Georgian National Program

For Palliative Care

(Action Plan for 2011 – 2015)

Under the patronage of the First Lady of Georgia –
Sandra E. Roelofs

This document represents the middle-term governmental program for development Palliative Care throughout the country.

The program is discussing the evidence-based clinical, methodological, organizational and financial issues of Palliative care; presenting the plan of step-by-step incorporation of Palliative care into the National Healthcare system - as an un-separated part of continued medical aid.

Here is given the analysis of current level of development of Palliative Care in parallel of officially approved statistical data and results of different special investigations.

The document is prepared by the office of the Coordinator of Palliative Care national Program at the Healthcare and Social Issues Committee at the Parliament of Georgia under the leadership of Prof. Dimitri Kordzaia.

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Palliative Care – New Direction in Healthcare System

Beginning of XXI century showed remarkable increase in global aging, together with rising incidence and prevalence of oncologic diseases, AIDS and chronic progressive illnesses. All these have led to huge numbers of incurable patients, requiring the relevant complex medical and social care due to symptoms and suffering from their illness. A new direction in public health, called Palliative Care, serves to this very aim.

The term “Palliative” derived from the latin word “Pallium”, which means the “mask” or “mantle”. This explanation fits exactly the essence of palliative care – to mantle, mask or alleviate incurable conditions.

In 1970s in the aim of palliative care development, a small group of experts under the aegis of WHO began activities in more than 40 countries, from which the leaders were: Switzerland, USA, UK, Canada, Netherlands, Belgium, France and Australia. Currently, palliative care has its official status, together with legal, methodological, clinical, academic, scientific and organizational standards. In 1996, the term “Palliative Care” was involved in Index Medicus and added to definitions - “End-of-Life Care” (1968) and “Hospice” (1980).

Rapid rise in the incidence of malignancies and cancer prompted WHO to make declaration in 1990 on the need of creating new direction in healthcare system, which developed into the definition of palliative care. According to this definition, palliative care refers to “active, multi-approach care on patients, whose illness is not compliant to treatment any more. It’s primary aims involve pain and other pathologic symptoms relief, together with social, psychological and spiritual support of the patient. Palliative care targets on improving life quality of both patients and their families” (Geneva: World Health Organization, 1990). This definition is completely implicated in the laws of Georgia “On Heathcare System” and “On Medical Activity” for present time.

In the past times, palliative care was attributable to patients, in whom the radical treatment was not any more indicated, and only. Current approaches (WHO, 2002) deem that palliative care must be attributable to any chronic progressive intractable illness. These changes resulted from the realization, that problems arised at terminal stage of life can already be envisaged on the early stages of the disease.

Today, palliative care has been recognized to:

- introduce the philosophy of life and die with dignity;
- supports to active life style of the patient for maximally long period;
- offers assistance to patient's family in the grave period of illness and ensures psychological support to family in bereavement;
- applies the multi- (interdisciplinary) approach to patients and their families, in the aim of alleviating their problems;
- ensures pain relief and other symptoms' control;
- improves the patient's life quality and thus, in some degree, positively influences the course of illness;
- deals with social and legal issues and subjects of medical bioethics.

Therefore, palliative care concentrates on two main tasks: relieving the patient's state throughout the course of the disease (together with radical treatment means) and multi-approach support in the last months, days and hours of life.

End-of-life care has become an independent direction of palliative care (and of medicine, in some countries) presently. The main component of this direction refers to the development of particular philosophy, which encompasses the medical, social, spiritual and psychological support to patients and their families.

The forms of Organization of Palliative Care

There are multiple shapes of palliative care in general. These shapes are distinct in different countries, as this direction follows to independent, specific path of development in each. According to WHO recommendations, all this multiplicity can be divided into two main parts: home-based palliative care and hospital (in-patient) care.

In-patient palliative care units involve so-called independent hospices, oncologic and common profile hospitals, out-patient clinics, also, the palliative care units (wards) at hospital bases of social service system.

Considering the situation that most patients interviewed (more than 80%, including in Georgia) wish to spend their last days and die at home, palliative care is applied mainly in home-based manner.

Need for Education in Palliative Care Principles and Methodology

Unfortunately, the knowledge of most doctors and nurses comprise the dim understanding and sometimes significant gaps on the issues of care of incurable / dying patient. The qualified palliative care obligates the need of specific knowledge and skills in the following directions:

- Planning of end-of-life support to the patient in advance;
- Psychological peculiarities of communication with incurable patients and their families; the way of informing patient on “bad news”, diagnosis and prognosis; dealing with depression, anxiety and delirium;
- Which physiological changes develop at end of life? what measures must be addressed to by doctors, care-givers and families;
- Adequate pain relief according to three-step pain relief scheme provided by WHO and control of other pathologic symptoms, using the latest knowledge of medicine and science;
- Philosophic, ethical and religious issues of dying and eternity;
- Rules and approaches to administration and discontinuation of life-supporting therapy; relevance, indications and contraindications on parenteral feeding and fluid infusion at end-of-life;
- Psychological assistance to family in bereavement (in common or inadequate response to the loss of beloved).

The most essential provision for palliative and hospice care efficacy refers to training of the qualified staff and providing the continuous development in the field. Palliative care itself covers a long period of time, and therefore requires the involvement of adequate numbers of both medical and non-medical staff.

The clear understanding of the substance, role and place of Palliative Care still remains one of the most essential hindrances on the way of its incorporation in National Healthcare System. The latter is particularly prominent in developing countries and those with transitional economy.

The truth of above-mentioned concept was well demonstrated by observation on the process of gradual introduction of Palliative Care healthcare system of Georgia. In peculiar, the inquiry-based study conducted at the initial step of palliative care launching, showed that the irrelevant comprehension of the state significance of palliative care by representatives of governmental

structures, decision-makers and stakeholders are meaningfully impeding the decisions for approval of respective political strategy and financial assignments, necessary for preparation of appropriate human resources, drug availability and the practical implementation of Palliative Care. It appeared that 83% of respondents from above-mentioned categories failed to understand the fair sense and role of palliative care in national healthcare system. The years lasting tradition of tabooing the cancer diagnoses as well as widespread non-argument opioidophobia in Soviet Period also have prevented the right understanding of this issue.

For Better Understanding the Palliative Care Essence

The essence of Palliative Care appeared to be hardly comprehensible for its potential customers – the patients and their family-members. The established traditions of the cancer diagnoses tabooing and opioidophobia, charge-free and conventional, but low-quality and unprofitable medical services (when treatment – and not care – of the advanced patients could prolong during many days without achieving pain control and comfort), led to the poor comprehensibility of real benefit and efficacy of cost-effective palliative care based on individual approach.

Obviously, the initiative of implementation of Palliative Care in any country/society can never be successful without the support of potential consumers on the one hand, healthcare system managers, on the other.

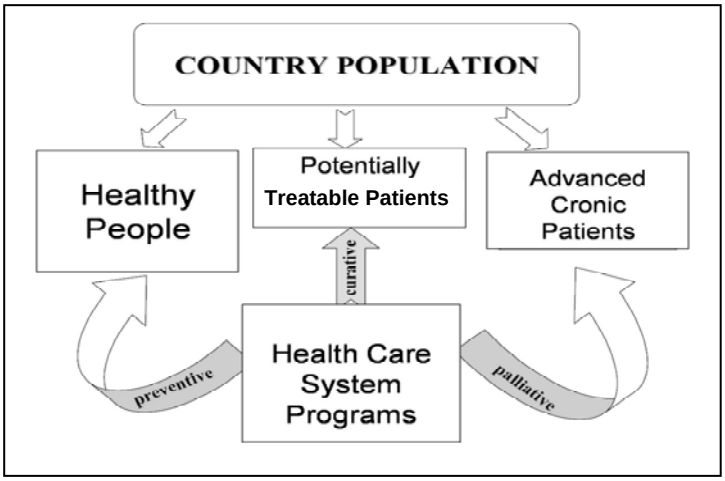
Therefore, supplying the information on palliative care essence and significance in simple and understandable design to both mentioned parties is crucial for obtaining the effective support.

I. "***What the Palliative Care means for Country?!***"

The population of every Country generally can be divided into three main groups: "Healthy People", "Potentially Treatable Patients" and "Advanced Chronic Patients".

Taking into account the above-mentioned groups, evidently, the health care system must also have three principal directions:

- Preventive (aimed at healthy people), intending the maintenance of healthy status and decreasing morbidity;
- Curative (for potentially treatable patients), aimed at the patient convalescence and rehabilitation;
- Palliative (for Advanced Chronic Patients), intending the maintenance of maximally available life quality.

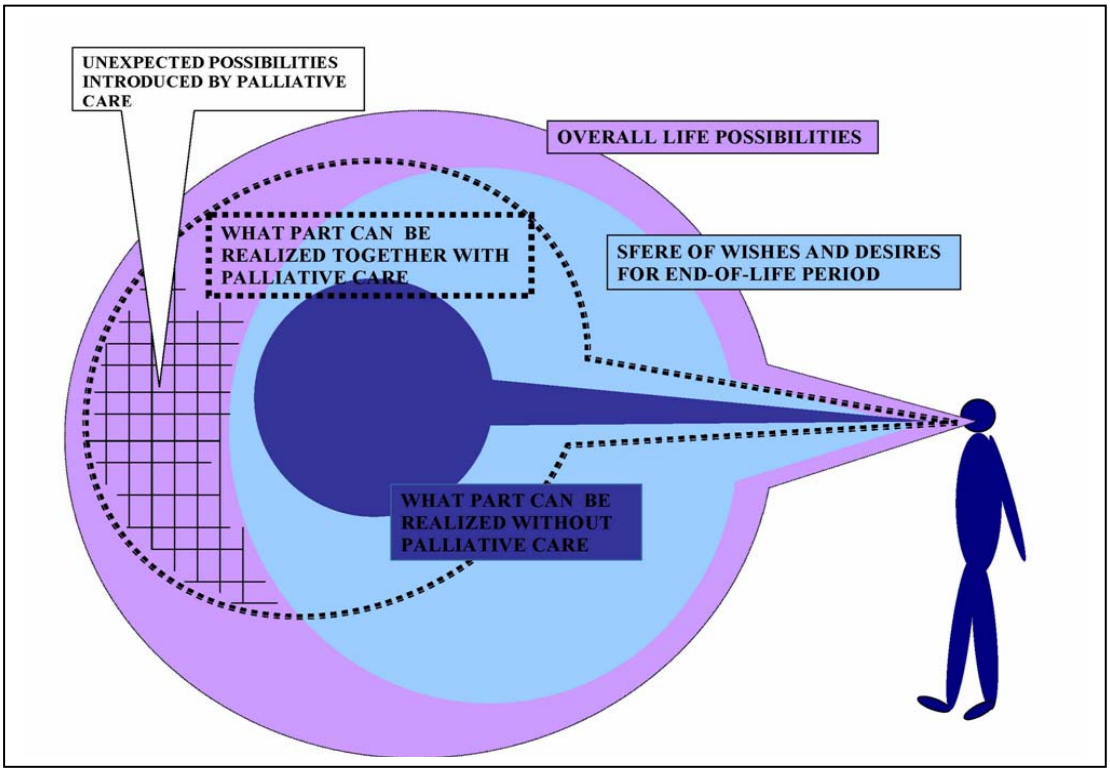


If any of the listed directions is omitted, the health care system can not be considered as perfect, for in this case, the corresponding part of the society becomes deprived of the health care service.

Principally the same outcomes are ensued if any of the listed directions are realized through incorrect strategies and methods: e.g. incorrectly planned and performed preventive programs fail to avoid and/or effectively prevent the development of certain diseases. Similarly, the incorrect palliative care is unable to provide an adequate life quality.

II. *"What the Palliative Care means for advanced patient?!"*

Each of us may have countless wishes and possibilities for their realization through the lifetime. These possibilities are given in a shape of big violet circle on the diagram above („Overall life possibilities").



This circle involves the wishes and possibilities like love, marriage, health, friendship, journeys, sport, art and creativity, safety, comfort, wealth gaining, rest etc...

Obviously, due to the suffering from chronic incurable illness, the circle of wishes and possibilities gets smaller for advanced chronic patients. Willingness to realization of remote plans declines and one concentrates on desires like peaceful family life, rest, safety, comfort and freedom from pain and other complaints. This condition is depicted in the smaller, blue colored circle: „Sphere of Wishes and desires for End-of-Life Period". Unfortunately, not controlled pain and numerous annoying and distressing symptoms make patient refuse to realization of even those limited wishes and, which had been planned for the end-of-life. These severely limited possibilities are depicted in the third, dark blue circle: "What part of desires can be realized without Palliative Care".

Comprehensive Palliative Care is the very tool for relieving pain and different distressing symptoms (nausea, vomiting, cachexia, bedsores and pressure ulcers, constipation or diarrhea, etc) and achieving maximal comfort. It enables the advanced patient to make the rest of his live biologically and socially active, surrounding him by the atmosphere of not only medical but also the social and spiritual support.

Thus, palliative care has been proven to contribute significantly to the widening of the realm of patient's possibilities. This reality is given on the diagram by the circle drawn with the dashed line. There could be nothing surprising in the fact that the limit of possibilities for advanced chronic patients at the end of their lives is wider with palliative care compared to that without the latter, if not given the following circumstance: a dotted area on the diagram with the title – „Unexpected Possibilities Introduced by Palliative Care". It appears, that the comfort provided by comprehensive Palliative Care can be so significant, that possibilities now given to advanced chronic patients become a fascinating surprise they could never imagine to be real.

Concerning the case, I would like to bring as an example, a verse by famous Georgian producer, poet and translator Revaz Tabukashvili – „To my grandsons - Rezo and Bombo" written the day before his death, by the author suffering from incurable illness. The poem became his last will not only to his grandsons, but to entire Georgia. The comfort provided by pain relief and symptom control brought him back the endurance and inspiration of creator once more, and enabled him to light the final days with this masterpiece.

Thus the question: „What does the palliative care give a person?" can be answered with the following two words: „**Unexpected Possibilities".**

We are not allowed to miss a chance to share these unexpected possibilities, even by the end of life, for if we listen to the old Greek byword – „I feel unexpectedness – that means I live".

* * *

Analyzing the huge international experience in the field, the special document on Recommendation Rec (2003) 24 of the Committee of Ministers to member states on the organisation of palliative care was adopted by Council of Europe in 2003, as the management manual for political, healthcare and social concerncs.

Here are some lines from this document, which recommends that the governments of member states are to:

1. adopt policies, legislative and other measures necessary for a coherent and comprehensive national policy framework for palliative care;

2. promote international networking between organisations, research institutions and other agencies that are active in the palliative care field.

3. promote international networking between organisations, research institutions and other agencies that are active in the palliative care field;

4. support an active, targeted dissemination of this recommendation and its explanatory memorandum, where appropriate accompanied by a translation.

For instance, we'll bring an example on three countries:

Spain has developed a palliative care plan, which has been adopted by the interregional council of the national health care system, the Plan Nacional de Cuidados Paliativos; Bases Para Su Desarrollo (18 December 2000). The plan intends to offer palliative care according to need, preferably publicly financed, to encourage the co-ordination of the levels of health care provision, to ensure equity, to stimulate quality, effectiveness and efficiency, and to ensure satisfaction among patients, families and professionals. More specifically, the plan aims to:

- facilitate interdisciplinarity and co-ordination with other (non-health care) sectors involved;
- to direct the attention to the home as the most appropriate place for palliative care;
- to ensure the development of guidelines and standards, and
- to stimulate the education of professionals and families.

With regard to education, the plan distinguishes between a basic, an intermediary, and an advanced level of expertise. The Spanish plan contains an elaborate description of the way it will be evaluated.

In Hungary, the 1997 Health Care Act contains explicit reference to palliative care, which formally entitles patients to symptom management, to live with their relatives; home care should be offered when possible; support for relatives and spiritual support of both family and relatives is specified in the Act. The Hungarian Ministry of Health Care and Hospice-Palliative Association published and distributed professional guidelines.

In Ireland in 1999, to take a last example, the Minister for Health and Children established a National Advisory Committee on Palliative Care, which published an advice encompassing all aspects of palliative care policies, also regarding organisation and financing, in which it was proposed that palliative care should be a separate area of government funding (National Advisory Committee on Palliative Care 2001).

Multiple curative means tested scientifically are available today, for relieving pain as well as number of other symptoms, causing the suffering in patients with both cancer and chronic illnesses, and those at terminal stage of disease (including aged persons and chilren), which are cardiovascular, stroke, AIDS etc. Thus, ignoring the opportunities provided by palliative care to patients of mentioned category and their families for improving their life quality, is just non-ethical.

Pain is one of the most heavy burden in chronic incurable and especially, in cancer patients, where its frequency composes 55-95%. Multicenter studies carried out in USA and France have shown that control of cancer-associated pain is frequently inadequate. Millions of people suffer and have a strong discomfort in their last days due to that reason. Chronic pain resluts in negative psychological, emotional and ecomonic affect on both patients and their families.

There is a simple, scientifically tested way of pain control, cost of which is low enough to provide help to most portion of population. Receiving of palliative care is a common human right. Refusing on palliative care to patients needing this service refer to not only medical and legal, but also an ethical “transgression”. Application of huge knowledge and experience in pain control and palliative care accumulated for present internationally, gives chance to improve the life quality of cancer and chronic terminal patients rapidly and effectively.

Meanwhile, a correct understanding of dying as the natural consequence of life must be established, as well as recognizing that the national, cultural, socio-economic and religious traditions attributed to this phenomenon in society are equally significant to the pure medical care.

Political willingness of the country, professional preparedness of medical staff, education of society, allowance nad availability to needed medication, also, provision of cultural, religious and socio-economic fields refer to the issues, dealing with which would alleviate the life of chronic incurable patients.

Today the world has compiled significant knowledge on how to get free from unnecessary suffering. Contemporary healthcare strategy offers the best approach for evidence-based modern knowledge and skills to become available for any population members.

In the aim of rendering state healthcare systems more effective, the state governments must apply the mentioned strategies on every levels of public health network.

The Need for Palliative Care in General

Globally, there is a very significant unmet need for palliative care:

- Of the 58 million people dying annually (45 million in developing countries, 13 million in developed countries), it is estimated that at least 60% (35 million) will have a prolonged advanced illness and dying and would benefit from palliative care.

- Already, there are 600 million people 60 years of age or older.

- With at least two family members involved in each patient's care, palliative care could improve the quality of life of more than100 million people annually worldwide.

Palliative care is particularly important for patients with cancer and AIDS, as the burden of issues that cause suffering is particularly high for these patients:

- Two-thirds (seven million) of the 10 million new patients with cancer each year are not cured and die within a year of their diagnosis.

- Of those living with cancer, 60% will experience significant pain.

- Already, three million patients die annually from AIDS.

With the rapidly aging world population and the associated increase of multiple ''noncommunicable''diseases, the need for palliative care will increase dramatically over the next 50 years:

- By 2025 there will be 1,200 million people 60 years of age or older; by 2050 the number will increase to 2,000 million.

- The incidence of cancer will more than double to an estimated incidence of 24 million new cancers per year by 2050.

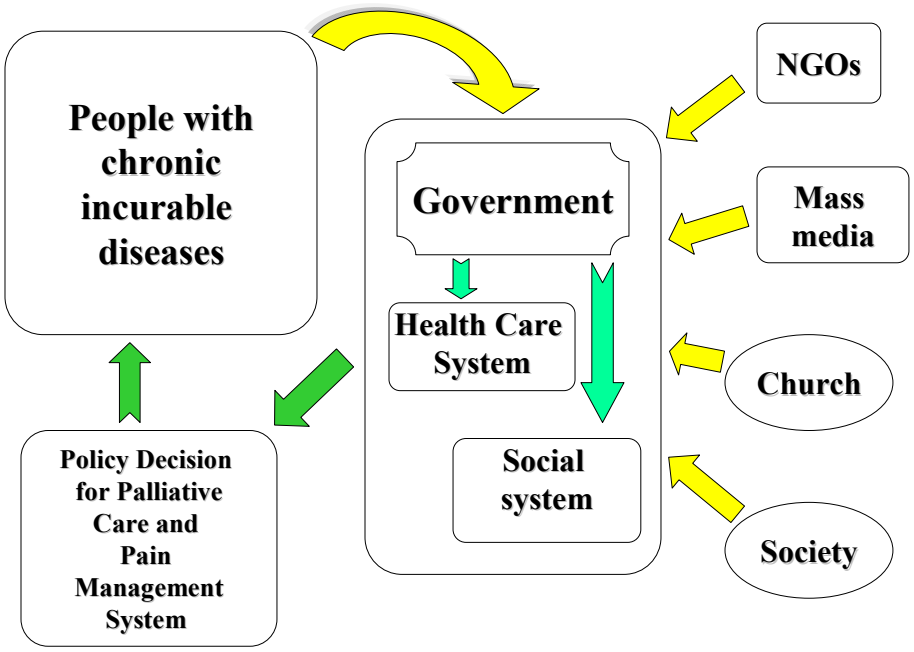
- If preventativemeasures don't work, annual mortality from AIDS will increase to four million in 2015 and six million by 2030.

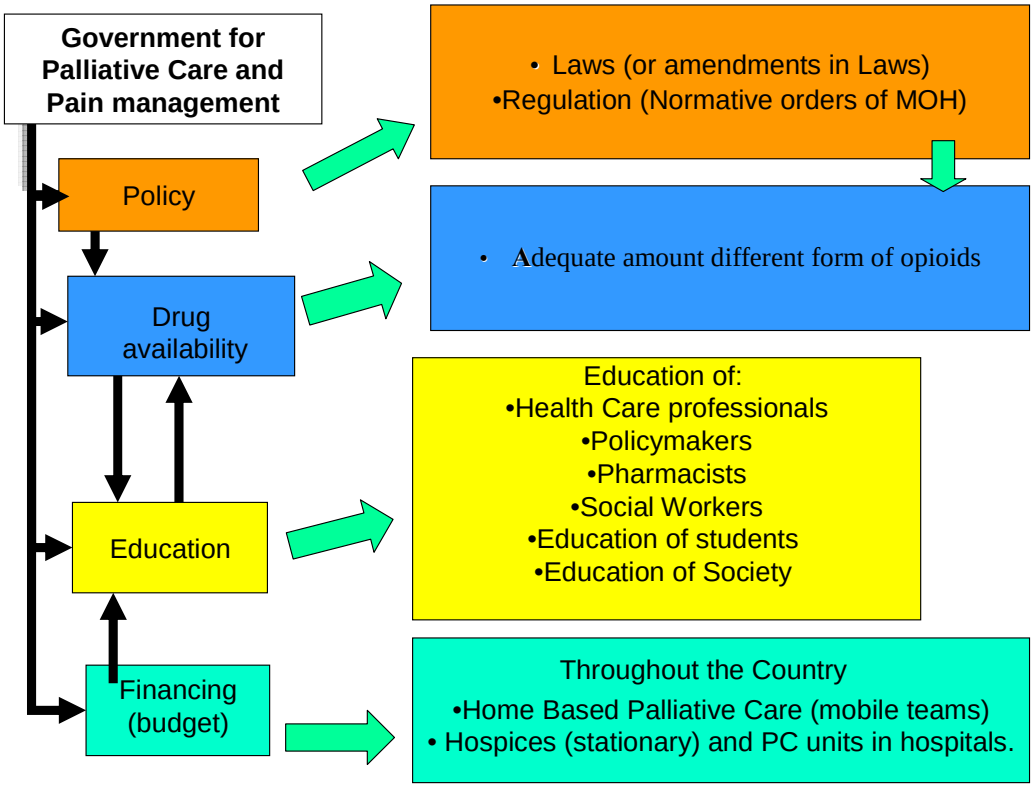
Throughout the world, many patients present late to their health care system with advanced disease. Therapies to control their disease are frequently ineffective, associated with multiple side effects that cause increased suffering and are expensive. For these patients, palliative care, if available, would give the greatest benefit during their limited life expectancy, for the least cost. Even in the developed world, when patients present earlier to the health care system and there is a greater chance that their disease is curable, a comprehensive approach to their care that integrates palliative care throughout their illness experience will provide them with better quality of life.

Unfortunately, although the knowledge and experience to control pain and diminish suffering exist, the tragedy for most of the world's population is that palliative care is not available to them. In fact, the greatest need is in developing countries, where 45 million of the deaths occur and health care resources are the scarcest.

