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Design of an Integrated Community-Based Strategy for Cervical Cancer Screening Access Among Women in Montería, Córdoba: The SINÚ-CCUM Intervention Proposal

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Abstract

Cervical cancer is the eighth most frequent malignancy among women worldwide, with 94% of cases concentrated in low- and middle-income countries. In Colombia this burden is not evenly distributed across the territory, as most cases are concentrated in rural areas. The city of Montería, Córdoba, exemplifies this problem, presenting an incidence higher than that of the rest of the country yet a lower coverage of screening tests.

The underlying causes of this situation were identified through a systematic search of the literature together with a semi-structured interview. The causal factors identified were geographical barriers; sociocultural barriers (fear, taboo, lack of knowledge, and the overlay of Indigenous beliefs); administrative barriers (paperwork and authorizations); and operational barriers (fragmentation in the transition between cytology, diagnosis, and treatment).

In response, SINÚ-CCUM emerges: an oncology-navigation proposal designed for women aged 15 to 65 living in Montería, Córdoba. It rests on two pillars: training of human talent to form a multidisciplinary team tasked with reducing misinformation and conveying the importance of screening; and the creation of a simplified diagnostic pathway that centres coordination on the health insurer (EPS), the Colombian League Against Cancer–Córdoba chapter (LCCC-Córdoba), and IMAT Oncomédica.

Introduction

Cervical cancer constitutes one of the most persistent oncological challenges in global public health. It is considered the fourth most frequent malignancy among women worldwide and one of the few oncological diseases that can be prevented through measures such as vaccination and screening, which allow precancerous states to be identified (1). Its burden is, however, distributed in a profoundly inequitable manner: more than 94% of associated deaths are concentrated in low- and middle-income countries (2, 3). In Latin America and the Caribbean, GLOBOCAN reported for 2022 an incidence of 15.1 per 100,000 women and a mortality of 7.7 per 100,000 (2). Approximately 95% of cases are attributable to oncogenic genotypes of the human papillomavirus (HPV), principally types 16 and 18 (4). The progression from persistent infection to intraepithelial lesions and, subsequently, to invasive carcinoma occurs over a period of 10 to 20 years (4), creating a wide window for early detection and pre-neoplastic intervention. Against this backdrop, the World Health Organization (WHO) proposed the 90-70-90 strategy for 2030 in order to eliminate the disease as a public health problem: 90% of girls vaccinated against HPV before the age of 15, 70% of women screened with a high-performance test at ages 35 and 45, and 90% of women with cervical disease receiving timely treatment (5).

In Colombia, cervical cancer represents the fourth most incident malignancy among women, with an incidence of 8% and a mortality of 9% during the 2017–2021 period (1). The High-Cost Account (Cuenta de Alto Costo) reported 27,385 prevalent invasive cases between 2023 and 2024, with a prevalence of 102.45 per 100,000 women (6); in 2025, 172 new cases of cervical cancer were notified in the Department of Córdoba (7). This national profile nonetheless conceals marked territorial inequities: the Caribbean region accounts for the largest proportion of new cases in the country, with 59% of these diagnosed at an invasive stage (6)—an indicator of a preventable operational failure. Córdoba, in particular, recorded 1,675 new cases between 2017 and 2021, of which 649 corresponded exclusively to the municipality of Montería, representing 38.74% of the departmental total (8). Local incidence is estimated at 16 cases per 100,000 women (9), comparable to the national average and placing this territory in a position of sustained epidemiological vulnerability.

The city of Montería exemplifies this situation. The local literature documents persistent rural poverty, a predominance of informal agricultural labour in peri-urban areas, gaps in the health workforce, and the financial

fragility of the State Social Enterprises (Empresas Sociales del Estado) (10, 11). The reduction—of between 20% and 60%—in the initial number of Health Promoting Entities (Entidades Promotoras de Salud, EPS), among which Nueva EPS, Mutual Ser, and Salud Total remain authorized to operate, has weakened administrative continuity and disrupted the coordination between care and screening pathways (12, 13). Beyond socioeconomic barriers, Resolution 3280 of 2018 itself constitutes an additional disadvantage by setting the start of screening at age 25, even though many women begin their sexual life at around 16 years of age (14–16). This regulatory gap, articulated with the socioeconomic conditions of the territory, perpetuates unattended exposure in younger populations with a higher risk profile.

