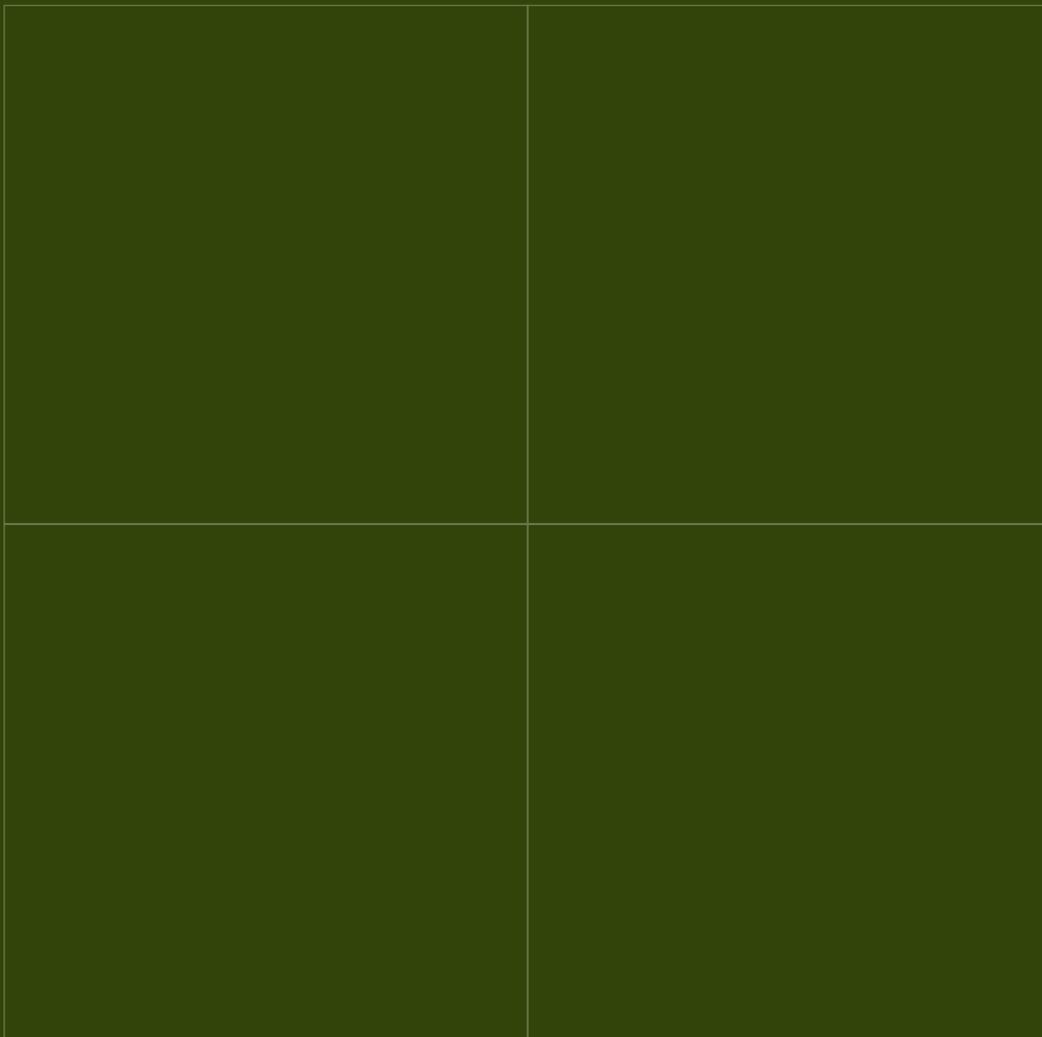




Family and Community Medicine Training Programme

Guide to Specialist Education

- > **National Commission for Family and Community Medicine**
- > **Ministry of Health and Consumer Affairs**
- > **Ministry of Education and Science**



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Ministerio de Sanidad y Consumo

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Prologue

From the time the speciality of Family and Community Medicine was established in Spain in 1978 to the present day, thousands of family doctors have contributed to managing the healthcare needs of the Spanish population, by developing and practising the particular skills of the speciality. As a result of this collective effort it has been possible to draw up a detailed picture of the profession which has been described and defined in the new training programme.

The process of putting together the training programme and obtaining its approval by the National Commission for Family and Community Medicine, the National Medical Speciality Council, the Human Resources Commission of the Interterritorial Council of the Spanish National Health System, the Ministry of Health and Consumer Affairs and the Ministry of Education and Culture, posed a challenge to family doctors: this challenge has resulted in the creation of a tool which is more than just educational and is intended to give a significant boost to the growth of Family and Community Medicine within the Spanish National Health System.

The implementation of the new specialist training programme for family medicine registrars beginning their training from 2005 onwards, creates an opportunity for the future. Family doctors will start to emerge with greater abilities to solve problems and take decisions across the whole health care system. Furthermore, the new family medicine registrars will demand more of their tutors: because an extra year of training means more involvement, the need to offer greater and improved content and to study new ways to develop learning. The training units are vital components in the system and will participate in the entire process. In this way the new programme will help us all to grow, will have a greater influence on the health system and will help solve more of the community's problems. In short, there is an opportunity to achieve a more global objective: not just better family doctors, but a greater potential to turn our health system towards a health-focused model.

The new programme presents guidelines that will help us to orient health care towards the provision of interventions for which there is better scientific evidence. This is the kind of health care that focuses on the community and its needs. It is the health care that maintains a balance between curative interventions, health promotion and disease prevention. It is a health care that adopts an integrated, holistic, biopsychosocial approach and whose professionals are committed to the community as a whole, to the social needs of the local environment and to resources and their management. It is this commitment of our speciality, its spirit and its values, that are gathered together in the new programme.

But from now on, the implementation of this programme will require us to start work on its evaluation and continuous improvement. Above all, it will require that we consider the future of the speciality again. This future will be to respond to the needs arising in the health system and which family doctors will be able to meet in a more integrated way because of the new programme.

In the hope that this edition of the new specialist training programme will enable us all to consult and use it, I would like to end my foreword by thanking the thousands of family doctors who work every day in delivering the characteristic care that defines the speciality of Family and Community Medicine, for their devotion to their profession and the undeniable contribution they make to the development of Family Medicine.

Luis Aguilera García
President of the semFYC



Introduction

The new Family and Community Medicine Programme is the result of a firm desire to consolidate the teaching base and the values of Family and Community Medicine and a deep commitment to training. The four years spent developing the different phases of the Programme and the collaboration of many family doctors bear witness to this commitment. New areas have been included, areas specific to the discipline have been consolidated, new teaching and evaluative methodologies have been introduced, priorities and levels of responsibility have been established and learning environments have been diversified and expanded. Rather than being simply a post-graduate training manual, this document constitutes a framework outlining the essential competencies of a family doctor. This is the framework for the academic discipline and professional development.

In short, the programme is a reference tool and as such, it must be dynamic and answer and adapt to people's needs. This tool represents a quantitative and qualitative change and we hope it will contribute to improving and consolidating Family and Community Medicine and Primary Care.

A change in content is one of the most important qualitative changes. We have added professional values, defined and specified the professional profile, defined essential, cross-cutting and specific competencies, and adapted the programme to social and healthcare needs. We have placed special emphasis on those competencies considered "specific" to family doctors, namely family and community care, and examined them in greater depth. Competencies for education, training and research have also been developed.

The programme is not only aimed at training family doctors who are going to work in health centres in the future, but also, due to its wide scope it serves as a basis for subsequent training in other areas, such as emergency care, palliative care, family care, etc, or so that doctors can work in other settings, such as accident and emergency departments or other services in both public and private care. Qualitative improvements have been made to the methods involved; individualised training has been included with a gradual increase in responsibility; greater emphasis has been placed on on-going training by tutors, involving continuous assessment. The tutors must be able to adapt to the required competency areas and training methodologies; it is therefore important that the health administration guarantees and facilitates opportunities for trainers to maintain and improve their skills, and provides excellent conditions for healthcare training and to maintain motivation.

The educational methodology is examined in greater depth. It is based on self-directed learning, learning in context, in the classroom, group work and workshops. The first two are fundamental, and the others complementary, depending on whether it is a question of acquiring new knowledge, learning skills or improving attitudes.

The health centre provides the central training environment for Family and Community Medicine, but there has been an expansion in the training environments: short-stay medical units, home hospitalisation units, accident and emergency units, teenage healthcare units, palliative care units, healthcare units for immigrants, drug addicts, victims of violence (women, the older adults, children, etc.) and rural health centres.

We have stated on several occasions that this programme is, and will probably continue for some time to be best known for increasing the training time from three to four years rather than for qualitative changes in training. Nevertheless it is the qualitative changes and only these changes which dictated the need for increased training time, to correspond to the minimum total training time recommended by the experts who drew up the programme.

A great many people have taken part in this process, including family doctors and other professionals: the two national commissions and bodies they represent, the Ministry of Health and Consumer Affairs and the Ministry of Education and Science, the scientific societies semFYC and SEMERGEN, the Organisation of Medical Colleges of Spain (OMC), family medicine registrars, the 11 members of the editorial committee, 83 writers, 153 editors and the members of the initial Delphi group; both boards of directors of semFYC, presided by Vicenç Thomas and Luis Aguilera, who have worked on every phase of this long process; their working groups; the National Medical Speciality Council [CNE] and its commissions; the members of the Human Resources Commission and many people with government responsibilities, including Ministers Ana Pastor and Elena Salgado, who have made a firm and decisive commitment to the programme, the Directors of Human Resources, Jaume Aubià and

Consuelo Sánchez, the deputy Directors of Professional Regulation, Marc Soler, Emilia Sánchez Chamorro (subsequently from her post as Deputy Director of Healthcare Science Specialities) and Javier Rubio, who have been the linchpins in the development and approval of this programme; Alfonso Moreno (president of the National Council of Medical Specialities; the representatives of the health centres, and in particular, Nela García, councillor at the Sub-Head Office for Professional Regulation of the Ministry of Health and Consumer Affairs, who has played a vital role in drawing up and approving the final version of the programme. Although they are not mentioned in the list of authors we are deeply grateful for the work and support of members of the CNE, as well as many other anonymous professionals who, due to lack of space or an oversight on our part have not been included in the list, but have collaborated in the design phase, as well as in the drawing up and approval of the programme and are now working with energy and determination on its implementation and development.

A great many things remain to be done. We must work on the accreditation and reaccreditation criteria for coordinators and tutors, on the assessment of teaching skills, on our information and communications systems, on research, on training tutors, on structured and on-going tutoring systems, on training assessment and skills-development analysis systems, on the training units, their organisation, functions, structure, management of training, coordination between trainers and training structures.

But above all, we now have to make «our programme» a reality and this is the responsibility of each one of us.

Verónica Casado
*President of the National Commission
for Family and Community Medicine*





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A new educational programme lasting four years, applicable solely to Registrars in Family and Community Medicine beginning their training as from the 2004/2005.

The previous programme will continue to apply to registrars who began their training programmes earlier and are currently in training.

Madrid, 17th January 2005

Family and Community Medicine Specialist Training Programme

NATIONAL COMMISSION FOR FAMILY AND COMMUNITY MEDICINE
MINISTRY OF HEALTH AND CONSUMER AFFAIRS
MINISTRY OF EDUCATION AND SCIENCE

1. Official name of the speciality and requirements

- > **Family and Community Medicine**
- > **Length:** 4 years
- > **Previous degree:** Medicine

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Background

In recent years, we have witnessed three important events in primary health care in Spain: the creation of the speciality of Family and Community Medicine (1978), the enactment of the General Health Law (1986), and sweeping reforms of primary health care, as initiated by the Royal Decree 137/1984 on basic health structures. These changes have led to the introduction of activities specific to primary health care such as: work in multidisciplinary teams with longer working hours, medical history and clinical activity recording, the incorporation of new skills and complementary investigations (blood analyses, radiology, spirometry, ECG), the introduction of clinical protocols and healthcare guidelines. At the same time preventive care and health promotion are being addressed through training and research in primary care.

A number of major social changes have occurred in this country in recent years which have led to an increase in the use of primary care services. These changes include an increase in the elderly population and in chronic pathologies, changes in family structure and other lifestyle and environmental factors that have created new health care needs and public expectations. The major growth in primary health care also stems from the better range and quality of services, that result from scientific and technological development and improved training and diagnostic skills of family doctors (FDs).

This new Family and Community Medicine Training Programme represents a major milestone: it is the third official programme and the fifth actual programme in the 24 years since the speciality was created, providing proof of the strength and dynamism of family doctors in Spain.

Despite the fact that Family and Community Medicine is a relatively young speciality, it has become firmly established and widespread in the healthcare system. This is borne out by the fact that over 18,000 specialists were trained in 2002, and 5,400 are currently in training. This quantitative breakthrough has been accompanied by a qualitative one, illustrated by the wealth of magazines, books, monographs, courses, workshops, working groups, congresses, research and teaching activities etc., by family doctors.

From an organisational point of view, the programme has been developed with a high level of consensus, as shown by the long list of authors/collaborators included in appendix II. It took over two years to develop the programme and during this time, Family and Community Medicine (FCM) Training Departments and the speciality's most representative Scientific Societies participated actively, particularly the Spanish Society for Family and Community Medicine (SemFYC).

Of particular interest to our neighbouring countries is the fact that the current programme has extended the training period to four years, as has also happened in other European countries such as Austria, Denmark and Finland. In this way it is approaching the recommendations proposed by the European Union of General Practitioners and the European Parliament which even advise extending this period to five years.

With regard to the contents of the programme, it is relevant to highlight that these meet the present and future needs of primary health care by allowing the flexible and individual adaptation of work rotations to meet the levels of skill required of a professional family doctor. Minimum, desirable and maximum standards have been established for learning objectives which allow a quality assessment of the entire process.

Health Centre tutors, who are responsible for following up and supervising the activities carried out by the family medicine registrars throughout their four-year training period, play a central role in this programme which must be supported simultaneously by a complementary programme of tutor training in order to maintain and improve their skills.

The Programme develops five areas of competence: essential skills (communication, clinical reasoning, healthcare management and bioethics), individual patient care, family health care, community health care and continuing education and research.

Primary health care must be the cornerstone of the health system and this means that high quality training of the family doctors of the future is fundamental, so that they can provide better, more accessible, more humane, more integrated and more efficient care for the health service user. This continues to be the challenge facing family doctors as trainers, together with their concerns for

future working conditions, professional career development, continuing education, skills certification and recertification, support for tutors and the development of new teaching methodologies etc. that create the indivisible whole that guarantees quality training and the best medical care for the public.

This Programme seeks to provide a dynamic tool, as its predecessors did. This means that it will be revised periodically in order to adapt to the changing needs of scientific developments and of our society.

The National Commission for Family and Community Medicine wishes to express its sincere thanks to everyone who has taken part in developing this programme, as well as all the family doctors who contribute on a daily basis to the progress of this speciality.





The professional values and profile of the family doctor

Profound changes and new phenomena taking place in society today are making new demands on health which family doctors cannot ignore. In the face of these changes, their function in society must not only focus on improving their levels of training and providing the services required of them, but also on promoting the values which legitimise their role in society.

2.1. The professional values of the family doctor

Doctors possess values which define their professional commitment to society. Learning and the internalisation of these values are indispensable if they are to do their job properly. *Teaching*, transmitting these values, is part of a tutor's job; *learning and assimilating them* are essential if a family medicine registrar is to become a good family doctor.

We can group the values of family doctors into five commitments:

- To people.
- To society as a whole.
- To the continuous improvement of their work.
- To their own speciality.
- To ethics.

2.1.1. A commitment to people

The individual citizen is the central focus of the care provided by the family doctor, whose interventions are geared to improving and maintaining the individual's health and which take priority over any other interests. The public understands the nature of the profession and every effort is made to gain public trust so that people will always consult the doctor whenever they need to do so. The best family doctors endeavour to improve health outcomes of the population for whom they are responsible.

Respecting the autonomy of the citizen is not just an ethical duty, but also a healthcare objective. The family doctor provides the necessary information so that patients themselves can decide, in collaboration with the doctor, their preferred course of treatment. In this respect, the promotion of patient autonomy in caring for themselves, is an essential healthcare objective. Ideally, family doctors should make every effort to ensure their patients achieve such levels of autonomy that they no longer need them. Their purpose is not to become indispensable to their patients, but to help them learn to look after themselves.

Every individual matters to the family doctor throughout their entire lives. The doctor's job is not restricted to clinical cases or to dealing with illnesses, but their daily work also involves attending to people with specific problems and beliefs, who are immersed in a family and social context which constitutes an indivisible whole.

2.1.2. A commitment to society

Family doctors act as a gateway to the healthcare system, or rather as healthcare agents for the community, or case managers and care pathway coordinators, and as such they have a high level of social responsibility with regard to the efficient use of healthcare resources. They know that the inappropriate use of healthcare resources (a drug, a complementary investigation, a consultation with another doctor, etc.) not only represents an iatrogenic risk for the patient, but is also an unnecessary expense which deprives the population of other resources. This is why family doctors have a social commitment to the *efficient use of healthcare resources and to actively avoid discrimination* in access to healthcare services.

As frontline healthcare professionals, family doctors must *guarantee rapid medical attention* for those people who require it, avoiding the creation of barriers which hinder access to their services or direct access to other more specialised services. To this end, family doctors endeavour to organise their own and their colleagues' workload so that they can meet public demand without delay.

Family doctors *know the importance of their role* within the healthcare system, but they perform it with humility, because they are aware of the influence of health care on social and economic factors, and for this reason they *identify and work to improve the living conditions* of the population they care for.

2.1.3. A commitment to continuous improvement

Family doctors make their *decisions based on updated scientific evidence* and must therefore keep their knowledge, skills and professional attitudes up to date, recognising the value of their team and minimising the possibilities of mistakes by maintaining continuous improvement and a scientific commitment to the speciality.

The professional profile of family doctors and their commitment to people, society and continuous improvement, make them *essential professionals* in the smooth running of the health system.

2.1.4. A commitment to their own speciality and the training of new professionals

The diversity, cross-sectionality and uncertainty with which family doctors work continually are not considered a limitation but an inherent characteristic of the speciality and an incentive to playing an active role in the development, consolidation and updating of the training base of this speciality.

Family doctors know that improvements can be made to their speciality and this is why they *value and take part in training new family medicine registrars*, to whom they convey everything they know without limitations, thereby helping *the new specialists to be even better than they are*.

As the tutors of new professionals, family doctors *help new generations of family medicine registrars to learn*, knowing that they themselves learn from the training process.

The family doctors' commitment to their speciality also determines their willingness to research those questions that are relevant to their job, in order to offer a better service to society.

2.1.5. An ethical commitment

Family doctors are very exacting with the healthcare administration and other actors in the healthcare system and call for it to be run properly. The limitations of the system do not prevent them from maintaining an irreproachable *ethical attitude* in their relationships with their patients, with society as a whole, with the healthcare organisation they work for and with the pharmaceutical industry.

The family doctor's ethical commitment is based above all, on respect for the patient's *autonomy*, guaranteeing their right to privacy and the *confidentiality* of their treatment. In their clinical interventions and taking into account their area of work, *they put the principle of no-harm before the principle of beneficence of the patient*.

Family doctors must be particularly careful and honest in their relationships with the pharmaceutical industry and in their teaching and research, making sure they put the needs of their patients before their own legitimate interests.

2.2. The professional profile of the family doctor

The family doctor's profile is that of a professional for whom the person is a physical, psychological and social whole, embedded in a specific family and social context. This approach enables the doctor to give continuing care to his or her patients, to improve the health of the healthy, cure the sick and to give care, advice and palliation for the effects of the illness, when it is not possible for patients to regain their health.

These specific characteristics of the family doctors' professional profile shape a particular body of knowledge that is fundamentally grounded in their area of activity – Primary Health Care, and their particular approach to providing care. This approach adopts a biopsychosocial focus in which the main driver is the integration of curative interventions with health promotion, disease prevention, rehabilitation and palliative care.

For educational purposes, this professional profile is represented by the following five areas of competency, which have a high level of consensus in the European Union.

2.2.1. Training area for essential competencies: communication, clinical reasoning, management and bioethics

Family doctors' main tool is their ability to communicate with the patients they see every day. It is therefore vital that they develop the ability to listen and empathise so that they can relate to users in the right way.

Family doctors usually see patients with ill-defined health problems, presenting in the early stages of the disease process and which are frequently trivial. This means that they must have the appropriate reasoning skills that will allow them to detect more serious conditions by making an accurate diagnosis from a very vague complaint. Protocols and clinical guidelines, which family medicine registrars themselves participate in developing and using, can be a very useful aid in learning clinical reasoning and decision-making skills.

Family doctors work as part of a team of primary healthcare professionals who have shared objectives and care for the same population group. This means they have to learn how to work in a team and to identify and set common objectives, as well as establishing methods of working and communication between the different professionals involved in health care provision.

To carry out their work properly, family doctors must learn how to organise the different aspects of their working day, including the efficient running of their surgery and the appropriate and effective use of clinical investigations, therapeutic resources and referrals to other specialists.

In primary health care, information is the basis of knowledge for diagnosis and decision-making and family doctors must be able to use relevant registers, information and technology systems appropriately, ensuring that all data remains confidential.

Learning evidence based medicine and the use of Internet resources are fundamental tools in the field of clinical management.

Family doctors will learn the theoretical framework and scope of quality in health care and the tools for assessing the structure, process and outcome measures by which quality can be identified and improved. The application of these evaluation and improvement techniques will enable them to assess the levels of satisfaction of both users and professionals with their work.

Family doctors must have the necessary know-how to perform basic administrative and managerial tasks in primary care centres.

During their training period, family doctors will learn to include the ethical values and attitudes of the profession in their working procedures, both in terms of their relationship with their patients (respect,

privacy, confidentiality, autonomy, informed consent), and in other areas of their professional duties (prescription, distribution of resources, research, their relationship with the pharmaceutical industry, etc.).

2.2.2. Training area for competencies in individual patient care

Family doctors are fundamentally good clinicians who must effectively and efficiently provide continuous care for individuals throughout their lives, both at the surgery and in the home, through appointments, on demand or in emergencies and for acute and chronic complaints.

Holistic care (for the whole person) and longitudinality (throughout their lives) are two essential characteristics of family doctors' professional role. They construct a picture of their patients' medical histories from a viewpoint that integrates the biological, psychological and social aspects of health care and illness.

Family doctors will acquire the technical skills to make a correct diagnosis, by processing and assessing the diagnostic tests available to them, and ensuring that they have the necessary skills to carry out each individual healthcare procedure:

- A diagnostic plan that includes making a correct differential diagnosis, a correct interpretation of additional investigations and if necessary, the inclusion of the opinions of other specialists.
- A pharmacological or non-pharmacological treatment plan, which will be drawn up and discussed with the patient, using the drugs and other therapies available to family doctors correctly.
- A follow-up plan assessing adherence to treatment and the results achieved, guaranteeing continuous and specific care in particular situations such as individuals with disabilities, people with mobility difficulties, the terminally ill who require palliative care, as well as children, adolescents, women, older adults etc.

In their contact with the patient, family doctors will also assess the need and opportunities for integrating evidence based, disease prevention and health promotion interventions into healthcare practice. This includes adopting measures for health education and for the primary and secondary prevention of the most common conditions in the population, such as infectious diseases, cancer, cardiovascular disease, mental health, and for health problems in children and adolescents, women, older adults etc.

Family doctors have to develop the appropriate skills so that during the clinical consultation they can establish a good rapport with the patient which can enable them to ascertain the specific reason for attendance and the underlying health problem in question, while maintaining absolute respect for the patient's privacy, confidentiality and autonomy.

2.2.3. Training area for competencies in family health care

The family plays an important role in the way its members fall ill and the type of illnesses they develop. Family doctors must understand each family as a unit operating in two different ways: as a part of the social context in which life and health unfold, and as a healthcare resource.

The family medicine registrar must see the family as a system, undertake a family consultation, draw up and interpret the genogram, know about the life cycle of the family, the transition stages and stressful life events, assessing them and being aware of their repercussions.

It is important for family doctors to acquire skills that enable them to advise, intervene in, and mediate with families. They should know how to identify family resources and the social support network that people and their families have, as well as how to recognise psychosocial dysfunction and problems originating in the family.

2.2.4. Training area for competencies in community health care

In order to improve health and reduce inequalities, family doctors must act on the physical and social determinants of health that are outside the context of the healthcare system.

The community dimension of a family doctor's work starts from his or her care of the individual patient and all activity must be contextualised within the person's family and social milieu, making the most of these resources and minimising their weaknesses.

With this aim in mind, family doctors must obtain enough information to identify the population's healthcare needs, focusing their attention on the entire community and identifying at-risk groups which because of their social class, gender, ethnic background, age, etc., suffer from inequalities in health care. This includes organising and implementing interventions to address community health problems and enabling the most vulnerable to access the healthcare system.

When providing health care for the community, family doctors must learn on the one hand to use epidemiological monitoring systems by which they can monitor environmental risks and their health repercussions, and on the other, to cooperate actively with community organisations (NGOs, mutual assistance associations, etc.) and other institutions that seek to improve the health of the population.

2.2.5. Training area for competencies in education and research

The family doctor must participate in a process of continuing education to constantly maintain and improve professional competence. This involves acquiring the necessary skills to prepare and deliver clinical, bibliographical and review training sessions, etc, as well as collaborating in under-graduate and post-graduate training in family medicine.

Family doctors will learn how to perform a literature search, familiarise themselves with the medical databases, information and document resources and how to obtain evidence based information.

Family doctors must be able to assess the quality and importance of the research results published in scientific journals, develop the habit of critical reading and the basic knowledge to undertake a research project geared to answering questions and hypotheses resulting from their work. They must acquire the characteristic knowledge and methods of clinical epidemiology and evidence based medicine [EBM] so that they can analyse the health of the community for which the basic healthcare team (family doctor and nurse) is responsible.





General characteristics of the Family and Community Medicine Programme

3.1. Links with the professional profile of the family doctor

In order to guarantee that the Family and Community Medicine specialist can meet the health demands of today's society, this programme is closely linked to the professional profile of the family doctor. For this reason the contents of the training programme are divided into training areas which in turn coincide with the competencies referred to in paragraph 2.2.

3.2. Flexibility

The flexibility of this programme is clearly shown by the following characteristics:

- Learning methods: the acquisition of skills by the family medicine registrar is always the final objective and not the method whereby such skills are acquired. " The important thing is the 'what' and not the 'how';" as a result it is envisaged that different learning methods will be used in the different training areas according to what best suits the educational profile of the tutors and the specific characteristics of the training unit where the family medicine registrar is being trained.
- Versatility of the training: the Family and Community Medicine Programme provides the necessary knowledge to enable doctors to work, not only in health centres, which provide the natural environment for FM, but in other working environments, where they are particularly in demand (such as the emergency services, hospital accident and emergency departments, prison health care etc.).
- Increase in training venues: in order to improve and broaden the education of family medicine registrars the training programme is open to the inclusion of new types of training resources such as: short-stay medical units, hospital-at-home services, teenage healthcare units, palliative care units, as well as the essential inclusion of rural health centres because of the specific nature of family medicine practice in this setting.
- Elective internships: assessment of training before the end of the third year will make it possible to determine the level of competence acquired. The elective internships last for three months and will enable registrars to rectify any shortcomings in their competencies.
- The individualised training of each family medicine registrar with a gradual increase in responsibility tailored to each doctor's personal characteristics.

3.3. The relationship between tutor and family medicine registrar

This relationship is the fundamental core of the entire training process, in that the internship system involves programmed and **tutored** theoretical and practical training, with the specialist participating in a personal and progressive way in the registrar's training in the relevant interventions and responsibilities.

Tutors should not only have a sound knowledge of the subject, but must also be available and accessible during every phase of the training period, as they play an important role as facilitators and mediators of the learning process.

The importance of the role of the tutor is demonstrated by the fact that the registrar has the same principal tutor, with whom they will remain in continuous and structured contact throughout the entire learning period, This does not however detract from the role of other tutors or the hospital tutor, depending on the place where training is taking place at any given time.

The principal tutor is responsible for adapting the individual training plan to the training needs and personal characteristics of each registrar, in order to rectify any shortcomings detected during their internship.



3.4. The link between interventions during the training period and levels of priority and responsibility

This programme is particularly important because its training contents are not just restricted to a simple list of skills, knowledge and aptitudes, but they also provide a useful tool to help both tutor and registrar to assess the importance and the level of responsibility the registrar must acquire for each of the interventions programmed at each stage of the training process.

To this effect, the tables of contents for each area of competence indicate the level of priority and responsibility for each activity, as follows:

Levels of priority:

- **Priority I:** indispensable: these competencies must be acquired by all family medicine registrars. Absence of these raises questions about ability.
- **Priority II:** important: these competencies must be acquired by the majority of family medicine registrars.
- **Priority III:** excellence: if the previous levels have been achieved, the acquisition of these competencies may be a criterion of excellence.

Levels of responsibility:

- **Primary level:** the family doctor must be able to identify, assess and manage this type of problem, and in 90% of cases without referral to another level of health care.
- **Secondary level:** referral to another level is usually required during the assessment or treatment of this type of problem.
- **Tertiary level:** the diagnosis and treatment of these problems fall within the competencies of other specialists, but the family doctor must be able to inform and support the patient and their family and ensure the coordination and continuity of care.

3.5. The importance of assessment

Every training programme involves a complex learning process, whose validity and dynamism depend on the extent to which quality criteria are used to evaluate all component parts, with the aim of detecting, improving and correct shortcomings as necessary.

This is the intention of section 14 of this programme, which contains evaluation and assessment criteria for family medicine registrars, the teaching staff involved in their training and the structure which makes the process possible, including this training programme.

3.6. Bibliographical and Internet-resource guide

One of the core values and approaches of this programme, is to convey to family medicine registrars that self-directed learning as well as the expansion and updating of knowledge, is a vital element in training specialists in Family and Community Medicine that does not end after four years' internship, but represents a permanent professional commitment by the family doctor.

For this reason, a bibliographical and Internet-resource guide related to Family Medicine, is given in section 16 and listed in Appendix I. The guide will be updated periodically by the National Commission for Family and Community Medicine on this web-site for this programme, by adding new reviews of the most important publications from the scientific literature in general and from family doctors themselves. Family doctors can submit their contributions to the National Commission, which will include them on the website following a selection process.



Training methodology in the Family and Community Medicine Training Programme

As we stated earlier, one of the specific characteristics of this programme is the diversity of learning methods, because the priority is that family medicine registrars fulfil the objectives of the programme, despite its broad contents, the variety of profiles of tutors/registrars and the diverse characteristics and resources of the many training units accredited to train these specialists.

To this effect, the five recommended learning methods in the different areas of competence of this programme are:

4.1. Self-directed learning

- This involves: the study and use of individual learning tools.
- It is particularly suitable for: acquiring new knowledge, maintaining competencies, acquiring skills in the use of basic tools (English, computers, Internet).
- Different models:
 - Everyday study on the registrar's initiative.
 - Directed learning: recommended reading or viewing (CD-ROM, videos, websites). Study assignments: problem-based learning, discussion of case histories and practical problems.
 - Distance-learning courses.
 - Preparing sessions.

4.2. Learning in context

- This involves: putting the family medicine registrar in a real situation in which self-directed learning can take place.
- It is particularly suitable for: learning about the complexity of functions and decision-making as a professional.
- Different models
 - Direct observation (the family medicine registrar sees what the tutor is doing).
 - Tutored interventions (the family medicine registrars carry out their interventions in the presence of the tutor).
 - Direct intervention, not supervised directly by the tutor (information is obtained in different ways from direct observation: audit of case histories, the patient's opinion, the opinion of other colleagues in the team or from secondary care).
 - Video recordings made in the doctor's surgery (with the patient's consent) and subsequent analysis.

