

**CASE-STUDY
MEXICO**

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1 General background data

1.1 Preamble

As in many other developing countries, Mexico is experiencing important demographic, epidemiological, and social transitions that should guide the formation of policy in a number of areas including long-term care. From an institutional perspective, the country and the Government are open to renewal. The issues surrounding long-term care are being incorporated into the programmes and reforms that are being launched in the areas of health, social security, gender planning and the social system, but so far with limited impact.

The demographic transition, and particularly the reduction in the fertility rate and increases in life expectancy, have led to the growth of the proportion of elderly people in the population. In 2000, only about 5% of the population was aged 65 years or older, while by 2050 the figure will be close to 20%. In the year 2020, Mexico will have a population structure similar to the post-industrial world today, with the disadvantage that this process of profound change will have occurred in a shorter period – placing particularly profound demands upon society and institutions.

As part of the epidemiological transition, the profile of disease has changed and the burden of disease has shifted towards chronic and degenerative illness. Much of this change is related to population ageing. Providing adequate and appropriate care for the elderly is one of the major challenges for health services, since this age group utilizes health services much more frequently than the rest of the population and the services they use tend to be more costly. From the perspective of long-term care requirements in the future, these phenomena should be highlighted – as the ageing of the Mexican population and the emergence of new health problems will generate increased demands for care in the near future and will have an impact on large groups of the population. These changing conditions will require a prompt response from the health system in the future, that should be designed in the present. Mexico finds itself at an important junction in terms of reformulating policy for the challenges of the future and preparing itself for the middle of the century when approximately one in five Mexicans will be aged 65 or over.

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On the social front, female labour force participation has more than doubled in the past 30 years. This is one of the most dramatic increases in the Latin American region. Paradoxically, however, women have not been able to reach the salary standards and conditions of men, while at the same time they are still the principal individuals responsible for non-financial household duties.

Protection of the elderly and the sick continues to be a responsibility of the family and the burden of this responsibility falls primarily on women. However, the capacity of the family to respond to the needs of the elderly has been decreasing due to repeated economic crises and the challenges and changes of female labour participation, migration and the structure of families. For example, extended families are less common, and in many cases family members are living in different parts of the country or in other countries.

This decrease in the capacity of the family to provide care to the elderly and the chronically ill coincides with increases in demand for care resulting from the demographic and epidemiological transitions. These opposing forces will generate a vacuum that the health and social systems will have to either fill or react to with creative policies that respond to the changing needs of the population by reinforcing social changes and gender equity.

Presented on the following pages are background data concerning Mexico, derived from international data bases.¹ These data include demography, vital statistics and epidemiology, economic data, and health expenditure.

¹ For consistency reasons data used in this section are taken from international data sources: UN, World Population Prospect, the 2000 revision (median variant); UNDP, Human Development Report 2001; US Government. The World Factbook 2002; WHO, World Health Report 2002; World Bank, World Development Indicators Data Base; ILO, Yearbook of Labour Statistics, 2000; UNAIDS/WHO Working Group on HIV/AIDS, 2002.

1.2 Background data from international data bases¹**Demography (year 2000)**

Population (thousands)	98 872
Land area (sq km)	1 923 040
Population density (per sq km)	50
Population growth rate (% 2000–2005)	1
Urban population (%)	74
Ethnic groups (%)	
Mestizo (American-Spanish)	60
Amerindian or predominantly Amerindian	30
White	9
Other	1
Religions (%)	
Nominally Roman Catholic	89
Protestant	6
Other	5
Total adult literacy rate (% in 1997)	91
Age Structure (%):	
0–14	33.1
15–24	20.2
60+	6.9
65+	4.7
80+	0.8
Projections 65+ (%)	
2025	9.3
2050	18.6

² Elderly dependency ratio: the ratio of those aged 65 and over per 100 persons aged 20–64.

³ Parent support ratio: the ratio of those aged 80 and over per 100 persons aged 50–64.

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Demography (continued)

Sex ratio (males per female)

Total population	0.97
15–64	0.95
65+	0.80

Dependency Ratio:

Elderly dependency ratio in 2000 ²	9.1
Elderly dependency ratio in 2025	15.5
Parent support ratio in 2000 ³	9.8
Parent support ratio in 2025	11.1

Vital statistics and epidemiology

Crude birth rate (per 1000 population) (2000) 22.2

Crude death rate (per 1000 population) (2000) 5.1

Mortality under age 5 (per 1000 births) (2001)

males	33
females	27

Probability of dying between 15–59 (per 1000) (2001)

males	179
females	101

Maternal mortality rate (per 100 000 live births) (1995) 65

Total fertility rate (children born/woman) (2001) 2.6

Vital statistics and epidemiology (continued)

<i>Estimated number of adults living with HIV/AIDS</i> (2001)	150 000
<i>HIV/AIDS adult prevalence rate</i> (2001)	0.3
<i>Estimated number of children living with HIV/AIDS</i> (2001)	3600
<i>Estimated number of deaths due to AIDS</i> (2001)	4200
<i>Life expectancy at birth</i> (years) (2001)	
Total population	74.2
Male	71.6
Female	76.7
<i>Life expectancy at 60</i> (years) (2000)	
Total population	21.0
Male	20.0
Female	22.0
<i>Healthy life expectancy (HALE) at birth</i> (years) (2001)	
Total population	63.8
Male	62.6
Female	65.0
<i>Healthy life expectancy (HALE) at 60</i> (years) (2001)	
Total population	14.7
Male	14.5
Female	14.9

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Economic data (year 2000)

GDP – composition by sector (%)

Agriculture	5
Industry	27
Services	68

Gross national income(GNI) (\$PPP)⁴ 861 billion

GNI – per capita (\$PPP) 8790

GNI – per capita (US\$) 5070

GDP growth (annual %) (1999–2000) 6.90

Labour force participation (%):

Male	55.6
Female	27.1

Health expenditure (year 2000)

% of GDP 5.4

Health expenditure per capita (\$PPP) 483

Health expenditure per capita (US\$) 311

⁴ PPP=Purchasing power parity: the rates of currency conversion that equalize the purchasing power of different currencies by eliminating the differences in price levels between countries

2 General health and social system

2.1 Basic income maintenance programmes

The financial problems of social security institutions have affected the majority of the developing nations in the world, and Mexico is no exception. The financial deficit of social security institutions makes the payment of decent pensions difficult and limits the supply of social benefits. A significant proportion of people beyond 65 years of age in Mexico (around 45%), as well as many who suffer from disability of chronic disease, have no access to social security benefits. The family provides support through monetary and material transfers, caregiving in the home, and care of health problems.

2.2 Organizational structure of decision-making (major stakeholders in decision-making)

There are a number of entities that can be considered stakeholders in Mexico's system of care for the disabled and the elderly.

- The Mexican Institute of Security provides health coverage for employers in the formal sector and self-employed persons.
- The Social Security and Services Institute for Government Employers provides health coverage to Government employees.
- Other institutions – such as the military, the national oil company, and the national university – also contribute to the coverage of public sector workers.
- The Secretariat of Health covers the informal sector and the poorer segments of the population.

In Mexico, social policy has been a longstanding tradition of both federal and state-level governments. Various institutions are responsible for the implementation of social policy, but the Secretariat of Social Development (SEDESOL) is the only one that has responsibility in all social areas. Reorganized, SEDESOL is now clustering a whole set of institutions that were previously attached directly to the Executive Branch or to other secretariats. SEDESOL is developing a new proposal to support the elderly population through the National Institute of the Elders (INSEN). Although INSEN was created two decades ago, it is now working with a renewed spirit and developing new programmes that can respond to the increasing needs of the elderly population.

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Another stakeholder in the care of the disabled is the Office of Representation for the Promotion and Integration of People with Disabilities. As defined by the Presidential Office:

As a specific compromise with the population with disabilities, the new administration looks to promote and integrate this important group of the population so that their opportunities and talent are expressed in all its dimensions. To do this, the new administration created the Office of Representation for the Promotion and Integration of People with Disabilities as a way to give this population a new and valuable role within our society.

Another Governmental agency that offers care for the elderly is the System for the Integral Development of the Family (DIF), which is the main family welfare institution of the public sector.

