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POPULATION STUDY

Making Nursing Activities Visible in Outpatient Care: A Nationwide Descriptive Study of Nurse-Led Clinics in Italy (ENLIGHT-AMB)

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ABSTRACT

Background: Nurse-led clinics (NLCs) are increasingly recognized as a strategic component of outpatient care delivery; however, in many health systems, including Italy, their role remains poorly documented, under-recognized in health information systems, and weakly integrated into organizational governance. This phenomenon contributes to the persistence of "Hidden Nursing Care," limiting nursing visibility and evidence-based service planning.

Purpose: To provide the first nationwide descriptive mapping of NLCs in Italy, examining their distribution, organizational characteristics, activity volumes, service typology, and professional workforce profile.

Methods: A national cross-sectional study was conducted as part of the ENLIGHT-IT project. Public healthcare facilities were recruited across Italian regions. Data were collected between January and June 2024 using three structured instruments: (1) facility-level survey on NLC organization and activity; (2) nurse survey including sociodemographic and professional characteristics and the Practice Environment Scale of the Nursing Work Index (PES-NWI); and (3) an annual log of nursing activities performed. Descriptive statistics were used.

Results: Twenty-seven healthcare facilities from 12 regions reported data on 279 NLCs and 940 nurses. NLCs delivered 2,047,058 nursing activities and assisted 533,212 patients in 2023. Clinics operated a mean of 4.2 days and 24.3 h per week. The largest service categories were general nursing (55.9%), wound care (11.1%), and chronic care management (10.0%). Most NLCs were

administratively affiliated with medical (42.9%) or surgical departments (26.5%). The nursing workforce was predominantly female (76.4%), with a mean age of 51.4 years and extensive experience (mean 26.9 years). PES-NWI results indicated strong leadership support but insufficient staffing.

Conclusions: NLCs constitute an established and high-volume component of outpatient care in Italy, yet their organizational positioning remains fragmented.

Implications for Public Health Nursing: These findings highlight the need for formal recognition, standardized documentation, and dedicated policy frameworks to support equitable access to nurse-led outpatient services.

1 | Introduction

The sustainability of healthcare systems is being challenged by profound demographic and epidemiological transitions. Population ageing, multimorbidity, and the rising prevalence of chronic conditions are reshaping healthcare demand, requiring a shift from acute, hospital-centered models to continuous, community- and outpatient-based care (Doose et al. 2025). This transformation calls for new organizational approaches capable of ensuring accessibility, coordination, and quality while maintaining economic sustainability (Hussain et al. 2024).

In this transition, nurses are often the first and most consistent point of contact for patients, providing continuity, coordination, and clinical follow-up across the care trajectory. The growing complexity of chronic illness management has led to the development of innovative outpatient models such as nurse-led clinics (NLCs), See & Treat (S&T) pathways, and other nurse-managed programs that ensure early access, continuity, and personalization of care (Johnson et al. 2024; Mellerick et al. 2023; Terry et al. 2024). These models are designed to respond efficiently to chronic care needs by leveraging nurses' clinical expertise, patient education skills, and coordination capacity within multidisciplinary teams. Evidence from several countries shows that nurse-led outpatient care can achieve outcomes comparable or superior to traditional physician-led care while promoting patient empowerment and adherence (Davis et al. 2021; Laurant et al. 2018; McMenamin et al. 2023).

Despite these strengths, the visibility of nursing contributions in outpatient care remains limited. Activities performed by nurses are often recorded under general categories or attributed to other professionals, producing an incomplete and distorted picture of the real processes and intensity of care (Welton et al. 2006; Welton and Longyear 2024). Moreover, the absence of shared definitions and coding systems for nursing interventions hinders comparability between services and the capacity to evaluate workload, productivity, and efficiency (Di Nitto et al. 2025). The phenomenon of hidden nursing care (HNC), that is, nursing work that is unrecorded, unrecognized, or misattributed, represents a structural weakness that affects not only professional recognition but also the ability of organizations to plan resources and assess outcomes (De Groot et al. 2022; Zaghini et al. 2024).

In Italy, this problem is particularly relevant. While the number of nurse-managed outpatient clinics has increased in both hospital and community settings, their establishment is largely based on local initiatives rather than national regulations. The resulting heterogeneity in structure, access modalities, and documentation systems limits the ability to map these services and quantify their actual activity. In many cases, nursing interventions, such as wound dressing, health education, follow-up counselling, or device management, are performed daily but are not formally traced in administrative databases or cost accounting systems. This lack of visibility leads to underestimation of nurses' contribution to patient outcomes and prevents evidence-based decisions on staffing, organization, and funding. Addressing this evidence gap is essential to improving the visibility of nursing within the Italian health system and to informing policy and resource planning in line with international standards for community and ambulatory care.