4.3. Classes

- These involve: teacher-centred transmission of information about a specific subject.
- They are particularly suitable for: the transmission of complex information and the creation of a frame of reference.
- Different models:
 - Traditional teacher-centred class.
 - Participative class.
 Preference should be given to participative classes wherever possible.

4.4. Small group learning

- This involves: making the most of the interaction between members of the group.
- It is particularly suitable for: working on attitudes.



- Different models:
 - Seminars
 - Role-playing
 - Working in context
 - Viewing videos
 - Improving quality
 - Research
 - Other classroom techniques: working in pairs, grid, Philips 6x6, etc.

4.5. Workshops

- These involve: skills learning in small groups.
- They are particularly suitable for: acquiring skills and procedures (behaviours that must be undertaken in a specific way).
- Different models:
 - With real or simulated patients.
 - With dummies.
 - With computerised programmes (simulators).
 - With educational projects.





The structure and contents of the training programme

The training contents of each of the areas which make up the programme are grouped into different sections with the following general characteristics:

- All specify the objectives and interventions grouped according to the level of priority and responsibility and also include knowledge, skills and attitudes.
- The activities required have been gathered into a practical series of essential training specifications. These specifications serve both to inform tutors and registrars of the knowledge, skills and attitudes that are the focus of learning at each point in time, and also enable tutors to convey the required approach and activities of the rotation in question more clearly to healthcare managers in the different training facilities.
- Likewise, the teaching methodology, the place of learning (health centre, internship at one of the training unit services, external rotation), learning time, recommended assessment and reading are set out for each training area and as appropriate, for each section or subsection.

Although the final objective of training family medicine registrars is the acquisition of competencies so that they can provide care for individual as a whole person living in their own context, for educational purposes the programme has been structured into five areas of competence, described in different sections of this programme to facilitate understanding:

- **Section 8 of the programme refers to the training area for essential competencies divided into:**
 - **Healthcare communication.** The clinical consultation. The doctor-patient relationship.
 - **Clinical reasoning.** Decision-making. The patient-centred clinical method.
 - **Managing health care.** Teamwork. Management and organisation of care. Information systems. Quality management. Civil and medico-legal responsibilities.
 - **Bioethics.**
- **Section 9 of the programme refers to the training area for individual patient care competencies, divided into two large groups:**
 - **Addressing healthcare needs and problems:** Risk factors and cardiovascular problems. Respiratory problems. Problems with the digestive tract and liver. Infectious diseases. Metabolic and endocrine problems. Behavioural and relationship problems. Problems with the nervous system. Haematological problems. Skin complaints. Trauma, accidents and poisoning. Kidney and urinary problems. Muscular and skeletal problems. Facial, nose, mouth, throat and hearing disorders. Eye complaints. Addictive behaviours. Acute and emergency care.
 - **Addressing population groups and at-risk groups:** Children's health care, specific problems and preventive interventions. Adolescent health care, specific problems and preventive interventions. Women's health care, preventive interventions and pregnancy care. Adult health care, preventive interventions. Occupational health care. Care of the older adult, preventive interventions. Health care for patients with mobility difficulties. Health care for the terminally ill, grief counselling, carers. At-risk situations within the family and society.
- **Section 10 of the programme refers to the training area for competencies in family health care.**
 - Training objectives and interventions relevant to this area.
- **Section 11 of the programme refers to the training area for competencies in community health care.**
 - Training objectives and interventions relevant to this area.
- **Section 12 of this programme refers to the training area for competencies for education and research, broken down into:**
 - Education and training.
 - Research methodology.



The educational schedule

The tutors involved in the family medicine registrar's training period and particularly the principal tutor, are responsible for supervising and following up the plans (schedules) drawn up for each registrar by the Advisory Commission tutors. These individual plans will be adapted to the potential characteristics and resources of each training unit and each family medicine registrar, but must nevertheless be able to guarantee:

- Extensive initial contact with primary health care for the family medicine registrar: preferably six months and at least three months.
- That at least 50% of the internship takes place at the health centre.
- A training period every year at the health centre.

The need for flexibility of individual training plans is not however an obstacle to including in this section the following proposal for an "schedule" of general guidelines which the National Commission for Family and Community Medicine considers individual training plans should gradually adapt to.

PROGRAMME SCHEDULE

Year one

- > Learning in context in primary care: 3-6 months⁽¹⁾
- > Learning in context in internal medicine and specialist areas: 5-8 months
- > Holidays: 1 month
- > Learning in context in Accident and Emergency (on-call periods)⁽²⁾
- > Self-directed learning
- > Classes/Group work/Workshops

Years two and three

- > Learning in context in internal medicine and specialist medical and medico-surgical areas: 8 months
- > Learning in context in primary care: 3 months (R2) at a rural health centre⁽³⁾
- > Learning in context in children's health care: 2 months⁽⁴⁾
- > Learning in context in mental health: 3 months
- > Learning in context in women's health care: 3 months
- > Complementary elective internships or learning in context at the health centre: 3 months (R3)⁽⁵⁾
- > Holidays: 2 months
- > Learning in context in Accident and Emergent (on-call periods)⁽²⁾
- > Self-directed learning
- > Classes/Group work/Workshops

Year four⁽⁶⁾

- > Learning in context in primary care: 11 months
- > Holidays: 1 month
- > Learning in context in Accident and Emergency (on-call periods)⁽²⁾
- > Self-directed learning
- > Classes/Group work/Workshops

(cont.)

(cont.)

PROGRAMME SCHEDULE

Learning in context will generally be carried out through individual tutoring and a gradual increase in responsibility as the family medicine registrar acquires professional competencies, according to the learning process being followed.

- (1) Learning in context in primary care [R1] will take place at the beginning of the internship period, preferably for 6 months.
- (2) See section 7 of the training programme.
- (3) Internships at rural health centres will ideally take place during the second year of training. Those training units whose catchment areas do not include any rural areas can become affiliated to rural health centres belonging to other training units and obtain specific accreditations for this task.
- (4) Learning in context in children's health care will take place principally in primary care.
- (5) Elective internships to facilitate the improvement of competencies or undertake complementary training, will take place at the end of year three, before the family medicine registrars begin their internship at the health centre. If the tutor and family medicine registrar deem this unnecessary, the family medicine registrar will join the staff of the health centre.
- (6) During year four of training, family medicine registrars must be able to play an active role in all the activities at the health centre and take charge of a family medicine surgery with full autonomy and without the aid of the tutor. The supervision of autonomous interventions carried out by family medicine registrars at the surgery will be fulfilled without this precluding their supervision through the continuous tutoring referred to earlier. If in doubt or when faced with complex situations, registrars may have recourse to their principal tutor, the support tutor or other family doctors at the health centre where they hold the surgery. It is recommended that autonomous healthcare activity is undertaken progressively so that, on completion of year four, it will include a period of no fewer than two months.

SUGGESTIONS FOR CLASSES AND WORKSHOPS

Family medicine registrars must receive complementary theoretical and practical tuition which consolidates self-directed learning and learning in context and will enable them to acquire the competencies of a family doctor. The areas traditionally developed with the support of classes and workshops are listed in the table below.

NON-CLINICAL COMPETENCIES	CLINICAL COMPETENCIES
<ul style="list-style-type: none"> > Introduction to Family and Community Medicine > Managing health care (clinical management teamwork, management and organisation of care, information systems, managing quality, civil and medico-legal responsibility) > Health education > Health care in the home > Methodology of family health care > Methodology of community health care > Planning and organising primary care > Bioethics > Computing 	<ul style="list-style-type: none"> > Emergencies. Essential basic and advanced support. Health care for patients with multiple injuries > Immobilisations > Minor surgery > Drug dependency > Infiltrations > Physiotherapy > Basic electrocardiography > Basic radiography > Mental health > ENT > Ophthalmology

(cont.)

*(cont.)***NON-CLINICAL COMPETENCIES**

- > Sociology of health care
- > Epidemiology, statistics and demographics
- > Prevention methodology
- > Training methodology
- > Research methodology
- > Bibliographic searching and other basic medical documentation techniques
- > Evidence based medicine
- > Communication. Clinical consultation. Doctor-patient relationship
- > Social skills: dealing with problems, solving conflicts, negotiation, decision-making
- > Provision of services at health centres
- > Clinical reasoning

CLINICAL COMPETENCIES

- > Health care for at-risk population groups:
 - Older adults
 - Adolescents
 - Women
 - Workers
 - Patients with mobility difficulties in the home
 - Terminally ill patients. Paliative care
 - Health care for patients at-risk within the family: domestic and gender violence
 - Health care for patients at-risk within society: immigrants

Family medicine registrars must train for a minimum of 200 hours, with a recommended 300 hours devoted to theoretical and practical sessions over the four-year period.





On-call duties during the training period

The provision of on-call services helps guarantee the integrated training of the family medicine registrar and the permanent running of healthcare institutions, and is considered a key element in the registrar's learning process and gradual assumption of responsibilities. These services, which will be provided at the training unit facilities, will be compulsory and be supervised by the associates and tutors at the healthcare centres where they are carried out, with the help of the coordinator from the training unit.

From an educational point of view, the recommended number of duty periods should be no fewer than three, nor greater than five a month, even in the case of accumulated duty periods resulting from holiday leave.

In any case, the coordinator and tutors from the training unit will plan the duty periods and other activities for the family medicine registrars, bearing in mind their dual function as trainee staff and workers at the healthcare units and centres where they are undergoing training. In order to achieve this, there must be the necessary coordination between the tutors and managerial bodies at these centres and units.

Given the educational value of participation in the on-call service, duty periods should also be included in the time spent making up for training sessions missed as a result of long periods of sick leave, negative assessments and other eventualities envisaged by the current legislation. The number of duty periods to be recuperated should be as deemed necessary in each case by the Advisory Commission, seeking a balance between the particular situation of the registrar and the required objectives of the programme.

PERCENTAGE DISTRIBUTION OF THE NUMBER OF ON-CALL HOURS DURING THE INTERNSHIP, DIVIDED INTO DIFFERENT AREAS

	H.C./P.H.*	Hospital accident and emergency	Pediatrics	Gynaecology	Orthopaedics	Medico-surgical	Emerg. services	Total
R-1	25%	75%						100%
R-2 & R-3	25%	37.5%	12.5%	4.5%	12.5%	8%		100%
R-4	75%	12.5%					12.5%	100%

This means that if there were 4 duty periods/month, they would be distributed as follows:

R-1 would involve 3 months of duty periods in H.C./P.H. and 9 more at hospital accident and emergency departments, or if they were distributed throughout the year, 1/month in H.C./P.H. and 3/months in hospital accident and emergency departments.

R-2 and R-3 would involve 9 months of duty periods in hospital accident and emergency departments, 6 months of duty periods in H.C./P.H., 3 months in orthopaedics, 3 months paediatrics, 1 month in gynaecology and 2 months in medico-surgical departments.

R-4 would involve 1 duty period per month, either in hospital accident and emergency departments or emergency services, and an additional three in H.C./P.H.

*H.C.: Health centres; P.H.: Primary healthcare.

The distribution of the duty periods in the second and third year may be combined with the rotations according to the speciality area during these two years.

At small hospitals, duty periods will be performed at the accident and emergency departments dealing with multiple pathologies.

Duty periods in primary health care and hospital accident and emergency departments will be distributed over the course of the year, throughout the four years of the internship. Under no circumstances should the duty periods in primary health care be replaced by duty periods in hospital accident and emergency departments if the stipulated hours in the latter have already been completed.

When the accredited health centres do not provide on-call services, or these prove to be inadequate, duty periods can be transferred to other centres. This will involve the specific accreditation of these centres for this task. Tutoring during duty periods must be guaranteed in each case.



Educational contents in the training area for essential competencies

8.1. Healthcare communication. The clinical consultation. The doctor-patient relationship

Communication between doctor and patient is essential to clinical practice. It is estimated that a doctor will perform 200,000 consultations during the course of their career and as a result it is worth doing well. Effective communication is essential to providing high-quality health care: it improves patient satisfaction and understanding, therapeutic compliance and outcomes of health care. Serious problems have nevertheless been observed in communication between doctors and patients.

Communication, together with medical knowledge, physical examination, and decision-making, are the essential components of clinical competence. These four elements are the true essence of good clinical practice and as such communicative skills should not be a mere complement of medical practice. Without good communication skills, all knowledge and intellectual efforts are easily wasted. Whether in the home or at the surgery, the doctor's knowledge is all conveyed during the face-to-face encounter with the patient and consequently how something is said is just as important as what is said.

Communication techniques must be taught and learnt as they are not an immutable personal characteristic. Moreover, they must be taught with the same rigour as physical examination techniques, because personal experience in itself is insufficient and can take the registrar along the wrong path.

Lastly, it is important to highlight the fact that specific methods are required to address successfully the teaching-learning process of communication techniques. Basically a change in behaviour is necessary and to achieve this the most suitable methods are known as "experiential" and include observation, feedback and trials of communication techniques. The outcome of training is the adoption of the necessary knowledge and attitudes.

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Establish, maintain and conclude an appropriate healthcare and therapeutic relationship.
2. Identify and provide a profile of the health problem/s presented by the patient.
3. Agree with the patient on the most appropriate action for each problem.
4. Inform and educate according to the patient's needs.
5. Use time and resources adequately.

IMPORTANT NOTE:

The level of responsibility for all interventions related to communication skills is primary. So important is this responsibility that family doctors can be seen as setting the standards for communication skills for secondary care specialists.

TRAINING ACTIVITIES GROUPED BY PRIORITY

Knowledge, attitudes and skills

PRIORITY I

- > To relate appropriately to patients and/or their families
 - > To facilitate the willingness of patients and/or their families to provide diagnostic information
 - > To ascertain the nature and history of the patient's health problem/s
 - > To delve for relevant information concerning the biological, psychological and social aspects of the health problems
 - > To take note of the information obtained about the biological, psychological and social aspects of the health problems
 - > To generate and test multiple hypotheses throughout the consultation with the patient and/or their family
 - > To ensure that the patient and/or their family understand the nature of their problem
 - > To ensure that the patient and/or their family understand the process and the recommended diagnostic studies
 - > To ensure that the patient and/or their family understand the relevant therapeutic measures
 - > To reach an agreement with the patient and/or their family about the problems/s, the diagnostic process and therapeutic measures
 - > To facilitate the willingness of patients and/or their families to accept the treatment plan. To negotiate when necessary
 - > To relieve the physical and psychological pain of the patient and/or their family
 - > To ensure the satisfaction of the patient and/or their family
 - > To ensure the satisfaction of the doctor
-

PRIORITY II

- > To know the most relevant models of clinical consultation
 - > To know the different phases of the consultation
 - > To be aware of the influence of the setting on clinical communication
 - > To know the main techniques of verbal communication
 - > To know the essential elements that shape paralanguage
 - > To know the essential types and components of non-verbal communication
 - > To know the essential elements of active listening
 - > To know the most frequent problems that arise in the doctor-patient relationship
 - > To know about the influence of personal factors in the clinical interview
 - > To relate to the patient and/or their family and/or carer
 - By greeting the patient in a friendly manner and calling them by their name
 - By showing interest and respect and helping the patient make themselves comfortable
 - > To be aware of and to use the necessary specific skills in order to communicate with:
 - Children
 - Adolescents
 - Older people
 - Immigrant population
 - > To elicit the reason/s for the consultation
 - By identifying the problems or issues that the patient wishes to have treated
 - By listening to the patient's initial explanation without interrupting
 - By confirming the list of problems
 - By negotiating the consultation agenda
 - > To obtain the relevant information
 - By encouraging the patient to "explain" the history of the problem/s in their own words
 - By picking up on and following the most important verbal and non-verbal clues
 - By making prudent use of different types of questions, cues, clarifications, requests for examples, signals, interpretations and techniques for controlling the consultation
 - By verifying the information obtained by summarising
 - > To establish a trusting therapeutic relationship
 - By demonstrating suitable non-verbal behaviour: eye/facial contact, posture and position, movements, facial expression, use of the voice
 - By using the case history, computer records, reports, prescriptions etc. without interrupting the dialogue or exchange
 - By legitimising and accepting the point of view of the patient and/or their family without judging them
 - By showing empathy and offering support
 - By dealing sensitively with delicate matters, reasons for suffering and physical examinations
 - By showing a genuine interest in the patient
-

(cont.)

TRAINING ACTIVITIES GROUPED BY PRIORITY

Knowledge, attitudes and skills

- > To go about the physical examination in an appropriate way
 - By asking permission
 - By explaining what is going to be done and why
 - By sharing findings with the patient
- > To reach an agreement on the nature of the problem, the information provided and the management plan
 - By undertaking explanations and plans in a way in which the patient and/or their family understand
 - By facilitating bi-directionality
 - By using appropriate negotiation and persuasion techniques
 - By providing the right amount of information in a clear and concise way (neither too little nor too much)
 - By involving the patients and/or their families in the decision-making process to the extent that they wish
- > To be aware of and to use the necessary specific skills to:
 - Give the patient and/or their family bad news
 - Communicate with terminally ill patients
 - Elicit their sexual history
 - Communicate with at-risk patients and those with problems of addiction
- > To conclude the interview properly
 - By summarising the most important points of the interview, particularly the role of each of the participants: doctor, patient and/or family and/or carers
 - By anticipating possible progress and the most suitable intervention in each case
 - By saying goodbye to the patients in a friendly manner
- > To allow the communication of information as well as thoughts and emotions at the surgery
- > To show unconditional respect for patients, their families and carers (although not necessarily for their course of action)
- > To respect the patient's autonomy and individuality
- > To be willing to share part of the diagnostic and therapeutic process with patients, their families and carers
- > To be willing to work with patients from different social strata and with different personalities
- > To show an interest and pay attention to the different aspects of the illness (biological, psychological and social) which may occur simultaneously
- > To show an open and enquiring attitude and a willingness to explore own attitudes, beliefs and expectations, arising from our vocation as doctors

PRIORITY III

- > To be aware of and to use the necessary specific skills in order to communicate with:
 - Patients with sensory/communication problems
 - Uncommunicative patients
 - Depressed patients
 - Patients suffering from anxiety
 - Angry/aggressive patients
- > To be aware of and to use the necessary specific skills in order to:
 - Communicate with patients' families
 - Facilitate communication between family members
- > To be aware of and to use the necessary specific skills to communicate with:
 - Patients from different cultural backgrounds from the doctor
- > To be aware of and to use the specific skills needed for the «motivational interview»
 - By being aware of the process involved in changing habits and the different stages involved
 - By developing empathy and fostering self-responsibility in this process of change
 - By handling open questions, reflective listening, summaries, positivisation, fostering self-efficiency
 - By knowing about and handling persuasion skills
- > To be aware of and use the necessary specific skills to «control emotions» at the surgery
- > To be aware of and use the necessary specific skills to communicate in «small groups»:
 - Patient groups
 - Working groups: primary care staff and professionals from other healthcare levels
- > To be aware of and handle the ethical issues that influence medical communication:
 - Ethical and communication principles
 - Informed consent

All cases listed in this training specification are considered to be primary levels of responsibility and this classification column has therefore been removed.

RECOMMENDED TRAINING METHODOLOGY

A) Self-directed learning

- Reading recommended bibliography
- Working with video
- Distance-learning courses

B) Learning in context

- Carrying out projects and writing reports
- Demonstrations (either real or recorded on video)
- Working with simulated patients and role-play
- Providing feedback based on direct observation or videos of real consultations
- Working in consultation and one-to-one with the tutor

C) Courses

- It is recommended that the theoretical content be taught through short participative presentations.

D) Group work

- In order to train in and master skills, it is recommended that family medicine registrars work in small groups (of 6-8), to which they can bring their own experience, as well as discuss common problems and suggest feasible and useful alternatives for each professional. The use of role-playing techniques and working with video recordings of real patients, provide registrars with the opportunity to «experience» (try out, exercise) a variety of communication skills under supervision and in «low-risk» conditions.

E) Workshops

- Advanced workshops geared to developing specific skills, mostly from «Priority III»; for instance, «Workshop on Communication with Adolescents», «Workshop on Communication with Aggressive Patients», «Bad News», etc.

RECOMMENDED PLACE OF LEARNING

Basic learning will take place at the health centre, but it is also advisable to provide some kind of theoretical learning and training in communication skills. This must be done in classrooms suited to small groups which have the right materials and equipment: flip chart, blackboard, back projector, video projector, portable video camera, video-cassette player and television set.

The supervision of communication style and techniques must be carried out at the family medicine registrar's place of work.

RECOMMENDED LEARNING TIME

It is recommended that the learning of communication techniques should begin at the start of the internship and continue throughout training.

Special effort is recommended during the training periods at the health centre.

Theoretical and practical training will be tailored to each training unit. However, it is advisable to spend at least 30 hours on this aspect over the four-year training period.

RECOMMENDED ASSESSMENT

See the epigraph at the end of section 8.

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- Video 1: Beginning a therapeutic relationship
 Video 2: Listening and asking
 Video 3 & 4: Informing and negotiating with the patient
 Video 5: Difficult situations at the surgery

8.2. Clinical reasoning. Decision-making. The patient-centred clinical method

Family doctors must perform a dual role: they must understand both their patients and their illnesses, and in a context whose very characteristics invite different reasons for consultation - including time factors, different likelihoods of disease, high accessibility, availability of continuity of care as well as specific healthcare responsibilities. Clinical reasoning and decision-making, together with communication skills and scientific and technical knowledge, are the essential elements of good clinical practice. Just as with communication skills, these other skills are not merely complementary but essential and at the core of practice. Without these skills, medical knowledge can easily be underused and even damaging.

Clinical reasoning and decision-making techniques and the patient-centred clinical method must be learnt and taught with the same rigour as physical examination techniques, because experience alone is insufficient and may cause the registrar to make errors. Just as with the consultation, clinical reasoning is not an intuitive process and involves a number of stages which need to be identified because each one can give rise to mistakes.

This area is divided into 6 sections corresponding to the general objectives that have been defined; each one specifies the educational aims pertaining to knowledge, attitudes and skills, grouped according to learning priority, as well as methodological suggestions, recommended reading and assessment possibilities.

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Be aware of the *fundamentals and characteristics* of decision-making in primary care.
2. *Apply the principals* of clinical reasoning and decision-making to the problems presented at the family doctor's surgery.
3. Use diagnostic tests and their results in clinical practice.

4. Make a *prognosis* of the disease.
5. Decide on a suitable *intervention plan* suited to the problem presented and the patient's characteristics.
6. Achieve *adequate adherence* to the agreed intervention plan.

IMPORTANT NOTE:

The level of responsibility for all interventions related to reasoning and person-centred decision-making skills is primary. This responsibility is so important that family doctors can be seen as setting the standards for reasoning and patient-centred decision-making skills for secondary care specialists.

TRAINING ACTIVITIES GROUPED BY PRIORITY

Knowledge, attitudes and skills

1. Knowing the fundamentals and characteristics of decision-making in primary care.

PRIORITY I

- > To distinguish the special characteristics of decision-making in family medicine: high accessibility, ill-defined illness and/or illness in its early stages, lack of organisation in the presentation of the illness, uncertainty about the importance of the problem, longitudinality.
 - > To consider uncertainty as an inherent part of the decision-making process.
-

PRIORITY II

- > To be aware of different decision-making models (inductive, hypothetical-deductive, pattern recognition).
 - > To analyse how the defining characteristics of primary care practice influence decision-making in family medicine.
 - > To study variation in clinical practice and consider it an indicator of possible quality problems.
-

2. Applying the principles of clinical reasoning to the problems presented at the family doctor's surgery.

PRIORITY I

- > To assess the importance of regularly using the stages prior to the diagnostic process: ruling out serious pathologies, analysing why the patient is visiting now, finding out the significance of the symptoms for the patient and whether any other factors exist.
 - > To include the different stages of the diagnostic process as a routine procedure: presentation of symptoms, early hypotheses, differential diagnosis, diagnosis of the illness, explanation of the illness.
 - > To identify the patient's problems and provide possible hypotheses which describe and explain their reality.
 - > To decide on the type and aims of any necessary investigations.
 - > To use clinical practice guidelines to deal with problems that are important either because of their frequency or their severity.
 - > To interpret the complaint in terms of its medical context including, in the clinical reasoning process, the patient's expectations and concerns and the repercussions of the problem on their lives.
 - > To relate the investigation into symptoms with the climate of the interview, communication techniques (particularly narrative support) and a patient-centred approach.
 - > To consider clinical examination as a more effective tool than laboratory tests in the diagnostic process.
 - > To recognise the limits of their competence and responsibility, identifying clinical situations which need to be discussed at and/or referred to secondary care.
-

[cont.]

(cont.)

TRAINING ACTIVITIES GROUPED BY PRIORITY

Knowledge, attitudes and skills

PRIORITY II

- > To be aware of the dangers of forming a hypothesis too soon, particularly premature control of the interview and the phenomenon known as «anchoring», as well as a failure to clarify unclear information and to assess the reliability of the information provided by the patient.
 - > To know about the sources of variability in clinical observation and to use different methods to reduce it, particularly the standardisation of observation procedures and the calibration and validation of instruments.
 - > To be aware of the different predictive values of investigations and symptoms depending on prevalence.
 - > To consider the effectiveness and efficiency of the diagnostic process.
 - > To manage uncertainty when making decisions, using different probability values to confirm or reject a hypothesis.
 - > To develop clinical practice guidelines.
-

3. Knowing how to use diagnostic tests and their results in clinical practice.

PRIORITY I

- > To know the characteristics of diagnostic tests: sensitivity and specificity.
 - > To identify and apply the concepts of predictive value and probability reasoning.
 - > To know the criteria for selecting the most appropriate diagnostic tests, both in diagnosis at the surgery and in screening tests on the population.
 - > To recognise how the characteristics of morbidity in primary care affect sensitivity and specificity.
 - > To apply test results to symptoms and signs: the probability of the disease given the symptoms.
-

PRIORITY II

- > To know about and use decision analysis techniques for solving specific clinical problems, using decision trees and applying sensitivity analysis, concepts of usefulness, test threshold, etc.
 - > To be aware of the possible secondary effects of adding another test: redundancy, cascade effect, etc.
 - > To know the theoretical foundations of Receiver Operating Characteristic Curves (ROC).
 - > To analyse the results of the tests used in clinical practice guidelines as well as the pre-test and post-test probabilities.
-

4. Making a disease prognosis

PRIORITY I

- > To analyse how the special characteristics of decision-making in family medicine may influence the prognosis, particularly ill-defined disease and/or disease in its early stages, lack of organisation in the presentation of the illness, lack of awareness about the importance of the problem.
 - > Making a prognosis, distinguishing between the natural history and the clinical course of the disease.
-

PRIORITY II

- > To know about the characteristics of the prognostic studies, assessing their suitability for the problems presented in primary care.
 - > To use longitudinality and continuity of care as an added value to making the prognosis.
-

(cont.)

(cont.)

TRAINING ACTIVITIES GROUPED BY PRIORITY

Knowledge, attitudes and skills

5. Deciding on an appropriate management plan for the presenting problem and the patient's characteristics.

PRIORITY I

- > To consider the different options for the management plan: cause of the problem, new tests, waiting time for therapy, etc.
 - > To identify the final objective of treatment: cure, preventing a recurrence, limiting structural or functional deterioration, preventing subsequent complications, remedying the current complaint, providing security, letting the patient die with dignity.
 - > To consider, when selecting the treatment and its objectives, the disease, the syndrome and the patient's social, psychological and economic situation.
 - > To explain clearly and to agree with the patients and their families the diagnostic and interventional measures to be adopted.
 - > To be aware of the importance of preventing adverse reactions to medicines (ARM) as well as monitoring them (pharmacovigilance).
-

PRIORITY II

- > To know the principles underpinning the assessment of the effectiveness of a therapeutic procedure.
 - > To interpret the results of the assessment of the effectiveness of a therapeutic procedure, distinguishing between the meaning of the statistics and the clinical importance of the published results.
 - > To be aware of and to use the concepts of relative-risk reduction, the number needed to treat (NNT).
 - > To assess the applicability in everyday practice of the results published in clinical trials and meta-analyses.
 - > To analyse the feasibility and efficiency of the interventions proposed in clinical practice guidelines.
-

6. Achieving adequate adherence to the agreed intervention plan.

PRIORITY I

- > To be aware of the factors associated with completing treatment: originating from the doctor, the patient, the disease, therapeutic indication, healthcare environment and structure.
 - > To consider adherence to treatment as the doctor's primary objective and basic task.
 - > To use different strategies to improve adherence to treatment.
-

PRIORITY II

- > To know about and use the different methods for assessing treatment completion.
-

* Since all the above listed training specifications are primary levels of responsibility, the relevant column has been removed.

TRAINING METHODOLOGY

The crucial part of the training method is the *work undertaken at the doctor's surgery* with the tutors, particularly those in family medicine (from both urban and rural environments) and accident and emergency departments. This work includes commenting on, studying and presenting cases, without forgetting individual study and case-presentation sessions. The recommended methods are:

A) Self-directed learning

Literature review of variations in medical practice at the health centre and/or accident and emergency department, for any common reason for consultation.

B) Learning in context

Working with the tutor at the surgery.

C) Courses

Introduction to clinical reasoning that can be included in a family practice seminar to be held during the initial period of the internship at the health centre (R1).

D) Group work

- Group work on the way doctors make decisions.
- Role-play about clinical reasoning in all its phases.
- Individual and group work analysing sequentially, and with real examples, the different stages of the diagnostic, prognostic and therapeutic process.
- Work with *video recordings* of consultations linking the diagnostic process with the consultation style and narrative support techniques.
- Undertaking and presenting *clinical sessions* which take an integrated approach to the problem, studying it from a patient-centred care focus and presenting the different stages of the diagnostic and therapeutic process, in accordance with the Riegelman diagram.
- Application of the proposed activities in different clinical practice guidelines to hypothetical cases, valuing their feasibility and proposing relevant adaptations.

E) Workshops

Practical workshop on clinical reasoning and decision-making (R4).

Theoretical and practical training could be planned on three levels: *introduction* in year one, which will continue during years two and three with *evidence based medicine*, *clinical epidemiology* and *diagnostic tests*, culminating during year four with a practical workshop on *clinical reasoning and decision-making*.

Theoretical and practical training must be closely linked to clinical consultation training and clinical epidemiology. It is considered very important to approach these sections jointly, or at least in a coordinated way, using the same examples and cases, role-play and video recordings in both activities.

RECOMMENDED PLACE OF LEARNING

Theoretical learning and training in clinical reasoning must be done in classrooms suited to small groups, which have the right materials and equipment: flip chart, blackboard, back projector, video projector, portable video camera, video-cassette player and television set.

The supervision of clinical reasoning style and techniques must be carried out at the family medicine registrar's workplace.

RECOMMENDED LEARNING TIME

It is recommended that the learning of clinical reasoning techniques should begin at the start of the internship and continue throughout training.

Special priority is recommended during the training periods at the health centre.

Theoretical and practical training will be tailored to each training unit. However, it is advisable to spend at least 30 hours on this aspect over the four-year training period.

RECOMMENDED ASSESSMENT

See the epigraph at the end of section 8.

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8.3. Healthcare Management

- Clinical management
- Teamwork
- Management and organisation of activity
- Information systems
- Quality management
- Civil and medico-legal responsibility

The four functions of family doctors are the provision of health care, teaching, research and managing health care. Good clinical and non-clinical (organisational) management will determine whether the competencies of the family doctor have the desired impact on the objectives of the health system: the effectiveness, efficiency, equity and viability of the system. Managing health care determines a basic element of microeconomic efficiency, which is the efficiency of each particular level, or in other words, the ability to solve problems at reasonable cost, with the scientific and technical expertise corresponding to the level.

