

Co-payments in European Health Care Systems: the Spanish Approach.

**G. LOPEZ-CASASNOVAS
IVAN PLANAS-MIRET**

Univ. Pompeu Fabra. Barcelona.

(First Draft, November 20th, 2001)

Prepared for the *Round Table on « Utilisation fees imposed to Public Health Care Systems Users in Europe »*

**Workshop organised for the Commission on the Future of Health Care in Canada
29 November 2001 Embassy of Canada in Paris**

I-THE SPANISH HEALTH CARE SYSTEM. OUTLINE

The Spanish Health Care System is framed by the reform of the 80s. The General Health Care Act (Ley General de Sanidad) 1986 moves definitively from a Social Security type of system towards a National Health Service, with universal coverage and taxation finance (Government Budget / *Presupuestos Generales del Estado*) despite some users' co-payments remain.

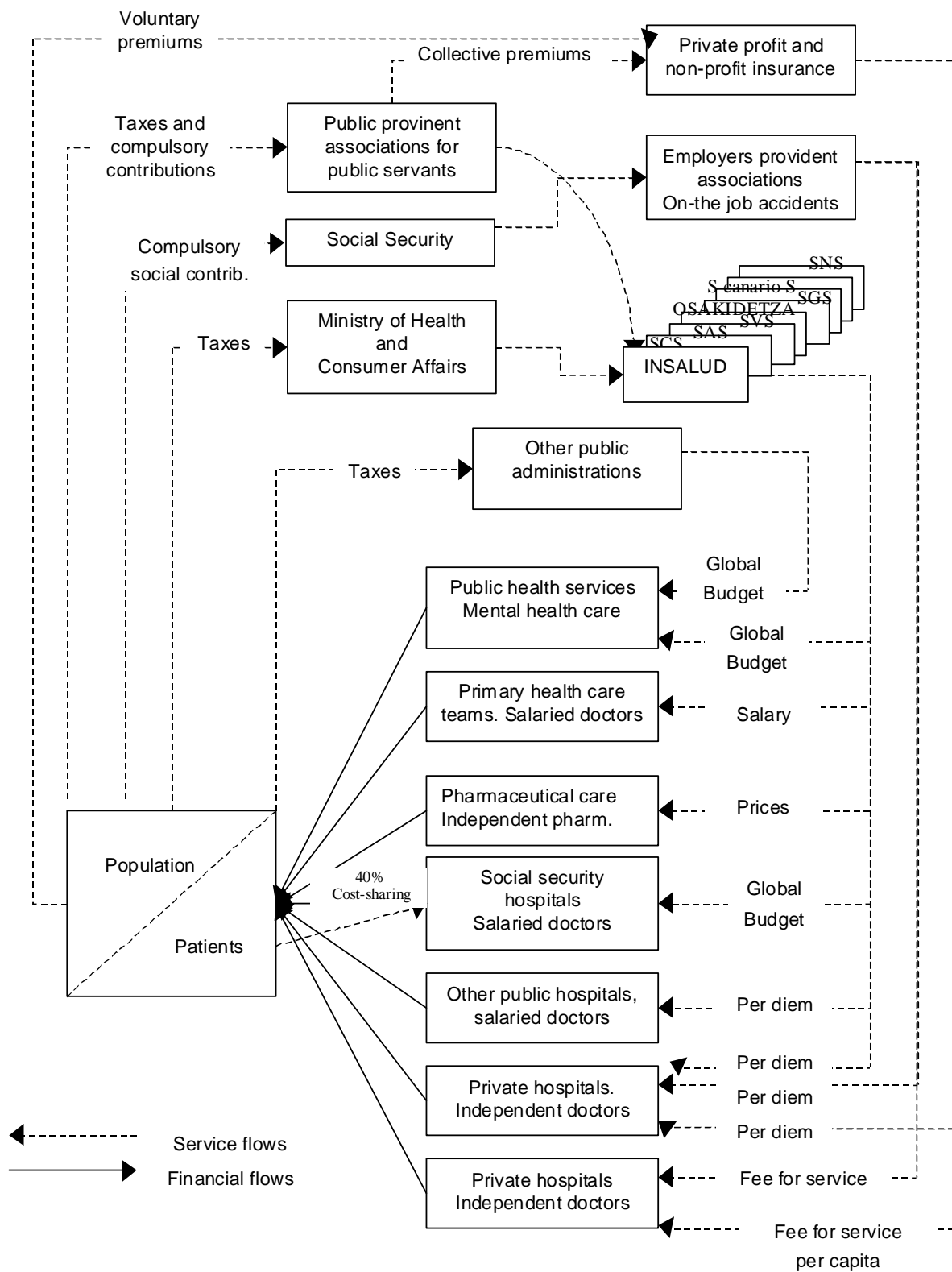
Prior to the former changes, the major attempt to create a Social Insurance System was done by the Basic Social Security Act of 1967, that initiated the expansion of coverage to self-employed professionals and central state civil servants. A major overturn of the system came with the Spanish Constitution in 1978 and the creation of the National Institute of Health (INSALUD) to manage health care services as a central differentiated agency. In addition, the transfer of health care to some Autonomous Communities (targeting the powers of historic nations as the Basque Country and Catalonia) has opened an important process of regional devolution. The process was initiated in 1981 with the transfer to Catalonia, followed by Andalusia (1984), Basque Country and Valencia (1987), Galicia and Navarre (1990), Canary Islands (1994) and the remaining regions, expected for 2002.

The General Health Care Act (1986) was passed with the main following objectives:

- Promotion and prevention of illnesses,
- Public Health Care service to all population,
- Access and service on effective equality, and

- Health policy oriented to overcome social and territorial differences

Health Care financial and service flows after the 80s reforms. Basic relationships.



Source: OCDE (1992), with minor changes by the authors.

1.1- The Health Care System after de reforms. Some basic figures

At present Spain spends 7,5% of the GDP on Health. Care. 77% of this expenditure comes from public provision and the rest comes from co-payments (for direct services, medicines and prostheses) and private insurance premiums, despite regional differences are important on the actual mix.