Therefore, this study aimed to provide the first nationwide descriptive analysis of nurse-led outpatient clinics in Italy, as part of the ENLIGHT-IT Amb (Enlightening Hidden Nursing Care in Outpatient Nursing Clinics) project (Zaghini et al. 2024). Specifically, it sought to (a) map the distribution and organizational characteristics of these services, (b) classify their clinical areas and service typologies, (c) quantify the nursing activities delivered, and (d) describe the professional and organizational context of the nurses working in these settings.

2 | Materials and Methods

2.1 | Study Design

This descriptive cross-sectional study was conducted as part of the ENLIGHT-IT project (Enlightening Hidden Nursing Care in Italy). The present article reports the findings from the *nurse-led clinics (NLC)* component of the study, whereas data regarding See & Treat (S&T) services, also included in the original protocol, will be presented separately. The study aimed to systematically describe the organization, typologies, and activities of NLCs operating within the Italian National Health Service (NHS).

2.2 | Settings and Participants

The study involved public healthcare organizations across Italy, including local health authorities, general hospitals, and university hospitals providing outpatient services managed exclusively by nurses. Private or accredited facilities were excluded. All eligible facilities were invited to participate through formal letters of intent distributed by the coordinating center. Facilities expressing interest and meeting the inclusion criteria were enrolled, leading

to participation from 27 institutions located in 12 Italian regions, for a total of 279 NLCs and 940 nurses.

2.3 | Procedures

In each participating facility, a local facilitator was identified in collaboration with the Nursing Directorate. Facilitators coordinated the enrollment of the services, supported communication between the central research team and local coordinators, and oversaw data collection. They ensured adherence to the study procedures and helped address any operational issues. Data collection was carried out between January and June 2024 using web-based survey tools.

The coordinating center (CERSI-FNOPI) provided training sessions for facilitators via online meetings and distributed written instructions detailing study objectives, data entry procedures, and privacy management.

2.4 | Data Collection Tools

Three structured instruments were used:

2.4.1 | Survey for Nursing Coordinators/Referents

This instrument collected information on the organization and activity of the NLCs during the previous year, including the number of services provided, patient volumes, staffing, activation procedures, and documentation systems.

2.4.2 | Survey for Nurses

This questionnaire collected sociodemographic and professional data (age, gender, education, years of experience, employment contract, and post-basic education) and assessed perceptions of the work environment through the *Practice Environment Scale of the Nursing Work Index (PES-NWI)* (Zanini et al. 2022). The PES-NWI comprises nine items rated on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree) and evaluates leadership, participation in decision-making, adequacy of staffing, and availability of support services. Reliability coefficients reported in the Italian validation range from $\alpha = 0.80$ to 0.92.

All tools were implemented through the LimeSurvey platform and distributed to participants via email links. The survey for nurses was administered to all nurses affiliated with the NLCs, and participation was based on voluntary response. Data were entered directly by the respondents (nursing coordinators or nurses) under the supervision of facilitators.

2.5 | Variables

The study explored organizational variables (number of clinics, activation documents, booking modalities, presence of nursing cost centers, and codes), service variables (number of patients assisted, activities performed, opening hours, and duration of patient slots), and nurse-level variables (demographics, qualifications, work contract, seniority, and perceived work environment). The primary outcome was the descriptive mapping of organizational and professional characteristics of NLCs across Italy.

2.6 | Data Analysis

Data were exported into IBM SPSS Statistics 25 for analysis. Descriptive statistics were computed for all variables, including absolute and relative frequencies for categorical variables and means, standard deviations, and ranges for continuous variables. Aggregate indicators were calculated to summarize total activities and patients assisted. To ensure comparability, some qualitative responses (e.g., clinic names or specialties) were grouped by thematic affinity into higher-order categories. No inferential or predictive analyses were performed, as the study was exploratory and descriptive in nature.

2.7 | Ethical Considerations

The study protocol was approved by the Lazio Regional Ethics Committee 2 (Protocol 21.24 CET2 utv_ptv) and, where required, by local Ethics Committees and Data Protection Officers of participating facilities. All participants received written information about the study and provided informed consent before data collection. The research was conducted in accordance with the Declaration of Helsinki, EU Directive 2001/20/EC, and Italian privacy legislation (Legislative Decrees 196/2003 and 211/2003). Data were pseudonymized and stored on password-protected servers accessible only to the research team.

