Towards Alternative Child Care Services in Armenia: Costing Residential Care Institutions and Community Based Services

Contents

Acknowledgements by the author

Foreword

"The family being the fundamental group of society and the natural environment for the growth, well-being and protection of children, efforts should primarily be directed to enabling the child to remain in or return to the care of his/her parents, or when appropriate, other close family members. The State should ensure that families have access to forms of support in the care-giving role".

UN Guidelines for the Alternative Care of Children

Several years have passed since the Government of Armenia initiated the reform of the child protection system, in particular in the area of de-institutionalization. However a high number of children still spend their childhood in residential care institutions, away from their families and communities. The large majority of these children, whose numbers do not seem to decrease over the years are those with disabilities.

New social services such as family and child support services and alternative family based care services need to be spread and sustained on a national scale to overcome the still prevailing over-reliance on residential care for children at risk in Armenia. This intervention area is included in the National Plan of Action for Protection of Children for 2004-2015.

UNICEF has continuously been supporting the Government of Armenia in this direction, and within its new Country Programme intends to support the development and implementation of a comprehensive master plan on de-institutionalization, which will address all aspects of the downscaling and transformation of the remaining residential care institutions. This includes areas from the setting of a timeframe to the definition of specific plans for each institution, considering financial aspects, human resources, and the definition of individual care plans for children.

As the country moves into such an operational phase of the reform, it will face the same challenges as many other countries, notably financial constraints. While maintaining the funding of residential care institutions in the interim, additional funds would be required to take on the commitment to scale up new types of services. However in the long run, the reallocation of funds would ensure the sustainability of new services without additional costs. Based on these considerations, it is of crucial importance to inform the reform planning process and budget discussions with solid cost and needs estimates.

The present report sheds light on the actual costs of residential care institutions in Armenia and compares them with the costs of required alternative care services. It is based on a list of all services currently existing, with their expenditure breakdowns, while providing forecasts according to the protection requirements of children.

Following a study carried out in 2008 on cost-effectiveness of day care and foster care, it uses demographic and geographic indicators and provides projections which take into account different scenarios of de-institutionalization in parallel with development of community-based social services.
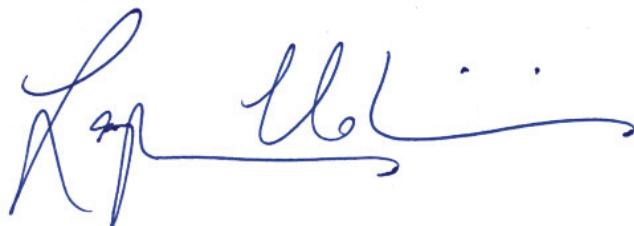
The report also includes estimates of 'transition costs' (the additional funds required to set up new services while still maintaining the old ones), as well as the potential sources of funding for the future transformation of services, including retraining and relocation of staff working in residential care services.

The considerations included in the study lead to conclude that the transformation of residential care services to alternative community based services will result, in the long run, in lower costs for the Government.

The findings of this study, conducted by the Academic Director at the Centre for Fiscal Policy in Moscow, with the active cooperation of experts from the Ministry of Labour and Social Issues of Armenia, were presented at the international conference on "Child Care System Reform" which took place in Moldova in November 2009, gathering the attention of several policy makers of different countries.

This study is yet another demonstration that it makes good economic sense to invest in alternatives to institutionalization, while at the same time creating an environment for a child's inherent right to grow up in a family.

We are confident that this report will help those guiding the realization of the critical area of child care system reform to make informed decisions towards the improvement of the wellbeing of children in need of protection, and ultimately, of all the children in Armenia.

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Summary

UNICEF is supporting the governments in the CEE/CIS (Central and Eastern Europe and the Commonwealth of Independent States to reform their child welfare systems, with the aim of developing a system of family and child support services and family based care for children without parental care that would gradually replace the system of residential care which remains the predominant child protection service in CEE/CIS countries. This reform is conducive with governmental policies, but has advanced operationally with different levels of success and speed in different countries. One important remaining stumbling block in achieving the goals of reform is the need to redirect budgetary resources from residential care to the new set of community based and family oriented services. It has been proven through several studies in Europe and Central Asia that the goals of this reform will have a positive effect on child wellbeing and development while at the same time providing a more cost-efficient set of services. This latter consideration is especially relevant considering the current economic crisis, which is affecting countries in the CEE/CIS to different extents.

The present study is on costing residential care institutions, community based services, forecasted needs and estimated costs of different community based services in the "continuum of services" in Armenia. It is proposed to gradually introduce the new services to replace large scale of residential care services. The study is based on demographic and geographic indicators in order to inform budgetary discussions in Armenia.

The policy provisions articulated by the Government of Armenia imply a reform, not only of the administrative structures involved in the protection of children, but also of the services provided to children at risk. In this regard, an important achievement in the reform of child protection services is the deinstitutionalization of residential care institutions, which has led to the restructuring of 17 boarding schools in 2007 and the reintegration of approximately 4,000 boarding school students into their biological families. While this is a good start, there still exist a number of child care institutions in the country which are managed by the Ministry of Education and Science, Ministry of Health, Ministry of Labor and Social Affairs and local authorities.

The Government of Armenia has not yet developed a plan for how, and within what timetable to close, transform or downscale the remaining residential care institutions, an important operational step which has been taken by a few other countries in the CEE/CIS. In addition, a number of new community based social services, such as family and child support services and alternative family based substitute care services, need to be created on a national scale and in sufficient numbers to overcome the prevailing overreliance on residential care for children at risk in Armenia. As the country moves into such an operational phase of reform it will face the same challenges as many other countries have faced. One of these is linked to financial constraints. It will not be possible for the country to sustain full funding to residential care institutions, while at the same time taking on the commitment to scale-up new services. It is therefore important that the planning of the continued reform is based on solid cost- and needs estimates to inform the budgetary discussion.

The objective of the study was to estimate the <u>costs of different types of residential care institutions (including special boarding schools) and community based services which exist as part of the current budgetary expenditure in Armenia, or on a pilot basis</u>, and to estimate the need for such services; taking into account that the aim of child care reform is to achieve a more balanced expenditure to community based services vis-à-vis residential care services. Cost estimates for each type of service were prepared, based on a list of all services (residential and community based) currently existing in Armenia, budget reports and interviews with service providers. Structural changes in socio-demographic groups of potential service users were estimated based on demographic forecasts and macroeconomic assumptions. In order to estimate the potential numbers of users of each service, several different scenarios for deinstitutionalization and development of community based social services were introduced. For each scenario, the total volume of expenditures on each type of service was estimated by multiplying the estimated number of users and the unit cost of service provision per year and the average duration of service (years). The total cost of reform will be greater than the total volume of operating expenditures estimated for each scenario by the amount of the so-called transition costs, including the costs of retraining and relocating the staff working in residential care services. The study makes an attempt to define the scope of such transition costs and their volume, and identify potential sources of funding to cover these costs.

The study shows that the reallocation of children into family care does not necessarily lead to the creation of an additional burden on the state budget. On the contrary, depending on the policy chosen, the savings can be quite tangible, even if the reform costs include the provision of jobs to excessive staff of the discharged residential institutions and additional social support and care services for children released from residential institutions and their families.

List of Abbreviations

AMD   **Armenian Drams**

CDRC   **Child Development and Rehabilitation Center**

CEE/CIS   **Central Eastern Europe and Commonwealth for Independent States**

IMF   **International Monetary Fund**

IRC   **Innocenti Research Center**

GDP   **Gross Domestic Product**

GoA   **Government of Armenia**

MoES   **Ministry of Education and Science**

MoLSI   **Ministry of Labor and Social Issues**

MTEF   **Medium Term Expenditure Framework, Armenia's multi-year budget**

NGO   **Non-governmental organisation**

RA   **Republic of Armenia**

UNICEF   **United Nations Children's Fund**

USD   **US dollars; exchange rate of USD 1=AMD 350 was used throughout this study.**

1. Background

This study builds upon the results of an earlier (2008) consultancy[1] dedicated to the evaluation of alternative child care models in Armenia. This earlier study focused on two types of alternative child care services: day care centers and foster care, and the reference service that these two services were compared against residential care in state-run institutions. It was discovered that foster care is a much cheaper and efficient solution than residential care. Day care centers do have a role in preventing child institutionalization, but their main purpose is family and child support. Day care centers are not the only type of service that need to be developed in order to replace the existing system of residential care.

The system that should replace the current one is one that provides a "continuum of services", where different multiple services work in parallel to achieve the common end-result. Day care centers and foster care are but two components of the future system. The costs and benefits of the entire system should be compared with the costs and benefits of the existing system in order to make an informed decision regarding replacing one system with another.

This new study presents an attempt at estimating the cost of a system with multiple community based services that would be established on the national scale, and doing so within several possible scenarios of deinstitutionalization and within different GDP forecasts in order to give the government arguments on the speed of deinstitutionalization and feasibility of reforms within fiscal space.

2. Objectives of Study

This study is on costing residential care services, community based services and forecasting the demand of different community based services in the "continuum of services" which are suggested to be introduced gradually to replace the large number of residential care institutions for children that are still the predominant form of child protection in Armenia, as well as in many other CEE/CIS countries. The policy in the area of child protection implies reform of both the administrative structures and of the services provided to children. The reform, although quite successful in setting up the administrative structure of child protection in Armenia, has not entered into the operational phase, where residential services need to be replaced with a broad spectrum of community based services and alternative forms of family care. As the country moves into the operational phase of reform, it will face the challenge of financial constraints. It will not be possible to keep the full funding of the existing residential care institutions and at the same time scale-up new services. It is therefore vital that the planning of reform is based on solid costs and needs estimates. The purpose of the study is to inform policy makers in Armenia on the costs of an alternative system of child care and on changes in demand for child protection services that stem from existing demographic trends and policy decisions regarding the speed and scope of childcare reform.

The social services for which estimates of costs and forecasts of outputs/needs need to be developed fall into four main categories:

- Residential care services such as orphanages, baby homes (for children from 0 to 6 years), homes for children with special needs, special boarding schools, and night care centers, taking into account that in the future system there will be less reliance on large scale residential care.

- Family and child support (community based) services, such as day care, counseling services, outreach services to families at risk, protected shelters, psychosocial support, independent representation, etc.

- Family based alternative care services, such as foster care and guardianship (kinship) care.

- Gatekeeping services primarily responsible for individual case management, including decision making on service provision and regular case reviews based on individual assessments.

Out of these services, residential care services have been inherited from the former Soviet Union and have existed for many years. Although their share in the total amount of services provided to children in need of government protection in Armenia is gradually going down, it still remains high. Some of the alternative services mentioned above have been developed in Armenia only recently. They are not available on the national scale

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[1] Elena Andreeva, Evaluation of Alternative Child Care Services in Armenia. UNICEF Armenia, October 2008 (manuscript).

yet, and cover only selected locations. Expansion of alternative care services is a priority area on the government's agenda, and the estimation of the costs of scaling up such services to meet the needs of deinstitutionalized children and their families is one of the objectives of the present paper.

3. Consultancy

a. _Activities During the Mission to Armenia and Sources of Data_

The mission to Armenia took place between the 12 and 21 October 2009. In order to conduct a specific and comprehensive study of the costs of different types services funded from the government budget or supported by donors on a pilot basis, the consultant visited a broad range of institutions and service providers and interviewed key officials of the ministries involved in child protection in Armenia. These site visits and interviews served as the primary source of information for making the estimations. Sites visited during the mission were:

- SOS Kinderdorf Headquarters in Yerevan

- Night care institution # 1 in Yerevan

- Early rehabilitation center in Yerevan

- Social day care center in Gyumri

- Inclusive kindergarten "Mush" in Gyumri

- Early rehabilitation center "Arabkir" in Gyumri

- Baby home for children with disabilities in Gyumri

- Commission for Guardianship and Trusteeship in Vanadzor

- "Aravot" NGO in Vanadzor

- State orphanage in Vanadzor

- Night care center in Vanadzor

- Child Protection Unit (CPU) in Vanadzor

- Community Justice Center in Vanadzor

- Children Rehabilitation Center in Ijevan

- Inclusive school in Ijevan

- Special school for children with hearing impairments, Yerevan

- Special school for children with anti-social behavior, Yerevan

- Children's Support Center Foundation (FAR), Yerevan

The consultant also met with officials from the following Ministries in order to put together a fuller picture of the kind of child protection services offered by respective ministries and the costs involved:

- Special Education Department, Ministry of Education and Science, Yerevan

- Department of Prenatal/Neonatal Screening, Ministry of Healthcare, Yerevan

- Family, Women's and Children's Department, Ministry of Labor and Social Issues, Yerevan

The source used for demographic data on Armenia was the United Nations World Population Prospects (http://data.un.org/). The 2008 Revision contains estimates and projections for every country in the world, including estimates and projections of 28 demographic indicators such as birth rates, deaths rates, infant mortality rates and life expectancy.

Sources of budgetary expenditures data were mainly through interviews with heads of institutions visited and official budget reporting. An important source of statistical information on the flows and stocks of children in

different forms of care in Armenia was the TransMONEE 2008 database, released in May 2008 at http://www.unicef-irc.org/databases/.

b. *Services Identified and Covered by the Study*

The list of all community-based services for inclusion into this costing exercise was provided to the consultant by UNICEF Armenia.

Residential:

- State run orphanages

- State run night care institutions

- Special boarding schools

Community based:

- Day care centers

- Socio-medical rehabilitation centers for children with disabilities

- Inclusive schools, kindergartens

- Community boards that work with first-time juvenile offenders

Family based:

- Biological family support

- Foster care, Guardianship/Trusteeship

Many services that should be part of the continuum of services, such as general schools, kindergartens and polyclinics[2], were not included in the study, due to the fact that they are already available in Armenia on the national scale. Other services that should be available, but do not exist, such as after school activity programs, were costed based on indirect evidence, although they were not included in the original list of services covered by this study. Secondary prevention services, including support for income generation, learning parental skills and/or other psycho-social services are currently offered on a very small scale and were not included in the original list of services to be costed under this study. The only exception is day care centers, but these contribute indirectly to the prevention of family disintegration, much in the same way as general education, housing health and other general social services do. It is virtually impossible to actually cost these indirect effects, but an attempt to quantify the link between the funding that can be allocated to the improvement of secondary prevention services and the budgetary savings resulting from the reduced demand for formal care services shall be described (see Annex1).

The maps below provide a good picture of the distribution of different types of services in the "continuum of services" that exist in Armenia today. The range of services needed is currently available, but the coverage of most services in the whole country is not sufficient. Some services are included into the national budget already, while other services are available but costs are covered by private funds (donors, NGOs etc.).

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[2]The difference between day care services and kindergartens requires an explanation. Day care services are set up for specific groups of children, such as children with disabilities, or children from at risk families, while kindergartens are preschool services covering the entire population much the same way as schools or polyclinics do.

ARMENIA: Map of residential care institutions and special schools, 2009

Orphanages (state) - 871 children
Orphanages(charitable) -212 children
Night care centers - 754 children
Special schools -2893 children
TOTAL: 4795 children

Legenda

STATE RUN NIGHT CARE CENTRES

STATE RUN ORPHANAGES

PRIVATE ORPHANAGES

SPECIAL SCHOOLS

Penitentiary for Juveniles and Women (including pre-trial detention facility)

Special school for children with anti-social behavior

Map labels:

- night care centre - Dilijan (117)
- SOS kinderdorf- Ijevan
- SOS kinderdorf-Kotayk (74)
- special school No. 1- Abovyan (102)
- Penitentiary for Juveniles and Women in Abovyan (14 convicted & 24 under pre-trial detention)
- night care centre Byureghavan(95)
- Gavar orphanage (79)
- special school n 1 Gavar (90)
- night care centre - Kapan (107)
- special school n 3 Kapan (162)
- special school n 2 Kapan (43)
- special school n 1 Goris (240)
- special school n 1 Sisian (82)
- Syunik
- Vayots Dzor
- Gegharkunik
- Tavush
- Kotayk
- Ararat
- Armavir
- Aragatsotn
- night care centre n. 1 – Vanadzor (116)
- special school n 1 Vanadzor (101)
- special school n 1 Spitak (141)
- Spitak orphanage - Spitak (30)
- Vanadzor orphanage - Vanadzor (106)
- night care centre n. 1 – Gyumri (101)
- special school No. 1 – Artik (76)
- Trchunyan - Gyumri (35)
- F. Nansen's orphanage - Gyumri (38)
- special school No. 3 - Gyumri (122)
- Tyramar Hayastan - Gyumri (48)
- Children's home - Gyumri (110)
- Special orphange - Kharbert (271)
- Zatik (71)
- Children's home (76)
- Marie Izmirlyan's orphanage (97)
- Children Support Center- FAR (60)
- night care centre n. 1 Yerevan
- night care centre n. 2 Yerevan (79)
- special school No. 1 - Ashtarak (77)
- Orphanage of Spitak branch in Yerevan (25)
- special school n 11 (110)
- special school n 12 (73)
- special school n 16 (250)
- special school for hearing impairments (106)
- special school n 17 (100)
- special school N. 8 (125)
- special school n 9 (130)
- special school for vision impairments (103)
- special school n 18 for children with anti-social behavior (44)
- special school n 1 for children with anti-social behavior (83)
- child medical-educ. assessment center (70)
- special school n 2 (122)
- special school n 6 (106)
- special school n 8 (134)
- special school n 1 Armavir (95)
- special school n 2 Vagharshapat (96)

ARMENIA: Map of day care centers, 2009

Day care centers - 1133 children
CDRCs - 292 children
TOTAL: 1425 children

Community rehabilitation center "Arevamanuk"Gyumri)

CDRC Spitak (37)

"World Vision" day care center (Gyumri)

Community rehabilitation center (Vanadzor)

CDRC Vanadzor (31)

Community rehabilitation center Alaverdi (77)

CDRC Spitak (37)

CDRC Gyumri (21)

state-run day care center - Gyumri (135)

"World Vision" day care center (Alaverdi)

"World Vision" day care center (Talin)

"World Vision" day care center (Azatamut)

"Bridge of Hope" day care center Dilijan (126)

"Bridge of Hope" day care center Ijevan (206)

"Bridge of Hope" day care center Noyemberyan (157)

"Bridge of Hope" day care center Berd (165)

CDRC (Ijevan)

Child and Family Club (Ijevan)

Child and Family Clubs in 10 communities (Berkhaber, Gandzakar, Azatamut, Aygehovit, Sevkar, Achagur, Khastarak, Getahovit, Tsakhavan, Vazashen)

CDRC Gavar (25)

Child and Family Club (Gavar)

Community rehabilitation center "Astghatsolk" (Chambarak)

day care centre - Goris (140)

Child and Family Clubs in 9 communities(Kamirgyugh, Sarukhan, Noratus, Gandzak, Lnjaghbyur , Tsovazard, Lchap, Hayravank, Tsakhkashen)

"World Vision" day care center (Sisian)

"World Vision" day care center (Kapan)

Community rehabilitation center (Yerevan)

CDRC Yerevan (106)

state-run day care center Yerevan (105)

"Bridge of Hope" day care center Yerevan (22)

CDRC Armavir (35)

Psycho-social support center (Armavir) as well as outreach services in 6 communities (Karakert, Dalarik, Argina, Lernagog, Shenik, Miasnikyan)

Child and Family Clubs in 10 communities (Karakert, Dalarik, Lernagog, Miasnikyan, Metsamor, Mrgashat, Baghramyan, Hatsik, Norapat, Hoktember)

"World Vision" day care center (Talin)

"World Vision" day care centers in 4 communities in Yerevan (Malatia, Achapnyak, Shengavit, Kanaker-Zeytun)

Tavush

Lori

Shirak

Aragatsotn

Kotayk

Yerevan

Armavir

Gegharkunik

Ararat

Vayots Dzor

Syunik

Legenda

PSYCHO-SOCIAL SUPPORT CENTERS FOR CHILDREN IN DIFFICULT LIFE CONDITIONS

CHILD DEVELOPMENT AND REHABILITATION CENTERS FOR CHILDREN WITH DISABILITIES (CDRC)

COMMUNITY REHABILITATION CENTERS FOR CHILDRENIN CONFLICT WITH THE LAW

DAY CARE CENTERS FOR CHILDREN WITH DISABILITIES/SOCIALLY VULNERABLE CHILDREN

DAY CARE CENTERS FOR SOCIALLY VULNERABLE CHILDREN

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A brief description of each service included into this study is provided below.