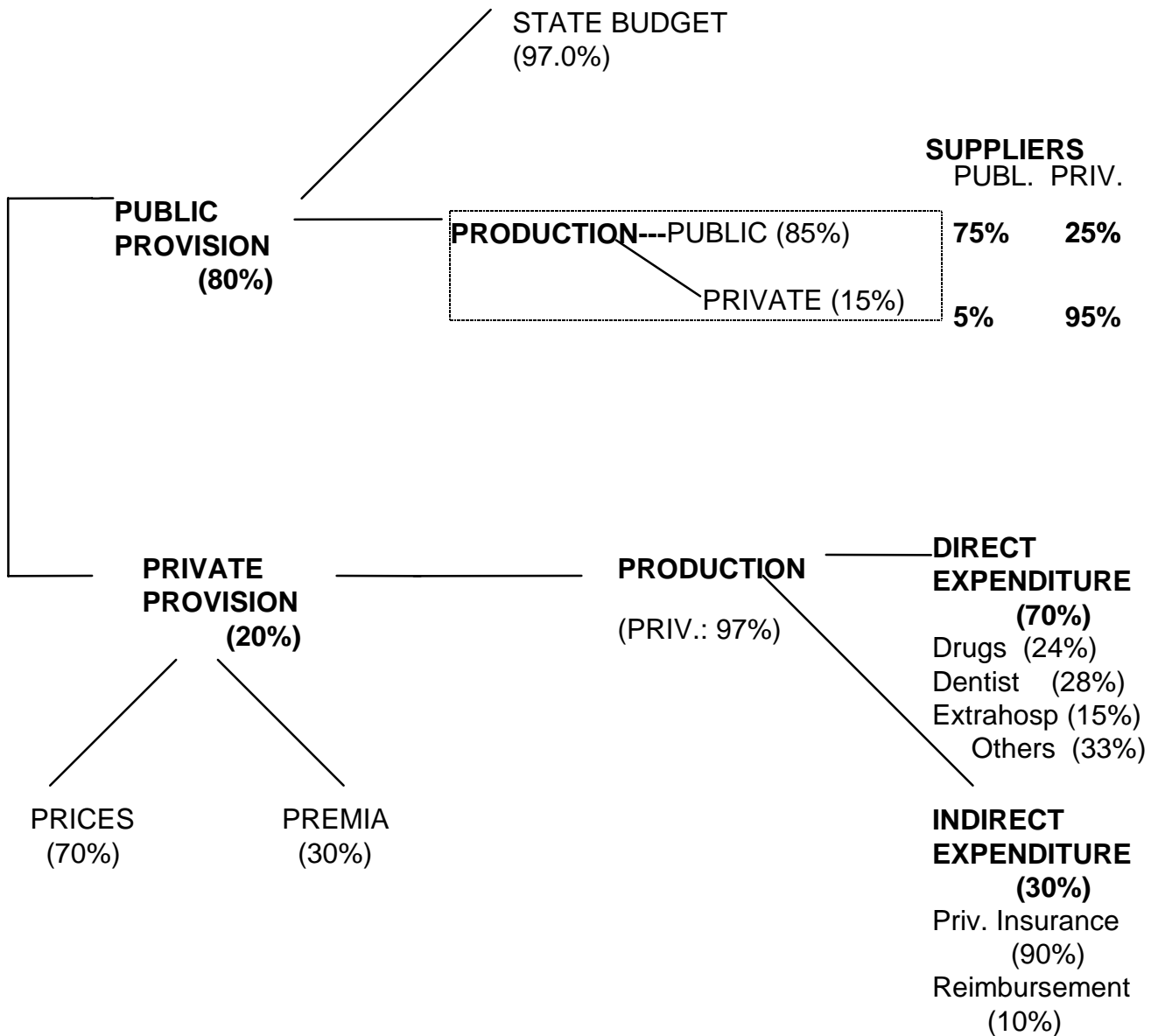
BASIC OUTLINE

Health care provision in Spain is a mix of public provision (approximately 4/5 of total health care spending) and private (the other 1/5).

- In 1999 total health expenditure amounts to 5.6 billion pesetas (\$ 33 billion), around 7.4% of the Spanish Gross Domestic Product.

Main sources of financing the system:

- Public Expenditure
 - 1986: General revenues (23.77%), social insurance contributions (74.27%), Other sources (1.96%).
 - 1995: General revenues (77.28%), social insurance contributions (20.43%), Other sources (2.29%).
 - 1999: General revenues (97.6%), Other sources (2.4%).
- Private expenditure (in thousand million current pesetas and %)
 - 1986: Health insurance Premia (71.1) (24%) with 4.301 thousand enrolees and out of pocket (228.9) (76%).
 - 1995: Health insurance Premia (293.7) (30%) with 6.700 thousand enrolees and out of pocket (685.3) (70%).
 - 1999: Losing relative share.



Key words: Finance refers to the revenue sources; provision to the service responsibilities; production, regards to who produces the service; and supply, to the inputs ownership. Prices can be identified with direct expenditure and premia with indirect expenditure.

Source: own elaboration. from different sources.

1.2- Some particular features:

-Ambulatory care

Ambulatory care is organised in Health Care Centres, where most of GPs and specialist worked full time with a basic salary payment and a civil servant status. Some multidisciplinary teams and supporting teams has started to appear.

More than 150 000 health care professionals (physicians, nurses and auxiliaries) work in 5 000 Health Care Centres. These centres are co-ordinated by District Authorities called Areas Básicas de Salud (with responsibility over a population between 5 000 and 250 000)

-Inpatient care

The hospital structure is composed by 800 hospitals, 56% are general community hospitals. There is, however, a relative high dispersion of beds among Autonomous Communities. Hospital care may be accessed by urgencies, or by referrals from GPs or specialists. Most of Spanish Hospitals have also a outpatient facilities that in most of cases imply a faster access to care than Primary Care Health Centres.