PAIN AS THE CHALLENGE

Palliative care is far incomplete without pain management. Consequently, in such circumstances, the state healthcare system can not be considered flawless, in general. Resolving the pain management problem in palliative care patients depends on multiple factors and includes multiple-directed activities as well (see schemes below):





All decisions and activities shown in above scheme is provided by essential political and methodological backgrounds, including:

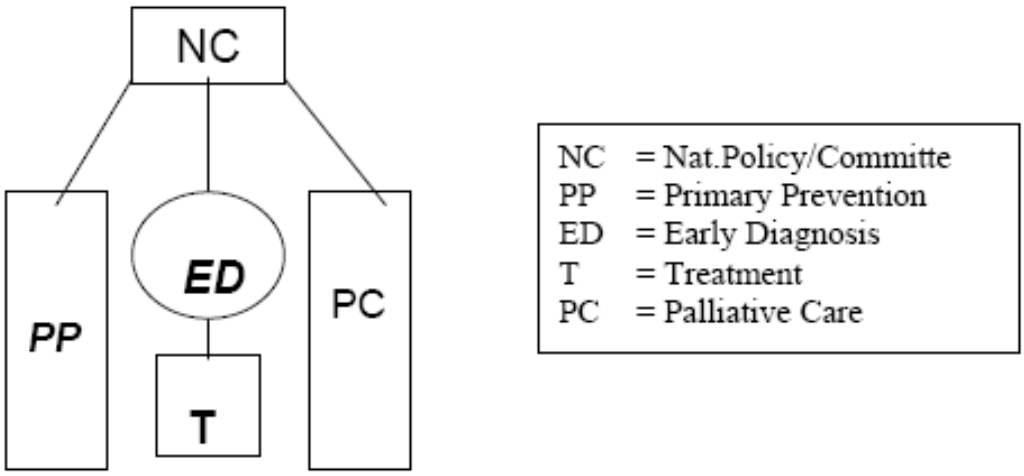
I. Recommendation Rec. (2003) 24 of the Committee of Ministers to member states on the organization of palliative care;

II. Achieving Balance in National Opioids Control Policy: Guidelines for Assessment. World Health Organization, 2000.

The first gives recommendations on political, organizational and human rights concerns in palliative care and pain relief, while the second deals with the medical and healthcare organization subjects.

A WHO PUBLIC HEALTH MODEL

In 1990, the WHO pioneered a Public Health Strategies (PHS) to integrate palliative care into existing health care systems. This included advice and guidelines to governments on priorities and how to implement national palliative care programs and national cancer control programs where palliative care will be one of the four key components (pillars) of comprehensive cancer care:



Herewith the share of different components is distinguished for different cancers, but “Palliative Care” remains in every cases (see the table bellow):

Priorities for the Eight Most Common Cancers Worldwide

	Primary Prevention	Early Detection	Curative Treatment	Palliative Care
Lung	++	−	−	++
Stomach	+	−	−	++
Colorectal	+	+	+	++
Breast	−	++	++	++
Cervix	++	++	++	++
Mouth/ pharynx	++	++	++	++
Esophagus	−	−	−	++
Liver	++	−	−	++

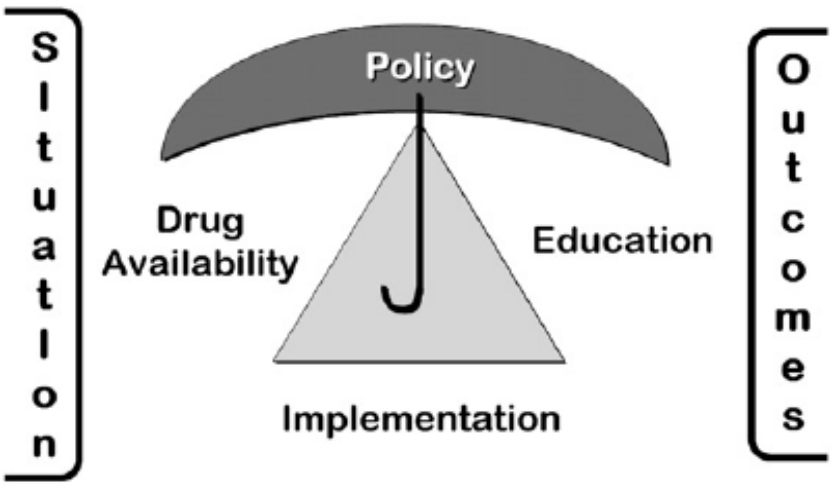
Updated from previously published versions to incorporate available vaccines, etc.[25]
++, effective; +, partly effective; −, ineffective.

In many countries the planning of governmental actions toward development of National Cancer Control Program was (is) conducted in accordance of data given in the presented table.

By the experts of WHO is formulated the strategy of political and organizational decisions to make Palliative care as an un-separated part of National Healthcare system.

Based on the advanced experience of Palliative Care successful implementation, an enhanced Public Health Model for Palliative Care has emerged (see Fig. bellow).

To effectively integrate palliative care into a society and change the experience of patients and families, all four components of the WHO Public Health Model must be addressed. There must be 1) appropriate policies, 2) adequate drug availability, 3) education of health care workers and the public, and 4) implementation of palliative care services at all levels throughout the society.

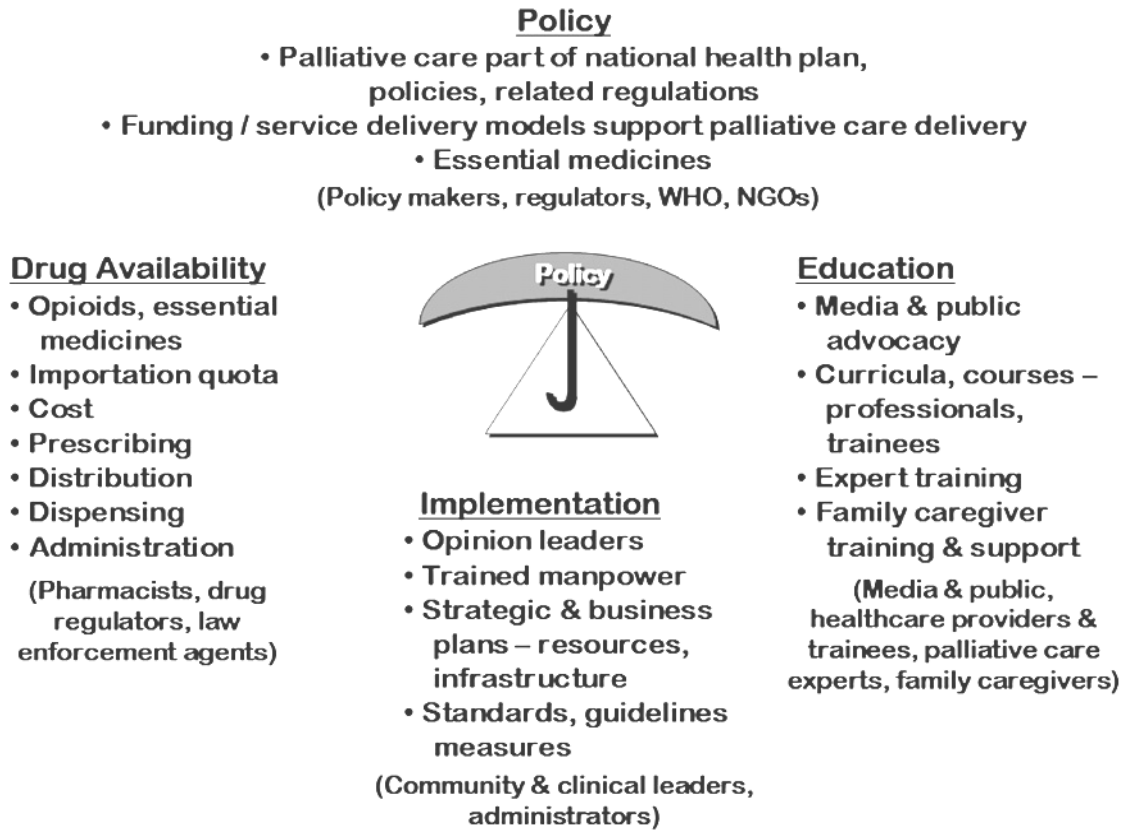


But all these activities always must be realized considering of such kinds of reality as are: national culture, structure of illnesses, demography, social-economical level and health care system model.

According to the modern understanding Palliative care relieves suffering and improves quality of life for both patients and families throughout an illness experience, not just at the end of life. PHS offers the best approach for translating new knowledge and skills into evidence-based, cost-effective interventions that can reach everyone in the population. For PHS to be effective, they must be incorporated by governments into all levels of their health care systems and owned by the community. This strategy will be most effective if it involves the society through collective and social action.

Remarks: b*efore embarking on extensive education and implementation strategies, ensure that policies and drug availability issues are addressed and are in place. These are inextricably linked as it is not realistic to import opioids unless appropriate prescription rules are in place and bedside-training courses can be guaranteed. Do not embark on training without appropriate policies and drug availability. It will only frustrate clinicians, patients and families, and the public.*

The development of all four components of WHO model is presented on the fig. bellow.



Palliative Care International Experts J. Stjernsward, K. Foley and F. Ferris have identified integration measures for Palliative Care into the existing Health Care Systems. For development and incorporation Palliative Care System into the country it is essential:

- To identify relevant institutions
- Permanent analyze of legislation base in order to check if Palliative care and pain management are overviewed as priorities;
- To analyze the available financing and service distribution model for Palliative Care services in the country. (to define the possibility of palliative care services for home based, ambulatory and for inpatient facilities);
- To evaluate the knowledge, work load and payment of the Palliative Care doctors and other professionals involved in PC.

In 1996, the World Health Organization introduced three measures (see Figure bellow) that are required as a foundation for developing palliative care with a public health approach:

1. Government policies that ensure the integration of palliative care services into the structure and financing of the national health care system;
2. Educational programs that provide support for the training of health care professionals, volunteers, and the public;
3. Drug availability supported by appropriate drug control policies and their administration to ensure the availability of essential medicines for the management of pain and other symptoms, in particular, opioid analgesics for pain relief.



Remarks: *In the Policy Recommendations to the Parliament of Georgia Georgia signed by J. Stjernsward and F. Ferris is are written:*

• *Establish Palliative Care as part of the national health plan and integrate it into the Georgia's healthcare system at all levels;*

• *Make generic immediate-release and slow-release Morphine available and develop a rational prescription policy;*
• *Educate doctors, nurses, pharmacists, psychologists and social workers at all levels about Palliative Care.*
http://www.parliament.ge/files/619_8111_657149_progr_en.doc

THE AVAILABILITY OF THE NARCOTIC DRUGS

As it was said above, one of the most important aim of the palliative care is to relieve pain; this can't be achieved without rational national drug policy (regarding opioid analgesics).

Because the opioids have potential for abuse and addiction, they are classified as narcotic drugs and regarded as controlled substances, which are regulated by the "single convention" - the Single Convention on Narcotic Drugs, 1961, as amended by the 1972 Protocol.

The latter establishes a framework to prevent illicit trafficking and abuse (nonmedical use) of opioids *and* ensure their availability for medical purposes throughout the world.

"The Single Convention is the result of the recognition by the United Nations of the fact that the adequate provision of narcotic drugs for medical purposes is

indispensable for the welfare of mankind, as well as of the fact that drug addiction is a worldwide social and economic threat. Therefore, the Single Convention aims to restrict the use of narcotic drugs to medical and scientific purposes and to prevent their diversion and abuse, while at the same time ensuring their availability for legitimate purposes." 17-2 a

All governments should take into account recommendations of "Single Convention", to which 181 countries from 210 became party by 2005 year, including Georgia.

The two international organs that have competence in the international control of narcotic drugs are the Commission on Narcotic Drugs (CND) and the International Narcotics Control Board (INCB). The CND makes recommendations for the implementation of the aims and provisions of the Single Convention.

The International Narcotics Control Board is an independent and quasijudicial control organ for the implementation of the United Nations drug control treaties, established in 1968 by the Single Convention. The INCB works to ensure that adequate supplies of drugs are available for medical and

scientific uses and that diversion from licit sources to illicit traffic does not occur. To this end, the Board administers and estimates system and a statistical returns system for narcotic Drugs. 17 -2 b

The Single Convention on Narcotic Drugs,1961, provides a system of estimates of opioid drug requirements; these Methods are used by INCB for Estimating Opioid Requirements in the following order:

1) **Population – based method**
2) **Service – based method**
3) **Consumption – based method**
4) **Consumption – Growth method/** ***Builds on Consumption-based method/***

- Population – Based Method: Based on epidemiological assessment of diseases and health problems of population;
- Service – Based Method: Based on a country's current capacity of health services, health resources available;
- Consumption – Based Method: Based on past demand for opioids; Developed using an average of the amounts consumed in recent years / Only useful when: reliable information about recent opioid consumption is available; demand for health services has reached a steady state and consumption trends for opioids have been stable/
- In Georgia Estimation of Requirements on Narcotic Drugs is based on Population – Based Method; Procurement and import of required Narcotic Drugs is based on consumption statistics of passed years.

Single Convention on Narcotic Drugs, 1961 declares: "the medical use of narcotic drugs continues to be indispensable for the relief of pain and suffering… adequate provision must be made to ensure the availability of narcotic drugs for such purposes." (*Preamble*, p. 13)

"The Board again urges all Governments concerned to identify impediments in their countries to adequate use of opioid analgesics for the treatment of pain and to take steps to improve the availability of those narcotic drugs for medical purposes, in accordance with the pertinent recommendations of the WHO." (p.20 International Narcotics Control Board, 2007)

To be free from the pain is the fundamental right of the humans and access to the pain medications, as to the essential drugs (according to WHO EMDL) is one from the four core obligations of the Governments defined by the UN Committee on Economical, Social and Cultural Rights.

This right is violated very often, due to whole complexity of the causes associated with the legal use of the opioids and their regulations, lack of education and the stigmatization of the issue in the medical and broad society.

The WHO Expert Committee on Pain relief and Active Supportive Care stated in 1990 that: "Freedom from pain should be overseen as a right of every cancer patient and access to the pain therapy, as a measure to the respect of this right".

Pain & Policy Studies Group (PPSG) refers to a World Health Organization Collaborating Center at the University of Wisconsin Paul P. Carbone Comprehensive Cancer Center in Madison, Wisconson, USA. This group coordinates a program of international policy studies to identify and address barriers to opioid availability in national policy and national health care systems. PPSG provides technical assistance and monitors progress to improve the availability of opioid analgesics for pain management and palliative care.

The mission of the Pain & Policy Studies Group (PPSG) is to promote "balance" in international, national and state pain policies to ensure adequate availability of opioid analgesics for the relief of pain and suffering and their appropriate medical use for patient care while addressing diversion and abuse. The PPSG is part of the University of Wisconsin Paul P. Carbone Comprehensive Cancer Center within the School of Medicine and Public Health, and is designated the World Health Organization (WHO) Collaborating Center for Policy and Communications in Cancer Care. www.painpolicy.wisc.edu/Achieving_Balance/index.html

WHY SPECIAL ATTENTION SHOULD BE PAID TO OPIOID ANALGESICS?

More then 20 years ago WHO demonstrated, that the most of the pain due to cancer can be relieved by the relevant treatment; and that all national governments should implement the methods to relieve the cancer pain.

In 1986, the WHO concluded that most pain due to cancer could be relieved using a simple analgesic method and that every national government should institute a cancer pain relief programme.1 The WHO analgesic method has also been endorsed for relief of pain due to HIV/AIDS.2 The analgesic method depends on the availability of, and patient access to, medicines that can relieve severe pain, such as morphine and other opioids. Recognizing that opioids are controlled strictly as narcotic drugs because of a potential for abuse and drug dependence, WHO recommended that governments (a) evaluate their drug control policies and practices to ensure that patients receive the opioid medications that are necessary for pain relief, and (b) encourage health care workers to report to the appropriate authorities any instance in which oral opioids are not available for cancer patients.

There is a variety of drug and non-drug therapies that are effective to treat pain. However, this course focuses solely on **opioid analgesics** indicated for relieving moderate to severe pain because their availability is regulated by drug abuse control policies. There is a consensus of global

health and drug regulatory authorities including the **World Health Organization** and other United Nations bodies that most moderate to severe pain could be relieved if relatively inexpensive opioid analgesics, including, but not limited to, oral morphine, were adequately available and accessible.

The methods, recommended by WHO, to relieve the cancer pain is also efficient for non - cancer and pain due to HIV. The effectiveness of this method is dependent on the availability and accessibility of the morphine and other opioids in the country.

Opioids - having potential for abuse and consequently diversion potential - as narcotic substances are regulated and controlled very strictly. That's why WHO encourages the governments to overlook the policy regulating narcotic substances and elaborate instructions which will ensure their adequate availability for medical uses including the relief of pain; the WHO as well encourages Health Care Professionals to address relevant governmental bodies, when the opioids, for the medical uses will not be available for the patients.

International Narcotics Control Board is concerned about discordances between the need and the usage of the opioids for pain control,most of the developing countries have high need in opioids and very low consumption rate, while the most developed countries consume the biggest part of opioids.

To improve the situation it is essential that the governments should follow the Single Convention on Narcotic Drugs, 1961, as amended by the 1972 Protocol Amending the Single Convention on Narcotic Drugs, 1961 (Single Convention) There are several provisions that obligate governments, as parties to the Single Convention, to ensure the adequate availability of opioid analgesics for pain management.

Indeed, the fact that opioids are narcotic drugs regulated by governments is why those interested in pain relief and palliative care for HIV/AIDS and cancer must learn about the drug regulatory system and prepare to work with governments.

It is important that the individuals who are obliged in pain control for cancer and HIV patients or are involved in palliative Care should learn well policy regulating the opioid analgesics and must collaborate with the governments to overcome the identified barriers. As the WHO defines: "A palliative care programme cannot exist unless it is based on a rational national drug policy…including regulations that allow ready access of suffering patients to opioids" (WHO, 2002)

The World Health Organization developed a method for evaluating national policy, *Achieving Balance in National Opioids Control Policy: Guidelines for Assessment* (**WHO Guidelines**), which was published in 2000.This document was translated into the Georgian language by the national Palliative care programs coordinators' office.

The WHO Guidelines contain 16 guidelines for assessing the adequacy of national drug control policy and administration, and encourage governments and health care professionals to cooperate in a study process using the guidelines.

The WHO Guidelines are based on the principle of balance, which is fundamental to the Single Convention . This principle asserts that governments' obligation to control narcotic drugs is not only to prevent drug abuse, but also to ensure the availability of opioid analgesics for medical purposes. Controls aimed at preventing drug abuse and diversion must not prevent the adequate availability of opioid analgesics for patients' pain relief. Drug abuse controls that hinder opioid availability and patient access to effective pain care would be considered out of balance and should be identified and corrected:

I. Use of opioid analgesics and any attempts to improve opioid availability and accessibility for the medical purposes, should respond the Public Health Care System, which by itself must work and respond to the patient care demands:

1. the knowledge of the governmental policies regarding opioid analgesics under the governmental control and their distribution system
2. identification of the week sides of the system and restrictions, which are obstacles to opioid availability and accessibility in legal use
3. to prescribe the necessary treatment
4. monitoring treatment results and if there is the need to reestablish the treatment.

II. Government policies that ensure the integration of palliative care services into the structure and financing of the national health care system

III. Educational programs that provide support for the training of health care professionals, volunteers, and the public

IV. Drug availability supported by appropriate drug control policies and their administration to ensure the availability of essential medicines for the management of pain and other symptoms, in particular, opioid analgesics for pain relief

Comments:

For today some aspects of Palliative care components are integrated into Georgian legislation . In April 2007 amendments to four laws supporting development of PC were approved by parliament of Georgia:

- **Law of Healthcare;**
- **Law of medical activity;**
- **Law of patient's right;**

- **Law of concerning the narcotics, psychotropic materials, precursors and narcological aid.**

This amendments to laws help to the development of the Palliative Care and to its' integration in the existing Health Care System. These main amendments are as follows:

Amendments in Law about "Healthcare"

"t" subparagraph of the 3rd article should be stated with the following edition:

"Primary Healthcare – first meeting of the person or family with the Healthcare System; continuous, comprehensive and coordinated and available for any member of the society medical service, based on family medicine system, which contains promotion of health, disease prevention, treatment of diseases and rehabilitation, palliative care, availability of necessary medications"

"t4" subparagraph should be added to the 3rd article with the following edition:

"Palliative Care is active, multidisciplinary care, the main goal of which is relief of pain and other pathological symptoms, social, psychological and spiritual support of the patients. Palliative Care should cover patients with untreatable diseases. Palliative Care should be able to increase quality of life of patients and their family members"

Amendments in Law about "Narcotics, Psychotrophyc substances, precursors and narcological support"

1' point should be added to the 8th article with the following edition:

"The country will provide availability of narcotics and psychotrophyc substances in required amount and form for medical, scientific and other needs allowed by law according to international standards"

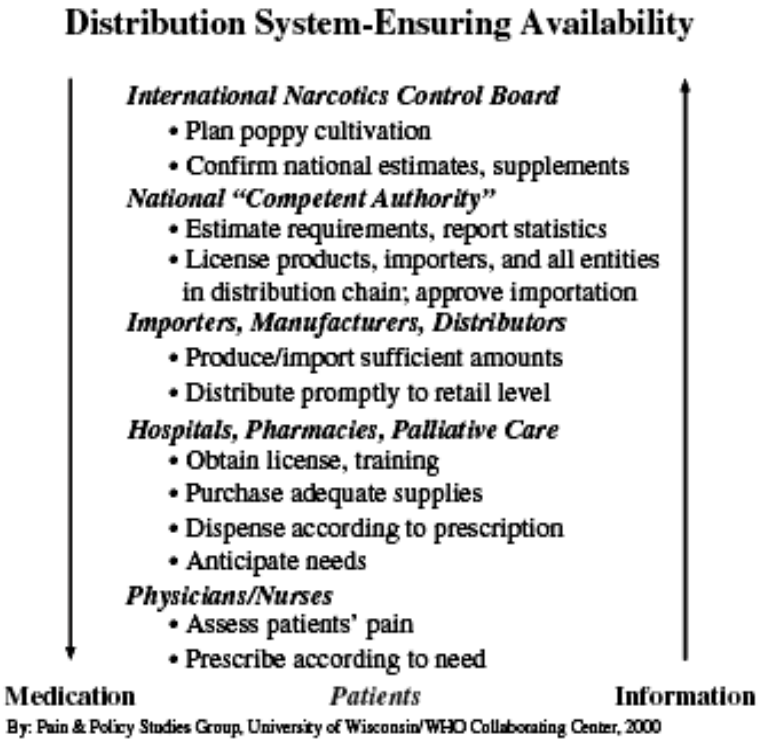
But still some changes are needed on the regulation and normative levels, in aim to implement this changes into practice.

It is acknowledged that the proper functioning of the system is defined by the functional status of the weakest part of it.

It is important to define the impediments to the implementation of the new legislation; what changes should be done in the protocol to ensure opioid availability and accessibility processing.

In 2006 Pain Policy & Study Group had updated and enlarged its' international web site (www.Painpolicy.wisc.edu) making available the information concerning country profiles and local, regional and global accessibility of the opioids.

The figure bellow illustrates the basic elements of an opioid distribution system, that ensures patient access to opioids, in which information about the requirement for opioids moves upward from the patients and the adequate amount of medications moves downward.



INTERNATIONAL PAIN POLICY FELLOWSHIP

In 2006 **Pain & Policy Studies Group (PPSG)** (World Health Organization Collaborating Center at the University of Wisconsin Paul P. Carbone Comprehensive Cancer Center in Madison, Wisconson, USA.) by support of OSI reestablished International Pain Policy fellowship two year program, in the aim of improving availability of opioid analgesics for pain management in palliative care; in 2008 this fellowship program was awarded in Georgia (Pati Dzotsenidze) as well.

At the same time PPSG recognizes that there can be no universal model suitable for the demands of every country in general.

Naturally, the National legislations vary in every country throughout the world; each national legislation, concerning the regulation of the use of narcotic substance is unique. This divergence is defined by the differences in national drug control policies regarding opioids, for different cutlers and societies. These discrepancies involve different rules for opioid procurement procedures, licensing, prescribing and dispensing, which can't be replaced by standard universal model. Albeit

the evaluation of national policies is grounded on it's correspondence with International criteria, involving the factors both supporting to and impeding drug availability and consumption.

Fear of developing drug addiction and abuse frequently interferes with complete and adequate pain control.

In previous years an incorrect evaluation of drug dependence/ addiction hazard was attributed to the WHO cautious declarations. The WHO authority regarding the evaluation of drug dependence is very great. By present, WHO recommendations based on the evidences of multi-center researches ensure Governments, drug regulators, professionals and the society, that opioid analgesics can be safely used for cancer and HIV/AIDS associated pain management, without any fear for possible drug addiction/abuse development (WHO – Cancer Pain Relief, 1996; Improving availability of Essential Pain medicines for cancer and HIV/AIDS Pain Relief Report for 2007//World Health Organization, Collaborating Center for Policy and Communications in Cancer Care, August 2008).

Most portion of opioid supply has been found to used for control of cancer-associated pain. WHO uses simple method for evaluation of the amount of opiods needed to control the cancer pain. 60% of end stage cancer patients need opioid analgesics. Supposing the average daily dose for control of cancer pain, which is 100 mg/ daily/per patient, and provided that this dose is given for 100 days on average, we'll need 10.000 mg or 0.01 kg per patient. Consequently, 1 kg of Morphine would cover the need of 100 patients.

For instance, we have around 8.500 new cancer cases annualy in Georgia. Approximately half of this patients - which is 4.250 - are in need of pain relief and at least half of them - which is 2.125 - need strong analgesics, like opioids (data based on international and national statistics). So the estimate opioid need for cancer patients annually is 21-22 kg. If we add other medical needs for opioids (surgery, post-surgery rehabilitation period, other chronic illnesses associated with pain, etc.) - it reaches about 23-25 kg annually.

Here is presented the method of population-based estimation for morphine, recommended by INCB for cancer patients:

№ of annual deaths **X** 80% (= number of patients requiring end-of-life care with oral morphine) **X** 90 days **X** 60-75mg per day

Using this method, estimation of the needed amount of morphine for Georgia will comprise:

- 4033 X 80% = 3226.5 patients in need.
- a) 3226.4 X 90 days X 60 mg = 17422,5 mg annually b)3226.4 X 90 days X 75 mg = 21 778 mg

Governments and the International Narcotics Control Board need to have accurate information about the medical need for narcotic drugs. In practice, estimation of the need in

morphine is based on the rate of consumption in previous years, plus the expanding of palliative care programs and consequently, the increasing need for opioids.