From this perspective, the distribution of the disease burden and screening coverage reflect social determinants that are well documented in the Colombian literature. Poverty and age constitute key variables in non-attendance at screening appointments, with poverty being the variable most consistently associated with higher rates of non-attendance (17). Consistently, national studies have documented a recurrent pattern of barriers grouped into five domains: structural and socioeconomic barriers linked to intermittent insurance coverage, rurality, and opportunity costs; followed by associated stigma, cultural and gender-based beliefs—whereby HPV is regarded as a cause of shame, discomfort, fear of diagnosis, and fatalism towards cancer (18). Operational issues within the system, such as the fragmentation between screening, diagnosis, and treatment, as well as the low quality of cytological reading (16, 19), are compounded by difficulties with administrative procedures associated with authorizations, referrals, and transfers (20). To these are added educational barriers that perpetuate lack of knowledge, mistaken perceptions about the test, and a subjective absence of need (19, 21). Health literacy, timely access to information, and institutional coordination emerge, in this context, as key determinants for ensuring effective entry into—and retention within—the care pathway (18, 22). In the same vein, communication strategies based on mobile technologies have demonstrated value for patient follow-up, although they require designs adapted to age, territorial context, and contact preferences, given that a significant proportion of women face barriers of digital literacy and frequent changes of telephone number (23).

In this scenario, Resolution 3280 of 2018 constitutes a regulatory framework for the early detection of cervical cancer as an essential component of secondary prevention. It establishes pathways differentiated by age and risk, including specific routes for rural or dispersed areas (15), synthesized in Fig. 1. The effectiveness of secondary prevention depends on each component of the pathway functioning in a coordinated manner: triage, colposcopy, biopsy, diagnosis, treatment, and sustained surveillance (24). Within this framework, primary HPV-DNA testing and self-sampling have emerged as promising alternatives for reducing barriers associated with embarrassment, discomfort, and geographical access limitations. Their acceptance is considerably higher when implemented within structured programmes that include invitations, reminders, and systematic follow-up (25). A study conducted in Peru documented that 75% of women prefer self-sampling over professionally assisted sampling (26)—a finding that underscores its potential but also the need to secure the subsequent diagnostic chain. Nonetheless, even under these conditions, adherence to follow-up remains vulnerable to social determinants expressed in prolonged waiting times, geographical distances, transport costs, lack of awareness, or incompatibility between service hours and caregiving and work responsibilities (27).

The effective implementation of these strategies at the local level in Montería depends on the institutional capacity to ensure sample collection, processing, diagnostic confirmation, and timely follow-up. Although no exact number of laboratories certified for test processing is available, the municipality has IMAT as its reference oncology institution. It processes more than 3,000 samples per year and sends approximately 1,000 to the National Institute of Health (INS) for diagnostic confirmation. It also supports the 107 clinical laboratories of the departmental network through technical assistance and quality control (7). However, cytology coverage—despite being the most widely used

preventive service—reaches only 63%, while attendance at preventive medical consultations does not exceed 23% of patients. This reinforces the need for strategies of active case-finding, education, and patient navigation (28). The critical point of the system lies in the continuity of the pathway following a positive result: the fragmentation between the screening, diagnosis, and treatment subsystems generates losses to follow-up (11, 29).

In response to this systemic situation, oncology patient navigation emerged in 1990: a multidisciplinary model that can be extrapolated to other healthcare settings and whose origin responds to the complexity of oncological pathways and the need for continuous accompaniment. It was designed to facilitate access to care pathways, manage authorizations, coordinate care with specialists, and identify psychosocial needs early. Its implementation has made it possible to reduce disparities in oncological care and to shorten the time elapsed from the first consultation to diagnosis from 91 to 30 days (30, 31). Nursing navigation models, systematized in the Ibero-American literature with relevant experiences in Brazil and Mexico, demonstrate that navigation reduces system fragmentation, improves adherence, and promotes shared decision-making, especially in contexts with administrative and territorial barriers that hinder continuity of care (32).

