CONSEJERÍA DE SALUD

# Health Examination for People Aged over 65 years

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## Foreword

## 1. General considerations

This programme aims to improve autonomy, safety and active life of people as they age, through the promotion of healthy lifestyles, early detection of risks, environmental adaptations and comprehensive care for frail elderly.

This is the result of an exhaustive review of the *Health examination for people aged over 65 years*[1], as well as of their current needs and health problems, mainly regarding health and better living conditions maintenance and frailty and dependence prevention. The programme Health Examination for People Aged over 65 years[1] has been updated to align the European Innovation Partnership for Active and Healthy Ageing (EIP on AHA) under the Europe 2020 Initiative[2], with the *El Documento de consenso sobre prevención de fragilidad y caídas en la persona mayor* dentro de la Estrategia de Promoción de la Salud y Prevención en el Sistema Nacional de Salud [*The consensus document on frailty and falls prevention among the elderly* within the *Prevention and Health Promotion Strategy of the Spanish National Health System*][3].

These years have been extremely useful in placing older people as key elements in the healthcare, by introducing new delivery models, encouraging promotion and prevention actions and highlighting functionality as key feature in the quality of life perspective as people age.

At the same time, major milestones have been added up, opening new perspectives such as the development of the WHO strategy on Active and Healthy Ageing[4], considering the basic pillars upon which it is based: security, health and participation, and to which, Andalusia, by the release of the *Libro blanco del envejecimiento activo* [White paper on active aging][5], added the *lifelong* learning pillar.

Another aspect to be highlighted is that the UE awarded Andalusia as “Reference Site” for the Active Ageing in 2012. This recognition has been renewed in 2016 with a 4 stars maximum score.

Active ageing is also mentioned in both Ley 16/2011, de 23 de diciembre, de Salud Pública de Andalucía [Law 16/2011, 23 December, on Andalusian Public Health Law][6] (promoting interest in older people’s health) and IV Plan Andaluz de Salud [IV Andalusian Health Plan][7] (increasing healthy life expectancy).

*The consensus document on frailty and falls prevention among the elderly*[3] was approved by the Inter-territorial Council of the Spanish National Health System in 2014. It advocates the early detection of frailty and the intervention for the prevention of falls as key element in the maintenance of functional capacities of elderly.

According to recent reports issued by WHO[8], Spain, and therefore Andalusia, has one of the highest life expectancy rates in the world. To this it must be added the interest of ageing with the best possible quality of life and the fight against inequality.

Hence the need to design a health programme firmly anchored in the constituent elements of an *active and healthy aging*, which includes the frailty strategy advocated by the Ministry of Health, Social Services and Equality and aiming at contributing to the improvement of the welfare of people living in Andalusia as they age by fighting inequality and based on the best available evidence.

When designing this new reference framework for the elderly care within the Andalusian Public Health System (SSPA), we must bear in mind the publishing of the strategy Renovación de la Atención Primaria [Andalusian Primary Health Care Renewal][9] on June 2016, since the program Health Examination for People Aged over 65 years is consistent with the aims of this mentioned strategy to place *primary care* as an action context, contributing their professionals to: 1) Improve the health of the population aged 65 and over; 2) Improve the individual experience in the care of this group; 3) Ensure equity in high-need groups; 4) Prevent disease and disability; and 5) Improve efficiency in the health care system.

The strategy for Primary Health Care Renewal[9] is defined by shared principles and these constitute the main aim of this document:
1. Focusing on the individual, as a whole, beyond organs or system-specific illnesses.
2. Bearing in mind that every person lives within a family, community and social context, which will to a large extent determine people's health.
3. Go beyond its role as *entry point* to assume the role of health agent, and become organisers of the care received in a whole health, social and community system.

*Primary health care* team is therefore the core around which healthcare revolves to promote active aging, frailty and dependence prevention and management in older people. In this context and according to the line 11 of this strategy, the content and development of this programme will be tailored to gender, race or ethnicity, immigration-related determinants, as well as other social and economic determinants with a potential impact on the established therapeutic plan.

Within the framework of reference for the development, this programme has also taken account of the: Estrategia de Cuidados de Andalucía [Healthcare Strategy in Andalusia][10]; Plan de Acción Personalizado [Personalized Action Plan][11]; Plan de Atención Integral a Pacientes con Enfermedades Crónicas [Comprehensive Care Plan for People with Chronic Illnesses][12]; and Proceso Asistencial Integrado de Atención a Pacientes Pluripatolóticos

[Comprehensive Care Process for Patients with Multiple Illnesses][13], which could be coordinated with the actions set out in this programme. Furthermore, actions on *health* which contributed to the development of the I Plan Andaluz de Promoción de la Autonomía Personal y Prevención de la Dependecia (2016-2020) [I Andalusian Plan for the Promotion of Personal Autonomy and Prevention of Dependence (2016-2020)][14] of the Regional Ministry of Equality and Social Policies of Andalusia are integrated.