Orphanages: There are eight state-run and four non-state orphanages in Armenia (871 children reside in state-run and 212 children in non-state orphanages). The study covers both state and non-state orphanages because both should be the focus of the deinstitutionalization policy. Even though the quality of care provided by non-state orphanages may be higher than that of state orphanages, as can be judged by the higher price of services provided by the non-state institutions as compared to those provided by the state institutions,[3] they still possess all of the negative features of institutional care.

State orphanages in Armenia include two baby homes, one of which is a specialized home for children with disabilities aged 0-6, one orphanage for older children with disabilities, two orphanages for children aged 0-18 (and older), and three orphanages for school-age children (6-18). The cost of the services provided by these institutions differs significantly depending on the age and/or health condition of the child. The cost on one child-year in Gyumri "Children's Home" for small children with disabilities is $7,700 while the cost of one child-year in the Vanadzor orphanage that houses children of all aged 0-18 and up is $3,200, on average. The cost of the graduation package that orphanage alumni are entitled to under existing legislation[4] was not included in the orphanage costs, because those amounts are provided separately - within the programme on "Provision of Education Scholarship and Lump-sum Cash Allowance to the Graduates of Orphanages".

State-run night care centers: Unlike the orphanages, which are a common form of residential care across countries in the CEE/CIS, night care centers are unique to Armenia. They came into existence in September 2007, when the program of discharging children from boarding schools entered into the operational phase. As a result of the program, 17 boarding schools ceased to exist in this capacity and were transformed into ordinary schools, closed down or re-profiled. Most of these were boarding schools of a general type, but several were so-called "specialized boarding schools for children with special needs", and some were "boarding schools for orphans, homeless children and those deprived of parental care". A screening of all children in the institutions selected for discharging has shown that, for many of the children in specialized boarding schools, the only developmental problem that they had was that of poverty and social neglect.[5] After the discharging, boarding schools of the general type ceased to exist, and only boarding schools for children with special needs still remain in smaller numbers. As for the children, most of them had to return to their families, but families often lacked the resources to take them back into the home. In order to support the reintegration of children into their families, the government of Armenia launched a program of financial support to reintegrated families. But even with financial support from the government, some families experienced such hardship that they could not support their children. For such families and children, the government set up a system of so-called night-care centers, where school-age children reportedly spend five nights a week and spend weekends and vacations with their families.[6] The families of these children are allowed to keep the allowance they received for taking the child back, even if the child spends most of the time in the night care center.

An additional program of family support has been implemented in Lori Marz, which includes one boarding school under Ministry of Education and Science, the Vanadzor night care institution and the Vanadzor orphanage. However, financial support to the receiving family has a limited time frame of only one year. The number of families that receive support each year is determined by the amount of funding included in the state budget for this program, rather than by demand considerations. See *Biological family support* below.

Immediately after the discharging of boarding schools, the number of children in night care centers reached 950. In 2009, that number came down to 710. The directors of the two night care centers visited during the mission think that it is unlikely that the downward trend will continue, especially given the on-going economic crisis. For the purposes of this study night care centers are considered to be residential institutions, though the

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[3]Costing of services provided by private orphanages was not part of the present study. However, judging by the numbers provided by Ashot Kocharyan, national director of "SOS-Childern's villages" Armenian Charity Foundation, residential services provided by SOS-Children Villages in Armenia are much more expensive than the services of state residential institutions for children - $11,600 per child a year in a SOS village vs. $2,400-$6,300 per child a year depending on the type of state institution.

[4]As shown in the earlier study, one out of four graduates of orphanages in Armenia is eligible for a free apartment under the government program of providing housing to orphanage alumni. The housing part of the program was suspended in 2007 because of the problems that emerged during the provision of apartment, but it has not suspended entirely. According to Eduard Israyelyan, MoLSI, in 2010 AMD 36.1 million (approx. USD100,000) will be provided for covering health, educational, psychological and other costs of the beneficiaries of the program. This additional cost could be avoided if, instead of growing up in institutions, children grow up in families. Otherwise, once the crisis is over the risk to direct resources in this area will still be present.

[5]2007-2009 Medium Term Expenditure Framework, Armenia (in English), p. 100.

[6]Some children in night care centers (approx. 10%) do not go home even for weekends and vacations. Nevertheless, they are not recognized as social orphans.

RA Ministry of Labor and Social Issues sees them as a kind of family support service.[7] The reason for classifying them as residential institutions is that many children (10% according to official reporting) do not go home on weekends and those who do not have a family are moved from these centers to summer camps organized by different benevolent organizations during the summer months. In the official statistical reporting, the number of children in night care centers is combined with the number of children in discharged boarding schools in the same variable, bearing the misleading title "children in boarding schools for orphans and children deprived of parental care".[8] In reality, such boarding schools ceased to exist in Armenia in 2007. Before 2007, the variable gives the number of children in boarding schools scheduled for closure or re-profiling, and after 2007 this variable represents the number of children in night care centers.

Special boarding schools: There are two types of special boarding schools for children with disabilities in Armenia: schools that are subordinate to the Ministry of Education and Science and are financed from the state budget and schools that are subordinate to local administrations (marzpeteran), and are financed out of marz budgets. All local special boarding schools except one are for children with learning disabilities (one school in Syunik Marz is for children with visual impairments). Special boarding schools subordinate to the Ministry of Education and Science (1,442 children in 12 schools in 2009) include two schools for children with anti-social behavior, one school for children with hearing impairments, a school for children with visual impairments, and a school for children with speech impairments, etc. Local special boarding schools (1,222 children in 13 schools in 2009) are not specialized for particular deficiencies (with one exception) and have a higher probability of housing children whose main problem is poverty and social neglect than the ones subordinate to the Ministry of Education. Indirectly, this is confirmed by the fact that in the TransMONEE Database, children in special schools under the Ministry of Education and Science are described as "children in boarding schools for children with disabilities",[9] while children in the special boarding schools run by the marzpeteran are misleadingly described as "children in boarding schools of general type".[10]

Medical-social rehabilitation centers (early rehabilitation centers): Medical-social rehabilitation centers provide treatment and complex health rehabilitation to children with special medical needs, which prevents the placement of such children into specialized orphanages and special schools. Currently, there are eight such centers in Armenia, five of which are state-run.

Day care centers for socially vulnerable children. The National Strategy on Reforms in Social Protection of Children in Difficult Situations for 2006-2010 defines day care centers as community based services that provide professional socio-psychological, pedagogic and legal services to children in difficult situations and their families. These centers are also places for children in need of temporary care during the day. The National Plan of Action of the Republic of Armenia for the Protection of the Rights of the Child calls for the establishment of 25 community day care centers for children in Armenia by the year 2015. There are currently two such state-run centers in Armenia.

Day care centers for children with disabilities and socially vulnerable children: Day care centers for socially vulnerable children and day care centers for children with disabilities/socially vulnerable are often treated as one type of service. This may be justified depending on the mix of services they provide, but for the purposes of the present study they shall be treated as two different kinds of services. The difference is in the amount of time the child spends at the center. At day care centers for socially vulnerable children, the child can stay in the center for all day long, while in centers for children with disabilities there are fixed visiting hours and the treatment usually lasts no longer than 1-2 hours. Another difference is that day care centers for socially vulnerable children work with children in groups, while the rehabilitation of children with disabilities requires individual treatment for each child. Because of limited visiting hours, children that visit day care centers for children with disabilities are not normally fed there, while at day care centers for socially vulnerable children food supply is an important expenditure item.

Inclusive schools, inclusive kindergartens. In Armenia there are about 1,500 schools, of which 49 are "inclusive", i.e. schools where children with disabilities and those with special needs study together with ordinary children. In two years (starting in 2010), the number of inclusive schools is expected to reach 200. The one school visited during the mission to Armenia had 485 students, of which 27 were children with special needs.

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[7]Opinions on the role of night care centers differ. Some see them as residential institutions, while some see them as family support centers. Their inclusion into the category of residential institutions is based on the personal impressions of the author during the visit to Armenia, and this opinion is shared by the UNICEF Office in Armenia and some of the MoLSI representatives with whom this issue was discussed.

[8] RA report to UNICEF for the TRANSMonee Database under the IRC project.

[9]See Section 8. Child protection, Table 8.8 Total Number of Children with Disabilities in Residential Care. In: TransMONEE 2008 DATABASE, released on May 2008 at http://www.unicef-irc.org/databases/

[10]See Section 8. Child Protection, Table 8.4 Children in Residential Care at the End of the Year.

The presence of children with special needs increases school education costs considerably: the size of classes in inclusive schools is 10-15 children, while the size of classes in ordinary schools is 20-30, which doubles the required number of teachers. The presence of children with special needs also requires the presence of professionals not usually found in ordinary schools. In the school visited there were four such specialists – a psychologist, an audiologist, a general educator and a speech therapist. These specialists assist the teachers during usual school hours and stay after classes to provide additional services to children with special needs. In ordinary schools there are no after school programs in Armenia.

The presence of additional staff and smaller classes, plus additional items of expenditure (i.e. food for children with special needs engaged in after school program), almost double the cost of inclusive education as compared to ordinary schools. However, the quality of education in such schools should also be higher due to higher teacher-student ratio and the availability of additional staff.

The one inclusive kindergarten visited during the mission did not generate a clear picture of how their costs and resource requirements are different from regular kindergartens. The head of the kindergarten said that they admitted children with disabilities, but could not give the exact number of such children attending the kindergarten or whether they employ additional staff because of the presence of such children. The kindergarten is sponsored by donors, and the staffing norms established by the state do not apply. The director also said that she expects the kindergarten to eventually be transferred into a regular municipal kindergarten and it is very likely that it will cease to be inclusive.

Community boards that work with first-time juvenile offenders: There are three such boards in Armenia – one in Vanadzor (Lori Marz), one in Yerevan and one in Alaverdi (Lori Marz). The community board operates on a voluntary basis: it consists of respected community members who see this work as their social duty and do not receive any payment for their work. The board works with first-time juvenile offenders who are referred to the board by local schools, police or the municipal guardianship/trusteeship board. In Vanadzor, the community board has been in existence for three years. During that time it has rehabilitated 33 children by giving them individual assignments and monitoring their progress. The board meets once a month. Of the 33 children that passed the community board there were only three cases of second-time offences. The community board is a very good example of local initiative that is efficient and does not require public resources, except for good will and a commitment to a common cause. Replication of this practice in other marzes would probably require some investment into a public awareness campaign.

Biological family support: This service is provided by "Aravot" NGO in Lori Marz. It began providing these services four years ago under the state program of discharging boarding schools. There were seven boarding schools in Lori Marz when the program started, out of which five were selected for discharging on the grounds that they housed not only children with special needs, but also children from poor families.[11] The NGO did a survey of all the children who lived in the five boarding schools (1,021 children) and their families, and selected 200 families that had potential for reintegrating with their children. For each of the families, a more in-depth survey was conducted in order to determine how the family could be helped to take back its child or children from the boarding school. Based on this second survey, 40 families were selected. The number of families selected for providing assistance depended on the amount of funding provided from the state budget for this purpose. Another 10 families were included into the program during the year in order to prevent family disintegration. Every year since 2006, 50 families leave the program and 50 new families are selected for inclusion into the program. Assistance to biological families under this program is provided for the first year only.[12]

200 children have passed through this program in four years (50 children every year). The program is funded from the state budget.

Material support includes; free school text-books, pens, notebooks, food supplies, partial coverage of electricity bill on a monthly basis and several one-time donations such a clothing, personal hygiene items and books. The total cost of services is $1,150 per child per year. This amount includes the monthly allowance, the cost of one-time donations and the remuneration of NGO staff that provide outreach services to the families in the program. Family integration is successful in 70% of cases under this program. In 30% of cases, chances for successful reintegration would have been higher if the family could have stayed in the program longer than one year.

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[11]One of the two boarding schools that were not included in the program, was a boarding school for children with learning deficiencies and the other one was a private institution.

[12]This time limit is not based on individual needs assessments, but seems to have been imposed for the ease of budgetary planning and considerations of economy only. According to the head "Aravot" NGO, one year of support is enough for 70% of families to successfully complete the integration, but in 30% of cases the duration of the support is not sufficient. It is quite possible that there are families that need professional support and material aid for a period shorter than one year, and that the elimination of the one year time limit will not lead to increased costs if coupled with careful monitoring of progress and individual needs assessment.

Foster care, guardianship/trusteeship: There are 25 children in 17 foster families in Armenia. The number remains stable, but the size of the remuneration of foster families has recently been increased from $2,000 to $2,800 per child a year (on average). This increase does not create a considerable burden on the state budget due to the small number of foster families, but it may become an obstacle if in the future the government decides to expand the program and increase the number of children in foster families significantly. In this case, the cost of raising a child in a foster family becomes comparable to the cost of residential care in an institution. Lack of increase in the number of foster families is a policy decision. According to unofficial sources,[13] the waiting list of those who wish to become foster parents numbers in the hundreds.

Unlike foster parents, guardians in Armenia are not entitled to any remuneration or child support allowance. Guardians are relatives of the child. Guardianship is a formally established form of kinship care. In Armenia, a guardian is not required to pass any tests or go through training. Guardianship is not subject to any formal supervision. If the parents of a child were deprived of parental rights, the consent of the next of kin to take the child into his or her custody is usually enough to place the child into the care of the guardian.

4. Costing Services

Costing of the selected services was done based on budgetary data, interviews with service providers, by analogy to similar services for which budgetary data was available and in cases where no information was available, costing was done by direct computation of the wage fund required for service delivery and the cost of utilities and supplies based on assumptions. The steps involved in costing each service are described in Annex 1. A wider range of services was costed than the range of services actually used in the several scenarios considered in this study. The proposed methodology of estimating the costs of the future child protection system allows for the assessment of different reform scenarios that involves different mixes of services. The availability of unit cost estimates for a broad range of community based services and allows the estimating of other scenarios than those considered in this study. The table below summarizes the results of costing for the services included in the scenarios considered in the study.

Table 1. Unit Costs of Services Used in Reallocation Scenarios

Service	Cost per 1 child a year in USD
Residential care[14]	3,800
Foster care[15]	2,800
"New" foster care, no remuneration, only child support allowance	1,500
Community based social care for children released from residential care and their foster families	100
Gatekeeping strengthened	3

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[13]Mira Antonyan, executive director of the Fund for Armenian Relief Children's Support Centre Foundation.

[14]According to our estimates, no more than 25% of $3,800 per child a year is fixed costs. The bulk of expenditures fall on food and non-food items budgeted per capita and wages of tutors, nurses and other staff that work directly with the children and whose number depends on the number of children. See Annex 1.

[15]Compensation to foster parents consists of two parts: one is equal to the amount budgeted for the procurement of food, clothes, shoes, toys, bedding, stationary, books, medication, hygiene items per child in residential institutions; the second part is remuneration to foster parents. The average amount budgeted for the procurement of food, stationery and other goods per child in the residential institutions visited in 2009 was about $120 monthly, or $1,440 a year. This is a bit less than the standard amount that should be budgeted for these purposes per capita, according to the existing norms (52,000 drams per child monthly, or $150). For the purposes of this study it shall be assumed that $1,500 of the annual $2,800 foster care allowance is compensation for supporting the child and $1,300 is the salary of the foster parents

The cost for residential care is the average cost of keeping the child in any kind of residential institution, including orphanages, boarding schools and night care centers (costs per child per year). Some residential institutions are much more expensive than others, but to avoid making the scenario excessively complicated no distinction between residential institutions was made. See Annex 1 for cost details of different residential services.

The cost of foster care is based on the budgeted amount for foster families in 2009. "New" foster care is a form of care that does not exist in Armenia now, but can be considered as a reform option. It is similar to foster care in that it is a formal form of care that requires training and meeting established service standards, but it does not include remuneration for the work of foster parents who receive only the child allowance covering food, clothing and some other requirements of the child using the same norms as those used for budgeting variable costs in orphanages. This form of foster care exists in some CIS countries, including Russia where it is called non-kin guardianship. This form of care is considered in this study as an option that could supplement already existing foster care and reduce the overall costs of the child protection system.

Community based social care for children released from residential care and their substitute families is a kind of service that does not exist in Armenia today. There is community based care for specific groups of children, such as children with disabilities or children from at risk families, but children released from residential care are not specifically targeted and neither these children nor their families have preferential rights to receive counseling and/or support services in their communities. Ideally, counseling and support services should be available to all community members who need them, but that would mean expanding the target group beyond the families of children released from residential institutions and increasing the cost of the system. In this study, the assumption is that foster families have preferential access to this service, but if the capacity of service providers permits, other community members can also have access to it. The cost of community based social care was calculated based on the assumption that one social worker can work with no more than 36 families/ children per year.