-Long-term care

In Spain there are around six and a half million elderly people. There is a very low level of public home care (4% of total offer) and very low involvement of the public sector financing elderly residential care (only 40% is publicly financed). According to Casado and López (2001) in 1998 the health status situation of elderly was the following: 65.9 % independent, 34.2% dependent. Of all these dependent individuals, 77.9% only received informal care, 11.4% privately financed home care, 4.4% publicly financed home care, 2.5% were on public residences, and 3.8% on private residences. This means that out of the total dependency care only a 6.9% was public financed.

Long term care is today on hands of the Autonomous Communities except home care that can be accessed by users through municipalities. Total public financing is less than 30% of long term care expenditure in Spain.

-Pharmaceutical care

There were not major changes in pharmaceutical care during the reforms other than some negatives lists. INSALUD and the Regional Health Services finance 87% of the total pharmaceutical expenditure, which once added to the patient co-payment amounts for the 90% of the total pharmaceutical expenditure.

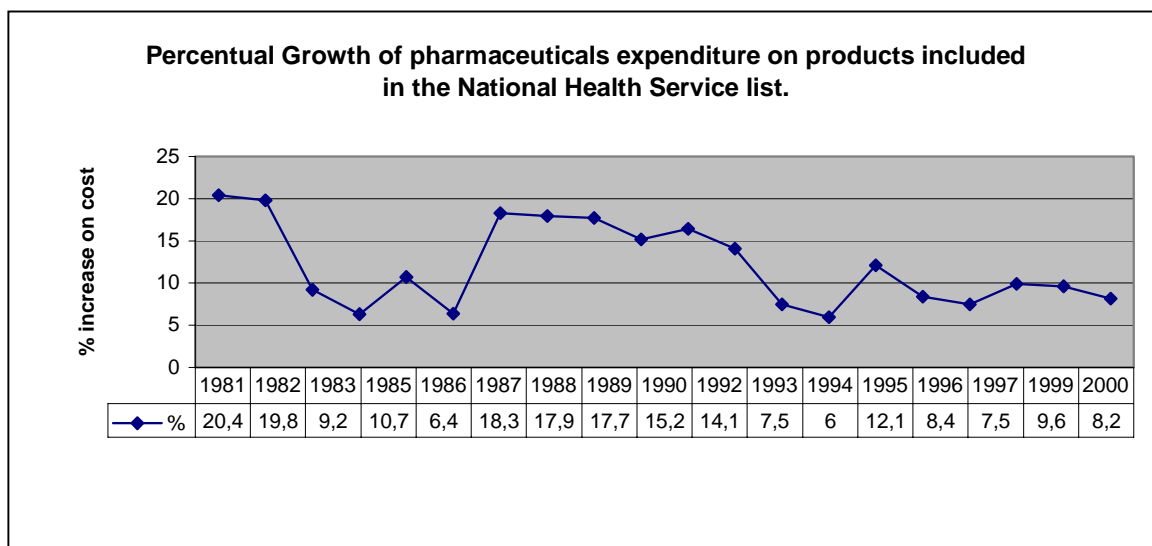
Pharmacists are independent private professionals. There are 18.000 Pharmacies in Spain (2.100 inhabitants per pharmacy) lower ratio than the ones of Germany or France (2 500), the UK (4.750) or Netherlands (10.000). The main reasons for pharmaceutical expenditure growth are:

- New products in the market are introduced at a much higher price than the older ones.

- There is a substitution effect with respect to these more expensive products. New products represent a percentage much higher than in other European countries.
- Low responsibility of prescribers and demographic trends impelling consumption.
- Finally, the lack of adequacy of drugs for some common illness problems is another problem.

Social Security consumption and expenditure on prescriptions for protected person and year (1995-1999)

	1995	1996	1997	1998	1999
Pharmaceutical consumption					
Pharmaceutical consumption/person/year	21552	23860	25036	27472	30035
Specialities consumption/person/year	19406	21516	22588	24800	27156
Social Security pharmaceutical expenditure/person/year	19645	21833	22978	25350	27825
Patient contribution/person/ year	1908	2027	2059	2122	2210
Number of prescriptions/person/year	14.1	14.8	15.1	15.0	15.2



II.- CO-PAYMENTS IN THE SPANISH HEALTH CARE SYSTEM

The most important elements of patient cost sharing are: (a) direct financial contribution made by the patient, (b) deductibles, (c) maximum amount of co-payment, and (d) limits on coverage.

Direct contribution of users may be established as a fixed amount or as a percentage of the cost of service. First option has an effect on the purchasing decision, but once a service has been chosen, it has no distortion over the user's decision. In contrast, a percentage of the cost of service has a proportional effect over any marginal unit that a user may be willing to consume.

Deductibles imply that up to a certain amount, the level at which the insurer supports the cost, the patient pays the full cost of the service. The observed effect over expenditure has two directions: decreasing, when insurer costs are lower than the deductible quantity, and increasing, on opposite case.

In addition, the maximum risk taken by the patients or insurers is also a crucial characteristic of any co-payment system.

Besides the elements that compose the structure of co-payments, a clear definition of what it is understood by co-payment usually lacks. In general, however, we identify a co-payment as any participation of the patient on the cost according to the utilisation of the services. They are based on the benefits principle, and not on the ability to pay, since the one who benefits from a service is the one who pays, at least, part of the cost.

Health Care policy makers commonly argue in favour of co-payments to avoid the over-utilisation that comes from the patients' moral hazard and induced demand. However, the ability of co-payments to avoid over-utilisation has shown to be very limited and therefore they play a role of increasing finance on an users rather than on a tax payers basis.

As described above on the first part, there are several political institutions involved on the Health Care policy making in Spain; the Health and Consume Department of the Spanish Government, and each on the Health Regional Authorities for those Regions (Autonomous Communities) with transferred Health competencies. A full description of co-payments in all of those policy-making points would be a complicated task unless that, as it happens in Spain, co-payments were only applied by a few of them. Indeed, at present, only the Spanish central government has established co-payments on drugs since the drugs approval and the pharmaceutical reimbursement policy cannot be transferred to Regional Authorities, despite they pay the bill.