For the improvment of pain control, WHO experts recommend the model below on the background of international experience analyzis:

Oral IRM	Oral SRM	Parental Morphine	Other opiods
30%	60%	5%	5%

It must be underlined, that the cheapest form of the morphine is the suspension one.

Why Is Generic Morphine Sulphate the Best Choice and How to Estimate the Future Needs?

(Optimal potential for benefit, minimum risk of adverse effects and the most cost effective pain killer drug)

Morphine has been confirmed scientifically as the single most effective opioid to achieve both immediate and long-term control of pain, and to manage breakthrough and procedural pain in either oral or parenteral formats. It has a very low incidence of adverse effects and less than 0.1% of patients consuming Morphine for pain control ever go one to misuse it.

Oral Morphine has been shown to control chronic pain in more than 90% of patients. Injections or infusions of parenteral Morphine are only needed to control 3-5% of patients with intractable chronic pain syndromes.

In contrast, more expensive preparations of other opioids, i.e. Transdermal Fentanyl do not add any increased potential for benefit, may have much greater risk of misuse on the black market, may be more difficult to use effectively in a hairy population in a hot climate where people are prone to perspire off the patches (and receive ineffective dosing**)**.

Pethidine has been used as a step-3 opioid, though actually it is only a step-2 analgesic with weak efficacy. In addition, due to accumulation of the toxic metabolite, it is associated with a high risk of serious adverse effects and is not considered appropriate for chronic pain management.

Cost effectiveness:

Both immediate and slow-release Morphine preparations can be produced generically at a cost similar to Acetylsalicylic acid tablets (ASA / Aspirin). In contrast, more elaborate preparations,

i.e. Transdermal Fentanyl, may be much more expensive for the same Morphine-equivalent dose. The relative cost of opioid preparations are given below, based on the experience of WHO experts:

Drug	Morphine	Morphine	Morphine	Fentanyl
Preparation	Oral IRM	Oral SRM	Parental	Transdermal
Relative costs	1x	3x	5x	>20x

Doses of different, strategically important medications recommended by WHO:

Oral IRM	Oral SRM	Parental Morphine	Other opiods
30%	60%	5%	5%
10 mg 20mg	30 mg 60 mg 100 mg	2mg/ml 10mg/ml 50mg/ml	-

Remark:

Importantly, *according to National Policy specification above, 90 % of increased INCB Quota of opioids for Georgia's NPCP should (in case of Government tender) refer to generic IR- and SR Morphine. Without clarifying the latter, there is a hazard of already seen bitter experience, when the big multinational pharmaceutical companies introduce smartly unaffordable, expensive and no better drugs.*

Practical advices to improve the pain management:

- *Incorporate principles in National Health Policy/Strategy and Essential Drug list;*
- *Contact directly to manufactures of generic IR-and SR Morphine for tender;*
- *Improved rules for prescription and easier accessibility to drugs;*
- *Bedside training of future core of Palliative Care professionals (doctors, nurses, pharmacists, social workers) when IR- and SR Morphine arrives;*
- *Monitoring and documentation of Morphine consumption and increase in number of patients treated.*

Thus, generic Morphine at costs is similar to or less than Aspirin. In Kerala, India, 10 mg IR Morphine tablet costs 2 cents US. In Uganda oral Morphine solution for one month corresponds to the cost of one loaf of bread for 2 weeks supply.

So we may conclude, that switching to oral forms (as IRMS and SRMS) of morphine is beneficial in all medical, social and financial purposes.

However, depending on the type of cancer, stage of the disease and treatment duration, the total amount of need may vary. The storage time of Morphine is 2 years, but biologically this usually lasts much longer. Starting pain control to run out of the drugs early would be cruel to patients. Hence it's better to err on the higher limit. Too high limit though may hinder the easy getting of higher INCB quota for subsequent year. In case if insufficient, it can always be increased.

Once IR-and SR Morphine is available, implementation of Educational Course goes first by importance, preferably with one week of interactive theoretical and minimum 2 weeks of active bedside training, involving both doctors and nurses. A *new higher quota from INCB is therefore suggested* to be requested in considerable time prior to the Course.

Again, it should be specified elsewhere - preferably in the National Policy or in an Order by the Ministry of Health and Ministry of Internal Affairs - that the new quota should concern the requirement of generic immediate and slow release Morphine. Generic IR M- and SR M tablets should be listed in the EDL and specified for use in standard treatment protocols .

In addition, WHO has issued recommendations regarding the links of Palliative Care development and implementation with opioid use.

The availability and accessibility to opioid analgesics should be guaranteed before initiating the expansive implementation strategy of Palliative Care services. It is unpractical to start importation of opioid analgesics, unless the prescription rules correspond to its use and trainings on the care of terminal patients are provided. Starting the trainings without relevant drug policy and availability will just make doctors, patients, family members and society desperate.

IMPORTANCE OF EDUCATION FOR IMPLEMENTATION OF PALLIATIVE CARE

A number of target groups, needing specific education and sharing experience in palliative care have been outlined on the way of palliative care establishment in the country. This concerns both professionals in the field and non-professionals, involving teachers, media, spiritual leaders and whole society in general, and particularly, patients and their families.

International experience gives special significance to the training of palliative care experts, developing specific programs for them and official recognition of their status. These experts will further be engaged in high-standard national centers and provide respective consultation and knowledge sharing to practitioner doctors.

Remark: *Two international specialists (fellows) from Georgia have been trained in The Institute of Palliative Medicine and Hospice of San Diego (California) by now.*

Establishing palliative care service

Defining leaders: One or more social or healthcare organization, having the potential of building palliative care centers inside their structure will be selected. Creating of these centers must be based on the authority and experience of the organizations, patient contingent and understanding, that palliative care must become a part of society, to which they serve.

Palliative care program may be started in one or two organizations, which will gradually become the leading centers of palliative care. Simultaneously, understanding that palliative care estbalishment in the country implies it's integration on every levels of healthcare system, covering all parts of society, is also essential. Development of palliative care is impossible when it is separated from existed healthcare system and public support network.

Evaluating the outcomes of palliative care establishment

At each step of the process of palliative care integration, there are fundamental immediate, intermediate, and long-term outcomes that can be monitored by those facilitating the process.

Immediate Outcomes

- Opinion leaders identified policy makers, regulators, clinicians, administrators.
- Needs and situational analysis completed.
- Action plan and timeline developed.
- Centers of excellence in palliative care identified, e.g., in cancer centers and community support services.
- Outcome indicators identified.

Intermediate and Long-term Outcomes

The intermediate and long-term outcomes are listed in Table below:

Intermediate and Long-Term Outcomes

	Intermediate Outcomes	Long-Term Outcomes
Policy	Policies and regulations incorporate pain relief and palliative care as priorities National Health Plan National Cancer Control Policy; National AIDS Policy; National Geriatric Policy, etc. National Palliative Care Policy Funding and service delivery models established to support the provision of palliative care in all settings where patients receive care Funding for health care professionals providing palliative care established	National policies and regulations support palliative care delivery National Palliative Care Policy fully implemented Multiple NGOs and health care organizations incorporate palliative care into their strategies Palliative care services are adequately funded Palliative care professionals and community support workers are adequately funded
Drug availability	Opioid prescribing laws and regulations support pain relief and palliative care Supplies of affordable medications are adequate: Generic opioids—immediate, slow release, and injectable morphine Opioid quota increased Essential medicines	Doctors prescribe opioids to meet patient needs Opioid and essential medications available in adequate supply in community pharmacies Opioid quota and consumption increased

Education	Media and public awareness campaign underway	Increased media, public, and health professional awareness of palliative care
	Educational courses underway to provide:	A large number of health care professionals have core palliative care knowledge and skills
	Core knowledge and skills to many practicing health care professionals	A significant number of palliative care experts are in practice
	Expert knowledge and skills to a few selected health care professionals who will lead palliative care services	All health care trainees and newly licensed professionals have core palliative care knowledge and skills
	Education in palliative care in health care professional training programs	
	Medical, nursing, pharmacy, social work schools	
Implementation	National Palliative Care Plan initiated	Communities own and support palliative care services
	Palliative care services functional in Centers of Excellence	Good coverage, i.e., >80% of the patients in need received palliative care
	Palliative care services started in health care and community service organizations, e.g., cancer centers, community service organizations	Quality of life is improved for patients and families (as identified by selected clinical outcome measures)
	National and organizational quality strategies implemented	National model, standards, guidelines, outcome measures guide palliative care practice
		Benchmarking/accreditation process is underway to compare and improve palliative care services

In 2003, at the background of a global population growing, aging, and dying at the rate of around 56 million each year, the International Observatory on End of Life Care was founded at Lancaster University, as the first ever research and development project to concentrate on the comparative analysis of hospice and palliative care around the world. IOELC is regarded as a ‘‘community of effort’’ to bring together the research-based activities for the improvement of end-of-life care.

The IOELC focuses on the mapping of international growth of hospice and palliative care, especially in resource-poor regions. Since 2003, it has carried out over 60 country analyses, which are posted to the Observatory web site (www.eolc-observatory.net). Review methodology includes the collection of relevant epidemiological, demographic, and health system data gathered from governmental, public health, and nongovernmental organization sources.

GLOBAL MAPPING

The IOELC has developed a four-part typology depicting levels of hospice and palliative care development. The four groups within the typology are:

1) no known hospice-palliative care activity,

2) countries with hospice and palliative care capacity building activity,

3) countries with localized provision of hospice and palliative care, and

4) countries where hospice and palliative care activities are approaching integration with the wider public health system.

Typology of Hospice-Palliative Care Service Development

1. No known activity	2. Capacity building	3. Localized provision	4. Approaching integration
	Presence of sensitized personnel Expressions of interest with key external organizations Links established (international) with service providers Conference participation Visits to hospice and palliative care organizations Education and training (visiting teams) External training courses undertaken Preparation of a strategy for service development Lobbying of policymakers/health ministries	A range of capacity building activities, but also: Critical mass of activists in one or more locations Service established often linked to home care Local awareness/support Sources of funding established, though may be heavily donor dependent and relatively isolated from one another, with little impact on wider health policy Morphine available Some training undertaken by hospice organization	Capacity building and localized activities, but also: Critical mass of activists countrywide Range of providers and service types Broad awareness of palliative care Measure of integration with mainstream service providers Impact on policy Established education centers Academic links Research undertaken National association in existence

Around half of 234 countries have established one or more hospice palliative care service throughout the world. Yet only 35 (15%) countries have achieved a measure of integration with other mainstream service providers together with wider policy recognition. In 78 (33%) countries, no palliative care activity can be identified. The table below lists all countries by group according to the levels of palliative care development given above:

CATEGORIZATION OF PALLIATIVE CARE DEVELOPMENT (THE COUNTRIES BY GROUPS)

Group 4 **Approaching integration (n = 35)**	Argentina, Australia, Austria, Belgium, Canada, Chile, Costa Rica, Denmark, Finland, France, Germany, Hong Kong, Hungary, Iceland, Ireland, Israel, Italy, Japan, Kenya, Malaysia, Mongolia, New Zealand, Netherlands, Norway, Poland, Romania, Singapore, Slovenia, South Africa, Spain, Sweden, Switzerland, Uganda, United Kingdom, United States of America.

Group 3 **Localized provision (n = 80)**	Aland Islands, Albania, Armenia, Azerbaijan, Bangladesh, Barbados, Belarus, Bermuda, Bosnia and Herzegovina, Botswana, Brazil, Bulgaria, Cameroon, Cayman Islands, China, Colombia, Congo, Croatia, Cuba, Cyprus, Czech Republic, Dominican Republic, Ecuador, Egypt, El Salvador, Estonia, Georgia, Gibraltar, Greece, Guadeloupe, Guatemala, Guernsey, Guyana, Honduras, India, Indonesia, Iraq, Isle of Man, Jamaica, Jersey, Jordan, Kazakhstan, Korea (South), Kyrgyzstan, Latvia, Lithuania, Luxembourg, Macao, Macedonia, Malawi, Malta, Mexico, Moldova, Morocco, Myanmar, Nepal, Nigeria, Pakistan, Panama, Peru, Philippines, Portugal, Russia, Saudi Arabia, Serbia, Sierra Leone, Slovakia, Sri Lanka, Swaziland, Tanzania, Thailand, The Gambia, Trinidad and Tobago, Ukraine, Uruguay, United Arab Emirates, Venezuela, Viet Nam, Zambia, Zimbabwe
Group 2 **Capacity building (n = 41)**	Algeria, Bahrain, Belize, Bolivia, British Virgin Islands, Brunei, Cambodia, Democratic Republic of Congo, Cote d'Ivoire, Dominica, Ethiopia, Fiji, Ghana, Haiti, Holy See (Vatican), Iran, Kuwait Lebanon, Lesotho, Madagascar, Mauritius, Mozambique, Namibia, Nicaragua, Oman, Palestinian Authority, Papua New Guinea, Paraguay, Qatar, Reunion, Rwanda, Saint Lucia, Seychelles, Sudan, Suriname, Tajikistan, The Bahamas, Tunisia, Turkey, Uzbekistan, Puerto Rico
Group 1 **No known activity (n = 78)**	Afghanistan, American Samoa, Andorra, Angola, Anguilla, Antigua and Barbuda, Aruba, Benin, Bhutan, Burkina Faso, Burundi, Cape Verdi, Central African Republic, Chad, Comoros, Cook Islands, Djibouti, Equatorial Guinea, Eritrea, Falkland Islands, French Guiana, French Polynesia, Gabon, Greenland, Grenada, Guam, Guinea, Guinea-Bissau, Kiribati, Korea (DPR), Laos, Liberia, Libya, Liechtenstein, Maldives, Mali, Marshall Islands, Martinique, Mauritania, Mayotte, Micronesia, Monaco, Montenegro, Montserrat, Nauru, Netherlands Antilles, New Caledonia, Niger, Niue, Norfolk Island, Northern Mariana Islands, Palau, Pitcairn, Saint Helena, Saint Kits and Nevis, Saint Pierre and Miquelon, Saint Vincent and the Grenadines, Samoa, San Marino, Sao Tome and Principe, Senegal, Solomon Islands, Somalia, Svalbard, Syria, Timor-Leste, Togo, Tokelau, Tonga, Turkmenistan, Turks and Caicos Islands, Tuvalu, US Virgin Islands, Vanuatu, Wallis and Fortuna, Western Sahara, Yemen

PALLIATIVE CARE AND WIDER LEVELS OF HUMAN DEVELOPMENT

The human development index (HDI) gives a multiple measure of a country's development based on longevity, knowledge, and standard of living. A strong association exists between palliative care and human development. Twenty-nine (83%) of the 35 countries in Group 4 have high human

development, whereas only one (3%) is in the low development group (see Table bellow). Among 78 countries in Group 1, only two (3%) have a high level of human development; 42 (54%) countries in this group have no HDI.

Human Development and Levels of Palliative Care Development by Group

	Total Countries	High Development		Medium Development		Low Development		No HDI	
	n	*n*	%	*n*	%	*n*	%	*n*	%
Group 4 countries	35	29	83	5	14	1	3	0	0
Group 3 countries	80	20	25	41	51	7	9	12	15
Group 2 countries	41	6	15	23	56	8	20	4	10
Group 1 countries	78	2	3	19	24	15	19	42	54

Thus, correlation between human development and levels of palliative care development is high.

The work of the IOELC demonstrates that it is possible to map and measure the levels of palliative care development that exist in any given country. Yet development is patchy, and despite increasing calls for palliative care and the relief of pain to be recognized as human rights, there is a long way to go before they are within reach of the global community. Working in partnership with other individuals, groups, and organizations, we intend to develop further studies to assess the global level of palliative care and to promote an evidence base to guide those engaged in policy and service development.

AVAILABILITY OF MEDICINES FOR PALLIATIVE CARE

(Development of IAHPC List of Essential Medicines for Palliative Care)

The Essential Medicines Concept

According to the World Health Organization (WHO), essential medicines are those that satisfy the primary health care needs of the population. The concept was laid down by WHO in 1977, with the recommendation that essential medicines be selected with due regard to disease

prevalence, evidence on efficacy and safety, and comparative cost-effectiveness. As part of this concept, the WHO has also developed a Model List of Essential Medicines (ML), updated every two years, which can be applied in all countries and is especially valuable in resource-poor settings. The WHO ML does not include specific essential medications for palliative care.

To remedy this deficit, the WHO Cancer Control Program requested support from the International Association for Hospice and Palliative Care (IAHPC) to develop a list of essential medicines for palliative care.

Process

The WHO requested that a list be prepared based on the consensus of international palliative care clinicians, using two criteria: efficacy and safety. In response, the IAHPC formed a working committee that included board members of the IAHPC and external advisors.

The group was chaired by Dr. Neil MacDonald, cochaired by Dr. Carla Ripamonti, and included Drs. Kathleen Foley, Eduardo Bruera, David Currow, and Ms. Liliana De Lima. Drs. Peter Glassman and Karl Lorenz served as external advisors. The committee developed a plan of action, with the following steps:

1. Guiding Principles

A set of principles for the development, use, and application of the IAHPC List of Essential Medicines for Palliative Care was developed by Dr. Derek Doyle. These included ethical principles and emphasized a global approach to guarantee that the final list would include only medications that were truly essential for the provision of palliative care, would be applicable in all countries of the world, and would not be influenced by personal or commercial interests. These principles have been published in other articles describing the process and are available at the IAHPC web site at www.hospicecare.com.

2. Most Prevalent Symptoms in Palliative Care

After several discussions among the committee members, it was agreed that the best approach to build a list was to start with a list of the most common symptoms in palliative care. Because the project was initiated with the support of WHO's Cancer Control division and because the evidence base for symptom prevalence in cancer is better than in other conditions, the group

focused on symptoms related to advanced cancer or its treatment. It was also agreed that the group would not address medications for the treatment of underlying conditions.

An initial list of 21 symptoms prevalent in palliative care patients was developed by the committee and included in the IAHPC web site report (www.hospicecare.com).

These symptoms and their management is detailed in the Georgian-languaged handbook – www.palliativecare.org.ge.

IAHPC board members and other palliative care leaders from around the world were asked to propose appropriate medications for the symptoms identified in Step 2. Thirty-four physicians responded (85%), of which 15 were from developing countries. In total, they recommended 147 items. This initial list was decreased to 120 by removing nonmedications and duplicates.

A modified Delphi survey was sent by e-mail to 112 physicians and pharmacologists (77 from developing countries). Using a scale of 1e9, participants were asked to rate the effectiveness and safety of each medication. Seventy-one participants (63%) responded to the survey. Following the guidelines from the request by WHO, the working group determined that only those medications for which at least 50% of the respondents rated both safety and efficacy at greater than or equal to 7 would be included in the final discussion and selection process. There was consensus among the respondents about the effectiveness and safety of 48 medications for 18 of the 21 symptoms.

Twenty-eight global, regional, and professional organizations working in pain and palliative care were invited to send representatives to a meeting in Salzburg, Austria, April 30eMay 2, 2006; the meeting was co-funded and hosted by the International Palliative Care Initiative of the Open Society Institute. Thirty-one representatives from 26 organizations attended. The names of the participants and the organizations they represented are available in the IAHPC web site at www.hospicecare.com.

The participants were divided into four working groups. Using the results from the survey, each group identified the medications they considered essential for each symptom. The chairs of each group shared the results with all participants. When there were differences of opinion, alternatives were discussed and the best option was decided by consensus. Thus, each of the medications included in the IAHPC list was reviewed and approved by the conference participants as a whole.

At the end of the meeting, Mr. David Praill gave a presentation on the principles of advocacy and strategies to disseminate the list. A discussion followed on ways in which the organizations could advocate for access to treatment by promoting the list and availability of medications as crucial components of palliative care.

Results

The final IAHPC List of Essential Medicines for Palliative Care is included in Table bellow. The third column provides the IAHPC indication(s) for palliative care. The fourth column identifies those medications on the IAHPC list already included in the WHO ML, as well as the indications for these medicines specified by WHO.

The conference participants agreed with the respondents to the modified Delphi survey in that there is not enough evidence to recommend any medications as both safe and effective for five of the symptoms: bone pain, dry mouth, fatigue, hiccups, and sweating hand asserted that additional research is needed to identify safe and effective medications for these symptoms.

The IAHPC list includes 33 medications, of which 14 are already included in the WHO ML.

This project focused on medications to treat major symptoms of advanced cancer patients, recognizing that the agents considered are also essential for the treatment of similar symptoms in patients with other disorders. The list will need to be revised to address specific features of these disorders and other important symptoms in the future. The request from WHO was to prepare a list based on the recommendation and opinion from palliative care experts, and not on critical reviews or metaanalysis. In addition, the group rated medications taking into consideration two criteria: efficacy and safety. The WHO will be carrying out the cost-effectiveness analysis and evidence-based reviews of the recommended medications.

The WHO, IAHPC, and Worldwide Palliative Care Alliance aim to ensure that global health institutions, nongovernmental organizations, charities, and other multilateral organizations, such as the World Bank, are aware of the need for access to medicines, and that national associations of health care professionals are aware of the IAHPC List of Essential Medicines for Palliative Care.

The IAHPC has secured the copyright to the List of Essential Medicines for Palliative Care and has granted permission to all those interested to reproduce and use the list as an advocacy tool to promote access to palliative care. It especially encourages use of the list as a model for countries in which there currently is limited availability of opioid analgesics and other palliative medications and for development of national palliative medication lists tailored to local needs and resources.

The IAHPC and all the organizations involved in this process welcome suggestions on ways to continue to improve the List of Essential Medicines for Palliative Care and to improve access to medications for patients in need.

IAHPC List of essential Medicines for Palliative Care

Medication	Formulation	IAHPC Indication for PC	WHO Essential Medicines Model List Section, Subsection and Indication
Amintriptyline *	50-150mg tablets	Depression Neuropathic pain	24.2.1-Depressive disorders
Bisacodyl	10mg tablets 10mg rectal suppositories	Constipation	Not included
Carbamazepine**	100-200 tablets	Neuropathic pain	5-Anticonvulsants/ antiepileptics 24.2.2-Bipolar disorders
Citalopram (or any other equivalent genetic SSRI expect paroxetine and fluvoxamine)	20mg tablets 10mg/5mL oral solution 20-40mg injectable	Depression	Not included
Codeine	30mg tablets	Diarrhea Pain-mild to moderate	2.2-Opioid analgesics 17. 5. 3-Antidiarrheal
Dexametasone	0,5-4mg tablets 4mg/mL injectable	Anorexia Nausea Neurophatic Vomiting	3-Antiallergics and anaphylaxis 8.3-Hormones and antihormones
Diazepam	2,5-10mg tablets	Anxiety	1. 3-Preoperative sedation short-term

	5mg/mL injectable 10mg rectal suppositories		procedures 5-Anticonvulsants/ antiepileptics 24. 3-Generalized anxiety sleep disorders
Diclofenac	25-50mg tablets 50 and 75mg/3mL injectable	Pain-mild to moderate	Not included
Diphenilhydramine	25mg tablets 50mg/mL injectable	Nausea Vomiting	Not included
Fentanyl (transdermal patch)	25 µg/h 50 µg/h	Pain-moderate to severe	Not included
Gabapentin	300- or 400mg tablets	Neuropathic pain	Not included
Haloperidol	0,5-5mg tablets 0,5-5mg drops 0,5-5mg/mL injectable	Delirium Nausea Vomiting Terminal restlessness	24.1-Psychotic disorders
Hyoscine butylbromide	20mg/1mL oral solution 10mg tablets 10mg/mL injectable	Nausea Terminal respiratory congestion Visceral pain Vomiting	Not included
Ibuprofen	200mg tablets 400mg tablets	Pain-mild to moderate	2. 1-Nonopioids and NSAIMs
Levomepromazine	5-50mg tablets 25mg/mL injectable	Delirium Terminal restlessness	Not included

Loperamide	**2mg tablets**	**Diarrhea**	**Not included**
Lorazepam* **	**0,5-2mg tablets** **2mg/mL liquid/drops** **2-4mg/mL injectable**	**Insomnia**	**Not included**
Megestrol acetate	**160mg tablets** **40mg/mL solution**	**Anorexia**	**Not included**
Methadone (immediate release)	**5mg tablets** **1mg/mL oral solution**	**Pain-moderate to severe**	**24. 5-Substance dependence**
Metoclopramide	**10mg tablets** **5mg/mL injectable**	**Nausea** **Vomiting**	**17.2-Antiemetics**
Midazolam	**1-5mg/mL injectable**	**Anxiety** **Terminal restlessness**	**Not included**
Mineral oil enema			**Not included**
Mirtazapine (or any other generic, dual action NassA or SNRI)	**15-30mg tablets** **7,5-17mg injectable**	**Depression**	**Not included**
Morphine	**Immediate release: 10-60mg tablets** **Immediate release: 10mg/5mL oral solution** **Immediate release: 10mg/mL injectable** **Sustained release: 10mg tablets** **Sustained release: 30mg tablets**	**Dyspnea** **Pain-moderate to severe**	**2.2- Opioid analgesics.**

Octreotide	**100 µg/mL injectable**	**Diarrhea Vomiting**	**Not included**
Oral rehydration salts		**Diarrea**	**17. 5. 1- Oral rehydration**
Oxycodone	**5mg tablets**	**Pain-moderate to severe**	**Not included**
Paracetamol (Acetaminophen)	**100-500mg tablets 500mg rectal suppositories**	**Pain-mild to moderate**	**2.1-Nonopioids and NSAIMs**
Prednisolone (as an alternative to dexamethasone)	**5mg tablets**	**Anorexia**	**3-Antiallergics and anaphylaxis 8. 3-Hormones and antihormones 21.2-Anti-inflammatory agents**
Senna	**8,6mg tabletts**	**Constipation**	**17.4-Laxatives**
Tramadol	**50mg immediate-release tablets/capsules 100mg/1mL oral solution 50mg/mL injectable**	**Pain-mild to moderate**	**Not included**
Trazodone	**25-75mg tablets 50mg injectable**	**Insomnia**	**Not included**
Zolpidem (still patented)	**5-10mg tablets**	**Insomnia**	**Not included**

SSRI – selective serotonin reuptake inhibitor; NassA- noradrenergic and specific serotonergic antidepressant; SNRI – serotonin norepinephrine reuptake inhibitors.
***- Side effects limit dose.**
****- Alternatives to amitriptiline and tricyclic antidepressants (should have at last one drug other than dexamethasone).**
***** - For short-term use in insomnia.**
Drugs in italics are considered *complementary* and require special training and/or delivery method.
Non-benzodiazepines should be used in the elderly. Non-steroidal anti-inflammatory medicines (NSAIMs) should be used for brief periods of time.
No government should approve modified release morhine, fentanyl, or oxycodone without also guaranteeing widely available normal release oral morphine.

