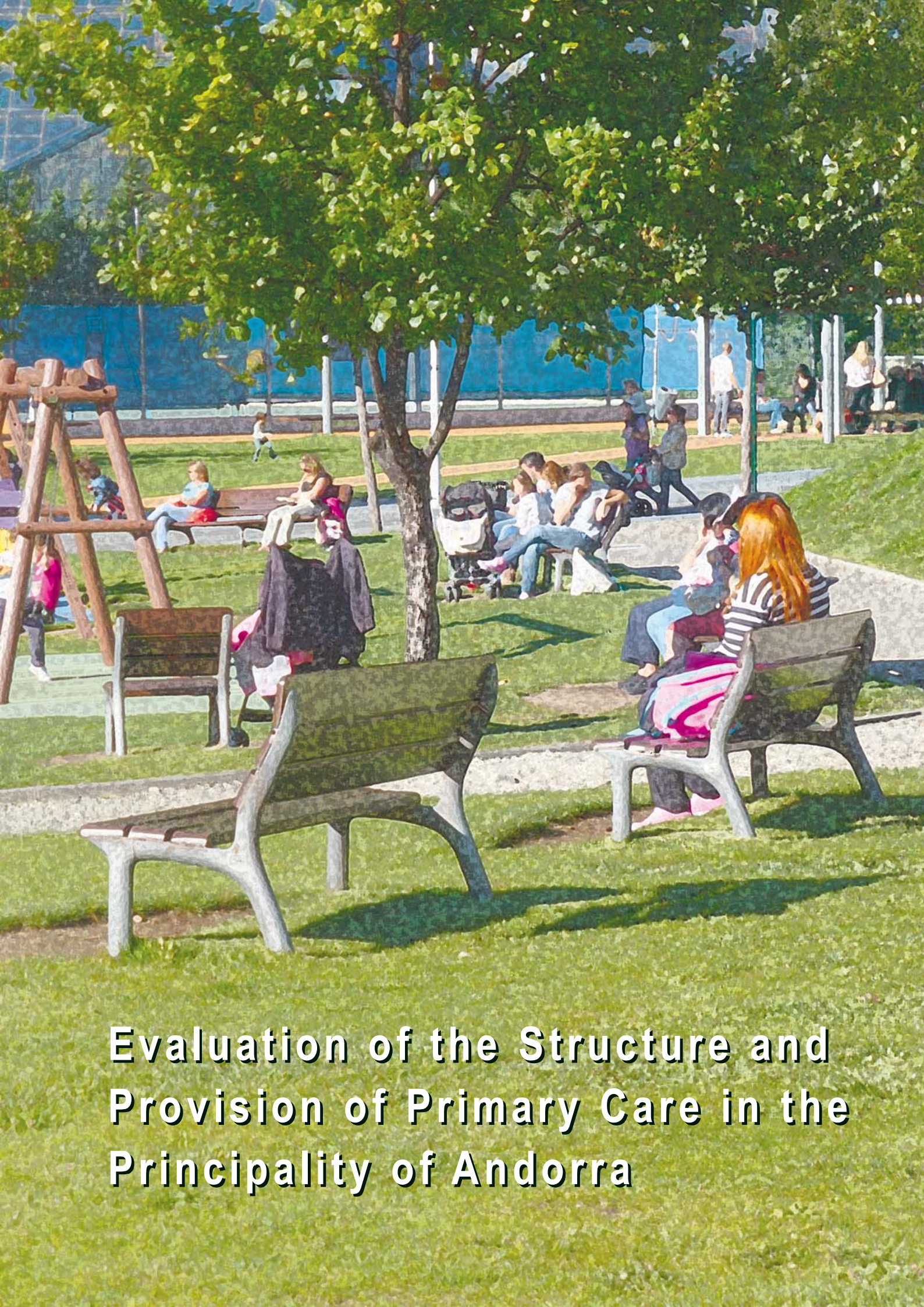

Evaluation of the Structure and Provision of Primary Care in the Principality of Andorra

WHO Regional Office
for Europe

Netherlands Institute
for Health Services
Research

Evaluation of the Structure and Provision of Primary Care in the **Principality of d'Andorra**

A survey-based project

August 2014

Abstract

Health reforms are part of the profound and comprehensive changes in essential societal functions and values occurring in many Member States in the WHO European Region. Primary care reform is not always evidence based and may be driven by political arguments or the interests of specific professional groups. However, policy-makers and health care managers now increasingly demand evidence of the effects of reforms and the responsiveness of services.

The WHO Primary Care Evaluation Tool (PCET) aims to provide a structured approach to evaluation. It focuses on health systems functions, such as governance, financing and resource generation, and the characteristics of a good primary care service delivery system, which include accessibility, comprehensiveness, coordination and continuity. This report provides an overview of findings from the use of PCET in the Principality of Andorra.

The project was carried out between 2012 and 2014 as part of a biennial collaborative agreement between the WHO Regional Office for Europe and the Ministry of Health and Welfare of Andorra, an agreement that lays out the main areas of collaborative work. It also involved the Netherlands Institute for Health Services Research (NIVEL) – a WHO collaborating centre for primary care – and stakeholders in the Andorran health system.

Keywords

PRIMARY HEALTH CARE
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HEALTH SYSTEMS PLANS – organization and administration
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ABBREVIATIONS

BCA	biennial collaborative agreement (between WHO Regional Office for Europe and Member States)
CASS	Caixa Andorrana de Seguretat Social (Andorran Social Security)
CME	continuing medical education
CVD	cardiovascular disease
ECG	electrocardiogram
EU	European Union
EU15	countries belonging to the EU before May 2004
GDP	gross domestic product
GP	general practitioner
MoHW	Ministry of Health and Welfare of the Principality of Andorra
NGO	nongovernmental organization
NIVEL	Netherlands Institute for Health Services Research
PC	primary care
PHC	primary health care
PPP	purchasing power parity
PCET	WHO Primary Care Evaluation Tool
SAAS	Servei Andorrà d'Atenció Sanitària (Andorran Health Care Service)
SDR	standardized death rate
STI	sexually transmitted infection
WB	World Bank

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- CASS (Caixa Andorrana de Seguretat Social) – Andorran Social Security
- SAAS (Servei Andorrà d'Atenció Sanitària) – Andorran Health Care Service
- Ministry of Health and Welfare of the Principality of Andorra

Furthermore, the project implementation team is grateful for the participation of all patients, general practitioners, primary care nurses, fieldworkers and local organizers throughout the country.

PREFACE

In 1978 an International Conference was held on primary health care services, during which what has been known since then as the Alma-Ata Declaration was adopted. The text called on all governments, international bodies (particularly the WHO and Unicef), as well as other international non-government agencies, to promote and strengthen primary health care, understood as a necessary consequence of the new financial and social-cultural conditions.

This Declaration defines primary health care as the principal nucleus of care in any health system, the first point of contact of the individual, the family and the community with the care system, understood as all the services of promotion, prevention, treatment and rehabilitation together, in order thus to achieve the maximum possible level in dealing with these problems and making the best possible use of the available resources.

In spite of the immense advances in health achieved in recent decades, in 2008 the WHO *World Health Report* again urged all the countries to reinforce their primary health care as the most efficient and beneficial way to guarantee fair and equitable access to health services.

In this context, the present study, centred on an assessment of the organization and current model for the supply of primary health care services in Andorra, forms part of the actions envisaged for deployment of the Reform in the health and social protection system. The principal aim of this Reform is to strengthen local services, in particular all the health and social services and resources which form the care and socio-health network of our country, which today, as everywhere, we have to rethink in order to ensure the capacity to be able to respond to these challenges as adequately as possible.

The results and recommendations which arise from the same text become a objective source of knowledge of the current situation; identifying the strong and weak points in the supply and organization of our primary health care services, and confirming the need to implement a new pattern of care, called the Andorran Health Care Model "Model andorrà d'assistència sanitaria" (MAAS).

The purpose of the MAAS is to develop and introduce a first effective regulation of the system which, respecting the principles of free choice essential to our system, establishes and creates the figure of the referring doctor and, with him, the creation of a multidisciplinary primary health care team which will become the principal doorway for access to the health system. The ideal is to guarantee comprehensive care, coordinated and continuous, centred on people's needs, and at the same time encourage a rational use of resources.

This study has been carried out with the close collaboration and support of the WHO Regional Office for Europe (WHO/Europe) and the Dutch Institute for Health Services Research (NIVEL –Netherlands Institute for Health Services Research), a centre collaborating with WHO/Europe and with long experience in such matters. Its results, highly representative, confirm to us that we are going in the right direction, while also making clear that we have to go further than the regulation of care and that it is also essential to tackle a new model of government and leadership in the system, and to introduce new figures of financing which encourage a more equitable access.

I would like very specially to express my gratitude for the collaboration and participation of all the professionals and citizens who have made it possible to carry out this study. The conclusions of this evaluation are one more element in the consolidation of our health system.

Cristina Rodríguez Galan

Minister of Health and Welfare

FOREWORD

Primary health care embodies the values and principles that WHO pursues in its worldwide effort to help countries strengthen their health systems to make them more equitable, inclusive and fair. WHO renewed its commitment to global health improvement, particularly for the most disadvantaged populations, in the *World health report 2008 (1)*, which urges countries to strengthen primary health care as the most efficient, fair and cost-effective way to organize a health system. The subtitle of the report underscores the urgency of its message: "primary health care: now more than ever".

The WHO European Region has a long history of developing health strategies based on scientifically sound and socially acceptable interventions that promote solidarity, equity and active involvement of various sectors and civil society. Health in the 53 European Region Member States has improved considerably over the past 30 years despite significant changes in patterns and trends of disease occurrence, demographic profiles and exposure to major risks and hazards in a rapidly evolving socioeconomic environment. The Region has also witnessed the development of more integrated models of care and greater pluralism in financing and organization of health systems.

Governments are continuing to rethink their roles and responsibilities in population health and the organization and delivery of health care. The WHO European policy framework for health and well-being, Health 2020, is an example of such reflection. It offers practical pathways for addressing current and emerging health challenges in the Region and emphasizes that primary health care is one of the preeminent instruments for integrating prevention within the wider health system.

This report evaluates primary care developments in Andorra using a methodology that characterizes a good primary care system as one that is comprehensive, accessible, coordinated and continuous. The methodology assesses whether primary care service delivery is supported by an adequate legal and normative framework, financing mechanisms, human resource strategies, supply of appropriate facilities, equipment and medicines, and effective leadership. The report therefore offers a structured overview of the strengths and weaknesses of the country's organization and provision of primary care services – built i.a. on the perceptions of professionals and patients – for policy-makers and stakeholders. The Regional Office hopes that the report will inform further primary care reform in Andorra, helping health care to meet people's needs and expectations.

I thank the many stakeholders who have generously contributed to this project with their ideas and insights.

Hans Kluge

Director, Division of Health Systems and Public Health

WHO Regional Office for Europe

EXECUTIVE SUMMARY

The implementation of the Primary Care Evaluation Tool (PCET) was among the activities mentioned in the 2012–2013 Biennial Collaborative Agreement between the Ministry of Health and Welfare of the Principality of Andorra and the WHO Regional Office for Europe. Other partners were the Netherlands Institute for Health Services Research (NIVEL) – a WHO Collaborating Centre for Primary health care, – the Centre for Sociological Studies (CRES) at the Institute of Andorran Studies (IEA) and stakeholders in the Andorran health system. The Primary Care Evaluation Tool (PCET) addresses both supply-and demand-side aspects of primary health care. It is intended to help ministries of health and other stakeholders to monitor the progress of primary health care-related policies and reforms and provides evidence for setting new priorities aiming to strengthen primary health care.

METHODS

The development of the PCET started from principles of the WHO 2000 Health Systems Framework *(1)*, stating that the performance of a health system is determined by the way its functions are organized. These functions are stewardship, resource generation, financing and service provision. The PCET addresses these four functions, together with the key characteristics of primary health care (PHC) services, including accessibility of services, continuity of care, coordination of care and comprehensiveness. For each of these functions and characteristics indicators or appropriate proxies have been included in the PCET.

To evaluate the complexity of primary care systems, the Tool gathers information from different levels, and from both the demand and the supply side. Accordingly, the PCET consists of three instruments: a questionnaire addressing the status, structure and context of PHC at the national level; another questionnaire for physicians in primary care (general practitioners), and a third questionnaire for patients. For Andorra an additional questionnaire for nurses working in primary care centres was developed. The questionnaires for general practitioners (GPs), primary care nurses and patients are pre-structured, with pre-coded answers. The national questionnaire contains both pre-structured and open-ended questions, with room for statistical data.

In several stages the project team, in close collaboration with policy makers, stakeholders and experts in the country, has implemented the Tool in Andorra between 2011 and 2014. The three questionnaires were completed by, respectively, national policy experts and other health system stakeholders; nurses in primary care; GPs and patients who visited these GPs. The project team processed and analysed data in the Spring of 2014. The draft report has been discussed with policy makers, stakeholders and experts in Andorra in June 2014. The final report was completed in July 2014.

The PCET approach with surveys means that the results rely on respondents' self-reported behaviour and experiences. Reported involvement of GPs and nurses in certain health services do not imply a measure of quality. The results are estimations of the real situation.

RESULTS

Study response

The surveys had a response of 26 General Practitioners (GPs), 41 PHC nurses and 390 patients that visited a GP. The achieved response rates of 70.3% among the GPs, 95.3% among primary care nurses and 93% among the patients, are very satisfactory. As the total populations of GPs and primary care nurses could be included in the study, the results provide a very reliable insight in the situation of primay care in the country.

National results

(based on answers from the national questionnaire and information from experts and site visits)

Context

Although Andorra is wealthier than its neighbour countries, it has also experienced an economic downturn. Deteriorated public finances since 2008 urged the government to implement austerity measures that also affected the health care system. As the economy strongly relies on foreign workforce, Andorrans are a minority in their country. The number of the population fluctuates with the trend of the economy. When foreign workers become unemployed they often decide to return to their home country. Life expectancy is high and health indicators are positive in Andorra, but these cannot be well copared to other countries as the population mobility is higher than elsewhere; in particular re-migration at older age to the country of origin is a frequently occurring phenomenon.

Stewardship / governance

An explicit health care policy has developed relatively late. The General Health Law in 1989 defined the functions of the actors in the health care system and laid the basis for a generous health care system with much freedom for both patients and providers and with little priority setting and planning. A Ministry of Health was established only in 1993.

The tide changed in 2009 with the Strategic Plan of Health (PES), which diagnosed the health care system and made proposals to strengthen health care governance and to control expenditures. In 2012 this was elaborated in the Andorran Model of Health Care (MAAS), and in the Governmental Plan 2012-2015 for the reform of the health and social protection system. These documents explained principles for the health care system, such as responsiveness, person-centeredness, comprehensiveness and continuity, and the requirements of safety, quality and efficiency. The formulation of a series of strategic objectives completed the break with the past.

The execution of the social health insurance system is in the hands of the semi-governmental Andorran Office of Social Security (CASS). Payments by CASS are based on an agreed catalogue of services. The management of publicly financed health care services is in the hands of the Andorran National Health Service (SAAS).

Policy development for PHC

Recently initiated reforms aim to restructure primary care to become the entry to the health care system and to make services more user-centred. The new care model identifies three levels around a ‘reference physician’. Primary care and some specialties close to primary care should be the first level. Continuity of care should be guaranteed by new mechanisms to promote coordination and communication among providers. Regulated access to the system is seen as desirable and, furthermore, activities at the primary care, home care and community levels should be expanded at the expense of care provided at the other levels.

Financing

The health care system in Andorra is a variant of the social insurance model. Paying premiums is obligatory for employees as well as self-employed. For unemployed people the government pays social insurance promiums. An estimated 5 to 10% of the population is poorly covered as they are unable to pay the premiums.

Insured people normally pay 25% of the bill in ambulatory care and 10% in inpatient care. Many people have a private insurance for these shared costs. The health expenditures have grown strongly in Andorra, especially since 2005, but the government had little possibilities to curb this trend. Around one-sixth of public health expenditures are paid for health services used outside the country.

GPs are working independently and are paid a fee for services. Also office-based private medical specialists, who provide outpatient secondary care, have a fee for services. The SAAS- employed hospital physicians receive a fixed salary. The primary care health centres are financed per case for nursing and midwifery services and for the remaining services by a global budget.

The health care reform aims to create new payment and reimbursement systems as incentives for more efficiency and better quality of care.

Human resources and education

Around one in seven physicians in Andorra is a GP. As medical education is not available in Andorra, most physicians have received their medical education in Spain or France. Also for continuing education (CME) they usually have to go abroad. However, CME is not obliged in Andorra. Nurses can be educated within the country.

The physician density in Andorra is close to that in France, but lower than in Spain and Portugal. No national norms exist for the number of patients per GP or the distribution of health care providers. No staff shortages were reported, but the high average age of GPs indicates that replacement will be needed in the near future because of retirements.

Patients' rights

No laws or regulations exist specifically pertaining to patients' rights. An advisory body to the Government has made initial steps for a Law on the rights and duties of patients. No patient empowerment programmes have been developed. Since 2013, practices and health facilities in Andorra are obliged to have a procedure for dealing with complaints of patients.

Quality management

Routine process or outcome measures to monitor the performance of the health care system are not used. A National Health Survey (most recently held in 2011) enquires the satisfaction of the population with the health care services. Physicians and nurses are not obliged to undergo regular tests of professional knowledge and level of competence. Re-licensing procedures are not in place yet. The issues of monitoring and quality assurances are being addressed in the current health sector reform.

A number of clinical guidelines for use by GPs have been developed, but mechanisms to disseminate them and promote their use are absent. The situation of nursing protocols and guidelines is more positive.

Service provision

(Results from the national level questionnaire)

Primary medical care is provided by independently working GPs and medical specialists, while nursing, maternity and community services are provided by the publicly funded and managed health centres.

There is only one hospital in the country, the Andorran Hospital Centre (CHA), run by SAAS.

Both salaried hospital doctors and private medical specialists use its facilities. Accident and emergency services are also based in CHA. Hospital bed supply in Andorra is considerably lower than in the surrounding countries.

Most GPs work in single-handed practice; they are not holding a gate keeping position. Some form of gate keeping, though not exclusively for GPs, is considered in the model the 'reference physician', which is promoted in the current health sector reform.

Both GP contact rates and prescription rate are high. On average patients have 10 contacts with a GP per year; per 100 patient contacts, GPs produce 124 prescriptions.

In addition to health services in Andorra, the population has access to medical care outside the country, in particular in Catalonia and France.

Results concerning GPs, patients and nurses in PHC

(from the surveys)

Almost all GPs are self-employed. Only one quarter has completed a specialisation in family medicine. With 51 years the average age of the GPs is high. Those with a specialisation in family medicine, however, are among the younger cohorts. More than half of the GPs has worked outside Andorra for some time, but still, on average, they have currently been working in the country for 19 years. Nurse are working in the primary care centres, run by SAAS. On average they are almost 10 years younger than GPs, 42 years, and have 11 years of experience as a nurse.

Most patients belong to the older age groups, though not being retired yet. As expected, the majority were women and, furthermore most respondents were living with a husband, wife or in a larger family. Less than one third was born in Andorra. In addition to the universal coverage by the CASS health insurance, less than half of the respondents had a supplementary private health insurance.

Workload

Three quarters of the GPs are working with a medical secretary. With 37.4 hours, the average working week is relatively short for self-employed GPs, but variation is considerable. The workload, in terms of patient contacts is higher in the winter season that in the summer. The number of office-based contacts is 18 in winter and 14 in the summer time. Home visits are sparsely made: 2-3 per week. Nurses have an average working week of 39 hours and they see 30 patients per day in the centre and a few in home visits (together 12 per week). Around half of the patient contacts results from a referral of a GP.

Accessibility of care

GPs and SAAS health centres are attainable in a short travel time, also by public transport. Patients find that accessibility of GP practices for disabled persons could be improved. Co-payments for primary care services may be a financial hurdle and a source of inequity in health care. During the 12 months before this visit, co-payments made 11% of patient respondents

decide not to visit or to delay a visit to their GP. Electronic access to GP practices seems to be hardly an option, but it is not a big issue for patients.

GPs report that patients can generally see them the same day, which is in line with what most patients report. When GPs are absent, most have an arrangement with another GP. Practically all GPs have opening hours in the evening at least once per week, but only half of the patients know this. Opening during a weekend day, however, is unusual. Still, only few patients are not satisfied with current opening hours of GP practices. Part of the patients would appreciate efficiency resulting in shorter times for making appointments and sitting in the waiting room.

Group sessions or clinics for specific patient groups, for instance patients with diabetes or hypertension, are reported by only five GPs. Clinics for elderly people or for family planning information are each reported by only one GP. Same day visits in the SAAS health centres are reported by the nurses as generally possible, but evening openings are unusual. Also in the PHC centres of SAAS group-wise activities are rare and half of the nurses are not involved in it at all. The only exception are activities for pregnant women (mentioned by 39% of the nurses).

According to the general image that patients have about GPs in Andorra, these are strong in an advisory role and in dealing with somatic problems, which do not require specific device or equipment. Health problems with technical or interpersonal components are much less perceived to belong to the GP's professional domain.

Coordination of care

Well over half of the GPs is working in a solo practice. Structured collaboration with other primary care workers is not well developed. Half of the GPs have regular meetings with colleague GPs, but such meetings with community nurses, social workers, psychologists and pharmacists are infrequent, and with midwives not reported at all. Also connections with the community are weak. In contrast, professional contacts with medical specialists, in the form of consultations and asking advice, are well developed, especially with cardiologists, internists and surgeons. GPs reported that 6% of their patient contacts ended with a referral, sometimes in Spain or France. However, patients can also contact medical specialists directly, without a referral of the GP.

