

# Health Care Systems in Transition

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# Andorra



























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DELIVERY OF HEALTH CARE
EVALUATION STUDIES
FINANCING, HEALTH
HEALTH CARE REFORM
HEALTH SYSTEM PLANS – organization and administration
ANDORRA

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#### **Foreword**

he Health Care Systems in Transition (HiT) profiles are country-based reports that provide an analytical description of a health care system and of reform initiatives in progress or under development. The HiTs are a key element of the work of the European Observatory on Health Systems and Policies.

HiTs seek to provide relevant comparative information to support policy-makers and analysts in the development of health care systems in Europe. The HiT profiles are building blocks that can be used:

- to learn in detail about different approaches to the organization, financing and delivery of health services;
- to describe the process, content and implementation of health care reform programmes;
- to highlight challenges and areas that require more in-depth analysis; and
- to provide a tool for the dissemination of information on health care systems and the exchange of experiences of reform strategies between policy-makers and analysts in different countries.

The HiT profiles are produced by country experts in collaboration with the Observatory's research directors and staff. In order to facilitate comparisons between countries, the profiles are based on a template, which is revised periodically. The template provides the detailed guidelines and specific questions, definitions and examples needed to compile a HiT. This guidance is intended to be flexible to allow authors to take account of their national context.

Compiling the HiT profiles poses a number of methodological problems. In many countries, there is relatively little information available on the health

care system and the impact of reforms. Due to the lack of a uniform data source, quantitative data on health services are based on a number of different sources, including the WHO Regional Office for Europe health for all database, Organisation for Economic Cooperation and Development (OECD) Health Data and data from the World Bank. Data collection methods and definitions sometimes vary, but typically are consistent within each separate series.

The HiT profiles provide a source of descriptive information on health care systems. They can be used to inform policy-makers about experiences in other countries that may be relevant to their own national situation. They can also be used to inform comparative analysis of health care systems. This series is an ongoing initiative: material is updated at regular intervals. Comments and suggestions for the further development and improvement of the HiT profiles are most welcome and can be sent to observatory@who.dk. HiTs, HiT summaries and a glossary of terms used in the HiTs are available on the Observatory's website at www.observatory.dk.





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The report reflects data available in the summer 2003.





### **W**

# Introduction and historical background

#### Introductory overview

#### Political background

ndorra is an independent, democratic, constitutional microstate. Its official name is *Principat d'Andorra* (Principality of Andorra) and its political system a parliamentary co-principality. With a total population of 67 159 in 2002, it is divided into seven parishes (*parròquies*, singular *parròquia*): Canillo, Encamp, Ordino, La Massana, Andorra la Vella, Sant Julià de Lòria and Escaldes-Engordany. Each parish is a territorial, political and administrative division of the country. The majority of the population is concentrated in the parishes Andorra la Vella and Escaldes-Engordany (Table 1). The capital city is Andorra la Vella.

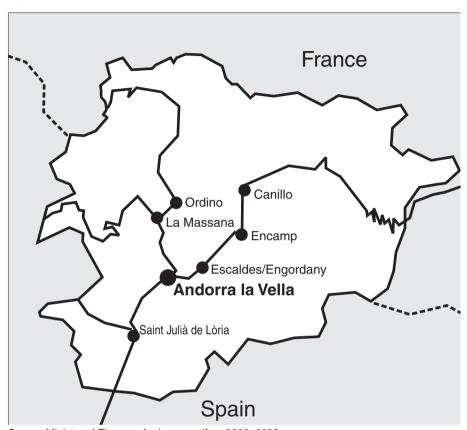
Table 1. Resident population per parish, 1985–2002

| Parish              | 1985   | 1990   | 1995   | 1998   | 1999   | 2000   | 2001   | 2002   |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| Canillo             | 1 071  | 1 513  | 2 430  | 2 691  | 2 706  | 2 808  | 3 014  | 3 205  |
| Encamp              | 5 339  | 7 489  | 9 360  | 10 385 | 10 595 | 10 576 | 10 627 | 10 772 |
| Ordino              | 982    | 1 414  | 1 835  | 2 184  | 2 283  | 2 291  | 2 366  | 2 485  |
| La Massana          | 2 953  | 4 386  | 5 544  | 6 092  | 6 276  | 6 280  | 6 375  | 6 660  |
| Andorra la Vella    | 17 201 | 20 437 | 21 984 | 21 513 | 21 189 | 20 845 | 20 787 | 20 724 |
| Sant Julià de Lòria | 5 223  | 6 272  | 7 446  | 7 623  | 7 623  | 7 647  | 7 646  | 7 785  |
| Escaldes-Engordany  | 11 827 | 12 996 | 15 260 | 15 389 | 15 299 | 15 397 | 15 519 | 15 528 |
| Total               | 44 596 | 54 507 | 63 859 | 65 877 | 65 971 | 65 844 | 66 334 | 67 159 |
| Andorrans           | 12 296 | 15 616 | 19 653 | 21 866 | 22 743 | 23 697 | 24 654 | 25 467 |
| Other nationals     | 32 300 | 38 891 | 44 206 | 44 011 | 43 228 | 42 147 | 41 680 | 41 692 |

Source: Ministry of Finance, Anuari estadístic 2003, 2003.

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Source: Ministry of Finance, Andorra en xifres 2003, 2003.

Andorra is located in the heart of the eastern Pyrenees, on the Mediterranean side between France and Spain (Fig. 1). It covers an area of 468 km², and its average altitude is 1996 metres. Geographically, Andorra is divided into three valleys that are separated by mountain crests of considerable height. Its topography is shaped by the Northern and Eastern Valira Rivers and their confluence as the Great Valira River. Catalan is the only official language; Castilian, French and, to a lesser degree, Portuguese are also spoken. Roman Catholicism is the official religion. Andorra once used French and Spanish currencies, and with the entry of its two neighbouring countries into the

<sup>&</sup>lt;sup>1</sup> The maps presented in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the European Observatory on Health Systems and Policies or its partners concerning the legal status of any country, territory, city or area or of its authorities or concerning the delimitations of its frontiers or boundaries.

European Monetary Union, Andorra adopted the euro on 31 December 1998, and it has been in circulation since 1 January 2002. The national police, under civilian control, are responsible for internal security.

Andorra is one of the oldest countries in Europe. The first appearance of the name of Andorra is found in a grant from the year 843, made by Charles the Bald to his faithful count Sunifred of Urgel. Centuries of conflict and hostility between the bishops of Urgel and the counts of Foix over the sovereignty of Andorra were ended by the signature of two successive agreements called *pariatges*. The first pariatge was signed in 1278 and the second was signed 10 years later, in 1288. The pariatges established the basic geographic and political form of the co-principality of Andorra that has endured until contemporary times. The agreements are fundamental documents in the history of Andorra because they established the joint sovereignty of the bishop of Urgel and the count of Foix, established a system of taxes, including the *quèstia*, and organized the administration of justice. These institutions are still an integral part of Andorran society.

Since the end of the 13th century, however, notable economic, political and social changes have led to the progressive modernization of Andorra's administrative institutions. For example, a decree modifying the institutions of Andorra was promulgated by the co-princes on 15 January 1981, establishing the Executive Council (*Consell Executiu*), the central government of Andorra. This reform initiative culminated on 14 March 1993, when a constitution was approved by popular referendum. The Constitution sought to separate the government's legislative, judicial and executive bodies and established the country as a parliamentary co-principality. The Constitution retains two co-princes as heads of state. The co-princes are the Bishop of Urgel and the President of the French Republic, each represented in Andorra by a single delegate. The Constitution stipulates that their authority is identical and is to be exercised individually. The co-princes also serve an important symbolic role, as they represent Andorra's independence and permanence, which helps to maintain stable political and economic relations with the neighbouring countries.

The Andorran parliament is known as the General Council (*Consell General*), and through the exercise of its legislative authority, it controls the economic and political activities of the government. It is composed of 28 councillors, half of whom are elected by the individual parishes and half by national vote. Andorran citizens (a minority of the population) who are 18 years and older are allowed to vote. In 1970, women were granted the right to vote. The elected councillors serve a four-year term and appoint, from among themselves, the General Syndic that is the parliament's directing body. Once the General Council has passed a law, the co-princes are informed in order that they may approve



and promulgate it within 8 to 15 days. Then the law is published in the Official Gazette of the Principality of Andorra (*Butlletí Oficial del Principat d'Andorra*) and becomes public record.

The executive branch of the government is led by the Head of Government (*Cap de Govern*), who is elected by the General Council and approved by the co-princes. The Head of Government appoints ministers, upholds the national and international policies of the state administration and exercises regulatory powers.

The communes (*comuns*) are governmental bodies that represent and administer Andorra's seven parishes. They are public corporations with legal status and the authority to issue local regulations in the form of ordinances and decrees. They also pass and enact the budget for each  $com\acute{u}$  (the singular form of comuns). Their governing officials are elected by Andorran national citizens for a term of four years.

Independent judges, acting in the name of the Andorran citizens, administer the justice system. The judicial branch includes the Tribunal of Judges, the Tribunal of the Courts, the Supreme Court of Justice of Andorra and the Fiscal Ministry. Two other legal institutions are the Supreme Council of Justice and the Constitutional Tribunal. The Supreme Council of Justice is the highest judicial body, and it has administrative authority over the rest of the judicial system. It is responsible for the supervision of the justice system and the appointment of judges. It is composed of five members: its President is named by the President of the General Council, one member is appointed by each co-prince, one by the Head of Government and one by the body of judges. All members of the judiciary are appointed for six-year terms. The Constitutional Tribunal is the highest interpreter of the Constitution, and its sentences are binding for public authorities and individuals alike. It comprises four judges: one direct appointment by each co-prince and two by the General Council.

After the approval of its constitution, Andorra joined the United Nations (28 July 1993), the Council of Europe (10 November 1994) and the World Health Organization (WHO, 15 January 1997). Andorra is also a member of the following international organizations: the United Nations Educational, Scientific and Cultural Organization (UNESCO), the World Intellectual Property Organization, the World Customs Organization, the World Tourist Organization, the Organization for Security and Co-operation in Europe (OSCE), the International Criminal Police Organization (Interpol), the International Epizootic Office, the International Telecommunication Union, the International Olympic Committee, the Customs Cooperation Council, the United Nations Economic Commission for Europe, the International Civil Aviation Organization, the International Red Cross and Red Crescent Movement, and the International

Federation of Red Cross and Red Crescent Societies. Andorra is not, however, a member of the European Union (EU).

#### Socioeconomic context

With a per capita gross domestic product (GDP) estimated at €23 566 in 2002, living standards are above the average for EU countries (Table 2). Tourism, mainly winter sports, is the mainstay of Andorra's tiny, prosperous economy. In 2002, 11.5 million people visited Andorra (of whom 29.4% stayed at least one night), attracted by Andorra's lack of a sales tax and its summer and winter resorts.

Table 2. Macroeconomic indicators, 2002

| GDP                  | 1 582 700 000 |
|----------------------|---------------|
| GDP per capita       | 23 566        |
| Imports <sup>a</sup> | 1 269 205 380 |
| Exports <sup>a</sup> | 66 912 420    |

Sources: Crèdit Andorrà, Andorrà 2002, 2003; <sup>a</sup> Ministry of Finance, Anuari estadístic 2003, 2003.

*Note:* GDP: gross domestic product. No data from the Ministry of Finance were available yet for 2002 when this document was finalized. For 2001, the Ministry of Finance data show a GDP of 167 million euros above the 2001 figure calculated by Crèdit Andorrà (see Table 8 and the accompanying note).

Andorra has achieved considerable prosperity since the Second World War through the growth of trade and the tourist industry. Initially, trade was the main economic activity, especially during the period of the Spanish Civil War (1936–1939) and the Second World War (1939–1945). Tourism based on leisure activities such as shopping and skiing developed in the 1950s and 1960s. These two sources of tourism were equally important throughout the 1970s, but trade-based tourism began to decline in 1986 when Spain joined the European Community, while the importance of skiing and other outdoor tourism increased. An isolated and mountainous country, of which only 4% is cultivable, Andorra has never had a strong agricultural sector, and therefore, most edible goods are imported. The main livestock activity is cattle raising, and tobacco is the country's primary crop, though of declining importance since 1997.

With the creation of the EU's internal market (see below), Andorra lost its duty-free attraction for Europeans and suffered from an economic recession in the early 1990s. Since then, Andorra has been trying to diversify its economy.





The fact that there is no value-added tax (VAT) makes this country an attractive destination for the purchase of luxury products (jewellery, leather goods, clothing and perfume), a situation promoted by retailers, the Chamber of Commerce and the Industry and Services Association of Andorra.

Andorra is a member of the EU Customs Union and is treated as an EU member in the trade of (non-tariff) manufactured goods, but as a non-EU member in the trade of agricultural products. The EU Customs Union Agreement was signed on 28 June 1990 and came into effect on 1 July 1991 for an indefinite period of time. Andorra requested permission to assume all of the prerogatives quoted in the agreement's Article 8, which concerns the TEC (Exterior Common Tariff). The request led to a review of the agreement in the course of 1995. As a result, the European Council made a Declaration of Intention on 30 October 1995 to cooperate with Andorra on educational and environmental issues. On 1 July 1996, the European Council extended this principle of cooperation to the practice of free trade.

Banking is the most important industry in the financial sector, with seven banks making a substantial contribution to the national economy. In 1989, a law was passed to set up the Andorran National Institute of Finance (INAF). INAF is a public self-governing body that exists as its own legal entity. INAF is responsible for, among other activities, the financing of the public sector and the supervision of the financial system. The Ministry of Finance works closely with INAF to integrate the management of public funds into centralized banking operations, to guarantee deposits and securities in accordance with legislative and judicial prescriptions and to promote useful financial measures like those encouraging saving. Furthermore, the system is regulated by the following laws: the Law Regulating the Financial System (1993), the Law Regulating the Coefficient of Obligatory Investments (1994), the Law Protecting Bank Secrecy and Prevention of Money Laundering or Criminal Activities, (1995), and the Law of Solvency and Liquidity Criteria for Financial Entities (1996). The above-mentioned laws are intended to diminish Andorra's international reputation as a fiscal paradise.

In 2002, Andorra had a labour force of 37 515 salaried employees, of whom 0.4% were employed in the primary sector (agriculture and resource extraction), 13.2% in industry, 16.6% in construction and 61.6% in the tertiary (service) sector. Between 1992 and 2002, the tertiary sector was the fastest growing part of the economy in terms of number of salaried workers, with tourism increasing the most, at an average of 8.0% per year. The Andorran labour market also attracts both temporary and seasonal cross-border workers from Portugal and Spain, among other countries. Although the Constitution states that foreign legal residents enjoy the same rights and freedoms as citizens, the laws do not always acknowledge it. While recent legislation has improved the quality of life



for immigrant workers, many still hold "temporary work authorizations". This type of permission is valid as long as the worker keeps the job for which the permit was granted. Therefore, when job contracts expire, temporary workers must leave the country. The government will only issue work permits to workers who can demonstrate that they have a permanent address and enjoy minimally satisfactory living conditions.

#### Demography and health status

The annual collection of Andorran population data, carried out by the police, began in 1947. Since 1977, the government has published annual demographic statistics, including distribution by parish, age, sex, nationality, marriages, births, and deaths by age. Since 1989, a more comprehensive census has been carried out, but data are still relatively scarce.

In 2002, 37.9% of the population was Andorran, which means the majority of the population consisted of other nationalities. Spanish nationals are the largest group of foreign residents, and in the same year they accounted for 38.8% of the population. Other sizable foreign groups were Portuguese (10.0%) and French (6.5%). The presence of foreign workers has brought the average age of the population down, mainly due to the fact that many foreign workers return home as they age or lose employment. This fact also is a complicating factor for obtaining accurate statistics (e.g. life expectancy).