## 2. Introduction

Health Examination for People Aged over 65 years was implemented in Andalusia in 2006. It is currently in force and targets older people with different health conditions. This programme made a clear proposal for the autonomy of the individual and to prevent the dependent status of the elderly, with a special focus on so-called “frail older people”.

In order to adapt healthcare for the elderly to the current reality, so they can get the best solutions in a society moving forward, a new initiative is launched by the Sistema Sanitario Público Andaluz (SSPA) [Andalusian Public Health System] to promote health, early detection of health issues and care needs for the population aged 65 and over, aimed at further extending the period of life without dependent elderly. The same goes for the “frailty” concept understood as a greater exposure to illness, an increased risk of developing functional impairment and the resulting dependence in carrying out daily activities and, eventually, death[4].

The aim of this programme is to determine the level of autonomy, detect any health problems at an early stage in people aged 65 and over, and implement promotion and prevention measures, that according to available studies, enhance health and quality of life of people aged 65 and over, while maintaining their independence for longer.

Since their introduction, over ten years ago, best practices have become common place among the vast majority of Andalusian health professionals, from initiatives to take older people into account, the adoption of an holistic view of the individual, the use of tools, questionnaires and tables to measure functionality as a basis for health and the increasingly integration of a systematic clinical assessment as well as a comprehensive assessment of the older person, including assessment of functional, mental and social aspects.

From its inception in 2006 until 2015, more than 800 000 Andalusians are benefiting from the Health Examination for People Aged over 65 years (Table 1), distributed by provinces as follows:

**Table 1.- Number of people included in the Health Examination for People Aged over 65 years by provinces.**

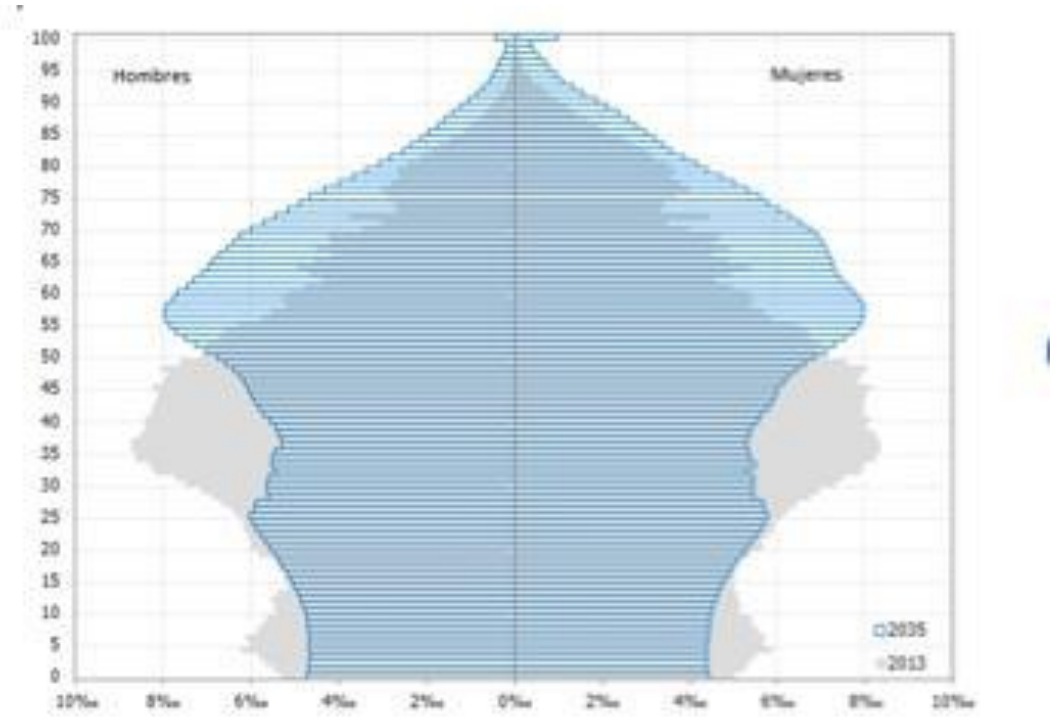
| | |
|---|---|
| Almería | 56 229 |
| Cádiz | 123 058 |
| Córdoba | 88 451 |
| Granada | 86 306 |
| Huelva | 53 199 |
| Jaén | 71 611 |
| Málaga | 164 293 |
| Sevilla | 182 676 |
| Andalusia | 824 823 |

Source: Subdirección de Gestión y Evaluación de Resultados en Salud. Coordinación de Gestión y Evaluación de resultados. Servicio Andaluz de Salud [Coordination of Management and Evaluation of results. Andalusian Health Service] 2016.

About 60% (505 919) of the total population under the programme, are autonomous; 23% (196 001) are fragile people or at risk of becoming dependent elderly, and 17% (142 619) are dependent elderly. Times and contexts are evolving, and we are witnessing a dizzying increase in the number of older people in recent years. Such a situation points to a steady increase of disability and dependence, and that in addition to the increase in life expectancy, it will depend on the early intervention on other factors that are modifiable[4], to which we must respond from right now and actions should be aimed at maintaining the autonomy and independence as they grow older.