There is a growing interest among the citizens of Mexico for volunteer participation in social problems that has had significant impact. This interest has led to the creation of many nongovernmental organizations (Civil Society Organizations).

There are currently 3500 such institutions, and two-thirds of them have been created in the last thirty years. They perform a wide range of activities, including those supporting the interests of disabled and elderly individuals.

For example, the Mexican Foundation for Mental Health and other groups of civil society have initiated a systematic debate on the benefits of the hospital system. At the same time, the Foundation has collected data to demonstrate that the prevalent model was not responding to the needs of many of the population with mental health problems and that hospital confinement was precluding any chance of their rehabilitation.

2.3 Financing of health services and health sector expenditures

Approximately 50% of the population has health insurance. Organization of the health system is still closely linked with employment. Employees in the formal private sector and self-employed persons are covered by the Mexican Institute of Social Security (Instituto Mexicano del Seguro Social, IMSS), which is financed by tripartite or bipartite contributions from employees, employers, and the Federal Government.

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Public sector workers are covered by the Social Security and Services Institute for Government Employees (ISSSTE). Such coverage is also provided by other institutions, such as the military, the national oil company, and the national university, which are financed by contributions from employees and the Government. The remainder – over 40 million people – are treated in establishments of the Secretariat of Health and under a system known as IMSS–Solidarity that is operated by IMSS in specific areas of the country. This group includes the informal sector and the poorer segments of the population. Roughly 10 million inhabitants or 10% of the population continue to lack regular access to basic health services.

In Mexico, a large proportion of the population, including both insured and uninsured, pay for private care out-of-pocket. Of the approximately 5.6% of Gross Domestic Product (GDP) spent on health in 1998, more than 50% is out of pocket spending, primarily on private sector care. Although out-of-pocket health spending is more common among the poor and the uninsured, the insured are also frequent users of private sector care primarily because of quality and long waiting times in the public sector (SSA, 2001; Frenk, Lozano & Gonzalez Block, 1994).

In 1997, several modifications to the Social Security Act went into effect. These changes were designed to revitalize the structure and practice of the pension and health care systems, by – among other provisions – reducing employer contributions and increasing Government contributions, offering family health insurance to those who wish to purchase it, and allowing the transfer of employee contributions from the workplace to other providers if employees so wish, but with IMSS retaining the collection function.

2.3.1 Expenditures and sectoral financing

In 1998, the total expenditure of the National Health System was estimated at US\$23 000 million and represented 5.6% of GDP. Of this percentage, approximately 2.5% was public and 3.1% was private spending. The vast majority of private spending was out-of-pocket payments by households.

Public spending tends to be inequitably distributed both among institutions and geographically. The poorest states tend to spend less per capita, despite efforts to allocate public funds based on formulas designed according to population needs. Further, social security institutions tend to have a larger per capita allocation of public funds than the health institutions dedicated to serving the uninsured, poorer part of the population (Frenk, Lozano, Gonzalez Block et al., 1994; SSA, 2001).

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The majority of public funds are dedicated to curative services. In the IMSS in recent years, for example, second level and tertiary care hospitals absorb 75% of the institution's total budget. Of the total budget allocated to health:

- 68% was directed towards curative care (including hospitalization);
- 15% to administration, policy, and planning;
- 7% to preventive care;
- 6% to infrastructure; and
- 4% to other categories.

Between 1992 and 1994, salaries consumed almost half the budget of the institutions with the greatest volume of services – 48% in IMSS and 50% in the Secretariat of Health. However, in ISSSTE the figure was only 21%, and operating expenditures were the highest (51% of total expenditure). In IMSS, operating expenditures accounted for 35% of the total, and in the Secretariat of Health they accounted for 3% of total spending for the same period.

Private expenditure is aimed predominantly at curative care, and its distribution shows that fees account for 35% of the total, drug purchases for 27%, and hospitalizations for 20%. Private out-of-pocket spending exhibited a regressive trend in all objects of expenditure – each year it represented a larger proportion than revenue.

Per capita health expenditure for 1995, estimated from the budget executed by public institutions and the total population, was MN\$499. The absolute values for private expenditure in urban areas are ten times higher for the households with the highest income than for those with the lowest income (US\$750 versus US\$75 per quarter); in rural areas this difference may be twenty times (US\$1294 versus \$65).

Analysis by the national accounting system of the resources utilized between 1992 and 1994, through the so-called concentrated funds and funds utilized by the various institutions, reveals an increase in the sums used by social security institutions, private concerns, and establishments that serve the insured population. Social security handled the greatest proportion of resources (43%), followed by private concerns (42%). The institutions (largely Government entities) that treat the uninsured population, used 13% of the total resources.

2.4 Services delivery system

2.4.1 Health services and resources

The volume of public services for both the insured and uninsured populations has increased. Total medical consultations rose from 160 to 190 million between 1993 and 1996; hospitalizations increased from 3.6 to 3.8 million; and auxiliary diagnostic services rose from 123 to 137 million.

The number of outpatient clinics for the uninsured population increased from 10 443 in 1993 to approximately 14 000 in 1999. The hospital network grew from 329 to more than 500 institutions in that same period. The Secretariat of Health has ten national institutes of health in the capital, which operate in a decentralized manner and provide care at the tertiary level to patients referred from throughout the country. The social security institutes treat members through their own service networks. Outpatient clinics increased from 3029 in 1993 to 3436 in 1999, and the number of hospitals increased from 422 to 478 (SSA, 2001; OPS, 2001).

Private medicine has grown substantially, although much of this growth has taken place outside the scope of official policies and in institutions of dubious quality. Private health insurance coverage is limited, and a traditional model involving direct collection of fees for services persists, with charges being as high as the market will bear.

In 1998, it was calculated that the private supply of goods and services was responsible for half of all health expenditure. In 1995 it accounted for 30% of the bed count, 34% of employed physicians, and 32% of medical consultations.

In 1999, there were 2950 private hospitals, with a total of 31 241 beds. The majority of these are small units in urban areas, and 27% have fewer than five beds (SSA, 2001).

Traditional healing – the extent of which has not yet been effectively measured – is extremely widespread, particularly in areas with a high concentration of indigenous peoples. So-called alternative and complementary practices are more prevalent in urban areas. A recent study estimated that around 8% of the population in two mid-size cities had, in the year previous to the interview, consulted a specialist of alternative or complementary medicine in the search for therapeutic services.

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2.4.2 Organization of care for the population

Health promotion is a strategic approach within the priorities for disease prevention and control defined by the Secretariat of Health. Work strategies are health education and social participation, carried out along six tracks:

- family health;
- comprehensive health of schoolchildren;
- comprehensive health of adolescents;
- healthy municipalities;
- health care exercises; and
- development of educational content.

A key component is the healthy municipality strategy, which has fostered the political leadership of heads of municipalities and the organized participation of society in defining priorities and executing local programmes that deal with health promotion.

In 1997, the Secretariat of Health established a new priority disease prevention and control model. In this way, ten substantive programmes with a direct impact on the health status of specific population groups were defined:

- reproductive health;
- child health care;
- health care for adults and the elderly;
- vector-borne diseases, zoonoses;
- mycobacteriosis;
- cholera;
- epidemiological emergencies and disasters;
- HIV/AIDS and other STDs; and
- addictions.

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In 1996, the country's epidemiological surveillance system was upgraded and integrated into different public sector institutions. The unified information system for epidemiological surveillance was implemented. This system generates information from the different health services at the technical–administrative levels, backed by a software package for receiving, collecting, and analysing the information obtained.

There exists a morbidity registry, information for which comes from the Unified Epidemiological Surveillance System and reports on hospital discharges from health facilities. The information on mortality is based on death certificates, which are the compulsory legal mechanism for death certification. At the beginning of 1998, all health institutions in the country began to use the ICD-10 for their statistical records.

Health regulation activities in the past four years have been geared towards prevention and control of disease (OPS, 2001), especially for:

- the primary care level (diabetes mellitus, uterine and breast cancer, tuberculosis, HIV/AIDS, rabies);
- delivery of standardized services to special population groups (women during pregnancy, childbirth, and the puerperium; children and adolescents, to monitor their growth and development; family planning services; and psychiatric care);
- decentralization (delegation of authority to the states in public health, administration of blood banks, and issuing of authorizations and health permits); and
- the new structures and organs of the Secretariat of Health (the composition of boards of trustees in hospitals, health institutes and jurisdictions as well as the National Health Council and National Medical Arbitration Commission).