The relevance of the present proposal lies not only in the magnitude of the problem but in the specific nature of the gap it seeks to address, where lesions are detected late and coexist with barriers that impede timely access. The Department of Córdoba ranks among those with the highest prevalence of invasive cervical cancer in Colombia (1), and the Caribbean region accounts for 59% of cases detected at an advanced stage (6), indicating a preventable operational failure in the care chain. Despite the regulatory framework in force (15, 33), effective coverage in rural areas and the continuity of the pathway following a positive screening result are entirely inefficient (11, 29), with an unequal distribution of interventions between urban and peri-urban areas that restricts access for the most vulnerable populations.

This proposal seeks to address a problem that is not limited to the reality of Córdoba but reflects persistent barriers in other territories of the country with similar conditions, especially in rural and peri-urban contexts with difficulties in accessing health services. It is intended to be implemented with the support of existing territorial assets, such as the Colombian League Against Cancer–Córdoba chapter (LCCC-Córdoba), in order to strengthen its feasibility and sustainability. Given the above, the present study aims to design a comprehensive navigation pathway with a differential approach by age and risk for cervical cancer in women aged 15 to 65 residing in Montería, Córdoba. To achieve this objective, the study first seeks to identify the main economic, territorial, administrative, and sociocultural barriers that limit access to screening, follow-up, and treatment for cervical cancer. On this basis, a differential navigation pathway will be implemented: for women aged 15 to 24, focused on education about sexual and reproductive health with timely activation of screening when indicated; and, for women aged 25 to 65, aimed at increasing access to the tests established by Resolution 3280 of 2018 and at improving adherence to the clinical follow-up of abnormal results.

Methodology

Study type

The present work corresponds to the design of a public health intervention proposal, with a qualitative approach, structured in three sequential phases. It is aligned with the guidelines of the Ministry of Health and with implementation-science guidance for complex interventions in middle-income countries (34, 35), and is organized around an explicit logic model that defines inputs, activities, outputs, outcomes, and impact. The choice of this design responds to the need to ensure the territorial relevance of the proposal, integrating up-to-date scientific

evidence, qualified testimony from local stakeholders, and the systematization of previous oncology-navigation models in Ibero-America (36).

Phase 1: Rapid literature review.

In order to characterize barriers and opportunities for access to screening in Montería, three sources were integrated: bibliographic databases, documentary analysis (CAC, INC, ASIS, and the Shock Plan), and a review of the territorial literature, with the aim of triangulating the qualitative findings with epidemiological and territorial-management indicators.

Phase 2: Territorial diagnosis through a structured interview.

In order to characterize the operational conditions of the local context, a structured interview was conducted with two qualified informants from LCCC-Córdoba. The information was processed through thematic coding into four categories.

Phase 3: Design of the SINÚ-CCUM navigation pathway.

On the basis of the inputs generated in the previous phases, the SINÚ-CCUM proposal (Integrated Navigation and Unification Service for Cervical Cancer in Montería) was constructed iteratively, in alignment with the institutional Ruta de la Vida (Pathway of Life) model of the Ministry of Health. The design integrated: (a) the components and good practices identified in the rapid review; (b) the needs, barriers, and facilitators emerging from the interviews; and (c) the operational conditions of the context, including available resources, existing institutional flows, roles of the health workforce, and current regulations.

Population

Reference population.

Women aged 15 to 65 residing in Colombian or international municipalities with epidemiological and territorial profiles comparable to Montería: a high prevalence of invasive cervical cancer, the coexistence of urban and dispersed rural areas, and the institutional presence of the Colombian League Against Cancer or equivalent actors.

Study population.