Population aged 65 and over registered in our Autonomous Community in 2016 -Municipal Register 2016, Institute of Statistics and Cartography of Andalusia (IECA)[15], reached 1 369 259 inhabitants, representing 16.32% of the Andalusian population (in 2014 represented 15,91%). It is particularly noteworthy to point out two issues that occur simultaneously in this population: on one hand, the rise in life expectancy and, on the other hand, the increased percentage of women in relation to men with advancing age. Therefore, IECA, estimates at over 2 million the number of people aged 65 and over, of which almost 1 200 000 will be women by 2035 (Figure 1).

**Figure 1. Population Pyramid according to medium scenario for 2013 and 2035**




IECA projections for 2020 and 2030 show us the unstoppable rise in the number of older people, particularly among the oldest old (people aged 80 and over). Table 2.

**Table 2. Projection of the population aged 65 and over. 2020-2035.**

| | 2020 | | 2035 | |
|---|---|---|---|---|
| | 65-79 | 80 and over | 65-79 | 80 and over |
| Men | 489 679.00 | 158 042.00 | 726 230.00 | 247 622.00 |
| Women | 561 839.00 | 267 994.00 | 817 499.00 | 273 042.00 |
| Total | 1 046 518.00 | 428 641.00 | 1 543 729.00 | 620 664.00 |

| | |
|---|---|
| **Total 2020** | 1 475 159.00 |
| **Total 2035** | 2 164 393.00 |

Own figures based on data from the IECA. Population Projections. Andalusia 2013-2070.

## 2.1 Active and healthy aging.

In 2002, during The United Nations second world assembly on ageing[16], the concept of *active ageing* was defined as "the process of optimizing opportunities for health, participation and security in order to enhance quality of life as people age". This concept includes the following characteristics:

- It is universal and inclusive: this not only applies to people with certain characteristics but rather includes frail, disabled or dependent people.
- The term "active" refers not only to physical or occupational activity, but is also intended to make sense and provide all the stages of life cycle with a project.
- It includes the individual and social context: personal and immediate environment resources, support and social networks.
- It replaces a strategic planning based on needs by another based on human rights and principles of equity, dignity and solidarity.

With the implementation of the Health Examination for People Aged over 65 years[1] in 2006, Andalusia was a pioneer in proposing actions particularly aimed at improving care for people aged 65 and over. Furthermore, different initiatives have been developed, among which the *El libro blanco de envejecimiento active de Andalucía*[5], providing the fundamental bases for making progress towards healthy and active ageing through the WHO strategic guidelines on security, health and participation, and a fourth strategic line added by Andalusian Community: lifelong learning.

Andalusian Public Health Law[6] makes express mention of *active ageing* in Title I, Chapter II, article 7 (promoting interest in the health of elderly people), as well as in Chapter III, article 14 (rights for particularly vulnerable people in Andalusia).

It also comes within the framework of the IV Andalusian Health Plan[7], specifically commitment 1 (increasing healthy life expectancy), commitment 4 (reducing social inequalities in health) and commitment 6 (fostering knowledge management and introduction of sustainable technologies to improve population health).

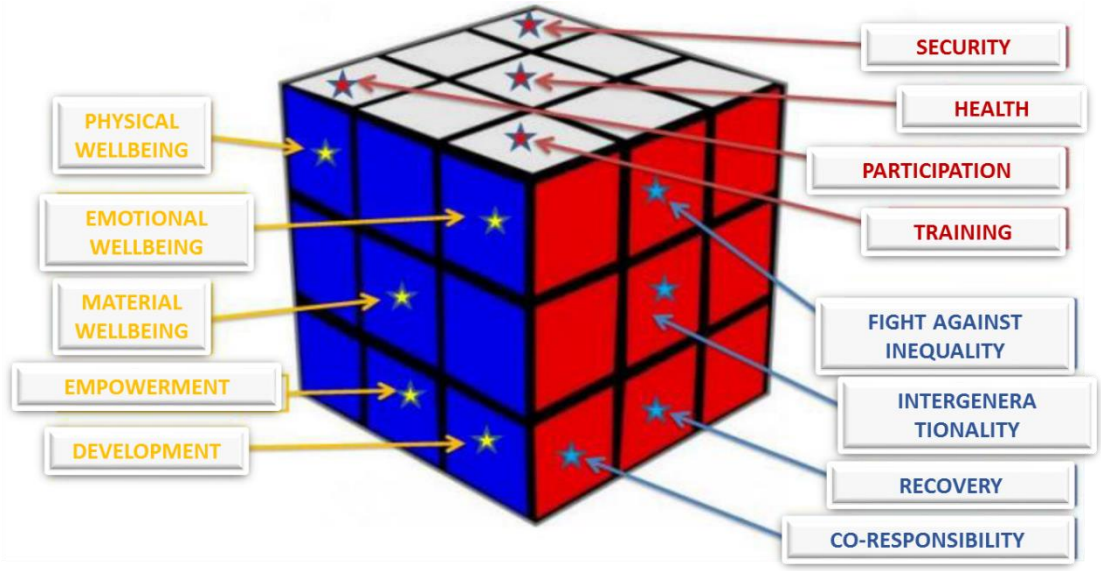
Andalusia was twice awarded the status of the Reference Site Collaborative Network (RSCN) of the European Innovation Partnership on Active Health and Ageing (EIP on AHA) (2012 and 2016) for implementing good practices in this field. In both cases, Andalusia achieved the highest recognition for its strategic vision. It has been an active participant in the RSCN since its inception, and is currently Vice Chair of the Reference Site Collaborative Network. To this should be added initiatives such as its direct link to the Comprehensive Care Plan