3 | Results

3.1 | Study Sample

A total of 27 public healthcare facilities from 12 Italian regions participated in the study, contributing data from 279 NLCs and 940 nurses. As shown in Table 1, most NLCs were located in Central Italy (82.4%), particularly in the Lazio and Tuscany regions, followed by Northern regions (21.5%) and Southern regions including islands (17.6%). The majority of clinics operated in community settings (n = 157, 56.3%), while the remainder were hospital affiliated. In 2023, the NLCs collectively delivered 2,047,058 nursing activities and assisted 533,212 patients.

3.2 | Service Organization and Activity Volumes

On average, each NLC assisted 1960 patients per year (range = 7–93,851) and provided 7337 nursing services annually (range = 68–121,094), indicating substantial variability in workload across clinics. Clinics were operational for a mean of 4.2 days per week (range = 1–7) and 24.3 opening h weekly (range = 4–84). The scheduled time allocated per patient was 25 min on average, while the actual direct care time was higher (mean = 26.7 min).

Considerable heterogeneity emerged in the formal establishment and governance of NLCs. The most common form of activation was through internal resolutions issued at facility level (n = 78,

TABLE 1 | Distribution of facilities, NLCs, nurses, patients, and activities by Italian region and macro-area (2023).

Macro-area	Region	NLCs, *n* (%)	Nurses, *n* (%)	Patients	Activities
North	Friuli-Venezia Giulia	36 (12.9)	69 (7.3)	32,355	47,520
	Liguria	8 (2.9)	15 (1.6)	470	21,804
	Piemonte	11 (3.9)	42 (4.5)	21,036	24,246
	Valle d'Aosta	5 (1.8)	17 (1.8)	47,468	124,463
Subtotal North		60 (21.5)	143 (15.2)	101,329	218,033
Center	Lazio	60 (43.0)	332 (35.3)	296,341	923,516
	Tuscany	110 (39.4)	310 (33.0)	73,634	564,994
Subtotal Center		170 (82.4)	642 (68.3)	369,975	1,488,510
South and Islands	Abruzzo	19 (6.8)	61 (6.5)	19,166	99,698
	Basilicata	3 (1.1)	18 (1.9)	3,286	24,066
	Calabria	3 (1.1)	7 (0.7)	5,020	53,050
	Campania	9 (3.2)	32 (3.4)	23,650	120,435
	Puglia	12 (4.3)	36 (3.8)	10,007	36,837
	Sicily	3 (1.1)	1 (0.1)	779	6,429
Subtotal South and Islands		49 (17.6)	155 (16,5)	61,908	340,515
Total		279 (100)	940 (100)	533,212	2,047,058

Note: Patients = unique individuals assisted in 2023. Activities = total nursing activities and interventions performed in 2023. Data are aggregated at the regional level; figures for some regions include multiple participating facilities within the same local health authority.
Abbreviation: NLC, nurse-led clinics.

30.1%) or department/ward level (n = 59, 22.8%), while only 41 clinics (15.8%) were established through regional acts and 41 (15.8%) through operational tools such as projects or clinical protocols. Notably, 40 clinics (15.4%) reported no formal activation documents, indicating informal or locally negotiated implementation.

Regarding access and booking systems, most NLCs were supported by a dedicated appointment agenda (n = 209, 75.4%). Access was mainly by referral from general practitioners or clinical specialists (n = 166, 66.8%) or following hospital discharge (n = 102, 41.3%). Specific nursing service codes or cost centers were available in fewer than one-third of clinics, indicating limited traceability and administrative recognition of nursing activity.

Regarding the administrative traceability of nursing work, 180 NLCs (64.5%) reported inclusion in a specific nursing or sector cost center. However, only 64 clinics (24.4%) had operational identification codes for nursing activities, while in 99 clinics (35.5%) nursing services were not attributed to any nursing cost center or professional responsibility line. Even among clinics without cost center attribution, a minority (n = 11, 3.9%) reported the use of regional or facility-level nursing activities codes. These findings indicate limited financial and organizational recognition of nursing activity within outpatient care structures.

3.3 | Classification of NLCs by Service Typology

As reported in Table 2, more than half of the clinics were classified as general nursing NLCs (n = 156, 55.9%), providing clinical assessment, medication management, and follow-up care for a wide range of patient needs. Wound Care NLCs represented 11.1% (n = 31), followed by clinical chronic care clinics (10.0%, n = 28) and vascular access services (9.0%, n = 25). stoma care (7.2%), urology (3.9%), renal care (1.4%), and pediatric/neonatal nursing (1.4%) accounted for smaller but specialized portions of the sample.