According to 2002 data, the sex ratio was 1.08:1 (male:female), with 13.3% of the total population aged 65 years and over (males 4441, females 4463), and 15.1% aged 0–14 years (males 5246, females 4920). During the same period, the annual population growth rate was calculated to be 1.24%. The birth rate (11.2 births/1000 population) remained higher than the death rate (3.2 deaths/1000 population). In 2001 (the year of the latest available WHO *World health report* estimates), average life expectancy was 79.6 years (males 76.2 years, females 82.9 years). Data from the Ministry of Health and Welfare show much higher life expectancies for the same year: 98.7 years for women and 89.4 years for men. The overall fertility rate was 1.36 live births per woman (Table 3).







Table 3. Health indicators for Andorra, 1995–2002

|   | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|------|------|------|------|------|------|------|------|
| Population aged 65 and over (% of total) <sup>a</sup>   | 10.8 | 11.2 | 11.5 | 11.8 | 12.1 | 12.5 | 13.0 | 13.3 |
| Age dependency ratio (population younger than 15 and older than 64 as a % of population 15–64 years old) <sup>a</sup> | 36.0 | 36.4 | 36.7 | 36.9 | 37.8 | 38.6 | 39.2 | 39.7 |
| Live births per 1000 population <sup>a</sup>  | 10.3 | 9.6  | 10.6 | 11.7 | 12.8 | 11.5 | 11.4 | 11.5 |
| Deaths per 1000 population <sup>a</sup>   | 3.4  | 3.1  | 3.0  | 3.6  | 3.1  | 3.9  | 3.6  | 3.2  |
| Estimated life expectancy at birth, in years  | -    | -    | -    | -    | 78.8 | 79.5 | 79.6 | 80.3 |
| Estimated life expectancy at birth, in years (females)  | -    | _    | -    | _    | 82.2 | 82.9 | 82.9 | 83.7 |
| Estimated life expectancy at birth, in years (males)  | _    | _    | -    | _    | 75.4 | 76.1 | 76.2 | 76.8 |
| Fertility rate (live births per woman)  | 1.1  | 1.0  | 1.3  | 1.4  | 1.2  | 1.3  | 1.4  | 1.3  |

Sources: <sup>a</sup> Ministry of Finance, Anuari estadístic 2003, 2003; WHO, World health report 2001, 2001; WHO, World health report 2002, 2002; for 2002 life expectancy and fertility rate data: WHO, World health report 2003, 2003; for fertility rates (1995–2002): WHO Regional Office for Europe, European health for all database, 2003; for live births: Ministry of Health and Welfare, Registre de mortalitat i natalitat, 2003.

Infant mortality data are depicted in Table 4.

Table 4. Infant mortality rate, 1991–2002

|  | 1991 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|--|------|------|------|------|------|------|------|------|------|
| Deaths of infants (< 1 year old)           | 2    |      |      |      | 4    |      |      | 1    | 0    |
| Live births Infant mortality per 1000 live | 652  | 660  | 620  | 691  | 773  |      | 759  | 753  | 772  |
| births                                     | 3.1  | 0.0  | 1.6  | 0.0  | 5.2  | 1.2  | 4.0  | 1.3  | 0.0  |

Source: Ministry of Health and Welfare, Registre de mortalitat i natalitat, 2003.

In 1999, tumours, cardiovascular and respiratory diseases were the most common causes of mortality, respectively representing 30.3%, 25.3% and 8.0% of the total deaths. External factors are the primary cause of death for males 15–44 years old and for females 15–34 years old. Car accidents due to alcohol consumption decreased from 79 in 1995 to 68 in 1997, and the total number of deaths caused by traffic accidents decreased from 10 to 3. More than half of women interviewed stated that they never drink alcohol, while that percentage was 22% for men. Tobacco consumption is slightly higher, with approximately 36% of those surveyed claiming to be daily smokers (43.7% males, 28.0% females). The highest percentage of smokers is in the 30–44 age group.





Data provided by the tax authority, the police department and the Ministry of Health and Welfare has indicated an increase in the consumption of drugs. A National Plan for Drugs (*Pla Nacional Contra les Drogodependències*, or PNCD) focusing on prevention (and mainly targeting youth) is currently being developed further by the Ministry of Health and Welfare to reduce the negative health effects of tobacco, alcohol and other drug addictions.

Self-perception of health status was recorded in three national surveys carried out in 1991, 1997 and 2002. The sample size was 700 persons in 1991 and 1000 persons in 1997. In 1997, 82.7% of the males interviewed and 79.4% of the females defined their general health status as good or excellent (Fig. 2). These proportions were similar to the results from the 1991 survey.

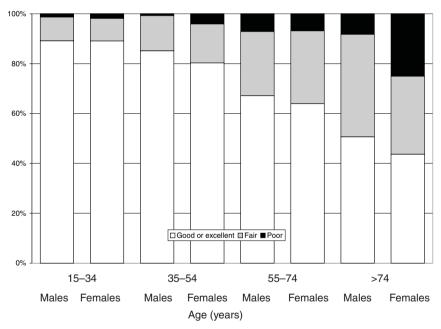


Fig. 2. Self-perceived health status, 1997

Source: Ministry of Health and Welfare, Enquesta nacional de salut d'Andorra: 1997, 1999.

Approximately 60% of males and 79% of females stated that they suffered from at least one chronic condition. Obesity problems were more frequent among men than among women; 58% of women were within the normal weight range, while that was true for only 46% of men.







#### Historical background

The Andorran health care system is based on a social insurance model. Health care rights are recognized by Article 30 of the Constitution. ("The right to health protection and to receive services to look after personal needs shall be respected. With that intent the State shall guarantee a system of Social Security.") Moreover, Article 39.3 recognizes the prerogative to pursue legal remedies when these rights have not been respected. Health care services are provided and financed both by the private and public sectors. About 92% (2002) of the total resident population is covered by the Andorran Office of the Social Security (*Caixa Andorrana de Seguretat Social, or CASS*). All residents are in principle entitled to health care services at the government's expense if they are unable to pay.

Before the social health insurance system went into effect in 1968, primary care doctors were contracted by the communes to deliver basic services during set hours each day. To guarantee accessibility outside these hours, patients paid small regular fees (known as *igualas* or *conductes*) to their physicians, who adjusted it according to estimated income. In most cases, these fees took the form of monthly or annual informal insurance; in some cases, however, patients chose not to insure, but to pay fees for services directly to physicians. As in nearby Spain, this system persisted as an informal scheme in rural areas after the establishment of formal social health insurance. Prior to that, specialists were only available for wealthier people who were able to travel to Barcelona (Spain) or Toulouse (France).

The origins of the current Andorran health care system officially date to 24 September 1918, when an agreement was signed to establish parish health boards (*les juntes parroquials de sanitat*) in response to the devastating consequences of the transnational influenza epidemic. Prior to 1918, communes were solely responsible for contracting physicians and for enacting the few existing laws related to health care issues. Approximately 12 years later, these parish health boards became permanent bodies under the Health Care Administration Ordinance of 9 May 1931. In 1935, in accordance with the Health Act (*Reglament de sanitat*), a national committee was organized to work with these boards. In 1960, the Department of Public Health and Hygiene (*Direcció de Sanitat i Higiene*) and the Council of Public Health and Hygiene (*Consell de Sanitat i Higiene*) were established. Both bodies functioned until April 1989, when the General Health Law (*Llei General de Sanitat*) was enacted, leading to the 1993 creation of the Ministry of Health, since March 1997 the Ministry of Health and Welfare (*Ministeri de Salut i Benestar*).







In 1966, CASS was created by decree to administer the Andorran social health insurance system, which went into effect in April 1968. On 5 March 1964, eight physicians decided to create a medical association, the Andorran College of Doctors (*Col·legi de Metges d'Andorra*). Its founding act and regulations were approved by the General Council almost 4 years later (30 December 1967). Following its creation, health care was governed by agreement between the medical association and CASS. Since 1942, a single, privately owned health facility with 19 beds had provided Andorra with all its medical, surgical and maternal care. In 1966, the decision was made to build a new clinic that would be public. The result was the 50-bed *Clínica Verge de Meritxell*, which officially opened in 1971. In 1974, CASS bought a 52-bed private clinic that was under construction, the *Clínica de Santa Coloma*, and it opened its doors in 1977. The administration of the two clinics was placed under the purview of a newly created health care institution: Andorran Hospital Centre (*Centre Hospitalari Andorrà*, or CHA), which also started functioning in 1977.

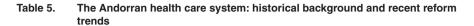
In 1985, the government drafted a plan to restructure the organization and governance of the health care system. As a result, in 1986 the Andorran National Health Service (*Servei Andorrà d'Atenció Sanitària*, or SAAS) was established, a semipublic body responsible for all publicly financed health care services. In order to coordinate the services offered by the two existing clinics and to save the cost of their duplicated services, the central government and CASS merged them in 1986. In 1988, the first nursing school was established under the aegis of SAAS; between 1996 and 2002 it was financially dependent on the Ministry of Health and Welfare, and in 2002 it became dependent on the *Universitat d'Andorra* (University of Andorra), which had been created by law in 1997. In 1997, CHA, initially owned by CASS, was bought by the government. In 2000, the 1986 Hospital Act was revised, and after it was revoked by the Supreme Court of Justice, yet another version was approved in 2001.

Table 5 below summarizes the main events in the history of the Andorran public health care system. The last section of this HiT gives more information on the content and politics of Andorran health care reforms since the 1980s.









| 1918 | An agreement was signed to establish several parish health boards ( <i>Les Juntes parroquials de sanitat</i> ) to combat the international influenza epidemic.   |
|------|--|
| 1931 | The ad hoc parish health boards legally established as permanent bodies.   |
| 1935 | Health Act ( <i>Reglament de sanitat</i> ) approved, and a national committee established to collaborate with the parish boards.   |
| 1942 | Joequim Tries and Antoni Vilanova began running Andorra's first private health care clinic.  |
| 1960 | The Department of Public Health and Hygiene ( <i>Direcció de Sanitat i Higiene</i> ) and the Council of Public Heath and Hygiene ( <i>Consell de Sanitat i Higiene</i> ) created.  |
| 1964 | Andorran College of Doctors (Col·legi de Metges d'Andorra) created.  |
| 1966 | A decree established the Andorran Office of the Social Security (CASS) to administrate a social health insurance system, beginning in 1968.  |
| 1971 | A new private facility created with the name Clínica Verge de Meritxell.   |
| 1977 | The first public clinic, financed by CASS, opened its doors.   |
| 1986 | Andorran National Health Service (SAAS) created as a semipublic body responsible for all publicly financed health care services.  Agreement between the central government and CASS to merge the two existing clinics. First Hospital Act (Reglament general de constitució, estructura i funcionament del Centre Hospitalari Andorrà) approved. |
| 1988 | First nursing school created by SAAS.  |
| 1989 | General Health Law (Llei General de Sanitat) approved.   |
| 1993 | Ministry of Health created (after March 1997, the Ministry of Health and Welfare). Constitution approved, recognising "the right to health protection and to receive services to look after personal needs".   |
| 1995 | The government opened up the management of SAAS to public bidding.   |
| 1997 | CHA brought under government ownership.  |
| 2000 | First important reform of the Hospital Act launched, approved on 4 January 2000, but revoked by the Supreme Court of Justice.  |
| 2001 | Amended Hospital Act approved as a compromise regulation in January 2001.  |



# Organizational structure of the health care system

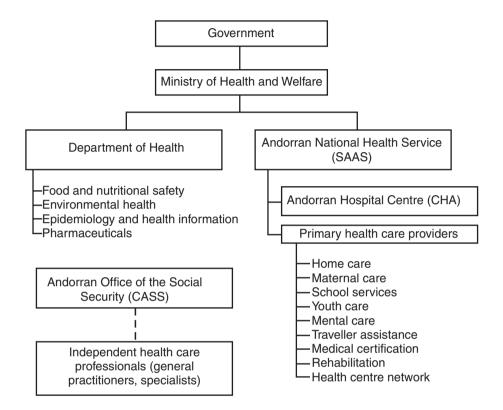
he General Health Law (*Llei General de Sanitat*) enacted on 20 March 1989 defined the current functions of the different actors in the Andorran health care system. The primary state institutions that govern health care are the General Council (the parliament), the Ministry of Health and Welfare (*Ministeri de Salut i Benestar*), the Andorran Office of the Social Security (*Caixa Andorrana de Seguretat Social*, or CASS) and the Andorran National Health Service (*Servei Andorrà d'Atenció Sanitària*, or SAAS) (Fig. 3). The central government and the parliament are responsible for health care policy-making. CASS is responsible for collecting the funds to pay for health care services, and it also controls the fees charged by participating physicians. In 2002, 160 health care professionals signed the yearly agreement. Furthermore, CASS pays pensions and compensates employees during illness and medical treatment that impedes work attendance. SAAS is responsible for the integrated management of all publicly financed health care. Fig. 3 illustrates the organizational and governance structure of Andorran health care.

#### The General Council

The General Council is responsible for health care legislation. It enacts laws to protect the rights of citizens and residents, to guarantee equal access to social services, and to regulate pharmaceutical products and health care professionals, providers and services. Most pieces of legislation directly related to health care issues have been collected in two books. The first was published by the Department of Labour and Social Welfare (Conselleria de Treball i Benestar Social) in 1989 and entitled Compendium of health legislation (Recull de legislació sanitària). The second was published by CASS at the end of 1996 with the title Andorran social security regulations (Reglaments del règim andorrà de seguretat social).

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Fig. 3. Organizational chart of the Andorran health care system



#### The central government

The Ministry of Health and Welfare, created in 1993 as the Ministry of Health, is responsible for regulating and planning health care provision, supervising SAAS, and undertaking quality and financial control of the health care system. The new name reflects the fact that, since 1997, the Ministry has also been responsible for a number of welfare issues not described here. Its specific health-related responsibilities include:

- regulating and developing the medical profession;
- regulating private medical practice;
- regulating health promotion and prevention, primary health care, inpatient
  and outpatient care, rehabilitation inside and outside the hospital, incentive
  schemes and service coordination;
- coordinating public and private health care activities according to basic principles of the medical profession;

- capacity planning in the primary care, hospital and pharmaceutical sectors;
- approving health plans and monitoring their implementation; and
- supervising health safety and hygiene in the workplace.
   Other government entities with health-related responsibilities:
- The Department of Education (health and nutrition in schools and nurses' training);
- The Department of the Environment (air and water quality and noise pollution);
- The Department of Finance (budget preparation and control of all pharmaceutical products entering Andorra);
- The Home Department (safety in public places and health care in prisons);
- The Department of Foreign Affairs (international public health issues);
- The Department of Public Works (the building and maintenance of health facilities);
- The Department of Agriculture (health and hygiene in slaughterhouses);
- The Department of Industry (radiological safety control);
- The Department of Trade (health and sanitation in commercial establishments such as hotels and restaurants); and
- the communes (the quality of water supplies and the maintenance of health centres in each parish).

The Andorran Office of the Social Security (CASS)

CASS was established in 1966 as an autonomous body supervised by the state, and existed as such until the middle of the 1990s when its status was changed to quasi-public. The central government nominates its director and four of its eight board members, but provides no funds. CASS is in charge of collecting premiums from the insured, paying health care providers and reimbursing patients for direct payments to providers. The Andorran social health insurance system provides services grouped around two primary needs:

- 1. illness (coverage of health care expenses, compensation for sick leave, disability compensation and allowances paid to family members in case of death); and
- 2. old age (coverage for retirees, widows and orphans).

Expenses are financed by contributions from the insured and their employers. Administrative, building and financial management are areas that are handled independently, each with its own budget.





CASS also has influence over the services provided and the manner in which they are delivered. CASS issues the Technical regulations (Reglament tècnic) and the Application regulations no. 20 (*Reglament d'aplicació* no. 20), which regulate health care benefits and include a catalogue of services and the agreements with different health care professions (physicians, nurses, dentists and physiotherapists, though not psychologists). These conventions are agreed to by the CASS board and the health care professionals without intervention from the government or parliament. CASS also signs agreements directly with the Andorran Hospital Centre (CHA) and private and public hospitals in France and Spain.

