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WP4. Population approach Segmentation

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POPULATION SEGMENTATION AGAINST SOCIAL EXCLUSION

Population approach:

Preventing the chronicity of social exclusion situations is an inexcusable challenge for the social services. With this project, a set of solutions for proactive social intervention to specific risk situations is explored.

The identification of a risk situation is a professional assessment where global knowledge must be taken into account; automatic detection of risk situations for specific people is a support element for the professional and an essential component of proactivity.

The Proactive Intervention Software Solution (named IPRO) supports and reinforces the natural initiative of many professionals in the field of social services who adopt a preventive approach when they identify possible risks of exclusion that the person does not seem aware of or there is no demand of social intervention. Thanks to this professional approach, we can go one step further: bring the proactive model to the organization of processes in the Social Services System. This IPRO solution should help the professional to recognize these situations and make the appropriate decisions.

Following the analysis of available data to identify situations of risk of exclusion, this a software called IPRO (meaning Proactive Intervention), has been developed. It should provide information to the professionals about people in potential risk situations and allow them to register their own assessments.

Likewise, its statistics will allow the anticipated annual planning by means of local network strategies, to address the intervention for those groups of people and families in certain risk situations on which to act preventively it is decided.

The purpose is to anticipate the emergence, chronicity or aggravation of social exclusion through a risk management work methodology supported by profiling software.

Social innovation to prevent risk situations does not end with the launch of this software. This step is rather the starting point that should allow local network entities to plan resources and evaluate the effectiveness of a population and preventive approach, developing new actions and coordinating existing ones to help risk groups that are considered locally relevant.



1 ORGANIZATION OF THE SOCIAL INTERVENTION

Adopting a population approach implies organizing the social intervention through a set of attention strategies aimed at addressing in general the various complexity of the population as a whole, as well as specific risk groups that can benefit from specifically tailor-made designed ways of intervention, so that the set is consider:

- **Proactive:** Anticipate user's demand by adopting a personal risk management approach.
- **Preventive:** Act on risk factors and related groups. Especially to avoid the chronicity on poverty and exclusion.
- **Community:** Activating ways of intervention based on community resources such as volunteering, mutual aid, association, etc., increasing the social community resources.
- **Human rights:** Go beyond the meet of subjective rights.
- **Group:** Taking advantage of the efficiency of group interventions, when appropriate.
- **Efficient, effective and subsidiary:** Optimizing the resources available in the territory: Informal, such as people, organizations and their culture, and formal ones, both from social services as well as other areas, and prioritizing the most standardized solutions.
- **Standardization and customization:** Normalizing processes and strategies, and adapting the social attention to the circumstances of each person.

1.1 STRATEGIES

It requires the organization of significant social attention strategies to prevent the chronification of poverty and exclusion:

- **A general strategy:** That encompasses the professional roles, services and intensity of care depending on the complexity of each situation. The Guaranteed Minimum Income (GMI) benefit already follows this general strategy: The intervention is different from those denied, temporary and structural.
- A set of **specific strategies** for each **risk group** consisting of people and families susceptible to intervention packages designed specifically for them, as it is carried out today with people at risk of losing their home due to insolvency. These strategies may include different combinations of community, group, family and individual intervention actions, from accompaniment to therapy. It requires specific attention protocols for each risk.



1.1 RISK GROUPS

It requires the detection of risk groups that identify “target” users for certain interventions, to support decision making and the development of population segmentation models for the purpose of plan resources to meet different needs in an adapted and creative way. There are some tools available to identify the people and families that can benefit from a particular strategy:

- Assessment by the case coordinator.
- The support of the Protection Network professionals.
- Electronic Social Record (ESR) in SAUSS¹ and its assessment instruments.
- The population segmentation tool in SAUSS.