The concept of essential medicines, and more specifically, the List of Essential Medicines for Palliative Care, was created to increase access to treatment for patients who have uncontrolled symptoms. Governments, policy makers, and health care providers should take the necessary steps to ensure that all patients in need have access to the medications in the List of Essential Medicines for Palliative Care.

PLANNING AND INTRODUCTION OF PALLIATIVE CARE IN PUBLIC HEALTH SECTOR

The rising incidence of chronic diseases, dementia and cancer associated with ageing as well as other progressive illnesses that also affect children together with the high prevalence of AIDS represent newly emerged areas of interest in the development of palliative care.

As a result of ageing societies, chronically and terminally ill patients are present at all levels of complexity within the health care system. Since the 1970s and onwards, pioneering palliative care physicians, such as Eric Wilkes in the UK, Jan Stjernsward at the World Health Organization (WHO) Cancer Pain Programme and Vittorio Ventafridda in Italy stated that palliative care should exist as an essential part of any national health service.

Several studies have shown clear evidence of the effectiveness and efficiency of palliative care services in providing adequate care by means of lessening unnecessary suffering and satisfying patient's and family's needs and demands at the end of life.

The WHO palliative care demonstration projects and other similar initiatives developed as part of a rational plan to implement palliative care within the public health sector have shown to be highly effective in responding to people's needs. As a consequence the right for good quality care at the end of life has been recognized in the law of several countries.

In this chapter, some principles for rationally planning the implementation of palliative care are outlined. General elements and some specific resources considered important to be kept in mind when setting up a palliative care programme are described.

The principles and aims of a public health approach

Each palliative care programme planned to be available within the public health sector should account for at least three basic elements:

1. *Education and training*
2. *Availability of opioids (*and other medicines used in end of life care)
3. *Specialist services implementation.*

National policies on end of life care will constitute the framework in which these elements will interact.

Robust public palliative care programmes should seek to accomplish a series of *essential principles* such as:

1. to guarantee *coverage* in order to reach most people in need of specialized care
2. to ensure *equity* in the sense that care should be provided to all terminally ill patients regardless of gender, age, social class, type of disease or economic situation
3. *to be accessible* in a way that the most complex clinical cases are cared for experienced and specialized palliative care teams
4. to secure *good quality* in the provision of services by means of effectiveness and efficiency,

Combined methods for implementing programs

Developing and implementing a global palliative care program involves the combination of different strategies with a clear understanding of the conventional methodology of the public programs: clear aims, strong leadership, professional consensus and rational public health approach. In conjunction with this methodology a rational step forward implementation of new services and policies is advised. Also it could be worthy to reallocate resources of preexisting services, promote changes in the organization and the optimization of conventional services, and to start with some catalytic initial measures, as support teams. All changes should be planned and visibly stated as short, medium and long-term measures. Systematic assessment of needs and of outcomes are strongly advised at any step of the implementation.

Assessment of needs

The first step in planning is to assess the needs. It is unavoidable to know some epidemiological data, such mortality rate, incidence and prevalence of patients with cancer, dementia, AIDS, or other conditions to be cared for, and some demographic data as the ageing population. This information could be combined with data, arising from local or population studies, on physical and emotional symptom frequency, and the consumption of health-care resources (place of death, hospital mean stay, emergency room use, etc.). To assess the perceptions of needs, even at general and specific contexts, from health-care professionals, patients and families would give important clues for planning.

In developed countries, the average mortality has been estimated roughly 1,000 death/ 100,000 inhabitants/year. Around 60% of these die due to chronic conditions and it is predictable than approximately 60-70% of these will need specialized palliative care interventions.

Implementation of specialist palliative care services

A specific palliative care program can be implemented in several ways. For instance, it might be reasonable to start by promoting the implementation of palliative care services in key places such as main hospitals, nursing homes or in the community.

A good start could be to promote at least one specific service in the different and key places even hospital, mid term, or home care. This allows to use them as reference services, to build up an appropriate leadership, and generate the solid formation of a core of pioneering teams, which at this stage is the most relevant aim. The selection where and which kind of service would be set up, can be considered not only in the base of needs but also on the feasibility (real capacity, availability) and the opportunity, factors frequently related with personal aspects, restructuring or local leadership.

Territorial organization of resources is very important to warrant coverage, equity and accessibility, so it has been shown worthy to define specific scenarios, as the metropolitan, rural and rural-urban areas, which have different quantity and distribution of people and resources. Comprehensive networks and integrated systems are ways to promote the continuity of care (see chapter 5 and below). Even though the great experience comes from the implementation of services of palliative care for cancer, this could be used for the new challenges as the dying elderly in the first world or the AIDS in Africa.

In fact, many different specific palliative care resources have been described even working in hospitals or in the community, which reflects the heterogeneity of health-care resources around the world and the need to adapt the services to each place to best serve people.

HUMAN RESOURCES, COMPONENTS AND STRUCTURAL UNITS OF PALLIATIVE CARE

Specialist nurses

The experience of Macmillan nurses at home in the UK, and the specialist nurses in hospitals have shown excellent results[i]. This could be also a recommended model in underdeveloped countries where primary care nurses might be able to undertake this role. It requires very well trained nurses, and it has some limitations, as the prescription rules in most countries, or the difficulties of individual vulnerability, specially at the long-term basis.

Support teams

A support team is a multidisciplinary team with specialized training and operating as a consultation team, without specific beds or units, either in the community, in hospital, or in a comprehensive network. Its basic structure is at least of one physician, one nurse with the help of a social worker or psychologist. The most relevant factor in its structure is the advanced training which make them highly effective and efficient, not only for the care of cancer patients and families

but also for the elderly and chronic diseases. In the case of home-care, key aspects have been defined previously, such as the geographic context of intervention, or the isochronisms (times of intervention). The geographic sectoring is fundamental for the service's efficiency. In hospitals, the support teams can be the initial resource of a program which, afterward, will implement a Unit with beds. At that point, it is fundamental to invest energy in achieving an agreement with the related services such Oncology, Geriatrics or Primary Care.

Specialized Units

When considering to set up a unit, some basic questions should arise, such the number of beds, type of patients and the architecture.

Regarding the number of beds, the first recommendation to take into account is to minimize its importance as a single parameter, and add this into its functional characteristics. With the current experience, we would recommend between 80 and 100 beds/million of inhabitants as the optimum level, if the non-cancer patients are also to be included. In relation to the preferred location, our experience indicates that the 20-30% of beds should be placed in acute hospitals, 50-60% in the social-health sector (also called medium-stay centers) and another 20-30% in the sector of nursing-homes or homes of rest for the elderly. It is evident that the size of the unit or the numbers of units to set up will depend on the sector or district which serves; for instance, in a small sector (less than 50,000 inhabitants) probably is not essential to have specific beds. From the individual point of view of each project, the number of beds depends on a variety of factors (architecture, organization of the nurses, cost) and a reasonable number would be between 12-25 beds per unit.

Concerning the type of patients and envisaged functional outcomes (medium stay, age, mortality, costs), it should take into account that palliative care units depending on its location could provide care to a wide kind of patients. Some of the units will be devoted exclusively to cancer patients but other will care for a varying proportion of other chronic diseases. For more complexity some units would be able to deal with acute an complex cases whereas others care patients in stable phase whom do not have the possibility of home-care.

About the physical structure of a palliative care unit, it should promote privacy, comfort of the patients, the company of family members (enabling night-time rest, total accessibility, and kitchenette) and the work-place comfort for the health-care professionals. The dilemma of the number of beds/room depends, obviously, on economic aspects or the structure, but we can advise that, in Latin countries, especially for young patients with actively-involved families, the individual room is the most appropriate formula and which has a greater demand in our environment.

Outpatient clinics and day-care centres

The activity of an outpatient clinic is an optimum resource in which to generate accessibility and enhance coverage of palliative care program, especially in promoting early and

shared interventions with other specialties. It can be carried out even by a hospital or home support team, or as part of the activity of a more compressive hospital palliative care service, even thought its location is optional.

Oncology clinics (centers)

Oncology institutes, where cancer patients are concentrated, together with human resources, equipment and devices needed for treatment, must also comprise palliative care department (or beds).

There are excellent examples of respective experience. Palliative services developed at oncology centers have shown to have strong influence on national policy of palliative care development, thereby supporting to increasing areal of service coverage.

Gerontologic care

Establishment of the likely model of palliative care requires consideration of disease structure, demographic and financial – economic indices of the aged population of the country, according to which the training of respective professionals will be carried out and the model of care developed.

Special conditions

There are several specific directions in palliative care, less implicated in policies, being though highly specific and rather problematic: these involve Child Palliative Care, Palliative Care in Neurological disorders (chronic progressive neurologic degenerations, like Multiple Sclerosis, Motor Neuron Disease etc.) and Palliative Care for imprisoned, AIDS and resistent TB patients.

Palliative care has been approved to be the best method of choice in the care of above mentioned category, though meeting the specific requirements in such cases always arise the necessity to deal with various organizational issues. Such care is usually delivered by palliative care support teams at the respective service.

Comprehensive - Integrated systems

Always when possible, we need to promote the implementation of an integrated system, which can be described as the endowment of diverse services that operate in a sector in an integrated manner (a concept that is stronger than “coordination”) and with a team acting as leader who would be involved in all aspects of care and in the different settings with a methodology focused on case management. The development of integrated systems depends on facts such as consensus and acceptance in the different contexts and on clear leadership together with the active participation of the responsible government administration, and the model of financing the services. The solid training and reputation of the team is essential to be acceptable to all interested parties. It is easier to develop this in intermediate or reduced-size sectors, since metropolitan systems are too complex.

LEGISLATION, GUIDELINES AND STANDARDS

Palliative care providers need to be aware of the relevant legislation as an element of the health system. These include laws, decrees, and ministerial orders and can be very simple and basic in description. In general, ministerial and official papers could be more generic, and standards can define better the details of the structure and the process of services.

Dealing with the problems of opioid legacy and availability (legislational, organizational and protocol) – refer to basic requirement, implicated with palliative care service development and increase of coverage, representing meanwhile the main wheel for expansion of the field. Opioids must be available for patients in both medical and home care settings.

Strategies for training and research

The training in palliative care can be described in several ways accordingly to their level, objectives, targets, advisable methods, type of provider, or according to the degree of priority at a particular time. If we consider the training requirements at the time of implementation of programs or services, we can define different priorities and actions.

Essentially, the initial priority is to create a nucleus of teams that will lead the clinical and training implementation. The current method consist, essentially, in a post-graduate course (a Masters) in addition with a stay in a reference center of service. Once consolidated, the widening of coverage is achieved when these teams develop and execute programs of training in their own contexts. They serve as local references for other successive teams until an elevated level of coverage is achieved.

Training activities must recognize the reality of the different learning characteristics of people so adaptation to each collective is most advisable.

Research is one of the cornerstones of improvement, generation of evidence, and credibility for palliative care. Palliative care research could embrace a great deal of subjects and could be faced from many different point of view and strategies. Research methodology used can be either quantitative or qualitative. Some times teams break-down research initiatives under the wrong thinking that only high-evidence studies (randomized clinical trials) ought to be considered. Easy descriptive studies could be very informative and sometimes the base for further studies. Generating evidence is an accumulative work where from the easy to more complicated studies can offer their contribution. The only major requirement should to use the more appropriate design for the purpose of the study in order to obtain valid conclusions. Research should be stated as one of the activities of any palliative care, obviously attuned to each own capacity. Apart from single center studies, corporative or multi-center research groups could be and interesting and fruitful way of do research specially when careful planned in-advance.

Monitoring outcomes

The results of any public program are people-orientated in character due to the impact of the measures in the improvement of care in target populations, either at a national, regional or district basis. Some general recommendations are to choose general indicators, easy to obtain as: number of specific services, population coverage, geographical coverage, accessibility, continuity of care (ex. emergency room visits), use and consumption of opioids, place of death and use of resources by advanced-terminal patients. In the case of specialized services some indicators could be: clinical results (ex. pain control), mean length of stay, mean intervention time, clinical pattern of the population cared (functional status, survival scores, pain prognostic index, etc), source of patients, mortality rate, estimate coverage, patient and family (external clients), and related teams (internal clients) satisfaction and costs. Among the different methods for monitoring the evolution, *Directories* of palliative care services are excellent descriptive tools and promote standardization, and *Observatories* monitor population-based or more general aspects, as the coverage, use of opioids, and other data.

Some successful experiences

Some successful projects and initiatives in palliative care were implemented under the leadership of the WHO in Spain, India, Jordan, Mongolia, Hungary and other countries, which were targeted on facilitating the development and integration of palliative care in the public health sector. These experiences in different geographical, cultural, social and economical settings have shown the rational public health plans to be effective, efficient, and feasible at every place, once the principles are clearly established, dispose an strong commitment and good leadership. After this enormous accumulated experience, palliative care can be claimed as an element of any Health Care System.

Studies with questionnaires carried out in different countries continuously demonstrate the content of paliative care consumers, which is reflected on marketing, respectively.

COST EFFECTIVENESS OF PALLIATIVE CARE

What concerns the cost effectiveness, the sum expenditure on medical and social service of chronic incurable patients at terminal stage have shown to decrease from 10% to 50%, after establishment of palliative care. Cost effectiveness of palliative care is based on:

1. Idelogical difference of “care” from “treatment”;
2. High level of coordination;
3. Increased informing and “medical education” of patients and their families.

(A systematic review of specialised palliative care for terminal patients: which... Garcia-Perez et al. *Palliat Med.*2009; 23: 17-22).

We'll bring some examples:

Randomized Control Trial on Cost Effectiveness of Palliative Care Service in terminal cancer patients in UK (JP Raftery, JM Addington-Hall, LD MacDonald, HR Anderson, JM Bland, J. Chamberlain and P. Freeling. A randomized control trial of the cost-effectiveness of a district coordinating service for terminally ill cancer patients. Palliat Med 1996 10: 151-161)

- 167 patients with life prognosis less than 1 year were studied. Part of them were receiving palliative care, while the other part continued the usual "treatment";
- Lethal outcome was found to be established at the same time in both groups;
- Hospital stay was significantly lower in palliative care group (24) than in "treatment" group (40);
- Expense per patient decreased to almost half the sum in palliative care conditions – 4774 £ vs. 8034;

Use of resources and costs of palliative care with parenteral fluids and analgesics (including morphine solution) in the home setting for patients with end-stage cancer – compared with hospital-based palliative care (P.O. Witteveen, M.A.C. van Groenestijn, G.H. Blijham & A.J.P. Schirjvers. Use of resources and costs of palliative care with parenteral fluids and analgesics in the home setting for patients with end-stage cancer, Ann Oncology, 10: 161-165, 1999)

- 128 retrospective and 28 prospective (ongoing) observations;
- Cost/patient/day: 750$ in control group;
- Cost/patient/day: 250-300$ in the home setting group.

Conclusion: significant savings are made when palliative care is shifted to home-based setting.

Evaluating the cost-effectiveness of palliative care regional program in Canada – Bruera E, Neumann CM, Gagnon B, Brenneis C, Quan H, Hanson J. The impact of a regional palliative program on the cost of palliative care delivery. J Palliat Med. 2000 Summer; 3(2): 181-6).

- Establishment of palliative care in the units of emergency medical care and involvement of GPs in the management of terminal conditions significantly decreased the overall cost of palliative care: from 11.960.000$ (1992/93) to 3.450.000$ (1996/97).

Cutting the costs of palliative care service in home-based setting (Serra-Prat M, Gallo P, Picazza JM. Home palliative care as a cost-saving alternative: evidence from Catalonia. Palliat Med. 2001; 15:271-278); Study in Catalonia have demonstrated 71% more expenses in hospital-based, rather than in home-based palliative care setting.

Evaluating palliative care cost in Sweden (CM Edenbrandt, 2008 – provided by Jan Stjernsward).

Background:

- 1.2 million population;
- 12000 cancer-induced mortality per year;
- Specialized palliative care covers 10% of registered deaths (4-17% in rural regions);
- Basic palliative care in hospital and home care with nurse visits covers 10800 persons annually.

Costs:

- 1341 krones per 24 hours – in home setting;
- 5685 krones per 24 hours – in hospice;
- 6000 – 8000 krones per 24 hours – in hospital.

It must be noted that "cochrein collaboration", representing the most recognized institute in generalizing the evidence-based study results, published the protocol of the planned study on "effectiveness and cost-effectiveness of home palliative care services for adults with advanced illness and their caregivers":

Effectiveness and cost-effectiveness of home palliative care services for adults with advanced illness and their caregivers 13-Feb-2009 (Protocol information)

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Thus we may be confident on having the evidence on cost-effectiveness of palliative care tested by current methodology in near future.

Several projects were worked out and implemented within the frames of "Cancer Pain Program" by WHO support, in compliance with the principles of rational planning in the 1990-ies. The rational strategy was established in Edmonton (Canada), leading to extraordinary results in care of dying advanced cancer patients.

Within the frames of WHO demonstrative project, the wide option list was created for 7 million people residing in Catalonia (70 home care mobile teams, 52 departments and 34 hospital supporting teams), also the wide-scale, effective and rentable service was provided to cancer and aged patients. During the last 10 years a number of palliative care programs were successfully implemented in Estremadura (Spain), Poland, Hungary, Slovenia etc.

Examples of success can be encountered all over the world: a rational policy was developed as a result of systematic approach in Uganda, where the leading palliative care centers were created, providing care for AIDS patients, additionally.

Good examples of success also involve the measures implemented in Chile, Australia, Jordan and Mongolia.

Experience gained in different geographical, cultural, social and economic environment show that rational plans of public health care are equally effective, rentable and applicable in every situation, provided the sharply defined principles, obligations realized seriously and the correct management.

Analyzing the existed huge experience in the field has led to recognition of palliative care as intrinsic part of any ring in healthcare system chain (WHO, 2004).

FREQUENT DILEMMAS AND DISCREPANCIES

The most frequent reasons for common dilemmas and discrepancies in the development of palliative care programs or elaboration of national models refer to the subjects related to the program scale, geography of implementation area and starting (preliminary) means, including financial issues.

Obstacles

Establishment of palliative care promotes to setting up of the new service, improving the care of advanced chronic and terminal stage patients, though this initiative simultaneously brings some changes into the development of healthcare system.

This approach may become the reason of encountering between staffs and personal interests, including some authorities. These include the well-known attitudes of rejecting ("We already do that!"), or responses from authorities to the development ("We are to manage that field!.. and we'll take respective measures afterwards").

Limited budget is a frequent argumentation raised by healthcare administration and governing bodies. The tested way of dealing with this issue implies the "Catalytic investment" with gradual generalization of the process. This refers to small amount of funds spent on building of supportive team, which meaningly improves the care quality and increase the system efficacy in general.

It's also noteworthy, that the problem of scarce budget is markedly relieved when expenses on educational, methodological and research activity are covered by international sponsors, donors and other non-governmental organizations.

* * *

Number of aged population is constantly rising in developed countries and thus, development of palliative care involving the aged and non-cancer chronic patients by nearest future (short-term perspective) pertains to a matter of significance.

Palliative care is becoming a subject of interest at numerous subunits of public healthcare system. It must exist and be available on every levels.

Educational courses on palliative care and related trainings must be involved in the syllabuses of the faculties linked to public health (medical, nursing, psychology, social etc.). Much remains to be done with regard to planning and development of specific studies carried out in palliative care field.

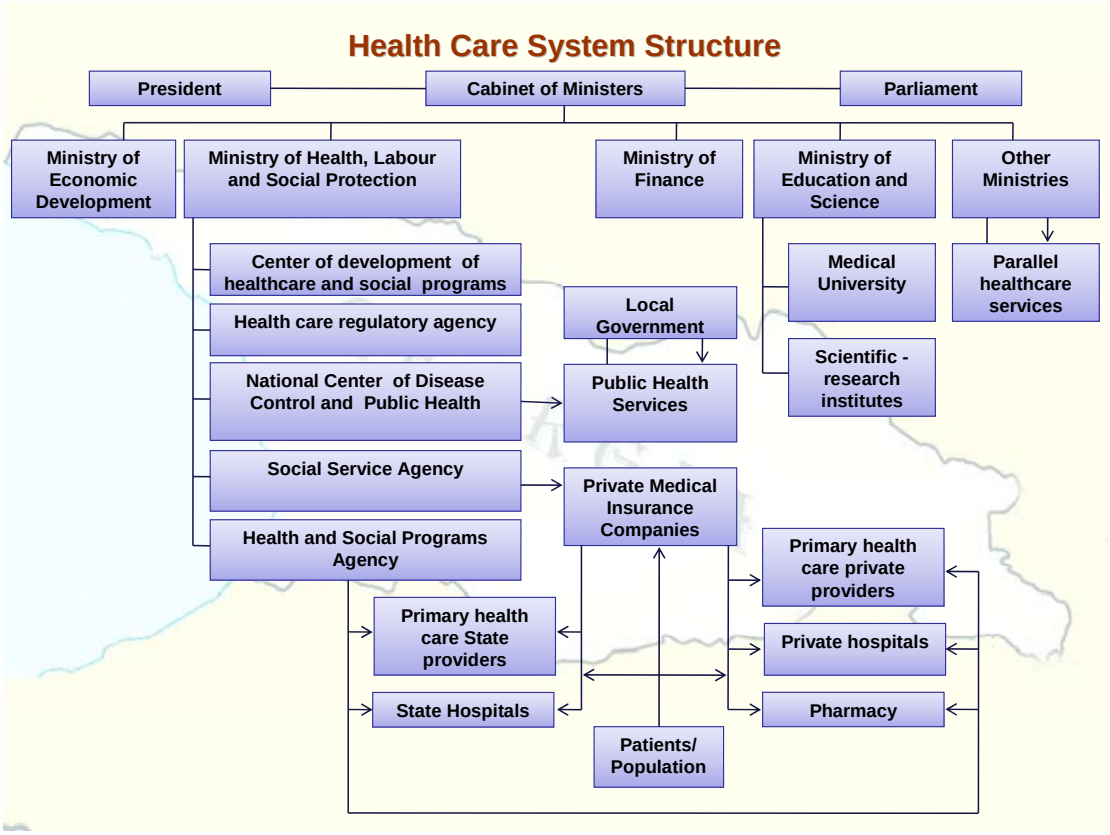
Creating the directions of palliative care and care on aged in developing countries gives a good chance for improving healthcare values and priorities and facilitation of organizational changes.

PALLIATIVE CARE IN GEORGIA

(SITUATION ANALYSIS)

Currently the National Healthcare Policy is still under development in Georgia. The conception of primary care setting – oriented model, considered as priority for the end of 20th century, is gradually substituted by complex development model conception by now.

Organizational structure of healthcare system can be depicted in the scheme below:



Regardless the complexity of the above scheme, three principal fields closely linked to each other can be classified within the Georgian healthcare system:

1. Public Health;
2. Primary Care Setting;
3. Hospital Sector.

Public Health

Transformation of soviet sanitary – epidemiologic surveillance into public health system, which took start in 1996, is still lingering on the level of undefined logical framework, unable to make development perspectives for the field more or less predictive.

Conceptual scheme for structuring Georgian public health field, bordering the competences, objectives, legal rights and obligations are defined in the Georgian Law “On Public Health” adopted in 2007.

According to the law, public health is defined as the complex of measures directed towards health improvement, disease prevention and control in population, which aims at supporting the general welfare and healthy life-style of the population, providing healthy and safe environment for living, bolster the reproductive health and preventing from both contagious and non-contagious disease outspread.

According to the law, the subjects pertaining to the public health field competence, involve: prevention of transmittable diseases, identification of transmittable diseases, isolation and putting a person to quarantine, provision of biological safety, setting norms of air, water and earth composition, sound, vibration and EM radiation limits and surveillance, chemical, radiation, technology and production safety, defining healthy lifestyle, maternal, child and adult health policy, control on tobacco consumption, drug addiction, toxicomania and alcoholism and taking respective measures against above listed.