for People with Chronic Illnesses[12], the Andalusian Healthcare Strategy[10], or the permanent presence in the I Andalusian Plan for the Promotion of Personal Autonomy and Prevention of Dependence 2016-2020[14]. Andalusia is also participating as a partner in the European Joint Action on the Prevention of Frailty (Advantage)[17].

Promotion of *active ageing* in Andalusia is intended to go beyond a purely economic view, which simplistically links it to production. As Mr Alan Walker[18] points out: The application of active ageing in Europe has been predominantly in a rather limited sense: extending working life. In other words, it has been interpreted as the response to two of the challenges of the ageing societies: the increased costs of social protection and a shrinking workforce. Such a limited interpretation does not do justice to all the potential of active ageing concept, because it only focuses on the labour market, ruling out critical policy areas and becoming a daunting and on-way policy tool.

Health Examination for People Aged over 65 years programme proposes measures to promote the active ageing with a comprehensive approach focusing on the well-being of people as they age. The proposed strategy is based on three axes (Figure 2). The first one, consists of the basic pillars set out in the Libro blanco del envejecimiento activo en Andalucia5: security, health, participation and training; such pillars are harmonized with a second axis, which consists of the lines structuring the public policies of this Autonomous Community: equity/diversity, co-responsibility, intergenerationality and recovery. Finally, a third axis crossing the first two and representing the quality of life and empowerment[19] dimensions, making up a three-dimensional network supporting such strategy.

**Figure 2: Conceptual matrix of active aging. Own elaboration.**




This network approach has established the year 2020 as its time horizon, in line with the European Innovation Partnership on Active and Healthy Aging (EIP on AHA) proposal, within the Europe 2020 initiative[20].

The expected outcome from implementing this strategy is an improvement of the well-being of people throughout their whole life-cycle[21], including emotional management and health and social components, as well as a life satisfaction assessment in accordance with the values of the individual. To achieve this result, progress is needed in the process of empowering people as they age, considering it as the process by which stakeholders are involved in controlling development initiatives, decisions and resources affecting them.

From a dynamic and strategic view, active ageing is considered as the result of integrating actions intended to promote the well-being of people throughout their life cycle. Current studies indicate that people at around the age of 60 need to understand that shaping their future life project is crucial and particularly appropriate[22]. Although what has been done so far will have a particular and decisive influence, this is the time in the life where key decisions to reshape and redefine what is to be the ageing of each person are made. Furthermore, this is an appropriate age for empowerment and to assume a high degree of co-responsibility in the processes. This should therefore be a major focus in developing the promotion of *active ageing*. With this incorporation, more than one third of the population becomes the focus of our attention.

It is also important to work with the concept of quality of life for achieving the intended goals. Its conceptual definition is a complex and continuously reviewed process, and as Shalock and Verdugo[23] state: rather than defining the term, the core dimensions and indicators for a life with quality should be agreed. These authors define the dimensions which will be the basic keys to this programme:

- Fostering physical well-being.
- Enhancing emotional and sentimental well-being.
- Contributing to the improvement of material well-being in Andalusia.
- Improving social inclusion and tackling inequalities.
- Promoting empowerment of people.
- Promoting personal development by improving their skills.
- Fostering interpersonal and intergenerational relationships while reducing unwanted isolation and loneliness.

For these purposes, the programme Health Examination for People Aged over 65 years, and considering that active ageing is not unique to health and should be extended to all policies including the population as a whole, is committed to providing a response based on the best available evidences to the sectors where health may be jeopardised, through intersectoral work with the other professionals involved.

## 2.2. Frailty among elderly people

In addition to integrating active ageing-related strategies, the inclusion of measures proposed in the document Consensus document on frailty and falls prevention among the elderly[3], within the Prevention and Health Promotion Strategy of the Spanish National Health System[24] will form the basis for such programme. That document sets out the guidelines and recommendations to address the problem of frailty and the early detection of fall risk, a number of considerations for a proper screening, recommendations on consistent use of tools and detailed responses to the different situations we might face.