Patients are much more positive about the flow of information from GPs to medical specialists and vice versa, than between GPs.

In the SAAS primary care centres nurses work with other nurses and other disciplines, in particular midwives, and social workers, which facilitates regular meetings. Many patients are seen on a referral by a GP, but only few have regular meetings with GPs. More incidental forms, such as asking advice by telephone are much more frequently used. Most nurses also have such contacts with surgeons, paediatricians, internists and the emergency service. Few nurses, like GPs, have regular meetings with local authorities or community workers.

Continuity of care

Although clinical records are reportedly well kept by GPs, storage and access are likely to be sub-optimal. Not all GPs use the computer for keeping clinical records or producing medicine prescriptions and referral letters. Furthermore, the information system of most GPs is unable to easily generate lists of patients by diagnosis or health risk. The information system used in the PHC centres of SAAS does not seem to be better. Telephones still seem to play an important role in the communication between health care providers.

Although patients reported a variation of consultation time, overall GPs take much time for their patients, which is well appreciated. Patients are also generally positive about the GP's knowledge of their personal and medical backgrounds and the communication skills. More reserved are the patients about the GP's role in dealing with personal problems, the available medical equipment in the practice and the preparedness of the GP to make home visits.

Comprehensiveness of care

Four groups of activities have been distinguished in the clinical task profile of GPs: the role of the GP in the first contact with patients' health problems; the provision of medical technical procedures; the management of diseases; and the involvement in public health for certain groups of people. GPs reported a modest role as the doctor of first contact for patients with health problems and complaints (score 52%). The role of GPs in treating diseases is stronger (71%). But the role of GPs in providing medical technical procedures and preventive services is quite limited (44%). Finally, concerning activities on public health and for specific groups GPs answered to be moderately involved in activities including screenings, rehabilitation, school health and dealing with high risk groups. In particular, involvement of GPs in screening programmes and paediatric surveillance is low. More than half of the GPs is not involved in family planning and contraception. Most patients reported that GPs speak with them about healthy food and physical exercise, but alcohol consumption and smoking were much less frequently reported topics.

The service delivery profile of nurses was measured through 14 activities, including various screening, patient assessment, health education and technical nursing. The average score of 66% (maximum 100%) indicated room for improvement, in particular concerning the monitoring of smoking cessation, patient assessment for admission to residential settings, geriatric assessment, technical health education and health education in schools.

GPs differed in the medical equipment they have in their practice. On average they had 23 items from a list of 30. Generally not available are: aspirator, ultrasound, hemoglobinometer, peak flow meter and enema. For emergencies, cortisone, analgetics and diazepam are widely available in the GP practices and hypertensive drugs to a lesser extent.

Laboratory and X-ray facilities were reported to be not or insufficiently available to around a quarter of the GPs.

PHC centres of SAAS seem to be well-equipped. From a list of 20 items at least 18 were available. Least reported were the peak flow meter and wound stitching materials. Results point to important gaps in the availability of health information and education materials in GP practices as well as the PHC centres of SAAS. For instance, in both facilities information on cardiovascular risks, obesity, diabetes, sexually transmitted diseases, contraception and self-treatment of cold was absent according to most GPs and nurses.

Quality assurance

Instruments to maintain the quality of care and to gain feedback to tune health care to local needs are poorly applied by GPs. Most of them are no frequent users of clinical guidelines and the obligatory complaint procedure is available in only a few practices, which is confirmed by results of the patients survey. Two GPs organise an investigation of patients' satisfaction. Continual Medical Education (CME) events are almost equally attended in Andorra as in Spain. PHC centres of SAAS have complaint procedures in place and a majority of the nurses answered to frequently use protocols and guidelines. Investigations of patient satisfaction and nurses' job satisfaction are hardly used, however.

Selected indicators

Table 1 provides an overview of findings by a set of indicators from the surveys among GPs, nurses and patients.

TABLE 1

Selected PHC indicators in Andorra

Functions	Selected proxy indicators	Findings GPs (n = 26) PHC nurses (N = 41) Patients (N = 390)
Stewarship / Governance	Department in MoH specifically dealing with PHC	No
	GPs and nurses reporting to have a box and procedure for patient complaints in the practice	GPs: 19% Nurses: 95%
	Patients reporting that a complaint box and procedure are available in the practice of their GP	15%
	Patients reprting to have no objections against having to choose a GP before visiting a medical spcialist	49%
Financing	Patients reporting co-payments for a visit to GP	38%
	Patients reporting co-payments for drugs prescribed by GP	29%
	Patients reporting to have delayed or abstained from a doctor visit because costs could not be paid	11%
	GPs reporting to prescribe generic medicines as a routine (if available)	15%
Resource generation	Proportion of active physicians in Andorra working in PHC	14%
	Average population per GP	Per GPs: 1.900 inhabitants
	GPs having completed a post graduate specialization in Family Medicine	23%
	Average age of GPs (in years)	51.1 yrs
	Reported time spent on professional reading (hours per month)	GPs: 10.8 hrs Nurses: 7.7 hrs
	Medical equipment available to GPs (from a list of 30 items)	22.6 (75%)
	Medical equipment available to nurses (from a list of 20 items)	18.4 (92%)
	Patients agreeing that practice equipment of GP is sufficient	60 %
	GPs reporting no or insufficient access to laboratory facility	27%
	GPs reporting no or insufficient access to X-ray facility	23%
	GPs not using a computer	None
	Using the computer for keeping patients' records	GPs: 73% Nurses: 100%

Functions	Selected proxy indicators	Findings GPs (n = 26) PCH nurses (N = 41) Patients (N = 390)
Service delivery ***Access to services***	Proportion of patients living within 20 minutes travel from preferred GP, pharmacist and dentist	From: GP: 84% Pharmacist: 93% Dentist: 66%
	Average number of reported patients per GP (survey)	3239 patients
	Average number of patient consultations **per day** in winter (w) and summer (s)	Gps: (w) 18 / (s) 14 Nurses: 30
	Average number of home visits **per week**	GPs: (w) 3 / (s) 2 Nurses: 12
	Average number of working hours per week	GPs: 37.4 hrs Nurses: 39.3 hrs
	Average length of patient consultations (in minutes; patients' survey)	GPs: 24.6 min.
	Offering evening opening at least once per week	GPs: 96% Nurses: 5%
	Patients being satisfied with current opening hours of GP	87%
	Patients reporting same day consultations with GP is possible if requested	76%
	Patients who *disagreed* that the GP waiting room was convenient	13%
	Patients who *disagreed* that the GP practice was well accessible for disabled people or people in wheelchairs	23%
	GPs' indicative referral rate to secondary level specialists (as a proportion of all office and home care visits)	6%
	Number of referrals **per week** from nurses to GPs (reported by nurses)	5
	Number of referrals **per day** from GPs to nurses (reported by nurses)	18
Coordination	GPs sharing premises with other GP(s), PHC workers or medical specialists	46%
	GPs reporting to have regular meetings with pharmacists	8%
	GPs reporting to have regular meetings with PHC nurses	30%
	Nurses reporting to have regular meetings with a GP and to ask advice from GP if necessary	Meetings: 20% Advise: 98%
	GPs reporting to always use referral letters	62%
	Patients agreeing that their GP always informs medical specialist in case of referral	82%
	GPs' information system allowing to easily generate lists of patients by diagnosis or health risk	35%

Functions	Selected proxy indicators	Findings GPs (n = 26) PHC nurses (N = 41) Patients (N = 390)
Continuity	GPs and nurses reporting to keep full medical records routinely	GPs: 92% Nurses: 76%
	Patients reporting to be with this GP for at least 1 year	83%
Comprehensiveness	GPs' role in *first contact care* (with18 selected health problems) (% of maximum score)	51.8%
	GPs' involvement in *treatment of diseases* (selection of 19 diseases) (% of maximum score)	71.3%
	GPs' involvement in the provision of 16 *medical-technical* and preventive procedures (% of maximum score)	44.3%
	Coverage for public health and activities for specific groups (based on 8 items; maximum=100%)	GPs: 47% Nurses: 66%
	GPs performing cervical cancer screening	27%
	GPs providing family planning / contraception services	46%
	GPs providing routine antenatal care	28%
	GPs performing TB screening/early diagnosis	27%
	Offering clinics for specific population groups or categories of patients	GPs: 19% Nurses: 49%
Quality assurance	GPs having regular meetings with local authorities	GPs 8%
	Reporting to frequently use clinical guidelines/ nursing protocols	GPs 42% Nurses: 60%
	Reporting investigation of satisfaction of patients	GPs 8% Nurses 5%
	GPs reported number of CME events followed in 2012 (average)	In Andorra: 4 Spain: 4 France: 1

RECOMMENDED POLICY ACTION [1]

Governance and regulation

Priority for primary care

Primary care development, with a stronger role for general practitioners (GPs) and nurses, should be a priority to improve the efficiency, coherence and quality of the health care system overall.

> *Recently first plans have been developed to better structure health care. Although three levels of care have been distinguished, an exclusive domain for primary care and a vision on the interrelations between GP practices, medical specialists, the hospital and PHC centres of SAAS are waiting to be specified. The implementation of plans for more integrated primary care services requires the active involvement of stakeholders.*

Responsiveness: patients' feedback

The role of the patients and users of health care services should be strengthened. Complaints procedures should be better maintained and systematic feedback from patients in PHC centres and GP practices should be organised, with a supervisory role for the government.

> *Obligatory complaint procedures were poorly maintained in general practice, probably by lack of coordination and inspection. Feedback from patients, otherwise than from complaints, is currently not systematically gathered, while it can help decision makers and practitioners to improve the quality and responsiveness of health care services. A state inspectorate should supervise the well-functioning of the system.*

Integrated primary care

The two pillars of primary care, the nurses in the PHC centres of SAAS and the GPs in their practices, should be more integrated. Incentives should be created for a homogeneous package of services offered to the population. Health care workers should be encouraged to cooperate and work in teams.

> *Cooperation between GPs and between GPs and the PHC centres of SAAS is incidental and not based on protocols or shared approaches. The recognition of GPs and PHC centresof SAAS as a level of the health care system would imply that the services will be delivered in a less fragmented way than they are now and, as much as possible, be based on the latest available evidence. In the furure, new GPs should be encouraged to have their practice in a PHC centre.*

Coordination function in primary care

It should be promoted that GPs will be the 'reference physician', as they are best positioned for this role.

> *In the current policy plans the GP is just one of the options to be the 'reference physician'. However, GPs as the entry to health care and at crossroads of medical, nursing and social care and rehabilitation, are better positioned to meet the expectations attached to this new function.*

Licensing and re-licensing

Only physicians who have completed a postgraduate training in family medicine should be eligible to work as GPs. In line with requirements in other countries GPs and other physicians should relicense five-yearly if requirements on CME and practise have been fulfilled.

> *Licensing and re-licensing are meant as a basic condition for qualified and up to date health care workforce. Currently no re-licensing scheme is in place in Andorra. With the introduction of such a scheme the limited availability of CME in Andorra should be taken into account.*

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[1] The recommendations are based on data from the surveys among GPs, nurses of SAAS Health centres and patients, as well as information gathered among experts and observations made by the researchers at site visits.

Health information

Available health care information should be better used and health information systems should be further developed to generate information that practitioners need for continuing patient care and policy makers to keep the health care system on track.

> *Information on the process and outcomes of health care were scarce. Patients' medical and nursing records were poorly accessible for modern practice. As far as computers were used at all, it seemed that the software was not up to date to retrieve data for proactive purposes. Computers can promote the clinical work of GPs and an efficient practice management. Continuity of care, systematic prevention and communication of patient data between health care workers require a suitable practice information system. Planning of the health care system requires the availability of information.*

Human resources

The government should develop a human resources policy and plan to safeguard the availability of sufficient health care workers with required qualifications in the future, in particular GPs.

> *In the near future several GPs will retire and will need to be replaced.A human resources plan should also consider the workforce needs and required skill mix which result from the new vision on primary care*

Care at the patients' home

Well-developed primary care should include possibilities of medical and nursing services delivered in the home situation. These services should be integrated with social services and with care provided in residential settings.

> *Both nurses in the PHC centres of SAAS and the GPs made relatively few home visits. Delivery of care to frail elderly people living at home, to chronically ill people or to patients who need care after hospital discharge has not been well organised yet. Health and social services provided in the patients' homes can be an effective response to challenges related to the ageing of the population and substitute for institutional care in the hospital or nursing home.*

Financing and incentives

Financial equity

The current general scheme of co-payments should be alleviated for primary are services as they are likely to be an obstacle to the use of health services and may result in unmet health needs.

> *About half of the patients answered to have a private insurance to cover co-payments. A smaller part of the patients indicated to have delayed or abstained from a visit to the GP for financial reasons during the previous 12 months. Access is an essential function of primary care. If people delay a visit to primary care for financial reasons opportunities for early detection of disease can be missed.*

Financial incentives in primary care

New incentives should be developed to encourage primary care providers to improve their competence and the quality and diversity of their services.

> *The current salary for nurses and the fee for service payment for GPs include no specific incentives. New mixes of incentives should reward specific performance in primary care in an integrated way. They should both serve the realisation of health care priorities and be attractive to providers.*

Purchasing function

CASS should be enabled to develop the purchasing function for health care services to stimulate efficiency, quality and responsiveness.

> *The main role of CASS is currently in funding and paying services. A purchasing role for CASS could well fit in a general development to expand the range of health governance tools.*

Quality assurance

Clinical guidelines

GPs and nurses should be encouraged to adopt and incorporate clinical guidelines and protocols in their daily routines. Guidelines and protocols used by different disciplines should be coordinated to facilitate the development of clinical pathways across level of care.

> *Few guidelines and protocols are currently available and coordination of its development and implementation is absent. Clinical guidelines can be the basis for performance indicators and can be used in continuing education courses. Guidelines for certain categories of patients should be developed in a coordinated way, including nurses, GPs and medical specialists.*

Service delivery

Comprehensiveness of GP services

The scope of services provided by GPs should be expanded in the area of first contact care, minor surgery and care for specific groups

> *The role of GPs as the entry and first contact was limited. Improvement were also possible in the area of medical procedures, which are now probably performed in the hospital. Prevention, health education and certain public health tasks are also suitable for transferral to the primary level.*

Medical equipment

The availability of laboratory and X-ray facilities for GPs should be reviewed. Furthermore it should be investigated if the medical equipment of GPs is in line with the services they are intended to offer to patients and their role in the health care system.

> *GPs reported they had insufficient access to laboratory and X-ray facilities. Furthermore patients were critical about the available equipment in their GP's practice.The government and the GPs could agree on a list of recommended practice equipment.*

EVALUATING PHC: BACKGROUND AND APPLICATION

THE THEORETICAL FRAMEWORK OF THE PCET

Why evaluate PHC?

Careful monitoring is called for in any reform process. Although strengthening PHC services is a priority in many of the countries in the WHO European Region, the nature of such reforms varies greatly from west to east. In Western Europe, PHC is expected to help address rising costs and changing demands that result from demographic and epidemiological trends. In the central and eastern part of the Region, however, countries once part of or closely allied with the Soviet Union are struggling to drastically improve the performance and cost-effectiveness of their entire health systems. These countries are now developing PHC to improve overall health system efficiency and bring adequate, responsive health services closer to their populations. In many of these countries, health care reforms have been part of profound, comprehensive changes in essential societal functions and values *(2)*.

Performance evaluations and measurements play an increasing role in health care reforms. Stakeholders need the information to decide how best to steer the health system towards better outcomes *(3)*. In the past, reforms were not always based on evidence, and changes were often driven by political arguments or professional interests rather than sound assessments. That situation is changing. Health care stakeholders are holding decision-makers increasingly accountable for their choices, demanding evidence from them on, for instance, the progress of reforms.

In addition, demographic and epidemiological changes require that health systems adapt to new population demands. Effective adaptation requires that the systems evaluate the responsiveness of health services from the patient perspective. Such evaluations can provide information about how accessible and convenient services are, how health workers treat patients, how patients receive communications that may affect their behaviour and well-being and how health care is managed, both at the PHC level and beyond.

However, health system evaluations and performance assessments should be contextualized appropriately before they inform policy-making and regulation. Not only do governments use such material directly, but in exercising their stewardship role they should also generate an appropriate flow of information, make it available to other health system stakeholders and ensure that the relevant analytical capacity is in place *(3)*.

Finally, system evaluations and performance assessments should be based on a proper framework. Deriving indicators from an accepted framework helps ensure that the indicators are relevant and that they cover key topics sufficiently. The following sections describe the framework used to develop the PCET.

PHC evaluation and the health systems framework

A health system can be defined as a structured set of resources, actors and institutions related to the financing, regulation and provision of health actions to a given population. A health action is any activity whose primary intent is to improve or maintain health. The overall objective of a health system is to optimise the health status of an entire population throughout the human life-cycle, including cases of both premature mortality and disability *(3)*.

Health systems aim to achieve three fundamental objectives *(1, 4)*:

- *improved health* (e.g. better health status and reduced health inequality);

- *enhanced responsiveness to the expectations of the population,* encompassing: respect for the individual (including dignity, confidentiality and autonomy); client orientation (including prompt attention, access to services, basic amenities and choice of provider); and
- *guaranteed financial fairness* (including fairness in household contributions to national health expenditures and protection from financial risks resulting from health care).

A health system's overall performance is reflected in how successfully it attains these goals. However, as health conditions and health systems both vary among countries, the country context needs to be addressed when comparing the performance of health systems. Thus, the measurement of performance should cover both goal attainment and available resources and processes.

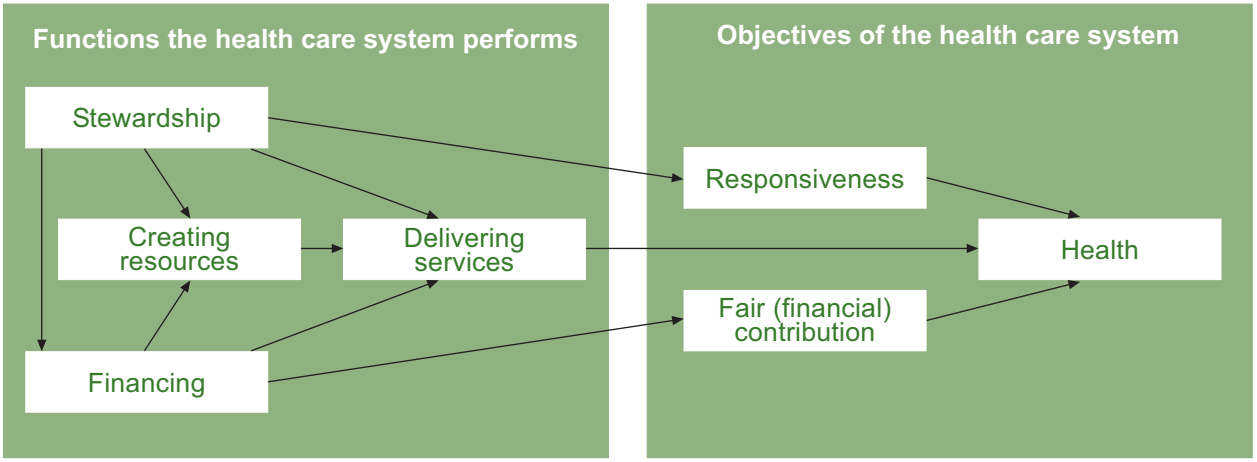
The WHO health system performance framework (see Fig. 1) indicates that the performance of a system is determined by the way in which four key functions are organized (4):

- stewardship
- resource generation
- financing
- service provision.

Although the international literature presents other approaches to performance measurement *(5–8)*, they all employ similar insights or related concepts. The four functions can be applied to the whole health system of a country or, for example, to PHC only, with specific subcharacteristics for PHC service provision.

FIGURE 1

WHO health system functions and objectives



What does each health system function encompass?

Stewardship

Stewardship is an overriding function, overseeing all basic health system functions but more broadly than regulation. It affects health system outcomes both directly and indirectly *(1)*. Stewardship encompasses the tasks of defining the vision and direction of health policy, exerting influence through regulation and advocacy, and collecting and using information. It has three main aspects: i) setting, implementing and monitoring the rules for the health system; ii) assuring a level playing field for purchasers, providers and patients; and iii) defining strategic directions for the health system as a whole.

Stewardship can also be subdivided into the subfunctions of overall system design, performance assessment, priority setting, regulation, intersectoral advocacy and consumer protection *(4)*. In short, stewardship involves governing, disseminating information about, coordinating and regulating the health system at various levels.

Resource generation

Not only does every level of a health system need a balanced variety of resources to function properly, but they also have to be further developed to sustain health services over time and across various levels and geographical areas. The resources needed include facilities, equipment, consumable supplies, human resources, knowledge and information.

It is especially crucial that the quantity and quality of human resources adequately matches the demand for services across the various levels of health care, and that they are equitably distributed across the country. Naturally, to ensure quality of care, the skills and knowledge of health providers need to be up to date and compatible with developments in technology and evidence-based medicine. Policy development that concerns human and physical resource planning falls under the stewardship function, as do regulatory frameworks for assuring high-quality service provision and consumer protection. However, actual workforce volume, distribution and professional development (including training, CME and research) are usually measured as part of resource generation.