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2.4.3 Health sector reform prior to 2001

The 1995–2000 Health Sector Reform Programme:

- allows social security recipients to choose the physician who will treat them at the health services;
- establishes family insurance coverage in the Mexican Social Security Institute (IMSS), whereby persons able to pay may voluntarily enrol;
- transfers health services to the states to care for the uninsured population;
- fosters greater local participation in health through the healthy municipalities programme;
- expands coverage through a basic package of services for persons without access to the health services; and
- reorganizes the system, with the Secretariat of Health exercising leadership and regulatory roles, health care for the uninsured population being integrated and coordinated, and IMSS separating the functions of financing and service delivery to introduce competition among service providers (Gómez , 2001).

The first major reform policy started in 1983 in order to decentralize the structure of public services belonging to the Secretariat of Health and IMSS–Solidarity. Fourteen states, mainly the most affluent, were embarked in the process, which implied the transference of funds from the Federal to the state level to be complemented by state level funds representing around 30% of the total budget in every state. Decentralization was halted between 1988 and 1994 and begun again in 1996, but did not include the decentralization of the IMSS–Solidarity infrastructure

In August 1996, a national agreement was signed to complete decentralization in the remaining 16 states (including the Federal District), by transferring 21 000 jobs, 7370 pieces of property, and US\$1.1 billion from the central level to the states.

The Federal Government retains the authority to set health standards; regulate services and sanitary control of goods, establishments, and decentralized services; and control professional certification and accreditation of health units, generation of national statistics, and international representation of the sector. The state and municipal agencies share responsibilities for the organization, operation, and monitoring of public and private health services; sanitary control of services to the population; and fulfilment of health promotion and orientation tasks.

In 1996, the Secretariat of Health implemented a programme to expand coverage, based on the provision of a basic package of health services for the population with limited or no access to medical services in rural areas; this programme covered 6 million people in 18 states in 1997. In addition, in July 1997, IMSS introduced family health insurance, which people may voluntarily obtain by paying a fee that is complemented by a Government contribution.

2.5 Human resources

In 1999, 135 159 physicians held positions in the health sector, and there were 114 845 in contact with patients. Many of these doctors perform their duties both in the private sector and in public institutions. Of these, 54 185 assisted the uninsured population (mainly from the SSA), 60 660 assisted insured workers (mainly from the IMSS or ISSSTE), and 62 102 doctors practised in the private sector.

Of all physicians, 31% were general practitioners, there were 3.6 per 1000 inhabitants, and the ratio between general doctor and specialist was 1:0.83. In 2000, the Secretary of Health had 206 408 employees: 26% doctors, 36% nurses, 10% paramedics, and the remainder consisting of other professions (DGEI-SSA, 1999; DGEI-SSA, 2001).

3 Summary of LTC provision

3.1 Social programmes that promote health care for the elderly population

In Mexico, social policy has been a longstanding tradition of Federal and state level governments. Different institutions are responsible for the implementation of social policy, but the Secretariat of Social Development (SEDESOL) is the only one that has responsibility in all social areas. As mentioned previously, SEDESOL is, in its reorganized fashion, clustering a whole set of institutions that were previously attached directly to the Executive Branch or to other secretariats.

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SEDESOL is developing a new proposal to support the elderly population through the National Institute of the Elders (INSEN). Although INSEN was created two decades ago, it is now working with a renewed spirit and developing new programmes that can respond to the increasing needs of the elder population.

INSEN operates several programmes to attain these objectives, concentrated on three main axes (INSEN, 2001):

- values;
- health; and
- employment.

The **values** axis contains various programmes to:

- collect information about the living conditions of elders;
- promote the value of elders and their needs through the media and other vehicles;
- help to maintain the integration of elders with other age groups; and
- provide juridical security to elders enabled to take decisions regarding their heritage.

The **health** axis comprises four programmes:

- The International Geriatrics Congress, which seeks to obtain and discuss frontier information on geriatrics and to learn from other countries' experiences;
- INSEN itself, which goes into neighbourhoods to approach and care for old people in their own communities and households in order to avoid segregation and isolation;

- Certifying services for elders and their quality, which seeks to unify the criteria in assistance centres in order to provide good care;
- The National Crusade against chronic–degenerative diseases, which aims at preventing and avoiding disability provoked by the most common problems.

As defined by the Presidential Office:

As a specific compromise with the population with disabilities, the new administration looks to promote and integrate this important group of the population so that their opportunities and talent are expressed in all its dimensions.

To do this, the new administration created the Office of Representation for the Promotion and Integration of People with Disabilities as a way to give this population “a new and valuable role within our society”.

What started as a presidential campaign promise of achieving

total incorporation into social, work, and political life of all those Mexicans that have some type of disability

now intends to be consolidated in public policies and specific programmes through this new Office. Its objective is to promote the full integration of people with disabilities, and to assure them a level of social well-being and opportunities equal to those of the rest of the population. This goal is to be pursued through the establishment of coordinated policies with other public administration agencies at the three levels of government and social organizations. (Presidencia de la Republica, 2001a)

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To do this, the new Office has three main functions:

- to promote necessary amendments to the legal framework of all three levels of government to improve the social well-being of all people with disabilities;
- to support and enhance inter-institutional coordination to further develop and improve all existing programmes for people with disabilities with a special emphasis on rural areas; and
- to promote the development of projects with financial support and technical cooperation at the national and international levels to improve the quality of life of people with disabilities.

In its few months of existence, the Office has established:

- The Work Integration Programme, that seeks to achieve total equality for people with disabilities in order to obtain a job and have a source of income benefiting not only themselves and their families, but society as a whole.
- The Training Scholarship for Unemployed Programme of the Ministry of Labour, with a special focus on people with disabilities who face difficulties in gaining access to the labour market.

The Office has achieved, with the help of the Ministry of Health and the National Centre for Rehabilitation, inclusion in the National Health Plan 2000–2006 of an integral programme for the prevention and rehabilitation of disabilities. Efforts will now be directed towards attaining the commitment of all states to include specific preventive programmes in accordance with Federal policies that define disabilities as a public health problem (SSA, 2001).

The objective of the National Accessibility Programme is to provide equal opportunities by a process through which the physical environment, housing, public transportation, public buildings, sanitary and social services, education, training, social and cultural life are made accessible to every person in the country.

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The “Care with Quality” programme for the disabled represents a major effort within the Federal Government to achieve the mandatory actions stated in the National Development Plan 2001–2006. The Plan requires that all Federal employees promote and strengthen the development of people with disabilities, with the objective of obtaining their integration in all spheres of national life.

To achieve this goal, the programme plans to train the largest possible number of Federal employees, so that they know how to provide the best quality services to people with disabilities. This training recognizes that the physical, intellectual or sensorial condition of such disabled people require special and specific attention – not preferential attention, but equal attention, according to their needs. (Presidencia de la República, 2001b)

Finally, the Research Projects and Funds Programme aims at promoting and supporting research projects in agreement with universities, research centres, and nongovernmental organizations in order to clearly define the projects needed, and at moving ahead with their implementation. The main projects defined today are: *Diagnosis of the Disability Phenomenon in Mexico* and *Functional Help for People with Disabilities*.

Another governmental agency that offers care for the elderly is the System for the Integral Development of the Family (DIF) which is the main family welfare institution of the public sector. In 1999, the DIF cared for nearly two thousand elderly people in sheltered homes, asylums and other types of nursing home.

DIF also runs a small “Day Residence Programme” for just over 100 individuals. This programme provides medical attention, rehabilitation, occupational and recreational therapies, as well as one meal per day to each individual. The objective of the programme is to raise self-esteem and quality of life for the families of these people, in order to delay enrolment in nursing homes.

In addition to these functions, the DIF provides legal counselling to the elderly, as well as medical and psychological orientation. It also provides free courses in which the elderly can learn about the risks to which they are exposed, and preventive issues concerning their health. In other areas, it also offers training to family members on how to take care of older relatives, and on the subject of self-employment. (DIF, 2000; Mora, 2001)

Among the citizens of Mexico, there is a growing interest in volunteer participation in social problems that has had significant impact. This has led to the creation of many nongovernmental organizations (Civil Society Organizations). There are currently 3500 institutions and two-thirds of them have been created in the last thirty years.