In observing the European experience, there are three main areas for co-payments: (a) Ambulatory services (first contacts), (b) Hospital services (usually inpatient hotel care or emergency visits), and (c) pharmaceuticals. In general, most of the European Union countries have introduced or expanded their co-payments on the costs of hospital services and on ambulatory care during the 80s and 90s, with the remarkable exception of Spain and Greece. In Spain, only the growing pharmaceutical expenditure seem to be a main concern for co-payments although there exist doubts on whether this is more a finance than a reduced consumption measure.

II.1- The Health Care benefits package under public financing entitlement

The 63/1995 Bill defined benefits on the National Health Service according to each type of service:

- (a) Primary care, which covers general medical and paediatric care, either on a Health centre's institution or on at a patient's home basis; as well as prevention programs, health promotion, and rehabilitation,
- (b) Specialised Health Care, which covers medical and surgical specialities in acute care, for any inpatient or outpatient service,
- (c) Complementary benefits, prostheses, orthopaedic products, wheelchairs, Health Care transportation, complex diets, home-based oxygen therapy, and children's hearing aids; for certain orthopaedic products and prostheses some users' payments are required, and
- (d) Finally, for pharmaceuticals, users pay a 40% of the price on medicines prescribed by the NHS doctors, with the exception of elderly over 65 and some specific groups (retired, handicapped and people who suffered occupational accidents), for which there is no co-payment.. There is also another exception for drugs co-payment in the case of chronic diseases. Only a 10% co-payment apply with a maximum of amount (3,01 Euros for year 2000) when they are explicitly prescribed by NHS doctors and patients identified as chronic.

Benefits excluded:

Since there is not a positive list of specific services explicitly entitled, and given the fact that sometimes it is not clear whether a service may be included in one of the above groups, the National Health Service has excluded some particular benefits: psychoanalysis and hypnosis, sex-change surgery (which is not excluded however in some Regional Authorities), spa treatments or similar cures, plastic surgery not related with accidents, disease or congenital malformation, and dental care (only extractions, Health promotion and education, and pregnancy diagnosis services are included).

The Basque County and Navarra Authorities decided to offer full public coverage of children's dental care. Since 1988 and 1990 respectively both Health Authorities offer dental services without any type of co-payment. Although the Spanish legislation maintains these benefits on the public package they have never been implemented so far.

In addition, Social and Community care are also excluded from the NHS benefits - today in hands of Regional (Autonomous Communities) and Local Governments.

Arguments often used to exclude the provision of services by Spanish public institutions are: (a) lack of scientific evidence on safety of clinical effectiveness or redundancy of interventions with previous treatments, (b) failure to clearly establish that the intervention is effective in the prevention, treatment or cure of the disease, or that it helps in the conservation or improvement of life expectancy, to self-help or elimination or relief of pain (palliative care), and (c) in case that the intervention is considered as a leisure activity or for comfort..

II.2- Co-payments in the Spanish NHS

1) Pharmaceutical co-payments:

Out-of-pocket payments amount for 79 266 million Ptas (1998); just 7.7% of the total pharmaceutical bill / 1.5% of total health care expenditure.

In fact, since 1966 there is a co-payment for medicines in the Spanish National Health Service. It started with a fixed amount of just 5 ptas and was replaced by a 20% of the price co-payment on 1978. On 1979 was increased to 30% and finally on 1980 it was established on 40%. This 40% (of the price) co-payment is fixed on pharmaceuticals consumption by users of the system on those products financed by the National Health Service (former Social Insurance System). This rule is not applied to retired population (under 65), individuals with permanent disability or chronic illness (10% co-payment on medicines). The evolution of pharmaceutical co-payments in Spain may be observed in the table below.

Another exception to this rule is that applied to civil servants which are under de MUFACE system. MUFACE affiliates have a 30% co-payment for all pharmaceutical products, both employed and pensioners.

Finally, we should consider a 100 % co-payment for those medicines included in the negative list of the 83/1993 and the 1663/1998 Bill as a form of co-payment. The conditions of this are developed below.

Chronological evolution of co-payment regulation

<i>Period</i>	<i>System</i>
<i>December 23rd 1966 Decree 3157/1966</i>	Definition of the Public Pharmaceutical Specialities Catalogue.
<i>December 23rd 1966 - April 14th 1978</i>	<ul style="list-style-type: none">• Drug price < 30 ptas → co-payment 5 ptas• Drug price ≥ 30 ptas → 10% price co-payment• Max. co-payment 50 ptas
<i>April 14th 1978 - January 1979 Decree 945/1978</i>	<ul style="list-style-type: none">• No co-payment for pensioners and its beneficiaries.• 20% price co-payment for employed and its beneficiaries.• New pharmaceuticals catalogue.
<i>January 1979 - September 1980</i>	<ul style="list-style-type: none">• No co-payment for pensioners and its beneficiaries.• 30% price co-payment for employed and its beneficiaries.
<i>September 1980 -</i>	<ul style="list-style-type: none">• No co-payment for pensioners and its beneficiaries.• 40% price co-payment for employed and its beneficiaries.

Source: López G., Ortún V. , and Murillo C. (1999)

Main health care and pharmaceutical expenditure indicators

Public health care expenditure over total health care expenditure	76.9	
Pharmaceutical expenditure over public health care expenditure	22.5	
Public pharmaceutical costs over total pharmaceutical consumption	77.9	
Public pharmaceutical expenditure over public pharmaceutical costs	92.6	
Patient cost sharing / public pharmaceutical costs	7.4	
	<i>% of GDP</i>	<i>Per capita</i>
Public health care expenditure	5.43	119809
Total pharmaceutical consumption	1.70	37410
Public pharmaceutical costs	1.32	29155
Public pharmaceutical expenditure	1.22	27006

Source: Farmaindustria.

2) Co-payments for complementary benefits (orthopaedic prostheses):

The 79/1998 and 128/2001 Bills establish the present regulation for orthopaedic prostheses. There exists a co-payment of 40% for them with a minimum of 5.000 ptas (30 Euros). According to this, each Regional Health Service may decide the prices for the orthopaedic products for outpatients. This catalogue establishes the products, the price and the public share (60%), including orthopaedic prostheses as said, wheel-chairs for handicapped, and special prostheses. For inpatient cases where surgery is needed there is no co-payment for this process.