Family doctors manage a large proportion of the resources of the Spanish National Health System: they are time managers, information managers and quality managers within a framework of civil and medico-legal responsibility, but above all they are clinical managers who must make efficient decisions based on the best available evidence, on their own clinical experience and bearing in mind the patient's expectations.

This section divides into six subsections the key elements of health care management of interest to the family doctor: clinical management, teamwork, management and organisation of activity, information systems, managing quality and civil and medical-legal responsibility. The relevant objectives and activities are defined in each section.

NOTE:

The levels of secondary responsibility included in this thematic area refer to the need for specialised technical assistance (Quality Groups, Health care Technician, Quality Coordinator, etc.).

8.3.1. Clinical management

Clinical management. Evidence based medicine. Patient-centred problem solving. Assessing clinical practice. Adequate use of complementary investigations. Rational use of medicines. Temporary sickness absence certification.

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Apply clinical management theory and practice.
2. Apply evidence based medicine as a tool for clinical management.
3. Apply patient-centred clinical management.
4. Assess the appropriate level for solving the problem and act accordingly.
5. Evaluate clinical practice and know how to apply the different evaluation tools.
6. Assess the usefulness of complementary investigations and know how to apply them to clinical practice.

7. Prescribe appropriately.
8. Handle sickness absence certification within the framework of the surgery.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
Knowledge, attitudes and skills	
PRIORITY I	
> Knowledge of the conceptual bases of clinical management: variation in clinical practice and strategies to manage it.	PRIMARY
> Knowledge of EBM as a clinical management tool: clinical practice guidelines.	PRIMARY
> Knowledge of the concept of the resolution capacity as a way of measuring the results of PHC activity and the possibilities of measuring it and taking the appropriate action.	PRIMARY
> Knowledge of clinical method and patient-centred clinical management.	PRIMARY
> Theoretical knowledge and skills for the adequate use of diagnostic trials.	PRIMARY
> Knowledge of the theory of pharmaceutical management and skills for rational prescribing.	PRIMARY/SECONDARY
> Knowledge and skills for sickness certification in the surgery.	PRIMARY
PRIORITY II	
> Knowledge of EBM as a clinical management tool: decision-making, assessment of practice.	PRIMARY/SECONDARY
> Skills for the development of clinical practice guidelines.	SECONDARY
> Knowledge and skills to assess diagnostic trials.	SECONDARY
> Awareness of the usefulness of cost-effectiveness analysis.	SECONDARY
> Theoretical knowledge and skills for undertaking studies on medication use.	SECONDARY
PRIORITY III	
> Skills to undertake cost-effectiveness analyses..	SECONDARY
> Clinical management skills.	PRIMARY
> Patient-centred EBM skills.	PRIMARY

8.3.2. Teamwork

Teamwork. The team leader. Meeting dynamics. Conflict management: negotiation.

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Work in a team in different spheres of work.
2. Lead and bring fresh impetus to team activities.
3. Chair meetings adequately.
4. Use negotiation as a conflict management tool.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
Knowledge, attitudes and skills	
PRIORITY I > Knowledge of the theory of teamwork. > Knowledge of the theory negotiation as a conflict management tool.	PRIMARY PRIMARY/SECONDARY
PRIORITY II > Knowledge of leadership styles and the influence of the leader as a coordinating element giving fresh impetus within the team. > Knowledge of the theory of chairing and giving fresh impetus to meetings. > Use of negotiation techniques.	PRIMARY/SECONDARY PRIMARY PRIMARY/SECONDARY
PRIORITY III > Practical management of meetings	PRIMARY/SECONDARY

8.3.3. Management of work activity

The management and organisation of the health care and non-healthcare activity within the primary care team (PCT). Frequent attenders and pressure on health care. Managing the surgery: rotas and diary.

OBJECTIVES

On completion of their training, family medicine registrars will be able to/demonstrate:

1. Knowledge of the fundamentals of organisation of PCTs.
2. Knowledge of and ability to assess the different organisational models for interventions in the surgery, home visits, the relationship between medical and nursing staff, in both rural and urban environments.
3. Knowledge and application of surgery management skills.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
Knowledge, attitudes and skills	
PRIORITY I > Knowledge of the organisation of health care in a PCT. > Knowledge of models of intervention at the surgery and in the home. > Knowledge of the models of the relationship between medical and nursing staff within the PCT. > Use of surgery management skills.	PRIMARY PRIMARY PRIMARY PRIMARY
PRIORITY II > Knowledge of the factors that influence the use of healthcare services. > Management of frequent users of healthcare services. > Knowledge of the organisation of the training, research and teaching aspects of the PCTs.	PRIMARY/SECONDARY PRIMARY PRIMARY
PRIORITY III > Knowledge of the organisation of the PCT's patient information service.	PRIMARY/SECONDARY

8.3.4. Information systems

Information systems: population data gathering, medical records, morbidity registers, coding, mortality register, other registration systems, computer systems at the surgery, systems and programmes.

OBJECTIVES

On completion of their training, family medicine registrars will be able to/demonstrate:

1. Knowledge of the general characteristics of the Healthcare Information System.
2. Manage the different registration systems used in primary care and know about their practical use.
3. Manage the most frequently used indicators in primary care.
4. Interpret the meaning of different indicators from the relevant data.
5. Define the most appropriate information system for different environments.
6. Knowledge and management of computer applications to computerise primary care.
7. Knowledge of the theoretical bases and methodology for the complete computerisation of a PCT.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
Knowledge, attitudes and skills	
PRIORITY I	
> Knowledge of the general characteristics of a Healthcare Information System (HIS), its basic principles and limitations.	PRIMARY
> Knowledge and management of a medical record in a variety of media.	PRIMARY
> Knowledge and management of other frequently used registration systems in primary care.	PRIMARY
> Ability to assess the practical use of different registration systems according to the value of the information and the cost involved.	PRIMARY/SECONDARY
> Knowledge of the most frequently used indicators in primary care.	PRIMARY/SECONDARY
> Ability to interpret the most frequently used indicators in primary care.	PRIMARY/SECONDARY
PRIORITY II	
> Ability to identify which HIS which is suitable and feasible for a specific environment.	SECONDARY
> Knowledge of the different computer applications for the computerisation of primary care.	SECONDARY
PRIORITY III	
> Ability to design plans and programmes (for education, health care and management) with their information and assessment systems.	PRIMARY/SECONDARY
> Knowledge of the theoretical bases and practical methodology for the computerisation of a PCT.	PRIMARY/SECONDARY

8.3.5. Quality management

Continuous quality improvement. The quality cycle. Improvement tools. Implementation of quality improvement processes within the PCT. The user perspective.

OBJECTIVES

On completion of their training, family medicine registrars will be able to/demonstrate:

1. Knowledge of the concept of quality and continuous quality improvement and the different components that it comprises.
2. Knowledge and application of the steps in the general quality cycle: detecting situations that can be improved, analysis of causes, analysis of solutions, implementation of improvements and evaluation of outcomes.
3. Knowledge and ability to use the different tools relevant to each phase of the cycle.
4. Knowledge of the aspects of healthcare that are valued by the user as opposed to those of scientific or technical quality.
5. Understanding of the use of situations that need improvement and of errors as tools for improving health care (the culture of evaluation for improvement).

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
Knowledge, attitudes and skills	
PRIORITY I	
> Knowledge of the concept of quality and the different components that it comprises (efficiency, effectiveness, equity, viability: customer/user satisfaction, scientifico-technical quality and motivation of professionals).	PRIMARY
> Knowledge of the quality cycle and its different steps.	PRIMARY
> Handling the simple quantitative and qualitative instruments for detecting situations that can be improved.	PRIMARY
> Knowledge and application of the quality standards established by professional groups, consensus groups and the institution itself, for the most common clinical procedures.	PRIMARY
> Knowledge of the aspects of health care that are valued by the user: ability to provide an answer, reliability, tangible elements, empathy, professionalism, continuity.	PRIMARY
> Knowledge of the aspects of health care that are valued by the professional: prevention of burn-out.	PRIMARY
> Positive attitude towards the assessment and awareness of error as an improvement method.	PRIMARY
PRIORITY II	
> To use of instruments for analysing causes and solutions.	PRIMARY
> To use of instruments and methodology for evaluating the results of quality improvement.	PRIMARY/SECONDARY
> Knowledge of how to implement an improvement plan within a PCT: the quality group, improvement teams, initiating activities.	PRIMARY/SECONDARY

(cont.)

(cont.)

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
Knowledge, attitudes and skills	
PRIORITY III	
<ul style="list-style-type: none"> > Use of complex tools for the detection of situations needing improvement: knowledge and application of the main group techniques (brainstorming, nominal group, focus groups) and statistics (Pareto diagram, cause-effect diagram) for carrying out improvement plans. > Drawing up quality criteria and standards for the structure, process and outcome of clinical practice based on scientific evidence. > Identification and documentation of healthcare processes, drawing up evidence-based clinical practice guidelines. > Selection of indicators and establishment of a follow-up and monitoring system for the processes and outcomes of the unit. > Knowledge and application of the main tools for checking and improving processes (standardisation, process control charts). > Drawing up and establishing an internal audit to verify the fulfilment of quality standards and criteria. > Drawing up and implementing quality improvement plans. > Knowledge of the different authorisation, accreditation and certification systems for healthcare systems. > Knowing and participation in overall and systematic self-evaluation methods for the organisation based on the European Model of Excellence. 	<p>PRIMARY</p> <p>PRIMARY/SECONDARY (most tools)</p> <p>TERTIARY (the occasional highly (complex tool)</p>

8.3.6. Professional responsibility

OBJECTIVES

On completion of their training, family medicine registrars will be able to/demonstrate:

1. Knowledge of the legislation regarding their post and profession.
2. Knowledge of the structure (organisational chart) and functions of the different levels of the healthcare service they work for.
3. Knowledge of the medico-legal regulations regarding Temporary Sickness absence.
4. Knowledge of the legislation and procedures regarding the prescription of medicines and accessories.
5. Knowledge of and competence in managing medico-legal situations and in completing medico-legal reports.
6. Knowledge of their obligations regarding requests for certificates by their patients.
7. Knowledge of and ability to keep themselves up to date about the most important professional statements and codes of ethics.
8. Knowledge of and ability to apply the regulations on Notifiable Diseases (ND).

IMPORTANT NOTE:

All the interventions pertaining to professional responsibility involve a primary level of responsibility.

TRAINING ACTIVITIES GROUPED BY PRIORITY

Knowledge, attitudes and skills

PRIORITY I

- > To know the relevant legislation about their post, which is applicable worldwide, nationally or within their own autonomous region.
 - > To know the relevant legislation about abortion and euthanasia in this country.
 - > To know the structure (organisational chart) and functions of the different levels of the health service they work for.
 - > To know the extent of their obligations and rights, as well as those of their colleagues in their team or secondary care.
 - > To know the medico-legal regulations regarding **Temporary Sickness Absence certification** and/or industrial accidents and diseases. Keep updated in all the necessary documentation in each of these.
 - > To know about the bodies and organisations of relevance to temporary sickness absence (MATEPSS, U VMI, EVI).
 - > To be aware of the economic repercussions of their decisions about sickness certification.
 - > To know the legislation and procedures regarding the **prescription** of medicines (different types of prescriptions: from the health service, insurance companies, private health care, prescriptions for narcotics, formulas, accessories (elasticated stockings), oxygen therapy, gene therapy, consumables, [catheters] and the use of vehicles [ambulances]).
 - > To know the amount of packs they can prescribe per prescription, products that require a special prescription (nappies, reactive strips, enteral feeds, etc.).
 - > To know about and show themselves to be competent in managing situations and in completing all legal reports: birth certification, death certification, when there is suspicion that death was unnatural, injury reports, case reports, reports when there is suspicion that women or minors have been mistreated, reports when there is suspicion of rape or sexual abuse, transport and receipt of dead bodies, reports requested by judges.
 - > To know and apply the regulations about Notifiable Diseases (ND).
 - > To know their obligations with regard to **requests for certificates** by patients (ordinary medical certificate – validity of the possible forms–, to certify that they have been seen by the doctor, for schools, reports for health spas, for trips organised by Spanish Social Services, for admission to a residence, for a driving licence, weapons licence, hunting licence, for affiliated and non-affiliated sports people).
 - > To know their obligations when asked to issue inappropriate certificates: certificates of virginity, requests to forge some aspects of the certificate (date, diagnosis), reports requested by company owners.
-

PRIORITY II

- > To demonstrate competence in disease outbreak management.
 - > To keep up to date with changes in sickness absence certification legislation.
 - > To keep themselves informed about the best ways to react to aggressive behaviour in their patients.
-

PRIORITY III

- > To know the Universal Declaration of Human Rights and the Code of Ethics of the General Council of Medical Colleges.
-

* All cases listed in these training specifications require primary levels of responsibility, the relevant column has therefore been removed.

TRAINING METHODOLOGY

Registrars will work on the different objectives of this area throughout their internship, but particularly during the first and last year. The basic training methodology involves **working at the doctor's surgery** with the tutors, particularly those working in the field of family medicine and accident and emergency departments, commenting on, studying and presenting cases and situations without forgetting individual study.

It is recommended that **theoretical and practical training** is planned on three levels: *introduction* in year one, which will continue during years two and three with *clinical management, information systems, teamwork and professional responsibility*, culminating during year four with a practical workshop on *quality management*.

Theoretical and practical training must be closely linked to training in clinical reasoning, clinical epidemiology, evidence based medicine and management. It is considered very important to develop these skills together or at least in a coordinated way.

The recommended methods are:

A) Self-directed learning

- Literature review of variations in medical practice at the health centre and/or accident and emergency department, for any common reason for consultation.
- Individual study.

B) Learning in context

- Working with the tutor at the surgery.

C) Courses

- Introduction to clinical management, teamwork, intervention management and organisation, information systems, quality management and professional responsibility. These can be included in a family practice seminar held during the initial period of the internship at the health centre (R1).
- Seminar on clinical management, teamwork and intervention management and organisation (R2-R3) and evidence based management (R2).
- Self-assessment course, applying the European Excellence Model.

D) Group work

- Group work on the way doctors make decisions.
- Assessment of real cases during the sessions held to review medical records (use of diagnostic tests, prescription, sickness certification...)
- Real experiences of undertaking audits of clinical practice and prescribing.
- Theoretical sessions and real experiences of teamwork, intervention analysis, organisation and management, drawing up health centre rotas, for management of busy periods and frequent users of the health service. Real experience of managing a frequent user of the health service.
- Group work analysing sequentially and with real examples, the different stages in the quality assessment cycle in the clinical and non-clinical sphere: identification of 10 processes relevant to the unit or team.
- Participation in an improvement team and in drawing up an improvement plan, participating in evaluation groups or audits, audits of medical records, fieldwork on improvement projects, participation in focus groups and the health centre's quality plan.
- Participation in drawing up a clinical practice guide.
- Attending meetings of the Management Board or Board of Directors.
- Participation in team meetings.

E) Workshops

- Practical workshop on computerised consultations (R3).
- Practical workshop on clinical management (R2-R3).
- Practical workshop on quality management (R4).

RECOMMENDED PLACE OF LEARNING

Theoretical learning and training in healthcare management skills must be done in classrooms suited to small groups, which have the right materials and equipment: flip chart, blackboard, back projector, video projector, portable video camera, video-cassette player and television set.

The supervision of healthcare management style and techniques must be carried out at the family medicine registrar's place of work. We recommend:

- Health Centre for the six areas.
- The attendance of meetings of the organisation's Quality Commission.
- Visits to health centres and leading organisations in the sector.
- Rotations with the quality coordinator at the centre or healthcare area.

RECOMMENDED LEARNING TIME

It is recommended that the learning of healthcare management should begin at the start of the internship and continue throughout training.

Special priority should be given to training periods at the health centre.

Theory-in-practice training will be tailored to each training unit. However, it is advisable to spend at least 30 hours on this aspect over the four-year training period.

RECOMMENDED ASSESSMENT

See the epigraph at the end of section 8.

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8.4. Bioethics

In order to provide quality family medicine, it is not sufficient for family doctors to «do their job»; they must «do it well», from a scientific and technical point of view (guarantee of quality, evidence based medicine) as well as an ethical one. This will favour the prudent practice of family medicine.

Furthermore, the appearance of ethical conflicts in the everyday practice of family medicine is becoming a more and more frequent occurrence: conflicts not only related to healthcare practice, but to other aspects of day-to-day professional life: teamwork, relationships with other professionals, relationships with the pharmaceutical industry, preventive interventions, use of resources, etc. Family doctors must be able to deal with such conflicts and following a process of deliberation, be it individual or following consultation with the available resources intended for this purpose (colleagues, healthcare ethics commissions, committees of the Medical Associations, etc.) must assess the possible ways of resolving them and try to select the best one for each case.

OBJECTIVES

On completion of their training family medicine registrars will demonstrate their ability to:

1. Integrate ethical deliberation into their day-to-day work as family doctors, in order to ensure that their everyday clinical practice is guided by ethical principles and prudence.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
Knowledge, attitudes and skills	
PRIORITY I	
> To detect situations of ethical conflict.	PRIMARY
> To know the basic principles of bioethics.	PRIMARY
> To contrast the case in question with the basic principles.	PRIMARY
> To assess possible exceptions to the basic principles.	PRIMARY
> To assess the circumstances and consequences of each case to be considered in order to establish possible courses of action.	PRIMARY
> To know and apply the following concepts: Confidentiality; Professional secrecy; Informed consent; Patient's decision-making capability; Duty not to abandon the patient; Rational use of resources; Teamwork.	PRIMARY
> To manage the following processes in an ethical way: Informed consent as a decision-making process at the clinic; Managing temporary sickness absence certification; Interprofessional relationships across all levels; Relationships with the pharmaceutical industry; Preventive interventions.	PRIMARY
> To record ethical issues in the patient's medical record.	PRIMARY
PRIORITY II	
> To know the legal and ethical requirements that have a bearing on decisions at the clinic.	PRIMARY
> To analyse clinical problems rationally and critically.	PRIMARY
> To understand the ethics involved in assessing the ability of a patient who is legally of age and a patient under the age of 18; To need to adapt the therapeutic input to each individual patient and situation; Interprofessional relationships across levels; The difficult patient; Giving bad news; Post-coital contraception; Abortion.	PRIMARY/SECONDARY
> Presenting a difficult case to the entire primary care team in order to consider it jointly, or to the Ethics Committee of the Department or hospital.	SECONDARY
PRIORITY III	
> To undertake research related to the ethical conflicts of clinical practice in PC.	SECONDARY
> To draw up informed consent forms for PC.	PRIMARY

RECOMMENDED TRAINING METHODOLOGY

The crucial aspect of the teaching methodology is the *work undertaken at the doctor's surgery* with the tutors. The recommended methods are:

A) Self-directed learning

Guided/self-directed learning.

B) Learning in context

Follow-up of patients under the guidance of a tutor.

C) Courses

Introduction to bioethics. This can be included in a family practice seminar to be held during the initial period of the internship at the health centre (R1).

D) Group work

- Journal clubs.
- Discussion of real and simulated cases (seminars/workshops).
- Role-play.
- Using simulations.
- Interdisciplinary consultations with teachers and legal advisory bodies, ethical healthcare commissions from the department or hospital in question and commissions of ethics from the Doctors' Association.
- Taking part in ethical healthcare commissions from the departments and/or hospitals.

E) Workshops

Advanced practical workshop on bioethics (R4).

RECOMMENDED PLACE OF LEARNING

Theoretical learning and skills training must be done in classrooms suited to small groups, which have the right materials and equipment: flip chart, blackboard, back projector, video projector, portable video camera, video-cassette player and television set.

Practical learning will take place at:

- An FCM training unit.
- A health centre and hospital.
- Health care ethical committees.

RECOMMENDED LEARNING TIME

It is recommended that the learning of bioethics should begin at the start of the internship and continue throughout training. Special priority is recommended during the training periods at the health centre.

Theoretical and practical training will be tailored to each training unit. However, it is advisable to spend at least 10 hours on this subject during year one, with a basic training course, which could be extended to a further 10 hours in the final year to enable the family medicine registrars to take an advanced course.

RECOMMENDED ASSESSMENT

See the epigraph at the end of section 8.

RECOMMENDED BIBLIOGRAPHY

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RECOMMENDED ASSESSMENT OF THE AREA OF ESSENTIAL COMPETENCIES

It is recommended that the learning of essential competencies be assessed by objective and standardised methods, either for educational or summary purposes.

Assessment in this area is set out on three levels: *the training process and the educational activities undertaken, the training structure and attainment of the educational objectives set (training assessment)*.

> We recommend carrying out:

- An assessment of the programme: objectives, contents, activities, organisation, documentation, etc.
- Assessment of trainers: knowledge of the subject, training qualities, etc.
- Assessment of the family medicine registrars: degree of attainment of the learning objectives.
 - Precise definition of objectives.
 - Construction of objective measuring methods.
 - Measuring in a simulated or real clinical context (by direct observation of the registrar, OSCE [Objective Structured Clinical Evaluation] viewing video recordings, information provided by patients, etc.).
 - Measuring the results of the proposed practical work and activities.
 - Feedback of results (training assessment).
 - The use of the GATHARES questionnaire is particularly recommended to assess the area of communication, as it has been approved for use with Spanish family medicine registrars.





Educational contents in the training area for competencies in individual health care

As mentioned in the section devoted to professional values, family doctors must treat *people*: individuals with specific problems and beliefs throughout their lives. It must be borne in mind that these people are immersed in a *family and social context* and it is important for this philosophy to pervade the entire learning process in order to ensure that treatment is not just provided for diseases and health problems.

This teaching area is subdivided into two large groups, the first concerning the approach to health-care needs and health problems (9.1) set out in subsections according to organ or system, and a second group concerning the approach to at-risk population groups, (9.2) subdivided as appropriate: children, adolescents, women, etc.

Nevertheless two situations are worthy of particular mention as they are common to all groups:

- **The patient with multiple pathologies:** this type of patient is a very frequent service user whose multiple pathologies require an integrated approach as well as specialist knowledge to deal with potential complications and interactions. Furthermore, it is essential to consider the patient's family and psychosocial context (creating suitable social support networks), «look after the main carer» and provide smooth communication during the entire care process.
- **The patients with a rare disease:** while it is true that the family doctor's job revolves around the management of the most common pathologies, it is no less true that they should have sound knowledge of rare since they are the point of referral for these patients. Ideally, the family doctor should be able to manage the main complications, provide therapeutic management and know the criteria for referral to secondary or tertiary care. In these cases, the approach should once again be biopsychosocial, they must be aware of self-help groups, provide genetic advice and know the techniques for approaching any emergent ethical dilemmas.

IMPORTANT NOTE

The different sections and subsections in this area have common training objectives as they form part of the basic and general competencies of each clinical area. These objectives must be taken into account in each clinical area.

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Take a detailed case history to understand the patient's clinical picture.
2. Carry out a thorough and competent physical examination according to the clinical picture.
3. Assess and choose the best diagnostic strategy.
4. Interpret basic laboratory investigations.
5. Interpret basic radiological and electrocardiographic studies, if necessary.
6. Identify appropriate hygienic and dietary measures.
7. Identify appropriate pharmacological measures.
8. Assess side effects and pharmacological interactions.
9. Identify the need for follow-up checks.
10. Identify the need for referral to second/tertiary level specialists.
11. Assess the need and appropriateness of preventive interventions designed to promote health in line with expert national and international recommendations. Assess the need for palliative care, if necessary.
12. Maintain a biopsychosocial approach and consider and address the family and social context, including health care in the home and the community, the use of community resources, health

care provided by the multidisciplinary team, with the family doctor being the coordinator of long-term care.

In addition to the learning objectives, family medicine registrars should acquire an attitude during their training that shows in all areas:

«A favourable attitude towards»:

- Teamwork.
- Coordination with secondary care.
- Coordination with social and healthcare services.
- Auditing their own work.
- Maintaining competence: updating knowledge and skills.
- Keeping an ordered information system that is easy for their colleagues to use.
- Clinical research.

9.1. Addressing healthcare needs and problems

9.1.1. Risk factors and cardiovascular problems

9.1.1.1. Cardiovascular problems

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY I:	
> To know and be able to carry out preventive interventions among the general population.	PRIMARY
> To know and be able to carry out preventive interventions among patients with: <ul style="list-style-type: none"> • Cardiovascular risk factors • Ischemic cardiopathy • Heart failure • Patients at risk of bacterial endocarditis. 	PRIMARY
> Diagnostic management of the following problems: <ul style="list-style-type: none"> • Dyspnoea • Thoracic pain • Cyanosis • Palpitations • Cardiac arrest • Heart murmur • Oedema 	PRIMARY/SECONDARY
> Diagnostic and therapeutic management and referral criteria for: <ul style="list-style-type: none"> • Ischaemic cardiopathy • Congestive heart failure (CHF) • Atrial fibrillation • Chronic venous insufficiency • Peripheral arterial disease 	SECONDARY

(cont.)

9.1.1.2. Arterial hypertension (AH)

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know and be able to apply preventive interventions for hypertension in all patients, taking into account: <ul style="list-style-type: none"> • Periodicity for measuring blood pressure recommended by groups of experts from Spain and abroad. • The main concepts for classifying hypertension as a disease entity, and hypertensive patients according to their overall cardiovascular risk. > To know how to: <ul style="list-style-type: none"> • Measure blood pressure correctly. • To be able to calculate overall cardiovascular risk. > Diagnosis and management of the causes of : <ul style="list-style-type: none"> • AH according to cardiovascular risk. • Secondary AH, undertaking an initial investigations. • White-coat AH applying the necessary measures to rule it out. • The main organ damage resulting from AH (arterial, kidney, cardiac and brain). • AH in special situations (pregnancy, concomitant pathology: kidney failure...). > To know the indications for and to be able to interpret: <ul style="list-style-type: none"> • Laboratory examinations. • Radiological tests. • ABP (Ambulatory blood-pressure monitoring). • SMBP (Self-measurement of blood pressure). > To know the indications for: <ul style="list-style-type: none"> • Abdominal ultrasound. • Echocardiography. > Therapeutic management of AH: <ul style="list-style-type: none"> • To be competent to negotiate lifestyle recommendations with the patient and the individual treatment best suited to each specific patient, with special attention to monitoring these recommendations (<i>adherence to treatment</i>). • To know the intervention mechanisms, indications, dosage, side effects, contraindications, effectiveness and costs for antihypertensive pharmacological groups. • To foster self-monitoring of BP by the patients themselves as an objective to be achieved and to act accordingly. • To know the criteria for the proper control of AH and to make the appropriate therapeutic decisions in order to achieve this objective. > To establish periodic checks on patients with AH. > Managing patients in emergency situations: <ul style="list-style-type: none"> • Hypertensive crisis. • Acute hypertensive episode • Hypertensive emergency. > To address the family and psychosocial context of the hypertensive patient, particularly in the case of incorrect monitoring (therapeutic failure, bad adherence to non-pharmacological and/or pharmacological treatment). 	<p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY PRIMARY/SECONDARY PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY PRIMARY/TERTIARY TERTIARY PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To know how to perform: <ul style="list-style-type: none"> • A thorough eye examination to assess hypertensive retinopathy. 	<p>PRIMARY</p>

9.1.1.3. Hyperlipaemias

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know and apply preventive interventions for hyperlipaemia in all patients, taking into account: <ul style="list-style-type: none"> • Periodicity for measuring cholesterol levels recommended by groups of experts from Spain and abroad. • The main groups for classifying hyperlipaemia as a disease entity, and hyperlipaemic patients according to their overall cardiovascular risk, and whether it is a case of primary or secondary prevention. > To know how to perform a: <ul style="list-style-type: none"> • Diagnosis of hyperlipaemia. • Complete study of the patient with hyperlipaemia. • Calculation of the Friedewald formula. • Calculation of the atherogenic index. • Calculation of cardiovascular risk. > Diagnosis and referral criteria for: <ul style="list-style-type: none"> • Hypercholesterolemia according to cardiovascular risk. • Primary and secondary hyperlipaemias. > To know the indications and objectives of dietary and pharmacological treatment according to cardiovascular risk factors and other parameters. > Therapeutic management of hyperlipaemias: <ul style="list-style-type: none"> • To be competent to negotiate lifestyle recommendations with the patient and the individual treatment best suited to each specific patient, with special attention to monitoring these recommendations (<i>adherence to treatment</i>). • To know the intervention mechanisms, indications, dosage, side effects, contraindications, effectiveness and costs for hyperlipaemic pharmacological groups. • To know the criteria for the proper control of hyperlipaemias, according to the type of patient and clinical situation, and to make the appropriate therapeutic decisions in order to achieve this objective. > To establish periodic checks on patients with hyperlipaemia. > To address the family and psychosocial context of the dyslipaemic patient, particularly in the case of incorrect monitoring (therapeutic failure, bad adherence to non-pharmacological and/or pharmacological treatment) high cardiovascular risk. 	<p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To know the classification and characteristics of primary hyperlipaemias. 	<p>PRIMARY</p>

9.1.2. Respiratory problems

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know how to approach tobacco addiction. > To know about and be able to perform preventive interventions on the general population and the at-risk population. > Diagnostic management of the following problems: <ul style="list-style-type: none"> • Chronic cough. • Dyspnoea. • Thoracic pain. • Cyanosis. • Haemoptysis. > Diagnosis, therapeutic management and referral criteria for: <ul style="list-style-type: none"> • Bronchial asthma. • Chronic Obstructive Pulmonary Disease (COPD). • Community-acquired pneumonia (CAP). • Respiratory failure. • Pneumothorax. • Pleural effusion. > Diagnostic management and follow-up checks of: <ul style="list-style-type: none"> • Tuberculosis (TB). • Pleuropulmonary cancer. > To know the indications for and to be able to interpret simple radiology of the thorax. > To know how to perform and interpret: <ul style="list-style-type: none"> • Functional respiratory tests. • Pulsioxymetry. • Tuberculin test. > To know the indications for the following diagnostic interventions: <ul style="list-style-type: none"> • Respiratory allergy tests. • Bronchoscopy. • CAT scan. > To know how to perform: <ul style="list-style-type: none"> • TB contact tracing. • Drug inhalation techniques. • Respiratory physiotherapy. > To manage anti-tubercular chemoprophylaxis. > To identify work-related pathologies. > To know about preventive interventions for risk factors in the workplace. > To know the indications for oxygenotherapy and perform follow-up checks. > To manage patients in emergency situations. <ul style="list-style-type: none"> • Acute dyspnoea. • Massive haemoptysis. • Pneumothorax. • Respiratory arrest. • Serious asthma attack. > To address the family and psychosocial context of the patient with advanced-stage respiratory diseases. 	<p>PRIMARY PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p> <p>TERTIARY PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>TERTIARY</p> <p>PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > Diagnostic management and follow-up checks of: <ul style="list-style-type: none"> • Pleural pathology. • Sleep apnoea syndrome. • Industrial respiratory diseases. 	<p>TERTIARY SECONDARY/TERTIARY SECONDARY</p>