Financing

In general, financing deals with the mobilization, accumulation and allocation of funds to cover the health needs of the people, individually and collectively, in the health system *(9)*. The financing function in health systems is defined by Murray & Frenk *(4)* as "the process by which revenues are collected from primary and secondary sources, accumulated in fund pools and allocated to provider activities". Three sub functions can be distinguished: revenue collection, fund pooling and purchasing. Revenue collection means the mobilization of funds from primary sources (such as households and firms) and secondary sources (such as governments and donor agencies). There are a number of mechanisms through which funds can be mobilized, varying with context, e.g. out-of pocket payments, voluntary insurance rated by income, voluntary insurance rated by risk, compulsory insurance, general taxes, earmarked taxes, donations from nongovernmental organizations (NGOs) and donor agency transfers. Fund pooling uses various forms of health insurance to share and reduce health risks. Purchasing is the allocation of funds to cover the costs (e.g. for staffing, durable goods and operations) of health providers, whether institutional or individual, for specific interventions *(4)*. The way these sub functions are organized and executed affects the accessibility of health services.

Service delivery

Service provision involves the mix of inputs needed to deliver health interventions within a specific organizational setting *(4)*. It includes preventive, curative and rehabilitative services delivered to both individual patients and larger populations (e.g. through health education and promotion) in public or private institutions. Providing services is what the health system does – not what the health system is.

The Primary Care Evaluation Framework

The characteristics of PHC vary from country to country, and different definitions of what constitutes PHC exist. However, a comprehensive or well-developed PHC system should conform to the following description:

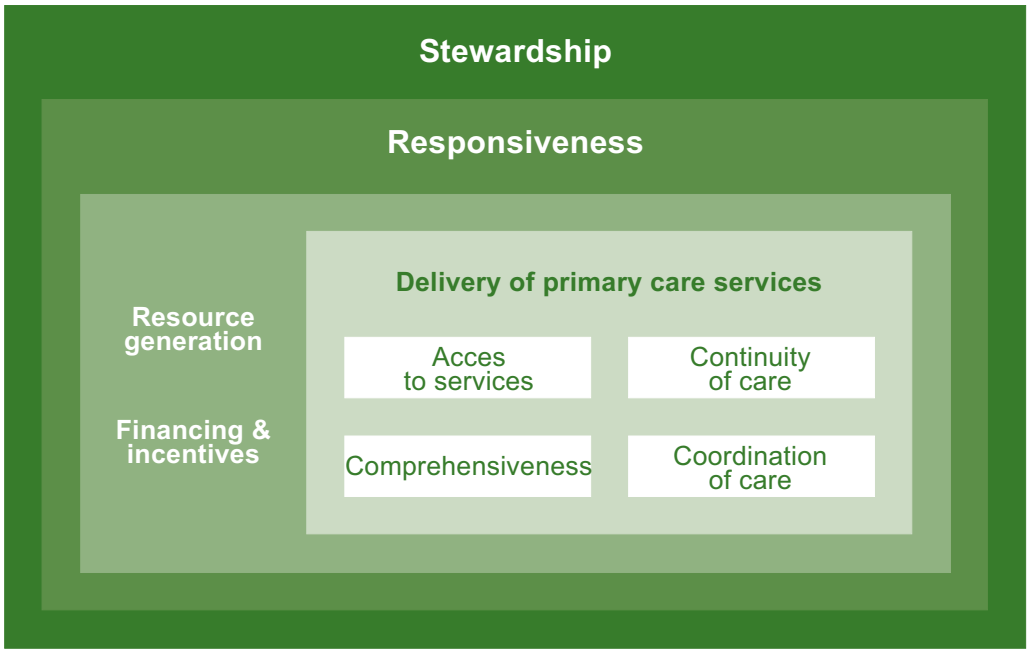
> *Primary (health) care is that level of a health system that provides entry into the system for all new needs and problems, provides person-focused (not disease-oriented) care over time,*

provides care for all but very uncommon or unusual conditions, and coordinates or integrates care provided elsewhere or by others (10).

The Primary Care Evaluation Framework (see Fig. 2), from which the PCET has been developed, encompasses the four health care system functions (as described above) combined with the four key characteristics of primary (health) care services that are part of service delivery.

FIGURE 2

Primary Care Evaluation Framework



What do the four key characteristics of a good PHC system involve?

Access to services

In general, access to health services can be defined as the ease with which health care is obtained *(6)*. Alternatively, it can be defined as "the patients' ability to receive care where and when it is needed" *(11)*. There are various physical, psychological, sociocultural, informational and financial barriers that restrict accessibility. For instance, the Primary Care Evaluation Scheme addresses geographical obstacles (distance to and distribution of general practices), obstacles in the organization of PHC practices (office hours, distance consultations, waiting times) and financial obstacles (cost-sharing, out-of-pocket payments).

Continuity of services

Health care interventions should be geared to patient needs over an extended period and cover subsequent episodes of care and treatment. A general definition of service continuity is "follow-up from one visit to the next" *(12)*. WHO provides a more comprehensive definition that takes into account the potential involvement of several health care providers, describing continuity as "the ability of relevant services to offer interventions that are either coherent over the short term both within and among teams (cross-sectional continuity), or are an uninterrupted series of visits over the long term (longitudinal continuity)" *(11)*.

Several levels of continuity have been distinguished *(13)*. First, *informational continuity* signifies an organized body of medical and social history about a patient that is accessible to any health care professional caring for that patient. Second, *longitudinal continuity* points to an accessible, familiar environment where a patient customarily receives health care from a provider or team of providers. Third, *interpersonal continuity* is an ongoing personal relationship between patient and provider, characterized by personal trust and respect *(13)*. Reid et al. also add *management continuity*, the provision of timely, complementary services as part of a shared management plan *(14)*. The Primary Care Evaluation Scheme includes informational, longitudinal and interpersonal continuity of care.

Coordination of delivery

Particularly because PHC is the most common entry point to health care and often provides a gatekeeping function to other levels of care, the coordination of services at PHC level is a key determinant of the responsiveness of health service provision and the health system as a whole. The potential for problems in coordination are particularly evident at the interfaces between primary and secondary care, and between curative care and public health services in the field of health promotion *(15)*. A general definition of coordination is "a technique of social interaction where various processes are considered simultaneously and their evolution arranged for the optimum benefit of the whole" *(9)*. With respect to health care, it can be defined as:

> *... a service characteristic resulting in coherent treatment plans for individual patients. Each plan should have clear goals and necessary and effective interventions, no more and no less. Cross-sectional coordination means the coordination of information and services within an episode of care. Longitudinal coordination means the interlinkages among staff members and agencies over a longer period of treatment (11).*

In the Primary Care Evaluation Scheme, the dimensions of coordination include collaboration within the same PHC practice, collaboration between PHC providers (e.g. GPs, home care nurses, physiotherapists, etc.) and collaboration between primary and other levels of care through consultation and referral.

Comprehensiveness

Comprehensiveness can be defined as the extent to which a health care provider directly offers a full range of services or other provider or specifically arranges for their provision elsewhere *(16)*. In the PHC setting, comprehensiveness refers to the fact that services can encompass curative, rehabilitative and supportive care, as well as health promotion and disease prevention *(15, 17)*. It also refers to the ability to consider several conditions at a time in one patient, particularly chronic conditions. The comprehensiveness of services refers not only to the range of services provided but also to practice conditions, facilities, equipment and the professional skills of the primary service provider. PHC workers' linkages to community services and the community also play a role. All these dimensions are incorporated in the Primary Care Evaluation Scheme.

The Primary Care Evaluation Scheme

Taking the Primary Care Evaluation Framework *(1)* as its basis, the Primary Care Evaluation Scheme provides further details by focusing on specific measurable topics and items relating to essential features and national priorities for change in primary (health) care and the facilitating conditions. The Primary Care Evaluation Scheme, which forms the basis of the PCET, includes a number of key dimensions that have been identified for every PHC system function. Each dimension has in turn been translated into one or more information items or proxy indicators for the dimension (see Table 2).

TABLE 2

Overview of selected functions, dimensions and information items

Function	Subfunction	Dimension	Selected items/proxies
Stewardship		Policy development	PC policy priorities
		Professional development	(Re-) accreditation system for PC
			Quality assurance mechanisms for PC
		Conditions for the care process	Laws and regulations
			Human resources planning
		Conditions for responsiveness	Involvement of professionals and patients in policy process
			Patient rights; complaint procedures
Resource generation		Workforce volume	Numbers and density
		Professional development	Role and organization of professionals
			Education in PC
			Scientific development and quality of care
		Professional morale	Job satisfaction
		Facilities and equipment	Medical equipment
			Other equipment
Financing and incentives		Health care/ PC financing	PC funding
		Health care expenditures	Expenditures on PC
		Incentives for professionals	Entrepreneurship
			Mode of remuneration
		Financial access for patients	Cost sharing/out-of-pocket payment for PC
Delivery of care	Access to services	Geographical access	Distance to PC practice
			Distribution of PC physicians
		Organizational access	List size
			PC provider workload
			PC outside office hours
			Home visits in PC
			Electronic access
			Planning of non-acute consultations
		Responsiveness	Timeliness of care
			Service aspects
			Clinics for specific patient groups

Function	Subfunction	Dimension	Selected items/proxies
	Continuity	Informational continuity	Computerization of the practice
			Medical records
		Longitudinal continuity	Patient lists
			Patient habits whit first contact visits/referrals
			Endurance of patient-provider relationship
		Interpersonal continuity	Patient-provider relationship
	Coordination	Cohesion within PC	PC practice management
			Collaboration among general practitioners/FDs
			Collaboration of PC physician with other PC workers
		Coordination with other care levels	Referral system/gatekeeping
			Shared care arrangements
	Comprehensiveness	Practice conditions	Premises, equipment
		Service delivery	Medical procedures
			Preventive, rehabilitative, educational activities
			Disease management
		Community orientation	Practice policy
			Monitoring and evaluation
			Community links
		Professional skills	Technical skills

To evaluate the complexity of a PHC system properly, the PCET gathers information from different administrative levels and from both supply and demand sides, i.e. from health providers and patients. The PCET accordingly consists of three separate questionnaires:

- a questionnaire for experts, concerning national PHC policies and structures
- a questionnaire for PHC physicians (and nurses as an option)
- a questionnaire for patients.

Together, these questionnaires cover the PHC functions, dimensions and information items identified in the Scheme. The physician, nurse and patient questionnaires are pre-structured. The national questionnaire contains both pre-structured and open-ended questions, and it lists the statistical data to submit.

PCET DEVELOPMENT

Development of the PCET commenced in February 2007 and was concluded in May 2008, when the final instrument became available to WHO for its health system support activities with Member States. The successive stages of development are briefly explained below. The development process for the tool has been described in more detail elsewhere *(18, 19)*.

Literature review

As a first step, researchers at NIVEL conducted a directed literature study, based on the WHO performance framework *(1)*, to gather information on possible ways to measure the key PHC system functions. They paid particular attention to PHC indicators and existing PHC performance measurement and evaluation tools and questionnaires. They produced a preliminary listing of dimensions and items for the tool.

First consultation with experts from the European Region

A meeting of international experts was convened in March 2007 to discuss the outcomes of the literature study. Primary objectives for the meeting were to discuss and reach consensus on key concepts and definitions; to discuss and endorse the provisional set of dimensions, proxy indicators and information items for the PCET; and to improve the initial version of the Primary Care Evaluation Scheme (see Table 2) in order to develop questions for the questionnaires. Participants also took the first steps towards a pilot implementation of the provisional tool.

Drafting, validating and translating the questionnaires

Draft versions of the questionnaires were developed on the basis of the information and feedback from the expert meeting. Comments from the experts on these versions were incorporated in new versions of the three questionnaires. These versions were subsequently tailored to the situation in each Member State where the tool would be piloted: the Russian Federation and Turkey. The terminology was adapted for the national situations and, at the request of health authorities in the two Member States, some additional questions were included on topics related to national PHC priorities. The final versions were translated into Russian and Turkish with input from a PHC expert, then back-translated into English and compared to the original version.

Two pilot implementations

The provisional tool was piloted in two provinces of Turkey and two districts of Moscow Oblast, Russian Federation. Under the supervision of the Regional Office and the respective health ministries in the pilot countries, local partners worked together with the technical leader from NIVEL to organize the details of the fieldwork, including sampling procedures, fieldworker training, and the logistics of data collection and entry. In both countries, meetings were organized with experts to discuss and validate the answers to the national PHC questionnaires. The data were analysed, the conclusions and policy recommendations formulated and a report was produced for each pilot implementation, including a section on lessons learned *(18, 19)*.

Copenhagen consultation meeting

A review meeting with international experts discussed the draft report at the Regional Office in Copenhagen on 14 and 15 April 2008. The meeting revised the three questionnaires, making a variety of major changes. Specifically, it:

- rewrote questions to encourage factual responses instead of soliciting opinions;
- reordered the sequence of topics and questions;
- changed the national PHC questionnaire into a questionnaire and a template for a more comprehensive background document to be prepared by a small team of local experts;

- reduced the size of the physician and patient questionnaires;
- made terminology and wording more consistent throughout the questionnaires;
- decided to complement the survey results with other information sources such as publicly available literature, interviews with health care workers and experts and personal observations during site visits;
- determined that individual countries would be able to add questions related to specific national priorities; and
- decided that final reports would contain a set of proxy indicators.

After revision, the PCET was made available to the countries of the European Region. To inform implementers in each Member State, an implementation scheme was prepared, describing the steps involved in utilizing the PCET.

IMPLEMENTATION OF THE PCET IN ANDORRA

The BCA context

Implementation of the Primary Care Evaluation Tool (PCET) was among the activities mentioned in the 2010–2011 Biennial Collaborative Agreement between the Ministry of Health of Andorra and the WHO Regional Office for Europe. The attention for primary care had grown in Andorra against the background of more general, but urgent concern about the sustainability and affordability of the health care system as it was functioning. First steps towards the implementation of the PCET in Andorra were made in January 2011, when initial information exchange took place between WHO EURO and Health Authorities in Andorra, including the process of the project and the related logistic requirements. In April researchers from NIVEL visited the country for the first time to prepare the implementation of the PCET. Later that year, in June 2011, a policy dialogue, hosted by the Andorran Ministry of Health, was held. National and foreign experts from WHO and European Observatory on Health Systems and Policies discussed the concerns of policy makers and identified possible priorities for governmental action in the shorter, medium and longer term.

Fundamental changes in political landscape, following the April 2011 elections, made authorities decide to delay the further implementation of the PCET. In September 2012 the process was then resumed and in 2014 the project could eventually completed successfully.

Country visits made by the project team

Experts from the research team have paid five visits to Andorra. One of the visits was combined with a Policy Dialogue organised by the Ministry of Health and Welfare in collaboration with the European Observatory on Health Systems and Policies.

Mission 1

A first visit was made from 4 – 7 April 2011, which was meant, on the one hand, to inform researchers on the challenges and priorities in the Andorran health care system and, on the other hand, to provide stakeholders with information on the PCET and its implementation. Furthermore, specific topics were discussed at this occasion, such as financing and remuneration schemes for use in primary care and the possible role of general practitioners (GPs) as coordinators of patient care throughout the health care system.

During site visits, undertaken to a GP practice in Sant Julià de Lòria and the SAAS Health Centre in Escaldes, health care workers were interviewed. Besides, an interview was held with a representative of social work in Andorra.

Concerning the method of implementation of the PCET in Andorra, it was agreed to aim at participation of all GPs in the country and to develop an additional questionnaire for nurses in the PHC centres of SAAS. To gain support from the GPs, the GP Association would be involved in the preparatory activities. Finally, the patient survey would just include patients from GP practices.

Policy Dialogue / Mission 2

From 27-30 June 2011 a second visit to Andorra took place which was combined to a Policy Dialogue titled: 'Sustaining health services in Andorra: options for containing costs and improving efficiency'.

The Policy Dialogue had the following two main objectives:

- To identify and discuss major health policy concerns in Andorra, in particular, the threats to sustainable health care financing and options for efficiency gains
- To identify priorities for governmental action in the short, medium and longer term, taking foreign experiences into account.

The Policy Dialogue had the form of a round table among senior staff of the Ministry of Health and Welfare and representatives of WHO Euro and the European Observatory on Health Systems and Policies. Four sessions subsequently addressed challenges in making financing more sustainable, challenges related to services coverage and provision and options to move forward.

The visit was also devoted to discussions about further steps and planning of the PCET project in Andorra. The content of the newly developed questionnaire for nurses in PHC centres of SAAS was discussed as well as suggestions were made to adapt the questionnaires to be used in the surveys among GPs and patients. Besides, a planning of future activities, including revision and translation of the questionnaires and preparation and organisation of the fieldwork was agreed. Later, however, it turned out that urgent priorities at the Ministry required an interruption of the project implementation until 2012.

Mission 3

The project could be resumed in September 2012 and a third visit took place from 1-3 October 2012. During this 'fresh up' researchers were informed about the latest developments in health care policy and practice in Andorra and, where necessary, stakeholders and other persons involved in the PCET implementation were informed by the research team about the state of affairs and the steps to follow.

In several meetings the PCET questionnaires were discussed. The national level questionnaire was explained and discussed with the experts who will provide the answers and other information. With representatives of the GPs the GP questionnaire and the survey approach were discussed. A similar meeting was held with nurses from SAAS health centres. Regarding the survey procedures, the confidential collection of the completed questionnaires was a major topic. As the Centre for Sociological Studies (CRES) at the Institute of Andorran Studies (IEA) would be in charge of the fieldwork of the patient survey, details of this survey were discussed with researchers of CRES. CRES would also organise the data entry for the three surveys.

A final round of revisions of the three questionnaires was agreed. Revisions of the patient questionnaire may result from a pilot test to be organised by CRES. Finally, all questionnaires will be established by the research team and subsequently translated into Catalan. Based on the latest versions NIVEL will develop the software to be used for the data entry.

Selected observations from the 3 missions

- Health care governance in Andorra lacks a well-structured strategic vision and a specification of the roles and functions of primary care services, medical specialists and the hospital, also in relation to other sectors, such as social care services.
- As the government generally has limited possibilities to steer the health care system it is difficult to control expenditures and to maintain the quality of health care services, especially as the 'liberal regime' is concerned. The utilization of health care services abroad is not well regulated.
- The lack of regulatory power also applies to health human resource planning in the country. Regulation of the number of independently working physicians is very difficult.
- Health insurance coverage is not universal. In particular health coverage for people who have been unemployed for more than 6 months is poor.
- Information and evidence about cost, efficiency and effectiveness of service delivery are poorly available or not reported. This is an obstacle for effective policy making.
- CASS, as the social health insurance body, is not in the position to operate as a purchaser of health care services.
- Quality assurance is an underserved area. Quality indicators are not used and the remuneration system for GPs is not related to performance. Furthermore, a system for accreditation of GPs or requirements concerning continuing medical education are not in place. Professional structures to support quality of care, for instance by means of clinical guidelines or peer review are absent.
- Primary care services are provided in a fragmented way. Cooperation between GPs seems to be marginal and the integration between medical services provided by GPs and the (mainly) nursing services offered in the PHC centres of SAAS is not optimal.
- Non-emergency health care outside the regular office hours seems not to be coordinated between public and private providers.

Adaptation and extension of the PCET

In cooperation with stakeholders and counterparts the questionnaires of the PCET have been adapted and extended as follows for use in the national context of Andorra.
In the questionnaire for **GPs**:

- Terminology was adapted and answering categories modified or removed in several questions. For instance in the answers of several questions the PHC centres of SAAS are included.
- In some questions the specific situation of tourism was taken into account. For example, questions on patient contacts in the office and in the patients' home were broken down to the Summer and the Winter period.
- Questions or answering categories were removed related to practice nurses (there are not in place); community representatives in the board of the practice (not applicable)
- Questions or answering categories were added on:
  - Use of the computer to communicate with patients
  - Availability of patient leaflets on hygiene to stay healthy
  - Face-to-face meetings with social worker(s); speech therapist(s); psychologist(s).
  - Asking advice from cardiologist(s)
  - Referrals to cardiologist(s), endocrinologist(s), gastro-enterologist(s) (instead of taking these together)
  - Referrals made to medical specialists in Spain and France
  - Regular meeting with teacher(s)
  - Available of 4 types of medicines in the practice for emergencies

For **nurses** working in the PHC centres of SAAS a new questionnaire was developed, including 28 questions in the following categories:

- Personal and health centre information (4 questions)
- Workload and time spending (5 questions)
- Accessibility for patients (2 questions)
- Quality improvement (3 questions)
- Nursing records and information (5 questions)
- Cooperation and coordination (7 questions)
- Nursing equipment (1 question)
- Continuity of care (1 question)

In the **patient** questionnaire:

- Like in the GP questionnaire questions, terminology and answering categories were adapted to the Andorran situation or removed if not applicable
- Questions were added on:
  - Country of birth of patient
  - Mode of health insurance coverage
  - Coverage for prescribed complementary tests and direct visits of medical specialists
  - Habit to usually visit this GP or also visit other GPs
  - Visits of PHC centres of SAAS in the past 12 months
  - Visits of medical specialists in Andorra, France or Spain in past 12 months
  - Opinion about being registered with a chosen GP (referral system)
  - Possibility to have e-mail consultations with this GP
  - Perceived role of GPs:
    - Tendency to visit GP for 14 specific services or conditions
    - Expected benefits from a visit to a GP with 9 health complaints / diseases

In the questionnaire at the **national** level most references to regions were removed as it is less meaningful in this study to make such distinctions and break downs given the size of the country. Other changes were:

- Including four more professions in the question about shortages
- Question about the education of nurses
- Breakdown of health expenditures to Andorra and abroad.

Target populations, sampling procedure and survey approach

The target populations for the physicians' survey were all general practitioners (GPs). For the patient survey the target population was patients visiting these GPs. All nurses in the PHC centres of SAAS would be included for the nurse's survey. So, the surveys would cover the whole of Andorra. The available lists of GPs and nurses in the PHC centres of SAAS were used for recruitment. With each GP a target number of 15 patients was set for the patient's survey.