The per child cost of the gatekeeping function was estimated as follows. According to Vesna Bosnjak, the staff of statutory services who perform the gatekeeping function, i.e. make qualified decisions regarding individual cases, prepare individual plans, monitor service provision, recruit foster familie, appoint guardians, place the children in day care or other type of local service, place children in foster care or institutions and monitor and stimulate opportunities for family preservation or family reintegration, usually need between two and five days per year for individual case management. If this estimate is accurate, the workload of each social worker in the statutory service is between 50-100 cases per year. Based on interviews, the average salary of employees in the statutory services is 50,000-60,000 AMD per month, but the staff of statutory service do not perform all of the functions listed above. For instance, there is no regular revision of individual cases. To strengthen the gate-keeping function, the job description of social workers in the statutory services should be expanded and their salaries increased accordingly. A monthly salary of 80,000 AMD, before taxes, is equivalent to $2,800 annually. If this is divided by 100 cases per social worker per year, this gives an estimate of $2.8, or 3 dollars per case. Of course, adding one child to the workload of statutory services would not increase the cost of performing the gatekeeping function because the link between the number of children served and the number of staff in the gatekeeping function is indirect (gatekeeping is a semi-variable expenditure), but for each 100 new cases a new social worker position in the gatekeeping function should be added. In the cases considered below, only children released from residential care were considered as the target group for strengthening the gatekeeping function.[16] Three dollars per child per year multiplied by some 2,000 children to be released from residential care makes up the salary fund of social workers required to strengthen the function of individual case manage-ment and gatekeeping in this study.
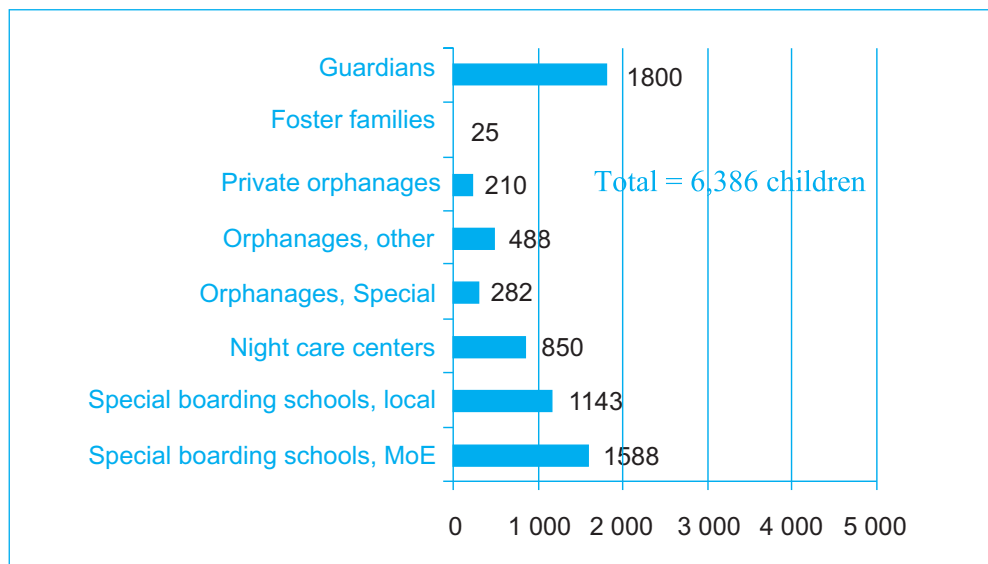
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[16]Ideally, gatekeeping should be done for all children entering child care services every year. Some of this cost is a "transition cost" – this has to do with all children in institutions today (stock) who should have their cases reviewed and based on which decisions will be made on who can go into alternative family based care and who should stay in the institution for the time being. There is also a cost which is "ongoing" and which will continue in the future -these are all the new cases (flow data).

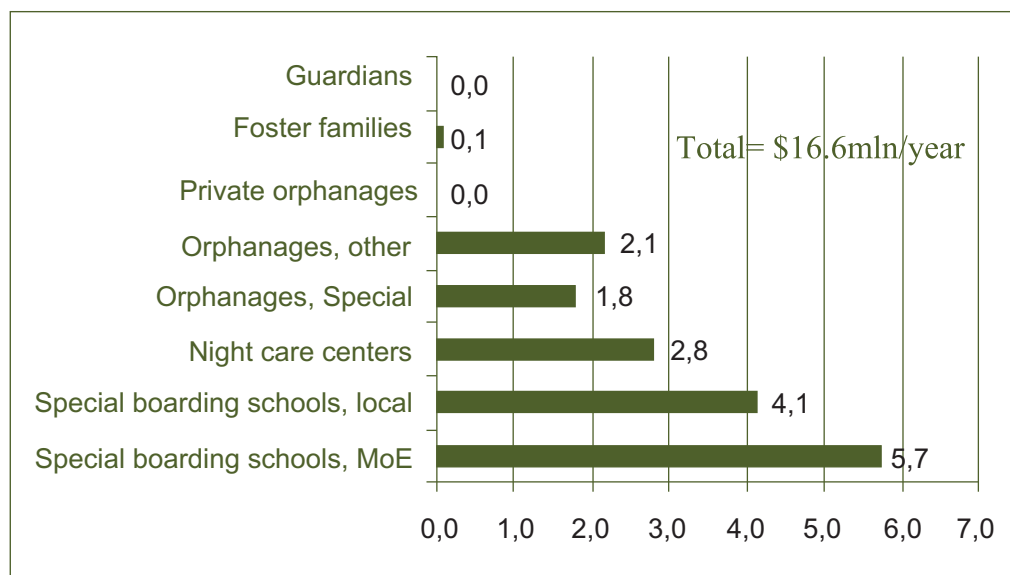# 5. Cost of the Existing System of Child Care

The number of children in each form of formal care[17] is represented on the chart below.

Figure 1. Children in different forms of formal care in Armenia, 2008

Total = 6,386 children

Category	Value
Guardians	1800
Foster families	25
Private orphanages	210
Orphanages, other	488
Orphanages, Special	282
Night care centers	850
Special boarding schools, local	1143
Special boarding schools, MoE	1588

To get an estimate of the annual budget costs of maintaining the present system of formal care/alternative care placement, the number of children in each form of care is multiplied by the cost of one child-year in that form of care and all these amounts are added together.

Figure 2. Cost of keeping children in different forms of formal care during one year, USD mln.

Total= $16.6mln/year

Category	Value
Guardians	0,0
Foster families	0,1
Private orphanages	0,0
Orphanages, other	2,1
Orphanages, Special	1,8
Night care centers	2,8
Special boarding schools, local	4,1
Special boarding schools, MoE	5,7

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[17]Formal care placement or alternative care placement should not in fact be permanent. Ideally, when foster care is established, work should be ongoing with the biological family so that this alternative substitute care does not become permanent. In some cases this will happen anyway, but the aim of the system should not be to place the child into care permanently. The case should be assessed on a regular basis and the need for the care service re-evaluated. This is another way of keeping the costs of the system down.

Conclusion: The cost of keeping 6,386 children in different forms of care as per status quo is $16,600,000 per year. This amount does not include the costs of the staff of private orphanages. As a public service, residential care is funded through three windows: 1) Ministry of Labor and Social Issues ($6.8 mln/year); 2) Ministry of Education ($5.7 mln/year); and 3) local governments ($4.1 mln/year). As local governments in Armenia have very little of their own revenue sources, their main source of revenues are transfers from the state budget. Therefore, the ultimate source of the $16.6 mln spent on residential care services for children every year is the budget of the Government of Armenia.

6. Estimation of Potential Savings from Moving Children from Residential Care into Foster Care

We shall consider children in any type of residential institutions as belonging to one stock – that of children in residential care. The initial allocation of children in formal care across other forms of placement in Armenia under this assumption is considerably simplified. The annual cost of supporting this system is $16.6 mln/year. The average cost of keeping one child in residential care during a year is $3,800.

Figure 3. Stocks of children in residential and family based care in Armenia, 2008
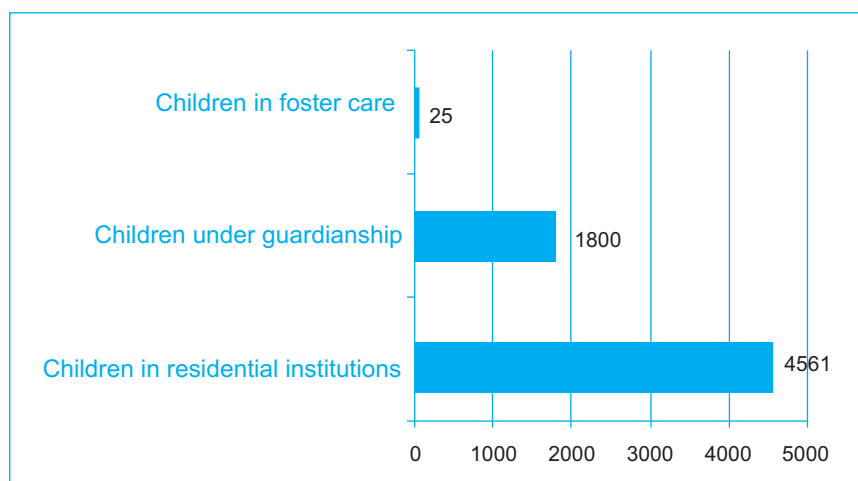
The policy option that will be analyzed is that of reallocating half of the children from residential care into family based substitute care. Finding a family for some children may be a more difficult task than for other children, and for the sake of simplicity we shall assume that for at least half of the children in residential care finding a foster family is merely a matter of committing the funds for the foster family allowance. This is equivalent to saying that foster parents who passed the necessary training and have obtained all the required certificates are in ample supply and that the availability (or lack of) such specialists does not impose any limits on a real-location policy. We shall also assume that this reallocation can be done instantaneously and does not require start-up costs.[18] The re-integration of released children with their biological parents was not considered as an option because, according to local child protection specialists,[19] screening conducted in 2006 pinpointed all biological families fit for reintegration. These families then became part of the reintegration program sponsored by the government. The criteria for accepting children into residential care have been significantly toughened since then, therefore the potential for reintegrating children from residential institutions with their biological parents or relatives are very modest. In contrary, the number of potential foster parents seems to be quite high in Armenia.

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[18]See Annex 3 on transition costs.

[19]According to Ms. Gayane Poghosyan, Children's Department, Chief Expert of Family, Women and Children Department, Ministry of Labor and Social Issues (MoLSI) and heads of residential institutions for children interviewed.

Figure 4. Placement of children and operating costs of child care after the reallocation.
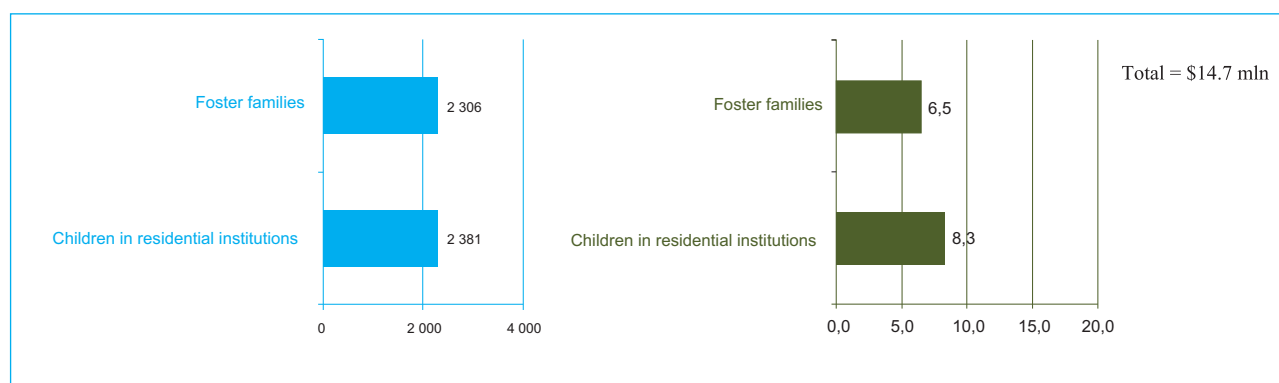
Conclusion: Total annual savings from the reallocation of children from residential care into family-based care can reach $1,900,000 ($16.6-$14.7). This saving comes from the difference in unit costs between keeping one child in residential care during one year ($3,800) and that of keeping the child in foster care ($2,800) for a year.[20]

In reality, the children cannot be reallocated instantaneously. A policy that regulates the number of children in each form of care by changing incoming and outgoing flows of children into each form of care explicitly takes into account the time factor and demographic trends is described in the next section.

7. Estimation of Demand for Services Based on Demographic and Macroeconomic Change and Analysis of Policy Options

Policy makers need to know what impact the policy decisions made today have on the future need for different types of services and what cost implications this will have on the budget, compared with a situation where no policy changes were made. The key problem of doing this type of analysis has to do with the fact that costs of the system will change regardless, even if no policy changes are made. These changes will occur because of macroeconomic changes, including inflation and demographic changes, such as changes in the number of children or elderly persons, or behavioral changes of the population which will affect the overall need for services. Therefore, the key task of the policy analysis is to obtain an evidence based picture of how long-term demographic/macroeconomic change may influence the country's budget and to estimate the combined effect of demographic/macroeconomic change and policy change.[21] Comparing the long term effects of zero-change policy and the policy of reforms would then indicate the gains or losses that can be expected if a particular policy course is chosen.

Constructing this picture requires a number of steps:

1. Define the types of social services which will be covered by the assessment (residential services, family based care placement, community based care);

2. Estimate unit costs of each service ($ per customer per year);

3. Estimate trends and structural changes in the socio-demographic groups from which the users of the

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[20]The cost of residential care includes the fixed costs for residential care institutions, and in the case of small variations in the number of children in residential care, using this cost estimate for determining savings would result in an overestimation of savings, even though the share of fixed costs in total costs of residential care is relatively modest (see Annex 1). However, as the number of children to be released from residential institutions in the reallocation scenario is high, it can be expected that such a release of children would eventually lead to the closure of excessive residential institutions. The estimated economy, therefore, would indeed occur, but not overnight as it will take some time to release all children from the institutions scheduled for closure without transferring them to other residential institutions. The simple reallocation scenario does not take the time factor into account; it produces the estimate of the final economy without specifying how soon this economy can be reached.

[21]The description of the estimation steps is based on "Proposed Evidence Based Framework to Incorporate Demographic and Financial Projections into Social Service Strategic Policy Development and Planning" by Laurie Joshua, report prepared under the DFID Project Facilitating Reform of Social Services in Ukraine (FRSSU), 2007. Though the approach used in this paper is different than the one described in the reference paper in that it explicitly introduced policy changes instead of relying on the observed historic trends, many of the steps in both approaches coincide.

services originate (in this case, service users are children);

4. Determine scenarios that will establish the demand for child care services. The demand for child care services depends upon the total number of children in Armenia and the rate of entry into institutional care (incidence of placement into residential institution) and alternative care (guardianship, foster care, etc.). Accordingly, the scenarios considered differ in the assumption concerning changes in the rate of entry into formal care:

   - In the first scenario, the flow of children into formal care will be determined only by demographic changes, the rate of entry into formal care will remain constant;

   - The second scenario will incorporate changes in demand that result from demographic conditions and improvement of the general economic situation which will result in fewer children entering into formal care;

   - The third scenario will incorporate demographic and macro-economic changes as well as changes that result from a strengthened gatekeeping function;

5. Design policy options for meeting the demand for services. Examples of policy options are: redirecting children from residential care into foster care; introducing new forms of family-based care; changing the size of the child allowance, etc.;

6. Estimate the cost of implementing different policy options under different scenarios; and

7. Compare policy options and develop recommendations.

A description of each of step follows.

Step 1. Define the Types of Social Services that Will Be Covered by the Assessment

This assessment shall cover four types of services for children: institutional (residential) care, family based care, community based care for children released from residential institutions and their families and strengthening of the gatekeeping function, or additional gatekeeping and case management services addressed to families and children from institutions. The many different forms of institutional care are treated as one service, without any further breakdown. Family based care includes: foster care of the type that exists in Armenia today; and "new" foster care which differs from the traditional type in that it does not include remuneration for foster parents, it includes only a child support subsidy. Guardianship and adoptive families are included in the model because these are forms of placement that divert children from entering residential institution, but in the scenarios considered there are no changes in the flow of children into these forms of care other than those that result from demographic changes.

As for community based care services, the demand for these, by definition, depends on the number and size of communities. Community based care services do play an important gatekeeping function, but their prime function is the social and medical rehabilitation of children in families. They also allow mothers to have some free time to focus on other things besides the child. Clients of community based services are families in the communities. In reality, the provision of these services should be needs based, and there should not be a separate "stock" of children/families that have a preferential right to receive such services. However, in order not to increase the deinstitutionalization costs beyond what is affordable in a time of economic recession, we shall provisionally assume that the scaling-up of these services is determined exclusively by the needs of providing priority access to these services for children released from residential/ institutions and their foster families.

Having made this assumption, we shall nevertheless bear in mind that the demand for day care centers exists, irrespective of the residential care policy selected. Ideally, all communities should have day care centers. They can be based in schools, kindergartens, additional education centers and even in libraries. In each case, the specifics of the service and cost shall be different, but one can assume that there should be some hierarchy of day care services. Complex disability or social neglect cases should be referred to some central institution that should probably be located in the central city of each marz, or better still, in each district center (there are four districts per marz, on average) so that families can make the trip to the service provider and back during the day, or so the center can provide outreach services without spending too much time on travel. This central rehabilitation function could be funded from the state budget, while the care centers based in schools and kindergartens could likely be financed from local budgets. These parameters are important in designing a cost efficient social protection policy.

The by-product of making day care services available to all would be a reduction of the inflow of children into the child care system, i.e. creating a strengthened prevention function. The buildup of a prevention function requires investments, and at a time when public resources are scarce, the most likely source of such investments

is savings in conducting a more efficient child protection policy. We shall first estimate the potential amount of savings that can be achieved by increasing the efficiency of the child welfare policy and then try to estimate the potential savings that could result from using the proceeds of a more efficient child allocation policy as a source of investments into the buildup of an abandonment prevention function. The starting assumption will be that of no change in the supply of abandonment prevention services. Of course, the provision of direct support services to children released from residential institutions and their new families would also have a gatekeeping effect. In the model, this effect will be reflected in the assumption that there will be no secondary flow of children from those families benefiting from these services to residential care institutions, but no other prevention services or effects will be considered in the first round of simulations.

The table below presents historic data on a broader range of residential/formal care services than shall be included in the assessment. The observation period may be too short for making definite conclusions about time trends, but apparently there is a downward trend in the number of children in all forms of placement in Armenia. The reduction of the number of children in residential care is the result of a combination of demographic and policy changes. On the one hand, the total number of children in Armenia has been shrinking for several years in spite of the growing number of births, and this trend may have contributed to the reduction of the number of children in residential institutions in Armenia. On the other hand, the reduction of the total number of children in Armenia by 6% in 2006-2008 can hardly be the only reason why the number of children in residential institutions was halved during the same period (a reduction from almost 10,000 in 2006 to 4,914 in 2008). The discharging of special and general type boarding schools was an important step in deinstitutionalization reform in Armenia.