Launching the Law “On Public Health” implicates the delegation of competences on different ministries and local governances within the public health field (including: Ministry of Agriculture, Fisheries and Food, Ministry of Environmental Safety and Natural resources, Ministry of Education and Science, Ministry of Internal Affairs, Ministry of defense, Ministry of Justice), and coordination of public health policy making and implementation is assigned to the Ministry of Labor, Health and Social Affairs.

If we consider once more the above listed activities, which are essential to the development of palliative care in the country, provided the mentioned processes and implementing state governances, one can conclude that involvement of palliative care into public health strategy may become a powerful wheel in development of the latter.

- Involvement of palliative care into public health system will support to development of corresponding labor market and define the approach to human resources;

- Georgian public health field will thus acquire a new sense, which will maximally get close to American - European concept.

The deemed structure of public health can be formulated like below:

- Policy and strategy defining structure in the central apparatus of the Ministry;

- Strategy implementing, coordinating, monitoring and analyzing structure in the capital and regions locally (National Center of Disease Control and its office);

- Financial means, needed for implementation of educational, expert and research activities, implying state programs.

Primary Care Setting and Hospital Sector

The course of training doctors (especially therapeutic field physicians) into GPs (General Practitioners) and remaking polyclinic system into family medicine centers was initiated by the end of 20th century in Georgia.

This process has been progressing slowly with some hindrances due to different reasons, resulting in simultaneous activity of both systems in today's healthcare system, with more or less similar competences.

Polyclinics and family medicine centers coexist both in the cities (including the capital) and regional centers as well.

The system of rural doctor and nurse also remains the main healthcare provision in the villages, composing the primary care setting for the village-dwelling population. The rural medical personnel refer to the village outpatient setting and is related to regional family medicine center or polyclinic under agreement, which provide the specific monitoring for their professional activity and assists in the management of complex cases.

***Some evidence supporting the provision of rural doctor system*:**

- 178 Primary Care Setting bodies have been rehabilitated and equipped, 1200 GPs and 1037 GP nurses have been trained by 2009;
- 2000 Lari grant were conferred to 777 rural doctors each as social aids in 2008, for the purchase of standard equipment indispensable for primary care medical practice in the region;
- In 2009, the rural outpatient clinics were rendered to producer natural persons and agreements were concluded with 1360 doctors and 1480 nurses by the Healthcare and Social Affairs Agency.

Monthly salaries of primary care setting doctors and nurses (in GEL)

Staff	2007	2008	2009
Rural doctor (trained)	280	332	456
Rural nurse (trained)	170	226	304
Rural doctor (untrained)	146	215	456
Rural nurse (untrained)	112	160	304
Medical assistant ("feldsher")	112	160	304

In the city, primary care setting is composed of family doctor (GP) (and nurse) or distric polyclininc physician (and nurse). In case if needed, a thorough examination and treatment at home (if available) is delivered to patients by family medicine centers and polyclinics, or hospitalization is executed.

In the regional centers the hospital sector structures – hospitals (inpatient clinics) are located. Most of them are able to deliver medical service of II and III level. This inpatient departments cooperate with regional polyclinics and/or family medicine centers.

In the big cities (e.g. Tbilisi, Kutaisi, Batumi), aside from II and III level medical service hospitals, the highly qualified inpatient clinics and so-called national centers are located (e.g. Ghudushauri National Center of Clinical Medicine, Oncology, Surgery, Therapy, Pulmonary Pathologies and Phthisiology, Radiology and Interventional Medicine, AIDS, Infectious Diseases and Clinical Immunology Centers and others alike), which deliver the multi- or monoprofile medical service in compliance with international standards.

A short citation from the General Plan of Hospital Sector Development (N11 Conclusion of January 26, 2007 of the Government of Georgia):

- objective: chief tasks for creating / developing the high level hospital medicine service:
  - Constructing the new buildings, as rehablitation alternative;
  - Launching of 15, 25 bed (in regions) and 50, 100 bed hospitals in the regional centers and big cities;
  - Compact localization of hospitals in Tbilisi on definite territories (in clasters);
  - Integrating monoprofile services into multiprofile hospitals;
  - Equipment of hospitals with standard and high-technology beds.

(Note: in hospitals on 15-25 beds the space per bed is equal to 50 square meters, in hospitals on 50 and more bes - 75 sq. m).

Hospital service load in Georgia

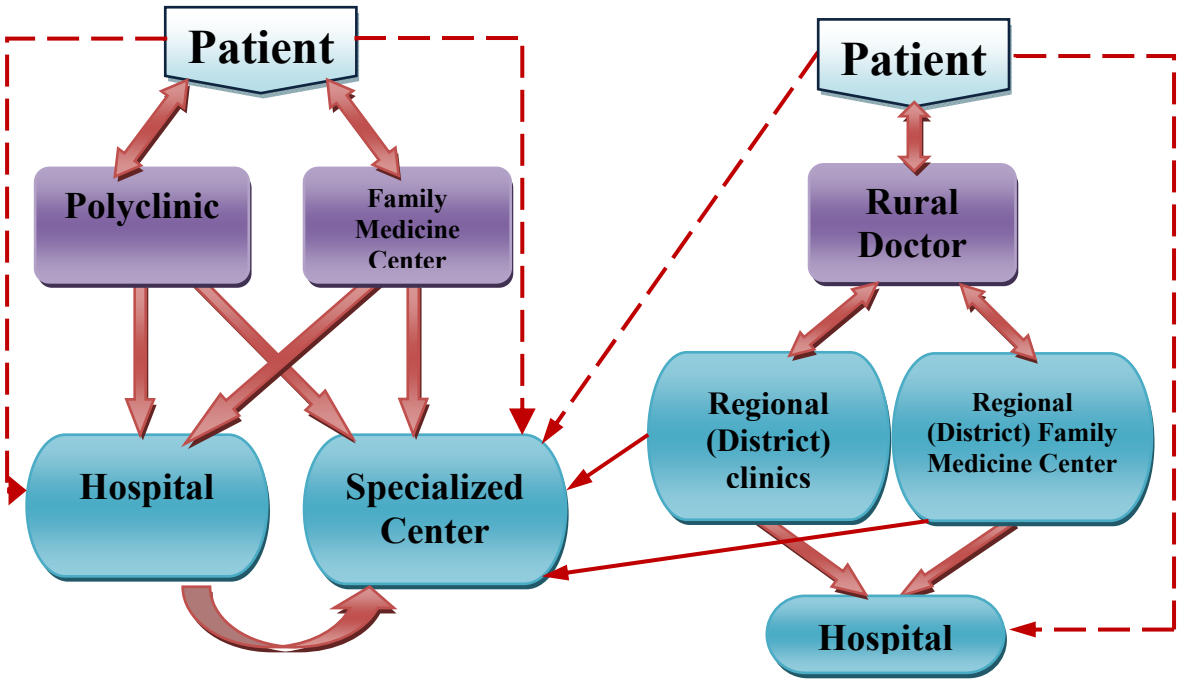
- 780 new beds – in 44 (15 and 25 bed) hospitals;
- 7020 beds – in 56 (50 and more bed) hospitals;

Profile of Beds

- 1036 - Obstetric;
- 1097 – Therapeutic;
- 676 – Pediatric;
- 308 – Infectiuos;

- 2458 – Surgical;
- 348 – Critical Care;
- 1882 – for Psychiatry, TB patients and those requiring long-term care *(the latter being especially important for palliative care system development; see below).*

Considering all above mentioned, relationship between primary care setting and hospital sector in Georgia can be designed in the scheme below:



Here must be noted also, that still persisting soviet concept of high authority hospital sector results in inertial direct referral to inpatient clinics until present.

Main Plan of Primary Care Setting Development (Project)

Defining criteria for optimal management in primary care setting centers:

- 15 minute “permeability parameter”;
- 85% coverage of Georgian population;
- One nurse per 250 – 1000 residents in sparsely settled high mountain regions;
- A team of one GP and one nurse per 2400 residents in Tbilisi;
- One primary care setting center per 20,000 residents.

Number of staff needed in primary care setting centers in Georgia:

- 2016 GPs (family medicine doctors);
- 1970 general practice nurses;
- (including 450 doctors and nurses in Tbilisi);
- 305 nurses and midwives).

Some data about healthcare system activity

(Are given in accordance of the Databases of the Ministry of Labor, Health and Social Affairs (www.moh.gov.ge), National Center of Disease Contro and Public Health, Department of Statistics, statistical review of 2008 (www.ncdc.ge), Georgian National Statistics Agency (www.geostat.ge) and Social Service Agency (www.ssa.gov.ge) have been used).

- 1048 licenced institutions have submitted statistical reports to the National Center of Disease Control and Public Health, including 1044 organizations are subjected to the Ministry of Labor, Health and Social Affairs and the remaining 4 are subjected to other bodies.
- 265 from 1044 institutions are inpatient clinics, which function on 14069 beds. These include: 241 hospitals with 12379 beds, 8 dispensaries with 156 beds and 16 scientific – research institute (national center) clinics with 1534 beds.
- In 2008, 320995 patients referred to inpatient clinics. Rate of hospitalization was increased for that time. Hospitalization index was equal to 7204,5 per 100,000 residents. Overall hospital stay was equal to 2183714 bed days. Bed fund usage indices changed in 2008 compared to previous years: average load (156,1) and circulation (22,9) were both increased, while the bed supply index per 100,000 population (320,9) and on-bed delay (6,8) were decreased. High indices of bed load and delay are intrinsic to those pertaining to Oncology / Radiology, Psychiatry / Narcology and Tuberculosis profiles.
- In the calculation year, 315829 patients were discharged from inpatient clinics of Georgia overall, including 6140 with lethal outcomes. General lethality rate was 1,9%. 22,0% of overall patient number involve 0 – 15 years age group.
- The highest lethality is characteristic for the class of symtpoms, signs and vaguely outlined conditions, which, according to WHO criteria, must not be used to determine the cause of death.
- Lethality rates are high in the following disease classes: several conditions developed in perinatal period (8,6%), cardiovascular pathologies (6,1%) and congenital abnormalities, defects and chromosomal aberrations (4,4%).

- In 2008, 121189 surgeries were performed in inpatient clinics of Georgia (lethality rate – 0,5%), including 13943 on pediatric patients (lethality rate – 0,6%). Percentage of urgent operations in overall number comprised 19,0% (lethality rate – 1,1%). General anesthesia was applied in 59,2% of overall surgeries.
- In 2008, 616 independent outpatient – polyclinic units and 72 polyclinics encompassed within the inpatient clinics submitted their accounting reports to the ministry.
- 1809208 cases have been registered in outpatient – polyclinic units during the calculation year (prevalence – 41270,3), including first-in-life diagnosed cases – 807497 (incidence – 18420,0). General prevalence and incidence rates tend to increase in recent years.
- In 2008, number of referrals to outpatient – polyclinic units comprised 2,1 per resident.
- 724,5 referrals have been registered per doctor (including the referrals to specialists) during the year. Maximal network load was observed in 1988 (84,7%) and minimal load in 2001 (26,3%). The same index corresponded to 37,5 % in 2008 *(note: these data must be taken into account during palliative care establishment).*
- In the calculation year, prophylactic examinations were delivered to 651381 children and adolscent students, which revealed: audition problems (0.12%), vision problems (0.53%), speech defect (0.41%), scoliosis (0.61%), problems with body straightness (0.47%). 69746 adolescents were examined before school graduation, with age 16 – 18, including 39380 males.
- 27426 surgeries were performed in surgical departments of outpatient – polyclinic units in 2008.
- In 2008, 22 day hospitals were performing on 408 beds in Georgia. 9295 patients were delivering treatment in day hospitals in the same period, which is 2 times lesser compared to prevoius year.
- In 2008, emergency departments of inpatient hospitals of Georgia admitted 20534 patients, including 11727 pediatric cases.
- 73 emergency units (ambulance services) submitted their report in 2008 on country scale. 1514 doctors, 960 nurses and 127 junior medical staff were engaged in mentioned emergency units. Number of general profile medical teams on duty comprises 283, and specialized ones – 3. 774192 call-offs have been registered. 768167 cases were treated, including general profile medical service in 758280 and specialized in 9887 cases. Medical service was delivered to 754818 patients from overall number with state standards and to 13349 ones – wth internal standards.

System design:

Some statistical data to be taken into account in the development of palliative care strategy in Georgia are presented below.

Georgian population is 4 385 400.

Country administration involves two autonomic republics. Including these, the ountry is divided into 11 regions. 63 municipalities are comprised within these regions. 5 big cities (the capital,Tbilisi, Kutaisi, Batumi, Poti and Rustavi) represent the self-governments.



Cities	
1	Tbilisi
2	Kutaisi
3	Rustavi
4	Poti
5	Batumi
Regions	
I	Autonomic Republic of Adjaria
II	Guria
III	Imereti
IV	Kakheti
V	Mtskheta – Mtianeti
VI	Racha – Lechkhumi, Kvemo Svaneti
VII	Samtskhe – Djavakheti
VIII	Kvemo Kartli
IX	Shida Kartli
X	Samegrelo – Zemo Svaneti
XI	Autonomic Republic of Abkhazia

Population distribution according to residence and age (data by January 1st, 2009)

Age	Countryside (%)	City (%)	Overall in the country (%)
Under 5 years	47,7% (number – 207630)	52,6% (number – 230910)	5.6
6 – 18			9.6
19 – 44			36.5
45 – 64			23.9
Over 65			14.4

Population under 15 years compose 17,6%;

Population over 65 – 14.4%;

Average number of family members is 4 in Georgia.

General ethnic groups in Georgia	Percentage in population (%)
Georgians	83.8
Azerbaijanians	5.7
Russians	1.5
Armenians	6.5
Ossetians	0.9
Greeks	0.3
Abkhazians	0.1
Kurts and Yezids	0.3
Jews	0.4
Belarussians	o.4
other	0.1

State language is Georgian, in autonomic republic of Abkhazia – Georgian and Abkhazian. Communication with the patient may sometimes require the knowledge of Abkhazian, Russian, Azerbaijani, Armenian and Ossetian languages.

80% of population is an Orthodox christians. There are also Moslems, Catholics, Gregorians and Jews.

Number of unemployed in Georgia – 315800 (16.5%).

Average earning per resident – 146.4 GEL.

Average earning per family – 537,4 GEL.

Minimal sufficiency limit – 126.1 GEL (according to December 2009 data).

Family is considered to be under poverty limit, if it is assigned 57 001 and less rating scores.

544031 families are under poverty limit according to March 2010 data and they are receiving state aid.

Families whose rating score does not exceed 70 001, are additionally given the medical insurance voucher.

842 200 pensioners are registered in Georgia, accounting for 19,2 % of population.

According to 2002 data, 6,3% of women and 53,8% of men are smokers in Georgia. Beginning of the new study is planned in 2010.

Life expectance is 74.2 years (69.3 in males and 79.0 in females).

Number of live newborns in 2008 comprised 56565; birth rate per 1000 residents is 12.9.

Lethality rate

Lethality rate per 10000 adult residents (age 15 – 60) is 11,3 (data by December 2008).

General causes of lethality is given in the table below:

Causes	**Lethality per year (%)**	**Lethality rate (per 100 000 residents)**
Cardiovascular diseases	64.1% (number – 27579)	629.1%
Respiratory pathologies	number - 1237	28.2
Neoplasms (cancer)	10.8% (number – 4661)	106.3
Accidents (unintentional)	2030	46.5
Endocrine pathologies	630	14.4
Neurologic diseases	283	6.5
Gatrointestinal pathologies (including liver pathologies and cirrhosis)	1260	28.7
Urinary and genital pathologies (renal pathologies)	322	7.3
Infectious diseases (septicaemia, malaria, tuberculosis, etc.)	368	8.4
HIV infection / AIDS	75 (in 2007) 87 (in 2008)	
Congenital defects	125	2.9
Perinatal period conditions	783	17.9
other causes / unclearly defined conditions	8.5% number – 3669	83.7
Overall mortality	43011	981.1

Number of children deceased under 1 year in 2008 – 959;

Mortality rate of children under 1 year is 17.0 (per 1000 residents);

85 children under 5 years were deceased in 2008. Mortality rate is 0.5 (per 1000 residents).

Malignant neoplasms:

Number of new malignancy cases (cancer) in recent years:

Year	Number of cases
2001	6927
2002	7092
2003	7117
2004	8347
2005	8364
2006	9186
2007	7445
2008	7886

Cancer types

5 main types of cancer in both sexes, according to frequency		
Females		Cancer type B.I
	1	Breast
	2	Cervix
	3	Gastric
	4	Rectal
	5	Lymphoid, blood producing and relating tissues
Males		Cancer type B.I
	1	Trachea, Bronchi and Lungs
	2	Gastric
	3	Prostate
	4	Larynx
	5	Rectal

Cancer stage (percentage) on establishing diagnosis (data by 2006 – 2008)

Cancer Stage	Percentage	
	Cervix	Breast
I	12.4	7.4
II	36.0	39.7
III	22.1	25.4
IV	25.1	24.0
Unknown	4.5	3.5

overall	100%	100%

148 newly diagnosed cancer cases were registered in 0 – 15 age group patients in 2008.

HIV infection / AIDS

1851 cases of AIDS and HIV infection are registered in Georgia by the end of 2008 (including 459 females and 1392 males), involving 845 cases of HIV infection and 1006 cases of AIDS. 351 firstly diagnosed cases were registered in 2008, including 175 AIDS and 176 HIV infection. 87 patients deceased. Intravenous drug abusers account for 56.1% and sexual encounters account for 39.0% of newly diagnosed cases of AIDS and HIV infection. Vertical transmission from mother to child was registered in 17 cases.

The most frequent path of HIV transmission is i/v drug abuse.

Antiretroviral drugs are available for every patients and is funded by the global funding program.

Aged persons

4 geriatric and nursing homes are functioning in Georgia with 633 places, from these 319 are occupied. Expenditures on the service of these homes accounted for 1630500 GEL in 2008.

The Department of Gerontology and Palliative Care is functioning at the base of Alexandre Natishvili Institute of Morphology in Georgia (Research Center of Gerontology Problems); Department of Geriatrics is functioning at the base of National Therapy Center.

HUMAN RESOURCES

Doctors

According to the data by 2009, 20253 doctors work in Georgia (medical staff supply index is 462 per 100000 residents).

20253 doctors involve the following specializations:

- Therapists – 1885;
- Surgeons (including child surgeons) – 972;
- Anesthesiologist – resuscitation specialists – 850;
- Traumatologist – orthopedists – 276;
- Cardiologists – 623;
- Urologists – 231;
- Oncologists – 255;
- Pediatricians – 1907;

- Infectiologists – 258;
- Otorhinolarynglosts – 326;
- Neurlogists – 634;
- Ophthalmologists – 350;
- Stomatologists – 1197;
- Gynecologists – 1417;
- Phthisiatricians – 145;
- Dermato-venereologists – 240;
- Psychiatrists – 215;
- Endocrinologists – 307;
- Family doctor – 459;
- Other specializations – 7705.

Assisting medical staff

19593 nurses are functioning in Georgia according to data by 2009 (index per 100000 residents is equal to 446.9).

Type of assisting medical staff	Number	Index per 100000 residents
Nurse	3698	301.3
Medical assistant (“feldsher”)	1719	39.2
Midwife	919	21.0
Male nurse - midwives	270	6.2
Other	3478	75.3

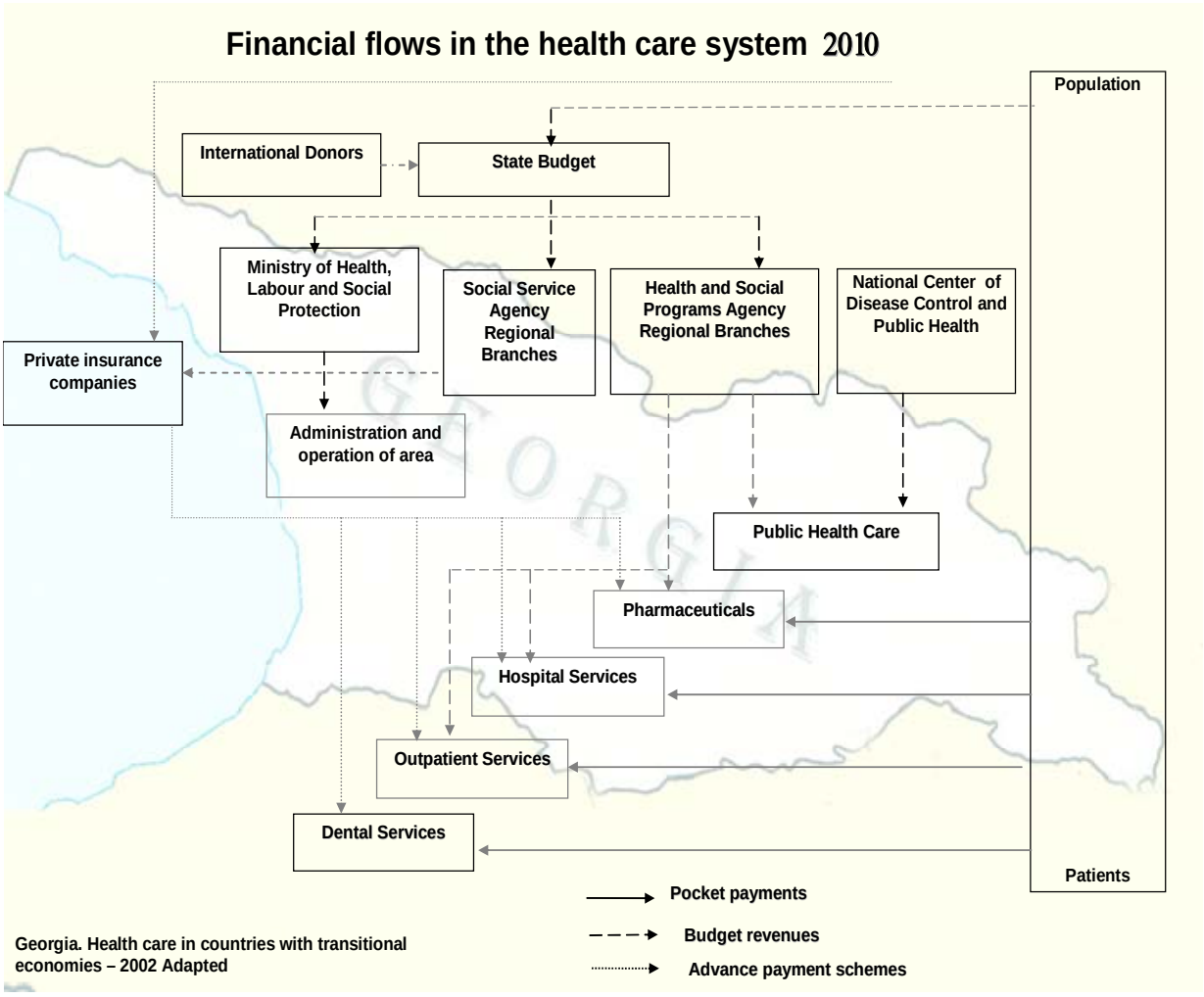
Healthcare funding

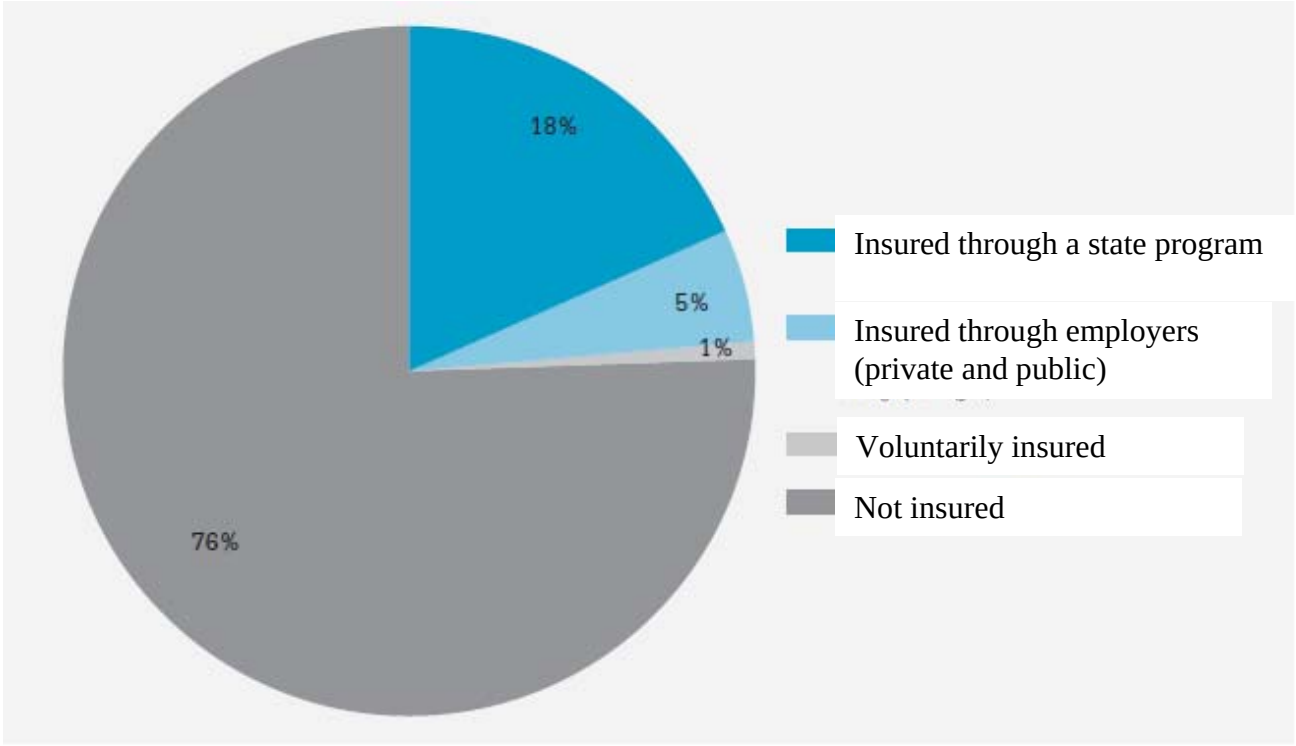
Determining palliative care strategy requires the accurate knowledge of healthcare financing in the country.