Response to surveys

From the GP population of 37 in Andorra 26 have participated in the survey (70.3%). From the 43 nurses working in the PHC centres of SAAS 41 have filled in the questionnaire, which is a response rate of 95.3%.

The aim of the patient survey was to have 15 participants per GP practice. The willingness among patients to fill in a questionnaire was very high. A response of 390 patients was achieved in the practices of the 26 participating GPs as well as in two additional practices of GPs who have not responded themselves. With an average of 14 per practice the target for the patient survey was

almost completely achieved. During the fieldwork, interviewers have met around 30 patients who were not able or not willing to complete a questionnaire. So, the response rate of the patient survey is around 93%.

Role of fieldworkers

Fieldworkers, trained and supervised by CRES, have approached patients in the GP practices to participate in the survey.

Information gathered at the national level

Three experts from the Ministry of Health and Welfare have answered the national level questionnaire and provided additional information as required. This information and the provided statistical data were forwarded to NIVEL where they have been used in Chapter 3 of this report.

Data processing, analysis and reporting

Data entry has been carried out by CRES, with use of data-entry software provided by NIVEL. Raw data files were sent to the NIVEL research team for processing and analysis. To validate the content of the report and to discuss preliminary recommendations and formulate new ones, a draft version of the report has been discussed in a meeting with experts and stakeholders in Andorra. On the basis of comments made in the meeting and discussions among stakeholders and researchers the final report has been produced at NIVEL.

Details on the application of the PCET in Andorra are summarized in Table 3.

TABLE 3

Key data on the application of the PCET in Andorra

Elements	Explanation
Target groups	General Practitioners (GPs)
	Nurses working in PHC centres of SAAS
	Patients visiting GP practices
	Health care experts (for information at the national level)
Locations	All GP practices and all PHC centres of SAAS in the country were included
Type of data collection	Surveys among GPs and nurses using prestructured questionnaires (distributed and supported by field workers)
	Patients: survey using prestructured questionnaires (personally administered by field workers)
	Health care experts: mixed approach; questionnaire and meeting for validation and feed back
	Observations during site visits made by research team and interviews with GPs and nurses

Elements	Explanation
Method of recruitment/inclusion	GPs: all were included
	Nurses in PHC centres of SAAS: all were included
	Patients: 10 subsequent patients attending the practice of GPs
	Health care experts identified and recruited by MoH (for information at national level)
Planned sample sizes	GPs: 37
	Nurses in PHC centres of SAAS: 43
	Patients: 420 (in the practices of GPs)
Response	GPs: 26 (74.3%)
	Nurses in PHC centres of SAAS: 41 (95.3%)
	Patients: 390 (93%) recruited in practices of 28 GPs
Instructions	Local coordinators were instructed about recruitment and logistics of the surveys
	Field workers have been instructed about the questionnaires; how to approach and interview patients; quality aspects
	Respondents (patients) have been introduced to the survey and got explanation by fieldworkers
Coordination of fieldwork	Ministry of Health and Welfare (GPs and nurses surveys)
	Centre de Recerca Sociològica / IEA (patient survey)
	NIVEL: general supervision
Data entry	Centre de Recerca Sociològica / IEA under auspices of NIVEL
Analysis & draft reporting	NIVEL (Utrecht, Netherlands)
Validation and final report	NIVEL, with inputs from WHO/Europe and Ministry of Health and Welfare of the Andorra

INTRODUCTION TO THE PRINIPALITY OF ANDORRA

THE COUNTRY [2]

Andorra is a microstate with a surface of 468 km2, located in the high Pyrenees between France and Spain. Its origin as an independent country goes back to agreements, made in the 13th century, between the bishops of Urgell (in Catalonia) and the counts of Foix (in France). This history has been the basis of feudal governance for centuries, which came to an end in 1993 with the approval of the Constitution, including a parliamentary system and the separation of legislative, judicial and executive power. As a historical remains the country has two co-princes as the formal heads of state, being the Bishop of Urgell and the president of the French Republic. The parliament, called General Council, is composed of 28 councillors, half of whom are elected by the seven districts of the country ('parishes', see map in figure 3) and half by national elections. Only citizens of Andorra, which is a minority of the population, are entitled to vote. Women's suffrage was introduced in 1970. After the Constitution came into force, Andorra joined international organisations, like the United Nations, the Council of Europe and the World Health Organization.

FIGURE 3

Map of Andorra and its location i Europe [3]

2 Sources: The World Fact Book https://www.cia.gov/library/publications/the-world-factbook/geos/an.html accessed 070514. Dubois HFW, Martínez F, Cetani T, Rico A. *Health care systems in transition:Andorra.* Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 2004.

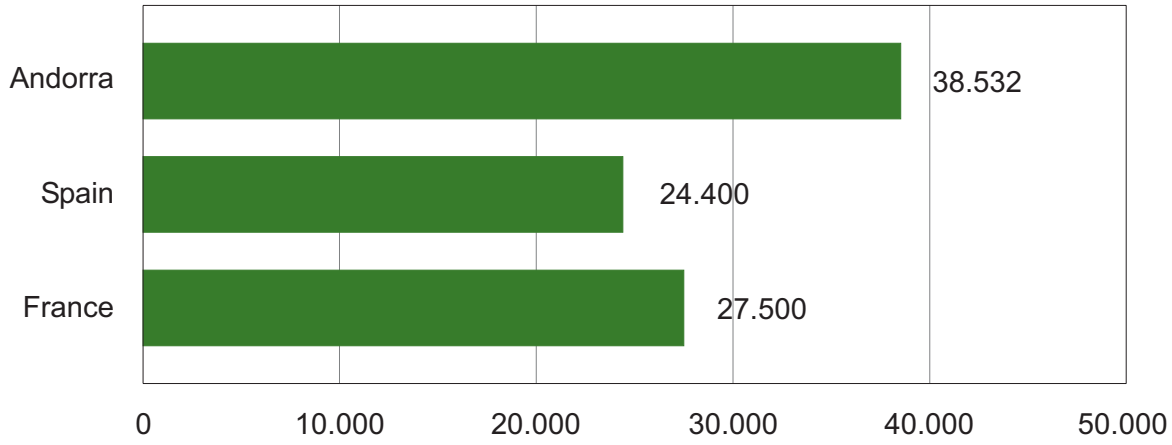
3 http://www.estadistica.ad/serveiestudis/publicacions/Publicacions/Andorra%20en%20Xifres_ale.pdf and Wikipedia. (accessed 070514)

The official language is Catalan and the national currency is the Euro. Although Andorra is no member of the European Union, international regulation has had increasing impact, for instance on the important banking sector. Another major pillar of the Andorran economy, duty free retailing of luxury goods, has suffered from the introduction of the EU internal market. Tourism, in particular winter sports, is another important economic activity that contributes to the country's wealth. In 2012, almost 8 million people visited the country and produced over 6 million overnight stays.

As shown in figure 4, Andorra is a relatively wealthy country. The Gross Domestic Product exceeds the ones of its neighbour countries France and Spain. The economic downturn in Europe has also affected Andorra. A drop in tourism and the construction sector since 2010 has resulted in a contraction in GDP and a deterioration of public finances that urged the government to implement austerity measures that also affected the health care system.

FIGURE 4

GDP rates per capita (€), Andorra, Spain, France (2012) [4]



POPULATION AND HEALTH

Andorrans are a minority in their country: of the total population of around 70.000, 43% has the Andorran citizenship. Substantial parts of the population are from Spanish, Portuguese and French origin (see figure 5).

FIGURE 5

Composition of the population of Andorra (%) [5]

[4] Source: Govern d'Andorra. Actualitat estadistica.ad. December 2013, number 39 (accessed 070514).

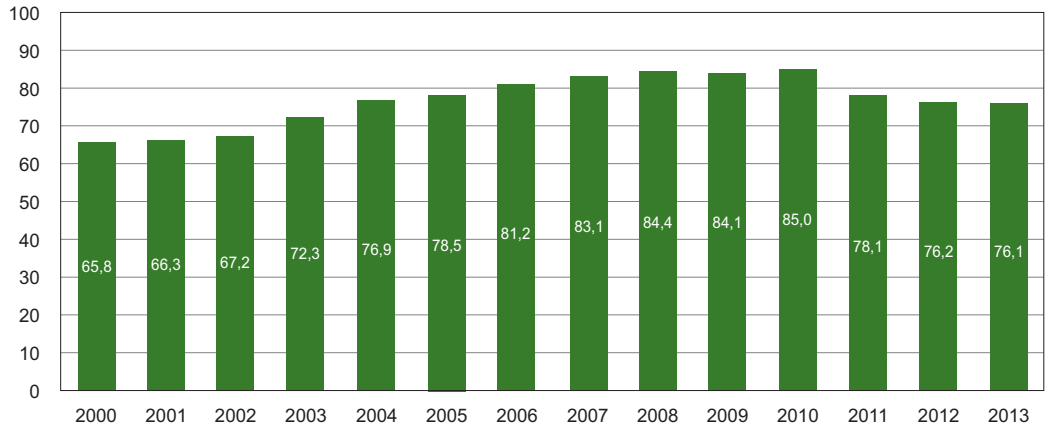
[5] Andorra in figures, 2013. http://www.estadistica.ad/serveiestudis/publicacions/Publicacions/Andorra

Since 1980s the population of Andorra has more than doubled. Also during the first decade of the 21st century there has been a steady growth of the population with almost 30% (see figure 6). Since 2010, however, a shrinkage of the population is visible in line with the economic downturn. Indeed, the volume of the population in Andorra roughly follows the economic trend.

The labour intensive industries, such as retailing and tourism, attracts many cross-border workers, in particular from Portugal and Spain. As foreign workers are not fully eligible for social security benefits they are more likely to return to their home country when they become unemployed. That is the reason for the elasticity of the number of the population in Andorra.

FIGURE 6

Population of Andorra, 2000-2013 (x1000)

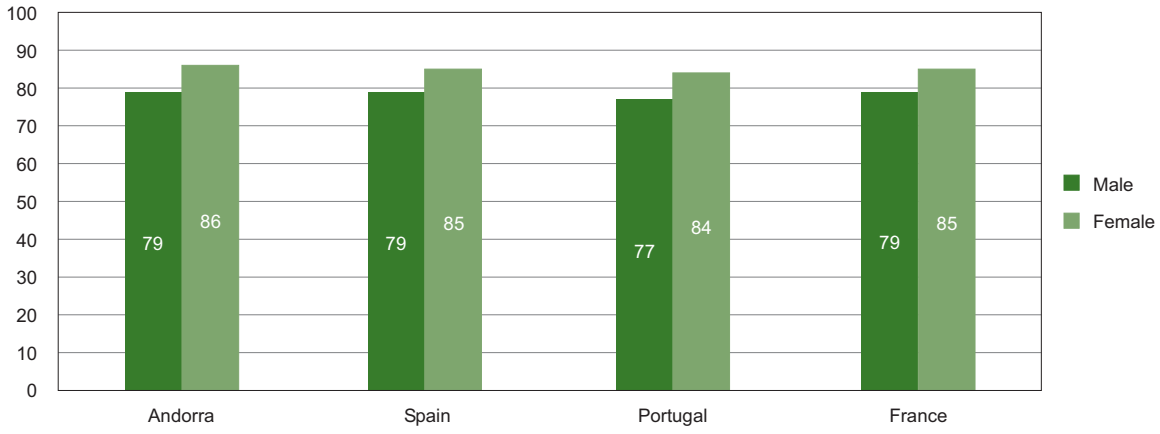


Fluctuations in the number of inhabitants make that the denominator of health statistics is not stable, which may harm comparisons with other countries. Furthermore, only a limited number of comparative demographic and health statistics are available for Andorra.

Life expectancy is generally high in the countries of south western Europe and Andorra is no exception in that respect. Life expectancy at birth in Andorra is good compared to Spain, Portugal and France, though difference are small (see figure 7).

FIGURE 7

Life expectancy at birth, male and female; 4 countries, (2012) [6]



[6] World Health Organization, Global Health Observatory. www.who.int.gho/countries (accessed May 2014)

The under 5 mortality in Andorra is lower in Andorra (3 per 1000 live birth) than it is in Spain (5), Portugal (4) and France (4). The mortality between age 15 and 60 is 92 for males and 43 for females per 100.000 population, which is better than in Portugal (114 and 49 respectively) and France (109 and 52 respectively) and only slightly below Spain, where this is respectively 86 and 40 per 100.000 population.

THE HEALTH CARE SYSTEM [7]

Governance and financing

Health care in Andorra is a variant of the social insurance model. Paying premiums is obligatory for employees as well as self-employed. For unemployed people the government pays social insurance promiums. As health care coverage in the public system is directly related to the payment of social health insurance premiums, those who don't, only have limited benefits. It is estimated that 5-10% of the population is not covered by the public health care system. Around 17% of public health expenditures are paid to services used abroad (mostly in Spain/Catalonia and France)

Out-of-pocket payments are an additional sources of health care financing. Beneficiaries of the social health insurance system normally pay 25% of the bill in ambulatory care and 10% in inpatient care. Those who are not covered pay directly for services. A substantial minority of the socially insured have a voluntary private health insurance for the costs that are not covered.

The health expenditures in Andorra have grown strongly, especially since 2005. In a time of reduced governmental revenues, resulting from the worsened economic situation, this absorbed a rapidly growing proportion of the total governmental budget . The government was confronted with the fact that possibilities to control health care expenditures were extremely limited.

The overall responsibility for health care is with the national parliament, the General Council, which initiates relevant legislation and regulation. The execution of the social health insurance system is in the hands of the Andorran Office of Social Security (CASS), which is largely controlled by the government. CASS is in charge of collecting premiums, paying health care providers and reimbursing patients for direct payments made to providers. Furthermore, CASS regulates service delivery and health care benefits via a catalogue of services agreed with health care professions, the Andorran Hospital Centre (CHA) and selected hospitals in France and Spain. CASS has very little means to act as a purchaser of care. All services agreed in the catalogue are paid (with a co-payment for patients) without limitation. There is little or no selectivity in the contracting of health care providers.

An organisational restructuring plan in the 1980s resulted in the establishment of the Andorran National Health Service (SAAS), responsible for the management of all publicly financed health care services. SAAS is in charge of an efficient use of health care resources; individual and collective provision of curative, rehabilitative and preventive services; and control of expenses and quality.

At governmental level the growing importance of the health care sector resulted in the enactment of the General Health Law in 1989, defining the functions of the actors in the health care system. Four years later a Ministry of Health was established, which was renamed in 1997 to Ministry of Health and Welfare.

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[7] Dubois HFW, Martínez F, Cetani T, Rico A. Health care systems in transition:Andorra. Copenhagen, WHO Regional Office for Europe on behalf of the European Observatory on Health Systems and Policies, 2004.

Delivery of services

Primary care is provided by independently working GPs and publicly funded and managed health care centres in each of the parishes. The health centres, run by SAAS, are responsible for nursing services, community care, home nursing care, immunization, rehabilitative care and health awareness for groups such as children, mothers and chronic patients. Main staff in the health centres are nurses. Coordination between GP practices and PHC centres of SAAS is generally low. Patients visiting a health centre normally pay an amount out of pocket.

Outpatient **secondary care** is mainly provided by office based private medical specialists. Physical rehabilitation services are offered by independently working physiotherapists from their own practices, either or not in collaboration with the hospital rehabilitation service. Hospital care in Andorra is provided by the only hospital in the country, the Andorran Hospital Centre (CHA, also referred to as Hospital Nostra Senyora de Meritxell), which is managed by SAAS. Although the hospital is publicly owned, both public hospital doctors and private physicians use its facilities. Accident and emergency services are also based in CHA. Both salaried and independent physicians working in the hospital are required to be on emergency call in shifts.

Part of the population receives medical care, in particular medical specialist care, also outside Andorra.

The mode of **remuneration of physicians** depends on their position. SAAS employed physicians working in the hospital receive a fixed salary. Independent physicians, under contract with CASS, are paid on a fee-for-service basis. Fees are negotiated annually between CASS and the Andorran College of Doctors. Patients pay doctors and get reimbursement from CASS. Reimbursement for ambulatory care is 75%; for inpatient care 90%. For specific services, such as maternity care, no co-payment applies. Care provided by physicians in or outside Andorra without a CASS contract is reimbursed for only one-third of the established fees. Services of contracted physicians outside Andorra are reimbursed for 75% of the established fees.

Human resources and education

Health workforce available for the Andorran population is difficult to establish. On the one hand, people frequently seek care in Spain, France and to a lesser extent in Portugal, and on the other hand, foreign physicians irregularly work in Andorra on an out-of-pocket payment basis. These streams of patients and doctors are not well monitored.

As full medical education is not available in Andorra, physicians have received their undergraduate medical education and postgraduate specialization abroad, usually in Spain or France. Although courses for health care workers are organized in the country, for continuing education physicians must go abroad. It must be noted, however, that no requirements exist for physicians practicing in Andorra to participate in a minimum amount of CME.

The situation of nurse education has become much more favourable since 1988, when a nursing school was established, where students are trained for internationally recognized degrees. In 2002 the school became integrated in the University of Andorra, which was erected in 1997.

Table 4 provides an overview of key indicators of health care supply in Andorra. The only hospital in the country had 181 beds in 2010. Of all physicians in the country 14% is a GP. However, outpatient medical specialists are accessible without referral and so many of these are also involved in what can be considered as first contact and primary care. Among the pharmacists, some are employed by SAAS, but most are working independently in one of the 58 pharmacies in the country.

The number of physicians in Andorra has strongly grown over the past decades. Compared to 1985 the number of physicians has tripled; since the year 2000 the increase has been 26%.

TABLE 4

Indicators of health care supply in Andorra (2010) [8]

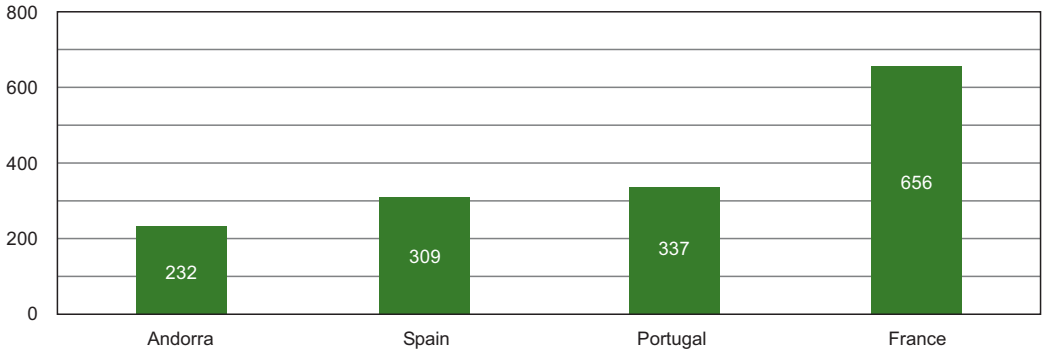
Supply of beds and professionals	Number
Hospital beds (including 12 psychiatric beds)	181
Medical specialists (hospital and outpatient)	220
General practitioners (GPs)	37
Pharmacists (SAAS and private)	78
Physiotherapists	69
Dentists	51
Nurses	309
Psychologists	41

The physician density in Andorra can be calculated to be 333 per 100.000 population, which is close to the physician density in France (316 per 100.000 population), but lower than in Spain and Portugal, where this density is 399 and 398 respective.

Hospital bed supply in Andorra is considerably lower than in the surrounding countries (see figure 8). In France it is even 2.8 times higher than in Andorra. This probably reflects that Andorra partly relies on hospital services in France and Spain, in particular for the more specialized services.

FIGURE 8

Hospital bed supply in Andorra, Spain, Portugal and France (2011) [9]



[8] Information MoHW

[9] WHO Health for All Database http://data.euro.who.int/hfadb/ (accessed 16 May 2014); Information from MoHW and CRES

PHC IN ANDORRA: NATIONAL SITUATION AND CONTEXT

This chapter will deal with policies, regulation and structures relevant to PHC in Andorra. In particular, the following areas will be discussed: policy developments, aspects of financing, workforce, education of providers, quality assurance and the role of patients.

Most of the information for this chapter was delivered by a small team of experts that provided answers to the national level questionnaire. Additional information was used from interviews and exchanges during visits of the researchers to the country.

The description of results follows the structure of health systems functions and characteristics used in the Primary Care Evaluation Scheme, as set out in Chapter 1. These are: stewardship / governance; resource generation; financing and incentives; delivery of PHC services.

The information provided in this chapter serves as the context for the understanding of the results of surveys among GPs, PHC nurses and patients, described in the chapters 4, 5 and 6.

STEWARDSHIP / GOVERNANCE

Past reforms

Social health insurance has been introduced as the mode of financing with the establishment of CASS in 1968. The establishment of SAAS in 1986 was the direct effect of governmental plans to restructure the health care system. A more comprehensive reform has been the enactment of the Generral Health Law in 1989. The law, that defined the functions of the actors in the health care system of Andorra, has laid the groundwork for the structure and organisation of the current health care system in Andorra. The law resulted in a health care system with a generous benefit package, provision of services by a mix of public and private suppliers, much freedom for both patients and providers and financing through social health insurance and with co-payments for patients. The roles of CASS and SAAS were defined, respectively in the execution of the health insurance system and the management of public health care services. However, health care governance was not extensively addressed by the law. In the absence of explicit priority setting and planning and little information available on the performance of the health care system for many years the urgency to steer or reform health care was low. Even steeply rising expenditures, as shown in the previous section, gave no rise for reform as long as the growth of the economy was even stronger.

