changing the Article 49 of the RA Law on Local Self-Governance stating that all Health Posts located in the villages shall be the property of the Village Mayors' offices.**
- **The Village Mayor's Office and Supervising Facility shall share financial and management responsibility for operating and maintaining Health Posts:** operational expenses of the HP shall be included in the Mayor's Office budget, whereas provision of essential drugs, medical equipment and supplies, as well as salary of the nurse(s) will be a responsibility of the supervising facility coming from the State budget. Such shared financial and management responsibility shall be stipulated by the Armenian legislation. The establishment and maintenance, or closing of HPs shall be the responsibility of the local governance body (Village Mayor's office).
- Inefficiency of Health Post can be partially attributed to the lack of clear definition of the roles and responsibilities of all stakeholders involved in the organization and management of HPs: MOH, Marz Government, Mayor's Office, supervising health facility, HP nurse, and community. Thus, we recommend **to clarify the roles and responsibilities of all parties affiliated with Health Posts.** For example:
 - Maintenance, concurrent and capital repairs of the HP should be supervised and financed by the Village Mayor's Office;
 - Supervising healthcare facility should continue supervising human resources and service provision at the HP, as well as paying for technical security, delivery of healthcare, provision of medical equipment, supplies, and medicine; and health education activities;
 - Service delivery protocols for HP nurses providing services at Health Posts should be developed and approved by the MOH;
 - Individual medical charts (including special charts for pregnant women) for the registration of the assumed diagnosis, provided health care (interventions and prescribed medicine) and referrals and counter-referral should be used by staff at HP under the supervision of the doctor of supervising facility. Presently, USAID-funded PHCR project assists the MOH to develop unified Individual Ambulatory Cards;
 - Create a registry, approved by the director of the supervising facility, for registration of visits;
 - Establish a fee/bonus for the night emergency calls made by HP nurses;
 - The supervising physician should be responsible for the submission of medicine, equipment and supplies requests and transfer paperwork to SHA for each HP.

- In order to **encourage more active participation of local governance bodies** and community authorities in primary health care. We recommend that they:
 - contribute to the development of the community-friendly schedule of visits for supervising physicians and narrow specialists to HPs;
 - become more familiar and promote BBP services within their respective communities;
 - authorize reimbursement of nurses only after review and approval of the reports on delivered state guaranteed free-of-charge health care services in the communities by the representative of community authorities.
- The volume of state guaranteed free-of-charge health care services offered at Health Posts and supervising facilities should be clarified. In particular:
 - while defining contract volumes of regional polyclinics, volumes of medicine should be designated separately for each HP and supervising health facility;
 - differentiate the resources targeted at the remuneration of rural health ambulatory and HP nurses according to the types and volumes of functions and performance;
 - allocate human and financial resources for the provision, maintenance, and repair of furniture and medical equipment separately for rural medical ambulatories/polyclinics and each HP under their supervision;
 - allocate human and/or financial resources in Village Mayor's office for maintenance and operation of Health Posts.
- No Health Post staffing requirements are stipulated in the contracts between health facilities and SHA. As far as the HP nurse works almost independently, the optimal number of the population served by one HP nurse is 700 (200 children and 500 adults) ranging from 500 (200 children and 300 adults) to 1000 (300 children and 700 adults). In case the number of population in the area is more than 1,000, more than one nursing position should be defined for the given HP: for communities with population from 1,000 to 2,000 - 2 positions, 2,000 to 3,000 – 3 positions, and the attached population should be evenly distributed among them.
- The compensation of PHC nurses is implemented on a per capita basis which is the same for all nurses regardless of the place of work (rural/urban area) and the differences in the scope of their responsibilities. As far as the HP nurse's scope of work (SOW) is larger than for the usual PHC nurse's SOW, and the community nurse's workday is non-regular, **we recommend increasing the compensation rate for the HP nurse by at least 20-25%**. We also recommend assigning the responsibility of overall management of the Health Post to the HP nurse (or one of the nurses working in the HP), assign her the position of HP Head and provide a 15-20% supplement to the salary for the additional managerial work. Additionally, the incentive system for nurses working in remote rural areas can assume a salary supplement in case of relevant years of service and/or a higher than urban areas per capita compensation rates.
- For the HP nurse working almost independently it is necessary to develop **a viable referral system to the higher level facilities, including detailed referral and counter-referral protocols for in-patient and out-patient healthcare facilities**. An efficient referral system may prevent inappropriate hospitalizations, reduce treatment time and cost to the healthcare system, increase patient satisfaction and strengthen the feedback/link between the mentioned health facilities.
- In order to increase quality of healthcare offered at Health Posts, it is instrumental to have **national standards of care developed and introduced** at healthcare facilities through performance-based training courses **coupled with supportive supervisory visits by physicians** at least twice a month. Funds need to be made available by the Ministry of Health to support institutionalization of national standards of care (guidelines,