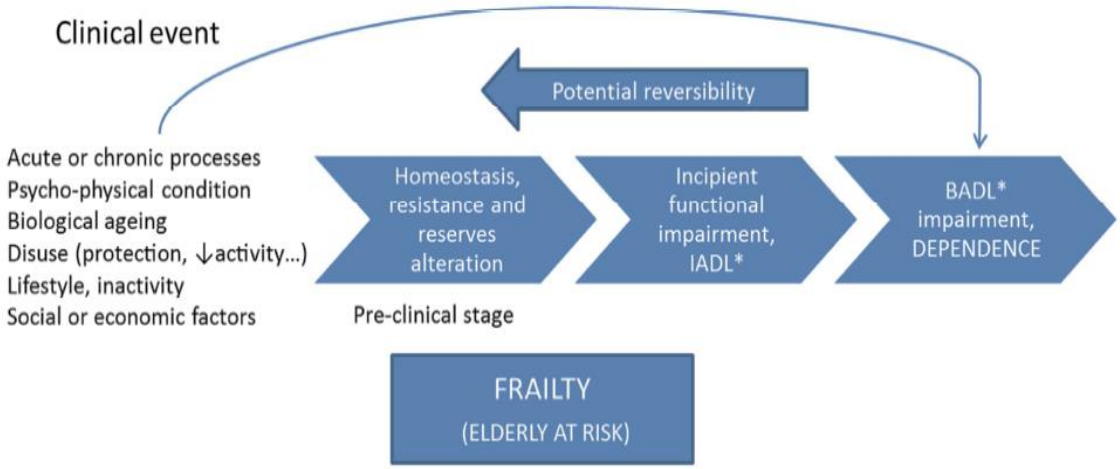
In this context, another major focus is frailty as basic health indicator among older adults, based on the idea that the decline in health among older people is not just about illness, but of loss of function, which is more related to life expectancy, quality of life and the resources and supports needed by the individual[4].

Older people can move from a state of good functionality to a state of dependence (functional impairment): this could happen suddenly (following a cardiovascular event,

complications from a fall, etc.), but it most commonly occurs progressively, even predictably (in at least 60% of cases) (Figure 3).

If detected early and appropriate and strong enough measures are implemented, a delaying o reversing process could be possible, seeking the lower degree of functional impairment.

**Figure 3: Onset of frailty. Training for detection and management of frailty and falls in older people. The Prevention and Health Promotion Strategy of the Spanish NHS. Ministry of Health, Social Services and Equality. Madrid 2014[24,25].**




* IADL (instrumental activities of daily living); BADL (basic activities of daily living)

Source: Martín Lesende I, Gorroñogoitia A, Gómez J, Baztán JJ, Abizanda P. **El anciano frágil. Detección y manejo en atención primaria.** Aten Primaria 2010; 42 (7): 388-93.

Detecting and acting on frailty to prevent disability is possible. There is currently a general agreement regarding the core of frailty as an increase of vulnerability to stressors due to a failure in multiple and interrelated systems, leading to a reduction both in homeostasis reserve and in their adaptive capacity, which predisposes them to adverse health events[26]. Detecting frailty allows as to identify people over 65 that keep their independence but are at risk of functional loss[27].

Morley et al[28] defined physical frailty as a medical syndrome with multiple causes and contributors that is characterized by diminished strength, endurance, and reduced physiologic function. Frailty can occur as the result of a range of diseases and medical

conditions. Frailty increases an individual's vulnerability for developing increased dependence and/or death[27].

It is more common to associate frailty with older ages, and is more prevalent among women. It is also associated with an increasing burden of diseases, disability and cognitive impairment, among other factors[4].
Frailty is a pre-disability state that can be prevented by acting on the keys risk factors: inactivity (a risk factor for heart diseases), insulin resistance, cognitive and musculoskeletal impairment (sarcopenia) and depression[4]. This is a reversible and modifiable situation.

Elderly who experience frailty are defined as having a greater progressive decline in their physical function and functionality, evolving towards disability and dependence.

### 2.3 Functional dependence among older people

Finally, we will use in this strategy the concept of dependence defined by Ley 39/2006, de 14 de diciembre, de Promoción de la Autonomía y Atención a las personas en situación de dependencia [Law 39/2006, of 14 December, on Promotion of Personal Autonomy and Care for people in a situation of dependence][29] as: The permanent state in which persons that for reasons derived from age, illness or disability and linked to the lack of loss of physical, mental, intellectual or sensorial autonomy require the care of another person or significant help in order to perform basic activities of daily living or, in the case of people with mental disabilities or illness, other support for their personal autonomy.