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<ul style="list-style-type: none"> > To know the indications for: <ul style="list-style-type: none"> • Barium-contrast radiology. • Endoscopy. • CAT scan. > To manage patients in emergency situations: <ul style="list-style-type: none"> • Acute abdomen: obstruction of the biliary tract, pancreatitis, appendicitis, intestinal occlusion/perforation, strangulated hernia. • Digestive tract haemorrhage. • Outbreak of haemorrhoids/abscess in the anal region. • Liver failure. > To address the family and psychosocial context of the patient with chronic digestive diseases. 	<p>PRIMARY</p> <p>TERTIARY</p> <p>TERTIARY PRIMARY/SECONDARY TERTIARY PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To know how to: <ul style="list-style-type: none"> • Administer an enteral feed via NGT. • Perform an anoscope. > To know how to interpret the images from a hepatobiliary scan. > To know how to interpret barium-contrast radiology. > Therapeutic management and preventive interventions for: <ul style="list-style-type: none"> • Patients with gastrectomies. • Patients with stomas. 	<p>PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY PRIMARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > Diagnostic management and follow-up checks on patients with low-incidence diseases: primary biliary cirrhosis (PBC), Wilson's disease, > To know how to perform hepatobiliary scans. > To know the indications for liver transplants. 	<p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY PRIMARY</p>

9.1.4. Infectious diseases

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know the vaccination record of adults and patients at risk of opportunist infections. > To know about and be able to perform preventive interventions for: <ul style="list-style-type: none"> • Contacts of patients with meningitis. • Contacts of patients with tuberculosis. • Sexually transmitted diseases (STDs). • Patients at risk of HIV infection. • Travellers. • Needle-stick injuries. > Diagnostic management of febrile syndrome. > Diagnosis, therapeutic management and referral criteria for respiratory infections: Cold, flu, acute otitis and sinusitis, acute pharyngitis, acute tonsillitis, acute bronchitis and worsening of COPD infection, community-acquired pneumonia. > Diagnosis, therapeutic management and referral criteria for urinary infections: acute cystitis, pyelonephritis, recurrent urinary infections, prostatitis, orchiepidyditis. 	<p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p>

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
> Diagnosis, therapeutic management and referral criteria for gastrointestinal infections: acute gastroenteritis, food toxoinfections, viral hepatitis.	PRIMARY/SECONDARY
> Diagnosis, therapeutic management and referral criteria for sexually transmitted diseases: vaginitis, genital ulcers, urethritis, cervicitis, and genital warts.	PRIMARY/SECONDARY
> Diagnosis, therapeutic management and referral criteria for skin infections: viral and bacterial complaints and mycosis.	PRIMARY
> Diagnosis, therapeutic management and referral criteria for anthroozoonosis.	PRIMARY/SECONDARY
> Diagnostic management and follow-up of: <ul style="list-style-type: none"> • HIV infection. • Meningitis. • Bacterial endocarditis. • TB. • Osteoarticular infections. 	TERTIARY TERTIARY TERTIARY SECONDARY PRIMARY
> To know how to: <ul style="list-style-type: none"> • Collect secretions: otic, pharyngeal, nasal, urethral, ophthalmic. • Take a triple vaginal smear. • Appropriate collection of skin samples, sputum, urine, faeces. • Perform a rapid diagnosis test. • Carry out a Mantoux test/TB contact investigation. 	PRIMARY TERTIARY PRIMARY
> Support and reinforcement of adherence to antiretroviral treatment.	PRIMARY
> Managing patients in emergency situations: <ul style="list-style-type: none"> • Sepsis... 	TERTIARY
> To address the family and psychosocial context of the patient with infectious diseases. (HIV, TBC, meningitis...)	PRIMARY
PRIORITY II	
> To know about and be able to perform preventive interventions for: <ul style="list-style-type: none"> • Biological accidents of an occupational nature. 	SECONDARY
> Diagnosis, therapeutic management and referral criteria for: <ul style="list-style-type: none"> • Pathologies imported by travellers: fever, diarrhoea... • Pathology imported by immigrants: malaria, parasitosis, leprosy. 	PRIMARY/SECONDARY TERTIARY
> Diagnosis and referral criteria when faced with opportunistic pathologies in patients infected with HIV.	PRIMARY/TERTIARY
> Advice on the start of treatment for HIV infections.	PRIMARY
> Implementation of community activities geared to promoting health care in the field of STDs and HIV infection.	PRIMARY

9.1.5. Metabolic and endocrine problems

9.1.5.1. Diabetes mellitus

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
Knowledge, attitudes and skills	
PRIORITY I	
> Prevention strategies: in the at-risk population, opportunist.	PRIMARY
> Criteria for the diagnosis of diabetes: Risk factors, suspicious symptoms and signs, diagnostic criteria, classification of diabetes.	PRIMARY
> Initial assessment at the moment of diagnosis of diabetes: start of treatment, metabolic monitoring, screening for chronic complications.	PRIMARY
> Follow-up of diabetes:	
> Metabolic monitoring: monitoring objectives, meaning of Hba ^{1c} , fructosamine, glucaemia, glucosuria, ketonuria, lipids, weight, blood pressure.	PRIMARY
> Screening for chronic complications.	PRIMARY/SECONDARY
<ul style="list-style-type: none"> • Retinopathy: interpretation of eye examination report. • Nephropathy: albuminuria, creatinine. • Cardiovascular disease: risk factors, cardiovascular risk (CVR) calculation. • Diabetic foot: examination, peripheral pulses, Semmens-Wenstein monofilament. 	
> Prevention and treatment of acute complications.	PRIMARY
> Treatment of type-2 diabetes mellitus: Basic nutrition. Physical exercise. Minimum anti-smoking intervention. Pharmacological groups (mechanism of action, indications, secondary effects, interactions, contraindications, effectiveness, costs). Use of drugs in monotherapy and combined therapy. Insulin therapy.	PRIMARY
> Health education: Individual (motivational interview).	PRIMARY
> Management techniques: injection, self-analysis, self-monitoring, intensive treatment.	PRIMARY
> Screening strategies and diagnosis of gestational diabetes.	
<ul style="list-style-type: none"> • Shared care. • Shared care between doctor and nurse. 	PRIMARY/SECONDARY
> Indication for consultation with other specialists.	PRIMARY/SECONDARY
> Contraceptive methods for women of child-bearing age with diabetes.	PRIMARY
> Advice about timing pregnancy.	PRIMARY
> Managing patients in emergency situations:	PRIMARY/SECONDARY
<ul style="list-style-type: none"> • Acute complications. 	PRIMARY
> To address the family and psychosocial context of the diabetic patient.	
PRIORITY II	
> Prevention strategies in the at-risk population, community.	PRIMARY
> Health education for groups.	PRIMARY
> Treatment of chronic complications.	PRIMARY/SECONDARY
> Screening for chronic complications.	PRIMARY/SECONDARY
<ul style="list-style-type: none"> • Retinopathy: eye examination and/or photography with digital retinography. • Foot: Doppler, ankle-arm index, podometry. 	
> Shared care for pregnant women with diabetes.	PRIMARY/SECONDARY

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY <i>(cont.)</i>
Knowledge, attitudes and skills	
> Shared care for children with diabetes, for the children and parents: Psychological support, resolving doubts and concerns, monitoring in intercurrent illness, flu injections, compliance.	PRIMARY/SECONDARY
> Shared care for adolescents with diabetes: Psychological support, resolving doubts and concerns, monitoring in intercurrent illness, specific education about contraception and planning pregnancy, smoking, alcohol and drugs.	PRIMARY/SECONDARY
PRIORITY III	
> Advanced nutrition.	PRIMARY
> Intensive insulin treatment.	PRIMARY/SECONDARY
> Treatment of gestational diabetes through diet and/or insulin.	PRIMARY/SECONDARY
> To address the family context of families in crisis with diabetic patients.	PRIMARY/SECONDARY

9.1.5.2. Obesity

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY I	
> To know about and how to: <ul style="list-style-type: none"> • Prevent obesity. • Detect obesity. • Prevent the possible complications of obesity: DM 	PRIMARY
> To know and apply: <ul style="list-style-type: none"> • Regular weight measurements according to the periodicity recommended by experts to detect obesity. • The main classification groups for obesity as a disease entity, and for obese patients according to their cardiovascular risk. 	PRIMARY
> To understand: <ul style="list-style-type: none"> • Height and weight tables. • Skin fold measurement. • Body mass index. • Waist-to-hip ratio. 	PRIMARY
> Diagnosis and referral criteria for: <ul style="list-style-type: none"> • Android and gynecoid obesity. Assessment of cardiovascular risk factors. • Secondary obesity. • Morbid or malignant obesity. 	PRIMARY/SECONDARY
> To know the indications for and be able to interpret: <ul style="list-style-type: none"> • Laboratory tests. 	PRIMARY
> Therapy management: <ul style="list-style-type: none"> • Assessment of patients with android and gynecoid obesity. • To be competent to negotiate lifestyle recommendations with the patient and the individual treatment best suited to each specific patient, with special attention to monitoring these recommendations. 	PRIMARY PRIMARY

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<ul style="list-style-type: none"> • To establish objectives, periodicity of visits and clinical parameters to be monitored. • To have a broad knowledge of different hypocaloric diets. • To know the Indications and contraindications of the pharmacological groups, as well as their side effects and dosage. • To know the chronic complications of obesity. <p>> To address the family and psychosocial context of obese patients.</p>	<p>PRIMARY</p> <p>PRIMARY PRIMARY</p> <p>PRIMARY/SECONDARY PRIMARY</p>
<p>PRIORITY II</p> <p>> Group health education.</p>	<p>PRIMARY</p>
<p>PRIORITY III</p> <p>> To address the family context and intervention by the families of morbidly obese patients.</p>	<p>PRIMARY</p>

9.1.5.3. Thyroid problems

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <p>> To know about preventive interventions:</p> <ul style="list-style-type: none"> • Screening for congenital hypothyroidism. • Correct iodine intake from diet. <p>> Diagnosis, therapeutic management and referral criteria for:</p> <ul style="list-style-type: none"> • Simple and nodular goitre. : • Graves-Basedow disease. • Hashimoto thyroiditis. : • Other types of thyroiditis. : • Subclinical thyroid alteration. : <p>> Diagnostic management and follow-up checks on cancer of the thyroid.</p> <p>> To know how to examine the thyroid area.</p> <p>> To know the indications of the following diagnostic procedures:</p> <ul style="list-style-type: none"> • Determining antithyroglobulin and antimicrosomal : antibodies. • Thyroid scan. • Fine-needle aspiration punction (FNAP). • Thyroid gammagraph. <p>> Managing emergencies in thyroid pathology:</p> <ul style="list-style-type: none"> • Thyrotoxic crisis. • Myxoedemic coma. <p>> To address the family and psychosocial context of patients : with chronic thyroid problems or diagnosed with cancer.</p>	<p>PRIMARY</p> <p>PRIMARY/SECONDARY SECONDARY PRIMARY PRIMARY/SECONDARY PRIMARY TERTIARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>SECONDARY SECONDARY TERTIARY TERTIARY TERTIARY</p> <p>PRIMARY</p>
<p>PRIORITY II</p> <p>> To know the indications of the following diagnostic procedures:</p> <ul style="list-style-type: none"> • CAT/MRI in the study of thyroid pathology. 	<p>PRIMARY/TERTIARY</p>

9.1.5.4. Other endocrine problems

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know about and apply the pertinent preventive interventions in patients with chronic endocrinopathies: prevention of osteoporosis... > Diagnostic suspicion, causes and subsequent follow-up checks of: <ul style="list-style-type: none"> • Hyperparathyroidism. • Hypoparathyroidism. • Addison's disease. • Secondary corticosuprarenal hypofunction. • Hyperaldosteronism. • Cushing's syndrome • Phaeocromocytoma. • Hyperpituitarism. • Hypopituitarism. > To know the indications for and be able to interpret: <ul style="list-style-type: none"> • Laboratory tests. • Radiology examinations. > Diagnostic management and referral criteria for: <ul style="list-style-type: none"> • Hypercalcaemia/Hypocalcaemia. • Hyponatraemia/Hypernatraemia. • Hypokalaemia/Hyperkalaemia. > Managing patients in emergency situations: <ul style="list-style-type: none"> • Acute suprarenal failure (Addisonian crisis) > To address the family and psychosocial context of patients with endocrinopathy. 	<p>PRIMARY</p> <p>SECONDARY SECONDARY SECONDARY SECONDARY SECONDARY SECONDARY TERTIARY SECONDARY SECONDARY</p> <p>PRIMARY PRIMARY</p> <p>PRIMARY/SECONDARY TERTIARY TERTIARY TERTIARY</p> <p>PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > Diagnostic suspicion of: <ul style="list-style-type: none"> • APUD system diseases. • Carcinoid syndrome. • Multiple endocrine tumours. • Endocrinopathies. 	<p>SECONDARY SECONDARY SECONDARY SECONDARY</p>

9.1.6. Behavioural and relationship problems. Mental health problems

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know about and to apply preventive measures for mental health disorders. > To know how to: <ul style="list-style-type: none"> • Conduct a psychopathological interview. • Basic psychological tests. > Diagnostic and therapeutic management: <ul style="list-style-type: none"> • Depressive disorder. • Anxiety disorder. > Diagnostic management and follow-up checks for: <ul style="list-style-type: none"> • Behavioural disorders. • Eating disorders. • Body image disorders. • Sexual disorders. • Psychotic disorders, with emphasis on early and active detection. > To know how to use basic therapeutic strategies: <ul style="list-style-type: none"> • Support therapies. • Therapeutic containment techniques. • Psychoactive drugs. • Interdisciplinary consultation. > Dealing with urgent mental health situations: <ul style="list-style-type: none"> • Self-harm attempts. • Psychomotor agitation. • Psychotic crisis. • Symptoms of mania and hypomania. > To understand the emotions and psychological conflicts of people with problems. > To know how to address the family and psychosocial context of patients in special situations: depressive syndrome, dementias, the terminally ill, the bereaved, severe disabilities. 	<p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p> <p>TERTIARY</p> <p>PRIMARY</p> <p>PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > Preventive management of risk situations associated with the main life stages: adolescence, motherhood, menopause, aging and retirement. > Diagnostic and therapeutic management of conflictive situations in primary care with regard to mental health: somatising patients, frequent users of the health service, patients who demand treatment, aggressive patients, profiteers, etc. 	<p>PRIMARY</p> <p>PRIMARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > To know the indications for and be able to practice the most specialised therapeutic techniques: cognitive therapies, self-help groups, etc. > Family Intervention in special situations: the psychotic patient, eating disorders. 	<p>PRIMARY</p> <p>PRIMARY/SECONDARY</p>

9.1.7. Nervous system problems

TRAINING ACTIVITIES GROUPED PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know about and be able to apply preventive interventions for cardiovascular risk factors. PRIMARY > To know how to: PRIMARY <ul style="list-style-type: none"> • Take a case history and undertake a neurological examination. • Perform an eye examination. • Make a functional assessment. > Diagnostic, therapeutic management and/or referral criteria for : PRIMARY <ul style="list-style-type: none"> • Cephalic disorders and facial pain. PRIMARY/SECONDARY • Vertigo syndrome. PRIMARY • Syncope. PRIMARY • Cerebrovascular disease. TERTIARY • Dementia and cognitive deterioration. PRIMARY • Acute confusional state. SECONDARY • Neuropathies. PRIMARY • Diseases of the cranial nerves. TERTIARY > Diagnostic management, follow-up checks and/or referral criteria for: <ul style="list-style-type: none"> • Tremors (essential tremors, Parkinson's disease, secondary to other neurological diseases). PRIMARY • Epilepsy. SECONDARY • Infections of the CNS: meningitis, encephalitis. TERTIARY • Changes in levels of consciousness: coma. TERTIARY > Diagnostic suspicion and causes of: <ul style="list-style-type: none"> • Demyelinating disease. PRIMARY • Brain tumour. PRIMARY • Neuromuscular disease. PRIMARY > To know the indications for the following diagnostic interventions: <ul style="list-style-type: none"> • Neuroimaging (CAT, MRI, PET). • Electroencephalogram. • Electromyogram. > Therapeutic management of: <ul style="list-style-type: none"> • Essential tremors and drug-induced tremors. PRIMARY • Contacts of patients with meningitis. PRIMARY > To assess the family and psychosocial context of patients with chronic neurological and/or degenerative diseases. PRIMARY 	
<p>PRIORITY II</p> <ul style="list-style-type: none"> > Therapeutic management of: <ul style="list-style-type: none"> • Parkinson's disease. SECONDARY • Epilepsy. SECONDARY > Diagnostic management of: <ul style="list-style-type: none"> • Other movement and walking disorders. PRIMARY/SECONDARY > Physiotherapy for vascular patients. PRIMARY > Know how to create support groups to help the carers for patients with dementia. PRIMARY 	
<p>PRIORITY III</p> <ul style="list-style-type: none"> > To know how to: <ul style="list-style-type: none"> • Perform a lumbar puncture. TERTIARY > Family intervention for patients with chronic and/or degenerative diseases who are in crisis. PRIMARY/SECONDARY 	

9.1.8. Haematological problems

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know about and be able to apply interventions to prevent iron deficiency anaemia in high-risk pregnant and lactating women. > To know the indications and to be able to interpret: <ul style="list-style-type: none"> • The basic haematological parameters. > Diagnostic management of patients with: <ul style="list-style-type: none"> • Changes in ESR. • Changes in the red cell count: <ul style="list-style-type: none"> – Anaemia: Microcytic, normochromic and macrocytic anaemia. – Polyglobuly: Primary, secondary and relative polyglobuly. • Changes in the white cell count: <ul style="list-style-type: none"> – Leucocytosis: Neutrophilia, eosinophilia, basophilia, lymphocytosis, monocytosis. – Leucopenia: Neutropenia, lymphopenia. • Changes in haemostasis and coagulation: <ul style="list-style-type: none"> – Changes in platelets. <ul style="list-style-type: none"> ■ Quantitative disorders: Thrombocytopenia and thrombocytosis. ■ Qualitative disorders. – Coagulopathies. – Vasculopathies: congenital or acquired. • Bone marrow aplasia: pancytopenia. • Adenopathies. • Splenomegaly. > Diagnostic and therapeutic management of patients with: <ul style="list-style-type: none"> • Iron deficient anaemia. • Thalassemia. • Anaemia of chronic disease. • Megaloblastic anaemia. • Eosinophilia. > Diagnostic suspicion and causes for patients with malignant haemopathies: <ul style="list-style-type: none"> • Acute leukaemia. • Myelodysplastic syndrome. • Myeloproliferative syndrome. • Lymphoproliferative syndrome. • Monoclonal hypergammaglobulinaemia. > To know the indications for anti-thrombotic therapy. > To know criteria for transfusion. > Managing emergencies: <ul style="list-style-type: none"> • Acute haemorrhage. > To assess the family and psychosocial context of patients with malignant blood disorders. 	<p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY/SECONDARY PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p> <p>SECONDARY</p> <p>TERTIARY PRIMARY/SECONDARY SECONDARY</p> <p>PRIMARY PRIMARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY</p> <p>TERTIARY TERTIARY TERTIARY TERTIARY SECONDARY PRIMARY PRIMARY</p> <p>TERTIARY PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To know how to monitor anticoagulant treatment with dicoumarins. 	<p>PRIMARY</p>

9.1.9. Skin problems

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY I	
> To know about and be able to apply preventive interventions for: <ul style="list-style-type: none"> • Sexually transmitted diseases. • Skin cancer. 	PRIMARY
> To know the appearance of the most prevalent basic lesions and skin alterations by anatomical area.	PRIMARY
> Diagnosis, therapeutic management and referral criteria for:	PRIMARY
<ul style="list-style-type: none"> • Skin lesions caused by living agents. • Changes in skin appendages. • Oral lesions. 	PRIMARY PRIMARY PRIMARY/SECONDARY
<ul style="list-style-type: none"> • Lesions with a liquid content (vesiculo-bullous diseases, pustular diseases). Acne. • Erythematous lesions. 	PRIMARY/SECONDARY
<ul style="list-style-type: none"> – Lesions with desquamation (papulo-squamous diseases, eczemas). – Lesions without desquamation (inflammatory papules and nodules and vascular reactions). 	PRIMARY/SECONDARY
<ul style="list-style-type: none"> • Skin ulcers. • Keratinisation disorders. • Pigmentation disorders. • Skin hypersensitivity reactions. • Pruritus • Tumours of skin and mucous membrane. 	PRIMARY PRIMARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY PRIMARY/SECONDARY
> To know how to perform and interpret:	PRIMARY
<ul style="list-style-type: none"> • Wood's light examination. • Collection of samples. 	PRIMARY PRIMARY
> To know about and use the most frequent dermatological treatments appropriately: Antimycotic, hydrating, photoprotective, topical antibiotic, antiparasitic, topical corticosteroid, antiseptic, antihistamine, base formulas...	PRIMARY
> To know how to:	TERTIARY
<ul style="list-style-type: none"> • Make an incision into and excise surface lesions. • Remove subcutaneous lesions. • Perform drainage. • Perform a shave biopsy. • Suture. • Perform nail surgery. 	PRIMARY
> Diagnostic management and follow-up checks on cancerous skin lesions.	SECONDARY
> To know the indications for epicutaneous tests.	PRIMARY
> To know the urgent indications in dermatology.	PRIMARY
> To assess the family and psychosocial context of patients with cutaneous neoplasia.	PRIMARY
<hr/>	
PRIORITY II	
> To know how to interpret epicutaneous tests.	SECONDARY
> To know the cutaneous manifestations of systemic diseases: collagenosis, vasculitis, disorders of the digestive tract, the central nervous system, paraneoplasias, HIV positive Status.	PRIMARY/SECONDARY
> To know how to:	PRIMARY/SECONDARY
<ul style="list-style-type: none"> • Use liquid nitrogen. • Perform electrosurgery. • Perform intralesional infiltration with corticosteroids. 	PRIMARY/SECONDARY

9.1.10. Trauma, accidents and poisoning

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know about and be able to apply preventive interventions for traumatic pathology: <ul style="list-style-type: none"> • Antithrombotic prophylaxis for immobilised patients. • Anti-tetanus, anti-rabies and antibiotic prophylaxis. • Prevention of osteoporosis. • Prevention of falls among the elderly. > Diagnostic management, initial therapeutic management and referral criteria for: <ul style="list-style-type: none"> • Patients with multiple trauma. • Moderate/serious head injury. • Thoracic trauma. • Abdominal trauma. • Asphyxiation • Total muscle rupture. • Serious sprains. • Luxation of: the shoulder, elbow, MCP, thumb, knee, TMJ • Fractures. • Injuries: complex, serious, deep, widespread on the face/hands. • Accidental injury with potential risks. • Moderate/serious burns. • Widespread bites by non-domestic animals and/or with systemic spread. • Acute poisoning. > Diagnostic and therapeutic management of: <ul style="list-style-type: none"> • Mild head injury. • Simple rib contusions/fractures. • Acute muscular lesions. • Painful pronation. • Non-serious sprains. • Luxation of interphalangeal joints. • Non-complicated fractures of phalanges. • Stable fractures of the spine, back and lumbar vertebrae. • Simple injuries. • Mild burns. • Bites. > To know how to: <ul style="list-style-type: none"> • Apply compressive and functional bandages. • Make plaster splints. • Perform skin and muscle sutures. • Perform the relevant immobilisation of different joints so that the patient can be moved. > To know how to follow the necessary procedures to activate emergency healthcare resources. > To know the periodicity of follow-up checks for fractures for which no surgical treatment has been indicated. > To assess the family and psychosocial context of patients with multiple trauma. 	<p>PRIMARY</p> <p>TERTIARY TERTIARY TERTIARY TERTIARY SECONDARY SECONDARY TERTIARY TERTIARY SECONDARY TERTIARY TERTIARY</p> <p>TERTIARY TERTIARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY</p> <p>PRIMARY</p> <p>SECONDARY</p> <p>PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > Use of orthoses. > To know the indications for rehabilitation of soft tissue injuries. 	<p>SECONDARY SECONDARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > To know how to perform thoracic and abdominal drainage. > Therapeutic management of: <ul style="list-style-type: none"> • Patients with multiple trauma. • Acute intoxications. > To know the indications for rehabilitation of fractures. 	<p>TERTIARY</p> <p>TERTIARY TERTIARY SECONDARY</p>

9.1.11. Renal and urinary tract problems

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY I	
> To know the Spanish and international expert recommendations for the prevention of prostate cancer.	PRIMARY
> Diagnostic management and follow-up checks on: <ul style="list-style-type: none"> • Haematuria and microhaematuria. • Proteinuria. • Scrotal masses. • Phimosis, paraphimosis. • Mild and moderate kidney failure. 	SECONDARY SECONDARY SECONDARY SECONDARY PRIMARY/SECONDARY
> Diagnostic and therapeutic management of: <ul style="list-style-type: none"> • Microalbuminuria. • Prostatic syndrome. Benign prostatic hypertrophy. • Prostatitis, orchitis, epididymitis, balanitis and urethritis. • Renal colic and urolithiasis. • Urinary incontinence. • Erectile dysfunction. 	PRIMARY PRIMARY/SECONDARY PRIMARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY
> To know how to carry out: <ul style="list-style-type: none"> • Rectal examination. • Bladder catheterisation. • Transillumination of the scrotum. • Rehabilitation of the pelvic floor muscles and bladder re-education. 	
> To know the indications for the following diagnostic interventions: <ul style="list-style-type: none"> • Abdominal and transrectal ultrasound. • Laboratory tests. • Urodynamic studies. 	PRIMARY
> To know the dosage of drugs in the presence of kidney failure.	PRIMARY
> To know the referral criteria for: <ul style="list-style-type: none"> • Lithotripsy and surgical treatment of renal lithiasis. 	PRIMARY
> To address the family and psychosocial context of: <ul style="list-style-type: none"> • Urinary incontinence. • Erectile dysfunction. 	PRIMARY
PRIORITY II	
> To know the indications for the following diagnostic tests: <ul style="list-style-type: none"> • Endovenous urography, cystography, urethrocytography, CAT, MRI, renogram, angiograph, gammagraph. • Cystoscopy. 	SECONDARY
> To know how to interpret kidney scans.	SECONDARY
> Diagnostic management and follow-up checks for: <ul style="list-style-type: none"> • Prostate, bladder and kidney cancer. • Acute kidney failure. Severe renal insufficiency. 	SECONDARY SECONDARY TERTIARY
> To assess the family and psychosocial context of: <ul style="list-style-type: none"> • Patients with kidney failure undergoing haemodialysis or peritoneal dialysis. • Post-operative kidney transplant patients. 	PRIMARY PRIMARY
PRIORITY III	
> To know how to: <ul style="list-style-type: none"> • Drain a hydrocele. • Reduce paraphimosis. • Perform a scan of the kidneys and urinary tract. 	SECONDARY TERTIARY TERTIARY

9.1.12. Musculo-skeletal problems

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know about and be able to apply the Spanish and international expert recommendations of on the promotion of healthy lifestyles (physical exercise) and the prevention of musculo-skeletal problems: osteoporosis, adolescent scoliosis. > Diagnosis, therapeutic management and/or referral criteria for: <ul style="list-style-type: none"> • Spinal column pain (cervical, dorsal or lumbar areas). • Radiculalgia. • Painful shoulder. • Pain in an upper limb (elbow, wrist and hand). • Pain in a lower limb (hip, knee, ankle and foot). • Monoarthritis. • Polyarthralgias and polyarthritis. • Muscular pain. • Generalised musculo-skeletal pain. • Stability problems. • Arthrosis. • Osteoporosis. • The most frequent orthopaedic disorders. > To know the indications and to be able to interpret: <ul style="list-style-type: none"> • Radiology. • Laboratory examinations. > To know the indications for imaging techniques. > To know how to: <ul style="list-style-type: none"> • Examine the different joints and limbs. • Perform periarticular infiltration. > Therapeutic management: <ul style="list-style-type: none"> • Physiotherapy. • Analgesics and antiinflammatories. • Gastroprotection from drugs. > To know when to refer to other healthcare levels. > To assess the family and psychosocial context of patients with chronic musculo-skeletal problems. 	<p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY PRIMARY PRIMARY</p> <p>PRIMARY PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To know how to interpret: <ul style="list-style-type: none"> • Other imaging techniques. > To know the techniques and indications for articular infiltrations. > Therapeutic approach to rheumatological problems (rheumatoid arthritis, SLE and other connective tissue diseases). 	<p>SECONDARY</p> <p>SECONDARY</p> <p>SECONDARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > Drainage of articular haemorrhage. > Rehabilitation exercises for patients. 	<p>SECONDARY</p> <p>SECONDARY</p>

9.1.13. Ear, nose and throat problems

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know about and apply preventive interventions for: <ul style="list-style-type: none"> • Oropharyngeal cancer. • Hearing deterioration: elderly people, workers. > Diagnostic and therapeutic management: <ul style="list-style-type: none"> • Othalgia and otitis. • Hypoacusia. • Voice disorders. • Peripheral facial paralysis. • Nasal obstruction. • Taste and smell disorders. • Acuphenes. • Vertigo syndrome. • Nasal respiratory failure. > Diagnostic management and follow-up checks for: <ul style="list-style-type: none"> • Tumours of the ear, nose and throat. > To know how to: <ul style="list-style-type: none"> • Take an ENT case history and conduct an ENT examination. • Otoscopy. • Extract ear wax. • Acumetry: Rinne and Weber test. • Anterior nasal pack insertion. • Anterior rhinoscopy. • Indirect laryngoscopy. • Vestibular rehabilitation. > To know the indications and to be able to interpret: <ul style="list-style-type: none"> • Simple radiology of the zone. > Managing patients in an emergency situation: <ul style="list-style-type: none"> • Epistaxis. • Ear trauma: haematoma of the ear, perforated eardrum. • Foreign bodies: nostrils, ears, larynx, oesophagus. > To address the family and psychosocial context of: <ul style="list-style-type: none"> • Patients with tracheotomies. 	<p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY/TERTIARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY/TERTIARY</p> <p>PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To know how to interpret: <ul style="list-style-type: none"> • Audiometry. > Therapeutic management of: <ul style="list-style-type: none"> • Patients with tracheotomies. > To assess the family and psychosocial context of: <ul style="list-style-type: none"> • Patients with hypoacusia («how to talk to the patient»). 	<p>SECONDARY</p> <p>SECONDARY</p> <p>SECONDARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > To know how to perform: <ul style="list-style-type: none"> • Liminal tonal audiometry. • A direct laryngoscopy. 	<p>SECONDARY</p> <p>SECONDARY</p> <p>SECONDARY</p>