The risk groups chosen for the experimentation (pilot) performed in PACT project, have been:

- Chronicity in the GMI benefit
- “Avoidable” dependence
- Loss of “protection needed”
- Mismatches in the social intervention
- Recidivism in mortgage insolvency

2 AREAS

It can be used from three perspectives:

- **Personal:** Proactive social intervention with individuals and families, through assessments of each case.
- **Professional:** Support to the case coordinator in decision making for intervention with individuals and families, through assessments of each case.
- **Territorial:** Planning and management of local community resources, through the use of statistics and lists of people with specific risks of exclusion, which allow community resources to be modified, such as:
 - Specialized volunteering: for example for mothers with lack of support, gender violence, etc.
 - Group: awareness workshops, parent schools or self-help groups.
 - Accompaniment services for insertion itineraries.
 - Etc.

¹ This acronym corresponds to the Unified System of Access to Social Services which is the information management system of user’s access to the Social Service System in the region of Castilla y León.



3 POPULATION STRATA AND RISK GROUPS

It is referred to risk management applied to people at risk of social exclusion to prevent undesirable situations.

3.1 POPULATION SEGMENTATION

It consists of assignment people to self-exclusive categories depending on the complexity of the global situation, the risk of exclusion chronification and the intensity of intervention.

The purpose is to help manage the intensity of intervention, roles and services in each case, combining the effectiveness and efficiency of available resources through a general strategy of social exclusion intervention.

The strata arise from the degree of proactivity that users require depending on the severity of the risk of exclusion:

- **Priority attention:** With a high risk of evolving into undesirable situations.
- **Moderate attention:** With moderate risk of evolving into undesirable situations.
- **Basic attention:** Autonomy with community support, without anticipation of negative evolution, with autonomous “coping capabilities”.
- **Self-care:** No risk appreciated.

3.2 GROUPS OF SOCIAL EXCLUSION RISK

It consists of the non-exclusive identification of people with a set of relevant social exclusion risks to develop differentiated social intervention guidelines.

The purpose is to facilitate proactive attention specifically relevant to each case, based on their known circumstances.

The approach of risk groups is carried out from a comprehensive/integrated care approach, instead of by groups or sectors, as has been done so far.

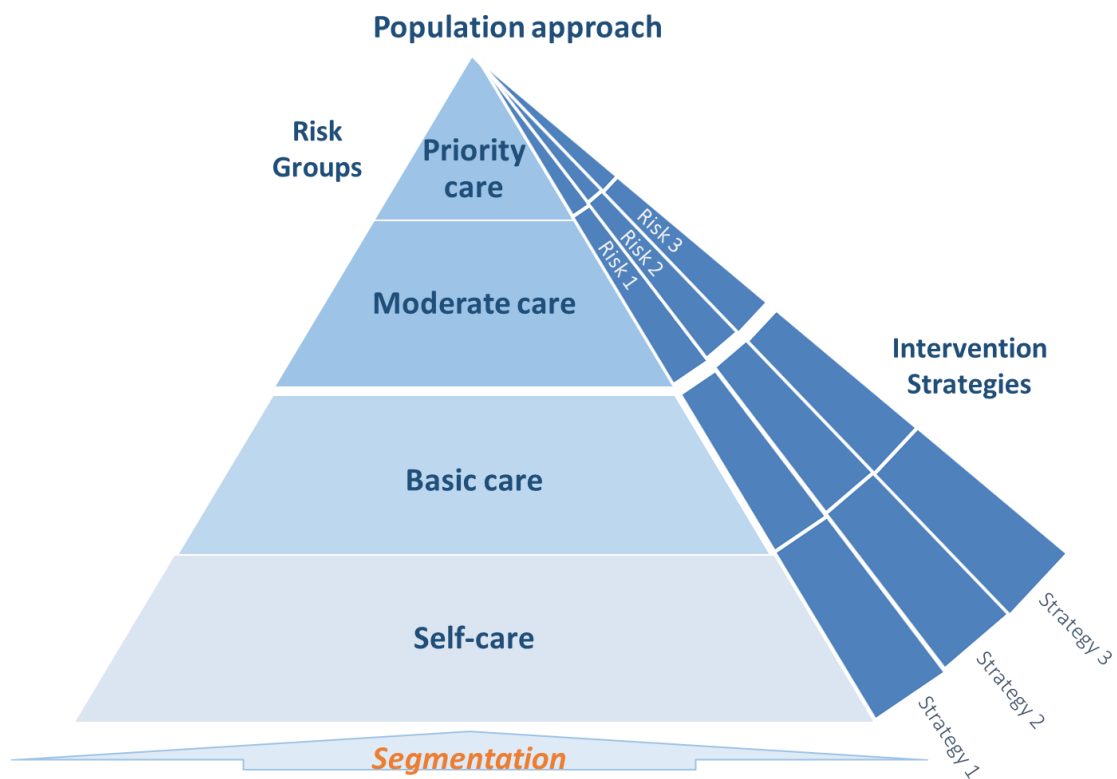
4 INTERVENTION STRATEGIES FOR SOCIAL EXCLUSION