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These organizations perform a wide range of activities. The NGOs that are of primary interest to the elderly are listed in the following table, which classifies the principal activities performed by those organizations that have been registered at the Mexican Centre of Philanthropy (CEMEFI, 2001).

Table 1. NGOs that work on behalf of the elderly in Mexico (2001)

<i>Activities</i>	<i>Number of organizations</i>
<i>Asylum, nursing home, shelter</i>	128
<i>Training for work</i>	9
<i>Feeding</i>	14
<i>Recreation and culture</i>	5
<i>Psychological support</i>	8
<i>Medical attention and rehabilitation</i>	18
<i>Legal counselling and human rights</i>	3
<i>Support to the elderly person's family</i>	6
<i>Charity</i>	9
<i>Integrated support</i>	28
<i>Various activities</i>	22
<i>Total</i>	250

Source: CEMEFI, 2001.

3.2 In-depth study of two initiatives in long-term care

In this section, two governmental programmes are studied in greater depth. These are projects that provide important lessons for long-term care policy in the future.

One is a programme to provide home-based care being carried out at the Mexican Institute of Social Security, the main social security institution in Mexico. The other involves an alliance between a nongovernmental organization and the Ministry of Health to develop cost-effective, de-institutionalized care options for people with mental illness. Both programmes require careful analysis in order to extend and expand services and both illustrate the efforts that the Mexican health system is making towards

- cost-containment
- improvement of efficiency, and
- strengthening of quality of care

in the provision of services for those in need of long-term care.

3.2.1 Mental care through the Ministry of Health in collaboration with nongovernmental organizations

Health care for mental illnesses in Mexico has been traditionally provided through asylums in highly institutionalized settings. Under this model, 50 hospitals were constructed throughout the country. These institutionalized settings have often lead to unnecessarily high costs for care, separation of patients from society and from family, and in some cases a lack respect of basic human rights of patients, particularly where funding was a severe problem.

Nonetheless, this is only the institutional expression of a way to perceive and respond to mental health problems in a country such as Mexico. Ranging from the household to the community levels, the mentally ill have often been seen as individuals who do not have a place or function in society. Frequently they have been abused and confined in order to keep them from participating in society (Modelo Hidalgo de Atención a la Salud Mental, 2001).

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The institutional health care model has been challenged since its beginnings for being an excessively medicalized and high-cost model, for not being able to establish as a goal the rehabilitation of mentally ill patients to socially valuable functions and for not providing incentives or programmes for reintegration into society. Still, the institutionalized model of care has continued to dominate in Mexico as in many other countries. Introducing elements of change into this model requires a system-wide recognition of the problem.

Pressure for change in Mexico began in the early 1990s with the participation of NGOs. Organizations such as the Mexican Foundation for Mental Health and other groups of civil society initiated a systematic debate on the benefits of the hospital system. At the same time they collected data to demonstrate that the prevalent model was not responding to the needs of much of the population with mental problems, and that hospital confinement was closing off any chance of rehabilitation.

As a result of these efforts, and within the context of health system change, the current institutional response is to develop a systemic model for the care of the mentally ill that would provide multi-level care, working with patients at all stages of illness. This model seeks to provide opportunities for reintegration into society, and to minimize the degree of institutionalization. The work towards systemic change involves collaboration between the national government, state governments, and NGOs.

An important breakthrough came in November 2000, when the Mexican Foundation for the Rehabilitation of the Mentally Ill, the Ministry of Health and the Government of the State of Hidalgo, inaugurated the Ocaranza Villages and two halfway houses in Pachuca, the capital city of the State of Hidalgo. This initial project, the Hidalgo Model, is now being adapted and developed to generate a national model that can be built into the overall health system at the state level.

The new model stresses:

- a minimum of institutionalization, based on the needs of the patient;
- step-wise reintegration into society and family; and
- the development of productive capacities that allow the maximum possible degree of independence for the patient.

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This model is focused on the idea that, in certain periods of their life, people can present a severe symptom or group of symptoms of a mental illness and need integral care in a hospitalized or semi-hospitalized setting, followed by work on prevention and social reintegration.

Hospitalization, when necessary, is designed to occur in psychiatric units in general hospitals. New semi-hospital structures designed to allow for group living and called 'villages' are being developed. These units are designed to provide specialized care under a short-term hospitalization scheme with integral medical–psychiatric care. They are also equipped for outpatient care and psychiatric emergencies. In the 'villages', rehabilitation programmes are intensified with visits of patients to the community, as well as workshops conducted on the premises where patients participate voluntarily in productive and paid work that will accelerate their future reintegration into the community.

Social reintegration is achieved through structures within the community that are able to support the patient in the rehabilitation process. These structures are mainly halfway houses, community residences, independent apartments, workshops, cooperatives, social clubs, etc. Community-based programmes are key to the redefinition of the traditional psychiatric model. Users have the opportunity to live within a social group and to experience a positive process of reintegration that allows them to overcome illness outside their family environment that is often dysfunctional or unsupportive.

Community-based programmes create an environment where users receive support, security, and proper care to develop their independence. Halfway houses and community residences are houses located in the community. In this space, users are housed as part of their training for independent life since in some cases, the family cannot support them. It is worth mentioning that the cost of one person in the community programme is estimated to be one quarter of the cost per bed/day in a traditional mental hospital.

Independent apartments are places within the community for which the only support to the user is the payment of rent. Residences for senior citizens will provide specialized medical psycho-geriatric care. Premises will be adequate to the population's needs. In the workshops, users will learn an activity and will be paid for their participation. Besides these services, social clubs – meeting centres in the community – and cooperatives will be built by members of the community and users in order to create their own source of financing.

Future efforts will focus on building on the lessons learned from the Hidalgo Model, complementing some existing health structures and restructuring others. The project will be scaled-up to the national level.

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In order to implement new models of service provision, the Ministry of Health has created the Psycho-social Rehabilitation, Citizen Participation, and Human Rights General Directorate, the main objectives of which are to expand, promote, train, advise and supervise the development of the new forms of care throughout the country, as well as to encourage federal and state-level authorities to provide the necessary financial resources.

Through this office, the Federal government is working to organize jointly the efforts of actors at the Federal Government, state government and civil society levels, so that by the year 2006 an integrated model that focuses on stepwise care rather than on institutionalization, can be operating in the majority of the states. While progress and the final model will likely vary by state depending upon needs, funding and existing institutional structures, the goal of this administration is to introduce many aspects of the integrated, stepwise, de-institutionalized model into each of the 32 states.

This experience is an excellent example of an effort to modernize, humanize, increase the effectiveness and reduce the costs of long-term care. Further, it is a very important example of collaboration between NGOs working at the local level and the national Government. In addition to the expected improvements in the provision of care, it will be important to learn from this experience of scaling-up a local model within a decentralized health system under the guidance of a national health institution working with an NGO.

3.2.2 Home Care Programme at the Mexican Institute of Social Security (IMSS)

3.2.2.1 Background

The 1996–2000 Strategic Guidelines of the Mexican Institute for Social Security (IMSS) seek to make medical care more flexible and opportune in face of the changes that the country is experiencing. They also seek to promote the efficient use of resources throughout all activities of the health care process at the three levels of care. Within the strategy of “Improvement of Care to Vulnerable Groups” defined in the Health Sector Reform Programme, one of the specific lines of action is home medical care (Reyes, 2001).

There is a growing group of patients in the IMSS and throughout the health system that require health care that is currently offered in hospitals and that could be met using the strategy of home-based medical care. This group includes patients with noncomplicated pneumonia, cancer patients, those undergoing treatment for trauma, or pre-term births.

CASE-STUDY: MEXICO

Many of these patients could be cared for in their own homes by a health team. However, the current trend is to keep them in the hospital. This practice imposes high costs on the health system, as well as a series of health risks.

The high costs of current medical practice have been putting pressure on the IMSS to offer hospital care only to those patients that require hospital facilities and equipment on a permanent basis. Home-care emerges as a powerful alternative within the current trends of development, since it offers quality and effectiveness at a lower cost than the hospital under many circumstances.