The general national program of healthcare financing is still absent in Georgia. State urgency program only covers population over 65.

900.000 residents are holders of state medical insurance voucher (including those under minimal poverty limit, refugees, teachers, homeless ones, staff of authorities.

1.2 million people carry corporation insurances and private insurances are carried by very few of population.


Financial flows in the health care system 2010
Population
International Donors
State Budget
Ministry of Health, Labour and Social Protection
Social Service Agency Regional Branches
Health and Social Programs Agency Regional Branches
National Center of Disease Control and Public Health
Private insurance companies
Administration and operation of area
Public Health Care
Pharmaceuticals
Hospital Services
Outpatient Services
Dental Services
Patients
Pocket payments
Budget revenues
Advance payment schemes
Georgia. Health care in countries with transitional economies – 2002 Adapted


18%
5%
1%
76%
Insured through a state program
Insured through employers (private and public)
Voluntarily insured
Not insured

CURRENT CONDITION OF PALLIATIVE CARE DEVELOPMENT IN GEORGIA

During the last years in Georgia - through the permanent collaboration of devotees with Governmental Institutions and NGOs (including International Organizations) was created the basis for the development of Palliative Care as an integral part of National Healthcare System.

Main Initiators – OSI, OSGF and Georgian National Association for Palliative Care (GNAPC).

Main Implementers –GNAPC, Office of Coordinator of Palliative Care National Program (ONCPC) at Healthcare and Social Issues Committee of Parliament of Georgia, NGO ”Cancer Prevention Center” (CPC), Department of Gerontology and Palliative Care at the Institute of Morphology (DGPC), Office of Coordinator of Palliative Care National Program (ONCPC) at Healthcare and Social Issues Committee of Parliament of Georgia, NGO “Coevals of Georgia”, Center of AIDS, Clinical Immunology and Infectious Diseases, “AIDS Patients Supporting Foundation”, Institute of Prevention and Palliative Medicine.

Main Donors, Sponsors and Supporters:

- OSI;
- OSGF;
- Charitable Foundation SOCO (foundation of the First Lady of Georgia);
- Institute of Palliative Medicine at San Diego Hospice (CA, USA);
- Healthcare and Social Issues Committee of Parliament of Georgia;
- Ministry of Labor, Health and Social Affairs (MOH);
- Ministry of Health and Social Affairs of Adjara Autonomic Republic;
- State Health and Social Agency;
- WHO Georgia Office;
- CORDAID Foundation;
- HtH;
- Global Fund;
- ESMO;
- ESO;
- Central European Hospice (Budapest, Hungary);
- Hungarian Hospice Foundation;

- World University of Wisconsin Carbone Comprehensive Cancer Center (WHO Collaborating Center);
- Catalonia (Spain) PC Program (WHO Demonstrative Project);
- Latvian Palliative Care association;
- Pediatric Hospice (Riga, Latvia).

International Experts involved:

- Mary Callaway – Director of PC International Program, OSI (USA);
- Kathleen M. Foley - Medical Director of the International PC Initiative of the Public Health Program, OSI (USA);
- Frank Ferris – Director of PC International Program, Institute of Palliative Medicine at San Diego Hospice (CA, USA);
- Jan Strjersward – WHO and OSI Expert in Cancer and PC (Sweden);
- Katalin Muzsbek – Director of Central European Hospice Hungary);
- Agnes Rusa – Expert, Hungarian Hospice Foundation;
- Xavier-Gomes Batiste, Director of PC WHO Demonstrative Project (Catalonia, Spain);
- Karen Ryan - Director, International Program/Pain & Policy Studies Group;
- Gerri Frager – Medical Director, Pediatric Palliative Care Service (PPCS), Dalhousie University, Canada
- Nancy Hutton - Medical Director, Johns Hopkins Children's Center, Johns Hopkins University, USA;
- Martha Maurer - University of Wisconsin Comprehensive Cancer Center/ WHO CC.

Main Political Advocacy:

- Sandra Elisabeth Roelofs - the First Lady of Georgia;
- Giorgi Tsereteli – Vice-speaker of Parliament of Georgia;
- Otar Toidze – Head of Healthcare and social Issues Committee of Parliament of Georgia;
- Irakli Giorgobiani – the 1st Deputy Minister of Health;
- Manana Jebashvili - Deputy Minister of Health;
- Vakhtang Surguladze – Head of State Health and Social Agency;
- Amiran gamkrelidze – Leading Expert of WHO Georgian Office.

National Leadership:

- Dimitri Kordzaia – Founder of GNAPC, Coordinator of PC National Program, director of Home-based PC Program;
- Rema Gvamichava – Tbilisi Hospice Founder and General Director, Inpatients'Program Director, CPC;
- Tamar Rukhadze - PC International Fellow, Head of Palliative Care Services at the National Cancer Center, Home-based PC Program Coordinator;
- Josef Abesadze – PC International Fellow, Tbilisi Hospice Clinical Director, Institute of Cancer Prevention and Palliative Care;
- Mikhail Shavdia – Tbilisi Hospice, CPC;
- Pati Dzotsenidze – Pain & policy fellow, GNAPC;
- Irina Tsirkvadze – Coordinator of Pediatric Palliative Care, GNAPC;
- Tamar Alibegashvili – GNAPC;
- Memed Jincharadze – Coordinator of PC program in Adjara Autonomic Republic;
- Izo Bodokia - "AIDS Patients Supporting Foundation";
- Zurab Tatanashvili - "Coevals of Georgia".

Capacity Building:

Governmental Budget of Georgia is financing:

- 20 beds in Tbilisi CPC Hospice;
- 20 beds in Palliative Care Service at National Cancer Center;
- 4 mobile teams providing Home-based Palliative Care in Tbilisi, Kutaisi, Telavi;
- Staff of Gerontology and Palliative Care (at the Institute of Morphology).

Governmental Budget of Adjara Autonomic Republic is financing:

- 1000 bed days (~ 100 patients, ~ 10 days/per patient) in Palliative Care Unit at Batumi Cancer Center;
- Mobile team providing Home-based Palliative Care in Batumi;
- 5 supporting groups (doctor + nurse) in 5 municipalities of Adjara (one group per each municipality).

"Global Fund" in the frame of "HIV/AIDS program" is financing:

- 3 beds in Tbilisi Hospice for HIV/AIDS patients.

- 2 beds in Batumi Hospice for HIV/AIDS patients.
- 2 beds in Zugdidi Hospice for HIV/AIDS patients.
- 2 beds in Kutaisi Hospice for HIV/AIDS patients.
- 4 mobile teams providing home-based PC for HIV/AIDS in Tbilisi, Batumi, Zugdidi, Kutaisi;

Capacity building creation was supported by: OSI, OSGF, the charitable foundation of the First Lady of Georgia – SOCO and Cordaid Foundation, which provided financial support to the pilot programs and office logistics.

Currently:

- 900-1000 patients annually receive Palliative Care.
- More than 70 persons working in the field of Palliative Care annually receive permanent salaries. Among them are healthcare professionals educated/trained abroad and inside of Georgia by International Staff.
- PC managing offices are arranged and equipped (including necessary modern personal computers, vehicles, etc).
- The handbooks, guidelines and instructions of the first necessity are provided on native (Georgian) languages.

http://www.palliativecare.org.ge/cms/images/sefasebis_rekomendaciebi.pdf;
http://palliativecare.org.ge/education.php;
http://www.palliativecare.org.ge/cms/images/paliatiuri_mzrunveloba_bavshvebshi.pdf**);**
http://www.palliativecare.org.ge/education.php ;
http://www.parliament.ge/files/619_8111_116308_Rec(2003)24-Georgian.pdf

NOTABLE ACTIVITIES DONE DURING 2005-2010

Policy:

- Three policy workshops and 6 ”Listenings” by Healthcare and Social Issues Committee of Parliament of Georgia, dedicated to Palliative Care Development was organized in 2005-2010.

- Policy recommendations on Palliative Care Development signed by International experts J. Stjernsward and F. Ferris were accepted;

http://www.parliament.ge/files/619_8111_657149_progr_en.doc

- Policy Document "Palliative Care Program in Georgia" Presented by International expert Jan Stjernsward was approved;

http://www.parliament.ge/index.php?lang_id=GEO&sec_id=619

o Position of Palliative Care National Program Coordinator and his Office was established at the Healthcare and Social Issues Committee at the Parliament of Georgia (Head of the Office – Prof. D. Kordzaia);

http://www.parliament.ge/index.php?lang_id=GEO&sec_id=619

- The portal of Palliative Care was also opened on the web-site of Parliament of Georgia.

http://www.parliament.ge/index.php?lang_id=GEO&sec_id=619

- In April 08, 2007 by Parliament of Georgia were approved the amendments in 4 laws of Georgia. They are:

- Law of Healthcare;
- Law of medical activity;
- Law of patient's right;
- Law of concerning the narcotics, psychotropic materials, precursors and narcological aid.

According to these changes:

- Definition of Palliative Care (analogous to WHO definition) was accepted ("Law of Healthcare" and "Law of Patient's Right");
- Pain relief for incurable patients was recognized as absolutely necessary issue ("Law of Healthcare");
- Palliative Care was recognized as a necessary component of continuous medical aid and can be received by patient during all his life ("Law of Healthcare" and "Law of medical activity");
- Government engages (takes under the obligation) to provide patients by necessary amount and necessary forms of opioids, correspondingly to international standards ("Law of concerning the narcotics psychotropic materials")
- The Ministry of Labor, Health and Social Affairs was obligated to create and sign the normative order "Instruction of Palliative Care for Chronic Incurable Patients"; (President of Georgia signed these amendments in May 8, 2007);

http://www.parliament.ge/index.php?kan_kat_id=13&sec_id=69&lang_id=GEO&kan_name=&kan_text=&kan_from=&kan_to=&kan_num=&Search=%E1%83%AB%E1%83%98%E1%83%94%E1%83%91%E1%83%90

- On July 10 2008, the Minister of Labor, Health and Social Affairs signed the normative order changing the rules of opioid prescription;

On March 17, 2009 the policy round table dedicated to improvement of drug availability and oral morphine importation was organized with participation of members of Parliament, representatives of MOH, Organizations providing Palliative Care, WHO Country Office, National Cancer Center, AIDS Center, Insurance Companies, Mass media and international experts: Mary Callaway,Karen Ryan, Katalin Muzsbek, Martha Maurer. The special recommendations to MOH were prepared (see bellow):

1. To take into account recommendations of the United Nations Single Convention on Narcotic Drugs, 1961 (as amended by the 1972 Protocol) and to use the International Narcotics Control Board's methods, when estimating the amount of annual requirements for controlled substances;
2. Update the "Essential Medicine Drug List", according to WHO recommendations, which should include codeine(30 mg tabs) and different forms of opioids- injectable and per oral forms (slow release and sustainable release forms);
3. Ensure procurement and import of codeine, morphine and other opioids according to the ratio recommended by WHO;
4. Ensure in the near future registration of the needed forms of opioids (Oral IRM and Oral SRM)
5. To take into account recommendations of "national palliative Care Program" (http://www.parliament.ge/files/619_8111_692237_jan_stjernsward_report_georgian.pdf) nd "controlled medicine database" http://www.who.int/hiv/amds/ControlledMedicineDatabase.xls#Introduction!A1) when procuring "analgesic medications for securing the population with specific medications";
6. Prepare amendments to the Decree of the Minister of Labor, Health and Social Affairs N 157/n, 10 July 2008", according to which:
a) to increase opioid supply, which one recipe can contain (for example Fentanyl patches at least for nine days supply);
b) Physician, when needed, at once, can prescribe more then one opioid;
7.In collaboration with Ministry of Internal Affairs to start working on new regulation, which will ensure increase in the number of days for dispensing the opioids from pharmacies;
8. to consider the need in increasing palliative care programs gradually in whole country (it is rational to start pilot programs in Kutaisi and Telavi by 2010)
9.To ensure support to the education of the Primary Health Care physicians in pain management and help them overcome unreasonable "opiophobia.

Remark:
The majority of these recommendations are already implemented

- The National Model of PC Incorporation in Healthcare System, presented by PC National Coordinator was accepted Healthcare Committee of Parliament of Georgia in April 3, 2009;
- On January 28 and February 26 On July 10 2008, the Minister of Labor, Health and Social Affairs signed the normative order changing opioid prescription-forms and liberating opioid prescription

Education/Training:

- Georgian-language handbooks and educational materials are prepared and published;
- 3 accredited Continuing Medical Educational programs in Palliative Care are preparation and implemented; the courses were accredited by the Counsel of Continued Medical Education and Professional Development. More than 300 healthcare professionals have attended these programs throughout Georgia;
- Obligatory course of "Palliative Care" – in Medical Faculty of Tbilisi State University and elective course - in Tbilisi State Medical University are Established.
- Educational courses of "Palliative Care" are implemented in Nursing Colleges in;

http://www.medicine.tsu.ge/sabakalavro/samk%20programa.pdf

- Dr. Tamar Rukhadze and Dr. J. Abesadze passed International Palliative Care Fellowship (2,5-years educational course in San Diego Hospice) lead by Dr. F. Ferris;
- Dr. Irina Tsirkvadze passed the educational/bed-side training course in pediatric PC in Latvia under Supervision of Dr. Anda Jansone;
- Dr. Pati Dzotsenidze is elected as a fellow of international Pain & Policy fellowship program;
- 6 Educational/training courses for healthcare professionals involved in PC services were conducted by International staff (k. Muzsbek, A. Russa, J. Srjersward, F. Ferris, X. Batiste, etc);
- 6 Georgian representatives participated in "Zaltsburg Seminars for Palliative Care";
- The international OMI satellite seminar (funded by OSI-OSGF): "Palliative Care in Children and AIDS" – was organized in Tbilisi, November 6-7, 2007 (speakers: M. Callaway, Dr. Gerri Frager, Dr. Nancy Hutton);
  http://www.aaf-online.org/satellite_2007.htm

Advocacy:

- The periodical demonstration of video-clips on PC by TV is performed
- The Report of Jan Stjernsward (WHO and OSI International expert) – "Georgia National Palliative Care Program" was published and distributed among Health Care Professionals and policymakers. Report was issued on both – English and Georgian Languages; its electronic version is presented on the website of GNAPC and Parliament of Georgia

http://www.palliativecare.org.ge/cms-images/jan_stjernsward_report_english.pdf
http://www.parliament.ge/files/619_8111_336972_Paliativi-Eng.pdf);

- About 20 informational meetings in Tbilisi (capital) and different regions devoted to the further promotion of Palliative Care development in Georgia were conducted (the meeting

were organized by First Lady's office and/or CPC and/or GNAPC – with participation of Members of Parliament of Georgia, MOH and International Faculty);

- Special Newspapers, dedicated to different aspects of Palliative Care were prepared and distributed;
- The project "Media – Support to Palliative Care Development in Georgia" was implemented; the competition for best 10 publications on PC in Press-media was organized.
- The annual meetings dedicated to international day of "Hospices and Palliative Care" were conducted.

Remark:
For organization of "Hospices and Palliative Care - 2010" GNAPC received the special grant from HtH.

- Meeting with Ukrainian delegation - representatives of Verkhovna Rada, Ministries, NGOs and Community - with First Lady of Georgia and Health Care and Social Issues Committee of Parliament of Georgia (delegation was invited by "Cancer Prevention Center") was prepared. Meeting was dedicated to mutual exchange of experiences for the first steps of development of Palliative Care in Ukraine and Georgia. The special Address of Health Care and Social Issues Committee of Parliament of Georgia to the corresponding committee of Verkhovna Rada (Parliament) of Ukraine – welcoming mutual support to implementation of joint programs dedicated to development of Palliative Care System in both countries - was signed by the deputy-speaker of Parliament of georgia

http://www.parliament.ge/index.php?lang_id=GEO&sec_id=302&info_id=18144.

http://www.osgf.ge/?i=29&l=1&i2=1044&y=2008&p=4.

- The special presentation "Palliative Care Development in Georgia – Juridical, Organizational, Educational and Medical Issues" was prepared by the office of National Palliative Care Program Coordinator; D. Kordzaia delivered this presentation/lecture in Ukrain, Latvia, Belorus, Armenia, Azarbaijan. In two last countries the presentations were done in frame of official programs of visit of the First Lady of Georgia.

Regardless the achieved results, unfortunately, palliative care in Georgia

- **Is carried out through solitary initiatives and pilot programs, and not as the integrated system;**
- **Is not incorporated in the national healthcare plan, as it's intrinsic (organizational, methodical and financial) part;**

One of the most important reasons for above mentioned is that there was no National Program of Palliative Care, which:

- **Would fill the information gap on palliative care significance, outcomes and expenditure efficacy and support to government in taking respective political decisions and implementation;**
- **Would present the plan for development of palliative care and it's stepwise incorporation in every levels of national healthcare system.**

We have to note that, launching of palliative care national program has led to brilliant results on the way of palliative care establishment in national healthcare systems, not only in developed countries (US, UK, Canada, Austria, Spain, Israel, Sweden etc.), but also in post soviet countries of Eastern Europe (Poland, Hungary, Romania, Slovenia etc.) and in developing countries (Mongolia, Jordan, Egypt, Vietnam).

Palliative Care Need in Georgia

Approximately 42.000 death cases are registered annually in Georgia, with population of 4.5 million. According to international experience, approx. 60% of deceased, that means approx. 25.000 patients require palliative care and pain relief, including with the use of opioids like morphine. Given that at least 2 family members provide care for terminal stage patients, significant improvement of approximately 75.000 people overall can be achieved through palliative care service annually.

Most patients prefer to die at home in Georgia – this is their will and right, firmed through traditions.

First diagnosis usually is established on advanced stages in a big number of patients with cancer in Georgia, where 7000 – 8000 newly diagnosed cases are annually registered. For this reason, these patients pertain to untreatable category. Therefore, delivering of pain relief and palliative care to cancer patients refer to the most humane measures.

Practical implementation of palliative care (in pilot project) was initiated from 2004.

As a result, palliative care was delivered to more than 2000 patients from 2004 till present in Georgia (at the same time, number of visits at home exceeded 15000). This is certainly

insignificant number on the country scale, but is quite sufficient to make the one analyze the problem of pain management in incurable patients.

In the period of 2006-2007, the study supported by the grant of "Open Society – Georgia", which interviewed up to 300 patients (and their family members), receiving palliative care at home. Results indicated that pain relief was inadequate in 136 cases (45.3%). The study results demonstrated that inadequate pain relief was largely provided by lack of oral opioid preparations in Georgia: the absolute majority of legally available opioids in Georgia refer to injectable forms (injectable morphine).

This situation together with the strict regulations on administration, prescription and intake of opioids, compiled up to heavy burden on pain relief (results of the mentioned study was reported to 10th Congress of European Palliative Care Association in Budapest, in 2007).

Still, the results of analysis have shown that pain problem was remaining unresolved in the part of patients receiving the pilled (oral) forms of opioids (MST, Doltard). *[these forms accounted for 10% of opioids imported to Georgia in 2005 – 2006, while in the period of 2007 – 2008 their import was completely arrested, to be restored again in 2009 after joint efforts]*.

Assumption was made that this could be resulting from the lack of knowledge on the use of opioids in pain management in medical professionals of primary care setting, delivering medical service at home to oncologic incurable patients [overwhelming opioidophobia and poor information awareness of both patients themselves and their family members presumably also make a huge contribution to the problem].

Analyzing the results of anonymous questionnaire interview, given to primary care setting medical professionals during the courses of continuous medical education, have shown that a meaningful number of doctors are unaware of morphine pharmacokinetics and current standards of their administration and prescription.

What about patients and their family members, they been found to:

- Be afraid of receiving opioids – explaining their fear with "the risk of developing drug dependence";
- Prefer to tolerate pain, as administration of opioids is regarded as a death warrant, leading to psychological problems, logically.

The mentioned situation was laid as a background to the initiative of amendments to legislative and normative bases, which has led to changes in 4 laws f Georgia, supporting to palliative care development, availability and import of the needed amount and forms of opioids, and the instruction of palliative care strategy was officially adopted by the Order N 157/n of the Minister of Labor, Health and Social Affairs, issued on July 10, 2008 (see the annex). Meanwhile, the latter

order and those numbered N17/n of January 28, 2010 and N55/n f February 26, 2010 establish the modern, liberalized terms of opioid administration and prescription:

Decree of the Minister of Labor, Health and Social Affairs N 157/n of 10 July 2008"

On Approval of the Instruction about "the Palliative Care Providence for Chronic, Incurable Patients"

(On the basis of Article N 154 of the Georgian Law on "HealthCare")

Hereby I decree:

1) To approve the enclosed "Instruction about the Palliative Care providence for chronic, incurable patients" (attachment N 1)
2) To ensure fulfillment of the approved instruction:

a) The recipe prescribed to chronic, incurable patients, can contain narcotic substances for 7 days supply;
b) The physician, who issues the prescription, or the head of the institution or any responsible person officially authorized by the head for monitoring to be held responsible for appropriate prescription of the drug;
c) If in the course of treatment the state of the patient changes, which requires changing of narcotics, or its forms or dosage, the physician should issue a new prescription;
d) Prescribed narcotic drugs should be dispensed within 5 working days. After expiration of 5 working days a pharmacist is no longer allowed to dispense the medication. In case of need a new prescription should be issued.
e) When submitting the estimated annual quota to INCB as well as implementing governmental procurements, the relevant services of the Ministry of Labor, Health and Social Affairs should take into account the recommendations of WHO on different kinds of narcotics required for pain relief, their forms and ratios."

3) The decree should come into force on the date of its publication.

Aleksandre Kvitashvili

Decree of the Minister of Labor, Health and Social Affairs

N 17/n 0f 28 January, 2010

On amendments to the decree by the Minister of Health and Social Affairs of 29 November, 1999 N465/o

"Approval of the temporary rules on endorsement of the recipe forms and their assigning and prescription rules, for Substances under special control , drug forms of these substances and preparations containing these drugs"

In accordance with article N20 of the Law of Georgia "on Normative Acts",

Hereby I decree:

1. To add the amendment to the decree by the Minister of Health and Social Affairs of 29 November, 1999 N465/o on **"Approval of the temporary rules concerning endorsement of the recipe forms and their assigning and prescription rules, for Substances under special control , drug forms of this substances and preparations containing these drugs"; the attachment N1 –**

"recipe form for the prescription of narcotic drugs" – approved by the first "a" article of the decree should be redacted as follows:

Attachment N 1

Recipe form for prescribing narcotic substances

Facility Authorization FormN1 Recipe N For narcotic use Date of issue Patient (name, surname) Age Medical history N Diagnose RP.: ---------- S.: ---------- Head of the Organization Doctor signature Doctors stamp Stamp of the Organization	Recollection for physicians – Generic or/ and commercial names of the substances can be used , in Latin language, filled by blue or black pen. – - only adopted abbreviations are allowed (recipe valid for 5 days)

2. Old recipe forms for prescription of the narcotic substances should be disregarded by the March, 2010.

Decree ## 18/n -96 of the Ministers of Labor, Health and Social Affairs and Internal Affairs, 28. 01. 2010
On amendments to the joint decree by the Ministers of Health and Social Affairs, 13 March 2000 and Internal Affairs, 15 March 2000 # 32/o,
 # 102 on "approval of the temporary rules of storing, registering, assigning, prescribing, dispensing and applying narcotic substances designed for the needs of contingent taking narcotic analgesics for symptomatic treatment. "
In accordance with article N20 of the Law of Georgia "on Normative Acts",

To add to the joint decree by the Ministers of Health and Social Affairs, 13 March 2000 and Internal Affairs, 15 March 2000# 32/o
102 (SSM III, 2000, #26, article 241) on "approval of the temporary rules of storing, registering, assigning, prescribing, dispensing and applying narcotic substances designed for the needs of contingent taking narcotic analgesics for symptomatic treatment" - the amendments to the Article 11' of the attachment N 2 on the "rules on assigning, prescribing, and applying narcotic substances and the rules on storing, registering, obtaining the recipe forms for the prescribing the narcotic substances in Primary health Care facilities " with the following contents:

"11'. All charts of the recipe should be filled apparently, generic or/ and commercial names of the substances can be used, in Latin language, indicating drug form, dosage and the total daily dose. On one recipe form different narcotic substances and their different forms can be prescribed. No

corrections are allowed in the recipe form. The recipe blank should be authorized by the stamps of the physician and the Head of the facility,(clearly readable). The recipe should be signed (visibly) by the Head of the facility or person officially authorized by the Head of the facility and by the physician. The narcotic substances can be dispensed from the pharmacies only on the base of the original form of the recipe."