4.1 GENERAL STRATEGY

It consists of a set of criteria applicable to the entire population in order to assign the intensity of intervention, roles and services in each case, combining the effectiveness and efficiency of available resources through a general strategy of attention to social exclusion.

It answers the question: Which people need attention to prevent an undesirable evolution, and what kind of attention do they need?

Indicative scheme:





4.2 SPECIFIC STRATEGIES FOR INTERVENTION TO RISK GROUPS

It consists of a set of intervention protocols applicable to each of the social exclusion risk groups.

A particular intervention strategy will correspond to each risk group.

Each service strategy may contain community, group, family, personal support network, or individual actions, allowing personalization based on the most relevant elements.

The specific strategies are articulated each other by means of the general intervention strategy.

5 INFORMATION UPDATE

1. BY THE SYSTEM:

- The system will update the information when the monthly payroll is generated.

2. BY THE CASE COORDINATOR:

- When validating the strata (segment resulting from the screening process) and proposed risks.
- At any time, the person can be reassigned to another strata/segment, based on any new known information.

6 OPERATION OF THE SAUSS-CEAS SYSTEM FOR THE CASE COORDINATOR

1. "POPULATION SEGMENTATION LIST" SCREEN:

- It shows the list of users to whom provide the proactive intervention, belonging to the territorial scope of the role who is consulting: CEAS² or Local Council.
- It shows the proposed allocation of the general population segmentation and each person's allocation to a specific risk groups provided by the software, as well as the correspondent date.
- It shows the assignment of general segmentation and risk groups made by the professional.
- Allows to filter and classify, and to access to the ESR (Electronic Social Record) of any person in order to edit the segmentation.
- Allows the segmentation to be edited by the professional.

² CEAS is the acronym of Centre of Social Accion, where the social intervention is provided at local level



2. SEGMENTATION SCREEN IN THE ESR OF THE PERSON AND THE FAMILY UNIT:

- Shows the allocation of segmentation and allocation in risk groups made by the professional, or alternatively made by the software.

7 UTILITY

The solution must be useful from four perspectives:

- Person: Who must be informed and able to decide what he/she wants
- Professional: The solution should make sense to them and allow them to provide better attention.
- Manager of the entity: It must allow him/her to manage the intensity of the intervention as well as both the internal and community resources where the entity operates.
- Social Services System of Public Responsibility: It must contribute to its purposes and respect the regulations.

8 IPRO SOFTWARE

The identification of a risk situation is a professional assessment where the global knowledge of the person must be taken into account.

Population segmentation will be presented to professionals through the IPRO Proactive Intervention computer tool, which will propose the segment to which each person belongs (fit better). The system will automatically assign one of the following levels:

- **Segment 1- Priority attention**
- **Segment 2- Moderate attention**
- **Segment 3- Basic attention**
- **Segment 4- Self-care**

GMI users and those who have received the Mortgage Insolvency Interlocution benefit will be proposed by the software to a segment based on requirements that indicate the possibility of something happening.