Table 2. Children in Formal Care in Armenia

	Source	2006	2007	2008
Total number of children in Armenia, thousand	MONEE	856	830	830
Total number of children in formal care	*	n.a.	n.a.	6,738
Children in residential institutions	*	9,854	5,123	4,914
- in private residential institutions		234	202	376
- in public residential institutions	*	9,620	4,921	4,538
- aged 0-17 in MoLSI orphanages for children with disabilities	MoLSI	269	262	282
- aged 0-17 in other MoLSI orphanages	MoLSI	563	534	488
- in special boarding schools under MoE	MONEE	1,935	1,707	1,588
- in local special boarding schools	MONEE	1,973	1,337	1,143
- in general type boarding schools	MoE	4,700	0	0
- in temporary shelters	MONEE	180	181	187
- in night care centers	MoLSI	0	900	850
Children under guardianship	MoLSI	n.a.	n.a.	1,800
Children in foster care	MONEE	26	27	24

Source: 2009 MONEE STATISTICAL TEMPLATE for Armenia, MoLSI and Ministry of Education. (*) Rows marked with (*) contain totals.

Step 2. Estimate Unit Costs

See Section 4. - Costing Services.

Step 3. Estimate Trends and Structural Changes in the Target Socio-Demographic Group

The socio-demographic group which is the source of potential clients for services selected is children, or the population of Armenia aged 0-17.[22] In reality, some of the institutions provide services to residents older than 18. Where possible, children older than 18 were removed from the source data. The demographic forecast only covers children aged 0-17.

Figure 5. Population aged 0-17 in Armenia, reported and forecast, thousand persons
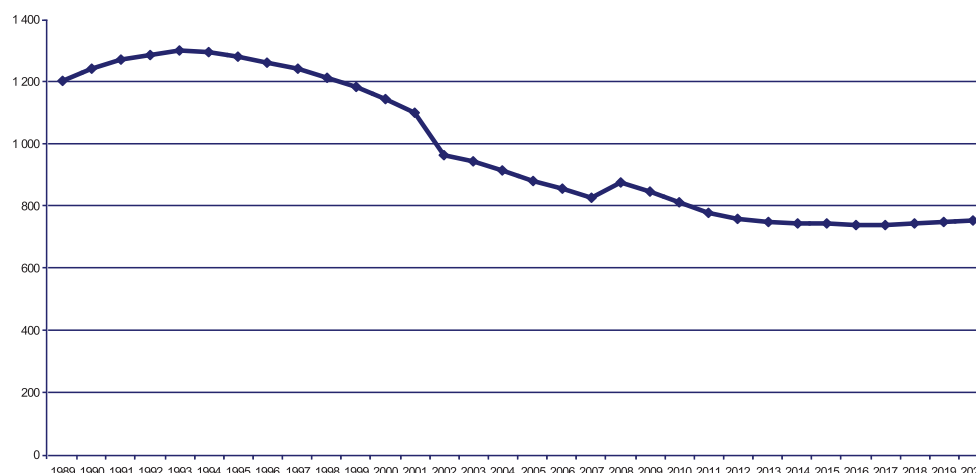
Source: TransMONEE IRC Database, United Nations World Population Prospects (http://data.un.org/)/, author's own calculations.

The number of children, or population aged 0-17, is expected to be reduced from the current 830 thousand to 750 thousand by 2020 despite the growing birth rate. This phenomenon has to do with the age structure of children: the number of live births increases, but even more numerous groups of older children are leaving the 0-17 cohort.

Figure 6. Nativity in Armenia, reported and forecast, thousand persons
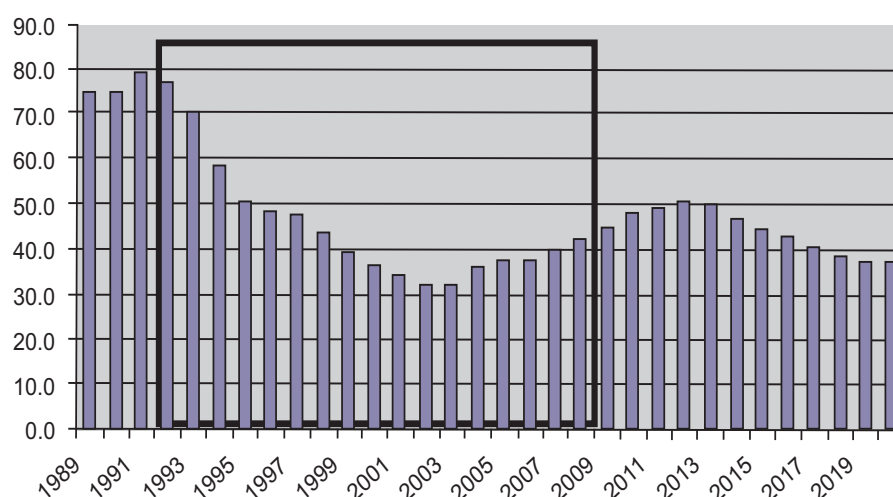
The black box in Figure 6 represents the approximate age composition of children in 2009. Children born in 1992 will be reaching maturity and leaving the category of children (population aged 0-17). The growing number of births does not compensate for the outflow of children from the age group 0-17.

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[22]Children up to 18, meaning 17 years 11 months and 30 days.

Step 4. Define Scenarios that Will Determine the Demand for Child Care Services

Figure 7. The stocks and flows model used for projecting the demand for child welfare services is based on demographic projection and policy change assumptions. Flow rates and levels of stocks are based on 2008 reported figures.
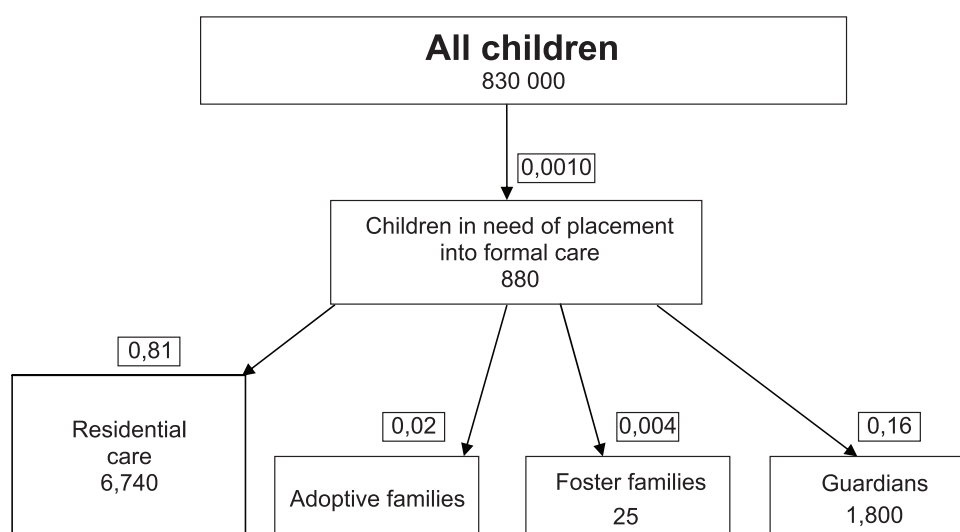
The diagram above represents the stocks and flows model that will be used for projecting the demand in child care services. In this model, the demand for child care services will be determined by the number of children in need of placement into formal care. This number is determined by multiplying the total number of children in Armenia by the rate of entry into formal care. This indicator is not available from official reporting and had to be estimated by dividing the total number of children placed into different forms of care during the year (some 900 children in 2008, according to the author's estimates) by the total number of children in Armenia (830,000). The number of children in need of formal care includes not only children whose parents were deprived of parental rights, but also children whose parents have not been deprived of parental rights, but the children nevertheless are admitted into boarding schools, orphanages or night care centers.

Table 3. Estimation of the Rate of Entry into Formal Care

| Type of institution	Number of children, end of year	Average length of stay	Estimated inflow, annual
Night care	850	3	283
Boarding schools MoE	1,588	8	199
Boarding schools local	1,143	8	143
Orphanages for children with disabilities	282	14	20
Other orphanages	864	8	108
Guardians	1,800	14	129
Foster	24	14	2
Adoptions	n.a.		20
Total inflow into formal care			903
Total number of children in Armenia	830,000		
Rate of entry into formal care			**0.001**

Explanatory note: Unlike the stock variables represented in Table 2, the flow variables, or changes in the stocks that occur during the year, are not available from official reporting in Armenia and had to be estimated. The estimates are based on the length of time children spend in institutions of each type on average and the number of children in each type of institution. For instance, if the total number of children in night care centers is 850, and several providers of this service said in the interviews that the average number of years children spend in these institutions is three years, the annual inflow (and outflow) of children into night care centers should be around 300 children (850:3).

The estimated rate of entry into formal care is the key parameter that regulates the demand for child care services in the model. Another important parameter is the total number of children, but this is controlled by demographic trends which are largely outside the control of policy makers. The type of services offered to children to satisfy this demand depends on the policy chosen. The predominant form of placement of children in need of formal care in Armenia today is residential care: 81 children out of every 100 children in need of formal care are placed in residential institutions, and only four are placed into foster care.

Community based services are not represented in the flow chart because the provision of these services does not create separate stocks of children. These services are available to all community residents who need them, and the indirect effect which can be captured on the flow chart is that of altering the flow of children into the formal care system and altering the allocation of children between different forms of formal care. In the first round of scenarios considered below, the effect of community based services will be that of eliminating the return flow of children placed in foster care into residential institutions. In the last scenario, the savings from the reallocation of children from residential institutions into family based care will be invested into the buildup of community-based services which will produce a noticeable abandonment prevention effect.

The scope of the study did not permit an explicit incorporation into the model of the GDP forecast, the fiscal space or inflation/discount rate effects. Changes in macroeconomic conditions are included in the forecast only to the extent that these affect the inflow of children into formal care. Several scenarios concerning changes in the rate of inflow of children into formal care (0.0010) were considered: 1) In the first scenario, the rate of entry into formal care remains constant over the entire forecasting horizon; 2) In the second scenario, the rate of entry into formal care follows a slow downward trend (from 0.0010 in 2008 to 0.0009 in 2020) due to the general improvement of economic conditions; 3) In the third scenario, there will be two factors contributing to the downward trend of the rate of entry into formal care: general improvement of economic conditions (10% drop in the rate of inflow into formal care) and the buildup of community based abandonment prevention services (another 10% drop from the base year level). In the latter case, the rate of admission into formal care rate will drop from 0.0010 in 2008 to 0.008 in 2020, creating new savings. The comparison of these new savings to the amount of funds invested in order to achieve them would determine the rate of the economic effectiveness of this type of social investment. Unfortunately, reliable evidence that would allow a measure of the effect of reduced entry of children into formal care as a result of build-up of community based services is difficult to obtain, as is usually the case with any preventive actions, where the effectiveness of such actions is measured by the number of cases. In the scenarios considered, some conservative assumptions regarding the link between the investments into community based services and child abandonment were used to estimate the potential scale of savings.[23]

Figure 8. Changes in the rate of inflow of children into formal care in 2009-2020 in Armenia in the three scenarios considered
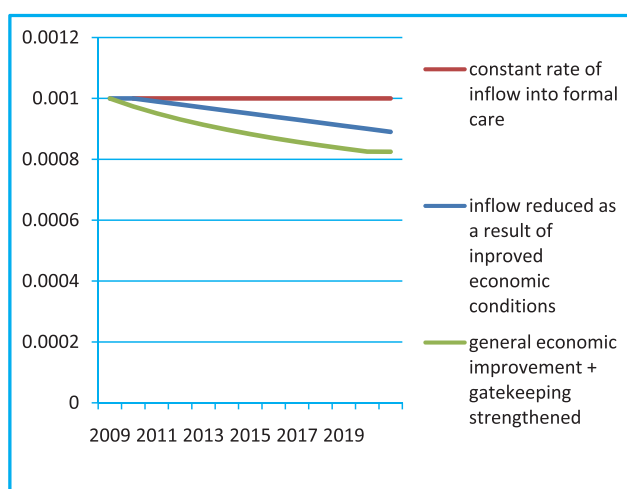
Explanatory note: A linear reduction of the rate of inflow into formal care is assumed in the case of improved economic conditions. The curved line in the third scenario is explained by the combination of liner reduction from the second scenario and accumulated investments into strengthening the gatekeeping function that are funded from the savings.

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[23]There are studies that show that in the medium and long term, prevention can be cost effective because it reduces government spending on the formal care of children left without parental care; and eliminates future economic losses from reduced productivity of orphanage alumni. See, for instance: Child Welfare Services Cost Measurement and Long-Term Economic Impact Analysis in Tomsk Oblast (Russia). Center for Fiscal Policy, 2007 (in Russian); www.fpcenter.ru/themes/basic/materials-document.asp?folder=16498&matID=19621

The pessimistic scenario in which the rate of entry into formal care would increase as the result of worsening of economic conditions was not considered. First, in contrast to expectations, in Armenia the hardships brought about by the economic crisis did not result in an increased inflow of children into formal care in 2008-2009. Even though the IMF (International Monetary Fund) and the WB (World Bank) predicted negative growth of the Armenian economy in 2009 between -9% and -20%, the inflow of children into formal care slowly reduced in 2009 following the demographic trend. It is true that we have only seen the effect of the crisis in 2009 and there are no guarantees that the situation will not become worse. The effect of the economic crisis on the labor market can be much more long term than on other factors. The jobs that were lost in 2008-2009 may not be easily compensated in a short period, even if GDP increases from 2010. This is why the effect on family incomes may be more long term, and we may still see the effect of this on the inflow of children into care next year, and even in the medium term, even if GDP increases in 2010. If the inflow of children into formal care increases, the savings from changing the placement policy from residential care into less expensive family care may be more substantial than the status-quo and optimistic scenarios considered in this study.

The continuation of the crisis may produce a negative effect on the ability of the GoA to provide public services in general, and child care services in particular. Depending on the predicted amount of GDP, tax collections will change, and depending of the inflation rate the same amount of funding can buy more or less services. In this study, the assumption was that the cost of services remains unchanged throughout the period considered and the purpose of the study was to estimate the demand for services. The ability of the government to meet the estimated demand will depend not only on the availability of funds, but also on the policy chosen. The share of spending on residential care and family based substitute care of children ($16.6 mln. in 2008) is small compared to the total overall budget of the RA (about 1% of the overall budget) and GDP (about 0.2% of GDP). It may therefore be affordable to freeze the amount of funding for residential and family-based substitute care at the expense of other sectors, if the government decides not to compromise its spending on children. The government of the RA has, in fact, made a commitment not to reduce its spending on children in the time of economic hardship, and has so far kept its word. Moreover, the shrinking number of children in Armenia will lead to a reduction in the demand for child care services which, if the level of funding remains unchanged, will result in an increase in per capita spending, and some indications of these effects were already visible at the time of this study (October 2009).

Step 5. Design Policy Options to Meet the Demand for Child Care Services

In this study, policy options are characterized by proportions in which newly identified children in need of formal care are placed into different forms of care and on the average length of stay of children in residential care. The purpose of the study is to show that diverting part of the annual flow of children from residential institutions into family based care can create budget savings, and that these budget savings can be increased even more if additional policy measures are introduced, such as accelerating the exit of children from residential care institutions into family care and by introducing new forms of family based care.

Other policy options have to do with providing additional services to children placed into family based care and their foster parents, as well as providing a severance package to redundant staff of residential institutions.

A total of 7 policy options were considered:

P0. No policy change

P1. Rate of admission to residential care halved, children re-directed to foster care

P2. Rate of admission to residential care halved, children redirected to "old" and "new" types of residential care in 50:50 proportion

P3. Rate of admission to residential care halved, children redirected to "old" and "new" types of residential care in a proportion of 1:3

P4. Accelerated exit from residential institutions

P5. New employment for redundant staff of residential institutions

P6. Direct support services provided to children released from residential institutions and their foster parents.

The options P5 and P6 are add-ons that can be used in combination with any of the P1-P3 options. Their cost increasing effect will be the same for any of the P1-P3 options with which they are combined, because in all cases the cost increase will depend upon the number of children redirected from residential care, and this number is the same in any of the P1-P3 options.

Direct Support Services Provided to Families and Children Released from Residential Institutions
The most common type of services that work directly with families and children are **day care centers**. Day care centers focus on skills and competency development for social integration and should also provide family outreach services for the same risks groups when the children cannot attend day care services. **Family outreach** may be less intensive then day care and family visits should be available two to seven times per week for two or more hours.
Both family outreach and day care are of special importance for the prevention of institutionalization and especially for families with children who need intensive support. Family outreach should be done by the same **type of personnel** who are working in day care. It is assumed that these services will be targeted to children released from residential institutions and their families. According to Vesna Bosnjak,[24] a social worker may need 30 or more days a year if he/she is providing family outreach service or intensive support to a child at risk, which results in a staff to beneficiary ratio of 1:12. Other experts believe that the staff to beneficiary ratio in the case of family outreach services can be as low as 1:36. The latter ratio was used in the scenarios considered.

The full range of P0-P6 options will be considered only under the scenario where the rate of the inflow of children into formal care remains unchanged and the demand for child care services is driven only by demographic change. Options P2 and P3 are different from P1 in that they use a new form of foster care – the so-called "new" foster care – in addition to the type of foster care that already exists in Armenia. The new form of foster care was introduced into this study to demonstrate the saving potential of a non-kinship form of family based care that does not assume remuneration to parents. This form of care has been successfully implemented in a number of CIS countries, but at present does not exist in Armenia, even though some experts believe that it has a future in Armenia. At present, when the number of foster families in Armenia is very limited (25 families), the government can afford to pay generous remuneration to foster parents, but if it chooses to implement a policy of reducing admissions to residential care by half and redirecting children to foster families the number of foster families would have to reach 300 in one year after the change in policy and 1000 in another four years. If there are families willing to raise a child without remuneration but with the support of the government in the form of a child support subsidy and direct support services to which foster parents will have preferential access. The option of introducing this new form of foster care merits investigation, and this was done in one of the scenarios of this study.

Nevertheless, the main focus is on the option of redirecting children from residential care into the already existing type of foster care. This option will be analyzed under all three scenarios in order to obtain an idea of the scope of savings that can be achieved under different macroeconomic conditions (Options 0 and 1). Option 2, where the rate of inflow into formal care is reduced as a result of a combination of two factors – that of the general improvement of economic conditions and investments into strengthening the gatekeeping function, is classified as an option, because like Options 0 and 1, it concerns a change in the rate of the inflow of children into formal care. However, unlike the first two scenarios, it involves a change resulting from a change in policy, i.e. investing into the gatekeeping function in order to curb the flow of children into formal care. A more detailed description of the policy options is analyzed in Annex 2.

Step 6. Estimate the Cost of Implementing Each Policy Option Under Different Scenarios

The analysis of different scenarios and policy options presented in Annex 2 has produced the following results.