In a situation of dependence, care services need to be reinforced, but our efforts should also be directed towards avoiding dependence or enhancing functionality; so, preventive and early care interventions will be encouraged and prioritized[30] in accordance with the Regional Ministry of Equality and Social Policies of Andalusia for the drafting of Law 39/2006, of 14 December, on Promotion of Personal Autonomy and Care for people in a situation of dependence[29], and the I Andalusian Plan for the Promotion of Personal Autonomy and Prevention of Dependence (2016-2020)[14]; comprehensive and quality care to people having to face a complex chronicity or dependency situation, so as to their caregivers, will be enhanced, within the framework of the Strategy for the Andalusian Primary Health Care Renewal[9], Comprehensive Care Plan for People with Chronic Illnesses[12], and the Healthcare Strategy in Andalusia[10].

## 3. Objectives

### 3.1. General objectives:

To improve wellbeing, promote health, prevent illness and meet the needs of people aged 65 and over, through tailoring the response of healthcare teams to the conditions determining the state and functional ability of these persons.

### 3.2 Specific objectives:

1. Scaling up promotion and prevention interventions relating to *active* and *healthy ageing*.
2. Early detection of frailty and risk of falls among older people.
3. Developing interventions aimed at recovering and/or maintaining functional capabilities.
4. Maximizing remaining capabilities of those who are in a situation of dependence.
5. Adaptation of interventions according to criteria based on the functional capabilities (functional stratification), scientific evidence and improved health outcomes.

## 4. Identification and recruitment

All persons aged 65 and over, included in the SSPA user's database will be the target population. Each health team will carry out a register of people aged 65 and over included in their respective quotas.

Candidates will be recruited from such specific registers via the opportunist recruitment method both in the healthcare setting or at home, as well as in community care services and depending on the patient's state of health (autonomous, frail or dependent older person) for the implementation of interventions included in this program.

In the case of areas requiring a social transformation, where there are at-risk populations, a proactive recruitment system will be designed by the health teams and will be included also in this programme.

## 5. Stratification/Classification

Functional ability of people aged 65 and over is the reference criterion for setting artificial cut points in order to classify older adults as healthy or autonomous, frail and dependent people.

It was agreed to set the age of 65 as the start of functional assessment. Nevertheless, functional ability can vary, and should therefore be re-evaluated, although there is no frequency established to do so.

Any person can move into and out of various categories, since they are not immovable.

Functional ability should be re-evaluated in the event of any physical, mental or social circumstance that may entail changes in the functional ability of a person, regardless of the time elapsed since the last evaluation.

Functionality evaluation should not be overlooked in any situation, even in the final stages of the life. What may differ are frequency and assessment tools used.

## 5.1. Stratification/ Classification process

Functional capacity of people aged 65 and over will be evaluated using the Barthel Index (BI); gait speed test as an indicator of frailty; and risk of falls assessment.

Comprehensive assessment is a tool for diagnostic and action assessment specifically designed for older people, focusing on functional evaluation. Although its implementation among the entire population aged 65 and over is recommended, it is particularly suitable for those at frailty risk and dependent elderly.

Depending on the results of the functional assessment measured by the Barthel Index, people can be classified as follows:

- **Autonomous older person**. Including:
    - Healthy and independent older people.
    - Older people with chronic diseases but maintaining their functional abilities.
    - Defined by:
        - *Barthel Index = 100: independence to perform basic activities of daily living.

- **Frail older person**: it makes sense for frailty detection among older people to identify frail persons at an early stage, when interventions can be effective. Detection is useful only if the risk of frailty can be reversed or adverse health events can be avoided. Equally important is to prevent unnecessary suffering as a result of futile or unnecessary clinical interventions. It would be useful to have sensitive and specific screening tools to identify frail people and make diagnostic and therapeutic decisions in every day practice.

Nevertheless, the available tools have low specificity, and they are thus effective to reject the assumption of frailty but they are of limited value in identifying frail people; in other words, a positive result has an uncertain value. This means that none of the clinimetric instruments replace clinical judgement of a physician.

This includes:

- Older people living independently, but with an incipient loss of functionality and high likelihood of impairment.
- Defined by:
  - Barthel Index = from 90 to <100: independence/minimal dependence in basic activities of daily life.
  - Lawton Index (women <8 / men <5).
  - Performance test (Annex 2): Gait speed (Annex 2.1). A gait disturbance is considered if he/she walks less than 1 m/s in a space of 4 m (<0.8m/s).
  - Screening questions about risk of falls[3] (Annex 2.2):
    1. Have you suffered a fall in the last year that required healthcare assistance?
    2. Have you suffered two or more falls per year?
    3. Do you have any significant gait disturbance? (in the event that the performance screening test shows evidence of frailty, a positive response will be assumed).

    Risk of falls: positive response to any of the 3 questions
    Low risk: negative response to the 3 questions

  A *comprehensive assessment* (Annex 3), with individualized and adjusted interventions as individual's circumstances change.