recommendations, protocols, and so forth.) and to cover transportation expenses of visiting supervisors.

- Develop national first aid service delivery protocol for HP nurses supported by the inclusion of such services in the state-guaranteed free PHC Basic Benefits Package and revised Job Description for HP nurses.
- There are over 40 private and state medical colleges in Armenia. Despite the requirement of the RA Law on Education (Article 42), at present, no private medical colleges have received accreditation yet. This is partially not taking place because of the natural time lag necessary for the students to finish their basic education and find jobs (a requirement of the accreditation), and weak enforcement of the newly established law. In order to improve basic nursing education, we believe that **stricter conditions should be stipulated for the accreditation of pre-service and continuing medical education institutions**. It shall include, but shall not be limited to, monitoring of the quality of educational programs, physical infrastructure, and technical equipment of educational institution with their clinical facilities by the Licensing and Accreditation Agency of the RA Ministry of Science and Education. To increase the quality of continuing medical education, additional medical educational programs for doctors and nurses shall be licensed by the RA MOH. For the proper implementation of credit system, the complete list of continuing medical educational institutions with the credit granting authority shall be approved by the MOH.
- In order to establish more efficient healthcare system in Armenia **the number of healthcare workers as well as their distribution need to be regulated based on international health economics standards and practices**.
- Existing pre and in-service educational programs of community nurses needs to be revised to include for following subjects:
 - Specifics of working in rural communities;
 - Organizational issues and management of HPs;
 - Medical-social, and psychological aid;
 - Aspects of nursing diagnostics.
- Training programs for community nurses should also include training of nurses in the use of medical equipment and instruments necessary for delivering health care services envisaged by the “Community (HP) Nurse Job Description”. Development of the sanitary norms for HPs should be considered as an urgent requirement for proper operations of HPs. It is necessary **to review the list⁵⁹ of medical equipment necessary for the provision of quality health care services**, as the “retrained nurses” cannot implement some functions (glucometry, some basic gynecological treatments) without special medical equipment and supplies.
- Ministry of Health shall explore the possibility of Health Post nurses dispensing medicine from the list of ready medicine not requiring prescriptions. Taking into account that first aid medicine should be available for the patients all the time, we recommend to **revise the list of essential drugs (not requiring prescription) available at Health Posts in line with given authority to community nurses to prescribe/dispense them with or without consultation with a supervising physician**. Such changes will require additional training courses for the HP nurses to improve their knowledge regarding characteristics and peculiarities of prescriptions of the medicine from the essential drugs list.

⁵⁹ Approved by GOA Decree N 1936 as of 05.12.2002 “On approving technical and professional qualification requirements necessary for provision of health care services in HPs”.