Women aged 15 to 65 residing in Montería, Córdoba, distributed across the urban centre, peri-urban areas, and dispersed rural areas, with a predominance of subsidized insurance coverage.

Inclusion and exclusion criteria

Studies and institutional documents addressing screening, early detection, oncology navigation, or community-based strategies for cervical cancer in women aged 15 to 65 were included, provided they were published in Spanish or English, had full-text availability, and were territorially relevant to the Colombian or Latin American context.

Excluded were those involving women with a prior diagnosis of cervical cancer under active follow-up, or persons with clinical conditions that temporarily contraindicate the performance of screening tests.

Bibliographic search strategy

The selection of articles was carried out by the authors, with structured data extraction in a standardized matrix and a narrative synthesis aligned with the research question, following the PRISMA 2020 guideline (37) and the corresponding PRISMA flow diagram (Fig. 2).

Ethical considerations

In accordance with Resolution 8430 of 1993 of the Ministry of Health, this study is classified as minimal risk, given that it is limited to conducting structured interviews with qualified informants. The participants signed prior informed consent, in which the purpose of the study, the confidentiality of responses, and the aggregated presentation of results—which prevents individual identification—were explained. The authors undertake to protect personal data in accordance with Law 1581 of 2012 and with the Good Clinical Practice standards (ICH-GCP, 1995), adopted in Colombia through Resolution 2378 of 2008, thereby guaranteeing the security, confidentiality, and privacy of the information obtained.

Results

Interview with institutional stakeholders of the Colombian League Against Cancer–Córdoba chapter (LCCC-Córdoba)

The interview made it possible to identify a set of territorial, administrative, cultural, and operational barriers that condition effective access to screening and follow-up pathways for cervical cancer in Montería. From their perspective, the informants described their institutional work as centred on prevention, early detection, and timely diagnosis. They have a population focus on socioeconomic strata 1, 2, and 3, with cervical cytology being the main service offered and the one with the greatest institutional demand. They also mentioned a series of current partnerships, among which the following stand out: over the past three years, the Ombudsman's Office (Defensoría del Pueblo) with campaigns in five to six municipalities; the Colombian League Against Cancer, conducting three to four campaigns per year; and other assets such as IPS de la Costa, the Universidad Pontificia Bolivariana, and Gestar Salud, accounting for a minority proportion—only 20% of institutional care, since 80% operates with private patients.

The findings from the interview reveal that geographical barriers remain a central axis of access to preventive services, especially in geographically dispersed areas—territories described as conditioned by public-order problems (San Jorge, Montelíbano, Uré) that restrict access to communities. It is there that, when patients are consulted, cytology services are described as "sporadic campaigns," generally conducted once a week. The interviewees also described a persistent perception of distrust towards public hospitals and municipal State Social Enterprises in rural areas of Córdoba and of neighbouring departments such as Chocó, Sucre, and the Bajo Cauca region of Antioquia. According to them, this favours travel to Montería in search of institutional care, owing to the trust placed in the institution.

Sociocultural barriers emerged with a particular role in the Indigenous communities of great influence in the region, notably the Emberá and Zenú. Community dynamics were described in which the authorization of the husband or chief (cacique) conditioned access to preventive procedures, especially those related to sexual and reproductive health. The interviewees associated these communities with early initiation of sexual life and multiparity. Meanwhile, in other rural areas, they reported documenting taboos associated with cytology, modesty regarding the gynaecological examination, and resistance to certain procedures stemming from negative experiences during

sampling, where—according to the participants—the procedures were performed by insufficiently trained personnel, causing pain and leading to rejection of future screening.

Regarding the implementation of HPV-DNA self-sampling, the informants noted low acceptance of this strategy despite the free availability of pilot samples. They described a marked preference among women for procedures performed directly by health professionals, since they associated self-sampling with insecurity and technical distrust —something they suggested would not occur if professional accompaniment were provided during the sampling process.