Comparison of Flow Re-direction Options under the "No Change in the Rate of Inflow into Formal Care" scenario

If no changes are introduced in the policy of placing newly identified children in need of formal care across different forms of care, the cost of the child care system would still go down from $16.6 mln in 2009 to $14 mln because of demographic reasons (P0). If 50% less children are placed into residential care than the P0 option and the children are redirected to foster care of the type that exists in Armenia today, which is expensive but still cheaper than institutional care, the savings would start at a modest $0.3 mln on the per annum basis one year after the policy change, reach closer to $1 mln in five years after the reform and settle at that level for years to come.

Placing half of the number of children into a cheaper form of non-kinship care, the so-called "new" foster care would roughly double the savings. Implementing this policy option would require, apart from putting in place the required changes in the legislation and setting up the needed support services, a willingness on the part of eligible Armenian families to take children into their care without any remuneration. Some150 such families

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[24]See Vesna Bosnjak's note on deinstitutionalization, 2009.

would be required in the first year after the policy change (2008 is the base year), and a total of 800 would be required by the end of the forecasting period (2020). Keeping in mind that, according to MOLSI, there are presently some 1,800 children under guardianship, guardians are not entitled to any form of support from the state for performing their functions, while "new" foster parents would be entitled to a child support subsidy and direct support services. The prospects of finding new homes for 800 children in the next 13 years do not seem unlikely.

Table 4. Savings from Re-directing Children from Residential Institutions one, five and 13 years after the Policy Change as Compared with the No Policy Change Option

	2009	2013	2020
Savings from re-directing children from residential institutions to foster care	0.3	0.8	1.0
Savings from placing children re-directed from residential care into the existing and new foster care in 50:50 proportion	0.5	1.5	2.1
Savings from placing children re-directed from residential care into the existing and new foster care in 1:2 proportion	0.5	1.7	2.4
1:2 proportion + accelerated outflow from residential care	1.2	2.2	2.8

The cost-saving effect of the accelerated exit from residential care option (P4) is about $0.5 mln per annum, irrespective of the allocation policy chosen. It increases the savings of any allocation policy if it is used in combination or as a separate policy option.

Figure 9. Comparison of policy options under the "No Change in the Rate of Inflow into Formal Care" scenario
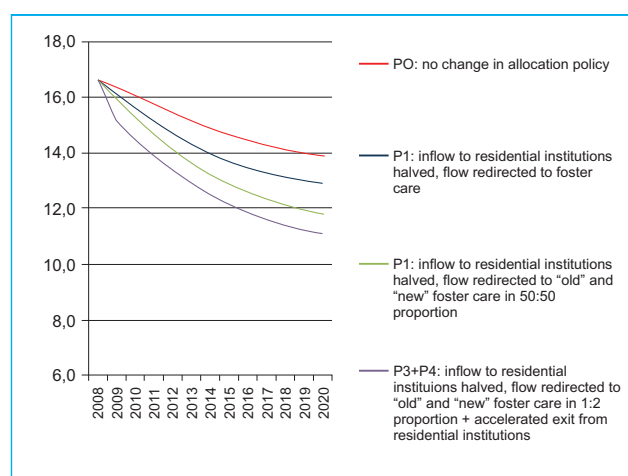
The provision of a severance package equivalent to two additional years of employment to all staff of residential institutions who became redundant as a result of redirection of new children from institutional care into family-based care would cut the saving of any re-allocation policy chosen by $0.5 mln. annually, i.e. almost by half if children are redirected from institutional care to foster care of the existing type. The provision of direct support services to children placed into foster care would require only $0.05 mln per annum, and these could be funded with the money allocated to the continued employment of redundant staff, as the positions of social workers in direct support services could be filled by professionals from residential institutions. See Annex 2.

Comparison of Re-direction to Foster Care Option Under Different Scenarios

The policy change analyzed assumes that the inflow of children into residential institutions will be halved, and that the children that would have otherwise been placed in institutional care are placed into foster care. To assess the budget savings from implementing this option, its costs need to be compared with the no policy change option. But the no policy change option will result in different inflows of children into residential care in different scenarios depending on the scenario, and the amount of saving that will result from halving the inflow

to residential care will also be different. The third scenario is built on the assumption that the savings achieved in the second scenario under the policy change option are invested into strengthening prevention services. Therefore, the policy reform option of scenario 2 becomes the no change option in the third scenario, i.e. it is the option against which the outcome of implementing the option of investing the savings into strengthening prevention is compared. The purpose of this analysis is to assess the potential savings in each of the three scenarios.
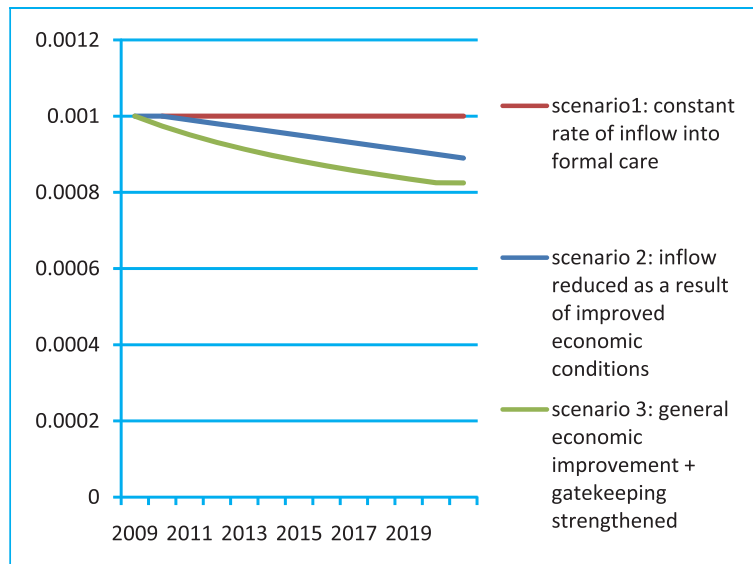
Figure 10. Cost of maintaining the status quo and the reformed systems of child care in the scenario where the rate of inflow into formal care remains constant, USD mln per year
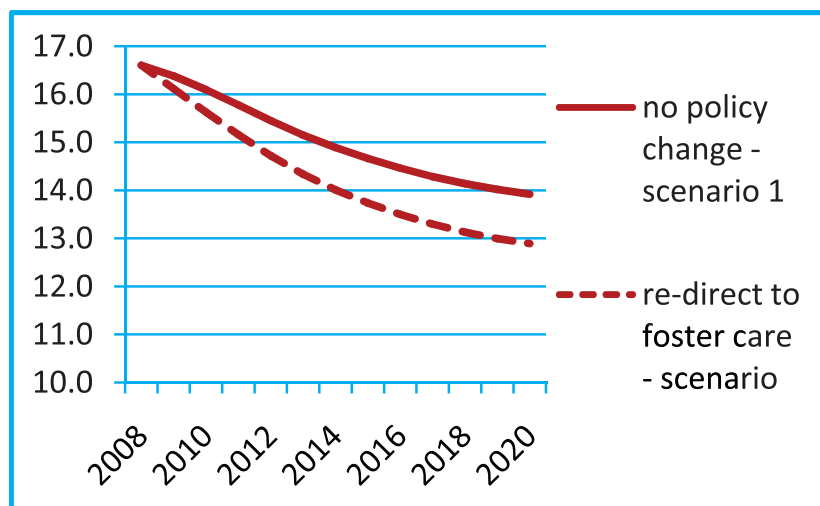
Figure 11. Cost of maintaining the status quo and the reformed systems of child care in the scenario where the rate of inflow into formal care goes down as a result of general economic improvement, USD mln per year
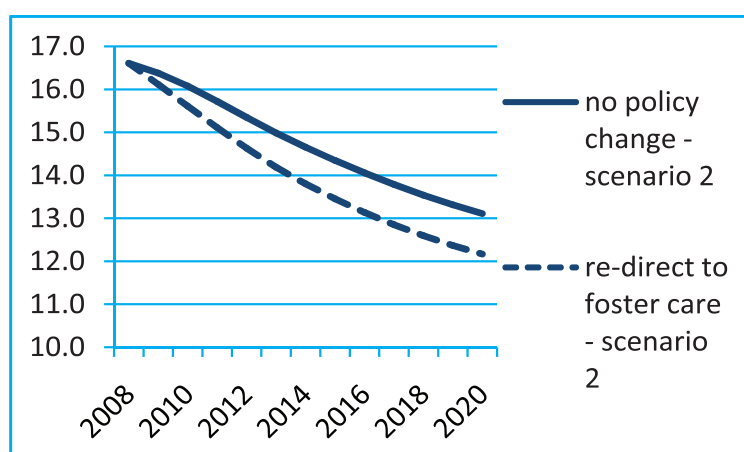
Figure 12. Scenario 3: Cost of maintaining the status quo, the reformed system of child care and the reformed system of child care with a strenthened gatekeeping function in the situation of general economic improvement, USD mln per year
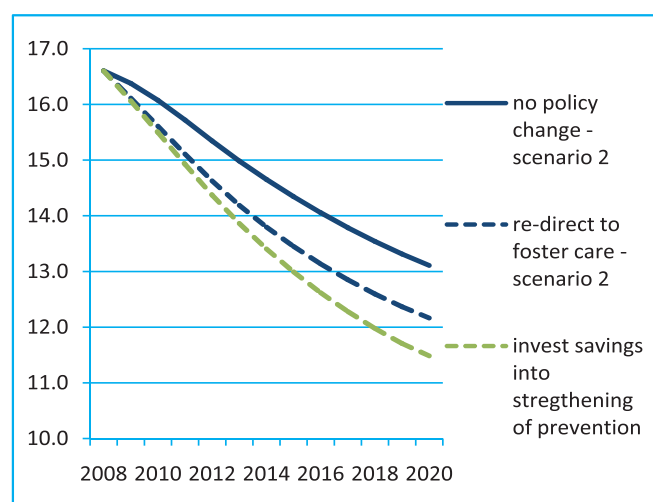

Table 5. Cost of Maintaining the Status Quo and the Reformed Systems of Child Care in the Three Scenarios, USD Mln.

		2009	2013	2020
sc1: Rate of inflow into formal care constant	- no policy change	16.4	15.2	13.9
	- redirect to foster care	16.1	14.3	12.9
sc2: Rate of inflow goes down due to improved economic conditions	- no policy change	16.4	15.0	13.1
	- redirect to foster care	16.1	14.2	12.2
sc3: Rate of inflow goes down due to improved economic conditions + children redirected to foster care	- economic improvements + redirect to foster care	16.1	14.2	12.2
	- build up of prevention services funded from savings achieved by policy change in the previous scenario[25]	16.1	13.9	11.5

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[25]The exact rate of social return of investment into prevention services is not known. It will depend on many factors, including the mix of

In the first two scenarios, the scale of savings from changing the child placement policy in favor of family based care is roughtly the same, which means that the potential for savings from changing the child placement policy in favor of family care will remain high even if the flow of children into the child care system in Armenia declines in future years. Investement of these savings into the buildup of prevention services will create more savings by weakening the inflow of children into the child care system.

8. Conclusions and Recommendations

1. Accelerating deinstitutionalization by and placing more children into family based care would generate a more cost-effective child care system even in the short run.

This study has proven the following:

- Services of residential institutions are very expensive. The reallocation of children in institutional care into cheaper – and more appropriate - forms of placement, which are family based, will create budgetary savings;

- Even if the savings are small, family based placements create huge social benefits for the child;

- Savings will also permit the costs of community based family and child support services to be covered. This will allow substitute families to obtain more qualified social care support services and will also allow jobs to be provided to all specialists who will be leaving residential care;

- Better access to day care services will reduce the inflow of children into the stock of children in need of placement into formal care.

2. More emphasis needs to be placed on "gatekeeping" of the system and some immediate investments into expanding the network of social services are needed to make this possible. In addition to expanding the social support services, it would be necessary to introduce a change in case management (and decision making) in order to direct clients of services to the right kind of services and to target the new services to those who are considered to be most in need. This is usually done by "statutory services". The way statutory services operate today is; no individual case assessment is made, and no regular review of cases is done to re-assess the need and eventually adjust the service provision to new circumstances in the family. Hence, in order for the new system to function properly, there is a need for financial investment into human resources of statutory services to carry out the function of case assessment and gatekeeping. There is a possible ratio between the number of such "case managers" needed and the population, which makes it possible to estimate the additional cost. Practice shows[26] that one case manager usually spends no more than one week a year managing each individual case, so if case management is limited to the cases of children released from residential institutions, the total additional demand for social workers in the gatekeeping function for some 2,000 children released from residential institutions would be 40 social workers who could come from the discharged residential institutions. The total estimated number of staff to be released from such institution is 1,000, out of which 200 are specialists in education and/or social work (based on evidence obtained during the visit). About 160 social workers would be required for providing social support to families, and 40 could strengthen the gatekeeping function.

3. In the medium term (during the first five years starting from the onset of more operational reforms), targets need to be set for the creation of more community based services which serve a preventive function. Five years from now, if a range of such services are available with coverage across the country; this will generate positive effects on the distribution of what is estimated as a potential demand for services (based on the estimated inflow of children into institutions in a no-policy change scenario). There are many alternative services that were not included in the calculator, such as community boards, inclusive schools and after school programs, etc. These can be easily added to the calculator, but making realistic assumptions concerning the

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services selected for the buildup and efficiency of service delivery. The assumption used here was that the ratio of investments to the cost of system eqals the rate of infow reduction. This asumption holds, for instance if $USD100,000, the annual savings that could be achieved after the first two years of reform, were used to fund the operation of one or two day care centers (the annual operation of one day care center in Armenia costs approx. USD60,000) which would prevent six children from being admitted into formal care during one year.

[26]This estimate was provided by Dr. Vesna Bosnjak, Consultant for the UNICEF Regional Office for the CEE/CIS and international, expert on child care reform.

required coverage of children by such services would require a separate study. Obviously, the total demand for day care and other community based services cannot be met by simply redirecting the savings from the cuts in residential institutions to fund additional day care facilities, because establishing presence of community based services in every community is an expensive aim. Without attempting to reach it in one jump, one can start planning the steps that will help bring it closer. One could start, for instance, by identifying the target number of children in each institution in five years' time, deciding on the number and the location of the day care centers and other alternative services that will open within the next five years, analyze available options of promoting family placements, and conduct a public awareness campaign. Making all these decisions will require careful analysis of possible budgetary outcomes.

4. For the continuation of the reform, the Government of Armenia needs to create opportunities and mechanisms for the regular screening of different policy options. The comparison of the two approaches presented in this study – the simple reallocation mode and the approach with the time factor and demoraphic trend, shows that simple scenarios can be a useful tool for the preliminary screening of different policy options. At a more advanced stage of policy analysis and for projecting long-term policy outcomes a more elaborate approach that takes into account demographic trends and macroeconomic effects becomes a requirement. Similar and new scenarios need to be developed during the course of the reform in order to update the projections and continue to evaluate the cost effectiveness of the system. The scope of policy options open to the Government of the RA in the area of child care is broad, but not indefinitely broad. There are only so many forms of formal care and each form has a cost associated with it. There are also a finite number of preventive/community based services available for expansion. If it has been decided what service the system of child/family support should include, the main issue should be that of deciding on the speed and geographic coverage of reforms. The size of the ultimate savings from deinstitutionalization is easy to determine by a simple reallocation calculator. However, the duration of the reform, its steps, associated expenditures and the timing when the ultimate savings can occur are all a matter of policy choice. Evidence-based analysis can help select the sequencing of reforms and optimize the funding requirements.

5. Generating better knowledge on the impact of policy changes is required in a modern system, but also puts new pressures on the improvement of data quality of some specific general characteristics, Uncertainty and divergence between projection and real life developments are inevitable when it comes to the assessment of the future needs for social services. Future needs are influenced by many factors that lie beyond the immediate control of policy makers, such as demographic trends, lifestyles, family values and economic growth. In order to develop a sustainable long-term strategy of social service provision, the government will have to rely on multiple scenarios and forecasts. Possible approaches to making such forecasts were demonstrated in this paper. The new approaches to policy analysis create new requirements for the quality of information. It is critical for the system of data management to meet the following characteristics:

- Timeliness, consistency over time, accuracy;

- Official demographic forecasts should be readily available for use by different ministries and should be clearly detailed and organized (by age, by jurisdiction, etc);

- Clear definition of services and target groups: data should relate to the needs and characteristics of target groups for different kinds of services, rather than to service providing institutions;

- Definition of target groups and services should be consistent across ministries and jurisdictions;

- Age and sex characteristics of potential and actual service users are essential for estimating the cost and benefits of services provided to children.

6. At present, the development of such systems in Armenia is limited by a high degree of administrative fragmentation in the delivery of social services. This fragmentation is reflected in the lack of consistency in data collection, as well as in reporting and exchange between stakeholders. The demographic dimension of data on service users is virtually absent because the traditional approach to budgeting does not rely on strategic planning. Just as budgeting for pensions requires the availability of data on the elderly population, planning for social benefits for families with children requires the availability of data on the population aged 0-17. If policy makers are considering the option of introducing guardianship benefits, what future burden for the state budget will this decision create? If foster care becomes the predominant form of family placement, how will this increase future spending commitments? The answers to these and other similar questions depend on the age at which children are placed into kinship or foster care. If community based services become progressively more important, an analysis of the efficiency of localized provision will require comparisons across communities and other community-level data.

7. A criticism that can be anticipated is that the savings in this study follow a smooth line, when in reality they follow a broken line and are often too small to be noticeable until the time comes to close one or several of the institutions. Policy analysis usually should start with a simplified approach to determine the general trend and direction of reforms. Once these have been decided, the next step should be that of planning the fate of each individual institution; whether they should remain as they are, downsized or closed, and this will involve careful case management of the children who reside in the institutions. Therefore, the next step should be that of creating the conditions for the reform policy to be implemented, such as collecting data on individual cases grouped by institutions, which will allow for a more adequate picture of the timing and the costs involved. The absence of ideal data, however, does not mean that evidence based estimations are impossible. They are possible and can be quite useful, and this study was designed to demonstrate them. See also Annex 2.

8. Reform usually involves some transition costs. Such transition costs can be either specific activities related to the "start-up" of new functions of the system, but can also involve paying for old services (residential care), while at the same time developing new types of services, with the intention that the "old services" will be gradually reduced over a period of time. These transition costs would normally only occur in the first few years of reform. Temporarily, they may increase the overall cost of the system. Several such transition costs which are "one-offs" and are related to starting up new functioning in the system which have been identified throughout this report. These have not been analyzed in detail since this went beyond the scope of this research. However, a preliminary list of such "one-off" costs could be provided in an Annex. A word of caution should be made however; in several other CIS countries, the expansion of community based services, and in particular family based substitute care services have not generated any specific impact on the rates of children who use institutional care services[27]. It could be considered that the reform has "expanded the net", rather than contributed to a deinstitutionalization effect. In the long term, the effect of reforms in such countries have indeed meant that the proportion of children cared for in the formal care system are cared for in a family based environment, which is a positive effect of the reform. However, it has also meant that what could have been the transition costs of the system (operating old services, while expanding new services), risks to become a permanent situation which will - instead of creating cost-effectiveness - increase the overall costs of the system. Considering children who are not yet in institutions (based on forecasted inflow of children into formal care) as the first target group for new services (foster care of different types and outreach services), and the children already in institutions as the secondary target group, it is important not to expand the net unnecessarily. In addition, the notion of gatekeeping and changes in the role of statutory services to perform this role, combined with the longer term reform policy goal to create a system that relies, first and foremost, on services to prevent the separation of children from their families, need to be important components in a reform strategy.