#### The Andorran National Health Service (SAAS)

On 23 December 1986, a law was passed to create the Andorran National Health Service, SAAS. This law stated that SAAS would be an autonomous public institution responsible for the administration and management of all public resources devoted to health care. The main goals of SAAS are:

- to promote more efficient use of public and private resources devoted to health maintenance;
- to provide individual and collective health care services to residents and transients;
- to organize preventive, curative and rehabilitative services;
- to integrate all public health care resources in one single administrative and functional organism; and
- to ensure health care quality and control expenses.

The SAAS offices are located in CHA to facilitate SAAS supervision of specialized care, as well as coordination among care levels. The General Director of the hospital is also Director of SAAS. Since 2001, besides a SAAS Director there is a different Hospital Medical Director and a Primary Care Director. The Minister of Health and Welfare chairs the governing body (*Consell d'Administració*) of SAAS.

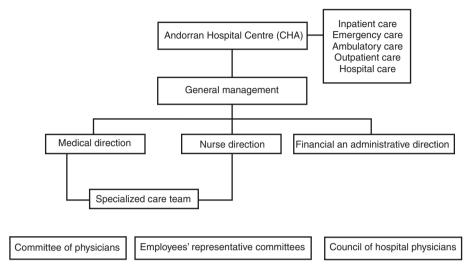
The hospital (CHA)

The Andorran Hospital Centre (*Centre Hospitalari Andorrà* or CHA, also known as *Hospital Nostra Senyora de Meritxell*) is a critical actor in the country's health care. It is the only hospital in the country, and although brought under government ownership in 1997, both public hospital doctors and private physicians use its facilities, which also house the SAAS central administrative offices and the mental health care services.





Fig. 4. Organizational chart of the Andorran Hospital Centre (CHA)



Source: adapted from Andorran National Health Service (SAAS), Memòria 1999, 2000.

#### Private sector

The primary providers of health care services in Andorra are independent office-based general practitioners and specialists who attend both public and privately financed patients. The clinics, equipment and personnel are financed by the physicians themselves. In addition, a large part of the population receives medical care outside Andorra – a 1997 survey suggests that about 25% of Andorrans' medical visits were to other countries. There has been a steady decline in the share of publicly financed health care provided abroad during recent decades as a result of the expansion of Andorran health care providers.

#### Public participation and the role of user groups

Public participation in health care decision-making is a logical consequence of Andorra's small size. The public has substantial choice and freedom within the health care system, for example, in the selection of doctors from among domestic and foreign providers. Andorrans can exercise their rights by acting individually and through the citizens' associations.





#### Voluntary sector

Since 1994, the hospital has an association called Volunteers of the Hospital Nostra Senyora de Meritxell (*Voluntaris de l'Hospital Nostra Senyora de Meritxell*) that offers services to a wide range of patients. In 2002 there were 21 volunteers working for this association. Voluntary associations are also found in the nursing homes.

#### Other actors

Traditionally, the communes managed certain aspects of health care, such as the free provision of physicians and other public health resources to the parishes. Now, as a result of legislative reforms, the communes' jurisdictions are more limited. Although the communes do not have any authority over health care delivery, they do play a fundamental role in some public health issues, such as the provision of potable water, and hygiene in developed areas. In addition, they are responsible for administrative authorization of new pharmacies, health centres and private practices, but they need government authorization for sanitation issues. Additionally, they oversee and implement the opening of all health centres. Some communes voluntarily intervene in health care maintenance.

The Tribunal of Judges, the Tribunal of the Courts and the Supreme Court of Justice of Andorra also have jurisdictional authority regarding health-related issues.

## Planning, regulation and management

#### **Planning**

The Ministry of Health and Welfare is in charge of health care planning at the national level. After the enactment of the 1989 General Health Law, the first National Health Plan was approved for a period of two years. It aimed to promote health care and health care awareness in different areas – environment, lifestyles, immunization, car and work accidents, maternal and child health and primary care – though without specifying what means could be used to achieve its goals.





#### Decentralization of the health care system

In spite of Andorra's small size, it has historically had a rather decentralized health care system. This tradition was partly a response to the difficulty of communication among the various valleys and parishes of this mountainous country. During recent decades, however, the country has been moving in the direction of a more centralized system as a result of improved communications and the perceived need to develop a more comprehensive, coordinated approach to health care. Until the 1980s, central regulation was practically non-existent, and both the communes and the physicians acted as independent health care providers. From the 1980s on, and especially since the creation of the Ministry of Health in 1993, health care regulations have been systematized and more services have been placed under the administrative responsibility of SAAS. There has been some debate about increasing the degree of decentralization in the Andorran health care system. The increasing importance of health centres could be seen as a manifestation of this.





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# Health care financing and expenditure

#### Main system of financing and coverage

In Andorra, public health care coverage is directly linked to social health insurance contributions, and therefore, to employment. Accordingly, people who are not formally salaried are only entitled to use the marginalized public welfare system. Employees who receive less than the minimum wage do pay social security contributions; nevertheless, they are not entitled to social security benefits. According to estimates from the Andorran Office of the Social Security (CASS), about 8% (2002) of the population are not enrolled in the main public health care system.

There are three public entities that finance health care: the government, the communes and CASS. Private financing also plays an important role. Table 6 summarizes financial contributions by source from 1990 to 2001. Clearly, CASS constitutes the main source of funding, with a contribution of 50.4% in 1990 and 59.3% in 2001, followed by private contributions (43.4%/28.1%). The importance of public expenditure increased steadily between 1992, when it consisted of just 59.1% of total health care expenditure, to 1998, when public expenditure amounted to 78.6% of total health care expenditure. This trend was chiefly caused by a large increase in government tax expenditure. According to the data gathered for the World health report 2001, tax financing represented some 33% of total public expenditure in 1998 (higher than usual because of the acquisition of the Andorran Hospital Centre (CHA)), consistent with the official statistics available. Between 1998 and 2001, public expenditure steadily declined again.

Other than these general statistics, the latest available detailed data on public expenditure are from a 1997 study by the Ministry of Health and Welfare.

Table 6. Health care expenditure by source of funds, 1990-2001

|   | 1990 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
|---|------|------|------|------|------|------|------|------|
| Total health care expenditure (THE, in millions of €) | 40.3 | 63.5 | 69.3 | 77.2 | 98.2 | 79.1 | 86.3 | 96.0 |
| Public expenditure (% of THE)                         | 56.6 | 68.5 | 70.4 | 71.5 | 78.6 | 71.6 | 70.1 | 68.8 |
| Social security (CASS) (% of THE)                     | 50.4 | 57.8 | 59.3 | 56.2 | 47.1 | 62.6 | 61.8 | 59.3 |
| Tax (% of THE)  | 6.2  | 10.7 | 11.1 | 15.3 | 31.5 | 9.0  | 8.3  | 9.5  |
| Private expenditure (% of THE)                        | 43.4 | 29.9 | 29.6 | 28.5 | 21.4 | 28.4 | 29.9 | 28.1 |
| Household contributions (% of THE)                    | 42.2 | 28.3 | 28.1 | 27.2 | 20.4 | 27.2 | 28.7 | 26.0 |
| Other (% of THE)                                      | 1.2  | 1.6  | 1.5  | 1.3  | 1.0  | 1.2  | 1.2  | 2.1  |

Source: Ministry of Finance, Gasto nacional en salud - Andorra, 2003.

CASS: Andorran Office of the Social Security; THE: total health care expenditure.

#### The role of CASS

Since its establishment in 1968, CASS has consisted of two branches: the *branca malaltia* (illness branch) and the *branca vellesa* (elderly branch). With funds provided for the illness branch, CASS insures about 92% (2002) of the Andorran population. Contributions are obligatory for each worker. The insured population has the right to the services of any health professional, public or private. CASS reimburses a portion of the fees paid by the insured for medical consultations, medical examinations and pharmaceutical expenses, including those provided abroad. CASS also reimburses the Andorran National Health Service (*Servei Andorrà d'Atenció Sanitària*, or SAAS) for treatments performed in the hospital.

As mentioned, approximately 92% of the population was covered by social health insurance provided by CASS in 2002. Affiliation is compulsory for salaried workers and voluntary for the unemployed and self-employed. Contribution rates are determined by income, not by risk. Spouses who are not working and children (provided that they attend school, among other things) are included without surcharge. Contributions for health insurance are collected together with pension contributions. In 2002, employees contributed 3% of their salaries to health insurance and employers 7% (6% for the general sickness scheme and 1% for the complementary sickness scheme). For those insured voluntarily, the sickness contribution is fixed annually in relation to salary. A family assistant (a spouse or child working in a family business) may also be affiliated, paying a contribution less than what a voluntary participant pays.







#### The role of the central government

The government is responsible for ensuring health protection, promoting health awareness, conducting prevention campaigns, providing limited coverage to the uninsured population through the public welfare system and developing collaboration schemes among the various providers, funding sources, etc. The government also formulates policies for health care management that affect the social health insurance system, health care professionals and institutions, and the public.

Government subsidies have financed three major kinds of programmes:

- emergency hospital care for those without social health insurance protection
  or the means to afford it, in accordance with the 1986 Hospital Act
  (Reglament general de constitució, estructura i funcionament del Centre
  Hospitalari Andorrà) a programme financed by a 5% allocation from the
  Hospital Centre of Andorra (CHA) budget;
- 2. promotion of preventive and community services, including the Home Care Programme (Programa d'atencò a domicil, or PAD), health centres and the Mental Health Centre (Servei de Salut Mental), all financed by CASS, as well as the School Health Services Programme (Servei de Salut Escolar), which is financed by the SAAS and sometimes detects health problems; and
- 3. the construction of the new hospital, initially paid by CASS.

With regard to other health issues, such as water treatment and waste disposal, the government collaborates with the communes by providing them with financial support. See *Health care expenditure* below for more detail.

#### Health care benefits and rationing

For its members, CASS covers expenses for general and specialist care (diagnosis, treatment and rehabilitation), medicines, odontostomatology, optical care, orthopaedic care and prostheses. Treatments that are covered are listed in the Nomenclature of medical activities (Nomenclatura dels actes mèdics), which is an annex to Technical regulations and to Application regulations no. 20. The central government pays for mental health care, basic primary nursing care, prevention efforts and health promotion out of taxes. In principle, the government should pay for health care services for uninsured people who cannot pay, so long as the services satisfy some undefined prerequisites. In





practice, however, people without social or voluntary health insurance have to pay directly for services, with the exception of emergency hospital care. It is estimated that 8% (2002) of the population are not covered by CASS, but it is not known what percentage are also poor and cannot afford private care.

CASS coverage applies to care delivered both inside and outside of Andorra. There is free choice of health care providers both in and out of Andorran territory, but reimbursement is lower for providers with no CASS agreement and for ambulatory care. CASS reimburses at a rate of 90% of the established fees (tarifes de responsabilitat) for hospital care, while it reimburses 75% of ambulatory care costs. In the case of workplace accidents, pregnancy and childbirth, reimbursement is 100%. Treatment by Andorran physicians who have no agreement with CASS (as of October 2002 there were four) is reimbursed at one third of the established fees, while their fees are determined by the national medical association, the Andorran College of Doctors. All care provided outside Andorra is reimbursed at 75% of the established fees. A 1997 survey showed that of Andorrans hospitalized that year, 76.8% were hospitalized at CHA, 14.2% in Spain, 7.5% in France and the remaining 1.6% in other countries.

## **Complementary sources of finance**

#### Out-of-pocket payments

Additional sources of health care financing are largely private, mainly through co-payments by CASS members and direct payments by non-CASS members. Normally, co-payments are 25% for ambulatory care and 10% for inpatient services. Co-payments are not applicable in special cases, such as labour accidents and specific agreements for very expensive services. Patients must apply for exemptions to the CASS board, which may agree to provide coverage for up to 100% of the costs. It is difficult to assess the exact amount of private health care expenditure. Consequently, a survey carried out by national health insurance companies has been utilized to estimate that amount. Results of that estimation are summarized in Table 7.

#### Voluntary health insurance

About 25% of the people insured through CASS also have private health insurance, but little is known about these members and their service profiles.

Table 7. Estimated private health care expenditure in thousands of euros, 1992-1996

|  | 1992  | 1993   | 1994   | 1995   | 1996   |
|--|-------|--------|--------|--------|--------|
| Co-payments by CASS members                                      | 4 761 | 5 420  | 5 586  | 6 045  | 6 686  |
| Direct payments and voluntary insurance fees by non-CASS members | 5 129 | 8 101  | 7 984  | 7 578  | 7 739  |
| Total private expenditure  | 9 890 | 13 522 | 13 570 | 13 623 | 14 424 |

Source: Ministry of Health and Welfare, La despesa sanitaria d'Andorra del 1992 al 1997, 1999. CASS: Andorran Office of the Social Security.

#### Health care expenditure

During the last decades, the Andorran health care system has experienced a significant increase in financial, capital and human resources. The increase is related to sociodemographic changes: there are higher health care expectations and needs and consequently, a greater demand for health care services. The Andorran health care expenditure statistics are calculated net of social care costs that are not directly related to health, and net of environmental health and safety expenditures. In 2001, total health care expenditure in Andorra was 96.0 million. This amount is equivalent to 5.9% of the gross domestic product (GDP), which is relatively low compared to other western European countries (WHO data in Fig. 5 suggest otherwise; see below). Expenditure for 1998 was exceptionally high because of the acquisition of CHA using tax revenue.

Main indicators of the changes in health care expenditure during the past decade are shown in Table 8.

Table 8. Health care expenditure in terms of GDP, 1990–2001

|  | 1990  | 1995  | 1996  | 1997  | 1998  | 1999  | 2000  | 2001  |
|--|-------|-------|-------|-------|-------|-------|-------|-------|
| Total health care expenditure (THE, millions of €) | 40.3  | 63.5  | 69.3  | 77.2  | 98.2  | 79.1  | 86.3  | 96.0  |
| GDP (millions of €) <sup>a</sup>                   | 1 045 | 1 138 | 1 230 | 1 351 | 1 265 | 1 350 | 1 557 | 1 640 |
| THE as % of GDP                                    | 3.9   | 5.6   | 5.6   | 5.7   | 7.8   | 5.9   | 5.5   | 5.9   |

Source: Ministry of Finance, Gasto nacional en salud - Andorra, 2003.

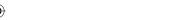
GDP: gross domestic product; THE: total health care expenditure.

Note: a Ministry of Finance estimates differ from estimates by Crèdit Andorrà, which show a GDP of €1 473 million in 2001.

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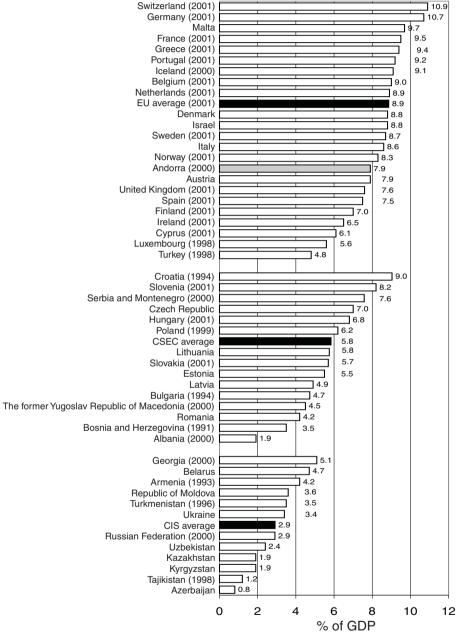
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Fig. 5. Total expenditure on health as a % of GDP in the WHO European Region, 2002 or latest available year (in parentheses)

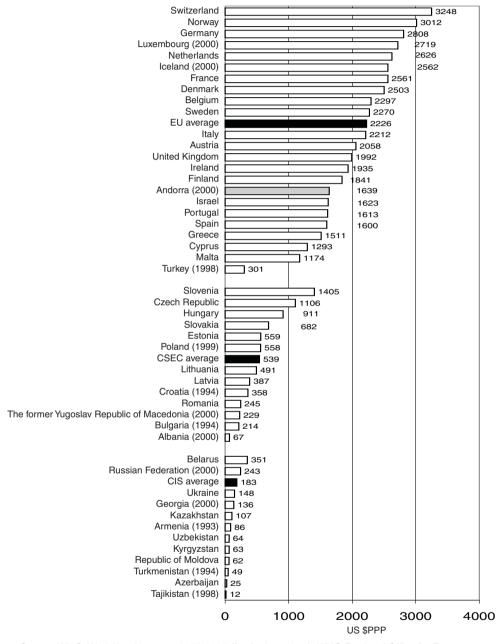


Source: WHO, World health report 2002, 2002 (for Andorra data); WHO Regional Office for Europe health for all database.