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ANNEXES

Annex 1

GENERAL EQUIPMENT and SUPPLIES

AVAILABLE IN FORMER SOVIET UNION HEALTH POSTS

HPs were refurbished with the equipment necessary for emergency care, mainly for urgent obstetric care. The list of the equipment included medical equipment, medical supplies for the patient's care, medical furniture and instruments, disinfection devices, sanitary stretchers, devices for educational activities (projector, films, demonstration material. etc.), bed clothes, linen and other supplies (per each bed), office furniture, kitchen utensils, dishes, etc. Refurbishment of the HP was implemented from the resources allocated specifically for this purpose by the state budget each year. Involvement of resources from state and cooperative organizations was permitted and encouraged.

The list of medical supplies necessary for emergency care included: syringes with needles and surgical needles, forceps, scissors, scalpels, tracheotomy tubes, spatels, mouth-expanders and tongue-holders, thermometers, sphygmomanometers, percussion hammer, phonendoscope, tourniquet, other special supplies for stomatological care (teeth examining glass, forceps, etc.), otolaryngological instruments (ear funnel, throat and nose glasses, ear instruments, pincet), ophtalmological (eyelid forceps, forehead reflector, elastotonometer, Filatova-Kalfi, etc.), as well as obstetric-gynecological instruments (pelvicometer, obstetric stethoscope, gynecological tube, vaginal speculum, etc.). In addition to these, the HP should have had a set of instruments necessary for patronage nurses, etc. HPs also had medical safes, instrument and bandage tables, medical coaches and screens, heaters for disinfection of instruments, sterile boxes, and anthropometric subjects, medical scales for adults and children and height-meters.

In HPs there were oxygen-respiratory and anesthetic equipment, for example, "AH-8" inhalation device for emergency care, artificial respiration device (manual and mobile), oxygen bag, folding mask for anesthesia, and mouth force out device. For physiotherapeutic interventions the HP was using "Sollux" mobile lamps, mercury-quartz radiants, and standing lamps for obstetric-gynecological procedures. The list of laboratory equipment available in HPs included: magnifier, mélanges, microscope, device for determination of erythrocyte speed, urometer, haemometer, camera of blood registration, clocks, scarificators, test tubes, glasses, staves, etc. There were necessary devices for the care after the patient in each HP – medical bowls, eye baths, hot water bottles, clysters, milk-suckers, protective glasses, medical gloves, eye pipettes, soothers, bowls (kidney-like), water thermometers, as well as scissors for cutting hair and razors.

Aiming at increasing the access to medicine and drugs, bandage and other medical goods, a second level drug-store was established at each HP. The drug-store was headed by the HP feldsher or other person (having vocational medical education) appointed to that position by the Chief Doctor of the regional central hospital or head of central drug-store.⁶⁰ Material responsibility of medicine and other supplies of second level drug-stores at HPs were given to the feldsher and were fixed by the contract with the supervising drug-store which provided medicine and medical supplies to the HP drug-store. The medicine and medical supplies were stored in a special safe. The list of emergency health care medicine was determined by the local conditions and approved by the Chief Doctor of the central regional or the district hospital.

The Chief Doctor of the central regional hospital decided upon the drug-store location, organization of work and provision of medicine to the HP drug-store, in agreement with the

⁶⁰ V.P.Lapin, Brief Medical Encyclopedia, "Soviet Encyclopedia", Edition 2, 1989, Moscow. <http://www.golkom.ru/kme/01/1-113-3-1.html>

head of the regional central drug-store. The supervising drug-store to which the second level drug-store (kiosk) was attached, provided the catchment area population with medicine not requiring a prescription, other treatment means, as well as educational and information material. In addition, second level drug-stores were provided by treatment means containing poisoning and strong influencing ingredients, according to the list approved by the Ministry of Health of the USSR as of February 25, 1982.