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[27]In Russia, for instance, the main emphasis in the de-institutionalization is on family placement of children in residential care. The release of such children from residential care, however, often does not reduce the number of children in residential care, because the vacancies were filled in with new children who often have to wait in temporary shelters before being placed into residential care.

Annex 1. Costing of Residential and Community Based Services

Determining the level of costs is important for the efficient management of services. It is important to know what the delivery of services as a whole costs, and how the production of one marginal unit of service will affect the total costs incurred in production. It is also important to know how the overhead costs that support the main activity (overhead costs include; building maintenance, cost of administrative personnel, computer systems, etc.) relate to the production of services, and how the overhead costs are affected by decisions to scale up or down the production of the services they support. Information on costs is required for making informed decisions on the allocation of resources to produce different services and for making sure that the planned actions can be carried out with the resources available.

In decision analysis, only the costs that vary with a decision should be considered. For many decisions that involve relatively small variations from the existing practice fixed costs are not relevant. For instance, the reduction of the number of children in a state-run orphanage by one child will not affect the costs of building maintenance, the costs of administrative personnel or the costs of direct labor. Total costs will only be reduced by the amount of the annual food and supplies allowance per child (unit variable costs). If the number of children in an orphanage that houses 100 children is reduced by 20 children, the reduction in total costs of running the orphanage may be greater than variable costs multiplied by 20, because the demand for certain categories of personnel depends on the number of children. For instance, if the effective norm is one tutor per 20 children, the reduction of the number of children by 20 can render the position of one tutor redundant. If the decision analyzed involves a significant variation from the existing practice, for instance a reduction in the number of all children who stay in orphanages in Armenia by half, fixed costs become relevant and should be taken into consideration.

Both costing methods – variable costing and full (absorption) costing – have their advantages and disadvantages. The choice depends on the extent of variation of the decision analyzed from the existing practice and the share of fixed and variable (semi-variable) costs in the full cost of the service.

In this study, the full costing method was used. The reasons for selecting this method were:

- The policy decision analyzed represents a major deviation from the existing practice, one that is likely to involve the closure of some residential institutions and elimination of associated fixed costs;

- The time horizon used in the analysis is 10 years – a period long enough for fixed costs savings to be implemented;[28]

- As will be shown below, fixed costs constitute a relatively small share of total costs of running residential institutions in Armenia (approximately 25%).

It should be noted, however, that the estimates of short and medium term savings determined using the full absorption costing method will be somewhat overrated. Ideally, a combination of both costing methods should be used for planning any major changes in existing services - the method of full (absorption) costing for long term analysis and strategic planning, and marginal costing for planning policy actions in the short and medium term, including sequencing the closure of individual residential institutions.

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[28]It can be argued that reallocating children from one half-full orphanage to another in order to achieve fixed costs savings traumatizes children and should be avoided. However, the time horizon of 10 years allows an achievement of savings without moving the children, i.e. by stopping admissions to one orphanage and redirecting all new newcomers into another orphanage. Since according to preliminary estimate the average length of time a child spends in an orphanage in Armenia is less than 10 years, in 10 years or less the first orphanage will become redundant through the natural process of aging.

Figure A1.1. Changes in total costs of residential care as the function of the number of children released and changes in the number of residential institutions
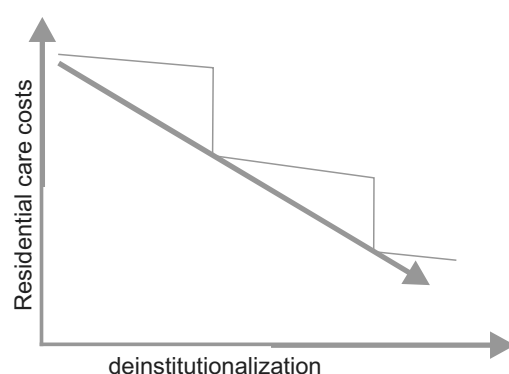
Variable costing produces a linear dependency between the independent variable (number of children in institutions) and the dependent variable (cost of care) which is applicable only to small variations of the independent variable. If the range of variation is such that fixed costs are affected, variable costing needs to be redone to produce a new linear dependency. Several such dependencies form a step-wise function which accurately reflects the savings, but is difficult to estimate, as estimation would require beforehand knowledge of the sequence in which the institutions will be closed and detailed data on each of the institutions - its costs, number of children, size of classes or groups, etc.

Absorption costing (single straight line) tends to overestimate the savings in the short run, but produces an accurate estimate in the long run , if the policy changes involve variations that affect fixed cost. The dependency between the number of services produced and costs incurred is much easier to estimate in the case of variable costing

Table A1.1 Composition of Costs in Some of the Institutions Visited, by Cost Object

Name of institutions	Food, clothing and supplies	Wage bill	Utility and maintenance
Night care center in Yerevan	25%	61%	14%
Day care center in Gyumri	33%	62%	5%
State home for children with disabilities in Gyumri	14%	68%	18%
Night care center in Vanadzor	33%	59%	8%
School for children with behavioral problems in Yerevan	22%	63%	15%

The main sources of data on costs in this study were interviews with service providers. In the majority of cases, the people interviewed were chief executives of the institution, i.e. chief pedagogue, orphanage director, director of night care center, etc., who were able to give only a rough estimate of the annual budget of their organizations without further breakdown into variable and fixed costs. In several cases, however, they also gave answers concerning the composition of costs by cost object, such as food and supplies, wage bills and utilities, and on the composition of staff (number of specialists directly working with children, number of support staff and number of administrative staff). Wage bills varied around 60-70% in all institutions for which data was available. Utility bills varied between 5% and 18%, and food, clothing and supplies (variable costs) averaged 25%.

The data presented in the table above is insufficient to determine the breakdown of total costs into fixed, variable and semi-variable costs. However, it can be assumed that the share of fixed costs in residential care institutions for children in Armenia is relatively small. The number of administrative staff in residential institutions for which data is available does not exceed 10% of total number of staff, and even if the wage bill of administrative personnel in the total wage bill is higher than the share of administrative personnel in

the total headcount of the institution, it is unlikely to exceed 11% of the total costs.[29] Part of the utility costs, such as telephone and electricity bills, should be included into variable costs, while heating (central heating) and building maintenance costs are predominantly fixed costs. If, for example, half of the utility bills and maintenance costs are variable costs, and the other half are fixed costs, the total fixed costs after adding the estimate of the administrative staff wage bill is unlikely to exceed 25% of overall costs. It should also be noted that orphanages in Armenia do not pay land or real estate taxes, which in some countries constitutes a large share of fixed costs. Amortization is not assessed either, because structures are not taxed.

Therefore, the assumption that total unit costs can follow the child into alternative services when the child is released from residential care, rather than just the variable costs, even if it somewhat overestimates the costs savings in the short run, delivers an accurate picture of savings in the long run and is the preferred method of costing for strategic planning purposes.

After selecting the method of costing, the next question that needs to be resolved is that of sources of data for costing services. Ideally, service costs should be determined based on service standards. Service standards should include requirements that define the outcomes desired for children and the accessibility of service (standards addressed to the customers of services) and requirements that define the technology of service delivery and resources to be consumed in service delivery (standards addressed to the service producers). It is sometimes argued that for the purposes of outsourcing services only service standards addressed to the service customers, or quality type requirements should be defined, as these affect quantitative standards such as staffing levels. In reality, however, both types of standards are needed and both should be observed in order to ensure the uniformity of public services, as the final responsibility for service delivery rests with public authorities even if theory outsources service delivery. In reality, some input requirements can be relaxed or altogether lifted in case service delivery is outsourced to the private sector, and one obvious example is the wages of the personnel involved in service delivery. But, if the service is provided by public entities, as is the case with residential care for orphans in Armenia, service standards should cover all aspects of both the technology of the service delivery and the quality of the outcome. At present, however, for many of the services covered by this study, specific service standards have not been developed or, if they exist, they do not provide the level of detail required for estimating either the efficiency of expenditures or costs. For instance, the decree of the government of the Republic of Armenia "On Approving the Procedure of Providing Day Care to Children" lists specific requirements to the premises where day care services should be provided, but does not establish any workload standards (staff per child), criteria of need, service accessibility or case review requirements. Such standards, however important, are not sufficient for either performance evaluation or for costing purposes. Another possible source of data is reported expenditures of the existing institutions. However, the cost of services produced by different institutions is often quite different. The reasons for these differences do not necessarily stem from inefficient spending, though public service providers often incur unnecessary costs. Other possible reasons include price differences in different localities, different quality of inputs, differences in the mix of inputs used, and differences in the needs of clients or in the mix of services produced if institutions provide a variety of services. Averaging per capita expenditures of institutions that provide similar services allows for a rough estimate of service costs that does not take into account possible sources of differentiation, but is acceptable as a first approximation.

For some of the services covered by this study, per capita costs were calculated by dividing the budgeted amount by the number of children that benefit from the service. Such was the case with orphanages: the MoLSI provided budget figures for each of the eight state-run orphanages for 2009 along with the number of children housed in each orphanage. This level of detail does not permit differentiation between constant and variable costs, but, as noted earlier, for the purposes of this study a rough *per capita* full cost estimate was sufficient.

For some services, budget expenditure estimates were not available from the official budget reporting. For instance, early rehabilitation services, which is a distinct service funded from the state budget, is not represented by a separate line in the state budget. In this and other similar cases, the estimate of unit costs (*per capita* per year costs) had to rely on the figures obtained in the course of interviews with the officials of respective service providing institutions. There are also several services for which neither budgeted data nor evidence-based data were available. For instance, the important distinction between the two types of boarding schools, some of which report to the Ministry of Education and other to local authorities, only became clear at the end of the

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[29]The wage bill constitutes about 60 % of total costs. The share of administrative personnel in total headcount is 10%. If the wages of administrative and other overhead personnel were equal to the wages of personnel directly working with children, the wage bill of overhead personnel would represent 10% of the total wage bill, or 6% of the total costs. If the average wage of overhead personnel is twice as high as the wage of other employees, it can be easily shown that the share of overhead personnel wage bill will constitute 18% of total wage bill, or 10.8% of total costs.

visit to Armenia. None of these schools were visited during the mission and these schools are not covered by the state budget because they are funded from local budgets. For local boarding schools the costing was done by analogy to other boarding schools reporting to MoE. It is quite possible that the costs of local boarding schools are overestimated in this study, but hopefully not significantly. It seems unlikely that boarding schools which provide shelter, nutrition and education services can cost less per capita ($3,600) than a night care center which only provides shelter and nutrition, but no education services ($3,300), and education services provided by ordinary schools cost about $400 per child per year.

Another important consideration is that for making medium and long-term projections, in fact, any projections with a time horizon that exceeds one year, not only annual costs, but also the duration of service provision needs to be taken into account, as the full cost of a service with a long production cycle is jointly determined by its duration and annual cost. Most of the numbers presented in the column "Duration of Service" in the table below are based on interviews, and for the orphanage in Vanadzor the estimate arrived at in the preceding report[30] was used (seven years).

Table A1. 2. Unit Costs and Duration of Residential Services (1USD=350AMD)

Institution	Number of children	2009 budget, USD	Cost per one child a year, USD	Duration, in years
Baby home for children with disabilities	118	843,000	7,600	5
Boarding school for children with behavior problems	77	300,000	3,900	5
Boarding school for children with disabilities (hearing impairments)	97	571,000	2,900	8
Night care center in Vanadzor	129	394,000	3,100	3
Night care center in Yerevan	82	300,000	3,700	3
Orphanage in Vanadzor	98	314,000	3,500	7

In this table, the costs are tied to the concrete institutions visited, and the difference in unit costs for similar services provided at different locations can be quite significant. For instance, the cost of one child year in the night care center in Vanadzor is $3,100, while the same service in the night care center in Yerevan costs $3,700. One possible explanation is the economy of scale – the night care center with more children has lower per capita costs. Another possible explanation is the difference in rent payments (housing and utility bills), as food and clothing provision norms for night care centers are uniform throughout the country. The total budget of all seven night care centers for 2009 is 893 mln AMD, and the total number of children in night care centers is 710, which gives an average of $3,600 per child a year in night care centers.[31]

As for orphanages, the difference in unit costs between the baby home in Gyumri ($7,600 per child a year) which houses children with severe disabilities between 0-6 years of age, and the orphanage in Vanadzor, which houses children from birth until graduation at the age of 18 ($3,500) is explained by the differences in age and health conditions under which children receive services.

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[30]Elena Andreeva, Evaluation of Alternative Child Care Models in Armenia. UNICEF Armenia, October 2008 (in print). In this report the average length of stay in an orphanage was estimated based on the age distribution of children in the orphanages and age specific in- and out-going flows observed (2007 data).

[31]At the exchange rate of $1=350 AMD.

Table A1.3. Estimates of Costs of One Child Year in Different Orphanages, 2009

Name of orphanage	No. of residents	Total 2009 budget, USD	Cost of one child year, USD
Yerevan "Mankan Tun"	80	475,886	5,949
Orphanage after Mari Izmirlyan	90	414,485	4,605
Yerevan "Zatik" orphanage	85	367,536	4,324
Gyumri "Children's Home"	110	844,517	7,677
Orphanage after F. Nansen	75	263,184	3,509
Gavar orphanage	90	416,428	4,627
Vanadzor orphanage	110	388,091	3,528
Nor Kharbert specialized orphanage	265	1,513,890	5,713
Total	**905[32]**	**4,684,017**	**5 176**

The table below presents the result of costing community-based services.

Table A1.4. Estimated Unit Costs and Duration of Community Based Services (1US$=350AMD)

Community based services visited/estimated	Number of children	2009 budget, USD	Cost per one child a year, USD	Duration, years
Early rehabilitation center in Yerevan	200	343,000	1,800	3
Day care center in Gyumri	120	223,000	1,900	3
Early rehabilitation center in Gyumri	22	53,486	2,500	3
Family reintegration and separation prevention support	50	57,000	1,150	1,3
Children Rehabilitation Center in Ijevan	165	77,000	500	3
Inclusive school in Ijevan	485	387,000	800	10
Regular school (estimate)	300[33]	131,000	450	12
After school program (estimate)	25	14,000	550	3
Foster families	25	69,000	2,800	6

Most estimates in Table A1.4 are based on interviews. The budget of the inclusive school in Ijevan was estimated based on the average budget of a regular school adjusted for smaller classes, additional staff, extra work hours in the after school social rehabilitation program and lunch for children with disabilities who attend the after school program. The result is almost twice as high as the cost of one child-year in an ordinary school, which was estimated based on the budget report for several (23) general education schools funded from the state budget.[34]

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[32]This number does not match the numbers reported in Table 2 for MoLSI orphanages because here the number includes all residents of orphanages, including those older than 18 year of age. In Table 2 the adjustment was made to cover only residents whose age is from 0-17 years.

[33]The column "Number of Children" presents the number of children in the institution visited, with the exception of a regular school (not visited), after school activities program (nonexistent) and foster families. The number of children in a regular school is the average number of schoolchildren in a school financed from the state budget (source – MTEF). The number of children in an after school activities program is an estimate based on the experience in Russia and other countries where some schools have after school classes for socially vulnerable children. The size of the class in usually 25 children, similar to that of an ordinary class. Neither after school classes for socially vulnerable children nor general after school activity programs exist in Armenia. As of 2009, there were 25 children in foster care in Armenia.

[34]Most of the general education schools are financed from local budgets. However, there are several general education schools that are financed from the state budget. These were shown as a separate service in MTEF 2007-2009 (see Annexes; in Eng). The parameters of the service presented in the MTEF included the total annual budget for all 25 schools for 2006-2009, the total number of teachers and the total number of students.

The cost estimate for the after school program (school based day care for children that attend the school) is based on assumptions of what would it involve to set up such a service at an average general education schools (number of additional staff, teacher-student ratio and food expenses), because this service is not provided in Armenia.

The estimate for foster families is based on the budgeted amount for foster care in the 2009 budget and the actual number of children in foster care.

The estimates of service duration are based on interviews and expert estimates. For instance, the head of Aravot NGO in Vanadzor (Lori Marz, program of support to biological families that reintegrate with their children) said that 70% of biological families receiving material and professional support under the state program for reintegrating biological families with children discharged from boarding schools were successfully reintegrated with their children after one year, but some 30% of families needed to be supported for a longer period. The program does not allow families to be supported for more than one year, but for modeling purposes the average duration of the service was assumed to be 1.3 years.[35]

The estimates of cost and duration presented above are rough, but reflect the order of the amounts and time frames involved. If better data becomes available, it will be easy to adjust the projections accordingly.

Annex 2. Estimation of Child Care Policy Options Under Different Scenarios

Scenario 1: Constant Rate of Entry into Formal Care

In the basic scenario, the rate of entry of children into formal care remains constant; there is no reduction in this rate due to general improvement of economic conditions or changes in the gatekeeping policy. The rate of entry into formal care is the ratio of children entering into formal care every year to the total number of children. Although the rate of entry into formal care remains constant, the inflow of children into formal care changes every year with demographic changes.

Policy Option 0: No Policy Change

In the option where no policy changes are envisaged, the stocks of children in all forms of care show a slow decline due to demographic changes.

Figure A2.1. Reduction of stocks of children in all forms of care due to demographic reasons
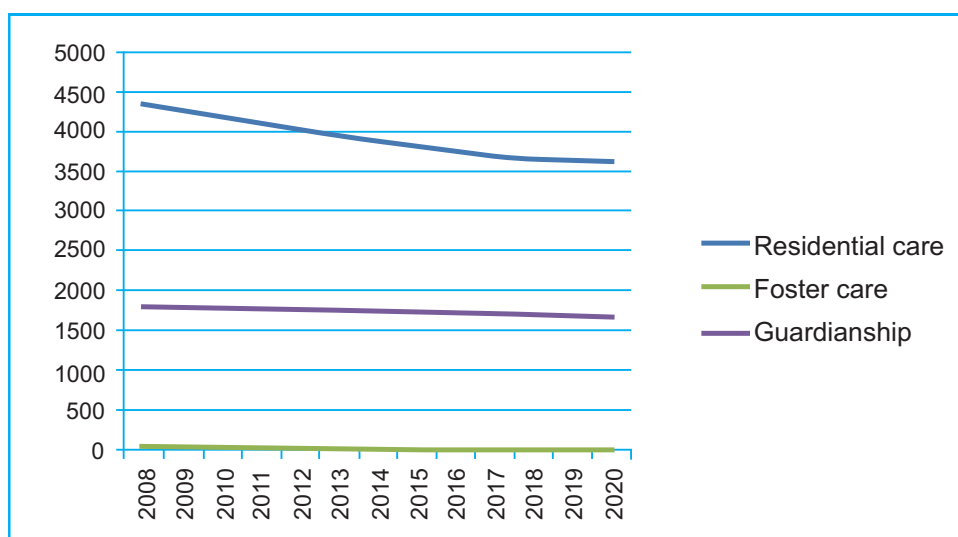
[35]Even if there are currently limits on the amount of time families can receive this type of support, it is necessary to change the current practice in that the limit should be based on an individual assessment of the child's and family's needs and should continue for as long as such need exists. A one year time limit for everyone, regardless of what is the situation and whether there is continued need for support of the family, is not a good practice.