- **Dependent older person**: older people with a certain degree of dependence for their basic or instrumental activities, requiring assistance from others. Such situations may be temporary and partially or fully tackled. It may be the result of physical, mental or social circumstances, which should be assessed for intervention. The so-called "end of life" situation is included.
  - Defined by:
    - Barthel Index <90: dependent for basic activities.
    - Lawton I. (women<8/men<5)
    - Screening questions about risk of falls (Annex 2)

    Risk of falls: Positive response to any of the 3 questions
    Low risk: Negative response to the 3 questions

- This group of people is characterized by:
  - High risk of worsening, with the possibility of being able to benefit from early intervention.
  - significant presence of geriatric syndromes, many of them reversible.
  - High demand and expectations from these persons and their families.
  - The need to revise the interventions that should be done and those that will not be needed longer.
- A *comprehensive assessment* (Annex 3) will be carried out, with individualized and adjusted intervention as individual's circumstances change.

## 6. Action Plan:

Health Examination for People Aged over 65 years programme shall prioritize a series of actions based on scientific evidence, in order to achieve the proposed objectives. 13 fact sheets with recommendations provided by support groups are included in Annex 4. Activities relating to the various issues will be carried out according to the following objectives:

- Promotion and prevention (healthy and active ageing).
- Frailty and fall risk factors.
- Recovery, maintenance or optimization of functional, cognitive and emotional capacities.

### 6.1 Autonomous older adult

**A.- *Health promotion* actions:**

- Healthy eating (Annex 4. Fact sheet 1).
- Adapted physical activity: (Annex 4. Fact sheet 2).
  - Recommendations, advices and training on physical, sport or leisure activities.
- Safe environment and removal of architectural barriers (Annex 4. Fact Sheet 3).
- Avoiding tobacco and alcohol consumption (Annex 4. Fact sheets 4 and 5).
- Emotional management (Annex 4. Fact sheet 6).
  - Maintenance of cognitive and mental capacity.
  - Social cohesion, involvement with society and social relations.

**B. Actions on *prevention*:**

- Immunizations: influenza, tetanus, diphtheria, 23-valent pneumococcal and others specific vaccines required depending on his/her medical situation and characteristics (Annex 4. Fact sheet 7).

- Assessment of proper use of drugs according to STOPP START[31] criteria, which will also be used as criteria for initial prescription (Annex 4. Sheet 8).
- Screening:
  - Anxiety, depression (only people reporting symptoms according to the integrated care process: anxiety, depression and somatization).
  - Visual acuity assessment.
  - Hearing loss assessment.
  - General screenings for early detection of cancer:
    - Breast cancer (population: women aged 50-69/screening test: mammography. Interval: 2 years).
    - Colorectal cancer: (population aged 50-69/ fecal occult blood test/interval: 2 years)
    - Specific screenings will be performed on people at risk (cardiovascular disorders, cervical, skin cancer…).

Every autonomous person aged 65 and over should be made aware of activities that were done through a shared therapeutic plan, and shall be recorded in his/her *health history.*

Both the situation of autonomous older people and their therapeutic plan shall be reviewed at least on a yearly basis in the context of the program, and/or when their health condition so required.

In order to underpin health outcomes and the impact of interventions included in the program, it will also be necessary to promote joint work with community and local assets and relevant intersectoral actions through the health teams.

## 6.2 Frail older person

The following promotion and prevention interventions will be undertaken:

**A.- *Health promotion* actions:**

- Healthy eating: maintaining BMI in the normal or little overweight ranges. Weight loss in people with obesity. (Annex 4. Fact sheet 1).
- Adapted physical activity: (annex 4. Fact sheet 2) (Annex 5).
  - Regular aerobic and resistance exercise suited to the individual's abilities, and muscle strengthening and balance training.

- Safe environment and prevention of accidents: removal of architectural barriers. (Annex 4. Fact sheet 3).
- Quitting smoking and alcohol (Annex 4. Fact sheets 4 and 5).
- Emotional management (Annex 4 4. Fact sheet 6).
    - Maintenance of cognitive/mental abilities and some activity.
    - Social cohesion, interest in their surroundings and social relationships.

**B.- Prevention actions:**

- Immunizations: influenza, tetanus, diphtheria, 23-valent pneumococcal and others specific vaccines required depending on his/her medical situation and characteristics (Annex 4. Fact sheet 7).
- Assessment of proper use of drugs according to STOPP START[31] criteria, which will also be used as criteria for initial prescription (Annex 4. Fact sheet 8).
- Determinations:
    - Cholesterol: if cholesterol level is normal, it should be measured once every 5-6 years. People between the ages of 65 and 75, and with associated risk factors (smoking, diabetes, high blood pressure) should be more frequently screened. For those older than 75, a cholesterol test should be performed if it not has not been previously performed.
    - Blood sugar: regular blood test in case or risk factors (having a family history of diabetes, high blood pressure, high cholesterol levels, being overweight…).
    - High blood pressure: if values are normal, a test once each year is recommended.