Note: CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.



Fig. 6. Health care expenditure in US \$PPP per capita in the WHO European Region, 2001 or latest available year (in parentheses)

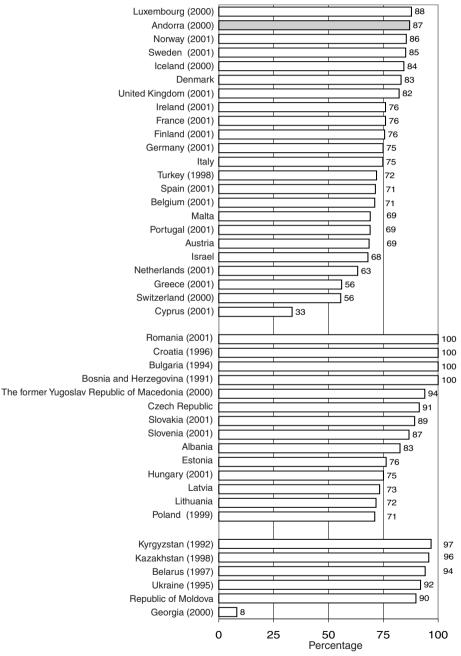


Source: WHO, World health report 2002, 2002 (for Andorra data); WHO Regional Office for Europe health for all database.

Note: CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.



Fig. 7. Health care expenditure from public sources as a percentage of total health care expenditure in countries in the WHO European Region, 2002 or latest available year (in parentheses)



Source: WHO, World health report 2002, 2002 (for Andorra data); WHO Regional Office for Europe health for all database.





Figs. 5 through 7 illustrate Andorra's health care spending with respect to the rest of the WHO European Region. Total health care expenditure per capita is below average for Europe, but the data from the Ministry of Finance's statistical office (*Servei d'Estudis*) in Table 8 give a much lower value. As for the percentage of total expenditure that comes from public sources, the official figure from the Ministry for 2001 was 68.8%, putting Andorra below average for the region. However, the latest WHO data available, from World health report 2002, give an above-average figure of 86.5% for 2000.

#### Health care expenditure financed by CASS

CASS financial contributions seem to have increased at a higher rate than those of the communes and other government agencies in the early 1990s. From a low of 77.0% in 1993, the percentage of the population covered by CASS increased, reaching 92% in 2002, according to CASS data. Table 9 shows health care payments by CASS between 1996 and 2002 and breaks them down by category.

Table 9. Health care expenditure financed by CASS, 1996–2002, in thousand of euros

|   | 1996   | 1997   | 1998   | 1999   | 2000   | 2001   | 2002   |
|---|--------|--------|--------|--------|--------|--------|--------|
| People insured by CASS <sup>a</sup>             | 52 699 | 54 700 | 57 573 | 60 460 | 62 929 | 65 776 | 67 862 |
| Total health care payments                      | 25 775 | 26 280 | 30 074 | 32 576 | 34 708 | 36 766 | 43 261 |
| Medical reimbursements                          | 23 537 | 23 758 | 27 017 | 29 356 | 31 095 | 33 146 | 38 761 |
| Work accident reimbursements                    | 1 097  | 1 299  | 1 643  | 1 608  | 1 844  | 1 776  | 2 215  |
| Maternity reimbursements                        | 686    | 777    | 888    | 966    | 957    | 949    | 1 093  |
| 100% reimbursements <sup>b</sup>                | 455    | 446    | 526    | 646    | 812    | 895    | 1 192  |
| Health care payments per beneficiary (in euros) | 489    | 480    | 522    | 539    | 552    | 559    | 637    |

Sources: CASS, Estats financers de la CASS 1996, 1997; CASS, Estats financers de la CASS 1997, 1998; CASS, Estats financers de la CASS 1998, 1999; CASS, Estats financers de la CASS 1999, 2000; CASS, Estats financers de la CASS 2000, 2001; CASS, Estats financers de la CASS 2001, 2002; CASS, Estats financers de la CASS 2002, 2003. CASS: Andorran Office of the Social Security.

Notes: <sup>a</sup>Includes beneficiaries living abroad. <sup>b</sup>For patients unable to pay the 10 or 25% copayments.

#### Central government health care expenditure

Table 10 shows the trend in central government's financial contribution to the health care sector. From 1992 to 1994, this figure underwent an especially dramatic increase of approximately 50%, from €4.58 million to €6.94 million in today's currency. This sharp increase was mainly due to additional subsidies





allocated by the Ministry of Health to offset the deficit accumulated by SAAS, build the new general and launch a set of new public health programmes. Accordingly, per capita central government expenditure grew from €80.42 in 1992 to €106.05 in 1996.

Table 10. Central government health care, public health and related expenditure in euros, 1992, 1994 and 1996

|  | 1992      | 1994      | 1996      |
|--|-----------|-----------|-----------|
| Health care services                           | 3 994 280 | 5 716 770 | 5 299 830 |
| Health care investments                        | 968 010   | 1 141 590 | 776 920   |
| Amortization                                   | 235 190   | 346 920   | 433 780   |
| Veterinary services                            | 114 200   | 135 380   | 128 750   |
| Water purification                             | 11 030    | 23 360    | 17 380    |
| Other health care expenditure <sup>a</sup>     | 598 770   | 721 600   | 957 910   |
| Total government health expenditure            | 5 921 480 | 8 085 620 | 7 614 570 |
| Total government health expenditure per capita | 80.42     | 107.42    | 106.05    |

*Source*: Ministry of Health and Welfare, *La despesa sanitaria d'Andorra del 1992 al 1997*, 1999. Note: <sup>a</sup> Includes welfare, general interventions, etc.

The government actively finances different parts of the health care system to various degrees. Article 75 of the General Health Law states that the government finances health care awareness activities and the health care system management. Table 11 breaks the total central health expenditure down by field.

Table 11. Central government health care expenditure and investment by field, in thousands of euros, 1995–1996

|                                  | 19    | 995    | 19    | 96     |
|----------------------------------|-------|--------|-------|--------|
|                                  | Value | %      | Value | %      |
| Health care                      | 4 666 | 62.7%  | 4 076 | 59.6%  |
| Environmental health             | 942   | 12.7%  | 881   | 12.9%  |
| Prevention and promotion efforts | 609   | 8.2%   | 614   | 9.0%   |
| Health care management           | 470   | 6.3%   | 538   | 7.9%   |
| Other <sup>a</sup>               | 752   | 10.1%  | 728   | 10.6%  |
| Total                            | 7 439 | 100.0% | 6 838 | 100.0% |

Source: Ministry of Health and Welfare, La despesa sanitaria d'Andorra del 1992 al 1997, 1999. Note: <sup>a</sup> Includes professional training and capital costs.







## Local government expenditure

Health care expenditure by the communes increased between 1992 and 1996, from €4.16 million to €5.52 million in today's currency, an average of 8% per year (Table 12). Their share of total health care expenditure remained constant during this period at about 10%. At the same time, the percentage of commune health care expenditures that was devoted to investment and capital costs almost doubled (Table 12). Of the fields, environmental health was clearly predominant (Table 13). The relatively high capital costs correspond to the expansion of the network of health centres during this time, funded partly out of municipal budgets.

Table 12. Commune health care expenditure by category, in thousands of euros, 1992-1996

|                                   | 1992  | 1993  | 1994  | 1995  | 1996  |
|-----------------------------------|-------|-------|-------|-------|-------|
| Current expenditure               | 3 587 | 3 472 | 3 593 | 4 074 | 4 217 |
| Investment and capital costs      | 570   | 907   | 1 017 | 1 217 | 1 307 |
| Total expenditure                 | 4 157 | 4 378 | 4 609 | 5 290 | 5 524 |
| Per capita expenditure (in euros) | 67.48 | 67.12 | 71.67 | 82.84 | 85.67 |

Source: Ministry of Health and Welfare, La despesa sanitaria d'Andorra del 1992 al 1997, 1999.

Table 13. Commune health care expenditure by field, in thousands of euros, 1992-1996

|                                 | 1992  |        | 19    | 1993   |       | 1994   |       | 1995   |       | 1996   |  |
|---------------------------------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|--|
|                                 | Value | %      |  |
| Environmental health            | 3 554 | 85.5%  | 3 451 | 78.8%  | 3 557 | 77.2%  | 4 035 | 76.3%  | 4 167 | 75.4%  |  |
| Health maintenance              | 15    | 0.4%   | 21    | 0.5%   | 15    | 0.3%   | 17    | 0.3%   | 27    | 0.5%   |  |
| Health promotion and prevention | 18    | 0.4%   | 0     | 0.0%   | 21    | 0.5%   | 22    | 0.4%   | 22    | 0.4%   |  |
| Investment and capital costs    | 570   | 13.7%  | 907   | 20.7%  | 1 017 | 22.1%  | 1 217 | 23.0%  | 1 307 | 23.7%  |  |
| Total expenditure               | 4 157 | 100.0% | 4 378 | 100.0% | 4 609 | 100.0% | 5 290 | 100.0% | 5 524 | 100.0% |  |

Source: Ministry of Health and Welfare, La despesa sanitaria d'Andorra del 1992 al 1997, 1999.







## Private health care expenditure

As discussed earlier in this section, private health care expenditure represented 28.1% of total health care expenditure in 2001 (29.9% in 2000), according to national published time series. However, the World health report 2002 gives a much smaller estimate, with its most recent figure being 13.5% for 2000. These discrepancies may be due to the exclusion by the report estimators of co-payments to the public sector. Direct payments to private providers and voluntary health insurance policies absorbed more than 50% of total private health care expenditure in the 1992–1996 period (see Table 7 above).





# Health care delivery system

he Andorran health care delivery system is among others composed of the state-owned hospital with 189 beds (including 12 psychiatric beds, 6 emergency service beds and 4 incubators), a private geriatric centre (*Centre Geriàtric Sant Vicenç d'Enclar*) with 50 beds, 10 health centres, 54 pharmacies and 203 physicians. Ambulatory care, including primary care and outpatient secondary care, is provided mainly by private office-based physicians inside and outside of Andorra. Most private physicians in Andorra are entitled to attend public and private patients at the public hospital facilities. A 1997 survey suggests that approximately 25% of Andorrans' medical visits take place outside Andorra.

# Primary health care and public health services

## **Primary care**

Private office-based general practitioners (GPs) provide primary care in Andorra. The Andorran College of Doctors plays an important part in the development of primary care.

In addition to the private office-based general practitioners, primary care is also provided by the 10 publicly funded and managed health centres in the seven parishes. Part of the movement to strengthen primary and community care, the health centres are responsible for nursing services, community care, home care, immunization, rehabilitative care and health awareness for groups such as children, mothers, diabetics and patients with hypertension. Each health centre provides first aid, preventive care, antenatal and child care, home care and

family planning and counselling. As an indication of health centre priorities, in 2002, 52.9% of staff hours were devoted to health promotion, prevention and detection of risk factors, while 45.7% concerned treatments and cures.

The health centres are managed by nurses, and besides professional nurses, the staff also includes administrative and other non-professional personnel. The number of nurses varies according to the catchment area. Generally speaking, the attempts made by the central government during the last two decades to promote the integration of private GPs and other private physicians in the health centres failed, although some social workers were employed by the centres. However, in 2002/2003, a few of the centres did employ GPs and were thus converted into primary care centres.

The professional nursing staff working in health centres provides primary care services that complement those provided by private GPs. The nurses also provide a home care service that plays a key role in determining quality of care and, consequently, patient satisfaction. Health centres are open Monday through Friday during standard Andorran working hours, and several of them are also during the weekends and holidays. Patients can access these facilities through a telephone appointment system. Urgent cases do not require an appointment, and it is also possible to request home care visits. In 2002, the 10 health centres were responsible for 85 128 visits, reflecting a decrease of 8.9% from 2001).

According to an agreement between the health centres and the Andorran Office of the Social Security (*Caixa Andorrana de Seguretat Social*, or CASS), patients pay a co-payment for each visit. Services are provided free of charge to people without resources when approved by social services. The health centres also provide some public health programmes funded by the government, such as vaccinations and tuberculosis prevention and treatment (see below).

#### Public health services

Immunization. Since 1988, the Andorran government has published a national immunization calendar, and has provided immunization against various infectious diseases (Table 14). In 1999, the immunization calendar that dated from 1993 was revised following recommendations by WHO; the changes included adding a measles, rubella and mumps vaccine and shifting the hepatitis B immunization from 15 years to birth. In 2000, a new calendar was implemented, which included for the first time immunization measures against meningitis C. Vaccination is available from paediatricians, health centres (with a physician's prescription) and school health services. The Ministry of Health and Welfare is responsible for the national compulsory vaccination programme (Table 14). Immunization is free of charge for all children and is





paid for by the Ministry of Health and Welfare, which buys the vaccines from pharmacies, incurring large costs for the Ministry. Fig. 8 gives an overview of the immunization situation for a variety of diseases in Andorra in 2000–2001. In 2001, 90% of the 1-year-old children were immunized against measles, which is above the western European average (Fig. 8).

Table 14. Recent immunization schedules

| Age       | Beginning<br>5 May 1999             | Beginning<br>20 December 2000   | Beginning<br>19 February 2003     |
|-----------|-------------------------------------|---------------------------------|-----------------------------------|
| 0 months  | НВ                                  | НВ                              | НВ                                |
| 2 months  | DTP + IPV + Hib/HB                  | DTP + IPV + Hib/HB              | DTPa + IPV + Hib +<br>HB/MCC      |
| 3 months  | DTP + IPV + Hib                     | DTP + IPV + Hib                 | None                              |
| 4 months  | DTP + IPV + Hib                     | DTP + IPV + Hib                 | DTPa + IPV + Hib/MCC              |
| 5 months  | None                                | MCC                             | None                              |
| 6 months  | НВ                                  | HB/MCC                          | DTPa + IPV + Hib +<br>HB/MCC      |
| 15 months | DTP + Hib/OPV/MMR                   | DTP + Hib/OPV/MMR               | DTPa + Hib/OPV/MMR                |
| 5 years   | DT/OPV/MMR                          | DT/OPV/MMR                      | DTPa/OPV/MMR                      |
| 11 years  | MMR <sup>a</sup>                    | $MMR^a$                         | $MMR^a$                           |
| 15 years  | Td/OPV<br>HB <sup>b</sup> (3 doses) | Td<br>HB <sup>b</sup> (3 doses) | DTPa<br>HB <sup>b</sup> (3 doses) |

Sources: Government of Andorra, Decrets d'actualització del calendari de vacunacions d'Andorra, 1999, 2000, and 2003.