Furthermore, it offers other benefits that go beyond the merely economic aspects to contribute to the improvement of quality of life by not separating the patient from the household environment, which:

- guarantees the individuality of the patient;
- promotes psychological relaxation of the patient and his/her family;
- isolates him/her from hospital-born germs; and
- allows psycho-social interaction, which promotes a better and faster recovery.

As described above, IMSS is the major provider of health care services in Mexico. It provides services to around forty million Mexicans. At the beginning of 2001, IMSS had 1076 family medicine units (first level), 219 regional hospitals (second level), and 41 specialty hospitals. These were located throughout the country, but were concentrated in urban areas where most formal sector workers live. IMSS also has the largest concentration of doctors and nurses in the country.

Even though a large portion of resources is devoted to the elderly who constitute a considerable part of the institution's population, IMSS medical staff includes very few geriatricians. In spite of this lack of technical capacity, the group aged over 65 years represents only 8% of registered users, yet accounts for 35% of the institution's budget (Table 2).

This concentration of resource utilization by elderly people will be magnified in the near future. IMSS is already experiencing the effects of this process. While the population between 15 and 44 years of age increased their utilization of services by 2% from 1994 to 1999, the group beyond the age of 65 years presented an increase in utilization of 55% in the same period.

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This trend is reflected in the type of health problems attended to by the institution. The reasons for consultation that had the higher increase in the same period were chronic and degenerative diseases, arterial hypertension, and diabetes mellitus.

Table 2: Users and expenditures by age group, IMSS, 1997-8

<i>Age/group</i>	<i>% of total users</i>	<i>% of services costs</i>
<i>Less than 1 year</i>	1.6	10.8
<i>From 1–4 years</i>	8.3	3.4
<i>Women in reproductive age</i>	26.8	27.4
<i>More than 65 years</i>	8.0	35.4
<i>Total</i>	44.7	77.0

Source: IMSS

Given this trend in resource use, IMSS has recognized the need to increase the capacity and efficiency of health care units. The “Home Care for the Chronically Ill” (ADEC) strategy was launched in 1997. This programme is intended to make medical care for chronically ill people and those in terminal phase available at the household level.

ADEC is designed for patients with chronic-degenerative diseases and temporary or permanent loss of autonomy; with dementia; with cerebrovascular disease; with severe sequela for early rehabilitation; and terminal patients in need of palliative care. Enrolment is voluntary, but a network of family and community support for the patient is a prerequisite. ADEC has proven to be able to provide high quality care, and to improve efficiency in the use of financial resources by reducing time spent at emergency wards and by reducing the number of hospitalization days.

CASE-STUDY: MEXICO

Although an evaluation of ADEC (Muñoz et al., 2001) proved the programme to be highly cost-effective for the Institute (IMSS), there are no studies or evaluation projects that contemplate the programme's impact, social value, or benefits to the population (such as their quality of life and general health status). The demonstrated advantages made it possible to justify the expansion of the project with the creation of a programme to care for non-chronic and non-terminal patients (Trujillo, Cárdena & Pérez, 2000). After identifying a series of non-fatal health conditions that could be cared for at the home level, the institution expanded the programme and created the Home Medical Care Programme (AMED) in 2000.

Within AMED, personnel participate in the decision-making process according to the particular situation of every health unit, following the institutional guidelines that IMSS has put in place in order to guarantee the decentralization of processes, the transfer of responsibilities, and managerial autonomy in the identification of problems, solutions, and the implementation of cost-containment. AMED encourages the participation of the family in medical care.

It has also established criteria for care given to patients with sub-acute ailments, and uses them as a guideline towards the administrative autonomy of health care units. The health team is composed of a family doctor (2nd level) or a specialist (3rd level), one general nurse, and one social worker. Depending upon the case, the team will also include a nutritionist, a rehabilitation specialist, a specialist in psychiatry, and a driver with the use of a vehicle.

AMED's implementation is organized into four phases.

- **Phase I:** detection and selection of patients.
- **Phase II:** planning of home medical visits.
- **Phase III:** home medical visits.
- **Phase IV:** case control.

In **Phase I**, the doctor in charge of the AMED programme in the health care unit identifies the patients who, according to clinical criteria, could be included in the programme. The doctor also determines the cost–benefit of including the patient in the programme by considering transportation costs, and is responsible for informing the patient and the family about the benefits of home care and the services that will be provided, as well as about their rights and commitments.

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In **Phase II**, the responsible professional organizes a plan to carry out home visits by the health team. The patient's needs are identified, in order to elaborate a therapeutic plan that enables the team to provide sound care at home. The plan is discussed with the family, to agree on collaboration regarding dates and times of home visits. Within the hospital, the plan must define the resources that are needed to provide the patient with adequate care.

In **Phase III**, the home visit is carried out. During the visit, the health team is required to:

- explain to the patient and the family the reasons for the visit;
- identify the patient's needs according to information on the clinical record;
- identify the patient's health status;
- develop the therapeutic actions;
- provide information to the patient and the family about the care that must be provided until the next visit.

In **Phase IV**, case control must be undertaken. In this phase, the health team must assure that household conditions can guarantee quality of care for the patient, particularly during the periods between visits. In so doing, the health team must identify the capacity of the patient and his/her family to follow the instructions given by health team personnel regarding the intake of drugs and the application of injections, as well as the capacity of the family to deal with the care of the patient and control sources of stress. The health team must advise the family on how to handle the patient and how to collect information that could be useful for the evaluation of the programme – both at the household and population levels.

To date, the programme has been operating under difficult conditions, because of the lack of appropriate resources for and training of the personnel in charge. Despite these difficulties, the programme is demonstrating results. The index of hospital readmission is approximately 1%, with some peaks due to difficulties with transportation or overdue visits. The number of trainees is three times higher than the number of patients enrolled in the programme. Although this health care model is still not generalized within IMSS, there is an interest in training multidisciplinary teams in a number of health care units and hospitals.

CASE-STUDY: MEXICO

IMSS is an institution still not prepared to deal with the increasing demand for health services by elderly people – the main victims of chronic and degenerative diseases. There is no organizational strategy to deal with the needs of this population group, and this is reflected clearly in some specific issues.

The most salient of these needs is the lack of geriatric specialists within the institution. Although doctors and nurses have received short-term training in some geriatric topics, their capacity to deal with problematic issues is limited. Also, this training is focused on the care of patients at the hospital level – in spite of the fact that most geriatric patients receive care at health centres. A further aspect to be considered as a limitation of the programme is that IMSS has no plan to provide integral geriatric care, to have a life cycle perspective – as recommended by WHO – nor to encourage health promotion.

The IMSS health care model continues to be excessively medicalized, and requires a more complete implementation and integration of models such as ADEC and AMED. Long-term care programmes operate within an institutional environment that is not prepared to support their development, although international experience and evidence show that such a system would save money, promote efficiency, and provide good quality care. It will be important to evaluate, adapt and promote the implementation of programmes such as ADEC and AMED within the entire health system, in order to meet the health care and economic challenges that will come with population ageing and the epidemiological transition.

As mentioned above, families have been a major asset in saving institutional resources that would otherwise be spent on hospital services. Other benefits of family support include the participation of the family in the health care of elders which tends to improve family integration, and the fact that medical consultation in the presence of a relative can help to achieve a better understanding of the treatment that the patient has to follow.

Still, it is incorrect to assume that families can bear the entire economic labour and time costs of caring for sick relatives at home. Further, the burden of the presence of a sick person is normally assigned to women – who, for cultural reasons, must accept the responsibility of dedicating time that often competes with other activities, such as salaried work or study.

Therefore, promoting wider implementation and acceptance of programmes such as ADEC and AMED will not be sufficient to effectively and equitably meet the challenges of demographic and epidemiological transitions. Reforms of the health care system must be complemented by policies and programmes to promote gender equity and wider participation in the provision of health and long-term care.

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4 General questions pertinent to LTC development

4.1 Present and future needs for LTC, and gaps between needs for and provision of services

The following points summarize the findings of this case-study. They indicate the gaps between the emerging needs for long-term care and the ability of the health system to provide services for those in need:

- The Mexican population is experiencing an ageing process, whereby the elderly will represent approximately 20% of the population by 2050.
- Changes in the epidemiological profile are placing great pressure upon the utilization and cost of health services.
- Health systems are not prepared for and cannot afford the cost of long-term services according to the prevailing model, in which the hospital is at the centre of the health services structure.
- Changes in the nature of the family and in the labour force participation of women make it impossible as well as inequitable to continue to rely on 'volunteer' female time for the care of the majority of family health problems.