For the organization of second level drug-stores at the HPs, according to the standards of №1, I-69-78, it was envisaged 14m² space for the kiosk and 6m² for the medicine warehouse. There should have been shelves, which had simple and mobile drawers for the storage of medicine and medical treatment materials, as well as one to two show-windows for the demonstration of their goods. In the HP drug-store there should have been a safe or metallic case for keeping the documents and poisonous substances, as well as a counter for the demonstration and sale of medicine, etc. Medicine and other treatment material were kept according to approved rules. Special attention was paid to the expiration dates of medicine and medical herbs. For the control of ready medicine a special register was kept.

ORDER (Draft) of Health Post Activities

1. A rural health post (HP) is an ambulatory-polyclinic health facility in rural areas and construction and mining sites far from dwelling areas. Opening and closing of HPs is implemented by the local governance body on the basis of a petition from community leader and the responsible person of the regional health care service.

2. The HP is under the management of the community/village mayor's office and the current maintenance and capital repair costs are covered by the community budget.

Management of the HP healthcare services, provision of the HP with medical supplies, medicine and other material and the supervision is executed by the ambulatory-polyclinic health facility to which the HP is attached.

3. The HP health staff is guided by the current legislation, the current order and the RA MOH decrees, instructions and protocols, as well as orders of the head of supervising health facility.

4. The main objectives of HPs are as follows:

- Provision of pre-medical care in case of injuries, poisoning, emergency cases, and acute and active stage of chronic diseases,
- treatment of the patients by the instruction and prescription of the doctor,
- patronage control of children and pregnant women,
- implementation of prophylactic and anti-epidemiological activities targeted at the reduction of morbidity (mainly infectious and parasitic diseases, as well as traumatism),
- implementation of activities with the purpose of reduction of maternal and infant mortality,
- education and promotion of healthy lifestyle among population.

5. The HP participates in the sanitary control of children's institutions, utility, food, industrial, water supply and other sites, as well as sanitary control of waste removal of the given area.

6. The HP conducts home visits by epidemiological instructions with the purpose of detection of infected patients, the contact persons and patients suspected in carrying an infection.

7. In due order, the HP staff informs the regional sanitary-epidemiological service about the infectious, parasite and professional diseases, poisoning of population and violations of sanitary-hygienic requirements.

8. The HP should have spaces, electricity, heating and communication means corresponding to the sanitary-hygienic requirements and enough to meet the objectives of the given health facility. For the implementation of its responsibilities in extraordinary conditions provision of HP employees with transportation means is implemented on the account of community budget.

9. Functions of drug-store implementing the sale of ready medicaments and other medical supplies can be put on the HP.

10. The HP staff list is approved according to the existing staff norms. The HP activities are managed by the head of the HP.

11. The HP has budget, stamp with its name and a seal.

12. The HP prepares and submits reports on its implemented activities and plans, in due form keeps record of medical documents.

SERVICES PROVIDED AT THE HP

The RA MOH (Decree N 940 as of 14.10.2005) has approved “The Community (Rural HP) Nurse Job Description” which describes in detail the functions of the HP (community) nurse. The HP nurse is a nursing/midwifery specialist with a mid-level professional education who independently implements the following types of activities:

- assess the health needs of the community which forms the basis to arrange priority actions for providing proper health care, including preventive and rehabilitation measures, to the community;
- provide counseling on healthy lifestyles;
- implement and organize home visits and deliver emergency care to patients.

The following health care services should be provided in the HPs:

- plan community primary health improvement activities, demonstrate and implement medical-social, psychological assistance in different situations according to the given job description;
- carry out prevention, diagnosis, and treatment of patients;
- register the covered population, record the changes of its demographic and social structure, register the risk groups citizens in need of home medical-social service, provision of surveillance and health care to them;
- conduct objective and subjective examination of the patients, determine breathing frequency, arterial pressure, temperature, weight, height, as well as pay attention to the general appearance and skin color;
- complete a referral card and necessary documents for further examination, explain the aim of such examination;
- control the medicine treatment regime, process of medicinal nutrition, instruct the patient and his/her family in regard to the prevention of chronic of diseases;
- execute early detection of epidemiological diseases and organize anti-epidemiological activities (in close cooperation with relevant territorial anti-epidemiological service);
- provide pre-medical health care services during acute situations, poisonings, injuries, organize hospitalization of the patients, if necessary;
- organize health care of people suffering from chronic, mental diseases, disability, and old age. Instruct the patient and his/her family in organizing and providing assistance for the patient’s professional and social-psychological rehabilitation activities;
- implement supervisory home visits with the purpose of detecting infectious diseases and contacting people in case of epidemiological situations;
- organize home care and surveillance of patients discharged from a hospital;
- provide psychological assistance to the patient and his/her family to confront stressful situations, chronic diseases and prevention of disability;
- prepare the patient for laboratory examinations prescribed by the doctor, explain the aim of examinations;
- complete the due reporting and medical statistics forms;

- if uncertain about an infectious disease or its detection, provide first pre-medical assistance to the patient, and inform the supervising administration immediately;
- provide vaccinations according to the doctor's instructions; ,
- study and assess living and work conditions of the patients under dispensary control;
- implement the surveillance of adolescent girls and women;
- participate in the sexual education of adolescents, provide education on the principles of safe sexual behavior with the purpose of prevention of STIs and pregnancy of adolescents;
- conduct consultancy on hygiene and healthy lifestyle of adolescents;
- educate adolescents about the physiological and psychological changes during different phases of life, family planning and contraceptive usage issues;
- Detect pregnant women and organize their monitoring:
 - measure their arterial pressure and assess the level of protein in their urine;
 - implement laboratory examinations, external obstetric examination, assessment of pregnancy complications;
 - conduct healthy lifestyle consultancy for the pregnant women;
 - organize and carry out emergency delivery car,
- Implement monitoring of women in labor and infants in home, including
 - consultancy on infant care;
 - care and cleaning of infant umbilicus;
 - take anthropometric measures of the infant;
 - provide consultancy on breastfeeding;
 - disclose and assess danger signs for the women in labor and the infant;
 - clean sutures of postpartum woman's external genitals;
 - provide consultancy on healthy lifestyle to postpartum women.
- Participate (together with the doctor) in the treatment and care of gynecological patients.

In addition to the above-mentioned, the HP nurse is also responsible for the implementation of the following functions:

- organize cleaning of the HP according to the operational instructions;
- organize and implement activities targeted at the disinfection of syringes, instruments and medical supplies;
- prepare necessary gynecological instruments for examination;
- take Pap smear;
- provide counseling on healthy lifestyle and prevention of STIs;
- detect danger signs of cervical and breast pre-cancer diseases, and counseling.
- Implement surveillance of physical, psychological, and mental development of the child in the family. Conduct patronage over the children up to one year of age. Teach the family members the principles of sanitary-hygienic regime and rational nutrition for the child; implement preventive vaccinations according to the calendar plan.

- Organize sanitary-hygienic advocacy activities among the population of the covered area. Provide education on the issues of hygiene, healthy lifestyle, rational nutrition, physical activity and physical exercises to the different sex-age groups of population.
- Provide counseling on the use of contraceptives.
- Teach the population about the provision of first aid for injuries, poisoning, acute situations and accidents. Introduce first-aid methods to community members.
- Complete the necessary referral and examination documents, explain the aim of the prescribed examination⁶¹.

The midwife or re-trained nurse in the HPs are responsible for the following:

- Early detection, registration of pregnant women and referral to ob/gyn.
- Monitoring of the pregnant women according to the ob/gyn schedule (envisaging at least 4 - 8 visits), including
 - Collection of anamnesis and complaints.
 - o Measuring weight and height;
 - o Examining and palpating breasts.
 - Obstetric examination:
 - o Measuring pelvis;
 - o Determining abdomen circumference and fundal height
 - o Listening to the fetus heart beat;
 - Measuring blood pressure on both arms;
 - Measuring the pulse.
- Implementation of preventive activities for pregnancy anemia.
- Implementation of social-psychological assistance.