Bodies of governance

The final responsibility for health care governance is the *General Council*, the Andorran parliament, that holds legislative power. Tasks related to the planning, management and regulation of health services and the development and implementation of national health policies and strategies have been delegated to the *Ministry of Health and Welfare*. The Ministry's responsibilities cover: regulation on medical professions and private providers; health promotion and prevention; coordinated delivery of all health care services; capacity planning; approval of health plans; and health safety and hygiene in the workplace.

The *Andorran Health Services (SAAS)* is responsible for the management of the public part of the health care system, in particular the efficient provision of primary care, medical specialists services and prevention and health promotion. The General Director of SAAS is also the Director of the *Hospital (CHA)*.

The *Andorran Office of Social Security (CASS)* is collecting health insurance preniums, paying the hospital and privately working physicians, and (partly) reimbursing patients for payments these make to providers.

The responsibility of the *Ministry of Education* regarding health care is the approval of training programmes and curricula and recognition of foreign diplmas.

The *Communes,* as the lowest administrative levels in the parishes, play a role in some public health issues, such as the provision of safe drinking water and hygiene and administrative authorization of health establishments in their parish. Before the 1980s, when there was very little central regulation and parishes were much more isolated communities, the communes played an important role in health care.

Today, health care is much more centralised and, as a consequence, differences in health care between parts of the country have mostly disappeared.

PHC policy development

The following policy activities and documents have been relevant to the development of primary care in Andorra.

2009 Strategic Plan of Health (Pla Estratègic de Salut - PES)

The plan present presents a diagnosis of the Andorran health care system, including an analysis of strength and weaknesses. The plan i.a. aims to: respond to current challenges, by improving health care governance and system management and developing mechanisms to control expenditures. The objectives should be realised by:

- Defining essential health services
- Clarifying rights and duties of actors and formalising their interrelationships
- Extending the government's competencies and reinforcing health administration
- Developing a coherent health information system.

Main proposals made include: more planning (health plan; service delivery plan; human resources plan); licensing and accreditation; benefit package of cost effective services; monitoring and evaluation of performance; strengthening of continuing medical education; regulation of care seeking abroad; improving financial equity; contracting of independent health professionals; international cooperation on health care.

2012 Andorran Model of Health Care (Model Andorrà d'Atenció Sanitària - MAAS)

This document explains the principles of the health care model for the population of Andorra, both residents and those temporarily staying. These principles include person-centredness, comprehensiveness and continuity. Furthermore, services should be safe and of high quality and responsive to the health needs of the population. Finally, services should be delivered in an efficient way.

In the delivery of services the model distinguishes three levels of care. For a good function of the system, contracted providers use clinical guidelines and participate in networks, that smoothen the transitions of patients across levels. Specificiation of a benefit package defines which services are eligible for reimbursement. The volume of health professionals and facilities is tuned to the health needs of the population. Coordination of care will be improved by means of personal health cards including basic clinical data. Patients can choose a reference doctor, who is responsible for coordination of care for the patient.

2012 Reform of the health and social protection system.Government Plan 2012-2015 (Reforma del Sistema de Salut i Protecció Social. Pla de Govern 2012-2015)

The document starts from the following principals: shared responsibility; equity and solidarity; sustainability; and quality.

A series of strategic objectives are identified in the following five activity areas:

- Governance (i.a. strengthening of the Ministry of Welfare and Health; putting citizens in the centre of the system; enhancing the role of professionals; better information sytems)
- Quality improvement (i.a. reforming the medical care model in line with MAAS)
- System sustainability and efficiency (i.a. defining portfolios of services and benefits)
- Health and welfare as an economic sector (the added value in a broader social and economic development model)
- Updating the regulatory framework

PHC in the MoHW

The Ministry of Health and Welfare is in charge of organising primary care and health promotion and prevention. It also stimulates coordinated action by health professionals in order to promote integrated care and multidisciplinary approaches. The Ministry also plans the health services and oversees their quality, safety and efficiency. The size of the country and its health care system does not make it necessary to have a depertment at the Ministry dealing with primary care specifically.

Professional regulation and monitoring

Very few procedures are in place to assess the quality and performance of primary care. Incidentally inspections of practice facilities are carried out by health authorities. However, neither internal control on surgeries and health centres were reported, nor external clinical audit of medical files. Furthermore, the Ministry is not using any routine process or outcome measures to monitor the performance of the health care system. A major source of feed back for the Ministry is the National Health Survey, which enquires the satisfaction of the population in Andorra on various aspects of the health care services. In the most recent survey (2011) questions were included on satisfaction of the population with primary care.

In Andorra, physicians and nurses are not obliged to undergo regular tests of professional knowledge and level of competence, for instance as part of a re-licensing procedure. Such procedures are not in place yet.

In the ongoing health sector reform, monitoring and quality assurances are being addressed. A body for health and social inspection, control and support will be developed to evaluate professional practice.

Licensing and accreditation

The following formal requirements exist for physicians to work in primary care. Physicians need an authorization to practice: the “Liberal profession licence”. To obtain this licence they must:

- be qualified by a degree in medicine recognised in Andorra.

- have the Andorran nationality or be a resident in the country.

If the liberal profession licence is acquired, they are registed by the Ministry of Health in the Health Professionals Registry. They must also become a member of the Andorran Official College of Doctors. For working in the public social insurance system, they must sign an agreement with CASS. Licensing and registration also applies to physicians who exclusively work for private patients who are not reimbursed by CASS.

Re-certification/re-licensing

As mentioned above GPs, other physicians and nurses are not obliged to renew their title. In the reform process a system is envisaged for re-certification and renewing the qualification every 5 years.

Conditions for the care process

PC workforce norms

No national norms exist for the (maximum) number of patients GPs should work for. Due to the territorial dimensions, social and economic organization, and the health system itself (of free choice) of the country, it is difficult to assign a number of professionals of reference.

In the reform process other mechanisms are envisaged to ensure a good distribution of GPs throughout the country.

Staff shortages

No shortages were reported for any of the following professions: GPs; paediatricians; gynaecologists; dentists; pharmacists; primary care nurses; psychologists; physiotherapists; social workers; ophthalmologists. In the near future, however, shortage of GPs may develop, as a significant number of them will be retiring soon. The average age of GPs is 51 years.

Mode of practice

Single handed practice is the dominant mode in Andorra: 60% of the GPs is working in solo practice. Ten GPs are working in a group practice, varying from two to four GPs. Five GPs are part of a mixed practice including medical specialists.

TABLE 5

GPs working in solo and group practices

Type of practice	Number of GPs
Single handed (solo)	22
2 or 3 GPs in the same building (without medical specialists)	6
4 or more GPs in the same building (without medical specialists)	4
Mixed practice with GPs and medical specialists	5

GP gatekeeping

Andorran GPs do not have a gate keeping position. Patients can freely visit any physician, even outside the country. This principle is highly valued by the citizens.

The intended new model of health care intends to promote the introduction of a form of gate keeping physician in order to improve coordination and patient centredness.

Conditions for responsiveness

Role of stakeholders

A number of stakeholder organisations is relevant in policy and development of primary care. Their role is shortly explained.

Organisations representing health professionals that are active in primary care, are involved by the Ministry of Health and Welfare in any programme development or modification related to primary care. These organisations are: the *Andorran Association of Primary Health Care Doctors (AAMAP);* the *Official College of Doctors of Andorra;* and the *Official College of Nurses and Midwives.*

Patients' associations in the country are usually categorical, for example the *Association for the Treatment and Rehabilitation of Neuromotor Diseases in Andorra (TRANA)*, and the *Andorran Diabetics Association*. These organisations are involved in the policy process as far as topics are related to the interest of the conditions and disease they defend.

Role of patients

At present, patients have much freedom to seek care. They can choose and consult any kind of health professional without first having been seen by a GP. The proposed new model of health care wishes to promote the introduction of the figure of the reference physician, which is a form of gate keeping. Also there are no limitations for Andorran people to seek insured health care services abroad. If people consult a foreign supplier who does not have an agreement with CASS no more than one-third of the fee is reimbursed.

Patient's rights and patient organizations

At present there are no specific laws or regulations pertaining to patients' rights. The Advisory Council on Health and Welfare (an advisory body to the Government) has made first steps for a Law on the rights and duties of patients.

As mentioned above several categorical patients organisation defend the interests of specific groups of (chronic) patients, for example: patients with diabetes, mental illness and fibromyalgia.

Patient empowerment and patient information

Empowerment and information of patients are part of the normal clinical process. No explicit programmes are available in this respect. More in general, it is the task of CASS to defend the rights of their insurees.

Patient´s complaint procedures

Each practice and health centre in Andorra is obliged to have a procedure for dealing with complaints of patients. This has been laid down in the *Law on Trade* and the *Regulation governing health centres and services and social health establishments*.

RESOURCE GENERATION

PHC workforce

In 2013 the total number of active physicians in Andorra amounted 263, of which 37 were GPs (14.1%).

TABLE 6

Number of active GPs, PHC nurses and midwives (2013)

Active primary care providers	Number
GPs	37
PHC nurses	43
Midwives	15

The number of midwives is the total number working in the country. Almost all are working in primary care as well as in the hospital.

Professional development and education

Professional organizations and journals

GPs in Andorra are organised in AAMAP, the Andorran Association of Primary Care Doctors, which has 34 members. AAMAP is active in defending financial and material interests of the members, professional development and education and scientific activities. The Association does not publish a journal.

Medical education

As there is no medical university or medical school in Andorra, the country mostly relies on the following foreign universities:

- Universitat Autònoma de Barcelona (UAB). Barcelona (Spain)
- Universita de Barcelona (UB). Barcelona (Spain)
- Université Paul Sabatier.Toulouse (France)

No information was available whether these universities offer postgraduate training programmes in General Practice/Family Medicine and the details on the programme. The Andorran authorities currently exert no influence on the programmes. In the reform it is proposed to initiate cooperation agreements with centres of reference in Spain and France regarding training programmes for Andorran health professionals.

Quality assurance, mechanisms and indicators

Guidelines

The Andorran Association of Primary Care Doctors, in collaboration with the Ministry of Health and Welfare, has developed clinical guidelines for primary care on depression, acute lumbago and diabetes. These guidelines have been developed in a procedure of peer revies among GPs and relevant medical spcialists. Guidelines are freely available to all GPs through the college and from the MoHW. It is reported, however, that these guidelines are not widely observed and that any system to promote its use is absent.

Regarding nurse guidelines or protocols for use in primary care, SAAS is the body to promote the development and implementation. To this end working groups are created of staff with sufficient expertise and affinity to the subject. The following examples can be mentioned.

- In 2013, a guideline from 2010 has been updated and extended for monitoring patients with chronic obstructive pulmonary disease (COPD). The previous version had a focus on patients with oxygen therapy at home.
- A guideline on arterial hypertension in primarycare has been updated. The content of the guideline was reviewed and new procedures for action were formulated, in particular on hypertensive emergencies
- In the framework of a programme on youth health care activities in education for health at school were reviewed. The focus of this programme is on emotional and sexual education for young people and adolescents at school.

Guidelines and their updates are normally distributed by the SAAS management among the head nurses of the SAAS Primary Health Care Centres. These, in turn, are in charge of the implementation in their centres. Furthermore, the text of guidelines and protocols are available on the SAAS intranet.

FINANCING AND INCENTIVES

PHC financing and expenditure

Health care is financed by a mix of premiums paid by employees and out-of-pocket payments made by patient for for their use of services.

Health care benefits are partly refunded to the patients by CASS, in accordance with the content of the portfolio of services. Health expenses for actions taken or prescribed by each of the health professionals are refunded as follows:

- 75% of the tariffs as mentioned in the list of definitions
- From 30% to 75% of the tariffs as mentioned in the list of definitions, for expenses on medicaments, orthopaedic products and some other specific health products
- From 50% to 75% of the tariffs as mentioned in the list of definitions, expenses on rehabilitation and functional re-adaptation.
- Expenses on hospitalization, both for the stay and for medical care: 90% of the tariffs as mentioned in the list of definitions.
- Users pay the amount not covered by CASS.
- The Government finances the Ministry of Health and Welfare, the public health programmes, services and benefits of general interest, takes part in financing the SAAS and takes on the health expenses of socially vulnerable people.

For ambulatory care services 75% of the bill is reimbursed; for inpatient care 90%. No co-payments are applicable for specific services, such as maternity care. Services provided by physicians without a CASS contract (either in Andorra or in an other country) is reimbursed for only one-third of the established fees. For services of contracted physicians outside Andorra 75% of the established fees is reimbursed.

In the current health reform new models of co-payment and financing are considered directed to achieving new health policy aimss and providing good incentives for more efficiency and better quality of care.

Tariffs of PHC services are approved every year by the Government with a report by the Board of Directors of CASS. This has been ruled by the General Law on Social Security.
Financial resources of the hospital comprise:

- Contributions received from the general administration.
- Contributions received from CASS.
- Own earnings.
- Income from participation in agreements with other health care bodies.

Hospital medical specialists, employed by SAAS, are paid a salary, while the independently working medical specialists are paid fees for services. The reform process envisages a gradual change in the model of financing, which in 2014 already introduces financing by a global budget for service provision.

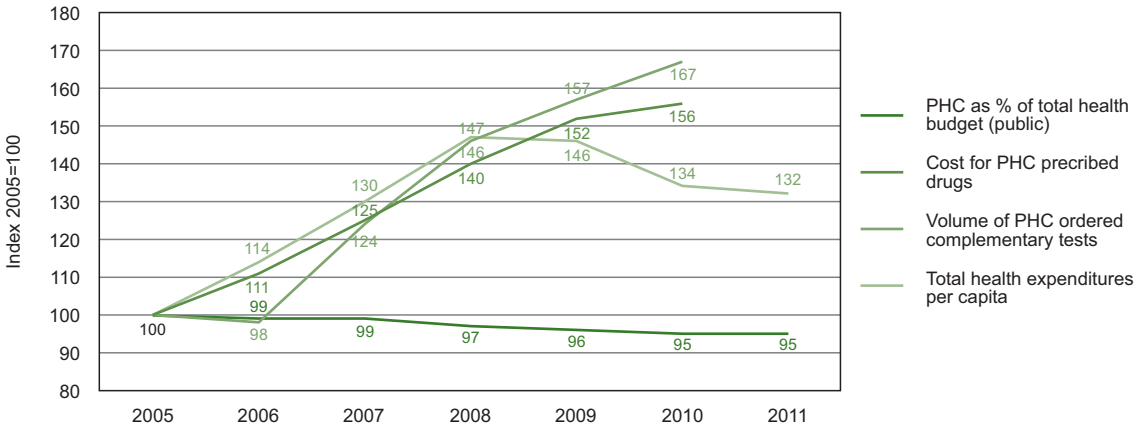
The PHC centres of SAAS in the parishes are financed per case for nursing and midwifery services; the rest is by global budget from the Government. The nurses, midwives and administrative staff in the centres are employed by SAAS.

Figure 9 shows the development of a number of indicators related to costs and production in (primary) health care between 2005 and 2010/2011 in the CASS budget (expenditures from the budget of the Ministry are excluded). The figure shows that, in contrast to the other indicators, the nominal costs for primary health care in the public system have been very stable over time and even slightly decreased. However, the costs for medicines prescribed in primary care and the volume of tests ordered in primary care, have been strongly increasing over the years. This growth has followed the overall trend of total health care expenditures until 2008, but in the years 2009 to 2011 it kept on growing while the total health expenditures were stagnating then and even decreased.

Compared to the Autonomous Region of Catalonia, where 20% of the health budget is allocated to primary care, Andorra only spends a small proportion of the helth budget to primary care. As the focus of current health sector reforms is on strengthening primary care, it is likely that the budget for primary care will rise in the future.

FIGURE 9

Development of health related expenditures and volumes of tests in the CASS budget [10]



Financial incentives

Payment mechanisms

All GPs in Andorra, except one, are self employed and have a contract with CASS. They are paid on the basis of fee for service. The salaried GP is employed by SAAS and working in a relatively remote health centre near ski resorts in the higher mountains.

[10] Sources: Reported by MoHW on national questionnaire. Total health expenditures per capita: Worldbank. www.tradingeconomics.com/andorra/health-expenditure-per capita-us-dollar-wb-data.html (accessed 19 May 2014)

Nurses and midwives are employed by SAAS. Other health professionals, like physiotherapists, dentists and pharmacisits are self employed with contractswith CASS.

Income levels

There are strong differences in the yearly incomes of physicians in the country. The income of medical specialists, like gynaecologists and cardiologists is 3 to 3.5 times the income of GPs. However, the income of specialists in internal medicine, who are employed by SAAS have the lowest income.

TABLE 7

Estimated gross income of physicians (2012)

Medical specialty	Estimated average gross yearly income (€)
Gynaecologist	273.485
Internal medicine specialist (SAAS)	126.000
Cardiologist	248.311
GP	79.000

Financial access

A large majority of the population is covered for costs of primary care services, though copayments generally apply. For instance, co-payments exist for GP consultations as well as for drugs prescribed in primary care and tests ordered. Full coverage only exists for certain groups with very low income or chronic patients with high-cost pathologies.

Coverage is very limited for certain people who have become unemployed; their number is estimated between 5 and 10% of the population.

PHC SERVICE DELIVERY

National data on utilization and provision of primary care services

TABLE 8

Key indicators of utilization of PHC services *

Indicator	Number
Number of contacts with GPs per patient per year	3
Number of referrals made by GPs to medical specialists (per 1 000 patient contacts)	n.a
Number of hospital admissions from GPs (per 1 000 patient contacts)	n.a
Number of drug prescriptions by GPs (per 100 patient contacts)	370

* The survey among physicians also addressed contact frequencies and number of referrals: results are reported in Chapter 4.

Both GP contact rates and prescription rate are high. On average patients have 3 contacts with a GP per year. Per 100 patient contacts, GPs make 370 prescriptions. It seems to be rare that patients leave the GP's consultation room without a prescription; usually it will be with more than one.

TABLE 9

Utilization of the SAAS PHC centres

Utilization	2007	2008	2009	2010	2011
Number of patients	16.956	17.359	19.724	18.932	20.161
Number of visits	110.694	113.161	110.616	105.767	108.365
% Home visits	11.3%	10.6%	10.0%	9.1%	8.8%

On an annual basis, almost one quarter of the population is seen in one of the SAAS Health centres or at home by SAAS staff. The contact frequency of each of these patients is 5 to 6 times in the year. By far most patient contacts are in the health centre; only around 10% of the contacts is in the patient's home. The proportion of home visits has been decreasing gradually from year to year. The current health information system does not allow to further analyse the reason for the visits and the interventions made.

Iinformation on PHC service delivery, based on the surveys among GPs, PHC nurses and their patients will be reported in the chapters 4,5 and 6 hereafter.

CURRENT ISSUES AND PLANS FOR PHC

As long as economic indicators were positive in the country, the urgency to control the growing health care expenditures was relatively low. When the conomic tide changed and health expenditures came on the political agenda, the lack of steering mechanisms was evident. This is among the core issues in the current health care reform. Backgrounds of the rising health care expenditures are a mix of factors, some of which more generally apply to countries in Europe and others which are specific for the Andorran situation. More general trends are resulting from the financial and economic crisis; growing demand as a result of ageing of the population and the use of new technologies in health care. Specific challenges related to Andorra and its health care sector can be summarised as follows:

- Lower available health insurance contributions due to decreased employment (in particular in tourism)
- Generous health benefits package with much freedom to use of services in Andorra as well as abroad
- Growing supply of services from growing numbers of health professionals
- Very little instruments to control the quality of care and the utilisation of services.

Major plans and policy intentions

At present the Andorran Health and Welfare System is in a process of reform. The aim is to make the system more user-centred and to develop primary care so that it will be more the entry to the health care system. A new model of care is being introduced with three levels around the reference physician (gate keeping). The three levels are:

- *Level 1*: including primary care, some specialties closely related to primary care (such as, gynaecology and ophthalmology), paediatrics and emergencies
- *Level 2*: comprising other specialties (with the requirement that the user enters the second level by referral from the first level) and
- *Level 3*:representing most complex interventions (with the requirement that the user enters the third level by referral from the second. The keys to the proper functioning of this model are tools of communication and coordination between levels so as to guarantee the continuity of care for the patient. At present a new tool is being developed, the '*shared health folder'*, which will be a visor shared between levels and containing the main administrative and care information on the users.

Another pillar in the introduction of the new model is a *change in the co-payment* system operated by CASS which differentiates to the extent that patients use the care circuits established by the new model.

When this model is fully implemented, regulated access to the system is desirable, with an increase of activity at primary, home and community levels and a reduction in care provided at the other levels. The idea, then, is to answer the needs of the users at the most suitable and economical level of care. This is expected to have an effect on the sustainability of the health and welfare system in Andorra.

Parallel to these longer term developments, measures have been taken for the improvement of efficiency in the shorter run. For example, studies have been launched to implement measures of efficiency related with i) improving the control of sick leave, ii) updating the catalogue of definitions and tariffs, iii) recommendations for professional action under scientific evidence, iv) actions for improvement of the pharmaceutical costs by means of Decrees on Prices of Reference and v) proposals for payment by fixed prices or other modes of financing.

GPs AND THEIR POSITION IN PRIMARY CARE
Results of the survey

This chapter contains the results of the survey among GPs in Andorra. From the 37 GPs that wer active at the time of the survey, 26 GPs filled in and returned a questionnaire (70.3%). Fifteen (58%) of them were men and 11 (42%) were women. All had an unselected practice population consisting of male and female patients of all age groups.

After the description of respondents' characteristics, this chapter will deal with the role of the GPs in the key aspects of primary care, as specified in chapter 1, including accessibility, continuity and coordination of care and comprehensiveness or breadth of the service package delivered by GPs to their patients. More specifically, the following topics will be dealt with: workload and use of time, availability of services to patients, quality of care, use of clinical information, cooperation and teamwork, available medical equipment and several dimensions of the clinical task profile.