4.2 Factors affecting the need for long-term care

4.2.1 Transitions in women's use of time, and implications for long-term care

The increases in the demand for long-term care which are associated with epidemiological and demographic transitions, are occurring alongside social transformations that are making the provision of care within the family increasingly difficult. Over the past three decades, the allocation of women's time, the structure of families, and the profile of activities performed by women, have changed dramatically in Mexico as in many other Latin American countries. These changes are generating important questions regarding appropriate and effective policy responses to meet the long-term care needs of the chronically ill, the disabled and the elderly, in addition to those of children.

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The increase in female labour force participation constitutes one of the key social transitions in Mexico as well as worldwide (Presidencia de la República, 2001b). Although women have 'always worked', historically the majority of this work was in unpaid, household domestic duties. In Mexico, the changes in female labour force participation have been particularly dramatic and concentrated in the past three decades.

In Latin America on average, female labour force participation increased 152% between 1970 and 1990 while that of males increased only 68%. In Mexico, the growth was the fastest in the region. Over the same period, the increases were 256% and 99% respectively (Valdés, 1995) and women now constitute approximately one-third of the labour force (INEGI, 2001).

The age distribution of the working female population has also changed significantly. In past decades, women aged 15 to 24 years had the highest participation rates, at 25%. In 1995, the highest participation rates reached 40% and spanned the age group 15 to 40 (INEGI, 1995).

While the incorporation of women into the labour market in Mexico is an important motor for economic growth and for social and human development, it is important to recognize that there are important gender inequities and implications in areas such as the provision of health care in the family. This increase in female labour participation has been accompanied by an increasing burden on women and a double or triple work day.

Apparently, women have extended their working day as part of the transition, rather than men increasing their participation in domestic duties. This has important implications for the supply of time for the care of the family and particularly for those in need of substantial daily care such as the elderly, the disabled, the acutely ill, and children. The extra burden on women also plays out in gender discrimination in wages and occupations.

The presence of adults aged 64 years or older, or children aged between 5 and 12 years, is related to the probability that women head of households join the labour market. The highest percentage of women working for pay appears in those households where there is a presence of both children and elders combined.

While several interpretations are possible, one possibility is that women in these families may have to work to support the large number of dependents. Another hypothesis is that elders act as substitute caregivers for children, enabling the mother to enter the labour market (Parker & Knaul, 1997; Levine & Wong, 1998). These data are being further analysed in regression frameworks.

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4.2.2 Changes in family structure

Parallel to other social transitions, the structure of the Mexican family has changed substantially. These changes imply a rupture with traditional family organization in which extended families were common and caregiving for children, the elderly and the ill were shared responsibilities. While the extended family continues to be an important institution in Mexico, such families are increasingly less common.

The phenomenon of rural–urban migration is a factor in these changes. In 1980, 25.5% of families were classified as extended, as compared to 18.3% in 1990. Furthermore, 74.5% of families are nuclear (FLACSO, 1995).

Moreover, there has been a strong trend in Mexico towards migration away from rural areas to the country's cities. Additionally, many Mexicans have migrated to other countries to look for work, most notably to the United States.

This migration has had important consequences for long-term care. With working age family members often moving to different parts of Mexico or to other countries to look for work, extended multigenerational families are now less common.

The presence of elderly or sick family members has a clear impact on labour force participation in the family. Based upon a national survey undertaken in 2001:

- 9% of informants (4.5 million inhabitants) that reported illness or disability declared that there was a moderate impact on family members that affected their time use:
- 3% (1.4 million inhabitants) declared that at least one family member had to withdraw from the labour market; and
- 2% (1 million inhabitants) declared that a number of family members had to modify their time use and leave the labour market.

These figures are slightly higher for older informants, but considerably higher for those who report chronic or acute illness.

The long-term economic challenges that face Mexican families are exacerbated by regular economic crises. Between 1970 and 2000, there were four economic crises. During these crises, families were forced to send as many members as possible to work in the labour market. This often implies that women, youth, and children enter the labour market – reducing the time that family members have for caring for young children, the elderly and the sick (Cutler, Knaul, Lozano, Méndez & Zurita, 2000).

In summary, the profound economic and social transitions that Mexico has gone through over the past three decades imply that the traditional supply of long-term care – women working in the home – has declined and will likely continue to do so. Other caregiving options must be sought and these require innovative policy interventions and programmes that can:

- stimulate the reorganization of responsibilities within the family;
- make female labour force participation compatible with caregiving, through flexible work options and the extension of social security coverage; and at the same time
- guarantee adequate services to those who require long-term care.

4.2.3 The epidemiological profile of the Mexican population

The demographic transition has been rapid and profound in Mexico, and is closely associated with the epidemiological transition. In 1940, children aged from 0 to 4 years represented a higher proportion of the population than adults. In 2010, this relationship will be inverted.

Further, while in the year 2000 less than 5% of the population is elderly, in 2050 one in five Mexicans will be elderly. Life expectancy in 1940 was 41.5 years and in 2000 is 74.4 years (INEGI, 1990; Partida, 1999).

This improvement is associated with a strong decline in infant mortality from 125.7 infants under one year per 1000 live births in 1940 to 28 per 1000 live births in 1995 (INEGI, 1999c). The age group with the largest number of deaths up to the middle of the century was the infant population. More than 50% of deaths occurred in age groups below 5 years, while the population older than 65 years contributed only 16% of deaths.

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The epidemiological transition is associated with a transition from a mortality and morbidity profile which is primarily associated with infectious and preventable diseases to one in which noncommunicable diseases predominate. This is particularly common among the wealthier and urban population.

Around the middle of the century, before the industrialization and urbanization processes, the mortality pattern was dominated by infectious diseases. The two main causes of death were diarrhoea and pneumonia, and overall infectious diseases were responsible for 60% of all deaths. Noncommunicable diseases represented 15% of all deaths, and injuries another 5%. Thirty years later, Mexico is clearly at a different stage of the epidemiological transition.

In 1998, more than 60% of deaths were caused by chronic-degenerative problems, injuries represented 12%, and infectious diseases 28%. Furthermore, the distribution of deaths according to age group is inverted. Thus, 50% of all deaths occurred in the population beyond 65 years of age and only 11% among the group aged five years or less. By the year 2010, deaths due to noncommunicable disease will represent an estimated 65% of all mortality, while injuries and infectious diseases will represent only 15% of deaths (Frenk, Lozano, Gonzalez Block et al., 1994).

The epidemiological transition has been described as prolonged and protracted. While tremendous improvement has been seen, poorer populations and states continue to suffer a backlog of preventable infectious diseases, malnutrition, and maternal mortality – while at the same time displaying increases in chronic and degenerative conditions. This presents a challenge for the health system, because the mortality and morbidity profile is complex.

In understanding the gravity of the transition to chronic and degenerative disease and disability, it is important to take into account that lacking an appropriate social infrastructure for long-term care, these health problems have a number of additional social manifestations. Illnesses that require long-term care have not only health consequences, but are also associated with social problems such as abuse, family disintegration, and exit from the labour force.

Further, catastrophic health expenditures, which have been identified as a major challenge for the Mexican health system in international as well as national studies, are often associated with disability or chronic conditions (SSA, 2001 ; World Health Organization, 2000; Knaul et al., 2001). These health expenditures can place a family at risk of falling into a poverty trap by forcing them to either give inadequate care to family members or put at risk their ability to finance other necessary expenditures.

4.2.4 General mortality and morbidity profile in the 1990s

In general, the most frequent causes of death continue to be cardiovascular disease (69.4 per 100 000 in 1995), followed by malignant neoplasms (52.6), accidents (38.8), and diabetes mellitus (36.4). Cerebrovascular disease was the sixth leading cause of death in 1992 (at a rate of 24.7) and moved to fifth place in 1993 (a rate of 25.5 in 1995); disorders originating in the perinatal period, which occupied fifth place in 1992, dropped to seventh place in 1995 (a rate of 22.4), and cirrhosis and other chronic diseases of the liver ranked sixth in 1995 (a rate of 23.2).

