

TRAINING QUALIFIED PROFESSIONALS IN CARE PROVISION IN CROSS-BORDER RURAL AREAS: THE CASE OF THE PROXIMITY TRAINING PROJECT

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Abstract

Rural cross-border regions in Northern and Central Portugal and Spain are experiencing accelerated population ageing, low population density, and persistent territorial asymmetries that challenge the provision of care services. In these contexts, the growing prevalence of dependency among older adults places increasing pressure on already fragile social and health systems. The shortage of qualified professionals, combined with geographic dispersion and limited access to specialized services, highlights the urgent need for structured capacity-building strategies tailored to the specific characteristics of transboundary rural territories. Based on the work carried out within the scope of the POCTEP-Proximity Training project, this study aims to analyse the importance of qualifying professionals in care provision to dependent persons in low-density cross-border regions and to propose an integrated training framework addressing identified territorial and demographic challenges. First, the article characterizes the cross-border territory, examining demographic trends and ageing indices. Second, it presents the development of structured training pathways, including the design of a training-of-trainers model to ensure pedagogical sustainability and regional scalability. Third, it details the implementation of competency-based training programs for care technicians, focusing on technical, relational, and community-oriented skills adapted to rural environments. Finally, the study describes the development of pedagogical manuals designed to support both trainers and trainees, ensuring methodological coherence and practical applicability within the Portuguese-Spanish cross-border context. The proposed framework emphasizes interinstitutional cooperation, harmonization of competencies across borders, and the use of flexible learning modalities (blended learning; learning by doing or job shadowing) to overcome geographic barriers. By strengthening local human capital and promoting knowledge transfer, this model contributes to improving quality of care, enhancing professional recognition, and fostering social cohesion in vulnerable rural areas. The findings support the argument that targeted, territorially grounded training strategies are essential to ensure sustainable long-term care systems in ageing cross-border regions.

Keywords: *Rural ageing, cross-border regions, care provision, professional training, capacity building.*

1. Introduction

The cross-border territory of Castilla y León (Spain) and the Central Region of Portugal, including Guarda, is defined by profound territorial asymmetries characterized by geographic isolation and severe demographic decline. This area has been classified by the European Union as a territory with a geographic disadvantage. The region faces one of the highest aging rates in Europe, which, coupled with a negative natural growth rate, has led to a growing prevalence of dependency and disability among its residents. In Castilla y León, over 125.000 people have recognized rights to dependency benefits, while in Guarda, more than a quarter of the population is over 65, with 32% of those being older than 80.

In this context, the EU, through Article 174 of the Treaty on the Functioning of the European Union (TFEU, 2012), which sets out the legal basis and principles of the Union's economic, social and territorial cohesion policy, establishes the objective of reducing disparities in development between the various European regions and supporting the least favoured areas. It recognises that certain regions, such

as mountainous, island or sparsely populated areas, face structural challenges that require specific support. To this end, it develops policies and funds aimed at balancing regional growth and strengthening solidarity among member state, of which we highlight the Operational Programme for Cross-Border Cooperation between Spain and Portugal (POCTEP, 21-27), specifically established for the border region between Portugal and Spain.

Considering this context, we have identified as a significant barrier to social equity in these borderlands, the shortage of qualified professionals trained to provide specialized care in rural settings. This deficit is driven by the migration of young skilled workers to urban areas in search of better opportunities. This human capital loss is further complicated by extreme geographic dispersion, for instance, 90% of the municipalities in Castilla y León have fewer than 1,000 inhabitants, making the delivery of social services logistically complex. Furthermore, structural gaps in transport networks and digital connectivity, where nearly 29% of the regional population lacks high-speed internet, act as major hurdles, hindering access to essential public services and isolating vulnerable populations.

To address these structural constraints, the POCTEP Proximity Training project serves as a structured response for capacity-building. The project aims to harmonize care standards across the border by identifying key professional roles, such as Personal Assistants, Carers and Case Managers, creating a bilingual (Spanish and Portuguese) training catalogue. By utilizing innovative pedagogical methodologies, including learning by doing, job shadowing, and blended learning, the project seeks to generate a new employment niche in the care sector. Ultimately, this project intends to empower professionals to provide high-quality and localized support, allowing individuals in situation of dependency to fulfil their individual life projects within their own communities.