Advocacy on the following issues:

- Healthy pregnancy
 - Proper nutrition of the pregnant and postpartum women
 - Personal hygiene and hygiene of sexual life
 - Preparation for breastfeeding
 - Postpartum care, patronage home visit during the first postpartum week.
- Referral of the pregnant women to women's consultations (cabinets) in the defined terms for examination by ob/gyn and laboratory tests.
 - In case of pathological disorders of pregnancy, referral of the pregnant woman to the specialized secondary health facility.

⁶¹ GOA Decree N211 as of February 19, 2004, approved the referral order and health care service types delivered by the family doctors of ambulatory-polyclinic health facilities. Annex N17 of the RA MOH Decree N1373 as of 27.12.2005 (which approved "Standards of provision of primary ambulatory-polyclinic health care") "On providing professional consultancy and laboratory examinations in the hospitals, narrow specialization centers and/or polyclinic sub-divisions of medical pyramids", Annex N18 "On organization of in-hospital health care and examination of the patients served by ambulatory-polyclinic health providers", and Annex N19 "On organization of examination and hospital care of children who are under the surveillance of specialized dispensary center" approved the referral forms in PHC level. Annex N 4 of the same decree approved "Mutual cooperation of primary health care (PHC) providers (district therapist, district pediatrician, family doctor) and narrow specialists of polyclinics and hospitals". It contains special statements on the regulation of the referral process. However, for an almost independently working rural HP nurse, there is no order of referral to the ambulatory-polyclinic health facility (for visiting the doctor or taking a laboratory-diagnostic examination) or order of immediate referral to the hospital (even in emergency cases), and of course there is no feedback between these health facilities as it relates to the patient treatment.

g. Implementation of preventive activities for avoiding undesirable pregnancies, pre-cancer and cancer diseases of reproductive organs; advocacy on family planning, STIs, available methods for prevention of neoplasm formation.

h. Registration and reporting according to the defined volumes and terms (RA MOH Decree N 1373 as of 27.12.2005). For record keeping of nurse visits a simplified registration form can be used.

Emergency care in HPs. According to Article 19 of the RA Law “On Health Care and Service to the Population”, ambulatory-polyclinic health facilities are obliged to provide relevant emergency care to each individual regardless of the bases guaranteeing the remuneration for the provided health care, as well as territorial-district coverage of the patient.

According to RA MOH Decree N1373 as of 27.12.2005, marz ambulatory-polyclinic health facilities must implement emergency home care during the daytime and home visits to the population of the catchment areas. The standards of the “Provision of primary (ambulatory-polyclinic) health care” approved by the noted decree do not have statements on whether the HP nurse is entitled to provide emergency care or not. “Community (HP) Nurse Job Description” approved by RA MOH Decree N940 as of 14.10.2005 envisages that the HP nurse has to implement or organize home care and emergency care of patients, as well as organize emergency delivery care.

According to the RA MOH Decree N940 as of 14.10.2005, for the implementation of emergency care and transportation of patients the following organizations provide necessary transportation services:

- health facility to which the HP is attached;
- ambulance service of the given area;
- in some (necessary) cases the community leader⁶².

The mentioned standards do not clarify, who bears the responsibility for calling ambulance service: the HP nurse or the supervising doctor?

In general, the responsibilities of the rural nurses have been expanded without:

- providing training on the peculiarities of working in rural communities and provision of relevant knowledge and skills for working independently in rural communities;
- ensuring relevant working conditions, necessary medical equipment and medical supplies;
- defining the order of medicine prescription by the HP nurse;
- clarifying relevant organizational and managerial frameworks of HP nurse rights and responsibilities.

As a result, many functions envisaged by the “Community (HP) Nurse Job Description” have been left only on paper.

⁶² There is no clear definition of “necessary” cases.