DT: diphtheria and tetanus vaccine (paediatric); DTP: diphtheria, tetanus and pertussis vaccine; DTPa: diphtheria, tetanus and acellular pertussis vaccine; HB: hepatitis B vaccine; Hib: Haemophilus influenzae type B vaccine; IPV: inactivated poliomyelitis vaccine; MCC: meningococcal group C conjugate vaccine; MMR: measles, mumps and rubella vaccine; OPV: oral poliomyelitis vaccine; Td: tetanus and diphtheria vaccine (adolescent and adult). Notes: <sup>a</sup> to be abolished as soon as the cohort that received its vaccination at 5 years reaches the age of 11 years (2005); <sup>b</sup> to be abolished as soon as the cohort that received its vaccination

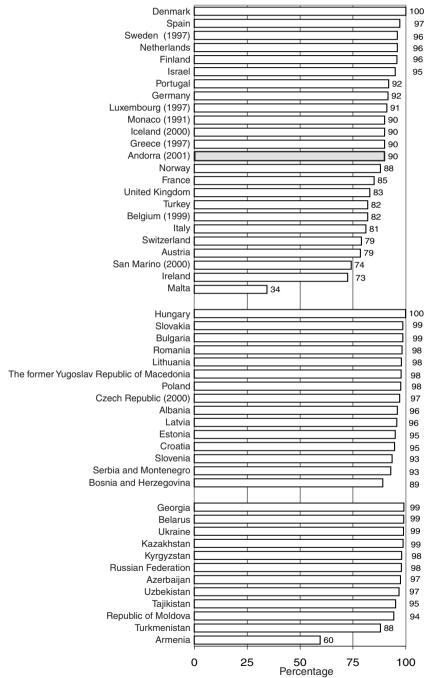
#### Prevention of drug, tobacco and alcohol abuse

A national plan to combat drug, tobacco and alcohol abuse was launched in 1989. It was to be implemented by the Ministry of Health in collaboration with educational, health and judicial committees, as well as church representatives. A study was carried out in 1989 to identify high-risk social groups and formulate an intervention plan for schools, workplaces and health care establishments. The plan emphasized the role of primary health care teams in the prevention and early detection of alcohol problems; the potential role of the social welfare and criminal justice systems in the prevention and management of alcohol problems; and particular alcohol problem areas, such as driving and youth. Later, in 1993, the preparatory study done in drawing up the National Health Plan emphasized other intervention strategies for tobacco and illegal drugs. So far, the only efforts





Fig. 8. Levels of immunization for measles in the WHO European Region, 2002 or latest available year (in parentheses)



Source: Bellamy, The state of the world's children 2003, 2002; WHO Regional Office for Europe health for all database.

that have been made in this area have been those undertaken by some schools, sometimes in cooperation with the Ministry of Health and Welfare.

#### Dental care

In 1993, a survey among students in Andorra aged 6–14 years was carried out in order to compare their dental status with students in Catalonia. The results showed that 35% of the Andorran students had never suffered cavities, while among Catalan students the figure was 42%. From 1991 to 2000, the reported prevalence of caries more than halved, decreasing from 55% to 26% for 5-year-olds, from 68% to 19% for 12-year-olds and from 70% to 28% for 15-year-olds. The reasons for this improvement are not clear.

#### **Tuberculosis prevention programme**

Between 1989 and 1993, 91 new cases of tuberculosis infection were detected (65% male, 35% female). Persons between 20 and 35 years of age had the highest incidence of infection. When cases were broken down by nationality, Spaniards had the highest infection rate, including those who had been residents of Andorra for over five years. As a result of these findings, a tuberculosis prevention programme was initiated by a committee established for this purpose, and the plan was implemented in the early 1990s. In November 1997, Andorra requested assistance from the WHO Regional Office for Europe, and in early 1998, a WHO expert came and helped revise the whole programme. The new tuberculosis prevention plan, jointly financed by CASS (75%) and the Ministry of Health and Welfare (25%), initially targeted new and established immigrants, though now it is aimed mainly at Andorran residents. Pulmonologists, GPs and professional nurses have participated in prevention activities in family and school contexts. As a result of these measures, the incidence of tuberculosis infection decreased.

#### Women and children's health

Health centres are responsible for providing information to address the special health care needs of women and children. The Andorran National Health Service (SAAS) organizes a childbirth preparation course given by midwives. In 2002, 25.9% of pregnant women attended this course. This percentage has been rather stable in recent years.

The state has not yet set up a national mammography programme. However, an increasing proportion of women receive regular mammograms under the advice of their private physicians. The mammography rate is highest among the 45–64 age group, with 53.2% of these women undergoing an annual exam.

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#### Youth services

Through a health centre initiative, certain services are freely and anonymously available to young people. The primary objective is to provide them with information to address their sexual concerns about such topics as birth control and the prevention of sexually transmitted diseases. In the beginning of the 1990s, a programme was launched to prevent undesired pregnancies among young women. In addition, a youth clinic was established in the late 1990s by the Ministry of Health and Welfare, in collaboration with the health centres and the communes, to disseminate sexual information to adolescents.

#### AIDS prevention

Despite a lack of data documenting the incidence of AIDS, Andorran physicians agreed with the Ministry to establish an AIDS prevention programme. Actions included creating an anonymous registry of people infected with HIV, conducting prevention activities in schools and elsewhere, facilitating early diagnosis and access to health facilities, and establishing support groups.

#### Food quality and safety

The Food Safety and Nutrition Unit (Àrea d'Aliments i Nutrició) at the Ministry of Health and Welfare is responsible for the public health area of food quality and safety. Its tasks are the control and surveillance of establishments that produce or prepare food (through inspections and sanitary controls); the maintenance of food quality (by monitoring food-borne diseases and developing relevant regulations, guidelines etc.); and the examination of eating habits and the promotion of healthy lifestyles (with the help of questionnaires and familiarity with international developments in the field).

#### **Drug quality and safety**

The Pharmacy and Health Products and Establishments Unit (Àrea de Farmàcia, Productes i Establiments Sanitaris) at the Ministry of Health and Welfare is responsible for the public health area of drug quality and safety. It develops and implements regulations to ensure the quality, safety, and efficacy of imported drugs and promote rational use of drugs. It licenses pharmacies, importing agents, distributors and manufacturers; conducts inspections; issues safety alerts; and disseminates drug information bulletins.

#### **Environmental health**

Environmental health activities are also part of the overall health programme. The central government enacts laws and may also act in an executive capacity,





seeing to specific administrative actions, sanctions, permits for inspection and quality controls. The communes and the central government share responsibility for regulating water, waste disposal, and land, noise and air pollution. The Constitution is the main piece of legislation that deals with these concerns. In particular, Article 31 grants the central government the authority to manage the rational use of all natural resources. In accordance with a long-established system called the "single list", the Constitution recognizes particular powers that belong to the communes. The communes have the primary responsibility for street cleaning, rubbish collection and litter removal, as well as general environmental and ecological protection. Article 31 stipulates that the communes' performance of their responsibilities must not adversely affect the effectiveness of the central government's management of natural resources. As the highest authority in environmental protection, the central government must oversee all kinds of public health concerns, such as:

- wastewater and surface water
- air and noise pollution
- solid waste disposal
- potable water supplies
- housing quality and safety
- food quality and safety (as described above)
- workplace hygiene
- school hygiene
- traffic accidents
- · ski accidents.

The first assessment of the state of environmental health in Andorra was completed in 1997. Data collection was difficult due to the lack of information exchanged among the several actors involved. The usefulness of data is also questionable given the size of the population, which is too small to be able to relate, in statistically significant terms, environmental situations to causes of sickness or death. The 1997 survey also provided information about public opinion towards the country's environmental health. A summary of the results in Table 15 reveals that Andorran citizens were generally satisfied with environmental health standards. The exception was a concern with improving waste disposal and the recycling of organic and non-organic materials.

After this preliminary investigation it was suggested that, to improve data collection in the future, a national information system be developed and a national environment and health information committee be established.



Table 15. Public opinion of environmental health standards (%), 1997

|                             | Good/very good | Fair | Poor/very poor | Don't know |
|-----------------------------|----------------|------|----------------|------------|
| Water quality               | 67.8           | 21.7 | 10.5           | 0.0        |
| Air quality                 | 73.8           | 19.7 | 6.1            | 0.4        |
| Sorted waste disposal       | 49.4           | 11.9 | 36.6           | 2.1        |
| Recycling of waste material | 24.8           | 15.8 | 42.5           | 16.9       |
| Public parks and gardens    | 62.8           | 22.3 | 13.1           | 1.8        |

Source: Ministry of Health and Welfare, Enquesta nacional de salut d'Andorra: 1997, 1999.

In November 1997, a few months after Andorra became a WHO Member State, a joint seminar with the Regional Office took place. Among the more visible outcomes of the increased cooperation with WHO in the years that followed were a national environment and health plan; new rules for drinking-water quality norms and assurance; improved food management practices; and a national waste-management plan (including water sanitation and solid waste provisions). A WHO expert also helped to update and review tuberculosis programmes and procedures and to develop a better approach (as discussed above).



Secondary outpatient care is mainly provided by private doctors in their own offices. Outpatient services include a wide range of specialist offerings including a dialysis centre, orthopaedic and physical rehabilitation services, diagnostic services and emergency outpatient care. Most physical rehabilitation services are provided by physiotherapists working on their own premises. The hospital rehabilitation service collaborates with individual physiotherapists in the treatment of people who have suffered trauma or neurological problems. More recently, there has been a trend for public health centres to integrate some rehabilitation services into their task profiles.

Hospital care in Andorra is provided by the one hospital, the Andorran Hospital Centre (CHA), which is publicly owned and managed by SAAS. With 189 beds in 2002 (including 12 psychiatric beds, 6 emergency service beds and 4 incubators), it provides Andorra with most of its basic hospital care and specialized care. Besides CHA, there is a smaller (50-bed) private geriatric centre, Centre Geriàtric Sant Vicenç d'Enclar. The Andorran health care system







also relies on hospitals outside the country for complicated or uncommon surgical procedures. Hospital admission is generally reserved for acute care, when home care is not effective or when surgical treatment is necessary. Two types of doctors work in the hospital: salaried doctors directly employed by the hospital (53 doctors working the equivalent of 52.6 forty-hour weeks in 2002), and private doctors. The private doctors have the right to conduct surgical, diagnostic and other treatment services on hospital premises; in exchange, they are required to be on call for emergencies a certain number of hours each week. In 2002, there were 160 private doctors and other medical professionals who held a contract with CASS, including 69 GPs and dentists, who do not usually practise on the hospital premises (see *Human resources* below).

Table 16 shows the main hospital indicators for the period 1996–2001. Hospital capacity remained relatively constant during this time. In 2001, the

Table 16. Inpatient utilization and performance in Andorra, 1996–2001

| <u>'</u>                          |      |      |      |      |      |      |
|-----------------------------------|------|------|------|------|------|------|
|                                   | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 |
| Hospitals                         | 1    | 1    | 1    | 1    | 1    | 1    |
| Hospital beds                     | 154  | 145  | 153  | 161  | 161  | 168  |
| Hospital beds per 1000 population | 2.4  | 2.2  | 2.3  | 2.4  | 2.4  | 2.5  |
| Admissions per 100 population     | 9.5  | 8.8  | 9.2  | 9.2  | 9.1  | 9.3  |
| Average length of stay in days    | 6.6  | 6.8  | 6.8  | 6.7  | 7.0  | 6.6  |
| Bed occupancy rate                | 78%  | 73%  | 74%  | 70%  | 71%  | 68%  |

Sources: Andorran National Health Service (SAAS), Memòria 1999, 2000; SAAS, Memòria 2001, 2002.

number of hospital beds per 1000 people was 2.5, the occupancy rate 68% and the average length of stay 6.6 days. The admission rate per 100 people was 9.3. As compared with other countries of Europe, Andorra has very low hospital capacity and admission rates (Table 17, Fig. 9). The lowness of these figures is related to Andorrans' use of hospitals in France and Spain. Consistent with these data, and in contrast with the prevailing trend in most of Europe, hospital beds increased during the last decade, although the ratio per population remained rather constant (Fig. 9, Table 16). Its hospital occupancy rates and length of stay place Andorra in an average position within western Europe (Table 17).

Diagnostic services available at the hospital include X-rays, computerised axial tomography (CAT) scans, ultrasound, magnetic resonance imaging (MRI)





Table 17. Inpatient utilization and performance in acute hospitals in the WHO European Region, 2002 or latest available year

| Country                                   | Hospital bed<br>per 1000<br>population | s Admissions<br>per 100<br>population | Average<br>length of stay<br>in days | Occupancy rate (%)        |
|---|--|---------------------------------------|--------------------------------------|---------------------------|
| Western Europe                            |  |                                       | -                                    |                           |
| Andorra                                   | 2.8                                    | 10.1                                  | 6.7 <sup>c</sup>                     | 70.0 <sup>c</sup>         |
| Austria                                   | 6.1                                    | 28.6                                  | 6.0                                  | 76.4                      |
| Belgium                                   | 5.8 <sup>a</sup>                       | 16.9°                                 | $8.0^{c}$                            | $79.9^{d}$                |
| Cyprus                                    | 4.1 <sup>b</sup>                       | 8.1 <sup>a</sup>                      | 5.5 <sup>a</sup>                     | 80.1 <sup>a</sup>         |
| Denmark                                   | $3.4^{a}$                              | 17.8ª                                 | $3.8^{a}$                            | 83.5 <sup>b</sup>         |
| EU average                                | 4.1 <sup>a</sup>                       | 18.1°                                 | 7.1 <sup>c</sup>                     | $77.9^{d}$                |
| Finland                                   | 2.3                                    | 19.9                                  | 4.4                                  | $74.0^{g}$                |
| France                                    | $4.0^{a}$                              | 20.4°                                 | $5.5^{c}$                            | 77.4°                     |
| Germany                                   | $6.3^{a}$                              | 20.5 <sup>a</sup>                     | $9.3^{a}$                            | 80.1 <sup>a</sup>         |
| Greece                                    | 3.9 <sup>b</sup>                       | 15.2 <sup>d</sup>                     | _                                    | _                         |
| Iceland                                   | $3.7^{f}$                              | 15.3 <sup>d</sup>                     | 5.7 <sup>d</sup>                     | _                         |
| Ireland                                   | 3.0                                    | 14.1                                  | 6.5                                  | 84.4                      |
| Israel                                    | 2.2                                    | 17.6                                  | 4.1                                  | 94.0                      |
| Italy                                     | 3.9 <sup>a</sup>                       | 15.6ª                                 | 6.9ª                                 | 76.0 <sup>a</sup>         |
| Luxembourg                                | 5.6                                    | 18.4 <sup>h</sup>                     | 7.7 <sup>d</sup>                     | 74.3 <sup>h</sup>         |
| Malta                                     | 3.5                                    | 11.0                                  | 4.3                                  | 83.0                      |
| Netherlands                               | 3.1ª                                   | 8.8                                   | 7.4 <sup>a</sup>                     | 58.4ª                     |
| Norway                                    | 3.1ª                                   | 16.0ª                                 | 5.8 <sup>a</sup>                     | 87.2ª                     |
| Portugal                                  | 3.3 <sup>d</sup>                       | 11.9 <sup>d</sup>                     | $7.3^{d}$                            | 75.5 <sup>d</sup>         |
| Spain                                     | 3.0€                                   | 11.5 <sup>d</sup>                     | 7.5 <sup>d</sup>                     | 76.1 <sup>d</sup>         |
| Sweden                                    | 2.3                                    | 15.1                                  | 6.4                                  | 77.5 <sup>f</sup>         |
| Switzerland                               | 4.0 <sup>a</sup>                       | 16.3 <sup>d</sup>                     | 9.2ª                                 | 84.6ª                     |
| Turkey                                    | 2.1                                    | 7.7                                   | 5.4                                  | 53.7                      |
| United Kingdom CSEC                       | 2.4 <sup>d</sup>                       | 21.4 <sup>f</sup>                     | 5.0 <sup>f</sup>                     | 80.8 <sup>d</sup>         |
| Albania                                   | 2.8                                    | _                                     | _                                    | _                         |
| Bosnia and Herzegovina                    | 3.3 <sup>d</sup>                       | 7.2 <sup>d</sup>                      | $9.8^{d}$                            | 62.6°                     |
| Bulgaria                                  | -                                      | 14.8 <sup>f</sup>                     | 10.7 <sup>f</sup>                    | 64.1 <sup>f</sup>         |
| Croatia                                   | 3.7                                    | 13.8                                  | 8.7                                  | 89.6                      |
| CSEC average                              | 5.2                                    | 17.6                                  | 8.1                                  | 72.5                      |
| Czech Republic                            | 6.3                                    | 19.7                                  | 8.5                                  | 72.1                      |
| Estonia                                   | 4.5                                    | 17.2                                  | 6.9                                  | 64.6                      |
| Hungary                                   | 5.9                                    | 22.9                                  | 6.9                                  | 77.8                      |
| Latvia                                    | 5.5                                    | 18.0                                  | 0.9                                  | -                         |
| Lithuania                                 | 6.0                                    | 21.7                                  | 8.2                                  | 73.8                      |
| Slovakia                                  | 6.7                                    | 18.0                                  | 8.8                                  | 66.2                      |
| Slovenia                                  | 4.1                                    | 15.7                                  | 6.6                                  | 69.0                      |
| The former Yugoslav Republic of Macedonia |  | 8.2 <sup>a</sup>                      | 8.0 <sup>a</sup>                     | 53.7 <sup>a</sup>         |
| CIS                                       | J. <del>4</del>                        | 0.2                                   | 0.0                                  | 55.7                      |
| Armenia                                   | 3.8                                    | 5.9                                   | 8.9                                  | 31.6ª                     |
| Armenia<br>Azerbaijan                     | 3.8<br>7.7                             | 5.9<br>4.7                            | 6.9<br>15.3                          | 25.6                      |
| Belarus                                   | 7.7<br>-                               | 4.7                                   | 15.3                                 | 25.6<br>88.7 <sup>h</sup> |
| CIS average                               | 8.2                                    | _<br>19.7                             | _<br>12.7                            | 85.4                      |
| •   | 8.2<br>3.6                             | 4.4                                   | 7.4                                  | 82.0 <sup>a</sup>         |
| Georgia<br>Kazakhstan                     | 5.1                                    | 4.4<br>15.5                           | 7.4<br>10.9                          | 82.0°<br>98.5             |
|   |  |                                       |                                      |                           |
| Kyrgyzstan                                | 4.3                                    | 12.2                                  | 10.3                                 | 86.8                      |
| Republic of Moldova                       | 4.7                                    | 13.1<br>22.2                          | 9.7                                  | 75.1                      |
| Russian Federation                        | 9.5                                    |                                       | 13.5                                 | 86.1                      |
| Tajikistan                                | 5.7                                    | 9.1                                   | 12.0                                 | 55.1                      |
| Turkmenistan                              | 6.0°                                   | 12.4                                  | 11.10                                | 72.1 <sup>e</sup>         |
| Ukraine                                   | 7.2                                    | 19.2                                  | 12.3                                 | 89.2 <sup>d</sup>         |
| Uzbekistan                                | _                                      | _                                     | _                                    | 84.5                      |