Figure A2.2. The cost of maintaining the existing system of child care, USD mln: reduction due to demographic changes
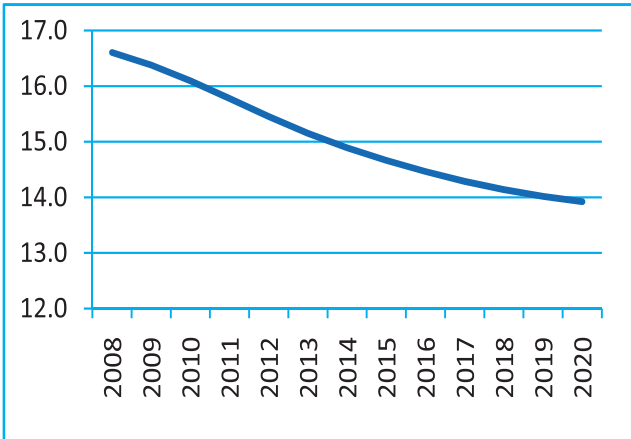

These demographic changes will result in the reduction of the cost of maintaining the existing system of child care represented in the graph. This cost curve will serve as a reference against which the costs of implementing all other policy options will be compared.

Policy Option 1: Rate of Admission to Residential Care Halved, Children Redirected to Foster Care

The parameters of this policy option are:

- The rate of admission of children into residential institutions – but not the stock of children in residential institutions - is halved instantaneously (in the first year of reform);

- The children that were redirected from residential institutions are allocated to foster families.

Figure A2.3. Policy change: reduction of admissions of children into residential care by half and redirection of the other half to foster care
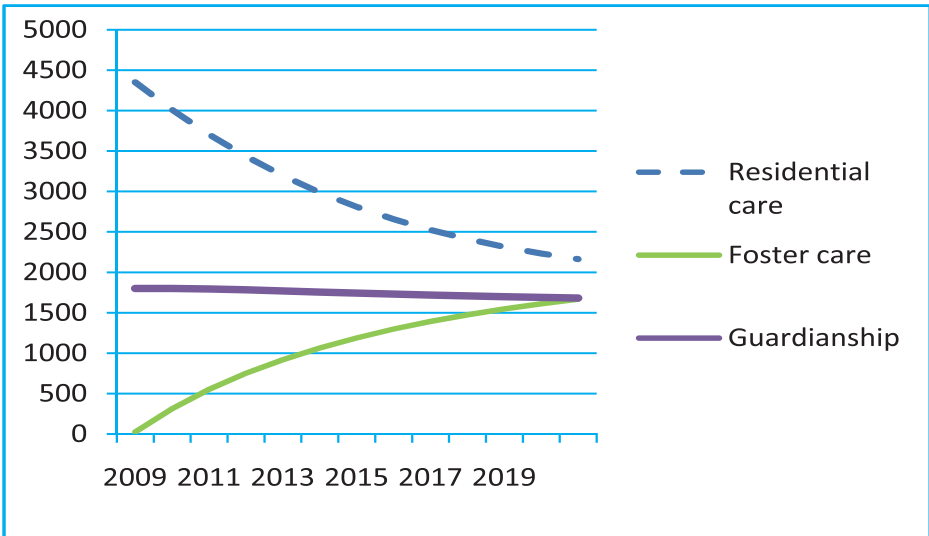
Savings in this scenario as compared to the one presented in Figure A2.2 can reach one million USD, as demonstrated in the next graph.

Figure A2.4. Savings from redirecting newly identified children from residential care into foster care, all other things being equal to the no change scenario, USD mln.
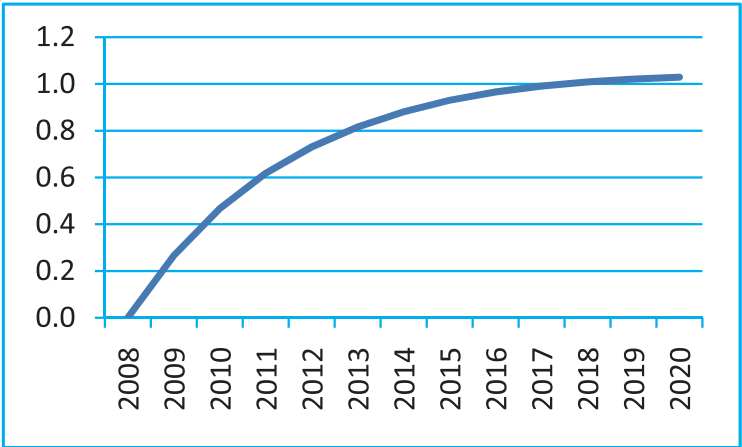
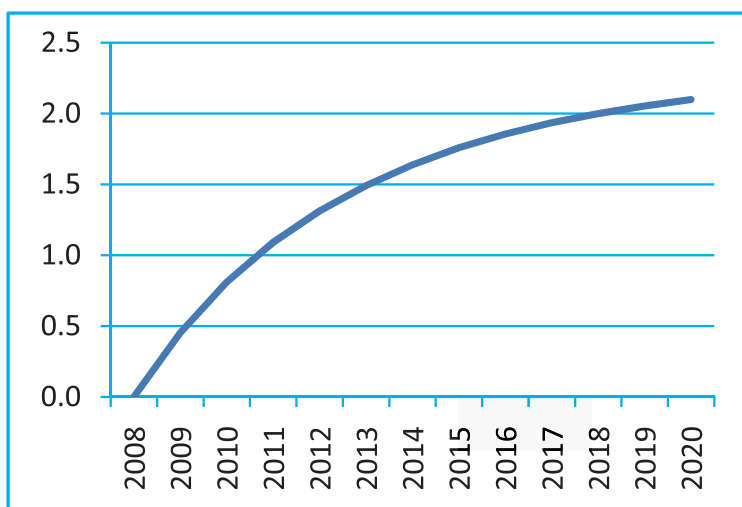**Policy Option 2: Children Re-directed to Old and New Foster Care in a 50:50 Proportion**

The first modification has to do with the introduction of a new form of family based substitute care; the so-called "new" foster care that does not include remuneration for foster parents' work, only the child support subsidy. In this modified scenario, the flow of children re-directed from residential care is divided equally between the "old" and the "new" foster care. A possible interpretation of this polocy would be to provide remuneration to foster parents only in case cild care presentcs some difficulties, for instant, if the child is an adolescent or has special needs.

Figure A2.5. Children in need of placement into formal care are re-directed from residential care to old and new foster families (50:50) (the two foster care curves overlap).
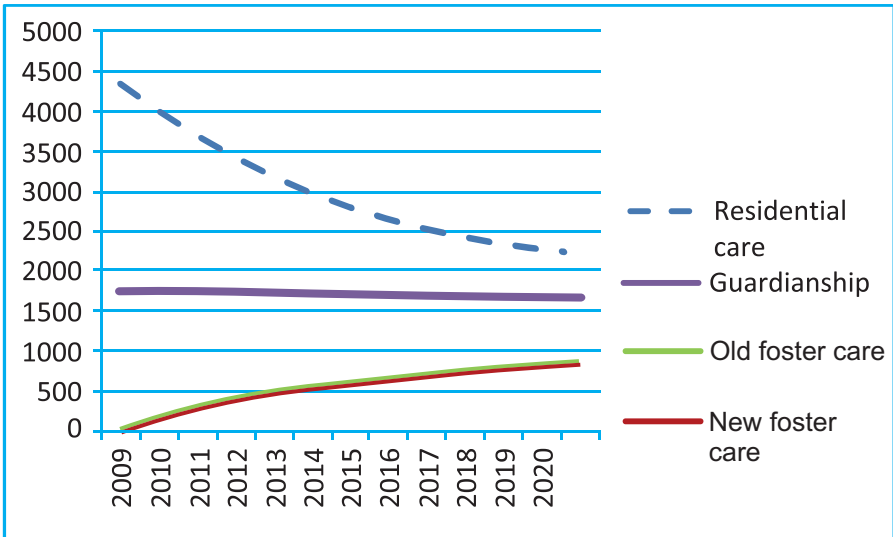
With this policy option savings almost double: they go up from $0.5 mln in the first year of reform to over $2 mln in 2020.
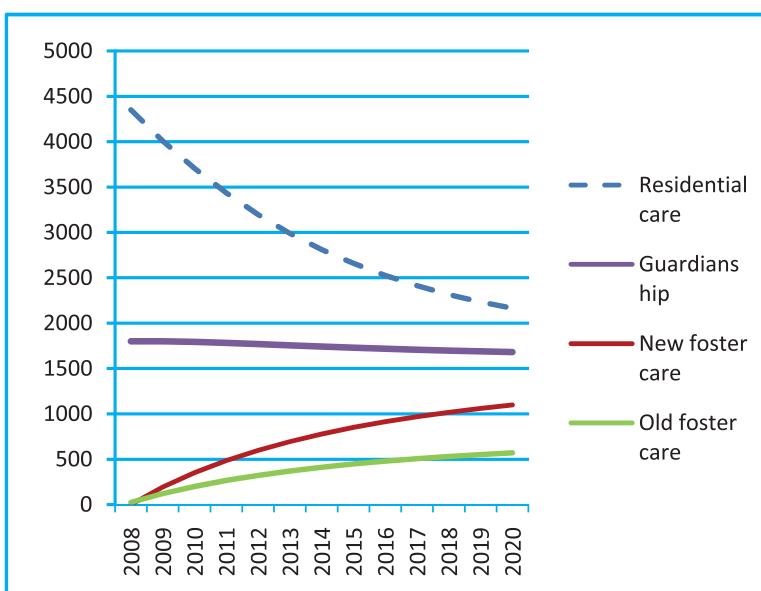
Figure A2.6. Savings in Policy Option 2: admission to residential institutions halved, children re-directed to "old" and "new" foster care in 50:50 proportion, USD mln

Policy Option 3: Children Re-directed to Old and New Foster Care in a 1:2 Proportion

The second modification was to place 1/3 of the redirected flow of children into the existing foster care and 2/3 – into the "new" (cheaper) form of foster care.

Figure A2.7. Changes in the stocks of children in different forms of care under policy option 3: rate on inflow into formal care remains unchanged, admissions to residential institutions halved, 1/3 of the children redirected to "old" foster care and 2/3 to "new" foster care

In this policy option annual savings go up from $0.5 mln in the first year of the reform to $2.5 mln in 2020.

Figure A 2.8. Savings in policy option 3: admission to residential institutions halved, children re-directed to "old" and "new" foster care in a 1:2 proportion, USD mln
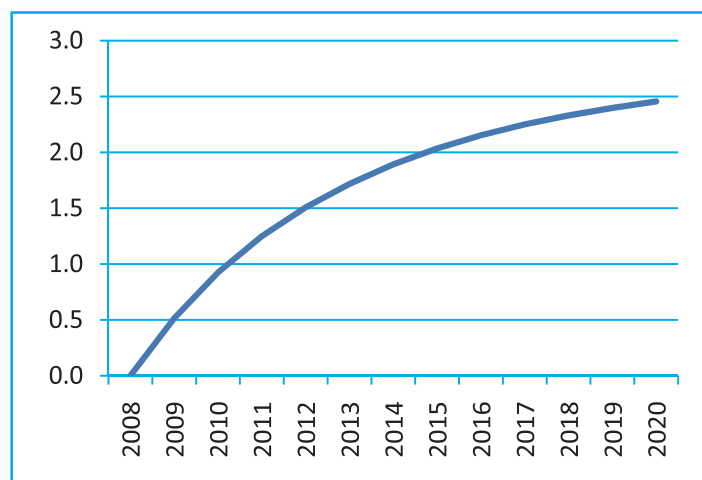
Policy Option 4: Accelerated Exit from Residential Institutions

It shall be assumed that in the case of accelerated exit, the average length of stay of children in residential institutions is six years instead of the current eight years. Accelerated exit can occur as the result of a growing number of exits from residential institutions into family care. It can also be the natural outcome of placement policy when more children in need of formal care are placed into family care rather than into residential institutions, and because it is often easier to find a substitute family for younger children, the average age of children in residential institutions would inevitably go up, which will shorten the time an average child would need to stay in a residential institution before graduation. Since no data in the age composition of children in different forms of care or the age composition of flows of children between stocks were available, the link between the placement policy and accelerated exit could not be integrated into the model. Accelerated exit is considered as a separate (independent) policy option which can be combined with any change in the placement policy or be implemented separately as a single change in the existing system. Savings from changes in placement patterns of newly identified children who are entering the formal care system for the first time and savings from the accelerated exit of children who are already in residential institutions have different (non-overlapping) origins, and the combined effect of changes in placement and accelerated exit is determined as the sum of two independent effects.

Figure A2.9. Stock of children in residential institutions in the scenario where the inflow of children into such institutions is halved as compared with the present situation and the same policy change combined with accelerated exit of children from residential institutions
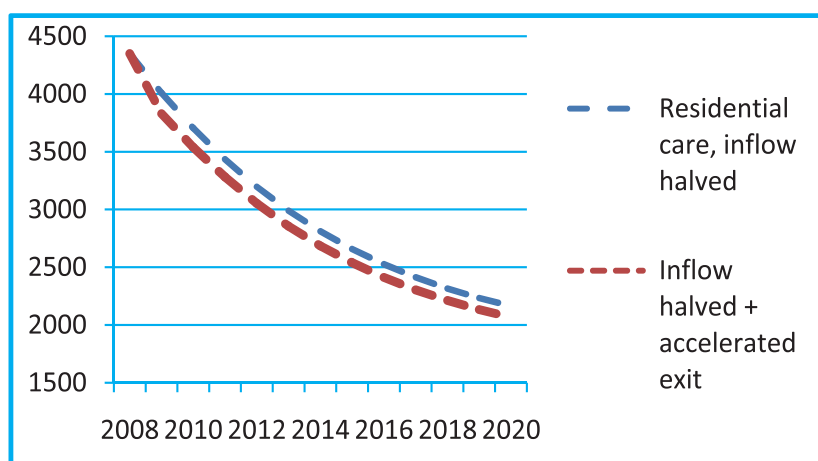
As can be seen from the graph, accelerated exit does not significantly affect the stock of children in residential care because the inflow remains the same as in the reference scenario, and it is the inflow that is the key parameter In fact, accelerated exit from residential care has the same effect as reduced inflow into residential care, and the inflow to residential care has already been halved; any further cuts would be minor compared to the change..

Annual savings in case of accelerated exit start at $0.7 mln in the first year of reform, and then slowly recede to $0.4 mln/year in 2020

Figure A2.10. Savings in Modification 3 of the basic scenario: accelerated exit from residential institutions
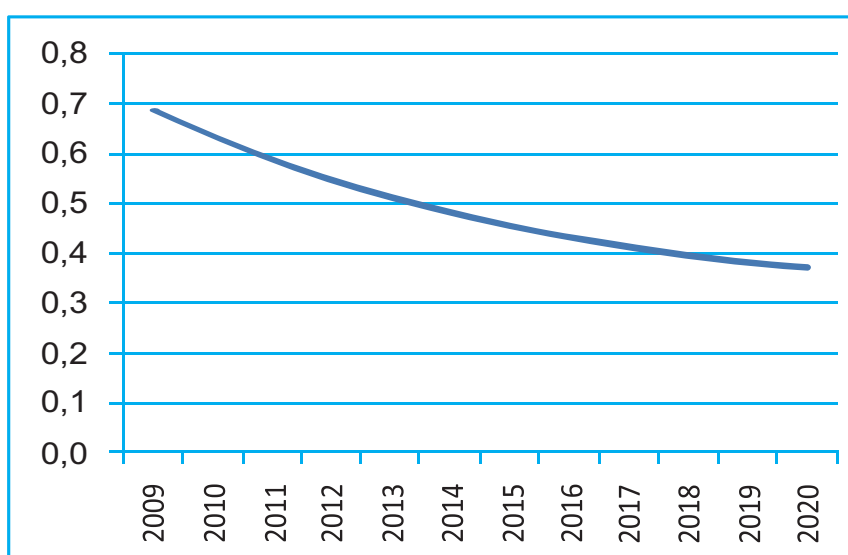
Policy Option 5: Employment of Excessive Staff of Residential Institutions

The assumptions underlying this policy option are:

- Two years of employment provided to excessive staff of residential institutions;

- Staff to children proportion in residential institutions is 2:1; and

- Average salary of the staff of residential institutions for children in Armenia is USD 1,700 per year.

This policy option assumes that all staff of residential institutions who have become excessive because of the number of children in residential institutions has decreased will continue to work for two additional years or will be offered a severance subsidy in the form of a lump sum, of early retirement, retraining or other support. Offering a severance package equivalent to two years of earnings would seem an unreasonably lavish policy, but the option is nevertheless considered in order to determine the upper limit of the potential funding needed to omit social tension. Unlike the policy options considered before, this policy option creates costs, not savings, for the government budget, thereby reducing the savings from a more efficient placement of children.

The number of staff that will become excessive is determined by the number of children that avoided being placed in residential institutions. The total number of children that will be re-directed from residential institutions into family care in 2009-2020 in all policy options considered is 3,600; therefore the total number of staff that will become excessive in the same period is 1,800. The burden created by the continued employment of excessive workers for two additional years or offering a severance package in the amount equivalent to two years salary will be around $0.5 mln per year.