3.4 | Organizational Affiliation of NLCs

Most clinics reported administrative affiliation with medical departments (42.9%) or surgical areas (26.5%), while others were linked to urology units (10.2%), rehabilitation services (6.1%), oncology (5.1%), pediatrics (4.1%), and psychiatry (2.0%). Only a small number of NLCs reported cross-departmental or autonomous organizational models, indicating heterogeneous governance and limited structural recognition within healthcare organizations.

3.5 | Nursing Activities Performed

A total of 2,047,058 nursing activities were recorded across all clinics in 2023 (Table 3). The most frequently performed activities were venous blood sampling (31.9%), nursing assessment (21.2%), therapeutic education and counselling (14.2%), and wound care (13.2%). Together, these four categories accounted for over 80% of all recorded nursing interventions. Other activities included biological sample collection (8.2%), vascular access management (4.3%), instrumental examinations (2.0%), therapy administration (1.8%), ostomy care (1.2%), peritoneal dialysis (0.7%), bladder

TABLE 2 | Classification of NLCs by clinical domain and service typology ($N = 279$).

Category	*n*	%	Examples of services
General nursing	156	55.9	Assessment, sampling, administration of therapies, and monitoring
Wound care	31	11.1	Management of complex wounds, diabetic ulcers, and negative pressure therapy
Clinical chronic care	28	10.0	Follow-up of chronic patients (cardiology, respiratory, and metabolic)
Vascular access	25	9.0	PICC/Midline placement and maintenance and CVC management
Stoma care	20	7.2	Ostomy education, follow-up, and appliance management
Urology	11	3.9	Catheter care, urodynamic management, pelvic floor rehabilitation
Renal care	4	1.4	Peritoneal dialysis training and management
Pediatrics/Neonatology	4	1.4	Outpatient clinical nursing for neonates and children
Total	279	100	

Note: NLCs were classified through thematic grouping of clinic names and descriptions reported by participating facilities. Categorization was performed by two independent researchers, with discrepancies resolved through discussion. Each clinic was assigned to a single category according to its predominant service activity. Percentages refer to the proportion of the total sample ($N = 279$) and may not sum to 100 due to rounding.
Abbreviation: NLCs, nurse-led clinics

TABLE 3 | Nursing activities performed in NLCs $N = 2{,}047{,}058$ total activities.

Activity category	n	%	Cumulative %
Venous blood sampling	571,753	31.9	31.9
Nursing assessment/monitoring	379,055	21.2	53.1
Therapeutic education and counselling	253,699	14.2	67.3
Wound care (simple/complex)	235,991	13.2	80.5
Other biological sample collection	146,602	8.2	88.7
Vascular access management	76,148	4.3	93.0
Instrumental exams (ECG, spirometry, etc.)	35,756	2.0	95.0
Drug administration/transfusions	32,765	1.8	96.8
Ostomy care	21,976	1.2	98.0
Peritoneal dialysis	10,201	0.7	98.7
Bladder catheter care	9,810	0.6	99.3
Enteral feeding (PEG/NG tube)	2,681	0.2	99.5
Other activities	15,071	0.8	100.0

Note: Activity categories were harmonized through clinical grouping. Percentages are calculated over the total number of reported activities ($N = 2{,}047{,}058$). Minor discrepancies may be due to rounding.

catheter management (0.6%), enteral feeding (0.2%), and other activities (0.8%).

3.6 | Characteristics of Nurses Working in NLCs

Data from 584 nurses working in the clinics are reported in Table 4. Most were women (76.4%), with a mean age of 51.4 years (SD = 8.5, range 26–66). More than half held a pre-Bologna nursing diploma (55.1%), while 32.2% had a bachelor's degree and 12.8% held other academic titles. Regarding post-basic education, 49.5% had no additional qualifications, 37.2% completed a postgraduate diploma, 8.6% held a clinical specialization, and 4.8% had a master's degree. Nurses had extensive professional experience, with a mean of 26.9 years of total practice and 22.3 years within their current organization. Most were employed full-time (91.4%).

3.7 | Perceived Work Environment

Perceptions of the work environment, assessed with the Practice Environment Scale of the Nursing Work Index (PES-NWI), are reported in Table S1. Overall, nurses reported positive perceptions of leadership support ($M = 3.48$–3.54 across related items) but lower evaluations of staffing adequacy ($M = 2.72$–2.75) and organizational support services ($M = 2.78$), indicating areas of organizational strain.