This financial support formally is known as a economic aid (more than a copayment for lack of public financial support). However, there is no difference in its structure with respect to a co-payment, since these aids are universal, do not depend on the individual's characteristics, and most of times are directly provided by public institutions.

3) Health services excluded from public benefits and financial coverage:

Dental Services excluded from public benefits are a cost 100% shared by the user. Precisely, all dental services -except extractions and pain relief- are excluded from public financing in Spain. Approximately 16.8% of private health expenditure is devoted to dental care. This expenditure is positively correlated to education and income. Consumption of highly educated groups was between seven and eight times higher than that of least educated groups. Expenditure of the richer population was seven times higher than the poorer population. On average, expenditure per family was

80,000 ptas/semester per family (481.24 Euro year 1997). Private insurance may not be strictly related to the coverage of these benefits excluded from public financing.

- *Negative list of medicines: Central Bill on Selective Financing of Medicines (RD 83/1993) and the 1663/98 Bill which regulates the exclusion of medicines of public financing.*

An indirect way of setting co-payments for health services consist of excluding them from public financing. The Spanish Government used this policy in 1993 (Socialist were in power at that time) and in 1998 (the conservative party in power then) to control pharmaceutical expenditure by introducing a “negative list” on medicines. In real terms this is a 100% co-payment.

Both experiences have shown limited efficiency of negative lists of drugs on reducing pharmaceutical expenditure (López G., Ortún V., and Murillo C., 1999). However, jointly with these control purposes, other clinic or epidemiological objectives are usual arguments for them. The Spanish Bill of 1993 was based on two main objectives: (a) Prioritise public financing for those drugs whose need or severity of the illnesses for which they were used was higher, and (b) exclude from public financing those drugs with low therapeutic value.

In 1993, 1.692 pharmaceutical specialities were excluded: hygiene, lower symptoms relieve, or lower dermatological symptoms treatment: ie. products such as shampoos, antiseptics, creams, laxatives, constipation treatments..., were excluded from public financial coverage. Those pharmaceutical specialities amounted in 1993 for the 19,8% of all pharmaceutical Specialities publicly financed. Average price of excluded products was 291 ptas (1,75 Euros) which compared with the total average price, 1.247 ptas (7,51 Euros), may predict the low economic impact that this reform could achieve.

In addition to limited, the impact on pharmaceutical expenditure seems to be very short run, since consumption of these products has been commonly changed by doctors for similar but non excluded products.

- *Civil Servants (MUFACE) scheme*

Spanish Central Administration Civil Servants are included in a special health insurance regime called MUFACE. Once every year, each civil servant is asked to chose between a private health insurance carrier –with a signed agreement with MUFACE- and the public National Health Service provider (INSALUD or Regional Health Services where transferred). There are different conditions in each one, including a different copayment for medicines: all MUFACE’s affiliates pay a 30% of drug’s price (vs the 40% for active and 0% for retired in the NHS scheme). Per capita pharmaceutical expenditure is a 31% lower for MUFACE members than for NHS members (Ibern, P. 1996).

Year	Per capita cost of MUFACE members		Per capita prescriptions of MUFACE members		MUFACE financing of the price	
	Ptas.	Growth ratio (%)	Prescriptions per capita (%)	Growth ratio (%)	%	Growth ratio
1990	7806	-	11.29	-	77.74	-
1991	9053	15.97	11.71	3.72	78.35	0.78
1992	10302	13.80	11.75	0.34	78.87	0.66
1993	10806	5.48	11.14	-5.19	78.69	-0.23
1994	11104	2.18	10.24	-8.08	77.53	-1.47
1995	12609	13.55	10.91	6.54	78.10	0.74
1996	14118	11.97	11.45	4.96	78.56	0.59
1997	14600	3.41	12.00	4.79	78.14	-0.53

Source: López G., Ortún V. , and Murillo C. (1999)

Year	Per capita cost of NHS members		Per capita prescriptions of NHS members		NHS financing of the price	
	Ptas.	Growth ratio (%)	Prescriptions per capita (%)	Growth ratio (%)	%	Growth ratio
1990	10684	13.94	12.82	2.44	88.98	-
1991	12647	18.36	13.17	2.78	89.50	0.58
1992	15306	21.03	14.05	6.64	90.11	0.68
1993	16471	7.61	13.66	-2.74	90.45	0.38
1994	17507	6.29	13.32	-2.51	90.84	0.43
1995	19644	12.21	14.13	6.09	91.15	0.34
1996	21833	11.14	14.82	4.86	91.50	0.38
1997	22977	5.24	15.08	1.76	91.78	0.31

Source: López G., Ortún V. , and Murillo C. (1999) Cost shared by Government

Another special civil servants scheme is that of the Barcelona's council employees (PAMEM). PAMEM is a *mutulitee cretienne*, which receives a fixed capitation amount from the Catalan Health Service, and manages the health care insurance for its affiliates. Pharmaceutical co-payment is also 30% for both active and pensioners. As in the MUFACE scheme the average pharmaceutical expenditure is lower for PAMEM affiliates than the one for those under the National Health Service coverage.

- Fiscal expenditure on private health care spending

Fiscal expenses (deductions on taxes) from private insurance are not strictly a user co-payment but a government cost sharing on private expenditure, nevertheless financial consequences are very similar. The level of private insurance varies widely across regions, and it is highly concentrated. While the Spanish average is a 16% in Catalonia it amounts to almost 25% of the population.

Spanish Personal income tax (IRPF) included up to 1999 a deduction of 15% on the quota for health expenditure incurred by the individual or its dependants by illness or

children birth (it even includes user co-payment). Luxury treatments (such as: plastic surgery when this were not included in public benefits, or spa treatments) are excluded from the deduction. Fiscal expenses on this deduction were increasing over time, both on total amount and as a percentage of total deductions; in 1990 it amounted 28,866 million ptas (3% of total deductions) and in 1996 88,442 million ptas (6% of total deductions)¹.

On regions such as Catalonia reasons for private insurance vary among: tradition, strong preferences over health care good, a desire of a faster access to services (avoiding waiting on lists), or the better hotel conditions for inpatients treatment that in a private clinic may be found (such as 1 bed per room, better food...).