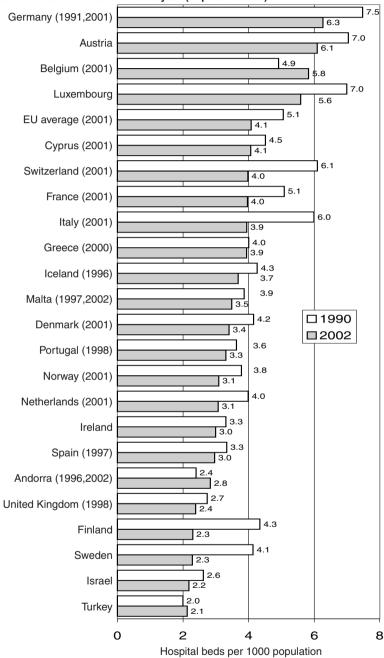
Source: WHO Regional Office for Europe health for all database.

Notes: <sup>a</sup> 2001, <sup>b</sup> 2000, <sup>c</sup> 1999, <sup>d</sup> 1998, <sup>e</sup> 1997, <sup>f</sup> 1996, <sup>g</sup> 1995, <sup>h</sup> 1994.

CIS: Commonwealth of Independent States; CSEC: Central and south eastern countries.



Fig. 9. Hospital beds in acute hospitals per 1000 population in western Europe, 1990 and 2002 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database. EU: European Union.

and mammography. From 1998 to 2002, the amount of these services delivered at the hospital increased significantly, by an average of 46.4% (see Table 18). Mammograms and MRI scanning increased the most, by 71.8% and 70.8% respectively. On average, blood tests by the hospital were performed at a rate of 0.88 per capita per year.

Table 18. Diagnostic services performed at the hospital, by category, 1998 and 2002

|                    | 1998   |            | 2       | 002        | % change |  |
|--------------------|--------|------------|---------|------------|----------|--|
|                    | Total  | Per capita | Total   | Per capita | % change |  |
| Blood tests        | 36 374 | 0.55       | 58 886  | 0.88       | +61.9%   |  |
| X-rays             | 30 894 | 0.47       | 40 243  | 0.60       | +30.3%   |  |
| Ultrasound scans   | 3 612  | 0.05       | 4 514   | 0.07       | +25.0%   |  |
| MRI scans          | 2 378  | 0.04       | 4 061   | 0.06       | +70.8%   |  |
| Mammograms         | 447    | 0.01       | 768     | 0.01       | +71.8%   |  |
| Other <sup>a</sup> | 868    | 0.01       | 737     | 0.01       | -15.1%   |  |
| Total              | 74 573 | 1.13       | 109 209 | 1.63       | +46.4%   |  |

Source: Andorran National Health Service (SAAS), Memòria 1999, 2000; SAAS, Memòria 2002, 2003

MRI: magnetic resonance imaging.

Note: a Excludes anatomic pathological examinations.

In 2002, a total of 35 731 patients were seen in the Emergency Department (ED) of the hospital. Traumatological patients merit specific mention, given the importance of skiing to the country's economy; in 2002, 5.4% of the emergency unit visits were due to skiing accidents. Since April 2001, ED admissions have been registered according to the International statistical classification of diseases (ICD); see Table 19 for 2002 statistics. Most visits to the ED were due to injury and poisoning. During 2001, SAAS also began to provide emergency care based on a new five-level triage system, *Model Andorrà de Triatge* (Andorran Triage Model), included in a new "continuous quality improvement" (CQI) model for the ED.

To facilitate urgent care, an emergency phone service has been created. Reached by calling a three-digit central telephone number (116), it is available 24 hours a day and is connected with an emergency ambulance service. It is staffed by a permanent salaried staff of hospital employees. In addition, private specialists are on call in case their services are needed.

In 1995, the hospital initiated a study on hospital-acquired infections that has been performed on an annual basis ever since. It shows that the nosocomial infection rate has varied between 1.0% (1995 and 2002) and 1.4% (1996).



Health Care Systems in Transition

Table 19. Emergency unit visits by ICD-9-CM diagnosis category, 2002

|  | Adults (%) | Children (<14 years) |
|--|------------|----------------------|
| Injury and poisoning   | 39.4%      | 24.1%                |
| Diseases of the respiratory system                           | 6.3%       | 31.9%                |
| Symptoms, signs and ill-defined conditions                   | 12.3%      | 9.7%                 |
| Diseases of the musculoskeletal system and connective tissue | 9.7%       | 1.9%                 |
| Diseases of the nervous system and sense organs              | 5.4%       | 8.2%                 |
| Infectious and parasitic diseases                            | 3.2%       | 12.6%                |
| Diseases of the digestive system                             | 5.6%       | 2.9%                 |
| Other  | 18.1%      | 8.8%                 |
| Total  | 100.0%     | 100.0%               |

Source: Gómez Jiménez et al., Gestión clinica de un servicio de urgencias hospitalario, 2004. ICD-9-CM: International classification of diseases, ninth revision, clinical modification.

The infection rate for surgical interventions has not shown a clear trend either, varying between 0.2% (1999) and 0.8% (1998 and 2001).

## Social and community care

Social care is carried out by social workers in each parish. Most of them work for the Welfare Department. This Department of the Ministry of Health and Welfare also has programmes focusing on children at risk, adoption, the elderly and women, in most cases linked with primary care and with the prevention and promotion unit of the Department of Health. Existing community care is provided by the health centres. There are also two nursing homes for elderly people, one public and one private, each with 50 beds. The private geriatric centre (Centre Geriàtric Sant Vicenç d'Enclar) also has 50 beds, and is integrated in the system as a long-term medical care facility.

In 1996, a public psychiatric care centre (Serveis de Salut Mental) opened on the premises of CHA, dedicated primarily to providing community mental health care. It employs psychologists, psychiatrists and nurses and has 12 beds (2002). The number of admissions increased greatly after its inauguration, reaching 184 in 2002.

Andorra

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## **Human resources and training**

Determining the number of physicians providing care to Andorran residents is problematic because physicians from abroad work for irregular periods in Andorra, and because many residents are treated in France, Spain and Portugal. Fig. 10 offers an approximation of the situation in Andorra relative to other countries in the WHO European Region.

Table 20 shows the number of health care professionals who signed the 2002 agreement with CASS, categorized by occupation. This is not the total number of physicians in Andorra, as some professionals did not sign the agreement, and there are also several foreign professionals attending the Andorran population. Including all physicians (doctors at the ski resorts, in administration, etc.), the Ministry of Health and Welfare concludes that the total current number of physicians in Andorra is 203, corresponding to 164 full-time equivalents (2002).

Table 20. Health care professionals who signed the 2002 agreement with CASS

|                       | Number | %     |
|-----------------------|--------|-------|
| Dentists              | 38     | 23.8  |
| General practitioners | 31     | 19.4  |
| Physiotherapists      | 21     | 13.1  |
| Speech therapists     | 11     | 6.9   |
| Anaesthetists         | 6      | 3.8   |
| Paediatricians        | 6      | 3.8   |
| Orthopaedists         | 6      | 3.8   |
| Gynaecologists        | 4      | 2.5   |
| Ophthalmologists      | 4      | 2.5   |
| Traumatologists       | 4      | 2.5   |
| Cardiologists         | 3      | 1.9   |
| Psychiatrists         | 3      | 1.9   |
| Surgeons              | 3      | 1.9   |
| Others                | 20     | 12.5  |
| Total                 | 160    | 100.0 |

Source: CASS, Llista de professionals de la salut que han signat conveni amb la CASS per al 2002, 2002.

CASS: Andorran Office of the Social Security.

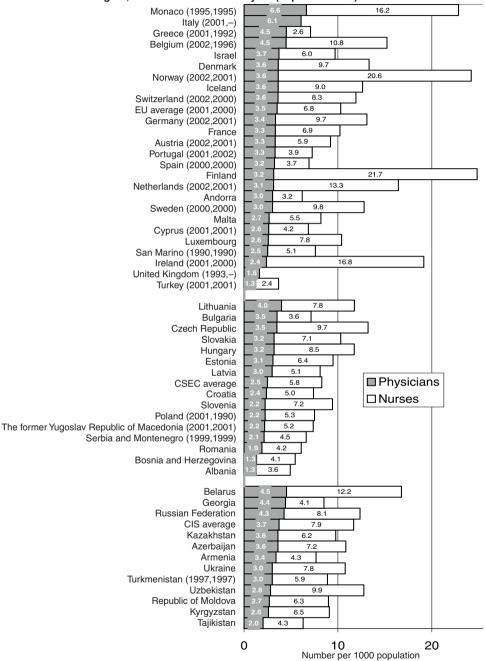
Table 21 details the health care personnel employed by SAAS in 2001 and 2002. During this period, the number of total personnel increased. Most remarkable are the proportional increases in directors/assistant directors and in faculty members, especially specialists.





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Fig. 10. Number of physicians and nurses per 1000 population in the WHO European Region, 2002 or latest available year (in parentheses)



Source: WHO Regional Office for Europe health for all database.

Note: CIS: Commonwealth of independent states; CSEC: Central and south-eastern European countries; EU: European Union.





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Table 21. SAAS personnel, 31 December 2001 and 31 December 2002

|   | 200                 | 01     | 200                 | )2     | Change       |
|---|---------------------|--------|---------------------|--------|--------------|
|   | Number <sup>a</sup> | %      | Number <sup>a</sup> | %      | (% increase) |
| Directors and assistant directors               | 5.25                | 1.03   | 7.00                | 1.26   | 33.33        |
| Faculty members                                 | 58.78               | 11.48  | 76.73               | 13.79  | 30.54        |
| Coordinators and heads                          | 13.40               | 2.62   | 17.00               | 3.06   | 26.87        |
| Physicians                                      | 40.00               | 7.82   | 52.60               | 9.45   | 31.50        |
| Pharmacists                                     | 2.25                | 0.44   | 2.75                | 0.49   | 22.22        |
| Psychologists                                   | 3.13                | 0.61   | 4.38                | 0.79   | 39.94        |
| Nurses, technicians and attending staff members | 323.25              | 63.15  | 343.03              | 61.64  | 6.12         |
| Nurses  | 160.50              | 31.36  | 173.00              | 31.09  | 7.79         |
| Nursing assistants                              | 90.75               | 17.73  | 90.28               | 16.22  | -0.52        |
| Physiotherapists                                | 7.00                | 1.37   | 8.00                | 1.44   | 14.29        |
| Dieticians                                      | 1.00                | 0.20   | 1.00                | 0.18   | 0.00         |
| Others  | 64.00               | 12.50  | 70.75               | 12.72  | 10.55        |
| Administration and non-attending staff members  | 124.58              | 24.34  | 129.72              | 23.31  | 4.13         |
| Total   | 511.86              | 100.00 | 556.48              | 100.00 | 8.72         |

Source: Andorran National Health Service (SAAS), Memòria 2002, 2003.

Note: <sup>a</sup> Full-time (40-hour workweek) equivalents.

In 2000, an incentive system for the payment of hospital staff was introduced. It was intended to increase staff motivation and to upgrade working conditions for publicly employed personnel, so as to decrease disparities with privately employed staff. A survey of work attendance of nurses and auxiliary staff in the public hospital has been conducted since 1993. In 1999, the daily percentage of staff absent due to maternity leave and sickness was 4% for both nursing staff and auxiliary staff.

In accordance with European Union legislation, there is a university-level nursing school that awards internationally recognized degrees. On a regular basis, SAAS sponsors further training opportunities for its nursing staff in health fields such as paediatrics, social care and geriatrics that are taught at the nursing school and other institutions in Andorra and abroad. The public hospital offers internships for university nursing students, as well as orientation internships for young Andorran students interested in health care professions. The nursing school also offers a training course for volunteers at the public hospital. Health centre and home care staff also receive training on a regular basis. During 1999, 5 secretaries, 21 nurses and 3 social workers attended 18 workshops and other postgraduate courses for a total of 243 days. In 1997, a virtual study centre was also created as part of the *Universitat d'Andorra* (University of Andorra)

that currently offers, among other things, a degree programme in educational psychology.

In the past, medical education was not available in Andorra, so doctors and other health professionals received training abroad, normally in France or Spain. But this situation changed during the 1990s. As part of the quality improvement programme in 1999, 17 training professionals were appointed to teach courses, in accordance with the European Model of Total Quality, to 369 health workers (nurses, nurse assistants, administrative staff members, physicians and social workers). The rest of the CHA staff, about 60 employees, received the same training in 2000. The European Directive 93/16/EEC, which requires primary care doctors to undertake a minimum level of postgraduate training as a prerequisite for practising medicine, has applied to all EU countries since 1 January 1995, but it is not in force in Andorra. It should be noted that to study medicine, students have to go to France, Spain and other countries, as there is no medical faculty in Andorra.