The 1993 National Survey of Chronic Diseases, which is the most recent, found a 23.6% prevalence of hypertension, a 7.2% prevalence of diabetes mellitus, and an 8.8% prevalence of hypercholesterolaemia in the population older than 20 years of age. The prevalence of these three conditions increases with age, and in the 65–69 year-old age group illnesses of this type with the highest prevalence were hypertension and diabetes mellitus. The distribution by gender was similar for diabetes mellitus and was slightly higher in men for hypertension and hypercholesterolaemia (OPS, 2001).

Mortality from chronic diseases is clearly on the rise. In 1995, cardiovascular disease accounted for 63 609 deaths (a rate of 69.4 per 100 000 population). Diabetes mellitus was responsible for 33 316 deaths in 1995 (36.4). The increase of deaths from cirrhosis of the liver was 21 245 in 1995 (23.2). The incidence of hypertension is increasing in the public health services. In 1996, 403 582 cases were reported, at a rate of 433.1 per 100 000 inhabitants. The trend is the same for diabetes mellitus.

4.2.5 Chronic and degenerative diseases and disability

Diabetes mellitus is the most salient example of an emergent disease with important consequences for the demand for health services. It is the main cause of outpatient health care demand and one of the main causes of hospitalization. In theory, diabetes mellitus should be a health problem the consequences of which can be controlled with proper medication and healthy behaviour. However, it is estimated that in Mexico out of every 100 diabetics, 14 develop nephropathies, 10 neuropathies, 7–10 diabetic feet, and 2–5 blindness.

Psychiatric disorders are an emergent problem that are not causes of death but that play an important role in decreasing the number of healthy years of life, alter the family dynamic, and represent a considerable economic burden. The absolute number of deaths registered annually from dementia, for example, has increased 20 times in the last two decades, moving from less than 40 to more than 800 per year.

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Depressive disorders continue to be a health problem about which little is known. Still, it is clear that in the decades to come they will be one of the main causes of loss of healthy years of life in the world. Global prevalence is 10%, and showing a tendency to increase. Currently in Mexico, there are almost four million people suffering from depression.

Disabilities are the product of diseases or injuries, but are also the result of improvements in prevention, diagnosis, and treatment of diseases. There is only limited information available about the incidence of disabilities, but it is estimated that every year in Mexico 125 000 disabilities are produced as a result of severe bone fractures, 67 000 genetic malformations, 43 000 sequel of vascular-brain disease, 20 000 sequel of cranium-encephalic trauma, and 12 000 cases of child brain paralysis.

Mortality by perinatal brain hypoxia has been reduced, but surviving children suffer brain paralysis along with movement problems, language alterations, and epilepsy. The survival rate of children with neural tube defects has also been increased, but many of them remain paraplegic or quadriplegic with severe organ dysfunction. As mentioned above, diabetes and hypertension are common causes of death. They are also associated with complications leading to disabilities.

Life expectancy in Mexico has increased considerably, as mentioned above. One of consequences has been the increase of several disabling conditions, including mental illness. It is important to highlight the fact that the disabled suffer a lack of equity in the allocation of resources. The main example is that of almost 1000 public hospitals in the country, only 152 have rehabilitation services, which tend to be underequipped and staffed by non-specialized personnel.

To be able to care for this population with an integral perspective, it is necessary to promote multisector actions in collaboration with the private sector and civil society. These actions should be addressed to:

- prevent, treat, limit and rehabilitate disabilities;
- broaden the public infrastructure available to facilitate the mobility and care of special needs for the disabled; and
- promote and facilitate the reincorporation of the person into the family, society and the labour market where possible.

4.2.6 Health of the elderly

The demand for health services for the elderly has increased. The proportion of hospitalizations of people aged 65 years or older increased from 8.3% in 1993 to 12% in 1999. In the past year, 10.3% of that population was hospitalized against only 4.6% of the population aged between 15–64 years. Furthermore, the population over 65 years of age accounted for 43% of intra-hospital mortality.

The main reasons for hospitalizations among elderly adults are currently related to cardiac problems and cerebrovascular diseases as well as pneumonia and complications from arteriosclerosis. Little is known about the magnitude of other problems that seem to be common in this age group such as trauma, malnutrition, dementia, and depression.⁴

To sum up, the decline in the extended family network greatly impacts the ability of family members to care for disabled and elderly relatives. Urbanization and industrialization over the last half century have contributed to a change in the mortality pattern in Mexico.

Around the middle of the century, the mortality pattern was dominated by infectious diseases, and overall infectious diseases were responsible for 60% of all deaths. Noncommunicable diseases represented 15% of all deaths, and injuries another 5%. Thirty years later, Mexico is clearly at a different stage of the epidemiological transition. In 1998, more than 60% of deaths were caused by chronic-degenerative problems, injuries represented 12%, and infectious diseases 28%.

⁴ The lack of information for the population as a whole is due to poor diagnosis as well as the lack of an adequate system for registering health problems that cause disability but not death. The transition from a predominant pattern of infectious, nutritional, and reproductive problems to a pattern of injuries and chronic conditions, will continue to place additional pressures on the health system to modify and strengthen data collection. This is a process that is well under way and assisted by recent improvements in the management of data and information. For example, a large project is under way to make widely available, user-friendly data on the provision of health care by age, gender and cause at the Mexican Institute of Social Security in conjunction with the Mexican Health Foundation. These data sets have never before been used in their entirety due to difficulty of managing such large data bases, and restricted access for reasons of privacy.

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4.3 Planned or current changes in health and social services that will impact on the provision of LTC

4.3.1 National health plans and policies in 2001–2006

With the change of the federal government in January 2001, there began an aggressive and ambitious programme to reduce health gaps and health care backlogs. The National Health Programme (NHP) was published in July 2001. The main health policies are geared towards strengthening the system and generating programmes in order to meet the three key challenges that have been identified in the National Health Programme for 2001–2006: equity, quality, and financial protection.

Key objectives are to expand coverage and provide efficient, high quality services to the entire population. In addition, the issue of financial protection and avoidance of impoverishing health spending is a key component of policy for the future. Given that chronic disease and care of the elderly are important factors leading to ongoing, impoverishing health care costs for families, the search for more cost-effective solutions to these health challenges is a major issue for current policy development.

Health plans are geared to treating the disorders stemming from epidemiological and demographic profiles, rapid transitions, and the substantial degree of inequity across population groups, as well as to providing universal health insurance. These programmes and policies built on several decades of health system reform initiatives, many of which have been limited in scope to issues such as decentralization, or to particular sectors such as the insured population.

A number of new projects are being launched and several are directly relevant to the issue of long-term care. One of the most important projects is *Women and Health*. This project responds directly to the office of the Secretary of Health and its main goal is to develop a stronger gender focus and impose greater gender equity in all projects related to the health system. The project has four main components:

- health of women;
- research and data;
- the medical labour market; and
- the production of health within the family and the community.

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A final component of this project is the one that is key for long-term care issues. Specifically, the programme seeks to develop institutional capacity, a stronger legislative framework, and social communication and education that will enable women to better combine work and other responsibilities with care for elderly and sick family members. The programme includes efforts to introduce gender equity into family and community-based care by considering policies such as extending work leave to males and females to care for family members when they are ill, newborns, and the elderly.

The National Health Programme is designed around ten major strategies. One of these strategies is to 'confront emergent problems' by defining priorities based on promoting healthy life-styles and early detection of health problems. In addition to implementing new health services, the strategy seeks to work with other institutions in the public and private sectors to deal with disability through rehabilitation, programmes to end discrimination, and projects to better integrate the disabled. These are described in greater detail in the next section.

Within the health sector, the strategy (SSA, 2001) on emergent problems includes intensified and enhanced programmes to:

- reduce the prevalence and consequences of diabetes;
- control cardiovascular disease and hypertension;
- provide better and more preventive care and information to the elderly;
- improve the training of professionals in the area of care for the elderly;
- promote transplants as viable health care alternatives;
- reduce addictions to tobacco and other drugs;
- care for the mentally ill;
- detect and prevent cancers;
- prevent and control HIV-AIDs; and
- prevent disability and rehabilitate the disabled.