Both risks and segments will be assigned **individually**, per person.

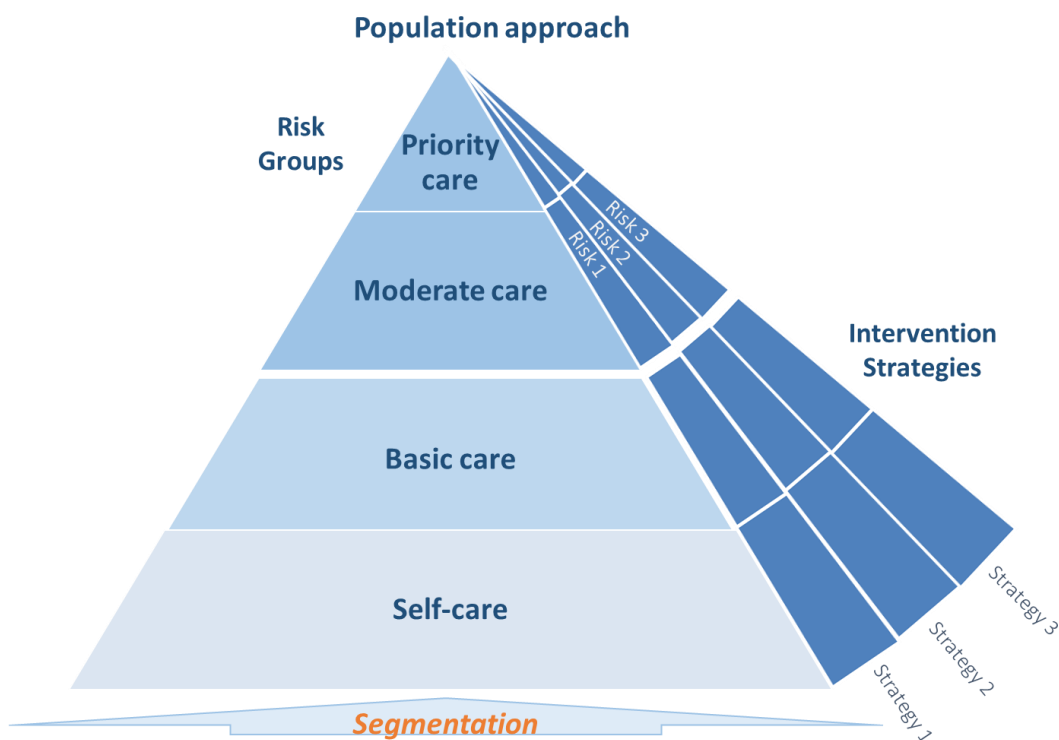
Even if the IPRO software did not propose a segment for a user, there is a possibility that all users of the SAUSS-CEAS³ will be assigned to a segment by the professional, depending on the criteria of the social worker.

³ SAUSS-CEAS is the specific information within the mentioned SAUSS related to the CEAS information system.

- Once the system has proposed a segment to each person, **the professional must confirm or reassign** to each person in a segment, when the person is in *pending* status. The system allows the professional to validate the filtering coincidence or cancelling the inclusion of a person in that risk group; given the known information, with their direct knowledge (allowing to cancel possible false positives).

In addition, if a case is not included in the risk selection but the professional considers it appropriate, he/she **can include him/her**.

- The professional may **review** the segment assigned to each person and include him/her in another one, based on the knowledge of new circumstances **at any time**.
- In case of **discrepancy** between the proposal for automatic assignment and the one assessed by the professional, the non-validation of the prediction will be included in a text box with the reasoned motivation of the disagreement. This is compulsory when the level assigned by the professional is lower than the one proposed automatically, and optional in case of higher, indicating the main associated risk factors. Professional interpretation can and should integrate other variables that have not been part of the predictive model but in risk situations.