## **Pharmaceuticals**

The Ministry of Health and Welfare is responsible for pharmaceutical legislation, the provision of national pharmaceutical needs and the regulation of the pharmaceutical sector. The Pharmacy and Health Products and Establishments Unit (Àrea de Farmàcia, Productes i Establiments Sanitaris) at the ministry develops and implements regulations to ensure the quality, safety, and efficacy of imported drugs and to promote rational use of drugs. It licenses pharmacies, importing agents, distributors and manufacturers; conducts inspections; issues safety alerts; and disseminates drug information bulletins. The Ministry of Health and Welfare is in the process of establishing a drug registry that would enumerate all drugs, both foreign and national, that are authorized for sale in Andorra. There is also a plan to set up an approved drug list that would include a selection of pharmaceutical products to be financed publicly according to medical evidence and other criteria such as safety, efficacy and cost–effectiveness. Andorra is also participating in a WHO international project to standardize the quality certification of pharmaceutical products sold internationally.

Every pharmacy is managed by a pharmacist who is licensed by the government. Licences must be issued by the Ministry of Health and Welfare. There are 54 pharmacies throughout Andorra, or an average of about 1 per 1200 inhabitants, one of the highest ratios in Europe. In 1988, the rate was much lower, with 1 pharmacy per 2072 inhabitants. Andorran pharmacies can sell approved foreign drugs, but they are obliged to trade only with those vendors that have





agreements with the Ministry of Health and Welfare. For each pharmacy, the ministry maintains a "quality record" based on standards of pharmaceutical good practice. CHA runs its own pharmacy, which is responsible for the provision of drugs within the hospital. The hospital pharmaceutical service is also responsible for drug selection; maintaining a pharmaceutical guide in collaboration with the pharmaceutical commission; the storage of drugs necessary for the efficient functioning of the hospital; and the preparation of drugs according to patient needs. Opening hours of the pharmacies vary, while the hospital pharmacy is open 24 hours per day.

Drug consumption in 2001 was equivalent to €104.0 per capita, after having increased steadily during the previous decade (Table 22). Throughout the decade, the government's share was rather constant at about 75%, corresponding to the rate of reimbursement by CASS.

Table 22. Annual pharmaceutical expenditure, in euros, 1990-2001

|                        | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000  | 2001  |
|------------------------|------|------|------|------|------|------|------|------|------|------|-------|-------|
| Per capita expenditure | 38.5 | 40.6 | 42.2 | 44.5 | 46.6 | 53.2 | 65.1 | 72.0 | 80.5 | 87.9 | 100.2 | 104.0 |

Source: Ministry of Finance, Gasto nacional en salud - Andorra, 2003.

At CHA, the services that require the highest investment in terms of drug consumption are the day hospital, followed by hospitalization. Day hospital care also showed the largest increase between 1998 and 2000 (Table 23).

Table 23. Hospital drug consumption in euros, 1998 and 2000

|                                      |                     | 1998       | -                      |                     | 2000       |                        |
|--------------------------------------|---------------------|------------|------------------------|---------------------|------------|------------------------|
| Area                                 | Drug<br>consumption | % of total | Unit cost              | Drug<br>consumption | % of total | Unit cost              |
| Hospitalization                      | 329 480             | 38.2%      | 8.01 per stay          | 300 400             | 30.2%      | 7.18 per stay          |
| Emergency unit                       | 21 107              | 2.4%       | 0.89 per visit         | 23 550              | 2.4%       | 0.86 per visit         |
| Surgical unit                        | 63 361              | 7.3%       | 20.18 per intervention | 60 640              | 6.1%       | 18.73 per intervention |
| Obstetrics                           | 8 121               | 0.9%       | 11.03 per<br>delivery  | 5 500               | 0.6%       | 7.81 per<br>delivery   |
| Radiology                            | 24 151              | 2.8%       | -                      | 24 270              | 2.4%       | _                      |
| Day hospital <sup>a</sup>            | 359 064             | 41.6%      | -                      | 520 000             | 52.3%      | _                      |
| Other hospital services <sup>b</sup> | 7 436               | 0.9%       | -                      | 10 160              | 1.0%       | _                      |
| Outpatient service                   | 50 146              | 5.8%       | _                      | 50 150              | 5.0%       | _                      |
| Total                                | 862 866             | 100.0%     |                        | 994 670             | 100.0%     |                        |

Sources: Andorran National Health Service (SAAS), Memòria 1999, 2000; SAAS, Memòria 2001. 2002.

Note: a includes ambulatory hospital drug expenditure; b includes central services.





## Financial resource allocation

## Third party budget setting and resource allocation

s detailed in the section on health care financing and expenditure, the budgets of the Andorran National Health Service (*Servei Andorrà d'Atenció Sanitària*, or SAAS) and the Andorran Office of the Social Security (*Caixa Andorrana de Seguretat Social*, or CASS) are subject to approval by the central government and the parliament. Other major sources of health care financing are out-of-pocket contributions, private insurance companies and the communes.

## Payment of hospital care

In Andorra, most health care services are provided by private physicians, who receive some of their income from patients in addition to their reimbursement from CASS. As mentioned, these physicians invest their own resources in the infrastructure of their private offices.

The public Andorran hospital is owned by SAAS. The construction of both the current public facility, the Andorran Hospital Centre (CHA), and the old one, *Clínica Verge de Meritxell*, were initially financed by CASS and later absorbed by the government, which also pays for the investment and amortization of most hospital equipment. In 1997, CHA ownership passed to the Ministry of Health and Welfare, which gave SAAS the responsibility for it for a period of 10 years, beginning 1 January 1999. Salaried physicians and auxiliary staff members who work in the hospital are paid by SAAS. SAAS is reimbursed in turn by CASS for the services performed by these salaried employees, according to officially established fees (*tarifes de responsabilitat*). Thus the budget of SAAS

depends partly on the activities of salaried physicians. In practice, however, CASS reimbursement does not deviate from the salary expenses. SAAS also receives funds from the Ministry to finance primary and community care as well as hospital assets. These funds are approved on an annual basis by the central government and the parliament.

## Payment of physicians

Physicians employed by the hospital receive a fixed salary, while private physicians under contract with CASS are paid on a fee-for-service basis. CASS reimburses 90% of the private doctors' fees for inpatient care and 75% for ambulatory care. In the case of workplace accidents, antenatal care, childbirth and special requests approved by the CASS board of directors, reimbursement is 100%. The Andorran College of Doctors, the country's medical association, determines annually the fees to be charged for private practice. Patients who receive care from Andorran private physicians without a CASS contract are reimbursed for one third of the established fees. Physicians working outside of Andorra without a CASS agreement are reimbursed for 75% of the established fees. The list of physicians who have signed the agreement with CASS is continually updated to reflect the addition of new physicians and the removal of those who cease to practise in Andorra or to hold a contract with CASS.

The vast majority of private physicians in Andorra sign a yearly fee agreement with CASS. Nomenclature of medical activities dictates the fees these physicians are allowed to charge. There are five categories of fees: medical treatment, dental treatment, health-related transport, auxiliary medical treatment and clinical geriatrics. Each group is divided into various types of treatments, and each group is assigned a letter code. Nomenclature of medical activities specifies the treatments and assigns a number of units to each; for example, Vitamin B12 analysis is assigned B140. The fee for each treatment is determined by multiplying the value of the letter code by the number of units assigned to the treatment. For example, in 2002, the value of a treatment unit for group B was €0.28, making the fee for Vitamin B12 analysis €39.20. When more than one physician is involved, CASS reimburses each additional physician half of a consultation fee. Nomenclature of medical activities is updated regularly, and new methods of treatment are occasionally added, but the letter and number codes for existing treatments remain the same as those fixed in 1966 when CASS was created. The monetary values attached to the letter codes are negotiated each January and come into effect on 1 February of each year.







Medical personnel contracted by SAAS are not civil servants. The conditions of their work contracts are determined by national labour regulations and internal SAAS labour regulations. Both salaried and non-salaried physicians working in the hospital are required by SAAS to be on emergency call in scheduled

SAAS labour regulations. Both salaried and non-salaried physicians working in the hospital are required by SAAS to be on emergency call in scheduled shifts. Frequency depends on need and is determined by the SAAS board. Oncall physicians receive an average of about €60 per shift as a compensation from SAAS. Physicians whose specialization rarely requires emergency aid (e.g. dermatologists) and physicians fifty years and older are exempted from this requirement. Some salaried physicians work for the hospital full time (40 hours a week, excluding on-call service), some work part time and some are contracted only for on-call services. The Hospital Act approved in 2000 tried to clarify the rights and obligations of private health care providers in the hospital. But the 2000 Act was ruled illegal, and the reformed Hospital Act passed in 2001 eliminated most of the measures that the private physicians had resisted (see *Content of reforms and legislation* below).



## Health care reforms

his section describes the principal reforms in Andorra's health care sector undertaken between 1986 and 2000. These reforms are in some ways similar to a set of reforms initiated in Spain with its 1986 General Health Act. While there were parallels between the two countries' reform priorities in the 1980s, during the 1990s each adopted different policy solutions, partly due to the institutional differences between their health care systems. Andorra adopted a privately oriented version of the purchaser/provider split in accordance with the predominant role that private providers play within the Andorran health care system, which more closely resembles the French system and its social health insurance model. Since publicly provided health care predominated in Spain, it concentrated on the so-called new public management reforms.

We can identify three broad waves of Andorran health care reform between 1986 and 2000.

- 1986–1990. Reforms in this first period concentrated on establishing a general regulatory framework and increasing the government's influence on health care policy.
- 1990–1995. Reforms in this second period concentrated on further increasing the government's influence on health care policy, and on more specific health issues.
- 1995–2000. Reforms in this third period addressed problems such as the lack of quality control, weak community care and public health care, and barriers to the integration of services.

## Aims and determinants of reforms

The first reform period was initiated by the government in 1985, and it began with a comprehensive audit of services and management at the two hospitals that existed at that time. The report highlighted major inefficiency problems resulting from poor organization of health care services, particularly in the distribution of roles among different institutions. Additional problems identified were inadequate facilities and an excessive reliance on health care professionals from France or Spain who worked on a temporary or sporadic basis, resulting in a large flow of patients (and thus of social security system funds) to France and Spain. A lack of strategic leadership on the part of the government meant that, while health care laws existed, their implementation was never a high priority. The report concluded that fundamental reforms were needed to create a regulatory framework. In some cases, it meant merely formalizing what had already been common practice for decades. A foreign expert was contracted as the General Director of the Andorran Hospital Centre (Centre Hospitalari Andorrà, or CHA) in January 1986, with the mandate to restructure the Andorran health care sector. The decision to hire a foreigner was partly due to the difficulty in finding someone with the required training in Andorra, but the political independence of a foreign expert was also seen as advantageous.

While the 1986–1990 reforms created prominent institutions as well as a general regulatory framework, fundamental structural problems remained unsolved. During the second reform period (1990–1995), the Ministry of Health was created in order to integrate the services provided by public and private providers. The reforms that took place between 1995 and 2000 focused on decreasing the flow of patients and CASS (*Caixa Andorrana de Seguretat Social, the Andorran Office of the Social Security*) resources to neighbouring countries and on strengthening public health services. The reforms aimed to stem the patient flow by improving data collection; promoting the institutional development of community care, primarily in the form of mental health care and long-term care for the elderly; and increasing the financial and quality controls that CASS and SAAS (the Andorran National Health Service) exercised over private providers.

## Content of reforms and legislation

Two types of regulatory measures were enacted as a part of the reforms that took place beginning in 1986. The first category of reforms targeted the organizational





and governance structure of the Andorran health care system, and the second category targeted the quantity and quality of the benefits provided, as well as their cost.

## Reforms of governance and organization

In 1986, a process of major organizational restructuring began, with the goal of reforming the Andorran health care system's primary governing institutions. That same year, in response to perceived inefficiencies and financial difficulties in the sector, it was decided to merge the two existing hospitals, which were only about two kilometres apart. CASS had funded the public *Clínica de Santa Coloma* and inaugurated it in 1977; with 52 beds, it was based on the Spanish staffing model of fixed-salary physicians. The private *Clínica Verge de Meritxell* had opened in 1971 with 50 beds, and it was based on the French model, a clinic open to freelance physicians who were paid on a fee-for-service basis. The integrated general hospital, known as *Hospital Nostra Senyora de Meritxell*, that resulted from the 1986 reforms was administered by CHA. It was refinanced on new premises that were inaugurated in 1994 with more than 100 beds, subdivided into units of approximately 10 beds. The merger resulted in a single billing method, a single fee structure and the fusion of departments that previously offered duplicate services.

On 30 December 1986, the first Hospital Act (Reglament d'estructura i funcionament del Centre Hospitalari Andorrà) was approved. This law established the organizational structure of the hospital and its management scheme. The Hospital Act underwent two subsequent modifications during 2000 and 2001. The 2000 reform was launched by the Ministry of Health and Welfare in order to clarify the rights and obligations of private health care providers in the hospital, and to strengthen the control SAAS had over these private doctors, who had little accountability for their actions. The 2000 Hospital Act introduced principles of group work, clinical hierarchy and the hospital board's responsibility for delivering appropriate health care. It also introduced the notion of malpractice. Physicians took the Act to court, where it was overturned due to the fact that the hospital did not have the legal standing to make such acts. In 2001, the government approved a new Hospital Act that strengthened the rights and powers of medical professionals. This measure is viewed by both SAAS authorities and the physicians themselves as an unsatisfactory compromise created during a crisis, and one that therefore needs to be changed (see *Reform* implementation below).

The SAAS, the top-level agency intended to manage the entire health care system, was created by law in 1986. The Ministry controlled half of the SAAS







board, and CASS the other half. This was part of a system of checks and balances intended to avoid politicizing the financing and management of health care. The Ministry of Health – in March 1997 it was changed into the Ministry of Health and Welfare – was established as a part of Andorra's first constitutional government in 1993. In 1995, the Ministry opened up the management of SAAS to public bidding, and a private Catalan company (which manages several non-profit hospitals in Catalonia) won the bid and became responsible for the integrated management of the Andorran health care system. In 1997, the hospital, initially funded by CASS, was transferred to public ownership. Since the late 1990s, as the SAAS management tried to exercise its new statutory powers, it has encountered increased resistance from professional associations. In November 2001, the Catalan company, which had been having some financial problems, lost control of SAAS. There is considerable agreement among qualified observers of Andorran health care that this development was mainly due to pressure from doctors working in the hospital. An additional factor was the increasingly widespread perception among state authorities that restoring the ministry's command of SAAS would expand the potential for integrated planning, management and control of the health care system.

The 1966 Social Security Law had five sections dedicated to health care. The first three sections addressed general, technical and financial aspects of social security administration. The fourth administrative chapter was reformed in 1998, while the fifth section, which dealt with litigation, was annulled in 1993 after the adoption of the Constitution. The law on the management and administrative organization of CASS was modified on 18 December 1997. The reformed law defined more precisely the legal status of CASS, changed the composition of its board and established rules for electing its members. The board currently has eight members. Four are elected by CASS members (two by salaried workers, one by employers and one by pensioners, the voluntarily insured self-employed and others). The other four board members are nominated by the government: the Minister of Health and Welfare appoints two candidates, and the Ministers of Labour and Finance one each. These eight members vote amongst themselves to appoint a chair. In 2002, the power of CASS to control the activity of private physicians was expanded.

## New health care rights, benefits and programmes

On March 1989, the General Health Law (*Llei General de Sanitat*) was approved. It was the first explicit statement of the rights and duties of the primary actors in the Andorran public health system, though these rights and duties had been informally observed since 1968. The General Health Law also







recognized a universal right to health protection, formally extending public coverage to non-CASS members with insufficient economic resources. In 1993, the first Andorran constitution was approved. It further formalized the health care regulatory framework. The Constitution also recognized the right to health care and to legal recourse when this right is violated.