2. Literature review

Border regions across Southern Europe, particularly along the Spain and Portugal border, continue to exhibit accelerated ageing, depopulation, and low population density, reinforcing structural inequalities in access to care. The literature confirms that rural and remote regions face persistent workforce shortages and service delivery constraints, particularly in long-term care systems (Carson et al., 2024). Low-density territories face increased costs, limited infrastructure, and reduced service accessibility, while relying heavily on informal care networks. These pressures are intensified by what recent studies describe as a rural social care workforce crisis, driven by recruitment and retention difficulties (Carson et al., 2024).

Sánchez-Mateos & Ruiz (2025) add that population ageing, in itself, does not explain service gaps, rather, the combination of ageing and territorial isolation creates complex and multi-level challenges requiring integrated policy responses.

At the heart of this problematic another issue emerges, which concerns the philosophy underpinning the care delivery model.

Traditionally, therefore, disability or impairment was viewed from a welfare-oriented perspective, in which people were treated as dependent individuals who required continuous and permanent care and protection. This biomedical model, often associated with charity and institutionalisation, reinforced segregation and limited opportunities for active participation in society. The focus is, therefore, on care provided by third parties without taking the individual's autonomy into account. However, with the growing emphasis on human rights and self-determination, a new model for approaching disability or incapacity has begun to emerge, based on autonomy and equal opportunities. This principle of self-determination holds that dependent people should have control over their lives, making supported decisions, but without external impositions that limit their freedom. This shift is reflected in the Independent Living Movement, which advocates for full social participation and the removal of physical, communicational and attitudinal barriers, promoting person-centred care (McKay, R., et al., 2012).

The transition from a biomedical to a biopsychosocial model remains central to contemporary care systems, and recent literature emphasizes its operationalization through integrated, community-based, and digitally supported care models.

Recent studies highlight that care is increasingly decentralized and home-based, supported by digital tools and telehealth. Furthermore, integrated care pathways are essential for ensuring continuity across different contexts and, training must reflect interdisciplinary and community-oriented approaches (WHO, 2022; Woods et al., 2024; Nolte, 2014). In line with this approach is Angel's study (2025) on work on rural healthcare systems which stresses that technology enhanced care pathways (e.g., telecare, AI-supported monitoring) are critical for managing dependency in ageing populations.

At the same time, research on digital health training shows that the successful implementation of these models depends heavily on workforce capacity. Training programs for rural professionals increasingly adopt blended and flexible learning models, combining online modules with practice-based learning (Woods et al., 2024).

Importantly, these developments reinforce the principles of Independent Live (Article 19 of UNCRPD, 2006), as digital and community-based solutions enable individuals to remain in their homes while receiving personalized support. In the specific case of Portugal and Spain we highlight, for Portugal, the Independent Living Support Model (MAVI), established by the Law 129/2017, and for Spain, the Law 39/2006 on promotion of personal autonomy.

This requires a sensitive and context-appropriate approach to professionalisation, through the development of technical, digital, relational and person-centred skills (Sultan et al., 2025; Watkins et al., 2024). Also, the place-based education and distributed training models are emerging as innovative approaches that broaden access to training, reduce travel costs and allow for personalised learning. In this way, they promote geographical and temporal flexibility development, whilst helping to promote local care networks and partnerships (Strasser et al., 2025).

It is this framework that justifies the establishment of the POCTEP-Proximity Training Project as an integrated response to the need for skilled training in the border region between Portugal and Spain.

3. Methodology

In order to achieve the aim of the POCTEP-Proximity Training Project, which is to contribute to the provision of high-quality care to dependent persons in low-density cross-border regions, and to propose an integrated training framework addressing identified territorial and demographic challenges, we have adopted the following methodology: i) Characterization of the cross-border territory; ii) Development and implementation of a questionnaire to identify training needs in the care provision service; iii) Design of a structured training programme for caregivers' trainers and caregivers; iv) Development of bilingual pedagogical manuals to ensure methodological coherence; and, v) Implementation of a flexible training programme supported by innovative teaching methodologies.

4. Results analysis and discussion

The first phase of the project consisted of studying the cross-border area, which identified the following as its main defining features: significant demographic dispersion across small settlements; population decline (negative natural growth), resulting from an ageing population; demographic imbalances; as well as issues associated with this situation, such as the weakness of the business sector (competitiveness) and its fragmentation; the lack of employment opportunities; shortage of qualified professionals; the stranglehold on labour markets caused by the small working-age population, which is both a cause and a consequence of low economic dynamism resulting from economic stagnation; and the gradual disappearance of basic services for the population and for people living in isolation, poverty and social exclusion.

In order to complement the information gathered through the territory study, a questionnaire was developed and administered to professionals working in care sector organisations in the cross-border region, with the aim of identifying their specific training needs, view to improving the care provided.