Figure A2.11. Number of staff that will become excessive due to reduced inflow of children into residential institutions
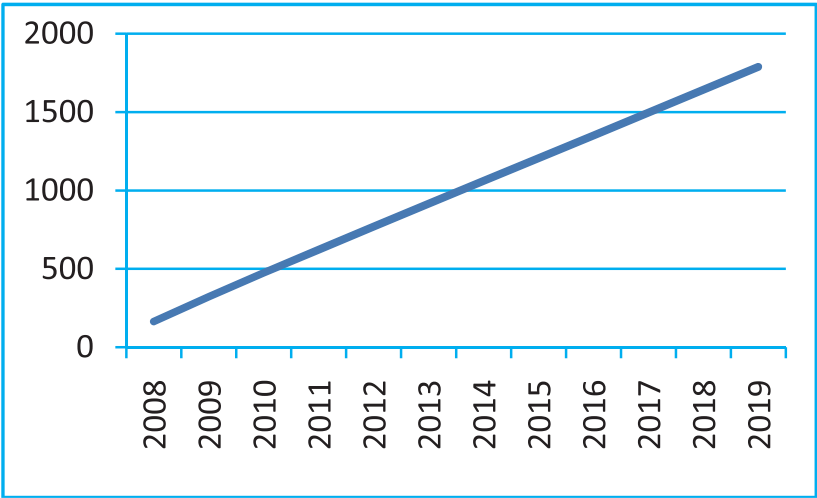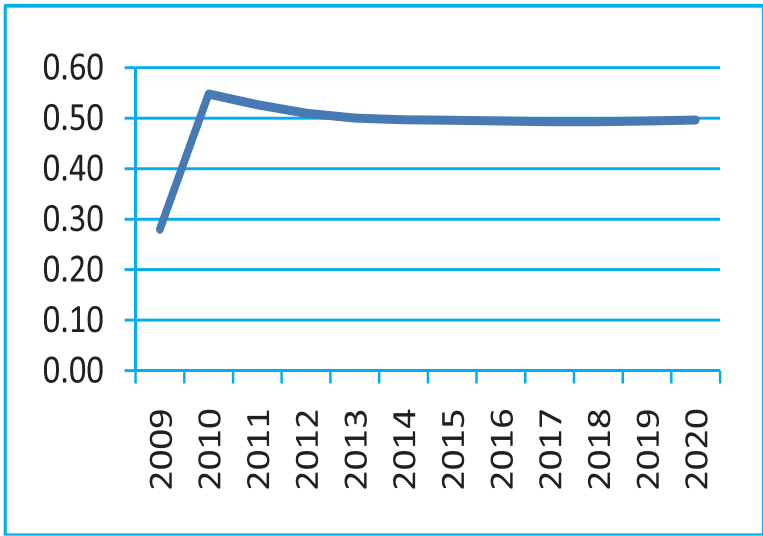

Figure A2.12. The cost of the continued employment of excessive staff for two additional years or providing an equivalent severance package

Policy Option 6: Direct Support Services Provided to Children Released from Residential Institutions and their Families

The assumptions used for this policy option are:

- Children placed with foster families are provided with direct support services in the form of family outreach services, preferential access to community-based services, etc.;

- One full-time social worker providing direct support services is needed for every 36 children/foster families;

- The average salary of social workers providing direct support to foster families is $3,400 (AMD 100,000 per month or roughly AMD80,000 after taxes)

- The length of time during which foster families/children re provided with direct support services is 2 years.

Table A2.1. Estimation of the Cost of Extended Employment/Severance Subsidy Option

Annual flow of children redirected from residential institutions	329	316	304	296	293	292	292	290	290	290	291	293
Children in need of direct support services	329	645	626	609	597	591	587	584	582	581	582	583
Number of social workers needed to provide direct support services (1:36)	9	18	17	17	17	16	16	16	16	16	16	16
Total wage fund of social workers providing direct support , USD mln (average salary = $3,400/year)	0.03	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	0.05	0.05	0.06

Comparison of the Outcomes of Different Policy Options in the Scenario of a Constant Rate of Inflow of Children into Formal Care

The policy options considered so far all relate to one basic scenario – that of an unchanged rate of entry into formal care. In this scenario, the annual costs of maintaining the system of child protection in its present form (P0) can be expected to go down because of demographic changes. These savings can be increased if the flows of newly identified children in need of formal care are redirected from residential care to foster care (P1). Additional savings can reach $0.3 million after just one year of implementing this new policy. Savings can be increased even more if a new form of foster care is introduced, one where foster parents do not receive any remuneration for their work but receive a child subsidy in the amount equivalent to food, clothing and other supplies provided to children in public residential institutions in Armenia. This form of foster care, which exists in some of the CIS countries, is cheaper than the foster care of the type that exists in Armenia and, according to some experts, has a potential for buildup in Armenia. The reason for including this non-existent form of foster care into the policy analysis is to acquire an understanding of the scale of potential savings that can be realized if foster care is considerably expanded, as will be the case when the deinstitutionalization reform enters into the operational phase.

Figure A2.13. Constant rate of entry into formal care: the costs of child care system in Armenia under different policy options, USD mln
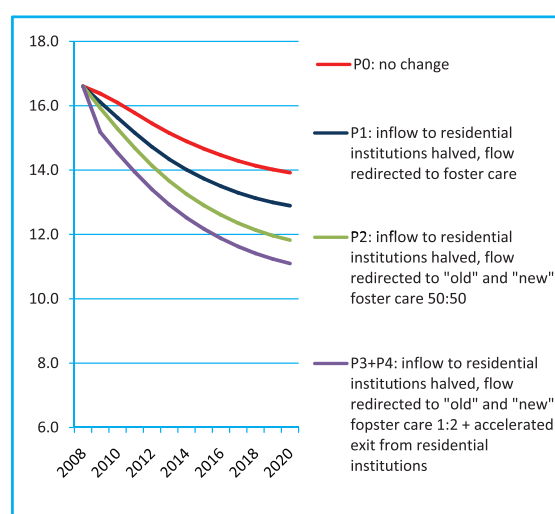
Scenario 2: Rate of Entry into Formal Care Follows a Downward Trend Due to a General Improvement in Economic Conditions

In this scenario, the rate of entry follows a downward trend as a result of a general improvement in the economy and growth in personal incomes. The number of children in all forms of formal care in this case will go down faster than in the scenario where this rate remains constant because there will be two factors driving it down: (1) demographic changes; and (2) higher income of families resulting in lower incidence of child abandonment.

In this scenario, we shall focus on comparing the no change policy option (P0) with policy option 1 (P1), that of redirecting the newly identified children in need of formal care from residential institutions to family-based

care (foster care of the existing type), as the scale of potential additional savings from introducing new forms of family care or accelerated exits from residential care have already been demonstrated in the first scenario.

The assumption used in Scenario 2 is: the probability of a child being placed into any form of formal care during the year goes down from 0.0010 in 2008 to 0.0009 in 2020 (a 10% reduction over 13 years), and this reduction shall occur at no cost to the government of Armenia.

Figure A2.14. Probability of a child being placed into formal care: constant in Scenario 1 and declining in Scenario 2
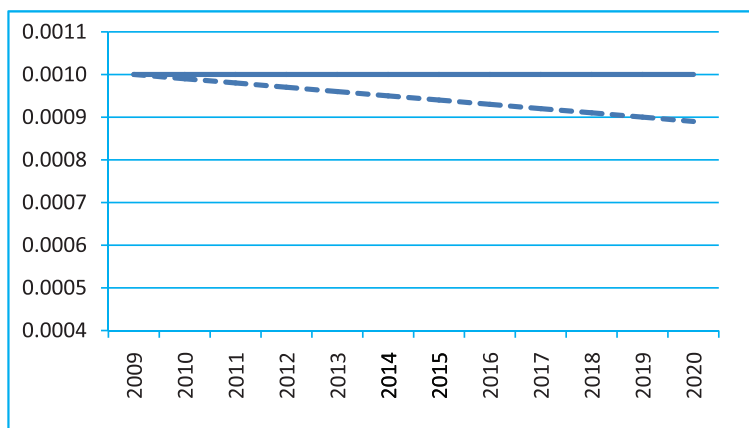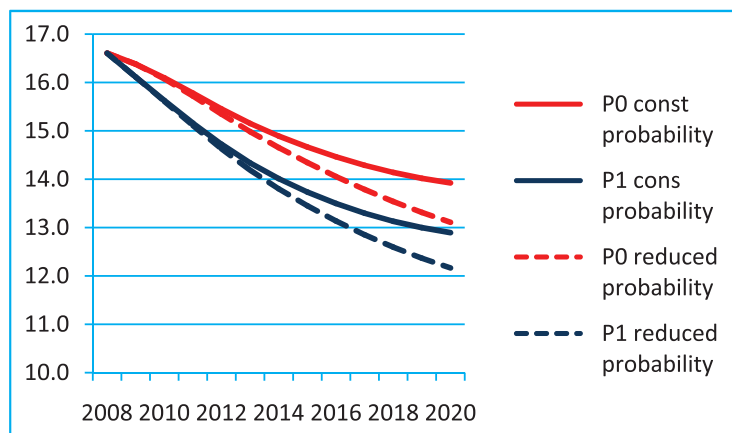

Figure A2.15. Comparison of the costs of child care (USD mln) under no change policy option (P0) and the option that redirects part of the flow from residential institutions into foster care (P1) in the two scenarios

In the graph, solid lines relate to the constant probability scenario and broken lines relate to the declining probability scenario. Even though the costs of maintaining the child care system are different in each scenario, the amount of savings that can be achieved by simply redirecting part of the flow from residential institutions to family-based care in both scenarios are roughly equal. It is also important that the savings (the difference between two solid lines or two broken lines) can be achieved in just the first year of the policy change.

Cutting the inflow of children into residential institutions by half and redirecting the other half of the flow from residential institutions into foster care (P1) is an option immediately available to the government of Armenia. Implementing this option would not require any changes in legislation. It would essentially be a matter of carrying out a certain amount of preparatory steps (see Annex on transitional costs) and redirecting financial flows from residential institutions into foster care. Even given the transitional costs, this policy change is unlikely to create any additional burden on the state budget, and in the short term can bring savings that can be invested into strengthening the gatekeeping function, as will be shown in the next section.

Scenario 3: Rate of Entry into Formal Care Reduced as the Result of Strengthening the Gatekeeping Function

The key variable that determines the number of children in formal care, and ultimately determines the costs of the child care system, is the rate of entry into formal care. This variable is difficult to predict because it depends on many factors, including general economic conditions. If the rate of entry into formal care increases, the potential for savings will be greater, than in the case when the rate of inflow into formal care declines. However, we have seen that the potential savings that can be achieved by redirecting children from residential care to expensive foster care remain high, even in the optimistic scenario where the probability of placement into formal care declines with time.

The last scenario that will be considered used the assumption that the savings which can be achieved by redirecting children from residential care into foster care (their potential amount is roughly equal in the two scenarios considered) will be invested into strengthening the gatekeeping function and the expansion of abandonment prevention services that will reduce the inflow of children into formal care even more.

Figure A2.16. Potential saving from redirecting half of the flow from residential institutions into foster care in the optimistic (declining probability of placement into formal care) scenario, USD mln
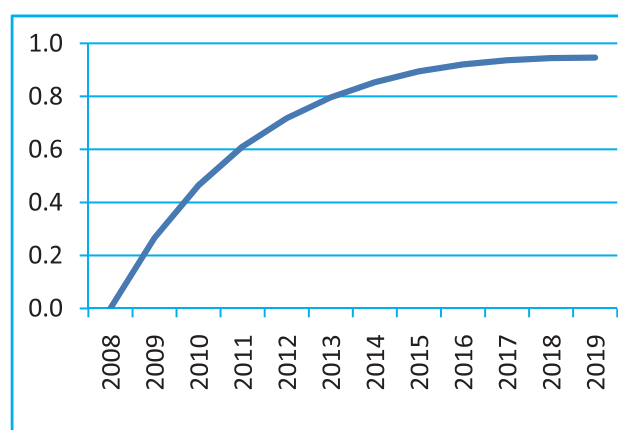
Data in the next table shows these savings compared with the cost of operating the child care system that produced these savings. Investing these amounts into strengthening the gatekeeping function will obviously reduce the inflow of children into the formal care system, but there is no reliable evidence that would indicate the measure to this effect. If each percentage point of increased spending on child care dedicated to strengthening the gatekeeping function results in a one percentage point reduction of the rate of entry into formal care, the savings resulting from the strengthened gatekeeping function can pay off the investments in just 3-4 years after the investments were made.

Table A2.2. Savings from Redirecting Children from Residential Care to Family Based Care and the Potential Effect of Strengthened Gatekeeping, if Savings Are Invested into the Gatekeeping Function

	2010	2014	2020
Savings from redirecting children to foster care $ mln	0.3	0.8	0.9
Cost of maintaining the new child care system $ mln	16.1	14.3	13.0
Ratio of savings to costs of maintaining the system	1.6%	5.6%	7.3%
Rate of entry into formal care declining due to economic improvement	0.0010	0.0010	0.0009
Rate of entry into formal care after investments in gatekeeping function	0.0010	0.0009	0.0008
Savings from strengthened gatekeeping function $ mln	0.0	0.3	0.7

Annex 3. Transition Costs

The policy options considered are based on the assumption that the Government of Armenia will develop a national plan for all child care institutions in the country, categorizing them into institutions to be transformed into another type of service, institutions to be scaled down into small group homes with no more than 10 children – providing residential care which is more similar to a family environment, and institutions to be closed down. In parallel, the Government of Armenia shall develop and approve standards for required preventive and alternative services, guidelines for liquidating orphanage institutions and a schedule. The implementation of this plan would require:

- Assessment and classification of institutions in Armenia; these include 12 special boarding schools under the MoE, 13 special boarding schools funded by local authorities, eight state-owned orphanages subordinate to MoLSI , four private orphanages, seven night care centers and temporary shelters;
- Assessment of the individual situation of each child in the institution (6,500 children);
- Assessment of the capacity and training of staff in these institutions (such assessment should establish how many people are doing different types of jobs, how many are preparing for retirement, how many can be re-trained to provide another type of service, and how many are to be laid off);
- Design severance provisions for redundant staff (re-training, temporary employment, new employment in community-based services);
- Setting up training centers for foster parents through capacity building – 300 foster parents a year;[36]
- Setting up local family outreach services; a total of 20 full-time family outreach specialists will be needed to provide direct support to children placed in foster care. Perhaps as many as 100 specialists should be trained in the first year and some 20 specialists every year after the first to ensure the accessibility of these services throughout Armenia and natural turnover of labor resources. Family outreach services could be provided by the redundant staff of residential institutions on a part-time basis;
- Conducting a national awareness campaign.

The scope of this study did not allow for an estimation of the transition costs required for implementing the reform options considered. Costs of some policy actions similar to those that would be required at the start-up of the deinstitutionalization reform, which were included in the 2008-2010 Medium Term Expenditure Framework, Armenia's multi-year budget for 2008-2010, give an idea of the order of the expenditures that could be involved (see table on the next page). For instance, conducting a nationwide public awareness campaign in Armenia can cost around $44,000 a year, and the refurbishment of one classroom, including the purchase of wall posters, can cost less than $100 per classroom. Of course, the costs depend of the scale of government actions undertaken (economy of scale). The retraining of one social work specialist costs around $300 a year.

Based on these estimates, retraining 100 redundant specialists from residential institutions for the provision of direct support services would cost around $30,000. The assessment of one boarding school, including the assessment of individual cases of pupils, under the program of discharging boarding schools costs around $1,500 in 2007. About 40 institutions will need to be assessed to provide proper planning of the deinstitutionalization reform. For reference, the economy due to a more efficient placement of children in formal care just in the first year after the redirection of flows can reach $300,000.

The inclusion of transition costs into the cost of reform can offset the savings from the more efficient placement of children in the first years after the policy change or represent an additional burden on the budget, if the operations phase of the reform is delayed until all preparatory steps, such as putting in place the new services and training facilities, are complete d. In any case, transition costs are usually something that the government would get support from donors, if the government decides to go ahead with any of the reform scenarios.

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[36]Includes renovation of premises, purchase of furniture and supplies, and training the trainers; the operating costs of running these centers, including the recruitment and training of foster parents, is included into the cost of providing family direct support services (not a transitional cost). The number of foster parents and the required capacity of training centers depend on the policy option chosen. If half of the annual flow of children into residential care is redirected to family based care, then around 300 foster parents need to be trained every year.

Table. A3.1. Excerpts from MTEF 2008-2010 that Relate to Costs of Services and Policy Actions that Are Similar to those that Would Be Needed at the Start-up Period of the De-institutionalization Reform in Armenia

	Amount (thousand AMD)				Quantity			
	2007	2008	2009	2010	2007	2008	2009	2010
CPS 1.6.2 — Government support for discharging children from boarding houses to their families								
Description: Provision of public awareness and management services for children, living in boarding houses for children								
Number of eliminated shortfalls and cases of breeching against registered breechings and shortfalls, registered as a result of inspections (studies and monitoring), carried out the previous year					100%	100%	100%	100%
AMD amount budgeted:	9468.9	11,770	11,770	11,770				
USD equivalent	27,054	33,629	33,629	33,629				
Number of boarding schools inspected *	17	?	?	?				
USD per boarding school inspected*	1,591	n.a.	n.a.	n.a.				
CPS 1.14.1 — Carrying out of public awareness activities; preparation of advertising videos, presentation of undertaken activities through the mass media, publication of booklets and manuals, feedback from the population								
Description: Carrying out of public awareness activities; preparation of advertising videos, presentation of undertaken activities through the mass media, publication of booklets and manuals, feedback from the population								
Number of TV programs		10,382.0	10,382.0	10,382.0		24	24	24
Number of printed booklets (copies)		3,840.0	3,840.0	3,840.0		14,000	14,000	14,000
Number of publications in mass media		1,080.0	1,080.0	1,080.0		6	6	6
Expenditures for provided services		15,302	15,302	15,302				
USD equivalent*		**43,720**	**43,720**	**43,720**				
CPS 1.3.10. — Reconstruction of classrooms of military training in general education schools								
Description of service : *Refurbishment of premises, provision of training materials, posters to the classrooms of military training*								
Number of reconstructed class-rooms of military training (signaling systems), metal doors, etc.					300	300	300	300
Complete set of posters of "Elementary Military Preparedness" and other training materials					1000	1000	1000	1000
AMD amount budgeted:	5,304.5	5,304.5	5,304.5	5,304.5				
USD equiv. *	*15,156*	*15,156*	*15,156*	*15,156*				
USD/class room*	*51*	*51*	*51*	*51*				
CPS 1.7.1 — Re-training of staff in the field of social security, government support to the "National institute of labor and social surveys" adjunct to the Ministry of Labor and Social Issues of RA for the implementation of methodological and scientific-research activities								
Description: Increase of qualification of cadres in the labor and social field, provision of methodological manuals and guidelines.								
Number of re-trained cadres	57,704	57,704	66,758.7	73,109.8	660	660	660	660
USD equiv.	141,498	141,498	163,863	177,977				
USD/per trainee	**214**	**214**	**248**	**270**				
Number of thematic works	8,179.80	8,179.80	9,406.8	10,817.8	5	5	5	5
USD equiv.	23,371	23,371	26,877	30,908				
USD/per manual	**4,674**	**4,674**	**5,375**	**6,182**				