Murillo and González (1993) show that for the period 1972-1989, the price elasticity was 0.44. That means that a 10% increase in premiums would reduce demand for private health insurance by 4.4%.

Reduction on demand of private insurance over the last decades attends to two main reasons: (a) inclusion of self-employed individuals into the Social Insurance Systems (and later on the National Health Service), and (b) improvement on public coverage (such as enlarging the outpatients visits to the afternoon).

This idea links with another type of co-payment existing in certain municipalities and the possibility for some Autonomous Communities to apply it. This co-payment we are referring is the “*iguales médicas*” (income equalizers for medical compensation). Traditionally, general practitioners would extend their working ours (2.30 public outpatient hours/day) and offer the possibility to get full time service (3-4 extra hours on the evening plus health care at user’s home) in exchange of a private capitation payment (usually per family). This activity was at least in doubt from the legal approach however permitted by the government in a way to complement GPs’ salary. The solution was to extend to the public package this kind of service. Two measures were taken: (a) extension of the outpatient ours on Primary Care Centres together with full-time GPs, and (b) to allow municipalities and Autonomous Communities that wanted to keep this service, to extend it to all the population and publicly finance it (through local taxes).

-Regional allocation of resources and co-payment

An agreement of the *Consejo de Política Fiscal y Financiera* was reached in November 1997. This agreement established a General Fund for territorial distribution (accounting 98.5% of total resources). Distribution of this fund was purely on capitation basis, with no adjustment for age (this is going to be accounted for in 2002), gender or any health indicator.

Decentralisation of the health care managing to Autonomous Communities, jointly with a closed budget, broadly implied the same financial resources per capita to each region in order to respond to different health care needs (i.e. different demographic structure, prevalence of illness...). Together with the different needs, preferences over health care or different prescription policies on a territorial basis (see table next) are also different across regions and therefore any difference between regional allocation of funds and

¹ Data estimated by Martínez E, (1998)

actual expenditure has to be covered with other sources of finance. Catalonia, for instance, devotes a proportion of its revenue higher than the funds that receive for health care expenditure.

Social Security expenditure on prescriptions for each protected person divided into regional health institutes in 1998 and 1999

	Pharmaceutical expenditure (ptas. million)		Covered population (thousands)		Pharmaceutical expenditure/covered population	
	1998	1999	1998	1999	1998	1999
	<i>Health Service of Andalusia</i>	173034	184888	6829	6861	25338
<i>Health Service of Canarias</i>	35580	39758	1514	1527	23501	26037
<i>Health Service of Catalonia</i>	160770	176778	5742	5741	27999	30792
<i>Health Service of Valencia</i>	112959	126167	3731	3742	30276	33716
<i>Health Service of Basque Country</i>	46537	52014	1943	1937	23951	26853
<i>Health Service of Navarre</i>	12207	13607	502	503	24317	27052
<i>Health Service of Galicia</i>	69204	77604	2574	2571	26886	30184
<i>INSALUD Direct Managing</i>	336513	370219	14514	14531	23185	25479
<i>Total Public</i>	946804	1041035	37349	37413	25350	27825

Source: Farmaindustria

On the agreements for the regional allocation of general revenues on year 2001, health care expenditure has been included into the general transfer system and under a revenue sharing agreement for the larger central collected taxes (all taxes, excluded pay roll taxes and the corporate income tax). Still is much less than clear that the new transferred amounts are going to be enough to cover the differences between needs and supply.

In those cases Autonomous Communities can use surcharges and exercise fiscal responsibility to cover the former financial difference. In this sense we may talk on a co-payment in this case for the local tax payers. In similar terms, whenever under-finance may exist, users may be forced to find a private alternative or to remain in a longer waiting list (and therefore pay the cost in terms of time, another sort of co-payment indeed!).

-Reference Pricing - Avoidable Co-payments

With the introduction of reference pricing for drugs in Spain a new co-payment was set up. Reference pricing imply an avoidable co-payment since user can always find a drug in the same therapeutic family with no extra (over de usual 40%) co-payment.

Briefly, the mechanism of reference pricing works as follows: a National agency for pharmaceutical prices sets a reference price for each therapeutic family. When patient

goes to the pharmacy, in case that the price of the prescribed drug is above the reference level, then patient may choose to replace it by one in the same therapeutic group with a price below that level. In case that the drug is not replaced, patient will pay 40% co-payment for the amount until the reference price and 100% for the rest.

In Spain reference pricing is applied to off-patent drugs on the same chemical groups. Chemical equivalence implies the same active ingredient.

Reference pricing in Spain was introduced on December 2000. To calculate the reference price the following formula was used: the average price of the lowest priced products in the chemical group which accounts at least for the 20% of the market sales. If a product accounts for less than the 10% of the market, the Reference price is recalculated by applying a 10% reduction to that price, thus achieving at least a 10% saving. Otherwise, if the reference price and the former higher-priced product account for 50% of the market, the reference price is recalculated as exactly 50% of the highest-priced product (thus foregoing some potential savings). The reference price will never be lower than the generic with the lowest price in the same group.

The Spanish Health and Consumer Ministry estimated the savings of reference pricing introduction on 10,000 million ptas and a reduction on 30% of the price. Although better efficiency would be expected if the generics market would be developed. Due to the recent introduction, no other relevant results can be obtained.

III.- ASSESSING THE IMPACT OF CO-PAYMENT

Main objectives of co-payment are: to contribute to the financing of public expenditure according to the benefits principle, to control the over-utilisation of services due to the moral hazard and induced demand problems, and to offer a market price signal to public policy makers.

The priority over reduction of over-utilisation objective or the financing of public expenditure objective would carry different recommendations according to Chernichovsky (2000). The optimal co-payment for the first objective should be applied over inelastic demand services. On the other hand, when the preferred objective is to increase the financing of public expenditure, then, the optimal policy is to apply co-payments to services and products with the lowest demand elasticity.