The study sample comprises 68 professionals working in institutions in the cross-border region, specifically in the cities of Guarda (Portugal), Ávila, Zamora, Salamanca and El Bierzo (Spain). This survey enabled us to identify, for the three professional profiles, namely *Personal Assistants* (performs or helps another person to perform everyday tasks in various areas, enabling them to pursue their life goals and promoting personal independence and decision-making); *Carers* (provides support and assistance to people in institutions); and *Case Managers* (coordinates, plans, evaluates and monitors the caregivers work), a set of training needs which we distinguished between training needs in transversal skills and specific or technical skills. Regarding training needs in transversal skills, we highlight teamwork, conflict management, emotional management and time management. As for specific skills, we highlight i) first aid, ii) adapting the message to each person's cognitive needs, iii) how to provide support during bereavement, iv) how to deal with behavioural changes and mental health, and v) training in the Independent Living Model.

Considering the territory study and the questionnaire results a training programme was designed in accordance with the principles of flexibility and adaptability, based on distinct professional profiles and innovative teaching methods. Accordingly, the programme comprises a total of 16 modules, some of which are common to all three profiles, whilst others are specific to each profile, as shown in Table 1.

Table 1. Modules for each professional profile.

Modules	Professional Profiles		
	Personal Assistant	Carer	Case Manager
1. Independent Living Support Model	X	X	X
2. Legal Framework	X	X	X
3. Personal Assistant	X		
4. Universal Accessibility, Technologies and Systems for the Provision of Assistive Devices	X	X	X
5. Occupational Health and First Aid	X	X	X
6. Personal and Interpersonal Skills	X	X	X
7. Technological Skills	X	X	X
8. Support for people with challenging behaviours and experience of mental illness	X	X	
9. Support for people with significant support needs	X	X	
10. Support in bereavement situations	X	X	
11. Support for people with intellectual and developmental disabilities	X	X	
12. Support for older people and those in the ageing process	X	X	
13. Methodologies and tools to support the development of an Individualised Personal Care Plan			X
14. Processes, Protocols and Procedures			X
15. Key tools for Effective Team Management			X
16. Networks, Synergies and Community Inclusion			X

In view of the shortage of qualified care workers, and to ensure that the training met the required quality standards, a specific training programme was also designed for trainers of the different caregiver profiles. This modular programme is also based on the principles of flexibility and adaptability and aims to equip future trainers with innovative methodologies and tools that, above all, uphold the principles underlying two fundamental and inseparable concepts in collective processes for promoting social inclusion, namely: the concepts of universal design (involves creating spaces, products, information and services that are accessible to all individuals, regardless of their physical, sensory and/or intellectual abilities and co-production (designing, developing and implementing initiatives that require the active participation and cooperation of all stakeholders). Based on these principles, the training programme for trainers consists of three modules: 1. Innovative Teaching Methods; 2. New technologies applied to training and; 3. Criteria for assessing and recognising skills.

Based on the training programmes that have been established, two bilingual pedagogical manuals have been produced with the aim of supporting and guiding the training processes in line with their respective modular structure. Although these manuals contain different content, they follow the same methodological approach and are intended to guide training activities by providing guidance on content and activities, as well as on the strategies and training methods to be adopted, with a focus on a combined model comprising face-to-face classroom training, e-learning, blended learning, learning by doing and job shadowing. In this way, priority is given to methodologies focused on practical and active learning, in line with the project's specific objectives.

Following the design of the training programmes and the development of the training manuals, a flexible training plan was implemented. The delivery of the training sessions followed the guidelines set out in the training manuals and included a simulated practice component, using suits designed to simulate the physical limitations usually associated with the ageing process. The training was held in the project's target region and involved a total of 239 participants. Of these, 13 were trainers, 174 were Personal Assistants, 27 were Case Managers and 25 were Caregivers.

5. Conclusions

The results of the POCTEP-Proximity Training Project demonstrate the critical role that EU programmes, such as INTERREG-POCTEP, perform in terms of promoting territorial cohesion, both economically and socially. The project has proven to be a structured and effective response to the shortage of qualified professionals in the sparsely populated border regions between Portugal and Spain. The implementation of flexible training programmes, supported by innovative training methodologies has made it possible to adapt care services to the specific challenges of an ageing rural population and geographical dispersion. The harmonisation of key professional profiles, combined with the creation of bilingual training manuals, ensured the methodological consistency and pedagogical sustainability necessary for the regional

scalability of the model. In turn, the use of flexible learning methods, it proved to be essential to overcoming territorial and connectivity barriers, thereby promoting the strengthening of local human capital.

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