Decree of the Minister of Labor, Health and Social Affairs N 55/n of 26 February 2010"
On amendments to the decree of the Minister of Labor, Health and Social Affairs N 157/n of 10 July 2008"
On Approval of the Instruction about "the Palliative Care Providence for Chronic, Incurable Patients"
In accordance with article N20, 4' of the Law of Georgia "on Normative Acts",

Hereby I decree:
To add the amendments to the Decree of the Minister of Labor, Health and Social Affairs N 157/n of 10 July 2008" on Approval of the Instruction about "the Palliative Care Providence for Chronic, Incurable Patients" Article 2 "b" 4' with the following contents:

> B'. The physician, who issues the prescription, or the head of the institution or any responsible person officially authorized by the head for monitoring to be held responsible for appropriate prescription of the drug; the primary Health care physician in the villages, who are responsible for the ambulatory health care service for the population in villages, are responsible for prescribing recipes alone, with authorization on the recipe blank with signature and personal stamp."

According to the data-base of the National Cancer Center there are about 30000 cancer patients registered in Georgia for today. For example, In 2007 5059 patients were registered and 4033 died, 2022 of which died within one year from diagnosing. So it's obvious that more than 50 % (50,1%), with the first established diagnosis, already have advanced cancer, mostly stage-IV and are in need of relieving pain of different strength.

Calculation of the number of people in need of pain relief is based on the illness structure. There are around 8.500 new cancer cases per year in Georgia. Approximately half of this patients are in need of pain relief and at least half of them need strong analgesics, like opioids, based on international and national statistics. According to international experts, for chronic pain one patient needs 10 gr of morphine in total (approximately for 3 months). So the estimate opioid need for cancer patients annually is 21-22 kg. To add other medical needs for opioids (surgery, post-surgery rehabilitation period, other chronic illnesses with pain, etc.). On the whole it reaches about 23-25 kg annually.

In 2007 the quota for morphine, estimated by the governmental structure, was 19,000 grams, 4,198 gr were imported, consumption rate was 6,337gr. That clearly indicates the condition of cancer patients suffering from pain. The amount of morphine consumed in 2007 is about 1/3- 1/4 of the estimated need.

For more evidence the statistics of morphine estimated and imported by Government of Georgia and consumed in the last 5 years are presented in the below table:

Morphine	2003	2004	2005	2006	2007	2008	2009
Quota	15000	19000	19000	19000	19000	19000	15000
Import	12828	11824	12595	9306	4198	5995	8616
Consumption	11833	11905	10921	8190	6337	5887	6886

This data indicates, that most of the cancer patients don't get any pain-killer medication or get inadequate amount that can create the picture of "pseudo-addiction," same as pseudo "Drug Seeking Behavior".

Relief of severe cancer pain depends on the availability and use of opioids in the therapeutic group of morphine. These opioids do not have an "analgesic ceiling". They can be administrated safely in increasing doses until the pain is relieved or as long as side effects are tolerated. There is no standard treatment dose for these opioids. The appropriate dose to relieve pain should be determined by individual needs of the patient. (WHO recommendations 1996, 2000, 2004; the single dose of morphine can be ranged from 5mg till to 1000 mg)

The amount of opioids estimated by the government (table data) would not even fully cover the real need of opioids for the patients in pain if the treatment and pain management were adequate. However, the imported amount of morphine within the framework of the governmental programs in 2003-2007 was only half of the estimated amount.

The underlined causes:

1. Lack of knowledge in Palliative Care and Pain Medicine among physicians, which consequently causes inadequate and incorrect opioid administration/prescription (pain treatment and palliative care are not the urgent priorities for the government, healthcare workers do not receive the necessary training to assess and treat pain);
2. The lack of knowledge leads to wide spread under-treatment and to low demand for morphine. Similarly, complex prescription regulations and the fear of punishment for mishandling morphine discourage pharmacies and hospitals from stocking and healthcare workers from prescribing it, again resulting in low demand from the primary Health care physicians to the relevant governmental bodies;
3. Leak of budget allocated by the Government for procurement the opioids.

It is interesting that with the decreasing importation, the amount of consumed morphine sharply lessens, while unfortunately, the number of cancer patients does not decrease. Considering that although the amount of opioids for sick people legally imported by the government was critically decreasing in 2003-2008 whereas the number of drug users and addicted persons was increasing dramatically, we can conclude that very strict control in legal use (over strict control of physicians and patients, strict regulations) only impacted the patients with incurable diseases who often suffer with unbearable pain. Pain like this often makes humans desperate and sometimes even drives them to suicide, especially given the very difficult socio-economic situation. Physicians fearing over strict control and undeserved punishment, often refuse to help such patients, thus betraying moral and ethic principles of doctors.

Despite the fact that in 2007 – 2008 some liberalization, according to international recommendations, has taken place in legislation regulating opioid use, still there is very low consumption rate for oral morphine, which was imported in November 2009.

Table indicating opioids consumption rates:

Year - 2009	**January**	**Quarterly**	**Annual**	**Annual**
	Residue	***Residue***	***Import***	***Expenditure***
Morphine sulphate 15 mg. tab.	0	27500	30300	2800
Morphine sulphate 200 mg. tab.	0	0	300	300
Fentanyl 0,005% 2ml. amp.	1545	44405	390000	347374
Morphine h/q. 10mg/1 ml. amp.	386948	460802	870000	804933
Morphine sulphate 10 mg. tab.	0	126	0	0
morfinis sulfati 100 mg. tab.	0	2700	3300	600
morfinis sulfati 30 mg. tab.	20435	17600	20300	23135
morfinis sulfati 60 mg. tab.	1480	17600	20300	4180
omnoponi 2% 1ml. amp.	2295	1860	0	435
promedoli 2% 1.0 amp.	605	12562	40000	30315
tramadoli 100 mg/2 ml. amp.	523	3830	20050	16743
tramadoli 50 mg. kaf.	5528	0	80	5608
durogeziki 25mg/10sm 25 mkg/sT.	995	0	0	995
durogeziki 25mg/10sm 50 mkg/sT.	245	0	0	245

The underline cause of this can be the following:

- amendments to legislation, mentioned above, weren't dispensed to the level, where they should be implemented;
- The Primary Health Care facilities staff (implementation) have learned about the amendments, but aren't able to implement them; because of:

- lack of knowledge
- fearing over strict control and undeserved punishment - (coming from previous years).

These conditions should be overseen, when working on strategic plan of palliative Care for coming years. As well the fact, that by WHO recommendations, Three Step Analgesic ladder also contains codeine, as a step 2 analgesic medication, should be also taken into consideration by Governments.

The same reasons, mentioned above for morphine low consumption rates, can be listed as cause for not importing codeine in the country for the last years.

These situation violates not only the patients rights, but defies physicians rights as well; in the condition of restricted choice of opioids and limited stokes, the physician often faces dilemma.

One important problem should be mentioned: Access to opioids in pharmacies is possible only on strictly designed days (only 2 days) in a week, that not only opposes the changes in the normative orders (N157n – 10.07. 2008; N 17 /n - 28.01.2010 ; N55/n – 26.02.2010) but as well creates problems to relieve pain to patients timely and adequately. According to WHO recommendations opioids for medical uses should be affordable always and every where. This indicates that the following sophistication of the normative bases is needed.

One of the impediments to the availability of opioids for medical purposes is the location of the pharmacies in police stations. This was done because of the unstable conditions in the country in last decade of the previous century and the need to provide very strict control over their storage and to prevent diversion.

Today the country is stable. The police, under the supervision of the Ministry of internal affairs have complete control in the country and support its' strategic development; including rapid country development. In order to integrate into the European Union, it is necessary to adopt the universally accepted international standards regarding the control of opioid substances for medical use, thereby placing all pharmacies dispensing controlled narcotic substances for medical use in secured safes in hospitals (according to district location) and in secured safes in retail pharmacies.

It is suggested that a two year action plan to implement this change be developed in collaboration with the Ministry of labor, Health and social Affairs, Ministry of the Internal Affairs and the relevant substructures.

This change will increase the number of facilities able to dispense opioid controlled substances, increase the number of days opioids may be dispensed, thereby increasing pain relief and reducing the suffering of patients and families.

According to the researches and evidences of international experts, patients using opioids for pain relief do not really get addicted to drugs based on the WHO definition and criteria.

Addiction currently is referred to as “dependence syndrome,” defined by the World Health Organization Expert Committee on Drug Dependence as

> “A cluster of physiological, behavioral and cognitive phenomena of variable intensity, in which the use of a psychoactive drug (or drugs) takes on a high priority. The necessary descriptive characteristics are preoccupation with a desire to obtain and take the drug and persistent drug-seeking behavior. Determinants and problematic consequences of drug dependence may be biological, psychological or social, and usually interact.” (p. 5) (emphasis added).

It is an essential characteristic of the dependence syndrome that either psychoactive substance taking or a desire to take a particular substance should be present;

The international diagnostic classification (International Classification of Diseases ([ICD-10]) for “dependence syndrome” conforms to the World Health Organization’s definition, and requires that three or more of the following six features have been experienced or exhibited:

“Dependence syndrome”

1) **Strong desire**
2) **Difficulties in control**
3) **Harmful**
4) **Neglect of pleasures; increased time to obtain substance**
5) **Tolerance**
6) **Physical withdrawal**

From the above six criteria patients in pain usually experience only the last two: tolerance and physical dependence (Physical withdrawal), that are not enough to meet the criteria of “Dependence syndrome”, unless they also exhibit one of the remaining 4 criteria that relate to compulsive use.” (WHO)

These definitions and criteria for drug dependence confirm once more the ridiculousness of the fear for developing drug dependence / addiction.

This issue must be reflected In the educational programs of the Palliative Care implementation and developmental strategic Planning.

The governmental bodies should also consider recommendations of the European Council (2003) 24 and WHO (2000 recommendations/ guideline 14), regarding terminology use; WHO Guideline 14: “Terminology in national drug control policy should not have the potential to confuse the medical use of opioids for pain with drug abuse or drug dependence.”

When health care professionals and government officials use Guideline 14 to examine national drug control policies, the goal is to identify any policy language that uses outdated terms and definitions, especially those that have the potential to classify a patient who merely develops

physical dependence or tolerance as a result of the appropriate medical use of opioids for pain as having a dependence syndrome.

Legislation concerning terminology in Georgia needs to be examined and overlooked.

There is need in introducing clear definition of ‘drug dependence’ term; changing of the terminology which leads to confusion in using terms: ‘using opioids for pain management’ and ‘drug dependency’.

For example, the definition “somatonarcoman” refers to “ Somatonarcoman (person) – patient, with somatic disease accompanied by pain, using controlled psychotropic substances legally prescribed by a physician and having developed drug dependence, which is confirmed by an authorized Health Institution” by the law today. The fragment “narcoman” from the word “ somatonarcoman” causes unethical and opposing to legislation actions from the physicians.

The rectification of the terminology concerning the legal use of the narcotic substances: estimating the needs, their procurement and import, assigning/prescribing and their use should be incorporated in the strategic planning of the National palliative Care program.

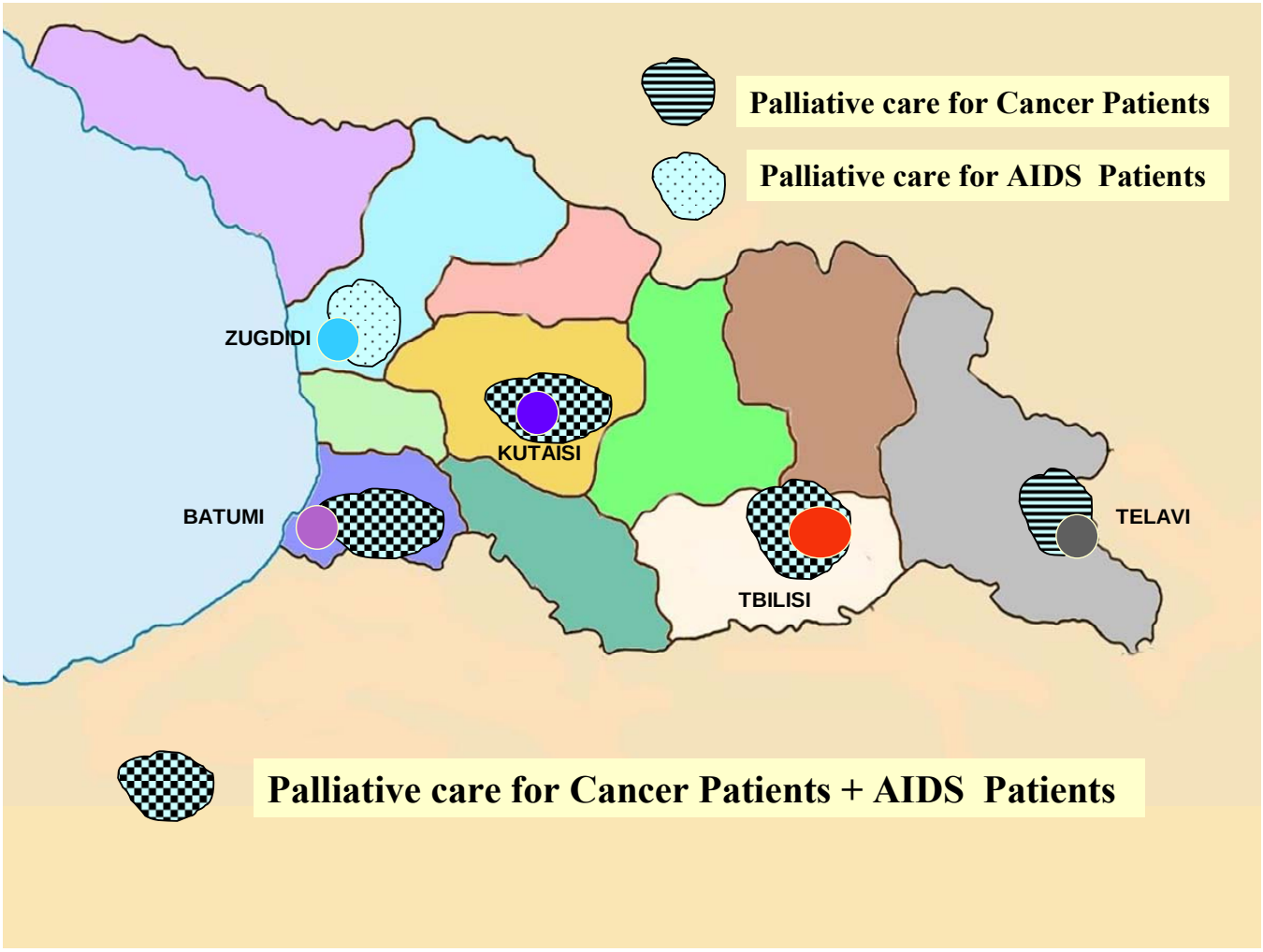
MAIN PROJECTS IN PALLIATIVE CARE BEING UNDER IMPLEMENTATION FOR PRESENT IN GEORGIA

Patient Service (see the scheme bellow)

Name of Palliative Care Program	Place of implementation	Dates of implementation	Implementing organization	Funding source
Home-based Palliative Care of chronic, incurable patients by mobile groups	Tbilisi Kutaisi Telavi municipality	2010	Georgian National Association for Palliative Care	State budget
Hospital-based Palliative Care chronic, incurable patients	Tbilisi	2010	"Cancer prevention Center" National Center of Oncology	State budget
"Improving survival rates and life quality of HIV infection / AIDS patients" (palliative care at home)	Tbilisi; Kutaisi (and Imereti region); Zugdidi (and Samegrelo region); Batumi (and Adjaria region)	2008 - 2010	Georgian National Association for Palliative Care (with cooperation of AIDS patients Aid Fund)	Global Fund
"Improving survival rates and life quality of HIV infection / AIDS patients" (palliative care at hospital)	Tbilisi; Kutaisi (and Imereti region); Zugdidi (and Samegrelo region); Batumi (and Adjaria region)	2008 - 2010	"Cancer prevention Center"	Global Fund
Palliative care at home	Tbilisi	2007 - 2010	Coalition for Care at Home (with cooperation of "Cancer prevention Center"	Foundation "CordAid"

Remark: There are no funding for the following programs:

- Pediatric Palliative Care;
- Palliative Care for elders;
- Palliative Care of neurological patients;
- Palliative Care of patients with intractable types of tuberculosis.



Education / Training

Title of Palliative Care educational program	Program duration	Place of implementation	Dates of implementation	Implementing organization
Palliative Care (obligatory course)	20 hours	Tbilisi State University	2007 - 2010	Academic staff of the University (with cooperation of National Cancer Center and Georgian National Association for Palliative Care
Palliative Care (optional course)	20 hours	Tbilisi State University	2009 - 2010	Academic staff of the University (Department of Basic and Clinical Pharmaclogy), with cooperation of National Cancer Center
Palliative Care (obligatory course for	8 ECTS credits	Tbilisi State University	2011 - 2012	Academic staff of the University, with

nurses)				cooperation of National Cancer Center
Palliative Care (optional course)	24 hours	Tbilisi State Medical University	2006 - 2010	Invited staff, with cooperation of Cancer Prevention center
Palliative Care (optional course)	18 hours	Batumi State University	2010	Invited staff (with cooperation of Georgian National Association for Palliative Care
Palliative Care (optional course)	18 hours	Kutaisi State University	2010	Invited staff (with cooperation of Georgian National Association for Palliative Care

Scientific research

Project Title	Term of implementation	Implementing organization	Involved organization	Funding source
Supporting to the developing the adequate model of pain relief in advanced cancer patients	2009 - 2010	Department of Gerontology and Palliative Care of Al. Natishvili Insitute of Morphology	National Palliative Care Association of Georgia	Georgian National Science Foundation
Developing the model of Palliative Care of Aged Population in Georgia	2009 - 2010	Department of Gerontology and Palliative Care of Al. Natishvili Insitute of Morphology	Georgian National Association for Palliative Care	Budget of Institute of Morphology
End-of-Life Mapping for People with Recognized Limited Terms of Life	2010 - 2011	Georgian National Association for Palliative Care Institute of Palliative Medicine (San Diego Hospice)	Department of Gerontology and Palliative Care of Al. Natishvili Insitute of Morphology	Preliminary period (self-funded)

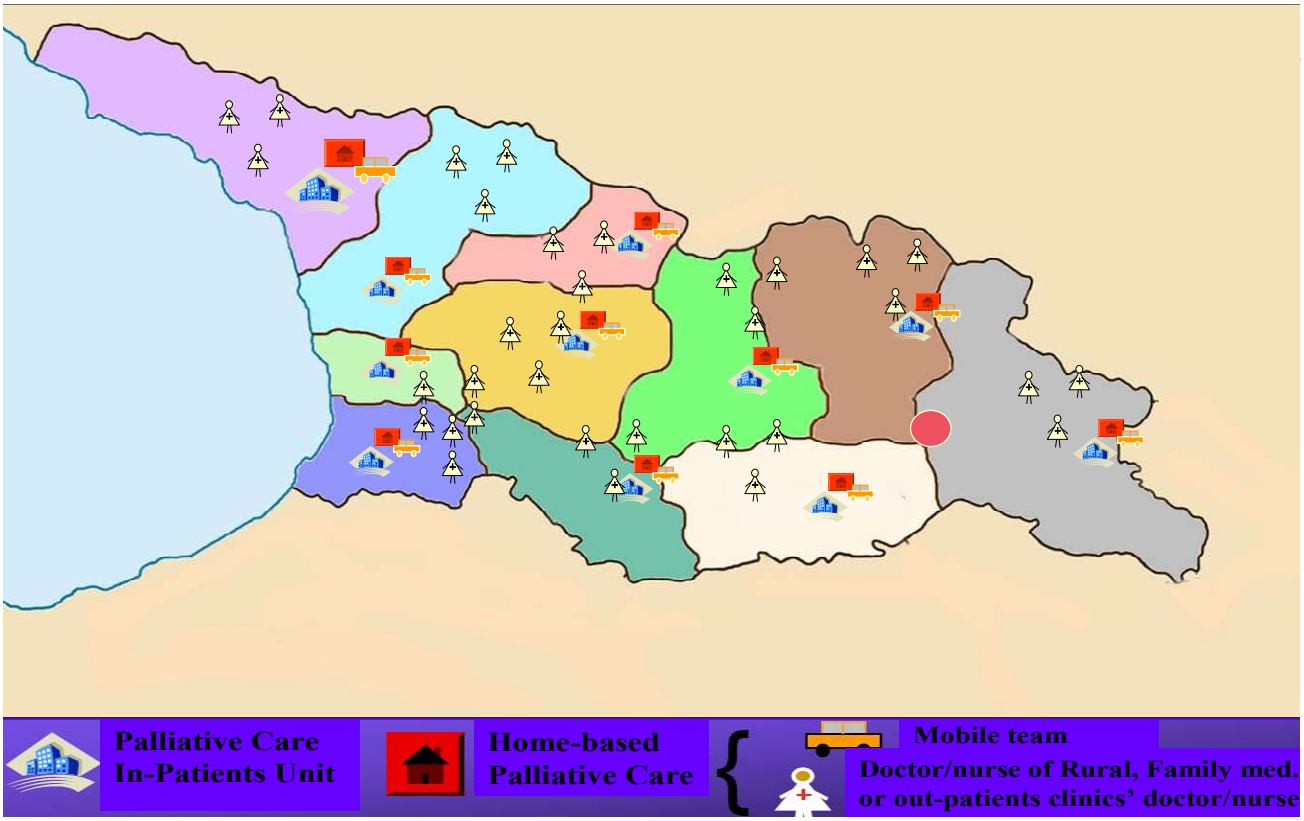
Promotion, informing, organizational and methodologic support

Project Title	Place of implementation	Term of implementation	Implementing organization	Funding source
Identifying obstacles to the fundamental human right "to be free from pain" and improving access to essential medicines through introduction of the WHO Model List of Essentail Medicines	Tbilisi	2009 - 2010	Institute of Cancer Prevention and Palliative Medicine, with cooperation of the Office of Coordinator of National Palliative Care Program	"Open Society – Georgia" Foundation

Improving the life quality of chronic – oncologic (incurable) patients through pain relief and improving knowledge of medical professionals, by educational trainings in Palliative Care	4 regions of Georgia	2010	Palliative Care Service at the National Cancer Center	"Open Society – Georgia" Foundation
Palliative Care supporting event, dedicated to International Day of Palliative Care	Tbilisi	2010	Georgian National Association for Palliative Care	"HtH", Tbilisi State Medical University

Georgia has already enrooted tradition of funding palliative care educational, informational, research, organizational and methodological support projects from non-budget sources (different funds, charity organizations, institutional initiatives, private funding, etc.). This trend will presumably keep the same route for the next 5 years.

Thus, the model and funding plan proposed below concerns only practical component of palliative care.



Palliative Care in Tbilisi								
In-patient Palliative Care						Home-based Palliative Care		
Central hospice	Oncology Center	Child hospilats	Neurology Center	Tuberculosis Center	AIDS Center	3 mobile teams (providing consulting and expert service)	Family Medicine Centers	Polyclinics
Unit on 20 beds	Unit on 20 beds	Unit on 5 beds	Unit on 5-10 beds	Unit on 5-10 beds	Unit on 3-5 beds	on whole city	by districts (regional distribution)	

Remarks: Big cities copy the Tbilisi model.

Palliative Care in 11 regions of Georgia			
In-patients Palliative Care	Home-based Palliative Care		
Unit or Ward in every Regional Central Hospitals	1-2 mobile teams (providing consulting and expert service)	Family Medicine Center(s)	Rural outpatient clinic (ambulance) – rural doctor/nurse
(3-10 beds, according to local need)	On whole region	In every regional center	In every village

Considering the above mentioned schemes, Georgian model requires up to 30 hospital (in-patient) Palliative Care units and up to 35 mobile teams for home-based Palliative Care.

Funding of family medicine center physicians and nurses, out-patients clinic physicians and nurses and rural doctors and nurses are already defined. Involvement of palliative care into medical services carried out by above-mentioned staff is strongly recommended. This would logically increase their salary. In this case the sum expenditure on funding specialized and non-specialized structures and human resources involved in palliative care network will not exceed 4500.000 GEL (considering present prices and wages).

This sum will cover the salaries of the doctors, nurses, junior medical personnel and care-givers, social workers, psychologist, technical personnel and managing staff, also the expenses of transporting and basic drugs minimal supply.

Considering all above mentioned, the Georgian National Program (action plan) on the establishment, development and integration of Palliative Care at every levels of healthcare system is presented below.