TABLE 4 | Sociodemographic and professional characteristics of nurses working in NLCs ($N = 584$).

Variable	n	%	Mean (SD)	Range
Sex				
Female	446	76.4	—	—
Male	131	22.4	—	—
Other/Prefer not to say	7	1.2	—	—
Age (years)	—	—	51.41 (8.59)	26–66
Highest professional qualification				
Nursing diploma (pre-Bologna)[a]	322	55.14	—	—
Bachelor's degree	194	32.22	—	—
University diploma	77	13.18	—	—
Post-basic education				
None	289	49.48	—	—
Postgraduate diploma	217	37.16	—	—
Clinical specialization diploma	50	8.56	—	—
Master's degree	28	4.79	—	—
Work experience (years)	—	—	26.91 (9.41)	2–45
Seniority in current organization (years)	—	—	22.26 (10.77)	1–44
Employment contract				
Full-time	534	91.44	—	—
Part-time	46	7.88	—	—

Note: Percentages may not total 100 due to rounding. Valid percentages reported where applicable.

Abbreviations: BSN = bachelor of science in nursing; MSc = master of science.

[a]Refers to the professional nursing qualification obtained in Italy before the Bologna Process reform (pre-2001), when nursing education transitioned from regional professional schools to university degree programs.

4 | Discussion

The ENLIGHT-IT study was conducted to systematically and quantitatively describe the organization, typologies, and activities of Italian nurse-led clinics (NLCs). This nationwide investigation provides the first comprehensive overview of NLCs in Italy, documenting 279 clinics and more than 2 million nursing activities delivered annually to over half a million citizens. Despite their extensive presence and contribution, NLCs remain underrecognized within the institutional, administrative, and financial frameworks of the National Health Service. This invisibility stems from the absence of specific legislation and the lack of structured coding systems that would allow for the integration and accurate reporting of nursing activities within existing reimbursement mechanisms. Consequently, the nursing contribution to healthcare delivery and outcomes continues to be systematically underestimated. In this perspective, a key priority area for action is the development of a national coding framework for nurse-led activities, capable of being formally adopted and operationalized within regional directives. Such a framework would enhance the traceability, visibility, and recognition of nursing interventions in NLCs, enabling their systematic inclusion in organizational monitoring systems and funding models. Starting from organizational-level implementation pathways, this approach could support the standardization of data collection, inform resource allocation, and provide robust evidence of the clinical, organizational, and economic value generated by nurse-led outpatient services.

Outpatient clinics primarily deliver specialized nursing care, such as wound care, stoma care, and the insertion and management of vascular access devices. Although these activities are performed exclusively by nurses within dedicated nurse-led outpatient settings, irrespective of their degree of formalization or nomenclature, only a subset is attributed to nursing cost centers or coded as nursing activities. This finding suggests a misattribution of costs and inaccuracies in financial reporting, contributing to the invisibility of nursing work. Such invisibility extends beyond the formal recognition of clinics and includes the traceability of economic implications, accountability for service provision, and recognition of professional contributions. Similar findings have been reported internationally, where the introduction of nursing cost weights or activity-based costing systems has proven effective in linking nursing work to measurable outputs and value creation (Kaplan et al. 2014; Knauf et al. 2006; Sermeus et al. 2009).

From a workforce perspective, the demographic profile of the participating nurses indicates a predominantly senior cohort, with an average age higher than the national mean (46.5 years—FNOPI Single National Register, 2025). This trend suggests that outpatient settings often accommodate experienced professionals who transition from high-intensity hospital environments. Therefore,

the observed age distribution does not reflect a lack of willingness among younger nurses to work in outpatient services, but rather an organizational placement strategy aimed at optimizing workforce sustainability and accommodating different career stages. While this may be considered a valuable resource for continuity and quality of care, it may also signal a lack of strategic workforce planning aimed at integrating younger nurses and fostering skill development in innovative outpatient contexts. The limited formal recognition of advanced or post-basic qualifications, reported by only one-third of participants, points to a persistent misalignment between education, competencies, and job responsibilities. This phenomenon, described as overeducation (Batino et al. 2025) training surplus (Zaghini et al. 2025) is known to negatively affect nurses' health, generating stress and frustration (Shahidan and Ismail 2021) and potentially leading to burnout (Bochoridou et al. 2025) and intention to leave the profession (Pan et al. 2025). Moreover, the underutilization of advanced skills represents a lost opportunity for system efficiency and innovation in outpatient care, despite international evidence demonstrating the effectiveness of nurse-led clinics in improving access, quality, and patient satisfaction (Connolly and Cotter 2023; Lian et al. 2024).