9.1.14 Eye problems

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know about and to apply if necessary, the Spanish and international expert recommendations on interventions to prevent the loss of visual acuity in children, patients with a family history of glaucoma, patients with hypertension and diabetes, patients with serious myopia. > Diagnostic management of the following problems: <ul style="list-style-type: none"> • Red eye. • Weepy/dry eye. • Decrease in visual acuity. • Floaters. • Changes in the state of the eye. • Eye pain. > Diagnosis, therapeutic management and referral criteria for: <ul style="list-style-type: none"> • Changes in the anterior chamber: acute conjunctivitis, hyposphagma, pterygium, pinguecula, corneal erosion, cataracts. • Palpebral changes: styes, chalazion, blepharitis, trichiasis, entropion and ectropion. • Chronic glaucoma. > Diagnostic management and follow-up checks for: <ul style="list-style-type: none"> • Optical neuritis. • Retinal vascular disease. • Hypertensive/diabetic retinopathy. • Tumours of the eye. > To know how to perform: <ul style="list-style-type: none"> • Examination with optotypes. • Fluorescein staining of the cornea. • Schirmer's test. • Direct ophthalmoscopy examination. > Managing emergencies: <ul style="list-style-type: none"> • Sudden loss of visual acuity: central retinal artery occlusion, vitreous haemorrhage, detached retina. • Perforation of the eyeball /foreign body embedded in the eye. • Physical/chemical ocular traumatism. • Acute glaucoma. • Ophthalmic zoster. > To assess the family and psychosocial context of blind patients or patients with serious changes in visual acuity. 	<p>PRIMARY</p> <p>PRIMARY PRIMARY PRIMARY/SECONDARY PRIMARY PRIMARY/SECONDARY PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>SECONDARY</p> <p>TERTIARY TERTIARY SECONDARY TERTIARY PRIMARY</p> <p>TERTIARY</p> <p>TERTIARY</p> <p>PRIMARY/TERTIARY TERTIARY SECONDARY PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To know how to perform: <ul style="list-style-type: none"> • Tonometry. > Diagnosis, therapeutic management and referral criteria for: <ul style="list-style-type: none"> • Changes in the transparent media: corneal ulcer, keratitis, iridocyclitis, vitreous opacities, congenital malformations of the anterior chamber. • Episcleritis and scleritis. • Anterior uveitis. 	<p>PRIMARY</p> <p>SECONDARY/TERTIARY</p> <p>SECONDARY/TERTIARY SECONDARY/TERTIARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > To know advanced ophthalmological examination techniques: correct handling of the slit lamp, examination of the back of the eye with indirect ophthalmoscope. > Diagnostic management of eye socket pathologies depending on their origin: malformation, vascular, inflammatory or infectious, endocrine, trauma and tumour. 	<p>TERTIARY</p> <p>SECONDARY/TERTIARY</p>

9.1.15. Addictive and risk behaviours

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To know about the different patterns of substance misuse. > To be able to take a case history of substance misuse: tobacco, alcohol, benzodiazepines, hypnotic drugs, cannabis, synthetic drugs (MDMA), cocaine, heroin and other psychostimulants. > To detect at-risk situations for substance misuse. > To detect substance misuse. > To know how to give advice on stopping smoking and reducing excessive alcohol consumption. > To propose alternative ways to reduce risks from illegal drugs: cannabis, synthetic drugs (MDMA), cocaine, heroin and other psychostimulants. > To estimate the degree of addictive-substance dependency. > To know about and be able to apply techniques designed to dissuade people from smoking. To intervene with behavioural and pharmacological help in order to give up smoking. > To identify serious symptoms of substance misuse. > To diagnose and treat acute intoxication from the different substances: <ul style="list-style-type: none"> • Alcohol poisoning. • Overdoses of synthetic drugs and amphetamine derivatives. • Cocaine overdose. • Heroin overdose (opiates). • Overdose of benzodiazepines. > To diagnose and treat diseases associated with drug addiction. > To undertake appropriate preventive interventions among drug users and/or people in at-risk situations. > To know about the specific local and regional resources for drug addiction and how to refer to them when necessary. > To intervene in and advise the different community resources (associations, schools, etc.) carrying out primary and secondary prevention activities. > To intervene specifically in the family unit, advising guardians/parents about the right courses of action to take. 	<p>PRIMARY PRIMARY</p> <p>PRIMARY PRIMARY PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY PRIMARY</p> <p>PRIMARY PRIMARY</p> <p>PRIMARY PRIMARY/SECONDARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To create support groups to help people give up smoking. > To detect mental health problems associated with the excessive consumption of psychoactive drugs. > To dissuade people from drinking alcohol. > To undertake detoxication from: <ul style="list-style-type: none"> • Opiates. • Cocaine. 	<p>PRIMARY PRIMARY/SECONDARY/ TERTIARY SECONDARY PRIMARY/SECONDARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > To dissuade people from taking: <ul style="list-style-type: none"> • Opiates. • Cocaine. • Other illegal drugs. 	<p>PRIMARY/SECONDARY/ TERTIARY</p>

9.1.16. Acute and emergency situations

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > Diagnostic and therapeutic management of medical, surgical and orthopaedic emergencies dealt with at a health centre. > To know how to carry out and interpret the following diagnostic interventions: <ul style="list-style-type: none"> • Monitoring vital signs. • Electrocardiogram. • Basal capillary glycaemia. • Urine reactive strip. • Fluorescein staining of the cornea. • Eye examination. • Basic analyses. > To know how to carry out the following therapeutic techniques: <ul style="list-style-type: none"> • Intravenous fluid therapy. • Oxygen therapy. • Aerosol therapy. • Insertion of a bladder catheter. • Peripheral venous access. • Nasal packing. • Basic bandages. • Plaster and metal splints. • Wound treatment and suturing. • Arterial tourniquet. • Gastric lavage. • Basic life support. 	<p>PRIMARY/SECONDARY</p> <p>PRIMARY</p> <p>TERTIARY TERTIARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY PRIMARY TERTIARY TERTIARY PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > First-level diagnostic and therapeutic management of medical, surgical and trauma emergencies dealt with at a hospital. > To know how to: <ul style="list-style-type: none"> • Insert a nasogastric tube. • Perform therapeutic thoracocentesis. • Advanced life support. • Electrical treatment of cardiorespiratory arrest. • Thrombolysis. • Normal delivery. 	<p>TERTIARY</p> <p>TERTIARY TERTIARY TERTIARY TERTIARY TERTIARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > Diagnostic and therapeutic management of critical medical, surgical and trauma hospital emergencies. > To know how to: <ul style="list-style-type: none"> • Achieve central venous access. • Perform cricothyrotomy. • Perform pericardiocentesis. • Perform ultrasound scans. 	<p>TERTIARY</p> <p>TERTIARY TERTIARY TERTIARY TERTIARY</p>

9.1.17. Common features in the approach to healthcare needs and problems included in sections 9.1.1. to 9.1.16

A) TABLE SHOWING PLACES OF LEARNING, RECOMMENDED INTERNSHIP TIMES FOR LEARNING IN CONTEXT.

Subject	Place of learning	Time
Cardiovascular problems and risk factors	Health Centre* Internal medicine* Acute and emergency care* Cardiology** Haematology** Rehabilitation**	* During the entire period envisaged for this internship, shared with other activities ** 1 month
Respiratory problems	Health Centre* Internal medicine* Acute and emergency care* Respiratory Medicine/laboratory for functional tests**	* During the entire period envisaged for this internship, shared with other activities ** 1 month
Digestive tract problems	Health Centre* Internal medicine* Acute and emergency care* Gastroenterology/digestive endoscopy service	* During the entire period envisaged for this internship, shared with other activities ** 1 month
Infectious diseases	Health Centre* Internal medicine* Acute and emergency care*	* During the entire period envisaged for this internship, shared with other activities
Metabolic and endocrine problems	Health Centre* Internal medicine* Acute and emergency care* Endocrinology*,**	* During the entire period envisaged for this internship, shared with other activities ** 1-2 months
Behavioural and relationship problems. Mental health problems	Health Centre* Mental health centre* Acute and emergency care*	* During the entire period envisaged for this internship, shared with other activities ** 3 months
Nervous system problems	Health Centre* Internal medicine* Acute and emergency care* Neurology** Health and social care centres**	* During the entire period envisaged for this internship, shared with other activities ** 1 month
Haematological problems	Health Centre* Internal medicine* Acute and emergency care* Haematology**	* During the entire period envisaged for this internship, shared with other activities ** 1 month

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Subject	Place of learning	Time
Skin problems	Health Centre* Dermatology*, ** Acute and emergency care*	* During the entire period envisaged for this internship, shared with other activities ** 1-2 months
Trauma, accidents and poisoning	Health Centre* Acute and emergency care* Rehabilitation*, **	* During the entire period envisaged for this internship, shared with other activities ** 1 month
Renal and urinary tract problems	Health Centre* Acute and emergency care* Urology* **	* During the entire period envisaged for this internship, shared with other activities ** 1 month
Musculo-skeletal problems	Health Centre* Rheumatology*, ** Orthopaedics or orthopaedic emergencies** Rehabilitation*, **	* During the entire period envisaged for this internship, shared with other activities ** 1-2 months
ENT and facial problems	Health Centre* Acute and emergency care* ENT**	* During the entire period envisaged for this internship, shared with other activities ** 1 month
Eye problems	Health Centre* Acute and emergency care* Ophthalmology**	* During the entire period envisaged for this internship, shared with other activities ** 1 month
Risk behaviours	Health Centre* Acute and emergency care* Drug dependency facilities**	* During the entire period envisaged for this internship, shared with other activities ** 1 month
Acute and emergency care	Health Centre and hospital casualty and accident and emergency departments*	44 modules. See individual training plan, page 27

* Basic facilities for learning in context, mainly for Priority I activities and primary-care responsibility level.

** Complementary facilities for carrying out some Priority I activities and Priority II and III activities and secondary- and tertiary-care responsibility levels. The recommended facilities ** will depend on the availability and training skills acquired, and the times will be adjusted accordingly in each training unit.

B) LEARNING METHODOLOGY

The recommended methodology for these groups must be based on the combination of all the techniques and possibilities of: self-directed learning, learning in context, courses, workshops and group work. The training unit will adapt and combine all these methods according to the particular characteristics of the place where registrars are undergoing training and their needs. This means that some of the internships recommended in the above table, particularly those involving the acquisition of skills, may be complemented or replaced by other training methods if the training benefits from these internships are not sufficient. We recommend 100 hours of theory and practical classes distributed throughout the four years of training, in order to acquire and improve clinical competencies in each of the areas of individual health care, population groups and at-risk groups.

C) ASSESSMENT METHODOLOGY

In these areas, direct tutoring by the tutor or person in charge of the department will be the most suitable way of assessing the extent to which the aims have been acquired, although we recommend objective and standardised instruments be included in this methodology. It is important to remember the extreme usefulness of other assessment methods such as the introduction/discussion of cases, video-recording techniques, clinical history audits, etc., adapted as appropriate to the individual registrar and their field (see chapter on evaluation).

D) RECOMMENDED BIBLIOGRAPHY

The recommended bibliography is included in section 16 of this programme on sources of information.

9.2. Addressing the needs of specific population groups and groups with risk factors

9.2.1. Health care for children. Specific health problems in children and preventive interventions for children

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Deal with, manage and treat the main health care problems in children.
2. Use and interpret diagnostic methods.
3. Undertake therapeutic management of children.
4. Manage the most frequent paediatric emergencies.
5. Undertake preventive interventions and health surveillance.
6. Provide psychosocial support and support for the families of children with chronic pathologies.

LEARNING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
Knowledge and skills	
<p>PRIORITY I</p> <ul style="list-style-type: none"> > Guide and manage the most frequent needs and problems of lactating women: the most suitable types of food, physiological jaundice, hiccups, umbilical cord healing, nappy rash, inguinal or umbilical hernia, regularity of bowel movements, spasms, febrile syndrome in breast-feeding infants, regurgitation/vomiting, diarrhoea, convulsions. > Manage, treat and/or provide guidance for paediatric health problems: acute infections and exanthema, febrile syndrome in older children, cutaneous and intestinal parasitosis, abdominal pain, enuresis/encopresis, eating and nutritional disorders, behavioural disorders, headache, asthenia, anaemia, allergy, asthma, convulsions. > Assess and provide suitable guidance for physical and psychomotive growth, hormonal changes during childhood, orthopaedic changes, changes to eyesight, hearing and language, heart murmur. > Manage and interpret diagnoses in paediatrics: history taking, physical examination, measurement of height, basic radiology, interpreting and adjusting laboratory data to age, optotypes, cover test, audiometry, podometry, height and weight graphs. > Know the most common therapeutic agents and their doses. > Know the patient's vaccination record. > Monitor and assess children periodically. Prevent substance addictions (alcohol, tobacco, others) > Manage the most frequent paediatric emergencies: convulsions, breathing difficulties, stridor, abdominal pain, febrile syndrome, dehydration, intoxications... > Address the family and psychosocial context of families in the «empty nest» stage and with children. > Provide psychosocial support and support for the families of children with chronic pathologies and psychomotive retardation. > Provide guidance, warnings and support for families of paediatric patients with HIV. > Know about and address situations of risk and vulnerability for victims of abuse and to identify signs and symptoms of violence against children. To draw up an integrated intervention plan in such cases, coordinated with other professionals and/or institutions (social, police or legal...). 	<p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY/SECONDARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > Perform lumbar puncture. > Perform naso-gastric tube insertion. > Perform bladder catheterisation. 	<p>TERTIARY</p> <p>TERTIARY</p> <p>TERTIARY</p>

9.2.2. Adolescent health care. Specific health problems in adolescents and preventive interventions during adolescence

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Understand the aspects of the consultation necessary to build up a good relationship with the adolescent at the surgery.
2. Understand the emotions and psychological conflicts of adolescents, and know about the family dynamics generated.
3. Know the main preventive interventions during adolescence to include in the consultation.
4. Be able to detect the factors and health problems associated with *high-risk* adolescents.
5. Be able to make an early diagnosis of disorders that may require specialised monitoring.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To manage the consultation with the adolescent appropriately (privacy), placing particular emphasis on confidentiality. > To create a genogram in order to find out about family dynamics and risk situations. > To master the necessary communication skills in order to question patients about risk factors during this phase. > To prevent, diagnose and treat sexually transmitted diseases. > To prevent and monitor unwanted pregnancies. > To prevent accidents and detect risky driving behaviours. > To prevent and make an early diagnosis of eating disorders. > To prevent and identify abuse and maltreatment. > To manage and detect mental health problems early: depression, suicide attempts, anxiety, social anxiety disorder, antisocial behaviour and somatisation disorder. > To manage and treat the most common reasons for consultation at this age. > To develop skills in community care: at institutions, in residents' associations, cultural bodies ... > To address the family and psychosocial context of the development crises of «families with adolescents». > To develop group skills techniques in order to: <ul style="list-style-type: none"> • Prevent drug addiction. • Prevent sexually transmitted diseases and unwanted pregnancies. • Prevent and monitor disorders of eating behaviour. 	<p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To undertake preventive interventions in the surgery, and be able to provide guidance and make patients think about the most common risks: <ul style="list-style-type: none"> • Give importance to school refusal and its implications and consider it a health care issue. • Use the motivational interview to act on risk behaviours. • «Risk-reduction» activities among adolescents who are sporadic users of alcohol, hashish, synthetic drugs. 	<p>PRIMARY</p>

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<ul style="list-style-type: none"> • Correct potentially risky sexual behaviour. • Know how to provide information about healthy diets and suitable weight control. • Reinforce self-esteem among adolescents. <p>> To use techniques for dealing with families in crises caused by adolescence.</p> <p>> To monitor adolescents with chronic diseases: asthma, diabetes mellitus, rheumatological diseases...</p>	<p>PRIMARY</p> <p>PRIMARY/SECONDARY</p>
<p>PRIORITY III</p> <p>> To treat the following serious situations:</p> <ul style="list-style-type: none"> • Family interventions in serious conflicts. • Consumption of illegal drugs and addictions. • Eating disorders. • Depression, anxiety and suicide attempts. 	<p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p>

9.2.3. Women's health care. Preventive interventions for women and pregnancy care

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Monitor low-obstetric-risk pregnancies.
2. Demonstrate knowledge and ability to manage morbidity during the puerperium and deliver appropriate maternal education.
3. Provide advice on contraception. Manage hormonal, intrauterine and barrier contraceptives.
4. Demonstrate knowledge of cervical and breast cancer screening interventions and warning signs for endometrial and ovarian cancer.
5. Perform basic gynaecological and obstetric examinations.
6. Address menopausal healthcare problems.
7. Treat the most common gynaecological and obstetric conditions.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <p>> Pregnancy</p> <ul style="list-style-type: none"> • To know about and manage low-risk pregnancies. • To make an adequate assessment of the presence of risk factors that require special attention, either by the family doctor or secondary care. • To detect and act on psychosocial risk factors. • To know and give information about the diagnostic techniques for foetal malformations (biochemical screening, chorionic villus sampling, amniocentesis). 	<p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY</p> <p>PRIMARY/SECONDARY</p>

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<ul style="list-style-type: none"> To know the main teratogenic risks (medicines and drugs, physical agents, infectious agents, toxic substances). 	PRIMARY
<ul style="list-style-type: none"> To know about preconception care. 	PRIMARY
<ul style="list-style-type: none"> To know how to manage medicines and drugs during pregnancy and the puerperium. 	PRIMARY
<ul style="list-style-type: none"> To auscultate the fetal heart, measure uterine height and determine the presentation of the fetus. 	PRIMARY
<p>> Puerperium</p>	
<ul style="list-style-type: none"> To know about and manage the most frequent causes of morbidity during the puerperium. 	PRIMARY
<ul style="list-style-type: none"> To provide support for breast-feeding women. 	PRIMARY
<ul style="list-style-type: none"> To restore the pelvic-floor muscles. 	PRIMARY
<p>> Contraception</p>	
<ul style="list-style-type: none"> To manage hormonal contraceptive methods (indication, follow up and contraindications). 	PRIMARY
<ul style="list-style-type: none"> To manage intrauterine contraception (indication, follow up and removing the IUD). 	PRIMARY
<ul style="list-style-type: none"> To manage emergency pharmacological contraception. 	PRIMARY
<ul style="list-style-type: none"> To manage barrier methods (correct use of condoms, instructions on how to use diaphragms). 	PRIMARY
<ul style="list-style-type: none"> To advise about vasectomies and tubal ligation. 	PRIMARY
<ul style="list-style-type: none"> To advise about voluntary termination of pregnancy. 	PRIMARY
<p>> Basic gynaecological and obstetric procedures</p>	
<ul style="list-style-type: none"> To undertake a gynaecological obstetric consultation. 	PRIMARY
<ul style="list-style-type: none"> To acquire skills in performing vaginal palpations. 	PRIMARY
<ul style="list-style-type: none"> To know about and perform breast examinations. 	PRIMARY
<ul style="list-style-type: none"> To know how to interpret a mammogram. 	PRIMARY/SECONDARY
<ul style="list-style-type: none"> To perform cervico-vaginal smears for cervical cancer screening. 	PRIMARY
<ul style="list-style-type: none"> To know how to interpret the results of a cervico-vaginal smear. 	PRIMARY
<ul style="list-style-type: none"> To know the recommendations for test frequency and evidence for preventing gynaecological cancer. 	PRIMARY
<p>> Menopause</p>	
<ul style="list-style-type: none"> To manage the symptoms of the menopause: changes in the menstrual cycle, hot flushes, vaginal dryness. 	PRIMARY
<ul style="list-style-type: none"> To know about and identify risk factors for osteoporosis, know the indications for densitometry and interpret the results. Prevention of osteoporosis in women at risk. 	PRIMARY
<ul style="list-style-type: none"> To know about and manage the different options for non-pharmacological and pharmacological treatment, its indications, side effects, benefits, risks, costs and levels of evidence. Know about and manage hormone replacement therapy [HRT] during the menopause. 	PRIMARY/SECONDARY
<p>> Prevalent reasons for consultation</p>	
<ul style="list-style-type: none"> To treat and diagnose vulvovaginitis. 	PRIMARY
<ul style="list-style-type: none"> To manage disorders of the menstrual cycle (dysmenorrhoea, hyperpolymenorrhoea, premenstrual syndrome). 	PRIMARY
<ul style="list-style-type: none"> To diagnose changes in the position of the genitals (prolapses). 	PRIMARY/SECONDARY
<ul style="list-style-type: none"> To manage and treat urinary incontinence with medication. 	PRIMARY/SECONDARY
<ul style="list-style-type: none"> To hold an initial consultation with sterile couples. 	PRIMARY/SECONDARY
<p>> To be able to address the family and psychosocial context of development crises in different stages</p>	PRIMARY

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>> To know about and deal with situations of risk and vulnerability for victims of abuse and identify signs and symptoms of violence against women. Be able to draw up an integrated intervention plan in such cases, coordinated with other professionals and/or institutions (social, police or legal...). See specific training specifications on Caring for victims of family violence.</p>	PRIMARY/SECONDARY
<p>PRIORITY II</p> <ul style="list-style-type: none"> • To know how to give preconceptual advice to women undergoing treatment for common chronic diseases (hypertension, diabetes, asthma, epilepsy, changes in thyroid function, mental health problems). • To know the contents of maternal education. • To manage non-neoplastic cervico-vaginal pathology. • To perform and examine a direct vaginal smear with an optical microscope, to diagnose the most frequent occurrences of vulvovaginitis. • To perform a normal delivery. 	<p>PRIMARY</p> <p>PRIMARY/SECONDARY PRIMARY PRIMARY</p> <p>PRIMARY/SECONDARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> • To insert an IUD. • To manage a level-1 obstetric ultrasound scan (foetal biometry and basic ultrasound during the first three months of pregnancy). • To manage a basic gynaecological ultrasound scan. 	<p>PRIMARY/SECONDARY PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p>

9.2.4. Adult health care. Preventive interventions for adults

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Identify patients at risk (at-risk population) who are candidates for preventive and health promotion interventions.
2. Include preventive and health promotion interventions in the everyday work of the health centre, applying semFYC's Programme of Preventive Interventions and Healthcare Promotion for Adults.
3. Obtain epidemiological data and health status data for the adult population.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <p>> To promote healthy behaviours.</p> <ul style="list-style-type: none"> • Regular physical activity. • Foods low in fat and cholesterol, the right calorie intake, fresh fruit and vegetables, calcium... • Preventing injuries: seat belt, helmet. 	PRIMARY

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<ul style="list-style-type: none"> • Advice about tobacco, alcohol, drugs... • Sexual behaviour and reproductive health. • Dental care. • Folic acid supplements during the periconception period. <p>> To identify patients at risk in the following groups:</p> <ul style="list-style-type: none"> • Overall high cardiovascular risk, quantifying this risk individually. • With risk habits: <ul style="list-style-type: none"> – Tobacco. – Alcohol. – Drugs. – Other addictive behaviours. – Obesity. – Sedentarism. 	PRIMARY
<p>> To know the indications and vaccinate for:</p> <ul style="list-style-type: none"> • Influenza. • Pneumococcus. • Tetanus and diphtheria. • Hepatitis B. • Hepatitis A. • Measles, mumps and rubella. • Typhoid fever. 	PRIMARY
<p>> To provide information and promote healthy behaviours with regard to:</p> <ul style="list-style-type: none"> • AIDS. • Sexually transmitted diseases. 	PRIMARY
<p>> To perform the following preventive interventions:</p> <ul style="list-style-type: none"> • Screening for arterial hypertension. • Screening for diabetes among at-risk patients. • Screening for dyslipaemias. • Screening for obesity. 	PRIMARY
<p>> Cancer.</p> <ul style="list-style-type: none"> • Early detection of colo-rectal cancer. • Early detection of prostate cancer. • Early detection of skin cancer. • Early detection of cancer of the cervix and breast. 	PRIMARY
<p>> Prophylaxis, early diagnosis of tuberculosis.</p> <p>> To include patients identified in the corresponding programmes (AH, diabetes...).</p>	PRIMARY PRIMARY
<p>> To collate and organise the data produced by these interventions.</p>	PRIMARY
<p>> To address the family and psychosocial context of the changes in the family life cycle.</p>	PRIMARY
<p>> To prevent mental health problems.</p>	PRIMARY

9.2.5. Health care for workers

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Recognise the impact of work and/or working conditions on the health of workers and identify risk factors.
2. Manage legal, administrative, institutional and relational aspects of the agents involved in the organisation of health care in the workplace.
3. Know about and keep up to date with work-related medical conditions for specific risks and jobs.
4. Provide basic clinical, preventive and administrative advice and information about individual conditions and their associated risk factors.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY I	
> To understand the regulatory and organisational framework of industrial health and safety. Institutions involved and their role.	PRIMARY
> To understand and be able to identify the basic interaction between working conditions and health with regard to risk factors in their different categories, individual characteristics and damages arising therefrom.	PRIMARY
> To concepts of industrial diseases, industrial accidents and work-related diseases.	PRIMARY
> To temporary and permanent disability: <ul style="list-style-type: none"> • Type, classification, time scale and current legislation. • Labour and economic repercussions, indicators. 	PRIMARY
> To know about and take a work-related medical history and include it in the clinical management. <ul style="list-style-type: none"> • Know about and identify current or past risks. Exposure times during previous and current jobs. 	PRIMARY
	PRIMARY/SECONDARY
PRIORITY II	
> To be able to establish links between risk factors and associated diseases: promote the importance of notifying about the industrial accidents and industrial disease.	PRIMARY/SECONDARY
> To know the prevalent pathologies in industrial health and safety and how to manage them: <ul style="list-style-type: none"> • Musculoskeletal. • Respiratory. • Dermatological. • Reproductive/pregnancy. • Hearing and eyesight. • Cardiovascular. • Specific risk factors of each job. 	PRIMARY/SECONDARY
	SECONDARY/TERTIARY

9.2.6. Health care for older adults. Preventive interventions

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Manage the main geriatric syndromes appropriately.
2. Know about and apply the promotional and preventive interventions recommended among this sector of the population.
3. Know how to perform a correct overall geriatric assessment in primary care.
4. Know about and apply the main rating scales used in geriatric assessment.
5. Know about the social resources available and perform practical family and social interventions.
6. Individualise the intervention according to its objectives and the characteristics of the person.
Know different intervention strategies for older adults.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY I	
> To understand and manage the main geriatric syndromes appropriately: cognitive deterioration and dementia, confusional state, urinary incontinence, lack of stability and falls, being immobilised and its consequences, poor diet and malnutrition, changes to eyesight and hearing.	PRIMARY
> To know which health promotion and preventive interventions are clearly recommended for older adults (tobacco, exercise, diet, accidents, flu and tetanus vaccinations, hypertension...) and others recommended but with less evidence (osteoporosis, hyperlipidaemia, eyesight and hearing deficit, incontinence, ...).	PRIMARY
> To acquire the skills to perform clinical interviews with elderly people.	PRIMARY
> To systematise the delivery and recording of the recommended preventive interventions in the surgery.	PRIMARY
> To undertake recommended screening and preventive interventions appropriately.	PRIMARY
> To know the characteristics of overall geriatric assessment in primary care and the basic contents of each component area (clinical-physical, functional, mental and social).	PRIMARY/SECONDARY
> To know about and apply some of the most widely used geriatric assessment scales: Lobo MMSE, Pfeiffer test, Katz's and Barthel's indexes, the Geriatric Depression Scale, among others.	PRIMARY/SECONDARY
> To know about the most immediate social resources available to this population: teleassistance, home health care, institutionalisation, etc.	PRIMARY/SECONDARY
> To know about the dynamics and initial mechanisms to use social resources (who to refer to, etc.).	PRIMARY
> To differentiate between quality and quantity interventions in accordance with personal characteristics, the process and the set objectives.	PRIMARY
> To know the different kinds of geriatric care and services available to primary care.	PRIMARY/SECONDARY
> To know about and apply fundamental elements of pharmacotherapy, polypharmacy and iatrogeny to the treatment of older adults.	PRIMARY

(cont.)

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<ul style="list-style-type: none"> > To manage the most prevalent pathologies among older adults, including those who present different patterns of symptoms: Parkinson's disease, some tumours such as prostate, constipation, anxiety, depression and insomnia, etc. > To know about and manage situations of risk and vulnerability for victims of abuse and identify signs and symptoms of violence against older people. Be able to draw up an integrated intervention plan in such cases, coordinated with other professionals and/or institutions (social, police or legal...). > To address the family and psychosocial context of families in the contraction phase of the life cycle and families with older members suffering from chronic disabling diseases. 	<p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To acquire skills for assessing the usefulness, involvement and resources of carers and the family. > To undertake suitable management interventions following screening interventions. 	<p>PRIMARY</p> <p>PRIMARY/SECONDARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > To be able to perform an adequate overall geriatric assessment in the specialist or institutional setting. > To be involved and make active use of available social resources and their interventions. > To acquire management skills for managing older patients in the specialist or institutional setting. > To examine in greater depth the more specialised issues of older adults (physiopathology, socio-demographics, ...). > To know the priorities for and participate in geriatric research projects. 	<p>SECONDARY/TERTIARY</p> <p>PRIMARY</p> <p>TERTIARY</p> <p>TERTIARY</p> <p>PRIMARY/SECONDARY/TERTIARY</p>

9.2.7. Health care for patients with mobility difficulties

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Perform a correct multidimensional assessment of the patient with mobility difficulties.
2. Follow up advanced-stage chronic diseases in the home.
3. Recognise developing signs that indicate a poor prognosis.
4. Know how to train the patient's carer.
5. Coordinate the health care for the patient with mobility difficulties with professional nurses and social workers.
6. Know about and use rationally the social and health care resources of the locality.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY I	
> To know how to take a case history of the organic, mental, functional and social state of patients with mobility difficulties.	PRIMARY
> To know how to perform an examination of the organic, mental, functional and social state of patients with mobility difficulties.	PRIMARY
> To appropriate management of patients with mobility difficulties with ictus.	PRIMARY/SECONDARY
> To appropriate management of patients with advanced-phase COPD.	PRIMARY/SECONDARY
> To appropriate management of patients with advanced-phase heart failure.	PRIMARY/SECONDARY
> To appropriate management of patients in a confusional state.	PRIMARY/SECONDARY
> To know about and be able to prevent pressure ulcers.	PRIMARY
> To know about and be able to prevent respiratory complications.	PRIMARY
> To know about and be able to prevent venous thromboembolism.	PRIMARY
> To know about and be able to prevent musculo-skeletal complications.	PRIMARY
> To know about and be able to prevent genito-urinary complications.	PRIMARY
> To know about and be able to prevent the risks of polypharmacy.	PRIMARY/SECONDARY
> To deal appropriately with nutritional deterioration.	PRIMARY/SECONDARY
> To know how to treat pressure ulcers correctly.	PRIMARY/SECONDARY
> To rational use of diagnostic tests.	PRIMARY
> To know how to draw up a rehabilitation plan for the treatment of immobility and how to stop it progressing.	PRIMARY/SECONDARY
> To know how to change a bladder catheter.	PRIMARY
> To know how to insert a nasogastric tube.	PRIMARY
> To know the criteria for hospital referral.	PRIMARY
> To know how to train the carer of the patient with mobility difficulties.	PRIMARY
> To know and inform the family appropriately. Use the available social and healthcare resources for each situation correctly.	PRIMARY
> To assess the family and psychosocial context of families with patients with mobility difficulties.	PRIMARY
PRIORITY II	
> To know how to treat complex pressure ulcers.	PRIMARY/SECONDARY
PRIORITY III	
> To know how to change a gastrostomy tube.	PRIMARY/SECONDARY
> To know how to perform paracentesis.	PRIMARY/SECONDARY
> To know how to use suction.	PRIMARY/SECONDARY

9.2.8. Health care for terminally-ill patients, the bereaved and carers

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Identify the medical complications of patients with terminal disease.
2. Identify psychosocial problems.
3. Monitor medical complications.
4. Communicate with the patients and their families.
5. Programme and organise care in the home.
6. Coordinate health care for terminal patients, the bereaved and carers, with professional nurses and social workers.
7. Coordinate social and health care resources within the health care locality.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > Identification/diagnosis of cancer pain syndromes. > Identification/diagnosis of pulmonary complications. > Identification/diagnosis of digestive complications. > Identification/diagnosis of neurological complications. > Identification/diagnosis of psychiatric complications. > Identification and referral if necessary of urgent problems. > Recognition of the psychological adaptation of patients. > Recognition of the psychological adaptation of families. > Therapeutic approach to pain, use of opiates. > Therapeutic approach to respiratory, digestive and neuropsychiatric complications. > Communication with patients and their families. > Diagnostic/therapeutic approach to the process of dying at home. > Death certification. > Bereavement management. 	<p>PRIMARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY PRIMARY PRIMARY/SECONDARY PRIMARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > Detecting patient's care needs. > Detecting psychosocial problems of care at home. > Use of the relevant symptom assessment scales. > Home management of alternative methods to oral administration. > Performing therapeutic techniques in the home (nasogastric tube, paracentesis). 	<p>PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > Community intervention to improve the care support network. > Links/coordination with social and healthcare services. 	<p>PRIMARY/SECONDARY PRIMARY/SECONDARY</p>

9.2.9. Health care for families at social risk: socially excluded people, disabled people, family violence

9.2.9.1. Socially excluded people

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Identify people at risk of social exclusion: immigrants, drug addicts, minority ethnic groups such as gypsies, people with mental disorders, etc.
2. Identify conditions of poverty, marginalisation or overcrowding among socially excluded people.
3. Manage the most prevalent health problems among socially excluded people.
4. Coordinate health care for socially excluded people with professional nurses and social workers.
5. Know about and use, in a coordinated way, other social community resources which will help solve the problems of socially excluded people and foster their integration.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To take an integrated social history. > To identify situations of poverty, marginalisation or overcrowding. > To provide easy access to the surgery for socially excluded people, and eliminate barriers. > To be aware of and identify community-acquired diseases in socially excluded people. > To manage the diagnosis and treatment of mental disorders in socially excluded people. > To know the socio-cultural issues that influence health and illness among socially excluded people. > To identify the personal and family resources of socially excluded people. > To be able to use the existing social resources in this area. 	<p>PRIMARY PRIMARY PRIMARY PRIMARY/SECONDARY PRIMARY PRIMARY PRIMARY PRIMARY/SECONDARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To identify the meaning of different presenting symptoms and their association with the socio-cultural expression of disease. > To undertake community health education interventions with groups of socially excluded people. 	<p>PRIMARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > To be able to minimize communication difficulties with socially excluded people. > To understand the emotions and psychological conflicts of socially excluded people. > To know about and take part in strategies that will attract socially excluded people: outreach techniques, work with peer groups/equals, etc. 	<p>PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY</p>

9.2.9.2. Disabled patients

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Recognise and diagnose the most frequent physical and psychological disabilities.
2. Draw up a specific plan for treating each disabled patient.
3. Provide disabled patients with the health care envisaged in primary care. Individualised care.
4. Coordinate health care for the disabled with nursing staff, rehabilitation, social workers and other care facilities and institutions.
5. Tailor the management and organisation of the health centre to their functional characteristics (removal of structural barriers).