RESPONDENTS' CHARACTERISTICS

Of the 26 GPs six completed a specialisation in family medicine. Table 10 provides a number of key data of the GPs and their practices. It shows that a minority of 6 GPs (23.1%) completed a specialisation in family medicine. The other GPs completed a training in general medicine, six of whom mentioned an additional specialisation: for instance: internal medicine or rehabilitation medicine.

All GPs but two (88.5%) are self-employed, with a contract to CASS. The majority of GPs (73.1%) is currently working in the most densely populated area in the country, Andorra la Vella or Escaldes. The average age of the respondents is 51.1 years and male GPs are slightly older (52.9 years) than female GPs (48.6 years). Only one third of the respondents (35%) were younger that 50 years, but all 6 GPs who completed a specialisation in family medicine fall within this age category. The number of years of experience as a GP, working in Andorra, is on average 19, ranging from 5 to 37 years. Fifteen of the 26 GPs (58%) also report having worked outside Andorra, with a mean duration of 5.6 years, ranging from 1 year to 32 years.

TABLE 10

Summary of characteristics of GPs

	(n=26)		
	Abs.	**%**	**Valid N**
Gender of GP: male	15	57.7	26
GPs with specialisation in family medicine	6	23.1	26
Self-employed with contract to CASS	23	88.5	26
Self-employed without contract to CASS	1	3.8	26
Presently working in Andorra la Vella or Escaldes	19	73.1	26
GPs average age (yrs)	51.1		26
Average years working as GP in Andorra	18.9		26

ACCESSIBILITY OF CARE

Organizational access

Workload

As table 11 shows, only nine of the 26 GPs could give an estimation of the size of the population (excluding tourists) they are working for, while 13 didn't know and four indicated that this was not applicable to them. The mean population size of the nine respondents is 3239 patients, with minimum of 1800 and a maximum of 5688 patients. Most GPs (20 of 26) are assisted by a medical secretary (not in table).

The number of patient consultations per day and the number of working hours per week is larger in Winter time than in Summer time and GPs work on average 37.4 hours per week, with a minimum of 12 and a maximum of 60 hours. Home visits are sparsely made: 2-3 per week. GPs spend more time reading professional journals or medical information than on training and following courses.

TABLE 11

GPs workload and use of time

Aspects of workload	(n=26)	
	Mean	Valid N
Reported list size (# patients)	3239	9
# patient consultations per day in Summer	13.8	24
# patient consultations per day in Winter	18.1	24
# home visits per week in Summer	2.2	23
# home visits per week in Winter	3.3	23
# working hours per week	37.4	26
# hours reading per month	10.8	24
# hours following courses per month	5.7	24

Patients' access and availability of services

Patients can generally see the GP the same day (see table 12), at least during office hours. Practically all GPs reported opening hours in the evening at least once per week, but only one GP reported at least one monthly opening during a weekend day. If practices are closed approximately half of them provide a telephone number to patients in case they get sick, but most GPs (73%) make arrangements with another GP to replace them when they are absent for one or more days (for instance for holidays).

Sessions or clinics for specific patient groups are uncommon; they are reported by less than 20% of the respondents. Among those mentioned were clinics for patients with diabetes or hypertension. Clinics for family planning information are reported by only one GP.

The bottom line of the table shows that on average the practice of one third of the GPs is at a distance of more than 5 kilometres from the hospital CHA.

TABLE 12

Indicators of access to the practice

Aspects of patients' access	(n=26)	
	%	Valid N
Same day visits are possible	96.2	26
Evening opening at least once per week	96.2	26
Weekend day opening at least once per month	3.8	26
Phone number available for patients when practice is closed	53.8	26
Arrangement with another GP when absent for one or more days	73.1	26
Clinics or sessions in use for special patient groups		
for diabetes patients	15.4	26
for hypertensive patients	15.4	26
for family planning information	3.8	26
for pregnant women	7.7	26
for the elderly	7.7	26
for other groups	7.7	26
No clinics or sessions for special patient groups	80.8	26
Practice situated at 5 or more kms distance from nearest general hospital	30.8	26

Quality improvement

Clinical guidelines, expert directives and procedures for dealing with patient complaints are tools to maintain and improve the quality of care. Furthermore, assessments of patients' satisfaction with services and being in touch with community representatives can provide GPs with important feed back to better tune their services to local needs.

Table 13 shows the utilisation of the different methods of quality improvement. The use of clinical guidelines are on average more frequently reported than the use of complaints procedures. Evaluative methods to determine the satisfaction of patients, community representatives and practice personnel are not widely used by GPs. Only two GPs (7.7%) report the use of patient satisfaction investigations and one GP (4.0%) reports the use of methods to assess the satisfaction of community representatives. No job satisfaction methods are reported.

The total number of Continual Medical Education (CME) events, attended since the beginning of 2012 is 6.8 on average, slightly more often in Andorra than in Spain, some in France, and none elsewhere.

TABLE 13

Use of clinical guidelines, complaints procedure, evaluation methods, and continuing medical education (CME)

Quality improvement	(n=26)	
	%	Valid N
Appliyng clinical guidelines		
frequently	42.3	26
occasionally or seldom/never	57.7	26
Having a procedure for dealing with complaints	19.2	26
Using evaluation methods		
investigation of patient's satisfaction	7.7	26
interviewing community representatives about satisfaction with the practice	4.0	25
interviewing GPs about job satisfaction	-	25
Number of CME events attended since January 2012		
in Andorra	3.8	24
in Spain	3.5	24
in France	1.0	23
elsewhere	-	21

CONTINUITY OF CARE

Informational continuity

Routinely keeping record of medical information of patients is a major condition for quality and continuity of care, and is part of daily practice for almost all of the GPs (see table 14). Retrieval of information is something different, but equally important. The identification of patient groups on the basis of a shared diagnosis, health risk or just age, may enable efficient approaches of active monitoring and prevention. The practice information systems of GPs, however, seem not to be tailored to generate such categorical lists.

One of the core elements of the cooperation between primary and secondary care is the information that accompanies patients when they are referred to medical specialists or are hospitalised and vice versa. Six out of ten respondents indicate to use referral letters for all patients that are referred.

All GPs use computers, most often for searching information on the internet, but writing bills, booking appointments, keeping patient medical record and medicine prescriptions and, to a lesser extent, producing referral letters, are other applications.

TABLE 14

Availability and use of clinical information and use of computers

Quality improvement	(n=26)	
	%	Valid N
Keeping patients' medical records routinely for all contacts	92.3	26
Easy to generate a list of patients by diagnosis or health risk	34.6	26
Using referral letters for all referred patients	61.5	26
Using the computer for:		
booking appointments	73.1	26
writing bills / financial administration	76.9	26
medicine prescriptions	69.2	26
keeping patients med. records	73.1	26
writing referral letters	65.2	26
searching medical information	92.3	26
Not using a computer	-	26

COORDINATION OF CARE

Cohesion within primary care

More than half of all GPs are working in a solo practice, while most others work together with one or two other GPs in the same building. Only one GP shares premises with a medical specialist (see table 15).

TABLE 15

GPs working in the practice

Working in the same building	(n=26)	
	%	Valid N
One GP (solo)	53.8	26
Two GPs working in the same centre	26.9	26
Three or more GPs working in the same centre	15.4	26
Both GPs and medical specialists working in same centre	3.8	26
TOTAL	100	26

The majority of the GPs are working alone, without other care disciplines in the same building (see table 16). Five GPs share premises with community nurses, three with midwives and one with a dentist. Social workers, a physiotherapist, a psychologist, a psychiatrist are mentioned as other disciplines.

TABLE 16

Other disciplines working in the practice

Other disciplines	(n=26)	
	%	Valid N
Not applicable (working alone)	57.7	26
Community nurse (from SAAS)	20.0	25
Midwife / birth assistant	12.0	25
Dentist	4.0	25
Pharmacist	-	25
Other	48.0	25

Regular meetings with other GPs were reported by half of all respondents (see table 17). Regular meetings with community nurses, social workers, psychologists and pharmacists are reported by a minority. No regular meetings with midwives / birth assistants or speech therapists are reported.

TABLE 17

Face-to-face meeting with other primary care workers

Meeting face-to-face at least 1x per month with:	(n=26)	
	%	Valid N
Other GPs	50.0	26
Community nurse(s) (from SAAS)	29.9	24
Midwife / birth assistant(s)	-	24
Pharmacist(s)	8.3	24
Social worker(s)	16.7	24
Speech therapist(s)	-	23
Psychologist(s)	12.0	25

Contact with other care levels and with the community

The level of contact with medical specialists is generally high. At least eight out of ten GPs ask frequently or sometimes medical advice from internists, surgeons or cardiologists. With paediatricians, gynaecologists, neurologists and dermatologists contact was only slightly less frequent (see Table 18).

TABLE 18

GPs' consultation with / asking advice from medical specialists

'Frequently' or 'sometimes' asking advice from:	(n=26)	
	%	Valid N
Paediatrician(s)	66.7	24
Internist(s)	96.0	25
Gynaecologist(s)	79.2	24
Surgeon(s)	88.0	25
Neurologist(s)	60.0	25
Dermatologist(s)	72.0	25
Cardiologist(s)	96.0	25

The reported number of patients referred to these and other specialists in a period of four weeks prior to filling out the questionnaire showed a moderate variation, with the highest average referral rates to nurses in a SAAS centre (see table 19). The lowest rates were for referral to secondary care paediatricians and to endocrinologists. (Note, however: these calculated referral rates should be taken as indication only).

To calculate the referrals as % of all office contacts and home visits, the number of consultations per day and home visits per week are combined to the number of patient contacts per month in Summer time and in Winter time. Those numbers are averaged to represent an average month in a year.

TABLE 19

Number of patients referred by primary care GPs to medical specialists during the previous 4 weeks; indicative overall referral rates

Patients referred to:	(n=26)	
	Mean (range)	Valid N
Secondary level paediatrician	0.3 (0-2)	20
Cardiologist	2.2 (0-6)	20
Endocrinologist	0.5 (0-3)	20
Gastro-enterologist	1.4 (0-6)	20
Gynaecologist	1.0 (0-4)	20
Surgeon	2.1 (0-5)	21
Neurologist	1.0 (0-3)	20
Dermatologist	1.4 (0-5)	22
ENT-specialist	1.9 (0-5)	21
Ophthalmologist	1.0 (0-3)	20
Hospital emergency service	1.9 (0-5)	21
Nurse(s) in SAAS centre	5.2 (0-15)	20
Total referrals per 4 weeks	20.0 (0-50)	
Reported referrals as % of all office contacts and home visits	6.0%	

The total number of referrals in a period of 4 weeks prior to the survey was 20 which amounted to 6% of all patient contacts. This means that 6% of the reported patient contacts (in the office and in the patients' homes) end up with a referral to a medical specialist or a nurse. (Self-referrals and other 'bypasses' of primary care are not included in these figures).

Table 20 shows that few patients are being referred to Spain and even less to France.

TABLE 20

Referrals by GP to medical specialists by country (previous 4 weeks; indicative rates)

Country where patients are referred to:	(n=26)	
	Mean (range)	Valid N
Andorra	10.1 (0-30)	21
Spain	2.6 (0-10)	21
France	0.7 (0-4)	21

For the GPs the connections with the community were weak, with regular meetings with local authorities and community workers reported by two respondents and regular meetings with teachers reported by one GP (see table 21).

TABLE 21

Connections with the community

Kind of connections:	(n=26)	
	%	Valid N
Regular meetings with local authorities	7.7	26
Regular meetings with community workers	7.7	26
Regular meetings with teachers	3.8	26

COMPREHENSIVENESS OF CARE

Practice conditions

GPs were asked whether health education materials, such as leaflets or posters, had been displayed or made available in the waiting room of their practice. Results are in table 22. Only information about hygiene to stay healthy, vaccinations, healthy diet and smoking cessation were available to a majority of GPs. The average availability among the GPs of all materials in the table is 36%.

TABLE 22

Availability of health education materials for patients in the waiting room

Subjects of the materials	(n=26)	
	%	Valid N
Cardiovascular disease risks (CVD)	23.1	26
Healthy diet	61.5	26
Smoking cessation	57.7	26
Obesity	15.4	26
Diabetes	11.5	26
Sexually transmitted diseases (STD)	38.5	26
Vaccinations	65.4	26
Contraception	3.8	26
Self-treatment of cold / coughing	15.4	26
Social services	42.3	26
Hygiene to stay healthy	65.4	26
Average material available	36.4	

Medical equipment

GPs were asked to indicate which items of medical equipment from a list of 30 they had at their disposal. The diagram in figure 10 and table 23 summarise the state of medical equipment in the practices.

In figure 10 the distribution of all items of equipment has been represented. The figure shows that thirteen items were available to (almost) all GPs (>90% = 24 GPs). A total of 17 items were widely available (to at least three quarters of the GPs = 20 GPs). In contrast, six items are available to less than 20% of GPs (< 6 GPs) and nine items to 50% of GPs or less (= 13 GPs). This shows that there is room for improvement.

Table 23 shows that overall, the average number of items of equipment per GP from a list of 30 items was 23 items. Fourteen out of 26 GPs (53,8%) had no more than 20 items at their disposal.

The worst equipped GP indicated to have 14 items of the list available in the practice.

FIGURE 10

Available practice equipment (% of GPs)

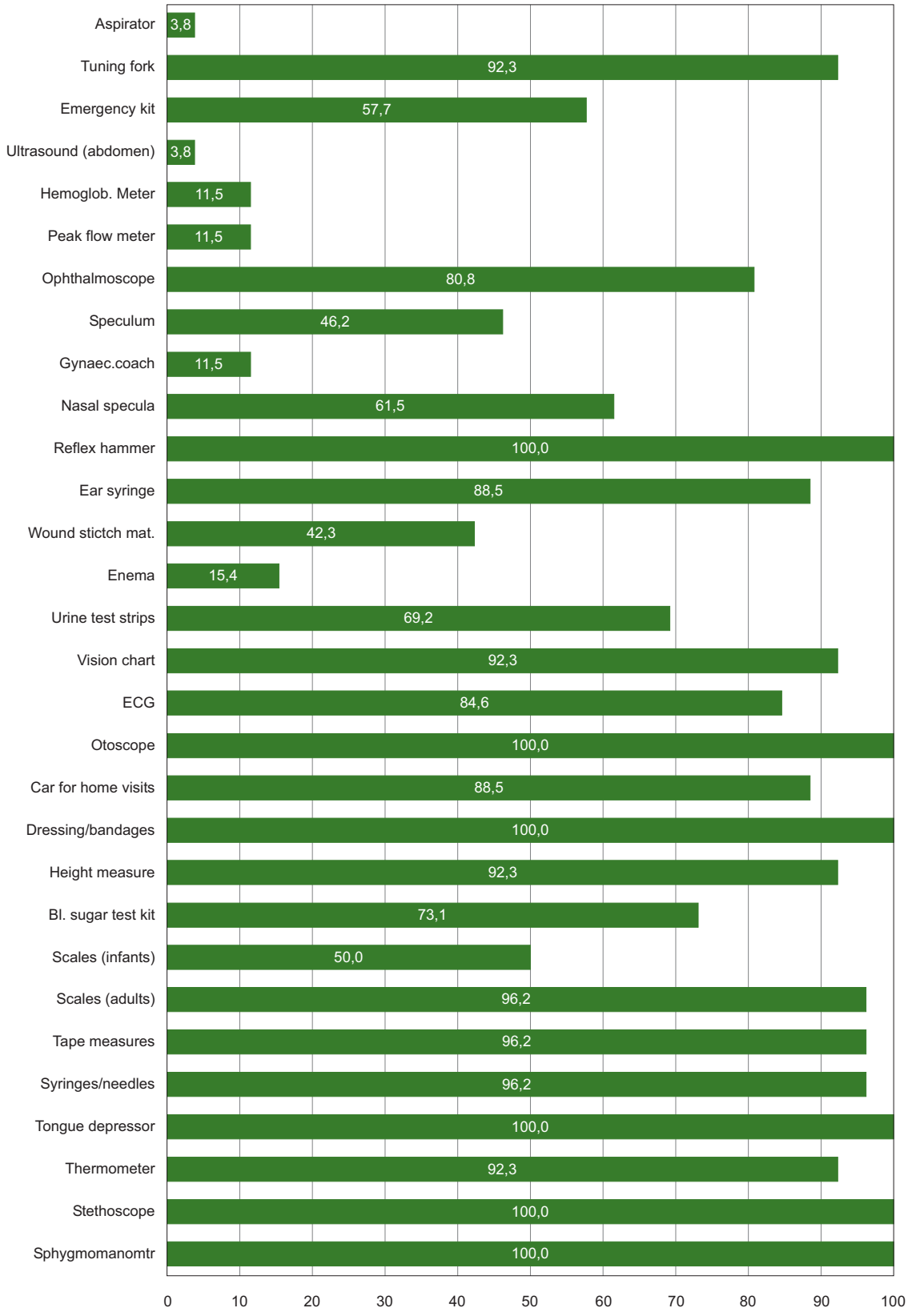


TABLE 23

Number of items of practice equipment available to GPs

Number of items of equipment	(n=26)	
	Abs.	%
15 or less	3	11.5
16 – 20	11	42.3
21 – 25	11	42.3
26 – 30	1	3.8
TOTAL	26	100
Average number of items per GP (from list of 30)	22.6	

Table 24 shows the reported availability of certain medicines in the GP practices for emergency situations. Cortisone, analgetics and diazepam are widely available in the GP practices; hypertensive drugs to a lesser extent.

TABLE 24

Medicines available to GPs (for emergencies)

Type of medicine	(n=26)	
	Abs.	%
Hypertensive drugs	20	67.9
Cortisone	24	92.3
Analgesics	22	84.6
Diazepam	22	84.6

Laboratory facilities (see table 25) were available for the majority of GPs outside their own practice or building. However, more than one in four GPs indicated that laboratory facilities were not or insufficiently available. X-ray facilities were less often available within the GP practice than laboratory facilities. Again a substantial number of GPs, alsmost one quarter, answered unavailability or insufficnet availablility of X-ray diagnostics.

TABLE 25

GPs' access to laboratory and X-ray facilities

Type of facility and mode of access	(n=26)	
	%	Valid N
Availability of laboratory facilities		
Fully available in practice or building	11.5	26
Fully available outside practice or building	61.5	26
Not or insufficiently available	26.9	26
Availability of X-ray		
Fully available in practice or building	7.7	26
Fully available outside practice or building	69.2	26
Not or insufficiently available	23.1	26

Table 26 shows how many tests a GP on average orders in a period of two weeks.

TABLE 26

Number of tests ordered by GPs per two weeks

Number of tests ordered per 2 weeks	(n=26)	
	Mean (range)	Valid N
Basic blood test	7.8 (0-30)	20
Complex blood test	7.3 (0-30)	16
IRM test	1.9 (0-5)	19
CT scan	1.1 (0-5)	19
X-ray	4.7 (0-25)	20
Endoscopy	1.1 (0-3)	19
Ultrasound	3.1 (0-10)	19

Services delivery

Clinical task profiles

Concerning the GPs' clinical task profiles three elements will be distinguished: the role of the GP in the first contact with patients' health problems; the provision of medical technical procedures; and the treatment and follow up of diseases. Each of these tasks has been measured by means of lists of items which together indicate the degree of involvement of the GP. (For more details we refer to the description of the methodology of this study in Chapter 1).

The role of GPs as the first contact for patients' health problems

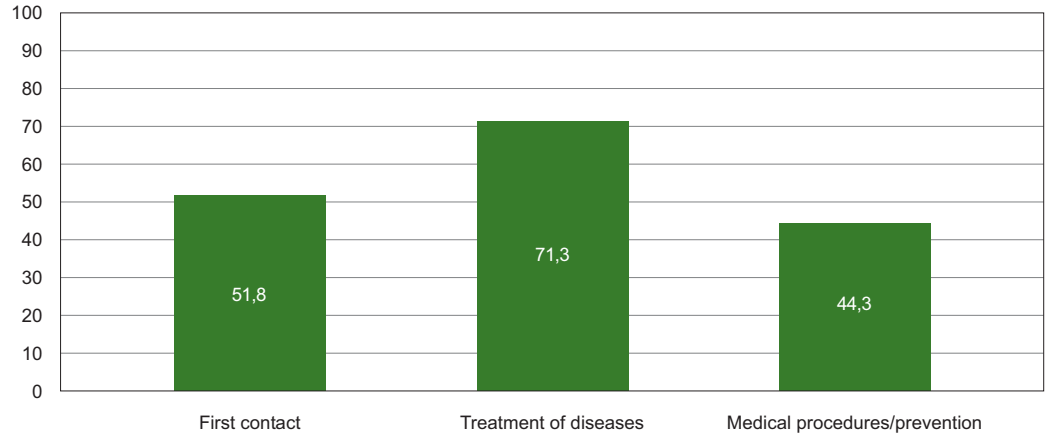
The first contact role was measured with 20 items related to a variety of problems of men, women and children. GPs could indicate whether their patients would address her/him with these problems either '(almost) always' or 'usually' or 'occasionally' or 'seldom/never' or 'do not know'. Figure 11 and, in detail, the table provided in Annex 1 to this report provide the results. Percentages in the table refer to GPs who estimated that they would be always or usually the doctor of first contact. (The percentage in brackets refers to those who ticked the answer 'occasionally'). The diagram shows the involvement of the GPs as a percentage of the maximum possible score for these services.