In relation to the fragmentation of the pathway and loss to follow-up, the interviewees described an automatic fragmentation at colposcopy—that is, following the detection of abnormal results. Although the initial cytology is relatively accessible, the transition to more specialized procedures such as colposcopy and biopsy represents the breaking point, given the inability of users to cover it privately. In addition, the administrative delays associated with authorizations on the part of the EPS condition frequent losses in clinical follow-up. In the words of one of the interviewees, “the insurers play the most important role in this entire pathway,” reflecting the perception of the EPS as the principal actor involved in delays and loss to follow-up within the system, and expressing the need to consider them as the centre of the comprehensive navigation pathway.

IMAT Oncomédica was identified as the only departmental reference oncology centre for Córdoba, Sucre, and southern Bolívar. Although there is no direct referral pathway from the LCCC to IMAT—transit depends on authorizations mediated by the EPS—some insurers such as Mutual Ser and Nueva EPS have implemented internal early-alert pathways for positive results, with promising results in reducing care times. In the face of these limitations, LCCC-Córdoba has implemented active follow-up mechanisms: email notification to the EPS, delivery of lists for active case-finding, and telephone calls at 24 hours and at 30 days post-cytology. Abnormal results are delivered exclusively in person, a setting that the institution uses as a first point of guidance, education, and awareness-raising.

Design and implementation of the SINÚ-CCUM intervention

On the basis of the territorial diagnosis and the rapid literature review, SINÚ-CCUM (Integrated Navigation and Unification Service for Cervical Cancer in Montería) was constructed: an oncology-navigation proposal aligned with the Ruta de la Vida (Pathway of Life) of the Ministry of Health. The intervention is organized into two complementary pillars, whose operational deployment is detailed in Fig. 3.

Pillar 1, training of the health workforce and community education, seeks to reduce barriers arising from misinformation and cultural taboos through the formation of multidisciplinary teams that integrate health personnel, community leaders, teachers, and representatives of the Emberá and Zenú Indigenous communities.

Pillar 2, a simplified diagnostic pathway with active oncology navigation, establishes screening differentiated by geographical zone—schemes following Resolution 3280/2018 in the urban centre, and campaigns with HPV-DNA self-sampling preceded by community education in dispersed rural areas—and positions the EPS as the central node of coordination. Upon a positive result, the SINÚ-CCUM navigator is activated to coordinate the screening provider (IPS), the EPS, and IMAT Oncomédica, thereby reducing fragmentation in follow-up. The proposal incorporates four critical time points as tracer quality indicators: T1 (positive result → colposcopy, target < 30 days), T2 (sample processing, target < 14 days), T3 (delivery of the pathology result, target < 10 days), and T4 (initiation of treatment, target < 15 days), with baselines derived from the available evidence (27, 41).

Discussion

The discussion that follows articulates the findings of the territorial diagnosis with the international evidence included in the review and with the two structural questions the proposal seeks to address: what type of intervention is feasible and relevant in a context with the barriers described, and what risks and limitations the design must make explicit before moving to the implementation phase.

The most relevant finding of the territorial diagnosis is that the EPS is not a peripheral actor in the pathway but its structural node. The explicit statement from the interview—"the insurer plays the most important role in this entire pathway"—is confirmed at the points where the pathway fragments: colposcopy is interrupted by cost in private patients, IMAT does not initiate treatment without a guarantee of payment, and specialist schedules reach two months or more in the context of the recent collapse of the system. This reading is consistent with the international evidence on referral mechanisms: in the Tamil Nadu screening programme, 41.6% of women with a positive screen were lost to follow-up for colposcopy, largely owing to weaknesses in the inter-institutional referral pathway (38). Analogously, the study by Aguilar-Linares in Morelos documented a median of 45.72 days between a positive HPV-DNA result and colposcopy, with only 50% of care adhering to the standard (27), confirming that in territories with socioeconomic profiles comparable to that of Montería, the bottleneck lies in the coordination between the screening provider and the insurer. SINÚ-CCUM incorporates this reading by positioning the EPS as the central node of navigation, rather than as a passive recipient of active case-finding lists.