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <p>> To know:</p> <ul style="list-style-type: none"> • The concept of disability and incapacity. • The main learning disabilities. Down's syndrome. Intellectual disabilities. • The main sensory disabilities. Total and partial blindness. Total and partial deafness. • The main motor disabilities. Cerebral palsy. Amputations. • After-effects of traffic accident trauma. • How to identify and establish a relationship of trust between the disabled person and the carer. • What a health centre free of structural barriers should be like. <p>> To establish:</p> <ul style="list-style-type: none"> • A healthcare plan for each of these disabled groups, including: <ul style="list-style-type: none"> • Preventive, general and specific interventions. • Healthcare interventions equivalent to any other patient. • Treatment of chronic diseases. • Rehabilitation. • Psychological and emotional support for patients and their carers. • Administrative procedures and information about ways of obtaining social support, economic benefits, prosthetic limbs and other devices, clinical materials and others. <p>> To refer disabled patients: according to criteria to the appropriate level of health or institutional care.</p> <p>> To organise: the provision of this entire spectrum of healthcare within the usual activities of the health centre.</p> <p>> To coordinate: this entire spectrum of healthcare with:</p> <ul style="list-style-type: none"> • Nursing staff. • Rehabilitation and physiotherapy. • Social workers. • Other care levels. • Other institutions. • Self-help groups. 	<p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY</p> <p>PRIMARY PRIMARY PRIMARY PRIMARY/SECONDARY PRIMARY/SECONDARY PRIMARY/SECONDARY</p>
<p>PRIORITY II</p> <p>> To know about the legislation regarding healthcare for disabled patients.</p>	<p>PRIMARY</p>

9.2.9.3. Family violence

OBJECTIVES

On completion of their training, family medicine registrars will be able to demonstrate:

1. Knowledge of the types of abuse and be able to detect them in their early stages in the surgery, through the identification of risk situations, signs and symptoms of domestic violence.
2. Knowledge of and ability to apply specific consultation guidelines when there is suspicion of domestic violence.
3. Ability to make a diagnosis of abuse and assess its severity, while evaluating immediate risk.
4. Ability to perform a physical examination, psychological assessment (attitudes and emotional state) and draw up an integrated and coordinated intervention plan.
5. Knowledge of the intervention guidelines (what to do and what not to do) when dealing with sexual aggression.
6. Ability to complete correctly the injury report for submission to the judge.
7. Knowledge of what social and healthcare resources are available, how to access them and referral criteria.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY I	
> To know about situations of risk and vulnerability for victims of abuse and to identify signs and symptoms of domestic violence.	PRIMARY
> To know about and be able to apply clinical interview guidelines in this situation (attitudes and communication skills).	PRIMARY
> To manage diagnosis of abuse and assess its severity, while evaluating risk: chronic, acute, potential risk of injuries and threat to life.	PRIMARY
> To perform a physical examination and find out about the signs to look out for and interventions to be avoided when carrying out examinations to find signs of violence, and be able to carry out a basic psychological assessment (attitudes and emotional state).	PRIMARY
> To inform the patient and know which urgent interventions are required.	PRIMARY
> To know the intervention guidelines when dealing with sexual aggression.	PRIMARY/SECONDARY
> To complete the injury report correctly.	PRIMARY
> To know the possibilities for preventing domestic violence at primary healthcare level.	PRIMARY
> To be able to draw up an integrated and coordinated intervention plan, in collaboration with social workers, the hospital, social services.	PRIMARY/SECONDARY
PRIORITY II	
> To know the available healthcare, social and legal resources, how to access them and referral criteria.	PRIMARY/SECONDARY
> To provide information and coordinate with the paediatrician if a woman has children, in order to prevent them being abused.	PRIMARY/SECONDARY
PRIORITY III	
> To know about the repercussions of domestic violence in the family circle and the possibilities of intervention by the family.	PRIMARY
> To know the correct attitude and intervention guidelines with regard to the perpetrator of the abuse.	PRIMARY

9.2.10. Common features in the approach to population groups and groups with risk factors included in sections 9.2.1. to 9.2.10

A) PLACES OF LEARNING, RECOMMENDED INTERNSHIP TIMES FOR LEARNING IN CONTEXT

Subject	Place of learning	Time
Health care for children	Health care for children* Paediatric service** Paediatric emergencies*	2 months
Adolescent health care	Health Centre* Consultations for young people**	* During the entire period envisaged for this internship, shared with other activities ** 1 month (optional)
Women's health care	Health Centre* Acute and emergency care* Gynaecology and obstetrics service**	* During the entire period envisaged for this internship, shared with other activities ** 2-3 months
Adult health care	Health Centre*	* During the entire period envisaged for this internship, shared with other activities
Health care for workers	Health Centre* Disability assessment unit** Specific healthcare resources**	* During the entire period envisaged for this internship, shared with other activities ** 1 month (optional)
Health care for older adults	Health Centre* Specific healthcare resources**	* During the entire period envisaged for this internship, shared with other activities ** 1 month (optional)
Health care for patients with mobility difficulties	Health Centre* Specific healthcare resources**	* During the entire period envisaged for this internship, shared with other activities ** 1 month (optional)
Health care for terminally ill patients/the bereaved/carers	Health Centre* Specific healthcare resources**	* During the entire period envisaged for this internship, shared with other activities ** 1 month (optional)
Health care for families at social risk	Health Centre* Social worker* Specific healthcare resources**	* During the entire period envisaged for this internship, shared with other activities ** 1 month (optional)

* Basic facilities for learning in context, mainly for Priority I activities and primary-care responsibility level.

** Complementary facilities for carrying out some Priority I activities and Priority II and III activities and secondary- and tertiary-care responsibility levels. The recommended facilities ** will depend on the availability and training skills acquired, and the times will be adjusted accordingly in each training unit.

B) TRAINING METHODOLOGY

The recommended methodology for these groups must be based on the combination of all the techniques and possibilities of: self-directed learning, learning in context, courses, workshops and group work. The training unit will adapt and combine all these methods according to the particular characteristics of the place where family medicine registrars are undergoing training and their needs. This means that some of the internships recommended in the above table, particularly those involving the acquisition of skills, may be complemented or replaced by other training methods if the training benefits from these internships are not sufficient. We recommend 100 hours of theory and practical classes distributed throughout the four years of training, in order to acquire and improve clinical competencies in each of the areas of individual health care, population groups and at-risk groups.

C) ASSESSMENT METHODOLOGY

In these areas, direct tutoring by the tutor or person in charge of the department will be the most suitable way of assessing the extent to which the aims have been acquired, although we recommend objective and standardised instruments be included in this methodology. It is important to remember the extreme usefulness of other assessment methods such as the introduction/discussion of cases, video-recording techniques, clinical history audits, etc., adapted as appropriate to the individual registrar and their field (see chapter on assessment).

D) RECOMMENDED BIBLIOGRAPHY

The recommended bibliography is included in appendix I and II about sources of information. We particularly recommend the following bibliography, by areas:

HEALTH CARE FOR CHILDREN

- Arístegui Fernández J. Manual de vacunas en Pediatría. 2nd edition. Madrid: Editorial Médica Panamericana; 2001.
- Illingworth RS. The normal child: some problems of the early years and their treatment, 10th edition. New York: Churchill-Livingstone; 1991.
- Bras J, De la Flor JE, Masvidal RM. Pediatría en Atención Primaria . 2nd edition. Barcelona: Springer-Verlag; 1997.
- Muñoz Calvo MT, Hidalgo Vicario MI, Rubio Roldán LA and Clemente Pollán J. Pediatría extrahospitalaria. Aspectos básicos en Atención Primaria. 3rd edition. Madrid: ERGON; 2001.
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Educational contents in the training area for competencies in family health care

The family plays a vital role in the processes of health and illness of its members as anyone who has worked in primary healthcare will have observed in practice. This phenomenon can be seen from at least four different perspectives:

1. The family is the main source of care when one of its members falls ill.
2. Family characteristics can determine the relationship of its members to the health system.
3. Family dysfunction can play an important role in the appearance and continuation of the disease.
4. There are different patterns of family response to the appearance and development of diseases.

It is also common knowledge that the health of a community depends to a large extent on the biopsychosocial health of its family networks. Therefore, the family is not only an important variable in the prevention of disease and the promotion of health, but becomes essential in care, rehabilitation and recovery. It is therefore appropriate to establish the essential concepts which will enable Family and Community Medicine registrars to gradually develop the foundations for their future work in family health care. This programme therefore reviews the theory and focuses family care on primary care practice, specifying the different levels and models of intervention as general objectives, and differentiating between a family orientated approach (or anticipatory assessment), from a family systems approach to clinical practice, right up to the level of family therapy.

Basically, we use the term *family orientated approach* to refer to the attitude of the professional. From this perspective the individual symptom or demand is assessed by taking the individual's family context as a reference, regardless of whether or not the family is present during the consultation. It is not a case of substituting care of the individual for care of the family; on the contrary, it is about imagining the patient within their family context and taking the latter as a reference for the health-care/illness problem being presented. A family orientated approach to practice rests on two fundamental premises: the acceptance of the biopsychosocial model and the incorporation of a holistic perspective.

The second model is somewhat more complex, and attains the fourth level of intervention, as it requires specific training to detect and neutralise dysfunctions that may exist in the family circle. We call this process the *family systems approach* as we act on the family system using a specific therapeutic intervention. By defending the family systems approach we accept that situations exist in which interventions across the entire family as a unit can offer advantages over the individual approach. We consider that the family consultation is the basic intervention tool for this type of approach.

Finally, and as Priority III, we recommend psychotherapy [brief family therapy] that does not require the symptoms to be defined as psychological in order for them to be treated. Its theoretical foundations also lie in the general theory of systems and communication theory, as well as radical constructivism.

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Consider care for patients in their family context.
2. Determine the family structure and identify the developmental crises the family may undergo throughout its life cycle.
3. Detect psychosocial problems and provide early assessment for the family.
4. Perform a systematic assessment and intervene in a planned way when family problems arise.
5. Alter the family system: family therapy.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY I	
> To know the factors involved in the genesis of psychosocial problems.	PRIMARY
> To recognise the different variables that influence the healthcare/illness process.	PRIMARY
> To establish different healthcare levels.	PRIMARY
> To identify the ways in which the family is a source of care and a source of problems.	PRIMARY
> To understand the family as a system and use the systemic approach model.	PRIMARY
> To recognise the configuration of the family structure.	PRIMARY
> To include tools for family examination in clinical practice:	PRIMARY
• To build and interpret genograms.	
• To build family maps.	
• To assess the family function using the family APGAR test.	
• To manage the scale of stressful life events.	
• To identify and analyse the social network.	
• To assess the dimensions of social support.	
> To know about growth and development variables in each stage of life in order to provide medical care for:	PRIMARY
• Pre-weaning and early childhood.	
• The age when children begin to play and school age.	
• Adolescence.	
• Young adults and mature adults.	
• Older adults.	
> To identify the time in the life cycle in order to verify how families adapt to:	PRIMARY
• Forming couples.	
• Families with small children.	
• Families with adolescents.	
• Breakaway phase	
• Empty-nest phase.	
> To identify roles, functions, rules and family rituals.	PRIMARY
> To design early family assessment strategies.	PRIMARY
> To review the risk factors raised by the transition from one phase to another in the family life cycle, and to know how to manage them in the following situations:	PRIMARY
• Serious and/or chronic disease.	
• Patients with mobility difficulties.	
• Carer exhaustion.	
• Terminal illness.	
• Bereavement processes.	
> To establish a long-term relationship between patients and their families.	PRIMARY
> To accept that families are a valuable resource and a source of support for the suitable treatment of the disease.	PRIMARY
> To share the responsibility for health care with patients and their families.	PRIMARY
> To be aware that our own personal and cultural values can impinge on the care provided to patients and family members with different systems of belief.	PRIMARY
> To show unconditional respect for patients and their families as people, and a group that makes its own decisions.	PRIMARY
> To be receptive to the way patients and their families express their suffering.	PRIMARY

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY II	
> To know the ecological model.	PRIMARY
> To assess the external frontiers of the family, the boundaries between individual subsystems and frontiers.	PRIMARY
> To identify the family member who falls ill most frequently.	PRIMARY
> To focus attention on the patient within the family context.	PRIMARY
> To interpret individual dysfunction as symptomatic of family dysfunction.	PRIMARY
> To view the family as an interactional system.	PRIMARY
> To assess the ability of the family system to create a flexible balance between stability and change.	PRIMARY
> To understand the basic axioms of the communication process.	PRIMARY
> To consider «functional» communication within the family as the communication in which there is a minimum difference between the feeling manifested and the messages conveyed.	PRIMARY
> To recognise and perceive triangulation as an anomalous form of communication.	PRIMARY
> To foster direct and assertive communication, which will allow the negotiation and resolution of problems among the different members of the family system.	PRIMARY
> To promote the expression of feelings that will allow conflict, confrontation and disputes to surface.	PRIMARY
> To make an operative assessment together with the family of problems, resources and intervention plans.	PRIMARY
> To collaborate with patients and their families in the identification of problems, detection of resources and implementation of intervention plans.	PRIMARY
> To build and interpret an ecomap.	PRIMARY
> To assess the evolution of the problems detected.	PRIMARY
> To carry out a family interview in the following cases:	PRIMARY
<ul style="list-style-type: none"> • Patients suffering from anxiety or depression. 	
<ul style="list-style-type: none"> • Dysfunctional couples. 	
<ul style="list-style-type: none"> • Behavioural problems in children and difficulties with adolescents. 	
<ul style="list-style-type: none"> • Addictions. 	
<ul style="list-style-type: none"> • Somatisers. 	
PRIORITY III	
> To guarantee the coordination and continuity of care for patients and their families who require Family Therapy.	SECONDARY
> To work with other professionals who are treating family members.	SECONDARY
> To provide support for the family's needs when the patient is receiving specialised treatment.	SECONDARY
> To distinguish between a complaint and a demand for medical attention by the family.	SECONDARY
> To achieve the expression of objectives in affirmative sentences that explain the behaviours to be adopted.	SECONDARY
> To identify the appropriate family behaviours that will prevent the reoccurrence of problems (exceptions).	SECONDARY
> If this is not possible, to look for the common denominator of behaviours that have been seen to date, by trying to solve the problem in question (common denominators).	SECONDARY

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
> To develop solutions geared to achieving more than what actually solves the problem, in order to bring about greater improvements.	SECONDARY
> To develop solutions that are as different as possible from the common denominator of the behaviours that led to the problem.	SECONDARY
> To put together and be able to deliver solutions that are as different as possible from the common denominator of the behaviours that led to the problem.	SECONDARY
> To identify the way in which each member of the family can cooperate in order to adapt the solution and maximise the probabilities of it being achieved.	SECONDARY

RECOMMENDED TRAINING METHODOLOGY

The basic educational method in this area consists of work undertaken at the doctor's surgery with the tutors, commenting on, studying and presenting cases, without forgetting individual study and the case-presentation sessions. To complement this, we recommend further study through an active and participative approach, in theoretical and practical sessions. The theoretical content should be taught through brief participative presentations and/or specially designed exercises. Family medicine registrars will work in small groups, to which they can bring their own experience, as well as discuss common problems and suggest feasible and useful alternatives for each professional. The use of role-playing techniques and working with video recordings, provide registrars with the opportunity to «experience» (try out, exercise) the basic skills for a family systems approach under supervision and in «low-risk» conditions.

The activities can comprise the following:

- Initial training course.
- The creation of a series of genograms (one for each stage in the family life cycle), supervised by the tutor and assessed by the training unit (TU) specialist.
- The observation of consultations carried out by the tutor, with their subsequent explanation.
- The introduction of some aspects of family health care in the presentation of clinical cases in the group of family medicine registrars/tutors.
- The reading of the recommended basic bibliography, supervised by the tutor or the TU. Dealing with doubts and questions.
- Group role-playing exercises in order to perfect family consultation techniques.
- Group discussion with family medicine registrars/tutors about the presentation of clinical cases with a family systems approach.
- Supervision of family interviews by the tutor and TU specialist.
- Reading the indicated basic bibliography, supervised by the tutor or the TU. Dealing with doubts and questions.
- Programming consultations initially to develop skills in the method, with supervision by the tutor/tutoring groups which other family medicine registrars take part in.
- Specific clinical-case sessions, during which cases are presented in order to assess their evolution.
- Training of support groups to draw up solutions at the end of the family consultation, in programmed consultations, which follow the progress of the consultation through video in real time and always with the family's consent.

- Group role-play exercises to perfect family consultation techniques and develop solutions.
- Reading some of the books on basic methodology, supervised by the tutor or the TU. Dealing with doubts and questions about the method.

RECOMMENDED PLACE OF LEARNING

- Health Centre.
- FCM Training Unit.
- (Specific) Family Healthcare Units [where there are any].
- Mental Health Units.
- Other Family Care Units in Social Services and Family Courts, for instance, and on occasions, internal medicine service and medical specialities during the first year's rotation.

RECOMMENDED LEARNING TIME

This area will be developed throughout the entire internship period at the health centre, together with other activities.

30 hours of class time per week will be devoted to theoretical and practical learning.

RECOMMENDED ASSESSMENT METHOD

These interventions together with the levels of training in the different educational objectives will be assessed regularly. It will be necessary to include the results of the objective assessment of real consultations and practical cases proposed by the tutor, together with the impressions of the tutor and family medicine registrars, the analysis of simulated cases, periodic introduction of cases and clinical history and family history audits.

The activities of year one will take place, following the course, during the second month's rotation at the health centre where the different genograms will be presented and discussed.

The activities of year four will be assessed throughout their internship at the health centre, culminating with the presentation of a family consultation by the family medicine registrar at their place of work.

The recommended assessment will be on clinical cases and will focus on:

- Fulfilment of the agreed objectives.
- Resolution of the problem that has been dealt with (mental health problems, relationship problems); or improvements in the situation being dealt with (for instance institution of prevention and monitoring programmes).
- Levels of satisfaction in the family.
- Supervision by the tutor through case presentations or preferably by video-recording if possible.

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Educational contents in the training area for competencies in community health care

It is important to bear in mind the difficulties that exist in training family medicine registrars in Community Health care, as it is necessary to devote specific resources and efforts to this type of training. Family medicine registrars must be aware that good family doctors cannot just restrict themselves to dealing with the questions raised by patients at the surgery; they must also deal with the healthcare needs of the entire population under their care and learn that community interventions, as a health promotion strategy, are among their functions.

Training in community care includes a wide variety of knowledge and skills, which are also based on individual care at the doctor's surgery. It is important that family medicine registrars see the links between individual and community care and the bridges that need to be built between both, thereby avoiding them being viewed as independent and unconnected. From the doctor's surgery, registrars must assess the context of the patients within the community, both in the analysis of their problems as well as in possible interventions. They must recognise the limits of their actions in the surgery itself and know which community resources might be effective. Family doctors who tutor registrars must therefore become actively involved in community care training and avoid delegating it to professionals who work specifically in this field. This does not preclude however specific collaborators from bringing their knowledge and skills to intervention and participation activities.

It is of fundamental importance that family doctors acquire a favourable attitude towards working in partnership with other community organisations and resources that empower citizens and help them share and play a central role in health care and its promotion.

OBJECTIVES

On completion of their training, family medicine registrars will demonstrate their ability to:

1. Provide individual care at the surgery, while taking into account the social and community context of the patients, both in terms of the conditioning factors of the problems and possible interventions and as well as the effectiveness and efficiency of individual interventions on the health of the community.
2. Identify and prioritise the healthcare needs and problems of the community through involvement in it.
3. Identify the resources available to the community, know about their practical uses and foster their development.
4. Develop and prioritise community programmes and interventions with the involvement of the community.
5. Develop (implement) community programmes and assess them with the community's participation.
6. Know the conceptual bases of the qualitative methodology and its application to the practice of primary care.
7. Carry out group health educational interventions designed to empower and foster participation. This requires knowledge of the learning characteristics of adults and the dynamics of group processes.
8. Participate in intersectoral coordination, particularly with the social services sector.
9. Work in partnership in real community development initiatives involving the promotion of health and health care, using active listening skills and recognising the leading role of the community.

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY I	
> To be aware of demographic and epidemiological knowledge when providing care for patients, particularly in the case of chronic diseases: prevalence and incidence, number of expected cases among the population being treated, coverage of diagnosis and treatment.	PRIMARY
> To know about and bear in mind the effectiveness and efficiency of individual health care on the health status of the community (avoidable morbidity and mortality etc.).	PRIMARY
> To bear in mind the social milieu and community context of individual care for each patient, identifying the conditioning social and community factors relevant to the health problems.	PRIMARY
> To know how to identify the limitations of medical consultation when treating the different health problems of each patient, and use the resources available to the community which may be beneficial in each case.	PRIMARY/SECONDARY
> To compile and present the existing data about the community and identify and prioritise community health problems, as well as finding out about and knowing how to use information systems and registers.	PRIMARY
> To study the distribution and determining factors of the need for community healthcare.	PRIMARY
> To know the conceptual foundation and techniques for qualitative research particularly interviews with the community and group techniques. To differentiate between methodology, method and technique.	PRIMARY/SECONDARY
> To know about and take part in qualitative methods to identify and prioritise community health needs and problems, as well as to implement and assess community interventions: interviews, focus groups, etc.	PRIMARY/SECONDARY
> To know about and use the health promotion and health care information resources available to the community and gather relevant information for each of them	PRIMARY
> To perform a critical analysis of an existing healthcare programme and the methodology on which it is based, contributing opinions about its positive and negative aspects and proposing alternatives to improve it.	PRIMARY
> To play an active part in the interventions of an existing community health programme, carrying out a critical analysis of its implementation.	PRIMARY/SECONDARY
> To perform a critical analysis of the methods and outcomes of a community health programme evaluation, proposing alternatives to improve it.	PRIMARY/SECONDARY
> To take part in group health education interventions designed to empower and foster participation, in partnership with other non-medical professionals (nursing staff, social workers and others).	PRIMARY/SECONDARY
> To play an active part in coordinated activities with the social worker at the health centre and/or with Social Services.	PRIMARY
> To acquire active listening skills when communicating with citizens and social and community organisations, fostering their empowerment, prominence and active participation in looking after and maintaining their health.	PRIMARY/SECONDARY
> To recognise the different possibilities for community intervention according to the social environment. To assess the different possibilities for community action in urban and rural settings.	PRIMARY

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TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY II	
<ul style="list-style-type: none"> > To participate actively in an analysis of the health status of a community, using quantitative and qualitative methods, with the active participation of the community (key informants, representatives from community associations, professionals from other institutions), with a realistic and efficient rapid appraisal, and drawing conclusions that are really useful to interventions at a health centre. 	PRIMARY/SECONDARY
<ul style="list-style-type: none"> > To coordinate interprofessional focus groups with the community, analysing the information obtained and reaching reliable conclusions. 	PRIMARY/SECONDARY
<ul style="list-style-type: none"> > To compile a community health programme or improve one that has already been drawn up and assessed. 	PRIMARY/SECONDARY
<ul style="list-style-type: none"> > To appraise a health programme or part of one, drawing practical conclusions and making specific proposals that could improve it. 	PRIMARY/SECONDARY
<ul style="list-style-type: none"> > To apply a qualitative group research technique to a hypothetical case or real situation. 	PRIMARY/SECONDARY
<ul style="list-style-type: none"> > To play an active role in intersectoral partnership initiatives. 	PRIMARY/SECONDARY
<ul style="list-style-type: none"> > To play an active role in community participation interventions at a health centre with active listening skills, and recognising the central role played by the community in promoting and looking after their health [empowerment]. 	SECONDARY
PRIORITY III	
<ul style="list-style-type: none"> > To design and coordinate an analysis of the health status of a community, using quantitative and qualitative methods, with the active participation of the community (key informants, representatives from community associations, professionals from other institutions), with a realistic and efficient rapid appraisal, and drawing conclusions that are relevant to the health centre. 	SECONDARY
<ul style="list-style-type: none"> > To use qualitative methodology to carry out a research project or task about aspects related to community health or the assessment of health services from the viewpoint of the population. 	SECONDARY
<ul style="list-style-type: none"> > To design and coordinate group health education interventions to empower and foster participation. 	SECONDARY
<ul style="list-style-type: none"> > To coordinate a plan which will introduce and develop an intersectoral partnership process for the promotion of health care in a community. 	SECONDARY
<ul style="list-style-type: none"> > To coordinate a plan which will introduce and develop a continuous community participation process at a health centre. 	SECONDARY

RECOMMENDED TRAINING METHODOLOGY

A) Self-directed learning and learning in context

- Study and reading, followed by discussion with the tutors.
- Practical self-directed learning as the culmination of a training process, through supervised implementation: carrying out interviews and group and community activities under supervision.
- Introduction of patient-centred clinical cases, which take into account the social context and community-level conditioning factors, the limitations of the medical intervention at the surgery, and the possible referral or use of group activities, and the resources available to the community (self-help groups, group education, community associations, social services).
- Consultation and coordinated care for patients with the social worker or social services.
- Supervision of medical records, checking to see if the social and community context has been taken into account and the resources available to the community have been made good use of.

B) Group work

- Role-play based on interviews with key informants from the community and others, group activities, meetings with other community groups.
- Observation of participants in group, community and intersectoral coordination interventions and the subsequent conclusions about what has been observed.

C) Classes and workshops

- Theoretical and practical courses, workshops and seminars on identifying and prioritising healthcare needs and problems, programming and assessing community programmes, qualitative methodology, methodology of the group learning process, community participation.

With regard to training in qualitative methodologies, such as interviews, group activities, community meetings, we do not recommend untutored, self-directed learning activities and distance-learning courses. This is because they impinge more on knowledge than attitudes, and as a result can lead to greater levels of theoretical and practical disassociation.

IMPORTANT NOTE:

The entire teaching methodology in the community health care area should particularly bear in mind the objective of promoting attitudes that will recognise the importance of empowerment and real and active prominence of the community and their organisations in promoting and looking after their health, and the role of the family doctor as the facilitator of this process. During the training process, particular care should be taken over the attitudes shown, at least as much as if not more than knowledge and skills.

RECOMMENDED PLACES OF LEARNING

- Health Centre to which the family medicine registrar is assigned. This must include activities that non-medical professionals can take part in (nursing staff and social workers).
- Care provided through specific activities at other health centres (group education, interviews and meetings with the community, groups, associations, health committees, etc.).
- Social Services, selected individual consultations but mainly group activities.
- Community health organisations: self-help groups, associations of people with illnesses, other associations.

NOTE:

Given the shortage, and even absence of specific community health care interventions at many accredited health centres, it may be necessary to draw on wider training resources and find ways of linking up with the health centres that have the required partnerships with community organisations in place, in which registrars can participate. Although established «rotations» are not essential, it is important that registrars are given opportunities to attend specific activities. This will require very good planning by the training units and the collaboration of all tutors. Some of the time assigned to the health centre during year two of the internship could also be devoted to this type of training and suitable centres chosen for this purpose.

RECOMMENDED LEARNING TIME

- During years one, two and three, theoretical and practical work through self-directed learning, group work, classes and workshops without an established rotations. At least 30 hours should be given to theoretical and practical training through group work, classes and workshops.
- Some of the time assigned to health centres in year two can be devoted to this type of training, choosing centres which are more active in community work.
- Practical training will mainly take place during year four, not through a dedicated period, but through learning in context and active participation in specific interventions throughout the year. This approach requires good organisational planning while making sure it is not hindered by other training activities.
- The time devoted to practical training in this area during year four should range from an obligatory minimum of 5% of overall training time to a maximum of 10%. In view of the fact that participation in training activities in this area would normally not involve a full day's work (interviews, group activities, meetings with community groups, etc.) the time dedicated is calculated by activities taking up half a working day, meaning that the total number of [half-day] training activities to be carried out throughout the year will range from an obligatory minimum of 22 activities (one every two months and 12 days fully dedicated to training) and a maximum of 44 activities (one every week and 24 days fully dedicated to training).

RECOMMENDED ASSESSMENT

- Supervision of consultation given by the family medicine registrar, medical record and introduction of patient-centred clinical cases: to analyse the community context of the problems identified, the limitations of interventions at the surgery and the possible use of resources available to the community in each case.
- Assessment of prepared documents: gathering and presentation of data and identification and prioritisation of healthcare needs, community programmes that have been drawn up and proposals for alterations, appraisal of programmes, design and planning of interventions, etc. To give special value to the participation of the community in the processes.
- Supervision of written or verbal conclusions by the family medicine registrars following observations of specific interventions.
- Supervision of interventions by the family medicine registrars: interviews, group education interventions, participation in meetings.
- The assessment must include, as a priority, the attitude of the family medicine registrar which should be favourable to the active community participation in the promotion of health and health care avoiding attitudes of «power» and authority over them.