Finally, data findings from the organizational context reinforce the interpretation of a system characterized by strong professional commitment but limited structural support. While nurses report high trust and recognition from their coordinators, they also perceive chronic understaffing and insufficient ancillary services, factors consistently associated with reduced care quality and lower job satisfaction (Bagnasco et al. 2023). These structural limitations are particularly concerning given the increasing demand for community-based and outpatient services in response to population aging and the burden of chronic disease (Rudnicka et al. 2020). The findings highlight the paradox of a profession that is operationally central to the delivery of outpatient care yet remains managerially invisible. The lack of standardized classification, coding, and recognition systems leads to inefficiencies at multiple levels: clinical, organizational, and economic. Addressing this invisibility requires systemic reform, including the adoption of a national nomenclature for outpatient nursing services, the integration of nursing activities into reimbursement and information systems, and the development of data flows that enable accurate monitoring of service provision and costs. Ultimately, making nursing work visible is not merely a matter of professional recognition but a prerequisite for health system sustainability and equity (McGuire et al. 2025). By quantifying and valuing the nursing contribution, policymakers can promote a more transparent, efficient, and responsive National Health Service, capable of meeting evolving population needs while supporting the professional growth of its largest workforce.

4.1 | Implications for Policy, Practice, and Research

The findings have several implications. First, from a policy perspective, there is an urgent need to establish national or regional frameworks that clearly define, classify, and document nurse-led outpatient services. Integrating nursing activity codes into reimbursement and reporting systems would promote transparent monitoring, equitable financing, and stronger governance of outpatient care. Second, at the practice and organizational level, the development of clear referral pathways, cost-center structures, and explicit lines of professional accountability would enhance coordination and make the contribution of nurses visible within interprofessional teams. Supporting workforce development, through advanced education, continuing training, and succession planning, would also help sustain quality and innovation. Finally, from a research perspective, future studies should explore the impact of NLCs on patient outcomes, cost-effectiveness, and professional well-being, and investigate the mechanisms through which organizational visibility influences performance and health system sustainability.

4.2 | Strengths and Limitations

The strengths of this study include its nationwide scope, large sample, and the use of standardized data collection tools. However, a limitation concerns regional representativeness. Italy comprises 20 regions, each characterized by distinct models of healthcare governance and organizational structures. In the present study, participating facilities were located in 12 out of 20 regions, corresponding to approximately 60% of the national territory. Moreover, when examining the distribution by macro-geographical areas (North, Center, South, and Islands), NLCs were predominantly concentrated in the Central regions. This uneven geographical distribution may limit the generalizability of the findings, as regional variability in organizational models, resource allocation, and service delivery could influence the configuration and functioning of nurse-led outpatient services. Moreover, data were self-reported by facilities and nurses, which may have introduced reporting bias. An additional limitation concerns the cross-sectional design, which precludes causal inference, and the voluntary nature of participation, which may have favored more structured or better-organized services.

5 | Conclusion

The ENLIGHT-IT study reveals that Nurse-Led Clinics are a structured yet under-recognized component of outpatient care in Italy. Their contribution to chronic care management and patient follow-up is substantial but insufficiently documented in administrative and governance systems.

Making nursing activities visible is not only a matter of professional recognition but a key requirement for transparency, efficiency, and equity in healthcare delivery.

The evidence provided by this investigation can guide institutions and policymakers in developing standardized frameworks for the classification, documentation, and evaluation of nurse-led services, ensuring their integration within national health strategies and the sustainability of community-based care.

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Disclosure

Any data utilized in this study have been lawfully acquired in accordance with The Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from Their Utilization to the Convention on Biological Diversity. State that the relevant fieldwork permission was obtained and list the permit numbers. The authors have verified that the submission complies with the Journal's statistical guidelines. The author team includes statisticians Alessandra BURGIO and Domenico Stefano CICALA.

Ethics Statement

This study protocol was approved by the Liguria Regional Ethics Committee in November 2022 (Ref. number 675/2022—DB id 12844).

Conflicts of Interest

The authors declare no conflicts of interest.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section.

Supplementary Table S1. Scores of the Practice Environment Scale of the PES-NWI among nurses working in NLCs ($N = 584$).