On the design of co-payment policies results over the elasticity of services should be taken into account to decide over which services it may be more optimum to set them. Studies such as Rice and Morrison (1994) and Rice (1998) departing from the Rand Study of Health Insurance show that the demand elasticities for services do not vary much among them, nevertheless elasticity is higher for preventive care. Co-payments of 25% reduce demand by a quarter (against 20% for prescriptions). Demand would fall by only 43% if its cost were borne at 95% by the patient. (Puig-Junoy, 2001, Newhouse et al, 1993)

Co-payment mechanisms effects over financing, utilisation and equity

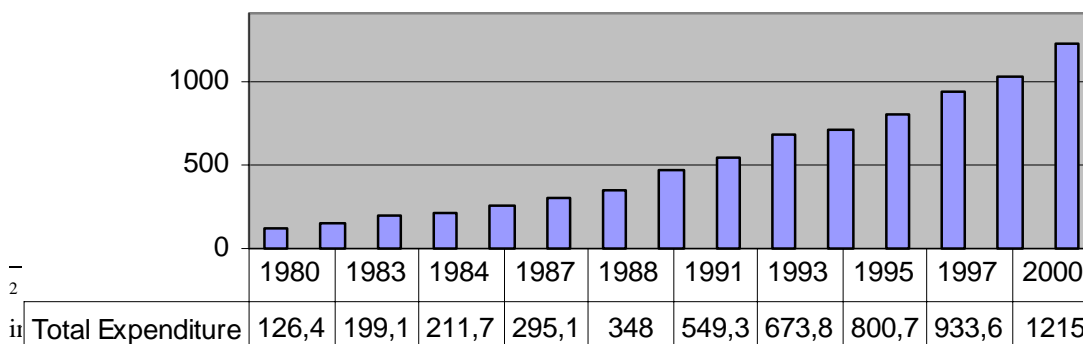
FINANCING	Cost transference from the public system to the user Increase on administrative costs
UTILISATION	Increase on private coverage by the amount of the co-payment Variation will depend on demand and supply interdependence Variation will depend on price elasticity of demand It does not guarantee a higher reduction on the utilisation of unnecessary services It may have a substitution effect towards more costly benefits
EQUITY	It may reduce utilisation of preventive benefits Reduces participation of low-income individuals It does not affect high-income individuals but marginally

Source: Murillo and Carles (1999)

So as to assess the efficiency impact of co-payment for Health Care services, the following issues should be considered (Puig-Junoy, 2001):

- To what extent the introduction of a co-payment system modifies the utilisation of the service (price-elasticity) and the one of other services or products (substitution effect)?
- To what extent the changes in consumption patterns do affect differently the socio-economic groups (price elasticity variance by income and need)?
- Which are the special characteristics of the NHS that may affect the co-payment effect over utilisation?
- Which is the real impact on public expenditure (monetary value of the reduction of utilisation)?
- Which is the marginal contribution to Health status of the benefits affected by the co-payment and which is the perceived lose of individuals' utility?
- Which is the co-payment effect over income distribution, especially that of sick² and poor individuals?
- Are the long run effects different to those of the short run?
- Which are the transaction costs generated by the co-payment mechanism?

Expenditure on pharmaceutical products included in the National Health Service list. PVP. (including co-payment)



- Side effects of co-payment through the use of pensioners prescriptions

Another type of substitution effect that may occur, is that between groups of population when a different type of co-payment for each group is set up. Especially, when the characteristics that are used to differentiate among several groups are other than the ones that strictly related to the sick episode, such as income, professional status, or situation (unemployed, retired). This substitution effect has had special relevance in Spain since a high proportion of co-payments have been avoided by using elderly members of the family's prescriptions to get a 0% co-payment instead of a 40%.

Puig-Junoy (1988) used 1983, 1984 and 1985 data to estimate the evasion of co-payment (using pensioners prescriptions -0% co-payment-, by non-pensioners -40% co-payment-) on 30 to 40% of the total pharmaceutical expenditure, with a 15-20% of total prescriptions. On the period 1978-84 pensioners increased from 15.1% to 17.7% of the covered population and the number of prescriptions reached a 50% of the total and 65% of the public pharmaceutical expenditure.

This substitution effect seems to be very reduced between chronic individuals and the other groups because of the specificity of the consumed drugs.

Some criticism has been raised on the reasons used to argue in favour of pensioners zero co-payment. This low-income proxy could be better improved with the information available in the system at present. It could have some sense on 1978 when this policy was introduced due to the poor data available at that moment. Political groups have done several proposals to reform this policy. However, the big share on votes that the pensioners group means forces to a political consensus of all groups, which has never been reached in this issue.

Coulson and Stuart (1992) showed that prescription expenditure among the elderly population tended to be persistent, even in the long term. Therefore, from this perspective an increase on pensioners co-payment would not affect utilisation to much, but it would significantly decrease government expenditure. A problem of capacity to pay the price of medicines by pensioners should be solved by other mechanisms, which may not have these evasion problems.

Number of prescriptions per Actives and Pensioners

	Number of prescriptions (millions)	Percentage	Average price per prescription (ptas)	Percentage
Actives	183042	2.5	1868	2.2
Pensioners	413849	5.8	2116	3.6
Total	596891	4.8	2040	3.3

Source: Health and Consume Affairs Department.

- Price elasticity of demand estimators

Studies performed using data from the United Kingdom (Birch 1986, O'Brien 1989) find elasticities in the range of -0.1 to -0.3.

For the Rand Study of Health Insurance (Newhouse et al. 1993) the price elasticity of demand for medicines was -0.1 for patients with a 0 to 25% co-payment, and -0.2 for those between 25% and 90% co-payment.

The latest available study on price elasticity for medicines in Spain is that of Puig-Junoy (1988). Puig-Junoy's study results derive a price elasticity of -0.13 for the consumption of drugs and a -0.15 for the pharmaceutical expenditure. These percentages are not very different to those calculated by Birch and O'Brien for the British market. That would imply that by an increase on price of 1% a reduction of only 0.13% could be achieved. The author argues that this low sensitivity to price may be explained by the substitution effect between groups explained above.