The second finding of interest is the paradox of self-sampling. In the Catalan experience of Peremiquel-Trillas, involving 6,355 women invited in areas with a high deprivation index, participation reached 80.9% and adherence to triage cytology was 98.7%, with a median time of ten days between invitation and collection (25). The same device, however, did not work when the LCCC distributed between 20 and 30 free kits: women rejected self-sampling because they preferred the cytologist to perform the sampling during the consultation. The explanation is direct and converges with the evidence of Rosas-Mendoza in Peru, where 75% of women preferred self-sampling over assisted sampling (26), but also with the evidence of Thomas-Purcell in the Caribbean regarding the weight of cultural stigma and distrust of one's own technical capacity (39). Preference for self-sampling is not universal: it depends on prior education, the level of health literacy, and the institutional framework that accompanies it. SINÚ-CCUM takes up this operational lesson by conditioning the implementation of rural self-sampling campaigns on a prior phase of community education, articulated with local leaders and midwives, and by replicating the scheme of systematic reminders at 7, 21, and 28 days that sustained adherence in Catalonia (25).

A third line of discussion concerns the weight of operational times. The study by Barrera-Ferro in the organized screening programme of Bogotá, with 1,699 women surveyed and 23,370 administrative records, documented a non-attendance rate of 40%, with a higher risk among women aged 25 to 30 and in the highest-poverty quintiles (OR = 0.74), and showed that reducing waiting times improves adherence to the programme by up to fourfold (40). In the same direction, the times measured by Aguilar-Linares in Morelos—45.72 days between a positive HPV result and colposcopy, 20.33 days between biopsy and result, and 23.92 days between treatment and follow-up—suggest that the points of greatest loss of adherence coincide with the administrative transitions between nodes of the system (27). SINÚ-CCUM converts these four points into central operational indicators of the optimized diagnostic-pathway component, with explicit targets defined by the T1–T4 tracer indicators described above. This methodological decision allows the evaluation of the proposal to rest not only on aggregate coverage but on variables directly modifiable by the intervention.

A fourth line, of a prospective nature, is the incorporation of artificial intelligence into the strengthening of cytological reading. Recent evidence documents that deep-learning-assisted systems applied to cervical cytology achieve diagnostic-concordance rates above 94% and increase the sensitivity of manual reading by approximately 5.8% in large population cohorts (41). For a territory such as Montería, where IMAT processes more than 3,000 samples and coordinates 107 departmental laboratories, the AI component constitutes a horizon for strengthening technical quality that SINÚ-CCUM incorporates as an exploratory line, without replacing the human component of the pathway. This approach is aligned with the guidelines of the 2025 Clinical Practice Guideline of the National Cancer Institute (33) and with the direction taken by the international implementation of primary HPV-DNA screening.

Among the strengths of SINÚ-CCUM, three elements stand out. First, its anchoring in a direct territorial diagnosis—an interview with a qualified stakeholder with 46 years of institutional presence—complemented by triangulation with relevant international evidence. Second, its articulation with pre-existing territorial assets (LCCC, IMAT, and the departmental laboratory network), which avoids the creation of parallel structures. Third, the explicit inclusion of the EPS as the central node, in keeping with the field recommendation and with the evidence on pathway fragmentation.

Among the limitations, it should be noted that the qualitative diagnosis is based on an interview with a single institutional point, without direct triangulation with patients' voices or with representatives of the EPS, which constitutes a pending task for the implementation phase. The proposal describes a design and not an evaluation: real feasibility, operating costs, and financial sustainability must be the object of a controlled pilot phase. The international evidence employed comes mostly from non-Caribbean contexts—Catalonia, central Mexico, Tamil Nadu, Bogotá, the Anglophone Caribbean—so extrapolation to the Córdoba context requires adjustments and a process of cultural adaptation that the educational component of the proposal seeks to anticipate. Finally, the artificial-intelligence component is incorporated as an exploratory line and not as a central operational element, given that its effective implementation demands technological and workforce infrastructure that exceeds the scope of the design phase.