- The segment to which each person belongs will be **visible from his/her Family Unit** and in the Social Record, when it is available.

The calculations of each of the risks are performed automatically once a month, when the GMI payroll is closed.



- The person **can change segment**:

At the instance of the professional:

- ✓ When significant changes in personal circumstances are known and the intensity of intervention should change.

As suggestion of the IPRO software:

- ✓ When it is captured in a filter in a higher segment than another previously existing.
- ✓ When several filters of the same segment meet, which would raise the person to a higher segment due to the simultaneity of several risks
- ✓ When several filters of different attention priority concur, the priority would be raised to the upper segment captured.

9 RISK SITUATIONS

The variables used to build each filter are detailed in each risk and come from different sources:

- Predictive model of chronicity risk of permanence in GMI for more than 5 years: consisting of 10 variables. We have an algorithm that could identify people with difficulties to obtain their autonomy from economic benefits before 60 monthly payments.
- Sociodemographic variables, such as age, number of adults at home, number of members in the household, gender.
- Variables of GMI file: consecutive months charging GMI, classification like structural or temporary situation.

The risk situations identified are the following:

9.1. RISK OF AVOIDABLE DEPENDENCE OF SOCIAL SERVICES

Some people who receive economic benefits achieve sufficient autonomy in the short or medium term to avoid exclusion, and other people remain in this situation for a long time. Could we better help the most vulnerable people in terms of social exclusion? Which people will have more difficulties to achieve their autonomy? How could we improve their capabilities?

This risk group is composed by GMI beneficiaries who have a high probability of exceeding a payroll period and opportunities are detected to improve their autonomy.

9.2. RISK OF LOSS OF PROTECTION NEEDED

This group of people receiving GMI have a high probability of exceeding a payroll period and the best intervention is to preserve their GMI payment.



9.3. RISK OF DISAGREEMENT ABOUT THE INTERVENTION

It is understood as a mismatch of attention both an infra-attention and an over-attention.

For this filter, we have mainly chosen those understood as infra-attention: we will select people who simultaneously have GMI plus other benefits or relevant actions related to social inclusion and, at the same time, there has been no monitoring in the last year.

9.4. RISK OF REINCIDENCE OF MORTGAGE INSOLVENCY SITUATION

This involves identifying people who get the Benefit of Integral Support to Families at Risk of Eviction Due to Mortgage Debt, having achieved a restructuring of the debt with the financial entity for a period or waiting period. When the deadline for the restructuring of the mortgage is close, the increase in the installments may repeat the risk of default and, therefore, loss of housing for some people. How can we help them?

9.5. RISK OF GENERATIONAL TRANSMISSION OF POVERTY

9.5.1. EDUCATIONAL DISADVANTAGE

The lack of attainment of compulsory education levels can lead to perpetual inclusion disadvantages and is decisive in the subsequent labor insertion.

Therefore, this filter is aimed at identifying the segment of children under 16 who have a history of school absenteeism or school insertion difficulties in any unit of living and at any time.

9.5.2. SINGLE-PARENT FAMILY UNITS

The risk of poverty and exclusion seems to be significantly higher in single-parent families than in other types of family structures. They are most affected by unemployment and precariousness (temporality, informal economy, below average income). This relationship is accentuated when the age of the children is less than six years. The group consists of family units receiving GMI formed by an adult (usually a mother or father, although it may be some other relative) and someone under eighteen.

9.5.3. MINORS IN DIFFICULTY

The accumulation of risks in children belonging to families with long-term economic dependence and low incomes, together with other factors of vulnerability or familiar instability, multiply their probability of lack of social protection during childhood and of risk of generational transmission in the adult stage (uncertainty or unstable social paths), reducing the possibilities of opportunities and resources for full inclusion, being a group of special attention to be protected.