Meanwhile, this plan considers the classical recommendations provided by WHO experts – strategic triangle of palliative care and pain control development – summary of which can be simply imagined like the scheme below:



PALLIATIVE CARE INCORPORATION IN GEORGIAN NATIONAL HEALTHCARE SYSTEM

ACTION PLAN 2011 - 2015

CHANGES IN LEGISLATIVE-NORMATIVE BASIS AND INISHIATIVES

#	Activities / Year	2011	2012	2013	2014	2015
1.	**Verification of "Palliative Care" in the official list of Medical Specialties of Georgia.** ***Note: currently "Palliative Care" is verified as a sub-specialty for 4 specialties: "Oncology", "Internal Medicine" "general Surgery", "Critical Medicine (reanimatology)".***					
2.	**Perfection of the terminology used in legislative-normative documentations and related with legal circulation and consumption of opioids**					
3.	**Approval of the List of Essential Drugs for Palliative Care (EAPC Essential Drug List)**					
4.	**Perfection of the regulations for Morphine administration, prescription, delivery, accessibility, consumption and monitoring – in accordance of recommendations and requirements of WHO, Euro council and EU.** ***Note: the current regulations are given above***					
5.	**Implementation of permanent changes in Georgian Law of State Budget** ***Note: the materials related with this topic are given below.***					

GEORGIAN LAW OF STATE BUDGET

FINANCING OF PALLIATIVE CARE (GEL) 1$=1,8 GEL

YEAR / BUDGET	2009	Current 2010	2011	2012	2013	2014	2015
Federal budget	280 000	440 000	**600 000**	**900 000**	**1 400 000**	**1 900 000**	**2 000 000**
budget of Ajara Autonomic Republic	100 000	50 000	**100 000**	**150 000**	**200 000**	**300 000**	**360 800**
Regional/municipal budget	–	–	**100 000**	**400 000**	**800 000**	**1 200 000**	**1 878 000**
TOTAL	***380 000***	***490 000***	***800 000***	***1 450 000***	***2 400 000***	***3 400 000***	**4 238 800**
TECHNICAL SUPPORT			***50 000***	***100 000***	***150 000***	***200 000***	***261 200***
TOTAL			***850 000***	***1 550 000***	***2 550 000***	***3 600 000***	***4 500 000***

FINANCING OF OPIOIDS PURCHASE, IMPORTATION AND DISTRIBUTION

YEAR / BUDGET	2009	Current 2010	2011	2012	2013	2014	2015
Federal budget	***600 000***	***660 000***	***800 000***	***900 000***	***1 000 000***	***1 100 000***	***1 200 000***

GEOGRAPHY OF PALLIATIVE CARE SERVICES

THE FORM (TYPE) OF PALLIATIVE CARE SERVICES / TOWN, REGION, MUNICIPALITY		Central Hospice (multi-profile palliative care for in-patients)	Multi profile Palliative care Service at National Cancer Center	Palliative Care Unit for Neurological Patients	Pediatric Palliative Care Unit(s)	Geriatric Palliative Care Unit(s)	Palliative Care for AIDS Patients	Palliative Care for patients with Tuberculosis	Palliative Care Mobile tem	Out-patients' Clinic / Family Medicine Centers	Rural Doctors / Nurses (in every village/community
Tbilisi		Beds	Beds	Beds	beds	beds			amount	amount	
		20	20	10	10	10	+	+	3	35	
TOTAL		*20*	*20*	*10*	*10*	*10*	*+*	*+*	*3*	*35*	
AUTO-NOMIC REPUB-LIC OF AJARA	**Batumi**	5	5	5	5	5	+		2	3	
	Kobuleti Munic.									1	
	Khelvachauri Munic.									1	
	Keda Munic.						+	+	1	1	
	Shuakhevi Munic.									1	
	Khulo Munic.									1	
TOTAL			*5*	*5*	*5*	*5*	*+*	*+*	*3*	*8*	
GURIA REGION	Lanchkhuti Munic	10							1	1	
	Ozurgeti Munic.								1	1	
	Chokhatauri Munic								1	1	
TOTAL		*10*							*3*	*3*	
AUTONOMIC REPUBLIC OF AFKHAZETI (ABKHAZIA)							+		1		
TOTAL							*+*		*1*		
IMERETI REGION	**KUTAISI**	10	5		5	5	+		2	2	
	Zestafoni Munic.									1	
	Wkaltubo Munic.									1	
	Samtrdia Munic.									1	
	Wiatura Munic.									1	
	Sachkhere Munic.	10					+	+	1	1	
	Terjola Munic.									1	
	Vani Munic.									1	
	Khoni Munic.									1	
	Tkibuli Munic.									1	
	Baghdadi Munic.									1	
	Kharagouli Munic.								1	1	
TOTAL		*20*				*5*	*+*	*+*	*4*	*13*	

KAKHETI REGION	Telavi Munic.	5					+	+	1	1	
	Akhmeta Munic.									1	
	Gurjaani Munic.								1	1	
	Kvareli Munic.									1	
	Dedofliswyaro Munic.									1	
	Lagodekhi Munic.									1	
	sagarejo Munic.									1	
	Sighnaghi Munic.	5							1	1	
TOTAL		*10*					*+*	*+*	*3*	*8*	
MTSKHETA-MTIANETI REGION	Akhalgori Munic.									1	
	Dusheti Munic.	5							1	1	
	Tianeti Munic.									1	
	Mtskheta Munic.									1	
	Kazbegi Munic.								1	1	
TOTAL		*5*							*2*	*5*	
RACHA-LECHKHUMI AND KVEMO SVANETI REGION Ambrolauri munic. Lentekhi Munic. Oni Munic. Tsageri Munic.										1	
									1	1	
		5							1	1	
		5							1	1	
TOTAL		*10*							*3*	*4*	
SAMEGRELO-ZEMO SVANETI REGION	**POTI**	5							1	2	
	AbaSa Munic.									1	
	Senaki Munic.									1	
	Zugdidi Munic.	5							1	2	
	Martvili munic.									1	
	Walenjixa Munic.								1	1	
	Khobi Munic.									1	
	Chkhorotsku Munic.									1	
	Mestia Munic.	5							1	1	
TOTAL		*15*							*4*	*11*	
SAMTSKHE-JAVAKHETI REGION	Adigeni Munic.						+	+		1	
	Aspindza Munic.									1	
	Akhalkalaki Munic.	5							1	1	
	Akhaltsikhe Munic.	5							1	1	
	Borjomi Munic.									1	

	Ninotsminda Munic.									1	
TOTAL		*10*					+	+	*2*	*6*	
KVEMO KARTLI REGION		10							1	2	
RUSTAVI										1	
									1	1	
Gardabani Munic.										1	
Bolnisi Munic.										1	
Marneuli Munic.										1	
Dmanisi Munic.										1	
TeTritskaro Munic.									1	1	
Tsalka Munic.											
TOTAL		*10*							*3*	*8*	
SHIDA KARTLI REGION	Gori munic.	5							2	1	
	Kaspi Munic.									1	
	Kareli Munic.									1	
	KhaSuri Munic.	5								1	
	Eredvi Munic.									1	
	KurTa Munic.								1	1	
	Tighvi Munic									1	
TOTAL		*10*							*3*	*7*	
CAPACITY BUILDING IN TOTAL		125	30	15	20	20	Will be defined according to Budget of Global Fund's Project	Will be defined according to Budget of Global Fund's Project	34	108	
BUDGET (GEL)		1 250 000	300 000	150 000	200 000	200 000			1 750 000	388 800	4 238 800

COVERING OF COUNTRY BY PALLIATIVE CARE SERVICES

No Services	Partial Covering	80 % - Covering

YEAR	2009	Current 2010	2011	2012	2013	2014	2015
TBILISI							
AUTONOMIC REPUBLIC OF AJARA							
BATUMI							
Kobuleti Munic. Khelvachauri Munic. Keda Munic. Shuakhevi Munic. Khulo Munic.							
GURIA REGION Lanchkhuti Munic Ozurgeti Munic. Chokhatauri Munic							
AUTONOMIC REPUBLIC OF AFKHAZETI (ABKHAZIA)							
IMERETI REGION							
KUTAISI							
Zestafoni Munic. Wkaltubo Munic. Samtrdia Munic. Wiatura Munic. Sachkhere Munic. Terjola Munic. Vani Munic. Khoni Munic. Tkibuli Munic. Baghdadi Munic. Kharagouli Munic.							
KAKHETI REGION Telavi Munic. Akhmeta Munic. Gurjaani Munic. Kvareli Munic. Dedofliswyaro Munic. Lagodekhi Munic. sagarejo Munic. Sighnaghi Munic.							
MTSKHETA-MTIANE-TI REGION Akhalgori Munic. Dusheti Munic. Tianeti Munic. Mtskheta Munic. Kazbegi Munic.							
RACHA-LECHKHUMI AND KVEMO SVANETI REGION Ambrolauri munic. Lentekhi Munic.							

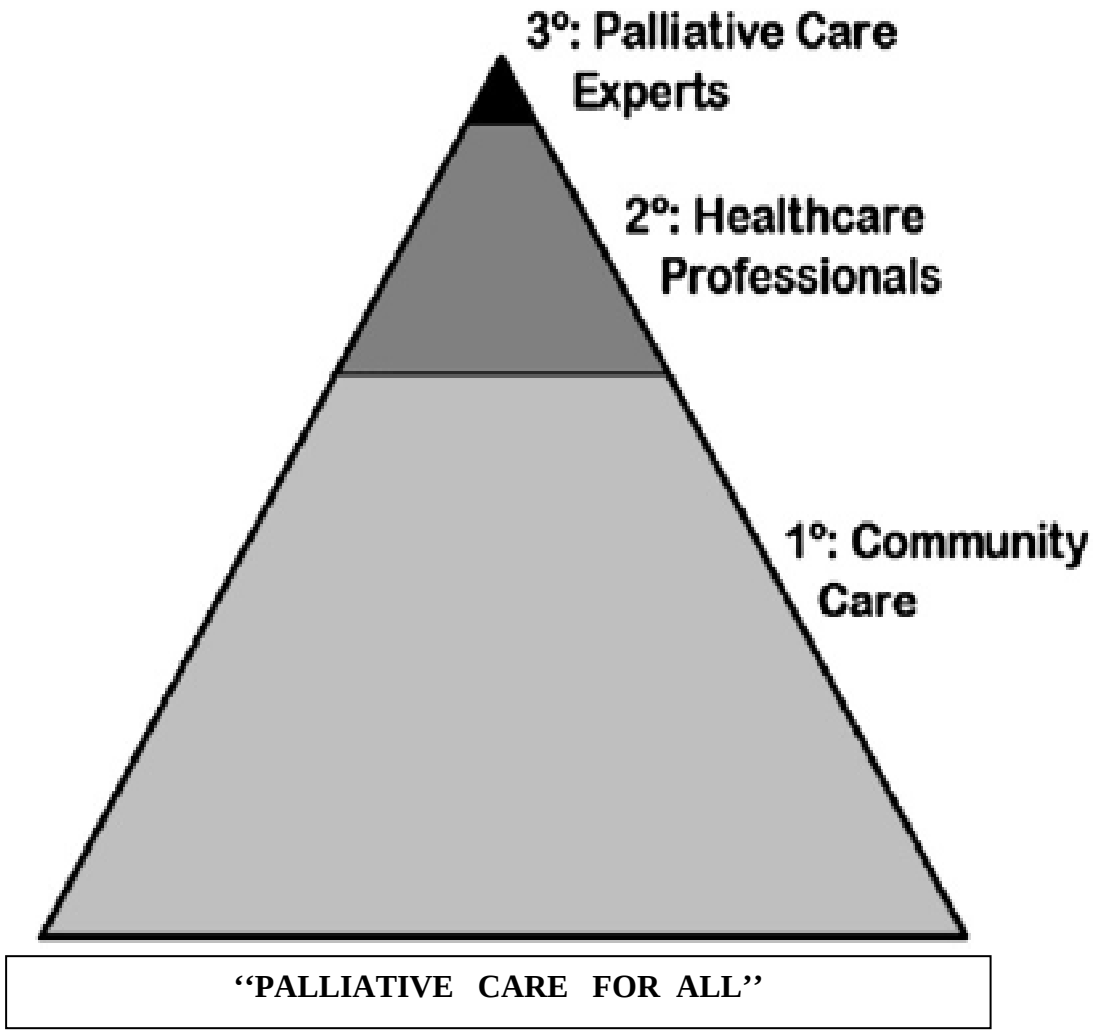
Oni Munic. Tsageri Munic.							
SAMEGRELO-ZEMO SVANETI REGION							
POTI							
AbaSa Munic. Senaki Munic. Zugdidi Munic. Martvili munic. Walenjixa Munic. Khobi Munic. Chkhorotsku Munic. Mestia Munic.							
SAMTSKHE-JAVAKHETI REGION Adigeni Munic. Aspindza Munic. Akhalkalaki Munic. Akhaltsikhe Munic. Borjomi Munic. Ninotsminda Munic.							
KVEMO KARTLI REGION							
RUSTAVI							
Gardabani Munic. Bolnisi Munic. Marneuli Munic. Dmanisi Munic. TeTritskaro Munic. Tsalka Munic.							
SHIDA KARTLI REGION Gori munic. Kaspi Munic. Kareli Munic. KhaSuri Munic. Eredvi Munic. KurTa Munic. Tighvi Munic							

COUNTRY QUOTA AND CONSUMBTION OF MORPHINE

QUOTA							
YEAR	2009	**Current 2010**	2011	2012	2013	2014	2015
Quota (kg)	**15,0**	**15,0**	**19,0**	**19,0**	**19,0**	**24,0**	**28,0**
CONSUMBTION (kg)							
Morphine (tablet.) Immediate release	-	?	**2,0**	**2,0**	**3,0**	**5,0**	**6,0**
Morphine (tablet.) Slowly release	**15 mg – 2800 tab** **30 mg – 23135 tab** **60 mg – 4180 tab** **200 mg – 300 tab** **100 mg – 600 t**ab	?	**4,0**	**6,0**	**8,0**	**10,0**	**14,0**
Morphine Inject.	**10 mg/1 ml – 804933 amp**	?	**4,0**	**4,0**	**3,0**	**3,0**	**3,0**
Other Types and Forms	-	?	**1,0**	**1,0**	**1,0**	**1,0**	**2,0**
Total Consumption	**6,89**	**?**	**11,0**	**13,0**	15,0	19,0	25,0

Education (Palliative Care Specialists Preparation, Medical Professionals Training, Methodological and Organizational Support to Educational Processes)

Presented bellow Action Plan is prepared in accordance of this scheme introduced by the Experts of WHO and IAHPC:



EDUCATION (Teaching/Training)

Target Groups		YEAR					Educational Program	Participants (BENEFICIARS)	Program Realization Place	Providers	Budget in GEL (1$ = 1, 85 GEL)	Financial sources
		2011	2012	2013	2014	2015						
MEDICAL DOCTORS	**2-years international Fellowship in Palliative Care (International residency Program)**						**2-years international Fellowship Program, accredited by IAHPC**	8 Medical Doctors	Institute of Palliative Medicine, san diego, Ca, USA	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Georgian National Association for palliative Care	624 000	NIH, OSI, OSGF HtH, IAHPC, etc.
	Middle-terms Education (3-6 months)						Program accredited by MOH of Georgia – for Medical Doctors of primary health care network (for rural doctors)	350-400 medical doctors	Regions and self-governing towns of Georgia	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO “Cancer Prevention Center” National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of Palliative Care	200 000	Employers of participants Grants to Providers and other financial sources
	Short-terms educational courses						Program accredited by MOH of Georgia for: - Medical Doctors of primary health care network (for rural doctors); - Public health Medical Doctors	About 2000 Medical Doctors	Regions and self-governing towns of Georgia	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO “Cancer Prevention Center”	200 000	Employers of participants Grants to Providers and other financial sources

										National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of Palliative Care		
CLINICAL PHARMACISTS	**Short -terms Education (1-3 months)**						**2-years international Fellowship Program, accredited by IAHPC**	3-4 recognized clinical pharmacists	Institute of Palliative Medicine, san diego, Ca, USA	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Georgian National Association for palliative Care	104 000	Grants to Providers and other financial sources
PHARMACISTS AND DRUG PROVIDERS	**Short -terms Education (1-3 months)**						Program accredited by MOH of Georgia for: pharmacists and drug providers	About 200-pharmacists and drug providers	Regions and self-governing towns of Georgia	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO “Cancer Prevention Center” National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of Palliative Care	50 000	Employers of participants Grants to Providers and other financial sources
NURSES	**Long-terms Education**						International Program for nurses **accredited by IAHPC**	8 Nurses	Institute of Palliative Medicine, san diego, Ca, USA	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Georgian National Association for palliative Care	312 000	Grants to Providers and other financial sources

	Middle-terms Education						Program accredited by MOH of Georgia for Nurses	350-400 Nurses	Regions and self-governing towns of Georgia	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO “Cancer Prevention Center” National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of Palliative Care	100 000	Employers of participants Grants to Providers and other financial sources
	Short -terms Education						Program accredited by MOH of Georgia for Nurses	About 2000 Nurses	Regions and self-governing towns of Georgia	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO “Cancer Prevention Center” National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of Palliative Care	100 000	Employers of participants Grants to Providers and other financial sources

SOCIAL WORKERS	**Short -terms Education (1-3 months)**						International Program for Social workers	4 Social workers	Institute of Palliative Medicine, san diego, Ca, USA	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Georgian National Association for palliative Care	104 000	Grants to Providers and other financial sources
	Middle-terms Education						Program accredited by MOH of Georgia for Social workers	ბოლო 50 Social workers	Regions and self-governing towns of Georgia	Institute of palliative Medicine, San Diego, Ca, USA ((Department of International Programs) Georgian National Association for palliative Care Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of Palliative Care	25 000	Employers of participants Grants to Providers and other financial sources
CAREGIVERS AND LOW MEDICAL STAFF	**Short -terms Education (1-3 months)**						Program accredited by MOH of Georgia for caregivers and low medical staff	About 200 for caregivers and low medical persons	Regions and self-governing towns of Georgia	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Georgian National Association for palliative Care Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia)	30 000	Employers of participants Grants to Providers and other financial sources Vocational Schools
PSYCHOLOGISTS	**Long-terms education (6 – 12 months)**						International Program for Psychologist	3 Psychologist	Institute of Palliative Medicine, san diego, Ca, USA	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Georgian National Association for palliative Care Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia)	78 000	Grants to Providers and other financial sources

	Short -terms Education (1-3 months)						Program accredited for psychologist	10-15 psychologist	Regions and self-governing towns of Georgia	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Georgian National Association for palliative Care Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia)	10 000	Employers of participants Grants to Providers and other financial sources Universities of Georgia
CHAPLAIN/ SPIRITUAL CANCELLER	**Short -terms Education (1-3 months)**						International Program for Chaplains/Spiritual Cancellers	2 Nuns/ Chaplains/Spiritual Cancellers	Institute of Palliative Medicine, san diego, Ca, USA	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Georgian National Association for palliative Care	26 000	Grants to Providers and other financial sources
STUDENTS	**Medical Students (Universities)**						Accredited Course integrated in Educational Curriculum	More than 1000 Medical Students	Tbilisi, Kutaisi, Batumi, Telavi, Zugdidi	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Georgian National Association for palliative Care Office of Coordinator of Palliative Care National Program Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) Medical Schools (Universities)	5 000	Universities' budget

	Nursing Students (Nursing Schools)						Accredited Course integrated in Educational Curriculum	More than 1000 Nursing Students	Tbilisi, Kutaisi, Batumi, Telavi, Zugdidi	Institute of palliative Medicine, San Diego, Ca, USA ((Department of International Programs) Georgian National Association for palliative Care Office of Coordinator of Palliative Care National Program Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) Nursing Schools	5 000	Nursing Schools' budget
TOTAL	1 973 000 GEL											

ORGANIZATIONAL AND METHODOLOGICAL SUPPORT TO PALLIATIVE CARE DEVELOPMENT IN GEORGIA

Years / Activities	Years					Program Realization Place	Providers	Budget	Financial sources
	2011	2012	2013	2014	2015				
PREPARATION OF EDUCATIONAL AND METHODOLOGICAL MATERIALS (TRANSLATION, EDITING, PRINTING)						TBILISI, BATUMI, KUTAISI	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO “Cancer Prevention Center” National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) Georgian Medical Association Georgian Nurses Association International experts and fellows of Palliative Care Nursing Schools Medical Schools (Universities)	100 000	NIH, OSI, OSGF HtH, IAHPC, etc. Grants to Providers and other financial sourses

CLINICAL PRACTICE GUIDELINES IN PALLIATIVE CARE (INCLUDING NATIONAL GUIDELINE FOR PALLIATIVE CARE)						TBILISI	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO “Cancer Prevention Center” National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) Georgian Medical Association International experts and fellows of Palliative Care Nursing Schools Medical Schools (Universities)	50 000	Employers of participants Grants to Providers and other financial sourses

PREPARATION OF APPROPRIATE EDUCATIONAL, COURSES OF TRAININGS, PROFESSIONAL DEVELOPMENT AND CONTINUED EDUCATION – FOR HEALTHCARE PROFESSIONALS, SOCIAL WORKERS AND CAREGIVERS						TBILISI	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO “Cancer Prevention Center” National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) Georgian Medical Association Georgian Nurses Association International experts and fellows of Palliative Care Medical Schools (Universities) Nursing Schools	30 000	Employers of participants Grants to Providers and other financial sourses
INTEGRATION OF PALLIATIVE CARE EDUCATIONAL COURSES IN MEDICAL AND VOCATIONAL SCHOOLS						TBILISI, BATUMI, KUTAISI	Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care International experts and fellows of Palliative Care Medical Schools (Universities) Nursing Schools	5 000	Universities’ budget Nursing Schools’ budget Vocational Schools’ budget

CREATION OF PALLIATIVE CARE EDUCATIONAL/TRAINING, INFORMATIONAL AND RESEARCH CENTER **(FOR GEORGIA AND CAUCASIAN COUNTRIES)**						TBILISI	Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO “Cancer Prevention Center” National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) Georgian Medical Association Georgian Nurses Association International experts and fellows of Palliative Care Medical Schools (Universities) Nursing Schools	100 000	Grants to Providers and other financial sources
TOTAL	285 000 GEL								

LOBBING AND SOCIETY SUPPORT OBTAINING

Activities \ Years	Years					Program Realization Place	Providers (Responsible organizations)	Budget	Financial sources
	2011	2012	2013	2014	2015				
ORGANIZATION OF INFORMATIONAL MEETINGS, WORKSHOPS DEDICATED TO THE PERFECTION OF LEGISLATIONS AND FUNDRAISING – WITH GOVERNMENTAL AND NON-GOVERNMENTAL STRUCTURES, DECISION MAKERS, PROFESSIONAL ORGANIZATIONS, POTENTIAL SPONSORS AND MASS MEDIA						Regions and self-governing towns of Georgia	Office of the First Lady of Georgia Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO “Cancer Prevention Center” National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of Palliative Care Medical Schools (Universities) Nursing Schools	30 000	NIH, OSI, OSGF HtH, IAHPC, etc. Grants to Providers and other financial sources

PREPARATION AND DISTRIBUTION/TRANSLATION OF PRINTING, AUDIO- AND VIDEO MATERIALS EXPLAINING ESSENCE, IMPORTANCE, NECESSITY AND HUMAN RIGHT ISSUES OF PALLIATIVE CARE BY PRESS, RADIO AND TV						Regions and self-governing towns of Georgia	Office of the First Lady of Georgia Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO "Cancer Prevention Center" National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of Palliative Care Medical Schools (Universities) Nursing Schools	125 000	Grants to Providers and other financial sources
CELEBRATION OF INTERNATIONAL HOSPICE AND PALLIATIVE CARE DAY						Regions and self-governing towns of Georgia	Office of the First Lady of Georgia Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care NGO "Cancer Prevention Center" National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of Palliative Care Medical Schools (Universities) Nursing Schools	50 000	Grants to Providers and other financial sources
TOTAL	205 000 **GEL**								

RESEARCH

Years / Research Directions	Years					Providers (Responsible organizations)	Budget	Financial sources
	2011	2011	2011	2011	2011			
THE WAYS FOR FURTHER OPTIMIZATION (PERFECTION) OF PALLIATIVE CARE NATIONAL MODEL IN GEORGIA (2-HOURS ACCESSIBILITY THROUGHOUT THE COUNTRY)						Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of Palliative Care Department of gerontology and palliative care (Institute of Morphology) Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) European Association for palliative Care	30 000 GEL	GNSF, NIH, OSI, OSGF HtH, IAHPC, etc Grants to Providers and other financial sources
NATIONAL PECULIARITIES OF GERONTOLOGICAL PALLIATIVE CARE IN COUNTRIES WITH TRADITIONAL STYLE OF LIVE (*ALL TOGETHER IN LARGE FAMILIES*) ON THE SAMPLE OF CAUCASIAN COUNTRIES (GEORGIA, ARMENIA, AZERBAIJAN, TURKEY)						Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of	100 000 GEL	Grants to Providers and other financial sources

						Palliative Care Department of gerontology and palliative care (Institute of Morphology) Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) European Association for palliative Care Iv. Javakhishvili Tbilisi State University		
END-OF-LIFE MAPPING FOR PEOPLE WITH RECOGNIZED LIMITED TERMS OF LIFE						Office of Coordinator of Palliative Care National Program Georgian National Association for palliative Care National Cancer Center of Georgia and its filial hospitals Institute of Cancer Prevention and Palliative Medicine (Tbilisi, Georgia) International experts and fellows of Palliative Care Department of gerontology and palliative care (Institute of Morphology) Institute of palliative Medicine, San Diego, Ca, USA (Department of International Programs) European Association for palliative Care Iv. Javakhishvili Tbilisi State University	100 000 GEL	Grants to Providers and other financial sources
TOTAL	**230 000 GEL**							

MANAGERIAL

Item \ Years	Years					Providers (Responsible organizations)	Budget	Financial sources
	2011	2011	2011	2011	2011			
Financing of managerial group						**Georgian National Association for palliative Care** **Office of Coordinator of Palliative Care National Program**	100 000	NIH, OSI, OSGF HtH, IAHPC, etc
Total						**100 000 GEL**		