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	12

Educational contents in the training area for competencies in education, training and research

12.1. Education and training

Family and Community Medicine specialists face the daily challenge of keeping abreast of the ever-growing body of knowledge, skills and attitudes that shape their specialist area. In this respect health services, scientific societies and different professional groups run **continuing medical education** programmes whose basic mission is to provide family doctors with the necessary tools to maintain and improve their competencies, both with regard to knowledge as well as skills and attitudes. The implementation of these programmes must take into account the cognitive process (reasoning and decision-making) rather than following the traditional compilation of data in the form of a tutor-centred talk or classic text book. They will also include new aspects such as individualisation of training, fostering self-responsibility during training and a greater specificity of educational sources and subjects. As the need for family doctors to update their skills increases, the need and responsibility to adapt to new communication, information and management technologies also increases exponentially: technologies which must be included in the continuing education activities of the primary healthcare team.

Throughout the internship period, family medicine registrars must be made aware of the current and future need to undertake continuing medical education activities. They should take part in continuing medical education at their health centre in order to internalise the need for it to form a part of their professional lives, as an essential way of guaranteeing their patients appropriate health care.

In short, throughout their training, family medicine registrars must internalise the fact that continuing training and the accreditation of professional competence is a guiding principle of the practice of health care, described by article 12 of Law 44/2003 for the Regulation of Healthcare Professions as «a right and a duty» which must be required of the Health Institutions where they provide services in the future.

12.1.1. Continuing medical education

In continuing education, it is first important to define and know about educational needs, subsequently planning suitable training activities to improve any deficits in competencies. There are a number of programmes designed with this aim in mind, which will be useful to family doctors, with a broad spectrum of contents, activities and methodologies. In theory, continuing medical education programmes for family doctors must respond to the necessary updating and renewal of the skills acquired during the internship, and developments in their fields of competence throughout their professional lives.

Continuing education, as stipulated in article 37 of Law 44/2003, mentioned previously, and article 40 of Law 55/2003, which approved the Framework Statute for Statutory Health Service Personnel, will be a fundamental tool for the acquisition of the levels of «professional development» and «professional career» which are regulated by both laws.

In this context, competence assessment procedures acquire specific importance, both for family medicine registrars during training and on completion of their internship, and for practising family doctors, completed in the latter case with accredited continuing education activities. It is therefore important for family medicine registrars to familiarise themselves with the new teaching and assessment methodologies and to include, for instance, activities with simulated and standardised patients.

12.1.2. Updating knowledge through new technologies

As is the case with other professions, the computerisation of medical knowledge and the organisation of health care must be one of the main features of training and continuing education activities in medicine. Of all the medical specialities, family medicine needs to place particular emphasis on updating to new technologies, due to its particular communication needs, information and management with regard to the community, its patients and the rest of the health system. In order to do this, it has at its disposal a variety of media such as the publication in electronic format of many specialist journals in the field, congresses organised by scientific societies, the development of multimedia teaching tools (multimedia courses or expert systems for diagnosis), virtual congresses, specialist courses, virtual patients, discussion forums and literature reviews.

The internet is an essential tool where resources can be found free of charge for continuing medical education appropriately geared to the general public or to a specific group of professionals.

There are many advantages to acquiring competencies in these new technologies for the continuing medical education process itself, because these methods will be particularly useful, not just during the training period, but during the registrar's future professional life, enabling them to create their own learning environments consisting of virtual tuition, on-line assessment, etc.

The popularity of the internet has given patients greater access to medical information. The traditional inequality in scientific and medical information between doctor and patient is beginning to fade, with the added problem that patients can access more information which is also incorrect or unnecessary. All family doctors must have access to the medical information used by their patients and have at their disposal the internet resources provided by universities, the pharmaceutical industry and communication companies which provide them with free access to updated information, search tools to find abstracts of articles [available on Medline or not], consultation with experts, etc. Doctors can include routine screenings or checks in these information systems to remind them of the most advisable steps to take. It is likely that the technologies will become more and more simple and therefore easier to use although this in turn, will involve new possibilities and technologies which doctors will have to keep abreast of.

The implementation of the Family and Community Medicine Programme through the training units, must guarantee that registrars are familiar enough with all the communication technologies and the information to use them in their future careers and to incorporate new technologies when they appear.

OBJECTIVES

On completion of their training, family medicine registrars will:

1. Know about systems for determining training deficits and opportunities for improving competencies.
2. Know about and manage the usual sources of professional training and information.
3. Be able to draw up an individualised training plan, geared to the improvement of competencies.
4. Be able to train themselves in the basic skills necessary for the acquisition and transmission of knowledge. .

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
PRIORITY I	
> To perform a critical analysis of progress during training and of the extent to which training plans are used during the internship.	PRIMARY
> To perform a critical analysis of the range of training activities offered with regard to their suitability and quality.	PRIMARY
> To know the different teaching methodology tools for the acquisition of knowledge, skills and professional attitudes.	PRIMARY/SECONDARY

(cont.)

(cont.)

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To undertake interventions to improve communication in the transmission of knowledge. > To deliver clinical training sessions of high quality > To present papers at medical research forums. 	<p>PRIMARY/SECONDARY</p> <p>PRIMARY</p> <p>PRIMARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > To take part in drawing up the educational programme of the training unit. > To participate as trainer in the educational activities programmed by the training unit. 	<p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p>

RECOMMENDED TRAINING METHODOLOGY

A) Self-directed learning:

- Looking up and using information on the Internet.

B) Learning in context

- Putting together educational plans under tuition.
- Presenting clinical sessions and presenting papers at congresses.
- Taking part in educational activities as a trainer.

C) Workshops

- Seminars giving real practice in performing a computer search for the range of available educational activities.
- Taking part in Competence Assessment tests.

RECOMMENDED PLACE OF LEARNING

- Health Centre.
- Sessions/Seminars organised by the training unit throughout the internship period.

RECOMMENDED LEARNING TIME

- Throughout the entire internship period.

RECOMMENDED ASSESSMENT

- Periodic active-tutoring meetings between family medicine registrars and their tutors.
- Objective and subjective assessments of the training activities carried out.

12.2. Research methodology

Quality research must be encouraged as a fundamental tool to generate knowledge and contribute to the progress of the health system, fostering the transferral of research outcomes to clinical practice in order to boost its effectiveness. Research is essential at all healthcare levels and for all healthcare professionals, because it is a way of achieving innovations that make it possible to provide efficient and better quality care.

Primary care is the first point of contact provided by the health service to individuals and the population in a continuing, integral and integrated way, regardless of age, gender, state of health or illness. However there is a particularly striking difference between the high levels of care provided at primary level and its scant presence in current research.

Among the reasons which dictate the need for a change in this respect, we find:

- The existence of uncertainty in the professional practice of family doctors. Uncertainties in their daily work are almost infinite and as a result there are many questions that require answers.
- Primary care deals with diseases at an earlier stage than other healthcare areas. Another differentiating factor is that while other areas can only carry out research into disease, mortality and high technology, primary care is the only level that can research into health as well. Nevertheless the results of research undertaken in other areas are often applied to primary care; areas treating «ideal» patients at specific stages of their illness and from selected age groups which do not match the patterns of the real population treated by family doctors at their surgeries. It is therefore important that the clinical practice of the family doctor should raise questions and seek the best answers for patients at this healthcare level. In this respect the area in which research is conducted can significantly shape the results and the way these are transferred to practice- This in turn affects the true estimate of the prevalence of the disease, the frequency of the conditions presented by patients, the predictive value of the tests used and the expected response to treatment.
- There is an on-going relationship with patients in primary care which provides an opportunity to observe them over uninterrupted periods of time and in their family, working and social environments.
- The sector retains an enquiring spirit: research initiatives are relatively common, as is shown in the major contributions to primary care congresses and scientific meetings or journals in the field. Many of these projects are descriptive, precise studies which with the right support, could lead to quality lines of research.

Lack of knowledge about the factors that condition the health of our fellow citizens, the natural history of the disease, the health services or the type of care we provide, costs society dear, both in economic terms and in physical, mental and social well-being. The continuing accumulation of fact-based knowledge is the cornerstone of progress and primary care cannot be an exception to the rule.

OBJECTIVES

On completion of their training, family medicine registrars will:

1. Know about the main sources of scientific documentation and be able to manage it skilfully.
2. Be able to make a critical reading of manuscripts on the following issues: aetiology, diagnostic trials, therapeutics, prognosis, efficiency.
3. Know the basic principles of designing research projects and have the skills to apply them to the design of a project relevant to their clinical practice.
4. Know the ethical principles of biomedical research and include them both in the design of projects as well as in the way in which findings are incorporated into clinical practice.
5. Be skilled in presenting research results, in the form of articles in journals and communications for scientific meetings (oral presentations, posters).

TRAINING ACTIVITIES GROUPED BY PRIORITY	LEVEL OF RESPONSIBILITY
<p>PRIORITY I</p> <ul style="list-style-type: none"> > To identify the needs for more quality scientific information by formulating the right questions. > To know how to search the main bibliographical databases (Medline, Cochrane Library) and manage them competently. > To be able to critically appraise scientific studies and be able to make decisions about their validity, importance and applicability. > To know the characteristics of clinical practice guidelines and their application to primary care. > To identify the ethical aspects inherent to all biomedical research and the need to guarantee them. > To know the publication guidelines of the main primary care journals and the procedures to be followed by the authors of original manuscripts. > To work on an on-going research project. 	<p>PRIMARY</p> <p>SECONDARY</p> <p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY</p> <p>PRIMARY/SECONDARY</p> <p>SECONDARY</p>
<p>PRIORITY II</p> <ul style="list-style-type: none"> > To have the necessary knowledge and skills to propose/ design a research project relevant to their practice (objectives, type of design, population, sample and sampling technique, study variables), prioritising the selection of pertinent outcome variables. > To know the characteristics, regulations and applications of clinical trials to primary care. > To present research results correctly, in the form of a congress communication (oral presentation or poster). 	<p>SECONDARY</p> <p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY</p>
<p>PRIORITY III</p> <ul style="list-style-type: none"> > To be skilled in identifying and retrieving scientific information on the Internet, with criteria for quality and efficiency in the use of resources. > To carry out a research project. > To know statistical analysis strategies: application framework, usefulness, use restrictions. > To be able to work on the statistical analysis of a research project. > To have the knowledge and skills to write an original manuscript containing the results of a research project they have carried out. 	<p>PRIMARY/SECONDARY</p> <p>PRIMARY/SECONDARY SECONDARY</p> <p>SECONDARY</p> <p>PRIMARY/SECONDARY</p>

RECOMMENDED TRAINING METHODOLOGY

A. Self-directed learning

- Reading secondary publications (Cochrane, Bandolier, Evidence-Based Primary Care, Clinical Evidence, etc.).
- Analysis of published studies that raise ethical problems in their design/application.

B. Learning in context

- Monitoring a research project under tuition.
- Presenting clinical sessions and presenting papers at congresses.

C. Classes

- Classes on research methodology, epidemiology, statistics, evidence based medicine.

D. Group work

- Exercises about real cases; presentation and discussion of articles during regular journal sessions; and discussion during sessions devoted to methodology applied to the proposals of each family medicine registrar.
- Recordings of real or simulated situations.

E. Workshops

- Seminar involving real computer practice.
- Critical appraisal seminars throughout the entire internship period.

RECOMMENDED PLACE OF LEARNING

- Health Centre.
- Sessions/seminars organised by the training unit longitudinally and progressively throughout the internship period.

RECOMMENDED LEARNING TIME

- Throughout the entire internship period.

RECOMMENDED ASSESSMENT

- Formulation of case-based questions (clinical scenarios), according to EBM format.
- Presentation of a research project.
- Presentation of critical appraisal journal sessions.
- Monitoring the evolution of clinical decision-making, basing it on the quality «evidence» available.
- Discussion of real or simulated situations which can be applied to the results of research into clinical practice.

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Responsibility, supervision and evaluation of the education programme

The viability of this programme requires that it be taught within a series of bodies whose training activities and professional profiles fit in perfectly with the educational objectives, within the framework of the Ministerial Order of 22nd June 1995, giving coherence to the entire process.

To achieve this aim and without this precluding adaptation at a future date to whatever changes may be envisaged in the legislation for the development of Law 44/2003, of 21st November for the Regulation of Healthcare Professions and the regulations approved by the Autonomous Communities of Spain in the application of what is envisaged in this law, the following individuals and bodies are considered fundamental to the correct delivery of the education programme of the speciality of Family and Community Medicine:

- **The principal tutor** will be responsible for the family medicine registrar's training and learning process, during the time spent at the health centre and outside it and will be the same one during the entire education period, undertaking continuing and structured contact with the registrar throughout this period. It is recommended that each of the principal tutors have assigned to them a maximum of two family medicine registrars at the same time. The tutor must be a specialist in Family and Community Medicine, without this precluding the transitory regime referred to in section 13.1.3 of this programme.
- **The support tutor.** In addition to the principal tutor, family medicine registrars will also have support tutors specialising in Family and Community Medicine. Principal tutors can be the support tutors for other family medicine registrars.
- **The hospital tutor** is responsible for coordinating and supervising the training of family medicine registrars during periods of in-hospital training. The number of hospital tutors assigned will depend on the number of family medicine registrars on rotation in the hospital. The hospital tutors will have professional experience in accordance with the function they are expected to perform, and if they are Family and Community Medicine specialists this will be particularly valued.
- **Training associates** are specialists and professionals from the different sections of the training unit where the family medicine registrars are working on a rotation basis. Although they are not the tutors of the registrars studying Family and Community Medicine, they contribute to the teaching of this programme and assume the supervision and monitoring of the interventions carried out during these rotations. They are not therefore required to be Family and Community Medicine specialists.
- **Public health specialists** are the healthcare professionals who, although not tutors, contribute to the theoretical and practical training and research envisaged in the programme undertaken at the training unit. They are specialists in Family and Community Medicine, preventive medicine and public health, and can also be professionals with accredited training in teaching and research methodology and the theoretical and practical blocks of the Family and Community Medicine training programme.
- **The training unit coordinator** is responsible for the management, planning and organisation of the training unit and also carries out assessments/monitoring, training and research, and the management and coordination of the training interventions of the primary care tutors. The training unit coordinator must be a specialist in Family and Community Medicine.
- **The Training Unit Advisory Commission** is the collegial body which organises education, supervises its practical application and checks to ensure the training unit fulfils the objectives of the training programme.
- **Other individuals and organisations** regulated by the Autonomous Communities of Spain according to the characteristics and structure of the training units within their jurisdiction.

13.1. Tutors and their relationship with the registrar and management

Tutors are actively working, medical professionals, who are recognised as having a suitable level of training and working environment which qualify them to impart the knowledge, skills and attitudes

inherent in specialised medical training. They assume responsibility for playing an active role in the teaching and learning process of specialist doctors in training, within an institutionalised context.

The tutor is a unique figure in the family medicine registrar's training process. This means that the distinctions at the beginning of this section (principal tutor, support tutor, hospital tutor) are made according to how closely the tutor is associated with the family medicine registrar in individual terms, without there being any hierarchy among any of these figures.

The tutor is a key figure in training family medicine registrars, particularly in the context of this programme which has flexibility as one of its defining characteristics. This flexibility involves the individualisation and personalisation of the training programme by adapting the contents, training times and methods to the needs of each family medicine registrar.

Tutors must meet two basic criteria:

- Be a good family doctor: their competencies and experience must fit in with those described in this programme.
- Be a good trainer, as the quality of the training obtained by the family medicine registrar will depend on the tutor's attitude to training, their preparedness, their ability to convey knowledge and the way they handle interpersonal relationships.

The tutor must plan, stimulate, direct, monitor and assess the family medicine registrar's learning process, by performing the functions stipulated in paragraph 7.3 séptimo. 3 of the Order of 22nd June 1995, and should therefore:

- *Give guidance to family medicine registrars throughout the entire training period.* To do this, the tutor must help them identify their learning needs and the objectives of each rotation, both at the hospital and the health centre; establish their individual training plan with them and, if necessary, the elective internships they have to take part in, informing them about other activities of interest to their training.
- *Supervise the family medicine registrar's training.* With this aim in mind, the tutor must:
 - Use the training specifications included in this programme as a basic tool, complemented by the information provided by the hospital tutor and the other people responsible for supervising the training programme.
 - Establish a calendar of regular meetings or interviews with the family medicine registrar they are tutoring, to jointly analyse how training is progressing and to try and rectify any weak points.
- *Be the family medicine registrar's key advocate* and as such provide support and ensure they are kept informed. The tutor is the key element in resolving conflicts and in protecting the registrar's rights.
- *Foster self-directed learning and the progressive acquisition of responsibility by the registrar.*
- *Foster the registrar's training and research skills.*
- *Be the main person responsible for training assessment* or the continuous assessment of the family medicine registrar, playing an active part in the yearly/qualitative assessment through the assessment commissions.
- Take part in *drawing up the annual report* about the teaching activities carried out by the family medicine registrars at the health centre.

13.1.1. The relationship between tutor and family medicine registrar

The family medicine registrar's learning process is based on a person-centred collaborative model. This is not the typical teacher-student relationship, nor is it one of friendship or comradeship. Rather, it is characterised by being an interpersonal, individualised relationship tailored to the needs of each registrar. It must therefore be undertaken in an atmosphere that will enable the training specialist to participate in defining objectives and in the progressive exchange of roles as the registrar progresses in his or her training.

Every tutor has an individual tutoring style, but they should all be able to:

- Communicate (empathy).
- Stimulate (give incentive, inject impetus and enthusiasm).
- Transmit information at the appropriate time.
- Explore the registrar's expectations and attitudes.
- Foster dialogue.

13.1.2. The relationship between tutor and manager

The importance of the tutor in the adequate training of family medicine registrars determines whether the healthcare administrations encourage the following:

- Maintenance and improvement of the tutor's competencies in clinical practice and training methodology, providing them with access to continuing education in:
 - Issues related to the knowledge and learning of educational methods.
 - Communication, monitoring and quality improvement techniques.
 - Motivation, supervision and assessment techniques.
 - Ethical values and aspects of the profession.
 - Issues related to the contents of the training programme.
- Suitable care and teaching conditions:
 - Controlled workload, based on the recommendation that doctors should not see more than 30 patients/day, or devote more than five hours to consultations.
 - Specific time for training.
 - Support from the training structure.
- Interventions geared to maintaining motivation: those tutors who guarantee quality training must be recognised by management either through their professional career or other economic, work-related or training incentives to compensate for the efforts this duty involves.
- Application of criteria together with the qualifications required, will guarantee the suitability of the tutors appointed.

13.1.3. Accreditation and reaccreditation of tutors

The Advisory Commissions will envisage, within the framework of the Overall Assessment Plan of the training unit mentioned in section 14.1., accreditation and reaccreditation procedures of tutors with a view to defining their basic experience and maintaining their competencies for the purpose. To this end the following criteria will be taken into account:

- Development of a training project (assessment, tutoring methodology, etc.) which will be assessed by the Advisory Commission.
- Work experience as a family doctor lasting a minimum of one year at the corresponding health centre.
- Participating in continuing education activities, particularly those related to training skills and the contents of the education programme.
- Undertaking research and participating in activities geared to improving quality.

NOTE:

Those people who graduated in Medicine before 1st January 1995 can be tutors, even though they are not specialists, pending the approval of their degree in Family and Community Medicine, regulated by Royal Decree 1753 of 31st July 1998, provided that they can give proof of professional experience described in paragraph 2.2 of the official programme of the speciality, continuous practice of the profession and training experience in the field of primary health care.

13.2. The hospital tutor

Tutors will be appointed by the hospital manager/director together with other doctors from the institution who have the professional experience suited to the functions the tutor has to perform. Family and Community Medicine specialists this will be particularly valued.

From a training point of view, and within the framework of the Ministerial Order of 22nd June 1995, hospital tutors must:

- Be members of the Advisory Commission of the Family and Community Medicine training unit.
- Be members of the Assessment Committee of family medicine registrars according to the terms envisaged by current legislation.
- Coordinate and supervise every aspect of the education programme at the hospital, together with the training unit coordinator: duty periods, rotations, etc.
- Advise the Family and Community Medicine training unit on all issues related to the in-hospital training of family medicine registrars.
- Provide monitoring and technical support within the hospital training department:
 - Detect and analyse shortcomings in the education of specialists in Family and Community Medicine in the hospital.
 - Propose improvement interventions for the organisation of in-hospital training.
 - Participate in drawing up on-call rotas for family medicine registrars within the hospital.
 - Participate in drawing up individual rotation plans for each family medicine registrar.
 - Provide hospital trainers with information and education about the objectives of the Family and Community Medicine Programme.

13.3. The training associate and public health specialist in the Family and Community Medicine Programme

13.3.1. The training associate

The role of the training associate is specified in article 104 of the General Healthcare Law 14/1986 and article 22 of Law 45/2003 for the Regulation of Healthcare Professions which envisages the availability of all the structures of the health system to be used in the specialised, continuous undergraduate training of professionals.

In this context, training associates are specialists and professionals who are not tutors of family medicine registrars, but trainers in different sections of the training unit. They are responsible for training family medicine registrars during their education periods in these sections. Professionals working in primary care who are not family doctors [paediatricians, nurses, physiotherapists, midwives, etc.], but contribute to the training of family medicine registrars will have the support of the training associates.

From a training point of view, training associates must:

- Give guidance to family medicine registrars throughout the entire training period in their unit or service.
- Supervise the family medicine registrar's training using the training specifications included in this programme as a basic tool, completed with the information provided by the hospital tutor and principal tutor.
- Be the family medicine registrar's key advocate during the training period and consequently, provide support and ensure they are kept informed.
- Foster self-directed learning and the progressive acquisition of responsibility by the family medicine registrar.

- Foster the family medicine registrar's training and research skills.
- Be the main person responsible for training assessment or the continuous assessment of the family medicine registrar during the training period.

13.3.2. The public health specialist

All the training units for the correct implementation of the programme will have public health specialists on their staff. The number of specialists and the amount of time they devote to the unit will depend on the number of family medicine registrars undergoing training and the particular characteristics of the training unit (geographical dispersal, participating centres, programmed activities, etc).

Public health specialists are the healthcare professionals who are not tutors of family medicine registrars, but who carry out the tasks entrusted to them by the training unit coordinator, which are designed to facilitate the implementation of the theoretical and practical programme of the speciality. They take part in the training and research activities at the training unit and health centre geared to improve the education of residents as well as tutors.

From a training point of view, and within the framework of the functions assigned to public health technicians in the Ministerial Order of 22nd June 1995, these professionals must:

- Be members of the Advisory Commission, and teach the courses and modules that are part of the programme, and collaborate with the coordinator in planning and adapting it to the characteristics of the corresponding training unit.
- Support the tutors, detecting their training requirements and providing opportunities to facilitate their education.
- Provide monitoring and technical support at the training health centres, detecting and analysing the deficiencies in the education they provide.
- Put together quality management programmes at the corresponding training unit.
- Stimulate, support and create solid lines of research at the training unit, tailoring them to the needs of each unit and the general health plans.
- Collaborate with the training unit in other educational activities (undergraduate, medical and nursing specialities, etc.) carried out at the training unit.

13.4. The training unit coordinator

Each Family and Community Medicine training unit will have a training unit coordinator, with a degree in Family and Community Medicine, appointed according to the terms envisaged in the applicable legislation in guideline 6.1 of Royal Decree 1558 of 28th June 1986, which establishes the general guidelines for the agreement regime between Universities and Health Institutions. This will be done after hearing the opinion of the Advisory Commission and in the case of training units with health centres and university hospitals, and after hearing the Mixed Commission.

The appointment of a training unit coordinator, as envisaged in paragraph 6 of the Ministerial Order of 22nd June 1995, must fall to a specialist with accredited experience in health care, teaching and research, for the purpose of which the appointment and if the case arises, the dismissal of the coordinator, must take into account the following points:

- Clinical experience, backed up by years of professional experience as a family doctor.
- Training in the speciality.
- Skills in training methodologies.
- Training and tutoring experience with family medicine registrars.

- Skills in research methodology.
- Doctorate and research activities carried out.
- Membership of commissions or work groups in the Health Department, administrations of the Autonomous Community or State.
- Skills and experience in negotiation, mediation and communication between the different agents taking part in the training programme.
- Experience and training in resource planning, organisation and management.

Time dedicated to training by the coordinator

In accordance with the additional first regulation of the Ministerial Order of 22nd June 1995, concerning the «time dedicated by doctors to specialised training activities», the managerial bodies of health centres will have to adopt, after hearing the opinion of the Advisory Commission, the appropriate measures so that the doctors who occupy the post of training unit coordinator can perform their duties efficiently and effectively.

It is recommended that the coordinator work in an area of health care that fits in with the characteristics of the unit.

From a training point of view and within the scope of their duties as administrators and managers of the material resources of each unit assigned to them by the Ministerial Order of 22nd June 1995, the coordinators must:

- Chair the Advisory Commission, be the head of studies of the training unit and direct the training activities of the tutors.
- As president of the Advisory Commission the coordinator will perform the duties assigned by article 23 of Law 30/1992 governing the Legal Regime of Public Administrations and the Common Administrative Procedure, resolving with their vote any stalemate in the adoption of agreements.
- Submit the planning and organisation of the education programme, as well as the yearly calendar of rotations, duty periods, courses, seminars and workshops, to the Advisory Commission for approval, and supervise its practical application.
- Chair the annual Assessment Committees, resolving any stalemate that arises, while promoting, boosting and supervising compliance with the Overall Assessment Plan of the training unit.
- Participate as a member in the Training Commissions of the hospitals that are part of the training unit, supervising and coordinating the practical application of rotations in each of them.
- Act as representative of the unit, and trainer-advocate with the management bodies of the primary care centres and hospitals which are part of the unit, coordinating the activities that registrars must undertake in both, while directing and supervising the practical application of these activities.
- Promote, foster and define lines of research and intervention in accordance with the Healthcare Plan of the Autonomous Community, the needs of the locality and those detected at the regular meetings of tutors with family medicine registrars.
- Administer the human and material resources assigned to the training unit, while supervising its organisational structure and managing the allotted budget and drawing up the yearly plan of requirements, according to the protocols of the different management departments.
- Propose to the Advisory Commission and through the commission, to the bodies responsible in each Autonomous Community, the training places available during the year in the coordinator's training unit.
- Handle the minutes of the annual evaluation and guarantee they are set down correctly and sent in time and in the correct form to the Ministry of Health and Consumption.
- Carry out any other duty that may be assigned to them by the applicable regulations.

13.5. The Advisory Commission

This is the collegial body of the training unit and takes on the responsibilities envisaged in paragraph 2 of the Ministerial Order of 22nd June 1995.

The composition and functions of the commission, as stipulated in the guidelines referred to by article 27 of Law 44 of 21st November 2003 for the Regulation of Healthcare Professions, will fit within the criteria contained in paragraph 6 of the Ministerial Order of 22nd June 1995, carrying out within its area of responsibility the functions listed in paragraph 2 of this Ministerial Order.

RECOMMENDED BIBLIOGRAPHY

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- Ministerial Order of 25th June 1995 for the Regulation of Teaching Commissions and Assessment Systems of Specialist Doctors and Pharmacists. BOE [Official State Bulletin] no. 155, 30th June 1995.
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- Quirós Bauset, C. ¿Debe ser obligatoria la formación continuada? Tribuna Docente 2000; 4: 25-34.



	14

Assessment

In accordance with article 26.1 of Law 44/2003 for the Regulation of Healthcare Professions, the targets in the current programme which aim to guarantee quality training, will be completed within the corresponding Administrative Resolution, through which approval is granted for general accreditation of the training units and centres training specialists in Family and Community Medicine. The primary aim is to guarantee quality and similar training for all family medicine registrars, irrespective of the training unit where the training programme is held.

Notwithstanding the above, and without precluding the external assessments that may be carried out through the audits agreed by the bodies with competencies in evaluating the running and quality of each training unit, an internal Overall Assessment Plan will be carried out in each training unit, in a systematic and structured way agreed on by consensus. The plan will be approved by the Advisory Commission and guarantee appropriate [continuous and yearly] assessment of the family medicine registrars assigned to the unit and the periodic assessment of the training structure of the unit.

14.1. The Overall Assessment Plan of the Training unit

The Overall Assessment Plan of the training unit will be drawn up within the Advisory Commission to guarantee the coordinated and correct implementation of the evaluation activities carried out in each unit.

Criteria for drawing up the Overall Assessment Plan: Without overly influencing the content of each individual Overall Assessment Plan, the plan should include:

- Strategic guidelines.
- Specific tools within the training unit to assess the family medicine registrar: self-assessment, rotation reports, analysis of registers, analysis of clinical cases, demonstrations of diagnostic and therapeutic techniques, OSCE etc.
- Common protocols for the assessment of the different rotations and internships to be carried out by family medicine registrars from the unit, taking as reference the training specifications in sections 8, 9, 10,11 and 12 of this programme.
- Specific tools within the training unit to assess the training structure for different aspects specified in section 14.3.
- Protocols for the assessment of the training structure.
- Assessment procedures for the accreditation and reaccreditation of tutors.
- Planning of periodic meetings to monitor effectively the assessments done at the training unit.
- Measures to guarantee the objectivity and confidentiality of the training process.
- Improvement measures adopted as a result of outcomes from the Overall Assessment Plan.

14.2. Assessment of family medicine registrars

14.2.1. Continuous/Training assessment

This type of assessment, which is referred to in paragraph 8 of the Ministerial Order of 22nd June 1995, BOE [Official State Bulletin] of 30th June, is the most important insofar as it assesses the registrar's learning process as a result of continuous direct or indirect supervision by the tutor, and by the tutors or people in charge of the units in the rotation scheme.

Training assessment will be based on monitoring the training aims of the programme and ensuring they are fulfilled, tailoring it to each family medicine registrar and proposing specific interventions for those areas of training and skills which reveal shortcomings.

Generally speaking, the registrar's principal tutor will be mainly responsible for carrying out and monitoring this assessment. The tutor will have to implement the personalised plan within the framework of the Overall Assessment Plan of the training unit.

The most important tools for training assessment and continuous assessment, besides those stipulated in paragraph 8 of the previously mentioned Ministerial Order of 22nd June, are:

- *Periodic interviews between tutor and family medicine registrar*

The aim of the interviews is to monitor the fulfilment of the training aims.

The conceptual elements of these interviews are:

- Training centred on the family medicine registrar: self-assessment of the needs detected with regard to the teaching aims.
- Identifying specific educational objectives and planning how to learn them.
- The tutor guides and motivates the registrar towards self-directed learning.
- The tutor must be the «example to be followed».

These interviews will be undertaken according to the feedback model: systematic meetings, previously agreed meetings to review specific themes that have also been agreed on. Ideally, these meetings will be undertaken halfway through each specific training period, to assess the benefits acquired during training and any shortcomings, thereby favouring the possibility of establishing plans to make up for the shortcomings observed.

A minimum of four interviews of this type will be held every academic year.

- *Assessment meetings between the principal tutor and the other people in charge of the training programme:* coordinator, public health specialist, hospital tutor...who will analyse the corresponding rotation reports.
- *Specific tools:* those envisaged in the Overall Assessment Plan of the training unit in question.

14.2.2. Yearly qualitative/summary assessment

The yearly assessment referred to in paragraph 10 of the Ministerial Order of 22nd June 1995, will be carried out by the evaluation committees. The composition of the committees will be as specified in paragraph 9.2 and 9.4 of this order.

The yearly assessment of the committees can be **positive** (Excellent, Outstanding or Satisfactory) or **negative** (in the cases envisaged in paragraph 4 of the previously mentioned order).

The assessment committees, following the guidelines set out in the Overall Assessment Plan of each training unit, will tailor the available assessment tools to obtaining the greatest objectivity in the yearly summary assessment, insofar as this is possible. The instruments used to carry out this qualitative evaluation will consist of those used in continuous/training assessment.

14.2.3. Final assessment

The final assessment of the internship period will fulfil the stipulations of paragraph 11 of the Ministerial Order of 22nd June 1995.