The articulation between the findings of the diagnosis and the evidence included suggests three implications for territorial health policy. The first is the need to formalize communication channels between community assets and insurers—something the interview frames as a "moral responsibility" of the League towards the EPS but which requires regulatory instrumentation. The second is the appropriateness of incorporating HPV-DNA self-sampling as a complementary but not substitutive tool, with a non-negotiable prior educational component. The third is the importance of monitoring the operational times of the diagnostic pathway as a tracer indicator of the quality of the system, in line with the approaches of the national Clinical Practice Guideline (33) and with the international experiences documented in this work.

Conclusions

Cervical cancer, in addition to being a public health problem at the national level, has a greater impact at the local level in Montería, Córdoba. In this territory, the figures for incidence, prevalence, and underdiagnosis exceed the national averages, reflecting multiple barriers and inequities specific to the region. It is in this context that SINÚ-CCUM emerges: a proposal that seeks to integrate and respond to geographical, sociocultural, and administrative barriers.

This proposal is articulated around two fundamental pillars—the training of the health workforce and a diagnostic pathway with active oncology navigation—which position the EPS as the central node, incorporate pre-existing territorial assets (LCCC-Córdoba and IMAT Oncomédica), and apply a differential approach by age, risk, and locality.

Despite the limitations inherent to a design phase, its territorial diagnostic basis and its coherence with international evidence consolidate it as a replicable intervention, with the potential for a sustained impact on screening coverage, adherence to the pathway, and the timely diagnosis of cervical cancer in Montería.

Declarations

Author Contributions

Javier G. Romero-López. javiergromero@javeriana.edu.co — https://orcid.org/0009-0004-0678-0703. Original idea for SINÚ-CCUM; joint structuring of the proposal; drafting of the introduction, methodology, and discussion.

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In the preparation of this manuscript, generative artificial-intelligence tools were used for two specific purposes: assistance in improving scientific writing and the generation of the visual design of the screening flow diagram. In all cases, the authors reviewed and verified the content and are fully responsible for the material presented, in compliance with the recommendations of the International Committee of Medical Journal Editors.