Figure 11 and Annex 1 show that GPs in Andorra reported a modest role as the doctor of first contact for patients with health problems and complaints. The involvement score, based on a list of 20 health problems for which patients may seek care, is 51.8% (where the maximum is 100%). There were only four health problems out of the list of twenty, where more than 70% of GPs answered to be always or usually the doctor of first contact.

An additional question (not in table) asked GPs whether they are available to provide palliative care for patients with cancer. The majority (76.9%) answered to be '(almost) always' available to provide palliative care, with an additional 11.5% answering 'usually'.

FIGURE 11

GPs' role in the first contact care, involvement in treatment of diseases and medical procedures/prevention (% of maximum score)



Involvement of GPs in the treatment of diseases

The role of GPs in treating diseases is stronger: 71.3% (maximum involvement is again 100%). Involvement is strongest (more than 90% of the GPs) in the treatment of chronic bronchitis, peptic ulcer, herniated disc lesion, uncomplicated diabetes (type II), and depression. The treatment score (see figure 11) is based on 18 items.

Medical procedures provided by GPs

As figure 11 also shows, the role of GPs in providing medical technical procedures is limited (for details see Annex 1). The involvement score is 44.3% (with a maximum of 100%) and is based on 16 items. Only one procedure is usually done by the GP or the nurse in a SAAS PHC centre: immunizations for flu or tetanus. Strapping an ankle is done by 54% of GPs and allergy vaccinations are provided by 48% of GPs, but all other procedures are rarely provided.

Preventive and public health tasks

GPs answered to be moderately involved in screenings, rehabilitaton, school health and activities for specific patient groups (see table 27). The overall involvement in these activities was 47%.

TABLE 27

Involvement of GPs in activities on public health and for specific groups

GPs involved in:	(n=26)	
	% Yes	Valid N
Screening for sexually transmitted infections (STI)	32.0	25
Screening for HIV / AIDS	20.0	25
TB Screening	26.9	26
(Prescription of) Influenza vaccination for high-risk groups	76.9	26
Rehabilitative care	42.3	26
School health care	48.0	25
Cervical cancer screening	26.9	26
Breast cancer screening	64.0	25
Smoking cessation	76.9	26
Intervention on alcohol problem	52.0	25
Provision of home care to elderly or chronically ill	69.2	26
TOTAL coverage for 'Specific groups' (range 0-100%)	**47.0**	

Table 28 shows to what extent GPs prescribe generic medicines if available.

TABLE 28

Prescription of generic medicines by GPs (if available)

Prescription of generic medicines	(n=26)	
	Abs.	%
I prescribe generic medicines as a routine	4	15.4
I often prescribe generic medicines	18	69.2
I occasionally prescribe generic medicines	4	15.4

Mother and child care / reproductive health

Care for mother and child and reproductive health are not generally seen as tasks for GPs. That is also true in Andorra, where almost half of the respondents indicated they provided family planning and contraception services to women, but routine antenatal care, immunisation and paediatric surveillance are often no tasks of GPs in Andorra. Table 29 shows to what extent GPs are involved in these services.

TABLE 29

Services provided by GPs to all or most mothers and children

GPs providing the following services to all or most:	(n=26)	
	%	Valid N
Family planning and contraception	46.2	26
Routine antenatal care	28.0	25
Normal immunisations to children under 4 years	34.6	26
Routine paediatric surveillance (until 4 years)	19.2	26

NURSES IN PHC CENTRES AND THEIR POSITION IN PRIMARY CARE

This chapter contains the results of the survey among nurses in Andorra, who work in the primary care centres run by SAAS. This survey is not a standard element of the PCET, but was specifically developed for the implementation in Andorra. The results reflect the working environment, experiences and opinions of the nurses. Largely in line with the GP survey this one has dealt with the following topics: workload and use of time, access and availability of services to patients, aspects of quality of care, use of clinical information, coordination and cooperation, equipment available in the health centres and continuity of care.

RESPONDENTS' CHARACTERISTICS

The survey had a total of 41 responding nurses, most of whom (38) are female, with an average age of 42 years (range: 27-61). On average they haven been working as a nurse for 11 years (range 2-25). About half of the nurses (55%) are currently working in the central parishes of Andorra la Vella and Escaldes-Engordany.

ACCESSIBILITY OF CARE

Organizational access

Workload

Table 30 provides an overview of various aspects of workload. The average number of patient visits in the centre per day is 29.5, which is about 148 a week. The average number of home visits is 12 per week. Of the total number of 160 patients per week, about 88 are referred by a GP (55%). The number of working hours per week is 39 hours on average, but with a wide range. The nurses spent on average 8 hours per month reading professional journals or nursing information and an other 8 hours on training and following courses.

TABLE 30

Nurses' workload and use of time

Aspects of workload	(n=41)		
	Mean	Range	Valid N
# patient visits in centre per day	29.5	10-75	40
# home visits per week	11.6	0-100	40
# patients referred by a GP per day	17.5	2-50	38
# working hours per week	39.3	35-48	41
# hours reading professional journals per month	7.7	0-30	38
# hours following courses per month	7.9	0-30	37

Patients' access and availability of services

Patients can generally see the nurse the same day (see table 31), at least during office hours. No nurses reported weekly opening hours in the evening. If the centres are closed it is standard that a telephone number is provided to patients in case they need care.

Activities or 'grouped education' for specific patient groups are sparsely available; to some extent they are reported for pregnant women. Half or the nurses indicated there were no sessions or clinics at all for patient groups mentioned in the table.

TABLE 31

Indicators to access to the health centre

Aspects of patients' access	(n=41)		
	N	%	Valid N
Same day visits are possible	40	97.6	41
Evening opening at least once per week	2	5.0	40
Phone number available for patients when centre is closed	6	15.0	40
Opening hours convenient for patients	32	80.0	40
Activities of the centre for special patient groups			
for diabetes patients	3	7.3	41
for hypertensive patients	1	2.4	41
for family planning information	4	9.8	41
for pregnant women	16	39.0	41
for the elderly	4	9.8	41
for overweight / obesity	2	4.9	41
for chronic obstructive lung disease	-	-	41
for other groups	1	2.4	41
No clinics or sessions for special patient groups	21	51.2	41
No information available	1	2.4	41

Quality improvement

Clinical guidelines, nursing protocols and procedures for dealing with patient complaints are tools to improve the quality of care. Furthermore, satisfaction of patients and community representatives can provide useful feed back to optimise the services provided.

Table 32 shows the utilisation of the different methods of quality improvement. The obligatory complaints procedures are widely reported, much more frequently than the frequent use of clinical guidelines and nursing protocols. Evaluative methods, such as investigations into the satisfaction of patients and nurses were mentioned by just a few nurses.

TABLE 32

Use of clinical guidelines / nursing protocols, complaints procedure, and evaluation methods

Quality improvement	(n=41)		
	N	%	Valid N
Using clinical guidelines / nursing protocols			
frequently	24	60.0	40
occasionally or seldom/never	12	30.0	40
Having a procedure for dealing with complaints	39	95.1	41
Using evaluation methods:			
investigation of patient's satisfaction	2	4.9	41
interviewing nurses / midwives about job satisfaction	4	10.0	40

CONTINUITY OF CARE

Informational continuity

Routinely keeping nursing record of medical information of all patient contacts is an essential condition for quality and continuity of care, but one quarter of the nurses does not practice it (see table 33). Equally important as the storage is the retrieval of information. The identification of patient groups on the basis of a shared diagnosis, health risk or just age, may enable efficient approaches of active monitoring and prevention. Although computers are generally used for keeping nursing records, the practice information systems of nurses, however, are reported to be unable to easily generate such categorical lists.

One of the core elements of the cooperation between primary and secondary care is the information that accompanies patients when they are referred to medical specialists or are hospitalised and vice versa. Most respondents indicate to always or usually inform (by telephone or letter) the GP or medical specialist about referred patients.

Nurses were asked whether (non-commercial) patient information materials, such as leaflets or posters, were available in the waiting area of their health centre. Results are in table 34.

Only information about healthy diet, vaccinations and social services were available to a majority of nurses.

On average 34% of nurses have some kind of health education materials available.

TABLE 33

Availability and use of clinical information and use of computers

Quality improvement	(n=41)		
	N	%	Valid N
Keeping patients' medical records routinely for all contacts	31	75.6	41
Generate a list of patients by diagnosis or health risk			
easy	0	-	40
somewhat difficult	4	10.0	40
very difficult	5	12.5	40
I cannot generate such a list	12	30.0	40
I don't know	19	47.5	40
Always or usually informing GPs or medical specialists about referred patients	22	53.7	41
Using the computer for:			
keeping nursing records	41	100.0	41
searching medical information	32	78.0	41
Not using a computer	0	-	41

TABLE 34

Availability of health education materials for patients in the waiting room

Subject of health education materials	(n=41)	
	%	Valid N
Cardiovascular disease risks (CVD)	17.1	39
Healthy diet	68.3	41
Smoking cessation	30.0	40
Obesity	23.1	39
Diabetes	15.4	39
Sexually transmitted diseases (STD)	40.0	40
Vaccinations	68.3	41
Contraception	7.9	38
Self-treatment of cold / coughing	10.0	40
Social services	67.5	40
Average material available	34.2	

COORDINATION OF CARE

Cohesion within primary care

All but one respondents work with at least one colleague nurse in the same health centre, while most (59%) work with a midwife in the health centre. One in four has a self employed GP in their centre and five answered to work with a salaried GP in the centre (see table 35).

TABLE 35

Health professionals working in the health centre

Working in the same health centre	(n=41)		
	Mean	Range	Valid N
Nurses	3.66	1-7	41
Auxiliaries	-	-	41
Midwives	1.09	1-2	41
General practitioners (public)	1.00	1	41
General practitioners (private/liberal)	1.55	1-2	41

Most nurses are working with a social worker in their health centre (see table 36) and some also report family workers, physiotherapists/psychologists or dentists. No pharmacists are mentioned to be part of a SAAS PHC centre. Among 'other disciplines' administrative co-workers are mentioned, as well as psychiatric and educational workers.

TABLE 36

Other disciplines working with nurses in the health centre

Disciplines	(n=41)		
	N	%	Valid N
Social workers	34	85.0	40
Family workers	7	17.1	41
Physiotherapist / psychologist	6	14.6	41
Dietician	1	2.4	41
Dentist	5	12.2	41
Other	7	17.1	41

To communicate about patients, for instance about risk factors or preventive activities, it is helpful if different health care workers can use the same patient records. Table 37 shows that nurses share patient records most often with other nurses and a majority also with midwives. Only very few nurses report that such records are shared with GPs or parmacists. Some don't know whether or not midwives, pharmacists or other nurses use the same patient records.

TABLE 37

The use of patient records by other health care workers

Use of patient records by:	(n=41)		
	N	%	Valid N
GPs	6	15.0	40
Other nurses	38	92.7	41
Midwife	24	58.5	41
Pharmacists	1	2.4	38

Regular face-to-face meetings with other nurses were reported by almost all respondents (see table 38). About half of the nurses had regular face-to-face meetings with psychologists or psychiatrists. Only 20% reported such meetings with GPs and 28% with social workers.

TABLE 38

Face-to-face meeting with other professionals

Meeting face-to-face at least 1x per month with:	(n=41)	
	%	Valid N
GPs	20.0	40
Other nurse(s)	85.0	40
Midwife	22.5	40
Psychiatrist / psychologist	48.7	39
Social worker	28.2	39

Contact with other care levels and with the community

The level of less formalised contact with GPs and a number of medical specialists is generally high. Practically all nurses ask frequently or sometimes medical advice from GPs, paediatricians, internists, gynaecologists, surgeons or ophthalmologists. With neurologists, dermatologists and emergency services contact was somewhat less frequent (see Table 39).

The reported number of patients referred to these and other specialists and services in a period of one week showed a moderate variation, with the highest average referral rates to GPs and emergency services (see table 40). The lowest rates were for referral to mental health care. (These calculated referral rates should be taken as indication only).

TABLE 39

Consultation with other care levels and with he community

'Frequently' or 'sometimes' asking advice from:	(n=41)	
	%	Valid N
GP(s)	97.5	40
Paediatrician(s)	67.5	40
Internist(s)	57.5	40
Gynaecologist(s)	26.3	38
Surgeon(s)	70.0	40
Neurologist(s)	7.7	39
Dermatologist(s)	23.1	39
Ophthalmologist	10.3	39
Emergency services	79.5	39

TABLE 40

Number of patients referred by nurses to medical specialists and other services during a one week period

Patients referred to:	(n=41)		
	Mean	Range	Valid N
GP	5.06	1-20	36
Secondary med. specialist	1.46	1-7	35
Emergency service	2.69	0-8	36
Mental health service	0.23	0-3	31
Social worker	1.15	0-5	34

The answers provided by the respondents point to weak working the connections between the primary care centres and the community in which it operates. Only five nurses reported regular meetings with local authorities (see table 41), while three (7.5%) were unaware whether such meetings took place. Meetings with community or social workers are more frequent than with local authorities, but it is still reported by a minority.

TABLE 41

Connections with the community, by someone in the health centre

Kind of connections:	(n=41)	
	%	Valid N
Regular meetings with local authorities	12.5	40
Regular meetings with community / social workers	33.3	39

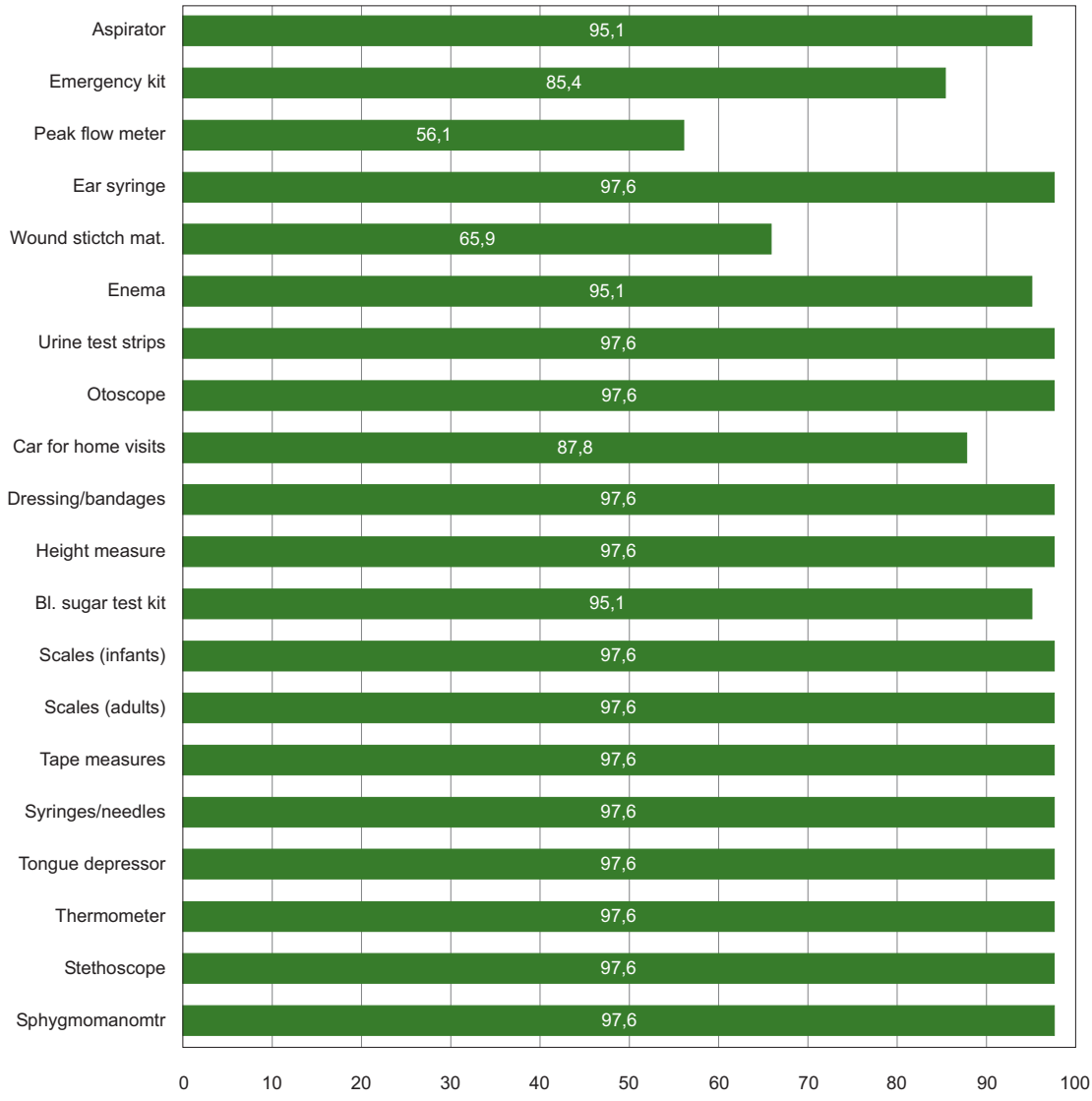
COMPREHENSIVENESS OF CARE

Medical equipment

Nurses were asked to indicate which items of equipment from a list of 20 they had at their disposal at the health centre. The diagram in figure 12 provides an overview of the availability of equipment. Sixteen items were available to (almost) all nurses (>90) and all items were widely available to the nurses. Three items that were least available are: peak flow meter, wound stitch materials and emergency kit.

FIGURE 12

Available equipment (% of nurses)



As the equipment level is generally high, table 42 shows only small differences between the nurses. Overall, the average number of items of equipment per nurse from the list of 20 items was 18 items. All but one had between 16 and 20 items at their disposal.

TABLE 42

Number of items of equipment available to nurses

Number of items of equipment	(n=41)	
	N	%
5 or less	1	2.4
6-10	0	-
11-15	0	-
16-20	40	97.6
TOTAL	41	100
Average number of items per nurse (from list of 20)	18,4	

Delivery of services

Nurses were asked about their involvement in activities for special groups: 'often', 'sometimes', or ' rarely or never'. In table 43 the answers 'often' and 'sometimes' are combined. The range for the total coverage for these activities as reported bythe respondents varied from 0% to 93%, and the average was 66%. Nurses were most frequently involved in flue vaccination, surveillance of young children, parenteral treatments, monitoring of patients with hypertension, screening related to alcohol and drugs use and surveillance of frail elderly people. Relatively few nurses are active in monitoring of smoking cessation, patient assessment for admission to chronic centre or nursing home, geriatric assessment, educating patients to use inhalers and health education in schools.

TABLE 43

Involvement of nurses in activities for specific groups

Nurse often or sometimes involved in:	(n=41)		
	N	%	Valid N
Patient assessment for nursing home	12	29.3	41
Patient assessment for chronic centre	8	19.5	41
Suturing of wounds	11	27.5	40
Screening / monitoring of patients with overweight and obesity	36	87.8	41
Screening / monitoring of patients with hypertension	39	95.1	41
Educating patients to use inhalers	29	70.7	41
Monitoring tobacco cessation	3	7.3	41
Screening on problematic alcohol / drug consumption	38	92.7	41
Geriatric / cognitive assessment	28	68.3	41
Parenteral treatments	39	95.1	41
Routine surveillance of young children (including vaccination)	40	97.6	41
Surveillance of frail elderly people	38	92.7	41
Routine flue vaccination	40	97.6	41
Health education in schools	18	43.9	41
TOTAL coverage for 'Specific groups' (range 0-93%)		**66,4**	

PATIENTS ABOUT PHC IN ANDORRA
Results of the survey

In GP practices, patients have been asked to answer a questionnaire dealing with their experiences and opinions. To that end field workers visited the practices and systematically asked every attending patient for his or her cooperation, until the target of 15 completed questionnaires was achieved. With two exceptions, the information gained from the patient survey relates to the practices of the GPs who participated in the GP survey. In two practices patients have been recruited for the survey without the participation of the GP. More details of the methodology can be found in chapter 1. Result will be described in line with the theoretical framework also explained in chapter 1.

RESPONDENTS' CHARACTERISTICS

The survey among patients had a response of 390, of whom backgrounds are presented in table 44. As usual among visitors of health services, female patients were a majority. The average age of respondents was almost 50 years and 46% were older than 50 years. About two-thirds were employees. As 24% of respondents is over 60 years of age, the percentage or retired respondents is in line with expectations. Only 4% of respondents were unemployed and 3% unable to work. Two-third of respondents were living with a partner, with or without children. Seventy percent of the respondents was born outside Andorra, mostly in an EU country.

TABLE 44

Backgrounds of the patient respondents

Patients' backgrounds	(n=390)	
	N	%
Gender		
Male	148	37.9
Female	242	62.1
Total	390	100
Age		
18-20 yrs	11	2.8
21-30	33	8.5
31-40	65	16.7
41-50	100	25.6
51-60	87	22.3
Over 60	94	24.1
Total	390	100

Patients' backgrounds	(n=390)	
	N	%
Occupation		
in school / education	12	3.1
unemployed	14	3.6
unable to work (because of disability)	10	2.6
looking after family / home	14	3.6
employee	256	65.6
self-employed	21	5.4
pensioned / retired	58	14.9
other	5	1.3
Total	390	100
Living situation		
alone	48	12.3
with parents	21	5.4
with husband / wife	145	37.2
with family (incl. children)	134	34.4
other	42	10.8
Total	390	100
Place of birth		
this country	118	30.3
EU country	246	63.2
European country outside EU	7	1.8
North America, Australia or New Zealand	1	0.3
other country	17	4.4
Total	389	100
Covering for health care costs		
compulsory health insurance	360	99.5
social welfare benefits	19	4.9
private supplementary health insurance	184	47.2
other	23	5.9

ACCESSIBILITY OF CARE

Financial access

Between 30% and 40% of the patients answered that they had to co-pay for the services listed in table 45. This refers to the proportion of health care bills that is not refunded by CASS. Patients answering that these services are free of charge, are likely to mean that they are covered for the co-payment by a private insurance. Part of the patients do not know exactly whether and to what extent they must co-pay for the services. Between 3% and 13% of respondents answered not to

know this or did not answer the question to what extent they would be compensated for visiting a GP or specialist or receiving prescribed medicines, and 27% did not know whether they would be compensated for a home visit by a GP.