Between 1993 and 1994, the newly created Ministry of Health strengthened public health services such as routine immunization and food hygiene oversight, which had already been created in the second half of the 1980s. It also developed specific services, such as a youth counselling service (consultajuve), follow-up programmes for diabetic and hypertensive patients, and antenatal and postpartum care in health centres. The ministry also improved the on-call system, ensuring rapid response home visits by general practitioners (GPs) and establishing a centralized emergency number.

Perceived problems with professional stability and quality induced the Ministry of Health to propose opening a nursing school in 1988 to guarantee continuous professional education. In 1988, the Andorra University School of Nursing (*Escola Universitària d'Infermeria d'Andorra*) was created under responsibility of the SAAS. In 1997, a virtual study centre was also created as part of the University of Andorra, and it currently offers, among other things, a degree programme in educational psychology.

In 1989, a network of public, municipal health centres, mainly staffed by nurses, was created to deliver preventive and community care. For this joint project, the communes provided the buildings and water supply, while the central government contributed furniture and equipment and the SAAS the professional staff. The first health centres opened in 1989 and 1990.

In the latter half of the 1990s, the SAAS medical committee implemented a quality care programme for hospital users. In 1995, it initiated a study on hospital-acquired infections that has been performed on an annual basis ever since. Cases of infection are examined and registered in accordance with Epi Info project guidelines. By taking part in the Study of Prevalence of Nosocomial Infections in Spain (*Estudio de Prevalencia de Infecciones Nosocomiales en España*, or EPINE) since 1992, Andorra has also taken "snapshots" of the prevalence of such infections among all its hospital patients. In addition, a programme was organized to improve hospital employee health conditions through vaccination campaigns against hepatitis B and tetanus, and to reduce workplace accidents. By 1998, a total quality assessment project was underway with the participation of hospital management and 17 internal professional trainers. Its intention was to improve hospital staff relations with SAAS. Improved monitoring of patient satisfaction was among the reforms intended to improve quality. It was also decided that periodic opinion polls of the general





population should be conducted. In spite of the significant efforts dedicated to raise quality standards, an application to obtain hospital accreditation from Joint Commission International was denied in November 2001.

During the late 1990s, the government made software management systems available to GPs on a trial basis. Currently, many GPs use the same system, making it possible to collect statistics readily and develop comparable patient information databases. This uniformity in record collection has not been extended to electronic patient records yet. In 1996, the Ministry's Public Health Information and Research Service (Servei d'Informació i Estudis Sanitaris, or SIES) was created. Its general purpose is to provide information to people who make health care policy decisions. Accordingly, it should collect the information necessary to understand the Andorran health care system, such as data on financial and human resources, system utilisation and the health status of the population. Currently, it primarily performs specific studies on the health status of the population and the factors that influence it. In 2000, its name was changed to the Epidemiological Surveillance Unit (Àrea de vigilància epidemiològica) and its responsibilities extended to all public health issues. Until 1996, there was only one nurse working in the public health sector. During the late 1990s, this situation improved.

Prior to 1996, psychiatric care was delivered on an inpatient basis at the hospital, and outpatient services were provided by private psychiatrists. Recognizing the lack of quality control in this decentralized situation, in 1996 a public psychiatric care network, Mental Health Services (*Serveis de Salut Mental*) was created to improve ambulatory mental health care, and a new ambulatory clinic, the Mental Health Centre, was established. A new agreement between CASS and SAAS was drawn up to regulate reimbursement for the newly instituted public mental health services. In addition, recent SAAS policies intended to improve the quality of rehabilitation and eliminate over-prescription have been implemented as proactive measures to prevent some psychological problems. An occupational therapist who works twenty hours per week has also been added to the hospital staff.

A new law to ensure the rights of disabled people (*Llei de garantia dels drets de les persones amb discapacitat*) was adopted by the parliament in October 2002. According to this law, social health insurance coverage was made compulsory for disabled people, irrespective of their capacity to work. This measure constitutes the latest enlargement of the public benefits package developed during the 1990s to address prevention, community health care, mental health care, and rehabilitation.

## Policy process and reform implementation

During the health care reforms of the past two decades, the Andorran political process has been characterized by extensive political debate and conflict among the various actors, causing significant delays in the approval and implementation of new legislation. The General Health Law, for example, was drafted in 1987, but its approval was delayed until March 1989. In facing the powerful CASS authorities and the Andorran College of Doctors, the newly created Ministry of Health often lacked the political muscle needed to implement reforms in the 1990s. (See below for detailed examples of the main issues at stake during implementation.) Occasionally, the parliament has also come under criticism for making potentially unpopular revisions to CASS policy.

As an institution that wielded substantial financial power and was already well established when the reform process began, CASS has been a major political actor during the reforms. CASS often used its economic leverage to attempt to block government initiatives that would expand the publicly funded benefits package. In protest, CASS would refuse to pay for services that had not been explicitly assigned to it in its founding charter. CASS was particularly resistant to assuming responsibility for preventive health services. By the late 1990s, however, SAAS had reached a successful agreement with CASS in which the latter would pay for rehabilitation services and mental health care provided by the hospital.

Since the late 1990s, CASS has also increasingly supported the government's attempts to transfer some control of health care provision from private physicians to SAAS authorities. In the late 1990s, CASS entered negotiations with the Ministry of Health and Welfare to establish new mechanisms of cost control. CASS initiated this effort in order to limit the number of unnecessary prescriptions and diagnostic tests. Practical and political issues made the establishment of a cost-checking system difficult. A relatively reliable means of checking expenditures is to compare specific patient cases with a statistical average, as in the internationally renowned DRG (diagnosis-related group) system. In Andorra, however, because of the relatively small population, such averages would be based on very small samples, making it problematic to use them as benchmarks. Neither would it be accurate to use international statistics in place of locally established deviations, thus ignoring Andorra's particularities.

Another powerful political actor in Andorran health care is the private physician. Throughout the various reform stages, physicians have expressed fears of losing their autonomy on clinical and patient management issues, and







they have opposed most government reforms on this basis. The creation of the *Col·legi de Metges* (Andorran College of Doctors) in 1964 was a foundational achievement in the protection of this autonomy. Since the mid-1980s, physicians have been encouraged by the government to increase the self-regulation of clinical practice. The first step was the formation of a group of Andorran physicians that met regularly at the Ministry of Health and Welfare to develop a plan for professional self-regulation, training and quality control. The idea was that raising Andorran doctors' standards would lead to progressively more health care services being provided within the country. Despite this initially consensual relationship, the Ministry subsequently attempted to introduce compulsory quality improvement mechanisms that the physicians resisted as threats to their autonomy.

More generally, since the early 1990s there have been ongoing disagreements between the doctors and the central government about their respective rights and duties within the system, disagreements that have sometimes ended up in the courts. There have been three main issues at stake. First and foremost, there has been an upwelling of conflict about the participation of doctors in the government of the hospital. Among other things, the 2000 Hospital Act attempted to compel physicians to fulfil their statutory duty to participate in hospital emergency care, in order to improve continuity of care and avoid duplication of services. Physicians argue that reimbursement for emergency services is too low. The physicians' associations took the 2000 Hospital Act to court, and by late 2000, the Supreme Court of Justice had ruled that the Hospital Act should be revised (as the hospital did not have the legal standing to make this regulatory act), leading to the approval of a new Hospital Act in 2001. Some physicians claim that the fact that inpatient care is reimbursed at 90% while outpatient care is at a maximum of 75% produces a situation of unfair competition in favour of the hospital. These physicians point to the relatively high usage of the hospital emergency unit to make their case.

The second reason the professional associations have opposed state policy has been the anticipated expansion of public provision in several parallel reform measures. A critical issue was the attempted integration of primary care doctors into the public system, which was openly rejected by the national medical association, the Andorran College of Doctors. The foundation of the Andorran Association of Primary Care General Practitioners (*Associació Andorrana de Metges d'Atenció Primària*) in 1993 evidenced the increased desire for cooperation among GPs themselves. This organization has published four protocols, though none of them have been implemented. In 1995, the government provided all GPs with software-equipped computers in order to promote coordination among primary, community and hospital care providers.



The initiative did increase cooperation among GPs, and it provided incentive for them to develop other agreements, such as a quality plan. The Ministry also proposed, in the late 1990s, that GPs work in health centres to convert them into primary care centres. Even though working for health centres promised increased stability, GPs were afraid of losing their independence. As a result, there are very few health centres that employ GPs. An additional source of tension was the agreement reached between SAAS and CASS in 2000 to back the expansion of public ambulatory mental health care at the expense of private practice. This agreement triggered another appeal to the Supreme Court of Justice, which declared that it was not legal. A revised agreement was reached on 2 May 2002.

A third disagreement between doctors and state authorities concerns who should be responsible for the expense of hospital infrastructure and services used by private (non-salaried) physicians, as well as for continuing medical education. As mentioned before, private physicians are not charged for using hospital equipment and facilities. The government pays for the equipment and support staff, yet these costs are not fully covered by the surgery fees charged to CASS, as they are in France, for example. As for professional training, in 1999 SAAS attempted to impose on-the-job training programmes as a requirement for holding a contract with CASS (as reflected in the 2000 Hospital Act). The doctors opposed the measure, arguing that the state should pay for any required training, and they succeeded in excluding the relevant provisions from the 2001 Hospital Act. Private physicians have long demanded that the Ministry should cover the full costs involved; otherwise, regulations making training compulsory for holding a contract with the public system could be interpreted as curtailing professional autonomy. The physicians' association has been trying to address the problem by running an academic organization in conjunction with a Spanish counterpart, but continuing medical education has not yet been achieved in Andorra.

## **Reform implementation**

As previous sections mention, not all of the reforms and legislation previously described have been fully implemented. A prominent example from health care governance is the planned transfer of control over financial and human resources from CASS to SAAS, envisaged in 1986 as well as 1990s plans as a way to expand the role of SAAS as an active, independent purchaser. The failure to implement the transfer explains why CASS remains the controlling institution in the health care system. Likewise, government pressure to get CASS





to control expenditures, reduce unnecessary demand and eliminate duplications in publicly and privately provided services has not succeeded. Attempts by the state to impose compulsory quality control and training measures upon private physicians have met similar fates.

When implementation has succeeded, it has taken protracted negotiations over an extended period. Often, the government has had to sacrifice some of its reform priorities to guarantee that other measures were successfully implemented. A prominent example is the 1986 central policy goal of promoting the role of SAAS as an independent agency acting at arm's length from the Ministry and the government, a goal that took more than a decade to achieve. When the new hospital was built, the government borrowed the equivalent of 24 million from CASS for its construction. SAAS was literally indebted to CASS for many years due to the construction loan. Therefore, since its creation in 1986, SAAS has been coping with the problem of insufficient financial resources and consequently little power.

Only in the mid-1990s did this situation start to change. The autonomy of SAAS expanded after 1995, following the transfer of its management to the private sector, which reflected Andorra's movement towards a more market-oriented society. The central government's payment of the hospital loan in 1997, and the transfer of ownership to SAAS in 1999, concluded the process of progressively strengthening SAAS autonomy that began in 1986. However, this partial success was at the expense of the main reform goal: to promote the transfer of CASS powers to SAAS. As a purchasing body, SAAS should in principle control the budget for the direct payment of private physicians, as was already the case with public hospital physicians and health centre nurses. However, some of the measures needed to guarantee this attempted change, like the 2000 reform of the Hospital Act, were successfully resisted by private physicians. Any attempt to give the institution a more active role in Andorran health care will likely encounter major political opposition.

Other examples of long implementation processes are similarly instructive. Health centres were successfully created during the first period of reforms, and in 2002 there were 10 health centres in Andorra, with at least one in each parish. Some employed social workers, but the government's intention to employ GPs at the centres has yet to bear fruit. However, in 2002/2003, a few of the centres did employ GPs and were thus converted into primary care centres. The government has also encountered problems regulating the health centres, a difficult task due to complex jurisdictional issues between the communes and the central government.

During the second period of reforms (1990–1995), some emergency services (an emergency phone number and an improved on-call system) were successfully improved, but coordination of emergency transport with the fire department was not achieved. With the addition of an occupational therapist to the hospital staff during the third period of reforms (1995–2000), the admitting physician (e.g. an orthopaedic surgeon) now has a rehabilitation professional to consult. The occupational therapist should be able to provide support and possibly cost savings.

In general, quality control has improved, mainly during 1995–2000, and though there is still a problematic lack of data for statistical comparison, quality improvement tools are being increasingly used by SAAS. For example, in 1998, a total quality assessment project started with the SAAS management and 17 professional internal trainers. By the end of 1999, more than 380 people had been trained. In June 1999, 9 of the 22 patients in the haemodialysis care unit were infected by the hepatitis C virus and died. The haemodialysis service was subsequently managed by a private Catalan clinic specializing in this kind of care. In line with the increased emphasis on quality control, an official inquest was performed. It revealed that the infection was due to problems with machine maintenance, and corrective measures were taken to avoid further contamination. To date, no further cases of infection have occurred, despite a high number of treatments (an average of about 260 sessions per month).

Despite the sometimes slow pace of reform, a national survey in December 1998 showed that 72% of the people who used the hospital and 67% who used its emergency unit evaluated the attention they received as "good" or "excellent". Overall, 43% of the persons interviewed felt that the Andorran health care system functioned fairly well. WHO's World health report 2000 ranked Andorra 4th of the 191 countries in terms of overall health system performance, based on 1997 estimates.







## **Conclusions**

as a resourceful, comprehensive social health insurance system that compares well with other western European health care systems. In terms of governance, however, until very recently the balance of power in the sector gave relatively large autonomy to private physicians at the expense of state regulation. This might be at least partly attributable to the relatively recent development of formal state institutions, as well as to a tradition of local governance. Historically, and consistent with the difficult topography of the country, most government functions have devolved on the tiny, mountainous parishes which compose the Andorran state. Independent doctors provided most health care and also ran informal private insurance schemes for their patients. Accordingly, the role of the central government in health care was virtually non-existent. The creation of an independent social health insurance fund during the late 1960s did not change matters much, and there was no state regulation of the sector until the late 1980s.

During the last two decades of the 20th century, Andorra experienced a thorough transformation of its political system, approving its first constitution in 1993. In health care, central state authorities have adopted an increasingly proactive role since 1986, and a comprehensive package of reform measures was launched in three subsequent reform phases during the next fifteen years. The main aim of these reforms was to develop government institutions and comprehensive state regulation of the health care sector almost from scratch – hence the relevance of the Andorran case for policy-makers. When introducing health care reforms, however, the central government encountered a high degree of opposition, mainly from private physicians, backed by the courts. The main controversies revolved around the role of state authorities vis-à-vis physicians in controlling privately provided (but publicly funded) health care services, and around government reform initiatives aimed at expanding public provision.

Another critical actor, the Andorran Office of the Social Security (CASS), has tended to support the state authorities on the first issue more and more. As for expanded public provision, the social security agency has not always supported the state's position. Nevertheless, the government has succeeded in expanding primary care (health centres and some primary care centres), though it has led to frequent duplication of services by the publicly funded private and public sectors.

Among the reforms that have been successful are the development of state institutions, the establishment of an emergency service and the expansion of primary care services. Yet three important issues remain largely unresolved, despite their high political priority during the last 20 years:

- 1. insufficient quality control of health care providers
- 2. lack of coordination between public and private providers and across levels of care
- 3. limited access to the public health care system.

With respect to the last item, public coverage in Andorra is more restricted than in other western European countries. It is linked to formal employment via payroll contributions to CASS. Approximately 8% (2002) of the population are not insured by CASS, and are therefore excluded from public coverage. Residual health care is provided to this population by the state through the public welfare system. The two-tiered system with restricted public coverage was typical of most social health insurance countries in Europe before the 1970s. However, in recent decades, these countries passed laws to improve coverage and access for the unemployed and the informally employed.







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