IV. CONCLUSION AND POLITICAL ASPECTS

Co-payments in health care in Spain, as in some other countries, are a very controversial political issue. Part of it has to do with the very political nature of any health care reform, and mostly of those affecting the financial side of public budgets, since social controversy is much more explicit on the political arena. However, part of the reasons for the particular complexity of co-payments in health care is due to some technical misunderstandings surrounding the co-payment proposals. It is not just the issue of the exact measure, say whether we subtract from the total effect of co-payments the income effect in order not to understate the real price effect that they may cause.

There exist in fact some confusion on the financial nature of co-payments or on the restriction effect on consumption of health care. In our view, there are not clear roles for co-payment in Spain at the present stage other than its potential for raising revenues (as it is the case in drugs) or limiting general taxes contribution to health care (as in the reference pricing case). This has to do with the low values of the estimated price elasticity for the services where co-payments are applied. In addition the existing information asymmetries seem to indicate that, at this stage of the weak empowered citizens facing the professionals' advice, patients do not demand health care in the welfare economics sense. Only citizens may demand care coverage when they are healthy and face complementary insurance following a prudential criteria say according to R Dworkin's view of what a well informed *pater familia* should do.

Therefore, the important issue to discuss in analysing co-payments in health care is, on one hand whether in some cases, users' prices may be not only (perhaps) more efficient in avoiding waste (where marginal benefit of care is lower than marginal costs), but even more equitable than contributors' charges. For this, we need to be precise on what we compare; indirect versus direct taxes, taxes on consumption (related or no) health care hazards, etc. We cannot assume that always, in any case, taxes are more equitable than co-payments. This could be clearly the case by removing the exemption of social security retirees on drugs. In Spain, as in some other developed countries, elderly do not seem to be the poor part of the population once we take into account not only income

but wealth and relative consumption needs. Similarly, by introducing a flat payment on medicines (other perhaps than for the case of generics), given the low transaction costs involved for the health authorities and its revenue potential.

On the other hand, we may need to further explore the possibilities that complementary insurance is offered in public health care, above the health care entitled on a national (European?) basis. This has a common well understood case when care is not effective or even not cost effective-superior to other existing treatments at a national (European?) level. This may be the response of a NICE type of institution and/or a European Agency for Drugs (under the pharmacoeconomics requirement for better cost-efficiency). In addition, this complementary coverage may have a territorial version (particularly in decentralised or federal fiscal systems), in this case with local surcharges or regional contributions from public revenue other than for the national guaranteed services.

In addition, we should not forget that in any public health system, whatever is not publicly supplied or centrally regulated is not 'prohibited'. This means that whenever public health care works with a rather limited performance or under a poor quality standard and some citizens have to pay from their own pocket for substitutive private health care, this becomes a sort of co-payment that ends being extremely unfair. In this case, no information or control is possible other than private access costs and individual willingness to pay for avoiding suffering.

Bibliography

Casado D. and López Casasnovas G. (2001), *Vejez, dependencia y cuidados de larga duración*. Colección de Estudios Sociales. Fundació La Caixa.

Chernichovsky, D. (2000) *The public-private mix in the modern health care system. Concepts, issues and policy options revisited*, Working Paper 7881, NBER, September.

Coulson, N. E. and Stuart, B. (1992), *Persistence in the Use of pharmaceuticals by the Elderly: Evidence from Annual Claims*. *Journal of Health Economics*, 11(3), 315-328.

Grootendorst (1995), *A Comparison of Alternative Models of Prescription Drug Utilization*, *Health Economics*, 4, 3, 183-198.

Ibern, P. (1996), *La concentración de los costes sanitarios per cápita y control del riesgo*. *Gaceta Sanitaria* 47, 133-39.

Ibern, P. , Murillo, C. (1998), *Posibilidades y límites de la transferencia de riesgo a intermediarios en el sector salud*. BBVA Foundation working papers. CRES- Pompeu Fabra University.

G. López and B. Jönsson (eds.) 2001, *Reference Pricing and Pharmaceutical Policy. Perspectives on Economics and Innovation*. Springer, Barcelona, Spain, 2001.

López Casasnovas, G. (1997), *La financiación hospitalaria basada en la actividad en sistemas sanitarios públicos. Regulación de tarifas y eficiencia: el caso de la concertación hospitalaria en Catalunya.*, in López Casasnovas y Rodríguez D. (1997) *op. cit.*

López G., Ortún V. , and Murillo C. Ed. (1999), *El sistema sanitario español: Informe de una década*. Fundación BBV. Bilbao. Spain.

Martínez, E. (1998), *Las deducciones en el IRPF por gasto sanitario privado: situación actual y posibilidades de reforma*. *Papeles de Economía Española*, nº76, (1998), pp. 273-283

Murillo,C. and Carles, M. (1999), *Diseño de indicadores de capacidad adquisitiva de los usuarios para mejorar la racionalidad y la equidad en la financiación sanitaria*, Madrid: Ministerio de Sanidad y Consumo, and CRES (Center for Research in Health and Economics).

Murillo, C. González, B. (1993), *El sector sanitario en España. Situación actual y perspectivas de futuro*. *Hacienda Pública Española* 1993; 41-58.

Newhouse, J. (1993), *Free for All? Lessons from the RAND Health Insurance Experiment*, The Insurance Experiment Group Coauthors, Harvard University Press.

Puig-Junoy, J. (1988) *Gasto farmacéutico en España: Efectos de la participación del usuario en el coste*. *Investigaciones Económicas*. Vol. XII nº1 (1988) 45-68.

Puig-Junoy, J. (2001), Los Mecanismos de Copago en Servicios Sanitarios: Cuando, Cómo y Porqué. Hacienda Pública Española (en prensa).

O'brien, B. (1989), The Effect of Patient Charges on the Utilisation of Prescription medicines, *Journal of Health Economics*; 8(1), 109-32.

OECD (2000), Health Care Systems in Transition : Spain. European Observatory on Health Care Systems.

Rice, T. and Morrison, K.R. (1994), Patient Cost Sharing for Medical Services: A Review of the Literature and Implications for Health Care Reform, *Medical Care Review*, 51(3): 235-287.

Rice, T. (1998), *The Economics of Health Reconsidered*, Chicago: Health Administration Press.