The answers on the question about financial obstacles to the use of care, as presented in table 46, are quite clear. Private payments for visits, medicines or complementary tests had made 11% of respondents decide not to visit or to delay a visit to their GP over the past 12 months.

TABLE 45

Services for wich patients report to have to (co)pay

Type of service	(n=390)	
	N	%
Visit to your GP	147	37.7
Home visit by your GP	149	38.2
A visit to a specialist after referral by your GP	145	37.2
A visit to a specialist without referral by your GP	139	35.7
Medicines prescribed by a GP or specialist	114	29.2

TABLE 46

Patients reporting financial obstacles to the use of GP services

Decision taken in past year	(n=390)	
	N	%
Not to visit or delay a visit because I could not pay for the visit, the medicines or complementary tests	43	11.1

Geographical access and responsiveness

This section is dealing with service aspects of the health care facilities, including: attainability and accessibility, opening hours, convenience and patient friendliness. As the table 47 and figure 13 show, on average, at least eight in ten patients could reach their preferred GP and pharmacist within 20 minutes. Reaching the preferred dentist takes some more time: for two thirds it takes no more than 20 minutes, which is about the same as for reaching the hospital. SAAS primary care centres, however, are most nearby, as 90% of the population can reach a centre within 20 minutes. As the country is very small it is obvious that travel times of more than 40 minutes are rarely reported.

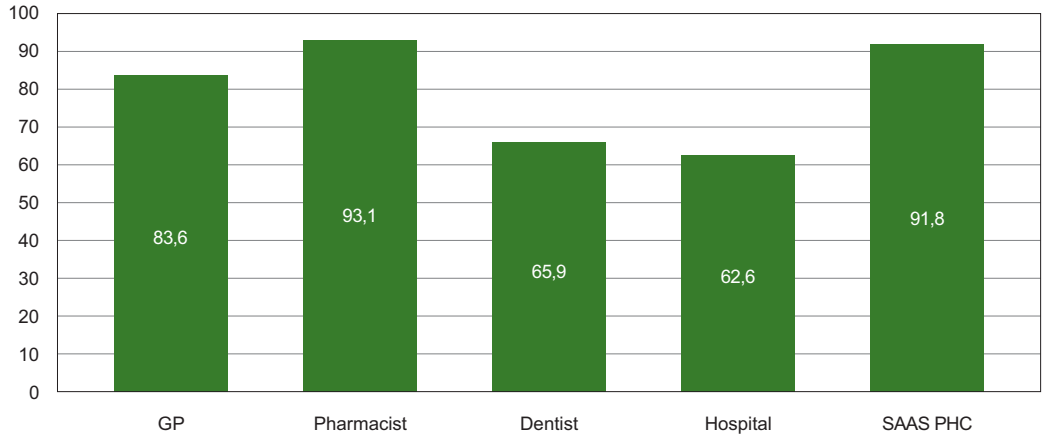
TABLE 47

Patients' travel time to primary care providers

Provider and distance	(n=390)	
	N	%
Preferred GP		
until 20 minutes	326	83.6
20-40 minutes	60	15.4
40-60 minutes	3	0.8
more than 1 hour	0	-
don't know / no answer	1	0.3
Total	390	100
Preferred pharmacist		
until 20 minutes	363	93.1
20-40 minutes	20	5.1
40-60 minutes	0	-
more than 1 hour	0	-
don't know / no answer	7	1.8
Total	390	100
Preferred dentist		
until 20 minutes	257	65.9
20-40 minutes	87	22.3
40-60 minutes	16	4.1
more than 1 hour	3	0.8
don't know / no answer	27	6.9
Total	390	100
The hospital		
until 20 minutes	244	62.6
20-40 minutes	123	31.5
40-60 minutes	18	4.6
more than 1 hour	0	-
don't know / no answer	5	1.3
Total	390	100
Nearest SAAS PHC centre		
until 20 minutes	358	91.8
20-40 minutes	23	5.9
40-60 minutes	1	0.3
more than 1 hour	0	-
don't know / no answer	8	2.1
Total	390	100

FIGURE 13

Patients within 20 minutes travel time from health care facilities (%)



Patients' experiences and opinions concerning service aspects of the GP practice are presented in table 48. The 15 items in the table concern accessibility and convenience of the premises, treatment by practice staff and opening hours and availability of service providers. Possible answers were: 'Yes, I agree', 'I agree somewhat', 'I do not agree', and 'I don't know'. Numbers and percentages in the table refer to the number answering 'Yes, I agree'.

Over two thirds of all patients indicated that they could easily reach the practice by public transport. About physical access of the premises for the handicapped or those using a wheelchair, three quarters answered that the office was easily accessible. So, in some 6 practices there may be ground for improvement in this respect.

More than eight in ten patients were positive about the quality of the waiting room.

Asked about the existence of a website of the GP practice, 8% indicated that it was not available (not in table). However, a vast majority (79%) answered not to know, which may point to little interest of respondent in a website as a service of the practice to the patients.

Only 14.5% of all patients were aware of the existence of a complaint mail box in their practice.

Most patients had the experience that the doctor was always available when they visited the practice (64%), that it was possible to visit the GP the same day if necessary (76%) or that is was easy to get the doctor on the telephone during opening hours (52%). Only 35% of respondents answered there was a telephone number for patients to use when they would get sick outside opening hours.

Visiting a GP in the evening, at least once a week, is possible according to about half of all respondents, but on a weekend day this seems to be much more difficult, as only 10% of respondents reported this as a possibility. Despite these limitations, most patients were satisfied with current opening hours.

Treatment at the reception desk was very well appreciated. Ninety-two percent of respondents agreed that staff at the reception desk was kind and helpful. Some room for improvement exist regarding the time it takes to make an appointment with the GP and waiting in the waiting room. Fifteen percent found that making an appointment with a GP took too long, while 20% answered they had to wait too long in the waiting room.

TABLE 48

The experienced quality of the practice

Patients agreeing with following statements:	(n=390)	
	N	%
I can easily reach the practice by public transport	267	68.5
The practice is well accessible for disabled and persons with a wheelchair	301	77.2
The waiting room for patients is convenient	338	86.7
The practice has a website	39	10.0
In this practice there is a complaint mail box that I can use to submit a complaint if I am not satisfied	58	14.9
When the practice is open and I want to visit a GP urgently it is possible to have the visit the same day	295	75.6
During opening hours it is easy to get the doctor on the telephone for advice	206	52.8
When I visit the practice there is always a doctor available	250	64.1
When the practice is closed there is a telephone number (other than 116) to call when I get sick	135	34.6
In this practice it is possible to visit a GP/family doctor on Saturdays or Sundays	41	10.5
In this practice is possible to visit a GP after 18h00 (at least once per week)	189	48.5
I am satisfied about current opening hours of the practice	341	87.4
Staff at the reception area is kind and helpful	357	91.5
Making an appointment with my GP takes too much time	60	15.4
I need to wait long in the waiting room to see the doctor	77	19.7

CONTINUITY OF CARE

Longitudinal and interpersonal continuity

For 16% of the respondents this was their first visit to any GP in the previous 12 months and for 20% it was the second visit. Well over one third had visited a GP two to four times during the previous year, while one quarter belonged to the frequent visitor with 5 or more visits over the past 12 months (see table 49). As the survey asked patients while visiting the GP practice, these percentages are no indication of the population's utilization of GP services.

Patients had visited a medical specialist in Andorra on average almost twice in the previous year, medical specialists in other countries have been visited with a much lower frequency.

Nurses in PHC centres of SAAS have on average been visited by respondents two times in the past year, while almost two-thirds of the patients answered they had not visited a SAAS nurse in the previous year. One-fifth of the respondents visited a nurse 1-3 times in that period.

TABLE 49

Patients' frequency of visits to their GP, a medical specialist and SAAS nurse PHC centre, during the previous 12 months

Visit frequency past 12 months	(n=390)		Mean (min-max)
	N	%	
Any GP			
only this visit	63	16.2	
once before this visit	79	20.3	
2-4 times before this visit	144	36.9	
5-7 times before this visit	60	15.4	
8 times or more before this visit	37	1.8	
I don't know	7	1.8	
Medical specialist			
in Andorra			1.90 (0-20)
in Spain			0.47 (0-12)
in France			0.05 (0-5)
in Portugal			0.00 (0-1)
Nurse			
no visits	245	63.3	
1-3 visits	84	21.7	
4-6 visits	31	8.0	
7-9 visits	5	1.3	
10-12 visits	6	1.6	
13 or more visits	16	4.1	
Annual visit frequency with nurses			**2.04 (0-50)**

The focus of the rest of this section is on the perceived functioning of the GP in the personal relationship with the patients. Important aspects in this evaluation are communication between the doctor and the patient, how patients perceive the doctor's competence and the patients' trust and confidence in the doctor. Basic to this evaluation are the conditions for a relationship between doctor and patient; for instance in terms of personal continuity and time available to patients in the consultations.

Table 50 is devoted to some conditions for continuity: how long patients have been with their current GP; whether they normally see the same physician each time they visit the practice; and the usual length of a consultation. The conditions for a continuous doctor-patient relationship seem to be good. Practice populations were relatively stable, as almost 70% of the patients answered to be with their GP for more than 3 years and 14% to have come to this GP no more than a year ago. Sixteen percent had been with this GP between one and three years.

As most GPs work single-handed it is obvious that patients answered to always see the same GP when they visit the practice.

GPs take much time for their patients. Patients' answers about this make an average length of a consultation of 25 minutes. Against those reporting very short consultations up to 10 minutes, there was one-third reporting to get 16 to 20 minutes and more than 30% to get more than 25 minutes.

TABLE 50

Patients' experiences with and statements about their doctor

Contact experiences and statements	(n=390)	
	N	%
Length of time being a patient with this GP		
less than one year	55	14.1
1-3 years	62	15.9
more than 3 years	260	66.9
not applicable	5	1.3
I don't know / no answer	8	2.0
If I visit a GP in my practice I see the same doctor each visit	369	94.6
Estimated duration of a consultation		
until 5 minutes	5	1.3
6-10 minutes	15	3.8
11-15 minutes	85	21.8
16-20 minutes	139	35.6
20-25 minutes	14	3.6
more than 25 minutes	120	30.8
no answer	12	3.1
Average length of a consultation (in minutes)	24.62	
Estimated time between making an appointment and visiting the GP		
the visit is the same day	153	39.2
I have to wait 1 day	159	40.8
2-3 days	64	16.4
more than 3 days	10	2.6
I never make appointments	1	0.3
I don't know	2	0.5
This GP knows my personal situation (e.g. work or home situation)	331	84.9
This GP knows the problems and illnesses that I had in the past (from my medical records)	359	92.1
This GP takes sufficient time to talk to me	369	94.6
This GP listens well to me	347	95.9
This GP not just deals with medical problems but can also help with personal problems and worries	265	67.9
This GP gives clear explanation about my illnesses and prescribed medicines	370	94.9
This GP would visit me at home if I would ask for it	199	51.0
After a visit to this GP I feel able to cope better with my health problem/illness	320	82.1
'When I have a new health problem, I go to a GP before going to a medical specialist'	342	87.7
'This practice has sufficient medical equipment'	233	59.7

The ten lower lines in Table 50 summarise the patients' evaluation of their GP. Numbers and percentages in these lines refer to the number answering 'Yes, I agree'.

A large majority of patients was positive about their GP's knowledge of their personal situation. More than nine out of ten respondents assumed that their GP would know about their past problems and illnesses from their medical records.

Communication skills, such as listening and giving explanation, were also well appreciated. However, a much smaller majority (68%) of all respondents agreed with the statement that their GP not just deals with medical problems, but can also help with personal problems and worries.

Only half of the respondents (51%) expected that their doctor would visit them at home, if asked. The statement of feeling better able to cope with health problems or illness after a visit to their doctor is an overall judgement about his or her perceived quality. Eighty-two percent of the patients agreed with this statement.

A large majority (88%) indicated they would go to the GP with a new health problem, before seeking help from a medical specialist. A critical point seems to be the medical equipment in the practice of the GP, of which 40% of the respondents suggested this was not sufficient. If this is related to what the GPs reported about available medical equipment, it may be concluded that GPs and patients disagree about the medical equipment in the practice.

TABLE 51

Patients' assessment of involvement of the GP in promoting healthy behaviour

Topic of health promotion	(n=390)	
	N	%
Eating healthy	350	89.7
Taking physical exercise	340	87.2
Use of alcohol	203	52.1
Reduce or stop smoking	234	60.0

Nearly 90% of the patients reported that their GP talked with them about eating healthy taking physical exercise (see table 51). However, talking about the use of alcohol and possible reduction or cessation of smoking was mentioned much less frequently.

PERCEIVED COORDINATION OF CARE AND CHOICE OF PROVIDER

In table 52 results are presented concerning patients' experiences with collegial exchange of information and cooperation. Numbers and percentages in the table refer to the number answering 'Yes, I agree'. Patients generally had varying views about the exchange of information between their own physician and other treating physicians. Only three out of ten patients think that another doctor than their own GP will have all the necessary information about them, but a large majority (82%) agree that their GP will inform the medical specialist to whom he or she is referred. After being treated by a medical specialist 80% of respondents answered that his or her GP would know the result of this specialist treatment. Despite the fact that GPs in Andorra do not have a gate keeping role, two thirds answered to first visit the GP before having access to medical specialist at the secondary and tertiary level.

TABLE 52

Patients' experiences with information and cooperation

Agreement with following statements	(n=390)	
	N	%
'If I visit another doctor than my own GP, he/she has all the necessary information about me'	118	30.3
'When I am referred my GP informs the medical specialist about my illness'	321	82.3
'When I have been treated by a medical specialist, the GP that I visit knows the results of it'	313	80.3
'To see a specialist, I first need to visit a GP for a referral'	259	66.4

Related to the last mentioned point is the question answered in table 53, what patients think about gate keeping, the situation that would have to choose a GP before being able to visit a medical specialist. A majority of the respondent would not be against it and 41% would prefer the current situation with complete freedom to visit any physician at any time.

TABLE 53

Patients' opinion about having to choose a GP before visiting a medical specialist

Agreement with following statements	(n=390)	
	N	%
'I would have no objection'	191	49.0
'I would prefer the current situation with complete freedom'	161	41.3
'I don't know, I need more information'	14	3.6
'It does not matter to me'	19	4.9
No answer	5	1.3

PERCEPTIONS AND EXPECTATIONS TOWARDS GPs

This chapter will be concluded with a section on how patients perceive what GPs in Andorra can do for them in case of certain complaints or health problems. The answers reflect the patients' estimation of the GPs' capacities in the context of the total available health care supply.

The question answered in table 54 aimed to get a more general image of the GPs, by asking what 'most people in Andorra' would do in each of the 14 cases mentioned.

Most people (at least three quarters) see the GP as the doctor to visit with stomach pain, a severely coughing child, anxiety problems or to have a routine health check. GPs are also the ones to advise which hospital or specialist to go to. Most people would go elsewhere with relationship problems, sexual problems, domestic violence, a cut finger and deteriorated vision.

The answers draw a profile of GPs who are strong in an advisory role and in dealing with somatic problems for which no specific device or equipment is needed. Health problems with technical or interpersonal components are not so much perceived to belong to the GP's professional domain.

The question of table 55 had a more personal focus, asking whether the respondent expected to benefit from a visit to the GP with nine health problems.

With all of the nine problems a majority between 60% and more than 85% answered to expect a benefit from a visit to the GP. Most people expect benefits in case of flue, shoulder/neck problems and stomach pain. Cases for which expectations are lower, such as headache and feeling tired, seem to be more day to day problems that are expected to recover spontaneously.

TABLE 54

Patients' perceived clinical role of GPs

'Would most people in Andorra visit a GP with the following'?	(n=390)	
	N	%
Cut finger that needs to be stitched	80	20.5
Removal of a wart	123	31.5
Routine health checks	345	88.5
Deteriorated vision	101	25.9
Help quit smoking	171	43.8
A child with a severe cough	308	79.0
Stomach pain	318	81.5
Blood in the stool	232	59.5
Sprained ankle	202	51.8
Anxiety	297	76.2
Domestic violence	98	25.1
Sexual problems	105	26.9
Relationship problems	71	18.2
Advice for choosing the best hospital or specialist for a certain treatment	335	85.9

* Answering categories were: yes - probably yes - probably not - no - don't know.
Numbers and percentages refer to the patients answering 'yes'.

TABLE 55

Patients' personal expectations from a visit to the GP

Would you expect benefit from a visit a GP with the following?	(n=390)	
	N	%
Stomach problems	322	82.6
Shoulder / neck pain	323	82.8
Feeling nervous	293	75.1
Diarrhoea	286	73.3
Sore throat	276	70.8
Headache	234	60.0
Feeling tired	244	62.6
Flu	338	86.7
Feeling nauseous	273	70.0

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TABLE A1

GPs' role in the first contact with patients' health problems

GP estimated to be the first contact in case of:	(n=26)	
	%	Valid N
Child with rash	56.0 *(32.0)*	25
Child with severe cough	32.0 *(44.0)*	25
Child aged 7 with enuresis	16.7 *(37.5)*	24
Child aged 8 with hearing problem	12.5 *(16.7)*	24
Woman aged 18 asking for oral contraception	32.0 *(48.0)*	25
Woman aged 20 for confirmation of pregnancy	48.0 *(40.0)*	25
Woman aged 35 with irregular menstruation	52.0 *(24.0)*	25
Woman aged 50 with lump in the breast	44.0 *(44.0)*	25
Woman aged 60 with poly-uria	52.0 *(28.0)*	25
Anxious man aged 45	80.0 *(16.0)*	25
Man aged 28 with a first convulsion	8.0 *(28.0)*	25
Physically abused child	- *(16.0)*	25
Couple with relationship problems	48.0 *(28.0)*	25
Man with suicidal inclination	4.0 *(40.0)*	25
Woman aged 35 with psycho-social probl. related to work	75.0 *(20.8)*	24
Man aged 32 with sexual problems	36.0 *(48.0)*	25
Man aged 52 with alcohol addiction problems	52.0 *(40.0)*	25
Man with symptoms of TB	16.0 *(36.0)*	25
Certificate for driving license, sport etc.	96.0 *(4.0)*	25
Sickness certificate	96.0 *(4.0)*	25
TOTAL SCORE 'First contact' **	**2.03**	

* Note: percentages are sum of the answers '(almost) always' and 'usually'; percentages in *brackets* refer to the answers 'occasionally' being the doctor of first contact.

** For the calculation of the score, answers have been weighted as follows: seldom/never = 1; occasionally = 2; usually = 3; (almost) always = 4.

TABLE A2

GPs' involvement in treatment and follow up of diseases

GPs' involvement in the treatment of:	(n=26)	
	%	Valid N
Hyperthyroidism	76.0 *(16.0)*	25
Chronic bronchitis	96.0 *(4.0)*	25
Hordeolum (stye)	88.0 (*4.0)*	25
Peptic ulcer	95.8 *(4.2)*	24
Herniated disc lesion	100.0 *(-)*	25
Acute cerebrovascular accident	48.0 *(20.0)*	25
Congestive heart failure	*25.0 (4.2)*	24
Pneumonia	84.0 *(16.0)*	25
Peritonsilar abcess	43.5 *(21.7)*	23
Ulcerative colitis	44.0 *(32.0)*	25
Salpingitis	28.0 *(16.0)*	25
Concussion of brain	40.0 *(16.0)*	25
Parkinson's disease	48.0 *(32.0)*	25
Uncomplicated diabetes (type II)	96.0 *(4.0)*	25
Rheumatoid arthritis	70.8 *(12.5)*	24
Depression	100.0 *(-)*	25
Myocardial infarction	48.0 *(32.0)*	25
Follow up TB care	48.0 *(12.0)*	25
TOTAL SCORE 'Treatment tasks' **	**2.85**	

* Note: percentages are sum of the answers '(almost) always' and 'usually'; percentages in *brackets* refer to the answers 'occasionally' being involved in this treatment.

** For the calculation of the score, answers have been weighted as follows: seldom/never = 1; occasionally = 2; usually = 3; (almost) always = 4.

TABLE A3

Involvement of GPs in the provision of medical procedures and prevention

Procedure usually provided/precribed by GP (either or not carried out by nurse in SAAS PHC centre)	(n=26)	
	%	Valid N
Wedge resection of ingrown toenail	26.1	23
Removal of sebaceous cyst from hairy scalp	11.5	26
Wound suturing	11.5	26
Excision of warts	20.0	25
IUD insertion	-	25
Removal of rusty spot from cornea	8.0	25
Fundoscopy	28.0	25
Joint injection	7.7	24
Maxillary (sinus) puncture	-	25
Myringotomy of eardrum (paracentesis)	-	25
Applying plaster cast	19.2	26
Strapping an ankle	53.8	26
Cryotherapy (warts)	16.0	25
Setting up intravenous infusion	23.1	26
Immunizations for flu or tetanus	88.5	26
Allergy vaccinations	48.0	25
TOTAL SCORE 'Medical procedures /prevention' ** (range 1-3)	**1.33**	

* Note: percentages are sum of the answers 'Usually done by myself' and 'usually done by nurse in SAAS centre'.

** For the calculation of the score, answers have been weighted as follows: usually done by medical specialist = 1; usually done by nurse in SAAS PHC centre = 2; usually done by myself = 3

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