The final grade awarded at the end of the internship period will fulfil the stipulations of the guidelines in article 20.3 e) of Law 44 of 21st November 2003 for the Regulation of Healthcare Professions.

14.3. Assessment of the training structure

The Overall Assessment Plan for each training unit will include the assessment of the structure of the unit. This assessment must be carried out at least every two years and will cover the following areas:

- *Assessment of training areas/Services with the following objectives:*
 - To study the appropriateness of the activities in relation to the teaching objectives.
 - To assess the quality of supervision.
 - To assess the achievement of objectives.
 - To assess the quality and availability of the material and clinical component.

- *Assessment of interventions*

An assessment strategy will be drawn up which will include the assessment by the family medicine registrars and/or tutors of all the complementary activities of a theoretical and practical nature carried out by the unit as part of the teaching programme.

- *Assessment of tutors*

At least once a year, every family medicine registrar will make an assessment of the tutor assigned to them.

- *Assessment of the organisation and management of training*

Measures will be put in place enabling those registrars assigned to the training unit to assess the suitability of the management and coordination bodies in fulfilling the objectives set out in the training programme.

Methodology. To perform the assessment of the training structure we recommend the following assessment tools:

- Opinion polls.
- Personalised interviews.
- Discussions in specific groups.



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The National Commission for Family and Community Medicine

This is a highly specialised advisory body in the field of Family and Community Medicine, which belongs to the Ministry of Health and Consumer Affairs and the Ministry of Education, Culture and Sport.

According to article 28.8 of the previously mentioned Law 44/2003, the National Commission for Family and Community Medicine, must:

- Put together the training programme for this speciality.
- Establish assessment criteria for training specialists.
- Establish assessment criteria in the cases of new specialist areas envisaged in article 23 of the Law.
- Instigate the creation of specific training areas.
- Establish criteria for the assessment of teaching and training units.
- Compile the report on programmes and criteria related to the continuing education of professionals, particularly those referring to the accreditation and advanced accreditation of professionals in specific functional areas within the speciality.
- Take part in designing the integrated plans within the speciality.
- Undertake those duties expressly stated in Law 44/2003, or those determined in the regulatory guidelines issued during its development.





Bibliography and Internet resources

Even when a specific bibliography is recommended in each area of knowledge, it is important to remember that a central tenet of the programme is to convey to registrars that self-directed learning and the broadening and updating of their knowledge does not end with the completion of the four-year internship, but is a permanent, professional commitment of the family doctor.

With this aim in mind, Appendix I of this programme features a bibliographical and Internet-resource guide for Family Medicine. The guide will be updated periodically by the National Commission for Family and Community Medicine, through the inclusion of new content, either from the scientific literature or from family doctors themselves, who can submit their contributions to the National Commission, so that they can be included on the programme website following a selection process.

The information included in this guide is divided into:

- Journals: essential reference and recommended.
- Essential reference books about Family Medicine.
- Internet resources for family doctors:
 - Classified as:
 - Selection of general Internet resources
 - Internet portals and search tools for primary care
 - > Portals
 - > Medical directories and search engines
 - Scientific bodies and societies
 - University family medicine departments
 - Research resources and continuous training
 - > Research and assessment of medical literature
 - > Databases
 - > Medical journals and books
 - Miscellaneous
 - > Information for patients
 - > Information on medicines
 - > Tools

Madrid, 17th January 2005





Appendix I

Bibliographical and Internet resource guide

1. Journals

1.1. Essential

(These must be available at the hospital, library of the training unit and health centres):

- Atención Primaria (Primary care).
- Formación Médica Continuada [FMC] (Continuing medical education [CME]).
- Centro de Atención Primaria- c@p (The Primary Care Centre)
- Dimensión Humana (The Human Dimension)
- Tribuna Docente (Training Tribune).

1.2. Recommended

(These must be available at the library of the training unit and at the hospital):

- *American Family Physician*
- Annals of Family Medicine
- *Annals of Internal Medicine*
- *Archives of Family Medicine*
- British Journal of General Practice.
- *British Medical Journal*
- Canadian Family Physician.
- Clinical Evidence.
- Cuadernos de Gestión para el profesional de Atención Primaria.
- European Journal of General Practice
- Evidence based medicine.
- Family practice.
- JAMA
- Journal of American Board of Family Practice
- *Journal of Family Practice.*
- Journal Watch
- *Lancet*
- Medical Experience Medicine.
- *Medicina Clínica.*
- *New England Journal of Medicine*
- Postgraduate Medicine, Spanish edition.
- Primary care.

The most frequently used journals are highlighted in italics

2. Essential reference books about Family Medicine

This part of the guide provides a list of the essential reference books that can be use during the day-to-day activities of the health centre. It does not set out to be exhaustive. There are probably a great many other books which are important enough to be included in a list of their own and can be added to the health centre's library.

The latest editions of the books listed below should be available to family medicine registrars.

- semFYC. Guía de Actuación en Atención Primaria. 2nd edition. Barcelona: semFYC; 2002.
- Loayssa JR. Guía educativa del área clínica. Enseñar y aprender a ser Médico de Familia. Barcelona: semFYC; 2002.
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- Ruiz de Adana R. Manual de diagnóstico y terapéutica médica en Atención Primaria . 3rd edition. Madrid: Díaz de Santos; 2002.
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- Argimón JM, Jiménez J. Métodos de investigación clínica y epidemiológica 2nd edition. Barcelona: Harcourt; 2004.
- U.S. Preventive Services Task Force. Guide to Clinical Preventive Services. 4 vols. Barcelona: Medical Trends; 1998.
- Starfield B. Atención Primaria . Equilibrio entre necesidades de salud, servicios y tecnología. Barcelona: Masson; 2001.

- Essential reference book on guaranteeing quality.
Example: Tratado de Calidad Asistencial en Atención Primaria . 3 vols. Madrid: Dupont Pharma, 1997.
Example: Guía práctica. Implantación de un plan de mejora en un PCT. Barcelona: Edide; 1994.
- Essential reference book on clinical management.
Example: Temes JL, Parra B. Gestión clínica. Madrid: McGraw Hill-Interamericana; 2000.
Example: Haciendo gestión clínica en Atención Primaria . Seville: Consejería de Salud; 2000.
- Essential reference book on evidence based medicine.
Example: Sacket DL, Richardson WS, Rosenberg WS, Haynes RB. Medicina basada en la evidencia. Cómo ejercer y enseñar MBE. Madrid: Harcourt Brace de España SA; 2000.
- Essential reference book on epidemiology.
Example: Jenicek M. Epidemiología: la lógica de la medicina moderna. Barcelona: Masson; 1996.
Example: Rothman K. Epidemiología moderna. Madrid: Díaz de Santos; 1987.
Example: Sackett DL. Epidemiología clínica: una ciencia básica para la Medicina Clínica. Madrid: Díaz de Santos; 1989.
- Essential reference book on applied statistics.
Example: Hulley SB, Cummings SR. Diseño de la investigación clínica. Barcelona: Doyma; 1993.
Example: Silvia Aycaguer LC. Cultura estadística e investigación científica en el campo de la salud: una mirada crítica. Madrid: Díaz de Santos; 1997.
- Essential reference book on family care.
Example: Mc Daniel S, Campbell L, Seaburn D. Orientación Familiar en Atención Primaria : manual para Médicos de Familia y otros profesionales de salud. Barcelona: Springer Verlag Ibérica; 1998.
Example: De la Revilla L. Bases para la práctica familiar en la consulta. Vols. I and II. Granada: Fundación para el estudio de la Atención a la Familia; 1999.
- Essential reference book on community care.
Example: Turabián JL and Pérez Franco B. Actividades Comunitarias en Medicina de Familia y Atención Primaria. Madrid: Díaz de Santos; 2001.
- Essential reference book on internal medicine.
Example: Braunwald E. (Eds). Harrison. Principios de Medicina Interna. 15th edition. 2 vols. Madrid: McGraw Hill; 2001.
Example: Farreras P, Rozman C. Medicina Interna. 14th edition. 2 vols. Madrid: Harcourt; 2000.
Example: Goldman L. Cecil. Tratado de Medicina Interna. 21st edition. 2 vols. Madrid: McGraw-Hill/Interamericana; 2002.
- Essential reference book on rheumatology.
Example: Alonso Ruiz A, Álvaro-Gracia, Álvaro JM, Andreu JL et al. Manual S.E.R. de las enfermedades reumáticas. 4th edition. Madrid: Panamericana; 2004.
- Essential reference book on geriatric medicine.
Example: Gorronogotia A, Álvarez M. Atención al anciano. Líneas guía para la Atención Primaria de Salud. Barcelona: semFYC; 1995.
- Essential reference book on dermatology.
Example: Fitzpatrick T, Johnson R, Wolff K, Suurmond R. Colour atlas and with a synopsis on clinical dermatology. 4th edition. Madrid: McGraw-Hill Interamericana; 2001.
- Essential reference book on paediatrics.
Example: Zafra MA. Manual de Diagnóstico y Terapéutica en Pediatría. Residentes Hospital Infantil La Paz. Universidad Autónoma de Madrid. 4th edition. Madrid: Publicación de Libros Médicos; 2003.
- Essential reference book on orthopaedics and orthopaedic surgery.
Example: Rodríguez Alonso JJ, Valverde Román L. Manual de Traumatología en Atención Primaria. Madrid: SKB; 1996
- Essential reference book on psychiatry.
Example: Tizón JL, San José J, Nadal D. Protocolos y programas elementales para la Atención Primaria de salud mental. 2nd edition. Barcelona: Herder; 1999.

- Essential reference book on palliative care
Example: Benitez del Rosario MA, Salinas Martín A. Cuidados Paliativos y Atención Primaria, aspectos de organización. Barcelona: Springer-Verlag Ibérica; 2000.
- Essential reference book on medical emergencies.
Example: Jiménez Murillo L, Montero Pérez FJ. Medicina de Urgencias: Guía diagnóstica y protocolos de actuación. 2nd edition. Barcelona: Harcourt; 2000.
- Essential reference book on pharmacology.
- Essential reference book on radiology.
- Essential reference book on electrocardiography and essential reference book on ENT.
- Essential reference book on ophthalmology.

3. Internet resources for family doctors

3.1. Selection of general Internet resources

Learthenet

<http://www.learnthenet.com/spanish/>

Spanish

Excellent on-line tutorial to help you familiarise yourself with the use of the Internet and learn the basic concepts.

Yahoo

<http://es.yahoo.com/>

Spanish

The best-known and most popular website index or directory, which has become a true Internet portal featuring a whole host of services.

Google

<http://www.google.com/>

English/Spanish

The most powerful and useful Internet search engine.

Ixquick.com/

<http://ixquick.com/>

English/Spanish

Metasearch engine and website search tool which uses a number of search engines to perform the most exhaustive and complete searches.

Scirus

<http://www.scirus.com/>

English

Internet search engine focusing on scientific information. It also features links to material not usually accessible with other search engines.

Using the Internet to Find Health Information

<http://www.hsl.unc.edu/lm/Healthinternet/Frontpage.htm>

Tutorial for doctors which enables them to learn and get the most out of Internet search tools.

Finding Information on the Internet: A Tutorial

<http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/FindInfo.html>

Advanced and general tutorial about Internet search tools.

3.2. Internet portals and search tools for primary care

Portals

A portal is a website which serves as a gateway to the Internet. Due to the initial increase in general information portals, healthcare professionals have begun to develop specialised portals of their own. Healthcare portals can be geared to professionals or the general public. The next few pages list a series of primary care portals for professionals. These websites comprise lists of links which have been placed in some kind of order, or pages with their own contents and services, as well as a whole host of other content.

Fisterra

<http://www.fisterra.com>

Spanish

This is undoubtedly one of the most useful and comprehensive websites for family doctors. Structured like a portal, it has also become a source of exclusive documents with a high added value content. The most important section of links, «Recursos en la red» [Net resources], features a selection of links and places special emphasis on those devoted to medical literature and bibliographical searches.

The contents section features a page on reference material entitled «Material para la consulta» with links and documents containing all the information required during day-to-day consultation. This ranges from diets to advice and information for patients. It includes a developed application using Access which makes it possible to perform the most common mathematical calculations (risk factors, dosage, diagnostic scales, etc.) in primary care consultation. Another useful section «Guías clínicas» [Clinical guidelines] contains a wide variety of topics about the most prevalent health problems in primary care, written by family doctors and other specialists. These guidelines are midway between a brief review and an intervention protocol. Although they do not follow the layout of a traditional clinical practice guideline and their quality is variable, they provide a very interesting and useful reference and continuing education tool.

Finally, we highlight the section entitled «El lado humano de la Medicina» [the human side of medicine], with pertinent comments and essays on the role of medicine in other arts such as literature and film.

Rafabravo website

<http://www.infodoctor.org/rafabravo/>

Spanish

Set up by Dr. Rafael Bravo Toledo, a doctor at the «Sector III» health centre in district 10 of Madrid.

This website should be visited periodically by family doctors. Here they can find:

- Documents and other high-quality resources on evidence based medicine.
- Bibliographical alert on important articles for family doctors.
- Link to websites of interest to family doctors.

Atheneum. Club Virtual de Atención Primaria

<http://www.atheneum.doyma.es>

Spanish

Portal set up by the publishers Doyma which includes, under the heading «Colecciones» [Collections] a series of documents, clinical or otherwise, classified by thematic areas and published in journals from their publishing group. This material and additional articles from all their magazines related to primary care, can also be accessed from a powerful search engine called ApLine.

The portal also includes sections on clinical cases, a search engine and a selection of external links, news, picture gallery and self-assessment test.

Family Practice

<http://www.familypractice.com/intro.htm>

English

Set up by The American Board of Family Practice, one of the family medicine associations in the United States, this is a clearly designed, well-set out portal, divided into four sections or centres: one devoted to continuing education, a clinical section featuring useful resources such as a collection of guides and algorithms for making clinical decisions, a news centre or section providing access to the complete text of the JABFP.

Medical directories and search engines

Primary Care Guidelines

<http://medicine.ucsf.edu/resources/guidelines/index.html>

English

Website hosted by the University of California and maintained by one of the members of the university's Department of Medicine. It is an index or directory featuring an extensive list of links to clinical practice guides on the Internet, classified by categories based on equipment and diseases, listed in alphabetical order and in accordance with the institutions that produce them. It also includes an internal search engine which makes it possible to rapidly locate guides on subjects of interest to us, just by keying in the right terminology. An additional way of indexing these resources is the classification according to the most frequently encountered clusters at family medicine practices in the United States.

The focus of the selection of resources in this directory is based on the criteria of evidence based medicine and it reviews them thoroughly.

The resources include links to clinical reviews, consensus-based lectures and other types of documents which do not fit within the concept of clinical practice guidelines in the strict sense, even though they are of unquestionable interest. Together with the guide directory, the site also includes other Internet links and brief summaries of the basic concepts of primary care. In view of the large amount of information contained on the site, performing a search can often be a little complex, but you overcome this problem as you get used to using the site. In short, this is an excellent website for the rapid location of general sources of information of the practice of family medicine, noted for the painstaking selection of information and the certainty of only finding contrasted information. It is undoubtedly an excellent gateway to medical information on the Internet, from a family doctor's viewpoint.

Medical Student

<http://www.medicalstudent.com/>

English

Digital library of web addresses, classified by category, designed to provide links to the main electronic resources on the Internet and geared to medical students. It has an important section on medical books.

MedWeb

<http://www.medweb.emory.edu/MedWeb/default.htm>

English

Index of medical resources structured as a traditional directory, which makes it possible to locate addresses contrasted with and selected from the main resources about all specialist areas of medicine.

Primary Care Internet Guide

<http://www.uib.no/isf/guide/guide.htm>

English

Despite the fact that it is not updated very often, this is a useful list of primary care resources. The site includes a noteworthy section that gathers addresses from distribution lists and international scientific societies (<http://www.uib.no/isf/guide/family.htm>).

National Guidelines Clearinghouse

<http://www.guidelines.gov/index.asp>

English

Clinical practice guidelines can be considered as containing summaries of much of the relevant literature and are written as a series of brief and clear statements about the most interesting aspects of clinical practice. The Internet has made it possible to access the complete texts of many of these guides which were hitherto unavailable. As a rule, to view the texts, all you have to do is visit the website of the institutions that sponsor them.

Nevertheless, the widespread proliferation of these guidelines often makes them hard to find, and the assessment of their quality even harder. This makes resources such as the National Guideline Clearinghouse particularly welcome. It is a database for evidence-based clinical practice guidelines and related documents produced by the Agency for Health Care Policy and Research, in association with the American Medical Association and the American Association of Health Plans.

It features a collection of summaries of guidelines ordered by the key words taken from the MEDLINE MeSH vocabulary or the body that has produced them. Every summary has a link to the complete text of the guideline, whenever it can be accessed via the Internet. As well as the list of guidelines, it contains articles, bibliographies and documents about topics related to the guidelines and a section on new publications and innovations.

Tripdatabase

<http://www.tripdatabase.com/index.cfm>

English

This is a metasearch engine for finding medical websites containing important documents for medical practice, in accordance with the pattern of evidence based medicine. It does not list many sites, and they are all in English, but the selection is good, giving prominence to those sites containing secondary documents, such as critical summaries of the literature or synthesis documents, such as guidelines and systematic reviews.

This engine performs its searches by identifying the key word in the title and the text of each document posted on the selected websites. The results are divided into five sections based on the five categories the selected websites are divided into. These sections are: EBM resources, question and answer services, clinical practice guidelines, e-books on general medicine and scientific medical journals.

The themes are also classified by clinical areas that are updated every month, and a Virtual Learning Centre has been launched, which features a course in continuing medical education. This is undoubtedly one of the main tools when looking for secondary information and when a quick overview of a subject of clinical importance is needed. However, it is important to bear in mind that the site is a selection of quality resources, rather than a comprehensive source of information, and for this reason the searches will not always be satisfactory.

3.3. Scientific bodies and societies

semFYC Sociedad Española de Medicina Familiar y Comunitaria

<http://www.semfyc.es>

Spanish

Sociedades Federadas semFYC

<http://www.semfy.com/Nueva/Federadas/Marco.htm>

Spanish

SEMERGEN

<http://www.semergen.es/>

Spanish

American Academy of Family Physicians

<http://www.aafp.org/>

English

Royal College of General Practitioners

<http://www.rcgp.org.uk/>

English

Ministerio de Sanidad y Consumo

<http://www.msc.es>

Spanish

Administrative information on the web

<http://db.doyma.es/cgi-bin/wdbcgi.exe/doyma/mrevista.fulltext?pident=13025588>

Link to the article published in the journal *Atención Primaria* which brings together and comments on a series of web addresses related to medical administrative information on the Internet.

World Health Organisation

<http://www.who.int>

English

CDC (Atlanta)

<http://www.cdc.gov/spanish>

Spanish

Canadian and US Preventive Task Force

<http://ahcpr.gov//pipp/>

Free access to the recommendations of these groups, as well as other guides about preventive care.
English

3.4. University family medicine departments

<http://www.cica.es/aliens/umfus>

<p>EUROPE Aarhus (Denmark) Aberdeen (UK) Belfast. Queen's U. (UK) Bergen (Norway) Berlin (Germany) Berlin Freie (Germany) Berne (Switzerland) Birmingham (UK) Bonn (Germany) Bochum (Germany) Bristol (UK) Bordeaux (France) Cambridge (UK) Cardiff (UK) Cork (Ireland) Debreceni (Hungary) Dublin (Ireland) Dublin - Trinity (Ireland) Dundee (UK) Düsseldorf (Germany) Edinburgh (UK) East Anglia (UK) Exeter (UK) Frankfurt (Germany) Freiburg (Germany) Wales-Cardiff (UK) Glasgow (UK) Gienssen (Germany) Göttingen (Germany) Gothenburg (Sweden) Hamburg (Germany) Hammersmith (UK) Heidelberg (Germany) Helsinki (Finland) Humboldt (Germany)</p>	<p>EUROPE Iceland (Iceland) Kiel (Germany) Europe Imperial College (UK) Keele (UK) King's College (UK) Kuopio (Finland) Leicester (UK) Leipzig (Germany) Liverpool (UK) Lunds (Sweden) Marburg (Germany) Mainz (Germany) Münster (Germany) Newcastle -Tyne (UK) Nottingham (UK) Oxford (UK) Oslo (Norway) Paris-5 Ouest (France) Queen Mary (UK) Royal Free (UK) Russia (Russia) Southampton (UK) Sheffield (UK) St. George's (UK) St Mary's (UK) Tours (France) Tampere (Finland) Tromsø (Norway) Trondheim (Norway) Turku (Finland) Ulm (Germany) Uppsala (Sweden) Witten/Herdecke (Germany)</p> <p>ASIA Hong Kong (China) CuKurova (Turkey) Arab Emirates Malaysia Sackler (Israel) Seoul (Korea) Singapore Sultan Qaboos (Oman)</p>	<p>ÁFRICA Pretoria (South Africa) Stellenbosch (South Africa) Witwatersrand (South Africa)</p> <p>AUSTRALIA AND NEW ZEALAND Adelaide (Australia) Melbourne (Australia) Monash (Australia) Otago (New Zealand) Sydney (Australia) Tasmania (Australia) Western (Australia)</p> <p>SOUTH AMERICA Sabana (Colombia) México-Auton. (Mexico) Buenos Aires (Argentina)</p> <p>USA Arizona Buffalo (New York) California, Irvine Case Western Reserve Cincinnati Colorado Duke Western Carolina East Tennessee West Virginia Finch Florida Georgia Hawaii Idaho Illinois Indiana Iowa Kansas Health Sciences Kansas (Kansas) Kansas (Wichita) Kentucky Louisiana Marshall Massachusetts Miami</p>	<p>USA Michigan Minnesota - Minneapolis Mississippi Missouri (Columbia) New York - Stony Brook New York North Carolina North Dakota Northwestern Ohio Oklahoma Minnesota - Duluth Oklahoma (Tulsa) Oregon Pennsylvania State RuralNet (Marshall) Rochester (New York) Rush San Louis South Carolina South Dakota South Florida Western California Western Illinois Tennessee (Memphis) Texas (Galveston) Texas (San Antonio) Texas Tech Thomas Jefferson (Phil) Tulane Upstate (SUNY) Utah Vermont Virginia Virginia Commonwealth Washington Wayne East Virginia Med College Wisconsin Wisconsin Wright State Albert Einstein Yeshiva</p> <p>CANADA Alberta British Columbia Calgary Dalhousie Laval McMaster Ottawa Kingston Saskatchewan Toronto Western Ontario Manitoba</p>
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3.5. Research resources and continuous training

Research and assessment of medical literature

TRIAGE The Trent Institute for Health Services Research gateway

<http://www.shef.ac.uk/~scharr/triage/>

English

Directory of Internet addresses associated with health research, which includes a whole host of links to websites accompanied by a short text. Priority is given to the careful selection of resources, rather than the exhaustiveness of the information presented. There is a preference for general resources, although the site includes practically all the information available on the Internet that may be required in the field of research, from articles to calculation tools, tutorials to courses. The addresses are classified according to a number of categories and the site also includes a search engine to make the information easier to find.

User's guide to medical literature

<http://www.usersguides.org/>

On-line version of the book of the same name, published in 2001 in two formats [pocket-size and manual]. These books are a new, expanded and corrected version of the user's guides to medical literature published as a series in JAMA. The electronic version contains the complete text of these books, which are augmented by the addition of interactive content, such as the calculators of the most common measure used in critical appraisal, links to full-text articles, clinical scenarios as examples, questionnaires, etc.

Centre for Evidence based medicine, Mount Sinai Hospital

<http://www.cebm.utoronto.ca/>

English

This website is currently hosted by the University of Toronto, and has as its mission the development, dissemination and assessment of the different resources that are useful in the practice and teaching of EBM, in pre-graduate and post-graduate training as well as in the continuous training of health-care professionals from most medical specialities. An additional objective of the site is to provide an updated, on-line version of the second edition of the book *Evidence based medicine: How to practice and teach EBM* by Sackett and colleagues. Although the book is also published in other languages, including Spanish, this website only uses the English version.

Fisterra-research methodology

<http://www.fisterra.com/material/investiga/indice.htm>

Spanish

A section of the Fisterra portal featuring a long list of chapters devoted to training in research methodology, which provides all the necessary knowledge to train in this field.

Databases

MEDLINE – PubMed

<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>

English

MEDLINE is a bibliographical database produced by the National Library of Medicine in the United States that includes ten million bibliographical citations from articles published in some 4,000 medical journals back to 1966. It is the automated version of three indexes published previously. MEDLINE contains the bibliographical citations for the articles, together with other types of information, which will either help retrieve it (such as the «key word» field) or help find out about the subject of the article [such as the one indicated in the «summary» field].

PubMed is a component of the system known as **Entrez**, which integrates and links up information from other databases. It is, therefore, a search and retrieval interface on interconnected databases that use world-wide-web technologies and are accessible via the Internet.

Contrary to popular belief, PubMed is not a search programme used exclusively for the MEDLINE database, but a search interface for bibliographical databases in the Entrez system. This means that it allows access to bibliographical references on other databases that are not part of the original MEDLINE. You can use PubMed's home page to view the databases and database subgroups accessible via PubMed. First, click on the *Limits* tab and then select the *Subsets* option.

PubMed is unique insofar as it allows users to optimise their search semi-automatically, without them having to perform a specific action or know how the website works. Some of the characteristics are listed below:

- > Restricted search
- > Related topics
- > Search
- > Single Citation Matcher
- > Cubby

Cochrane Library

<http://www.update-software.com/>

<http://www.infodoctor.org/rafabravo/cochrane.html>

English and Spanish

The Cochrane Library is an electronic publication created by the Cochrane Collaboration, designed to supply high-quality evidence, quickly and simply, for decision-making in clinical practice and about the beneficial or harmful effects of health care. It is only published electronically, on CD-ROM and via the Internet through the website of Update software, the computer firm that produces and distributes it. Access to the content requires the payment of an annual subscription fee. On other occasions, and as with other databases, the producers sell it to distributors who use their own search and retrieval applications via the web, so that users can have access to this resource. This is the case of *Knowledge Finder* or the distributor *Ovid*, which includes it in its product entitled *Evidence based Medicine Reviews*.

The Cochrane Library contains databases that are different in structure and origin, as well as other kinds of additional information:

- > The Cochrane Database of Systematic Reviews
- > The Database of Abstracts of Reviews of Effectiveness
- > The Cochrane Controlled Trials Register
- > The Cochrane Review Methodology Database
- > Health Technology Assessment Database
- > NHS-Economic Evaluation Database
- > Other documents

The second web address given at the beginning of this section is a specific home page which features the most important addresses associated with the Cochrane Library, including the page for subscribers only, the address that allows a search of the summaries of the main data base of this library free of charge, as well as the address of the Spanish version called Cochrane Library Plus.

Medical journals and books

Editorial Doyma

<http://db.doyma.es/cgi-bin/wdbcgi.exe/doyma/home.home>
Spanish

Website of the publishers Doyma, which contains over 80 journals. Many of them are the official publications of medical societies, as well as prestigious international journals in Spanish and sponsored publications in the field of public health. The latter include the most important primary care journals published in Spain.

Directory of medical journals

<http://www.infodoctor.org/rafabravo/hojear.htm>

Website designed to help locate the addresses of medical journals on the Internet. It comprises an alphabetical directory and a search engine which connects to a database holding most of the scientific journals associated with biomedicine. It is accompanied by a selection of general journal and medical literature resources and a selection of direct links to journals from the field of general practice and primary care.

My Morning Journal

<http://www.mymorningjournal.com/>
English

An ingenious website created by a Canadian family doctor which, like a virtual news-stand, posts a selection of medical journal addresses. The novel aspect of the site is that when a new issue of the journal is available on the web the colour of the link changes, so that we know when the latest issues have come out, without having to visit the websites of the journals themselves.

Freebooks4doctors

<http://www.freebooks4doctors.com/>
English

Website with links to biomedical books on the Internet, which can be accessed free of charge. Classified by the languages in which they are published and specialist areas.

Bandolier / Bandolera

<http://www.jr2.ox.ac.uk:80/Bandolier>
<http://www.infodoctor.org/bandolera/>
English/Spanish

Bandolier is a monthly journal which has been published in the United Kingdom by the Oxford Anglia NHS Trust since 1994. Along with other sources of information that emerged from within the burgeoning evidence based medicine movement, its primary mission is to provide scientific information that will help people involved in the decision-making process. This information is given in the form of summaries of systematic reviews, clinical trials and reports evaluating the technologies which its writers call the «ammunition» to achieve effectiveness.

Bandolier has become an important reference source for a wide range of healthcare workers, due to the quality of its contents, the usefulness of the information it contains, and its unusual, very British sense of humour, all of which make it a pleasure to read. It mainly focuses on reviewing topics related to treatment [pharmacological or otherwise], diagnostic trials, health services and healthcare management. Internet access to Bandolier is free and the print version is available by subscription. Back numbers can be obtained in electronic format or in print. Since issue 65, there has been a Spanish version of the journal which goes by the name of Bandolera, and contains all the articles featured in the original English-language publication.

3.6. Miscellaneous

Information for patients

Family Doctor

<http://www.familydoctor.org/>
English/Spanish

Internet resource providing information for patients, put together by doctors and teachers under the auspices of the American Academy of Family Physicians. The quality and clarity of information, with a precise and simple focus, make it particularly outstanding. It contains a number of sections, the main one comprising material collated from information sheets for patients which are published periodically in the Academy's journal, many of them in Spanish and which are also included on this website. Other important sections include information on medicines with simple monographs supplied by the USP a database of drug interactions, and information about advertising specialities and so-called *alternative medicines*; all of them geared to patients.

NOAH.New York Online Access to Health

<http://www.noah-health.org>
English/Spanish

MedlinePlus

<http://www.nlm.nih.gov/medlineplus/>
English/Spanish

Information on medicines

Portal Farma

<http://www.portalfarma.com/>
Spanish

Portal directed by the Organisation of Pharmaceutical Associations, and featuring important information for its members. The medicine databases are a particularly outstanding aspect of this site, and arguably one of the most complete sources of information about medicines on sale in Spain. They are particularly useful when issuing prescriptions.

Information about medicines on the Internet

<http://www.infodoctor.org/rafabravo/medicamentos.html>
Spanish

Website based on an article published in Atención Primaria (Aten Primaria 2001; 27:116-22) which features the main web addresses providing information about medicines from the viewpoint of the doctor and prescriber.

Tools

Fundación Infosalud

http://www.fundacioninfosalud.org/cardio/cv_scalas.htm
Spanish

A compendium of cardiovascular risk scales and calculators available over the Internet, with a downloadable application of its own that can be used off-line.

Medcal 3000

<http://calc.med.edu/>
English



MedCalc 3000 contains a wide variety of clinical mathematical formulas, diagnostic criteria and decision trees commonly used in medicine. They are displayed in the form of an interactive website and the user only has to key in the relevant details about the patient. You have to be on-line to obtain the information, but the site is fairly quick and easy to use.

MedSlides

<http://www.medslides.com/>
English

Collection of medical slides in Power Point format donated free by their authors, and which can be viewed on the screen or downloaded onto the computer and used at a later date.

Other useful Internet addresses

Communication and medicine

<http://www.pcm.northwestern.edu/>

Biomedical ethics

<http://www.izew.uni-tuebingen.de/bme/>

Medical dictionary

<http://www.medterms.com/script/main/art.asp?articlekey=15898&rd=1>

Nutrition

<http://www.amedeo.com/medicine/nut/NUTRREV.HTM>