5 *Recommendations on key steps necessary for the appropriate development of LTC*

- The emergence of home-based long-term care and deinstitutionalized models is a promising option to reduce costs, to provide quality care, and to increase quality of life.
- Currently, home-care and deinstitutionalized programmes face difficulties as they challenge the medicalized views of institutional health care – this needs to be overcome.
- Models for providing care for the elderly and the long-term ill must be supported by specific social policy to generate models that promote gender equity.
- Social policy should also encourage the participation of men in the duties of caring for family members and the community.
- All programmes described in the document are still in early stages but they need to be evaluated in order to make necessary adjustments according to specific situations.
- Home long-term care programmes need to be expanded, but changes need to be implemented not only at the institutional level but also at the social level – as there is still widespread rejection in society of more integrated and equitable models of caregiving.
- Taking into account international experiences, such income support policies in home care programmes as direct cash supports, medical equipment needed by the patient, special beds, and the like, could be included as a component for home care programmes in Mexico. This possibility must be evaluated taking into account the needs of current and potential home care programme users, the financial condition of the programme, and how these supports would be financed, etc.

Bibliography

CEMEFI (Centro Mexicano para la Filantropía) (1999) *Directorio de Instituciones Filantrópicas*. México, Centro Mexicano para la Filantropía.

CEMEFI (2001) *La Creciente Participación Ciudadana, un Signo de Esperanza*. Centro Mexicano para la Filantropía web site: www.cemefi.org.

CONAPO (Consejo Nacional de Poblacion) (1999) *Envejecimiento Demográfico de México*. Mexico, CONAPO.

Cutler D, Knaul F, Lozano R, Mendez O, Zurita B (2000) *Ageing, Financial and Economic Crisis, and Health Outcomes: Mexico in the 1980s and 1990s*. México, National Bureau of Economic Research (Working Paper No. 7746).

DGE (Dirección General de Estadística) (1970) *IX Censo General de Población*. Mexico, DGE.

DGEISSA (Dirección General de Información y Evaluación del Desempeño de la Secretaría de Salud) (1999) Estadísticas del Sistema Nacional de Salud. *Boletín de Información Estadística*, 1 (19).

DGEISSA (2001) Recursos para la Salud en Unidades de la Secretaría de Salud, 2000. *Salud Pública de México*, 43 (4):373–381.

DIF (Sistema Nacional para el Desarrollo Integral de la Familia) (2000) *Resumen estadístico de los programas del Sistema Nacional para el Desarrollo Integral de la Familia (Enero–Diciembre del 2000)*. Available at web site: www.dif.gob.mx.

FLACSO (Facultad Latinoamericana de Ciencias Sociales) (1995) *Mujeres Latinoamericanas en Cifras*. Santiago de Chile, FLACSO.

Frenk J, Lozano R, Gonzalez-Block MA et al. (1994) *Economía y Salud: Propuestas para el Avance del Sistema de Salud en México*. Mexico, Funsalud.

Frenk J, Gonzalez-Block MA, Knaul F, Lozano R (1999) La Seguridad Social en Salud: Perspectivas para la Reforma. In: *La Seguridad Social en México*. México, CIDE, CONSAR y El Trimestre Económico.

LONG-TERM CARE

Gomez D (2001) NAADIIR, *La Reforma del Sistema de Salud el caso de México*. Available at web site: www.insp.mx/ichsri/country/reforma_mex.pdf.

INEGI (Instituto Nacional de Estadísticas, Geografía e Informática) (1990) *Estadísticas Históricas de México*, Vol. 1. Mexico, INEGI.

INEGI (1991) *Encuesta Nacional de Empleo Urbano*. Mexico, INEGI.

INEGI (1993) *Encuesta Nacional de Empleo Urbano*. Mexico, INEGI.

INEGI (1995) *Encuesta Nacional de Empleo Urbano*. Mexico, INEGI.

INEGI (1997) *Encuesta Nacional de Empleo Urbano*. Mexico, INEGI.

INEGI (1998) *Encuesta Nacional de Empleo Urban*. Mexico, INEGI.

INEGI (1999a) *Encuesta Nacional de Empleo Urbano*. Mexico, INEGI.

INEGI (1999b) *Mujeres y Hombres en México*. Mexico, INEGI.

INEGI (1999c) *Sistema de Indicadores para el Seguimiento de la Situación de la Mujer en México*. Available at web site: www.inegi.gob.mx. Mexico, INEGI.

INEGI (2000a) *Diferencias de Género en las aportaciones al hogar y en el uso del tiempo*. Mexico, INEGI.

INEGI (2000b) *Anuario Estadístico 2000*. Mexico, INEGI.

INEGI (2000c) *Mujeres y Hombres en México*. Mexico, INEGI.

INEGI (2001) *Estadísticas de Empleo con Enfoque de Género*. Mexico, INEGI.

INI (Instituto Nacional Indigenista) (2000) *Instituto Nacional Indigenista 1995–2000*. Mexico, INI.

INSEN (Instituto Nacional de la Senectud) (2000)
Web site: www.insen.gob.mx

INSEN ((2001). Web site: www.insen.gob.mx

INSP (Instituto Nacional de Salud Publica) (2001) *Encuesta de Estados de Salud*. Mexico, INSP.

CASE-STUDY: MEXICO

Knaul F, Mendez O, Murray CJ, Arreola H, Ortiz JP, Torres AC, Frenk J (2001) *The Impact of Extending Universal Pre-Paid Coverage on the Fairness of Financial Finance and Catastrophic Health Expenditures in Mexico*. Mimeo.

Levine R, Wong R (1998) *Household Structure in Urban Mexico: Accommodating Work and Child Care*. Dept. of Population Dynamics, Johns Hopkins University, Mimeo.

(2001) *Modelo Hidalgo de Atención a la Salud Mental*. Fundación Mexicana para la Rehabilitación de Gente con Enfermedad Mental, Material Audiovisual.

Mora E (2001) Personal Communication of the “Directora del Programa de Atención a Indigentes y Personas de la Tercera Edad del Sistema Nacional para el Desarrollo Integral de la Familia”. October, Mexico, D.F.

Muñoz MH et al. (2001) *Evaluación Económica del Programa de Atención Domiciliaria a Pacientes con Enfermedades Crónicas y Terminales*. Documento de Trabajo, IMSS HGZ30.

OPS (Organización Panamericana de la Salud) (2001) *Country Health Profile for Mexico*.

Parker S, Knaul F (1997). *Employment and Child-care Strategies among Women with Young Children: The Mexican Case*. Documento de Trabajo de Economía, CIDE No.75

Partida V (1999) *Perspectiva Demográfica del Envejecimiento en México*. In: *Envejecimiento Demográfico de México: Retos y Perspectivas*. Mexico, CONAPO, 27–40.

Presidencia de la Republica (2001a) *Oficina de Representación para la Promoción e Integración Social para Personas con Discapacidad*. Available at web site: <http://discapacidad.presidencia.gob.mx>

Presidencia de la Republica (2001b) *Programa Nacional de Desarrollo 2001–2006*. México, Presidencia de la República.

Reyes S (2001) *Population Ageing in the Mexican Institute of Social Security*. Mexico, Funsalud.

LONG-TERM CARE

SEDESOL (Secretaria de Desarrollo Social) (1999) *PROGRESA: Más Oportunidades para las Familias Pobres, Evaluación de Resultados del Programa de Educación, Salud y Alimentación. Primeros Avances*. Mexico, SEDESOL.

SEP (Secretaria de Educacion Publica) (2000) *Estadísticas Básicas del Sistema Educativo Nacional*. Mexico, SEP.

SSA (Secretaria de Salud) (1998) *Anuario Estadístico*. Mexico, SSA.

SSA (2001) *Programa Nacional de Salud 2001–2006*. Mexico, SSA.

Trujillo S, Cardena C, Perez J (2000) Atención Domiciliaria: Un modelo de atención integral. *Gerontología y Geriatría*, 2(4):7–11.

Valdes T (1995) *Mujeres Latinoamericanas en Cifras; Tomo Comparativo*. Santiago, Chile, Ministerio de Asuntos Sociales y FLACSO.

World Health Organization (2000) *The World Health Report 2000*. Washington, DC, World Health Organization.