- Screening:

    - Anxiety, depression (only people reporting symptoms according to the integrated care process: anxiety, depression and somatization).
    - Visual acuity assessment.
    - Cataract surgery assessment, where necessary.
    - Hearing loss assessment.
    - General screenings for early detection of cancer:
        - Breast cancer (population: women aged 50-69/screening test: mammography. Interval: 2 years).
        - Colorectal cancer (population aged 50-69/ fecal occult blood test/interval: 2 years).
        - Specific screenings will be performed on people at risk (cardiovascular disorders, cervical, skin cancer...).

**C.- Other actions or specific interventions**:

C1.- A *comprehensive assessment* adjusted to frail older people as well a tailored care and treatment plan based on risk factors and needs shall be carried out. This may include:

C2.- Fall risk interventions (Annex 4. Fact sheet 3).

C2-1.- Early interventions to prevent functional decline with a view to promoting physical activity:

- Pain control: pain is one of the leading causes of immobility which is associated with functional decline. It is therefore essential to address and control the pain issue prior to the initiation of further measures aimed at preventing fall risk.
- Medical history, assessment, diagnostic and therapeutic evaluation for an effective control of pain.
- STOPP-START criteria.
- Referral to specific resources for the pain control and relief, if a proper management cannot be achieved.

- Physiotherapy for frail older people at high risk of fall and reduced mobility/wandering.

- Assessment and group assistance (multicomponent training programme) by the rehabilitation and physiotherapy team of the area. In cases of dependence, assistance to caregivers through support groups will be included (mobilization programs to enhance mobility in dependent people and prevent health problems among their caregivers).

- Individual assistance in specific situations to enhance and improve mobility in frail older people at risk of fall.

C2-2: Promoting *physical activity*: engagement in a multicomponent physical activity programme that includes aerobic endurance, flexibility, balance and muscle strength.

- It can be performed individually or at community facilities (centers for older people, sports centers and other sports facilities).
- Basic recommendations to draw up a multicomponent programme for frail people are listed in Annex 5 of this document.
- Basic recommendations should be offered in writing as a guide to people and community resources involved in the effective implementation of the programme.

C2-3: Medication review: to identify which medications can have an impact on an individual's risk for falls (sedative, hypnotics, psychotropics, diuretics...).

C2-4: Home risks assessment.

C3.- Cognitive impairment (Mini Mental Estate Examination for people with suspected mental disorder, recommendations on physical exercise/activity). (Annex 4. Fact sheet 9).

C4.- Malnutrition: height and weight assessment. Periodic weight measurements for detecting weight loss. A loss of greater than 10% of body weight in less than a year is indicative of increased risk of malnutrition (decreased appetite or intake due to the use of certain medications, functional situation, trouble swallowing, dietary restrictions, poor dental health). Diet should be adjusted to make sure they're getting everything they need[32] (Annex 4. Fact sheet 10).

C5.- Assessment for vitamin D and calcium:

- A daily intake of 800 IU of Vitamin D and 1.2 g of calcium from foods containing them (all people aged 65 and over).
- Older people at risk of falls should have their vitamin D levels checked to determine whether vitamin supplements are necessary.

C6.- Early detection of urinary incontinence (Annex 4. Fact sheet 11).

C7.- Early detection of elder abuse (Annex 4. Fact sheet 12).

C8.- Hypothyroidism: assessment and treatment to people with symptoms of hypothyroidism.

C9.- Dental care for older people at risk or experiencing malnutrition due to oral health problems:

- Oral hygiene information and maintenance of dental prostheses.
- Assessment and dental care provided for in the service catalogue of the Andalusian Health Service.
  - Dental care in specific situations for frail elderly provided for in the service catalogue of the Andalusian Health Service.

C10.- Podiatry intervention for older people at risk due to their feet morphology or inability to manage with self-care:

- Information and advice on footcare by primary health teams.
- Foot care promotion to prevent falls.
- Assessment of foot morphology and structure to determine whether a referral to trauma or podiatry services is necessary.
- Podiatry care in specific situations for frail older people at risk of falls (nail care, corns and calluses, surgery, prostheses…).

Every frail person aged 65 and over should be made aware of activities that were done through a shared therapeutic plan, and shall be recorded in his/her *health history*.

The situation of frail older people in this program will be reviewed at least once every six months, or when there are changes in their health condition, or is required during the control and follow-up of therapeutic indications process.

## 6.3. Dependent older person

A comprehensive assessment and therapeutic plan adapted to risk factors and care needs will be performed. Both dependent older person and his/her family caregiver will be evaluated.

In addition to recruiting and supporting for home care and caregivers, relevant activities included in the previous groups will be carried out, always taking into account the medical, social and family situation of the person.

A specific action plan will be defined for the person who cares, and measures will be developed related to the Plan de Apoyo Integral al Cuidado en Andalucía [Comprehensive Care Support Plan in Andalusia] (pending publication).

The situation of dependent older adults in this programme, as well as their therapeutic plan, will be review at least every six months and/or when there are changes in their health condition and as determined by the individual and his/her family.

In order to improve health outcomes and the impact of interventions included in this programme, it will also necessary to promote through the health teams, a work shared with the community and local assets and the appropriate intersectoral actions.

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