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Figures

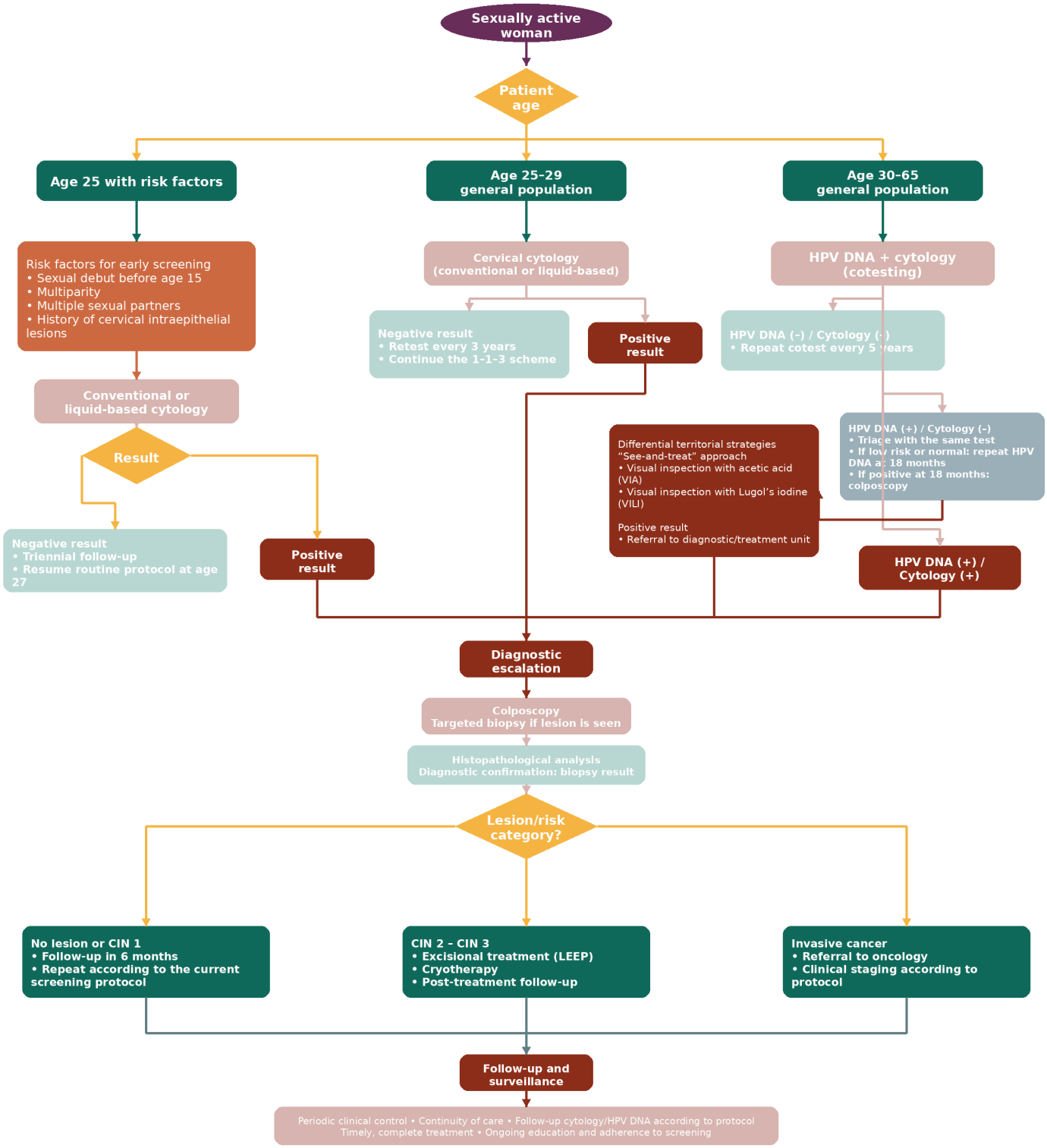


Figure 1

Figure 1. Cervical cancer screening and diagnosis scheme in Colombia based on Resolution 3280 of 2018. (Authors' own work.)

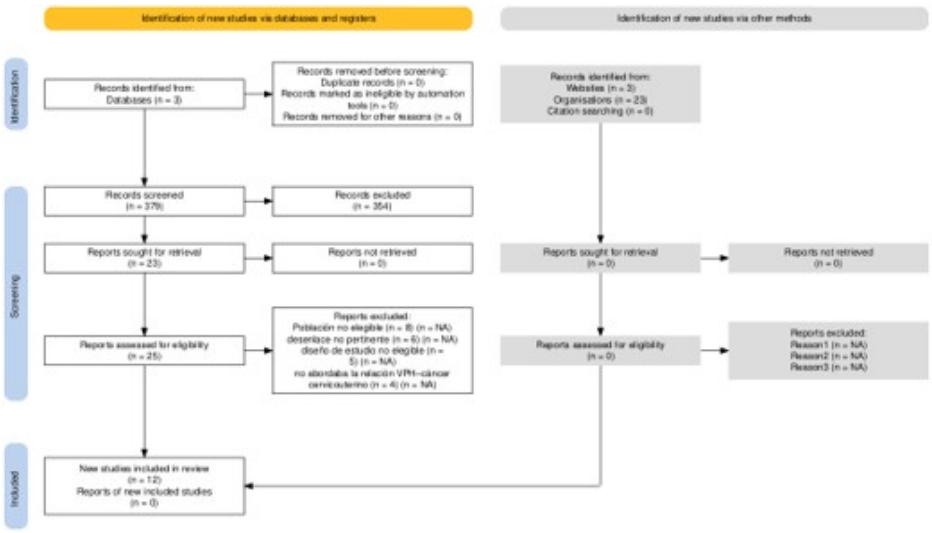


Figure 2

Figure 2. PRISMA flow diagram. (Authors' own work.)

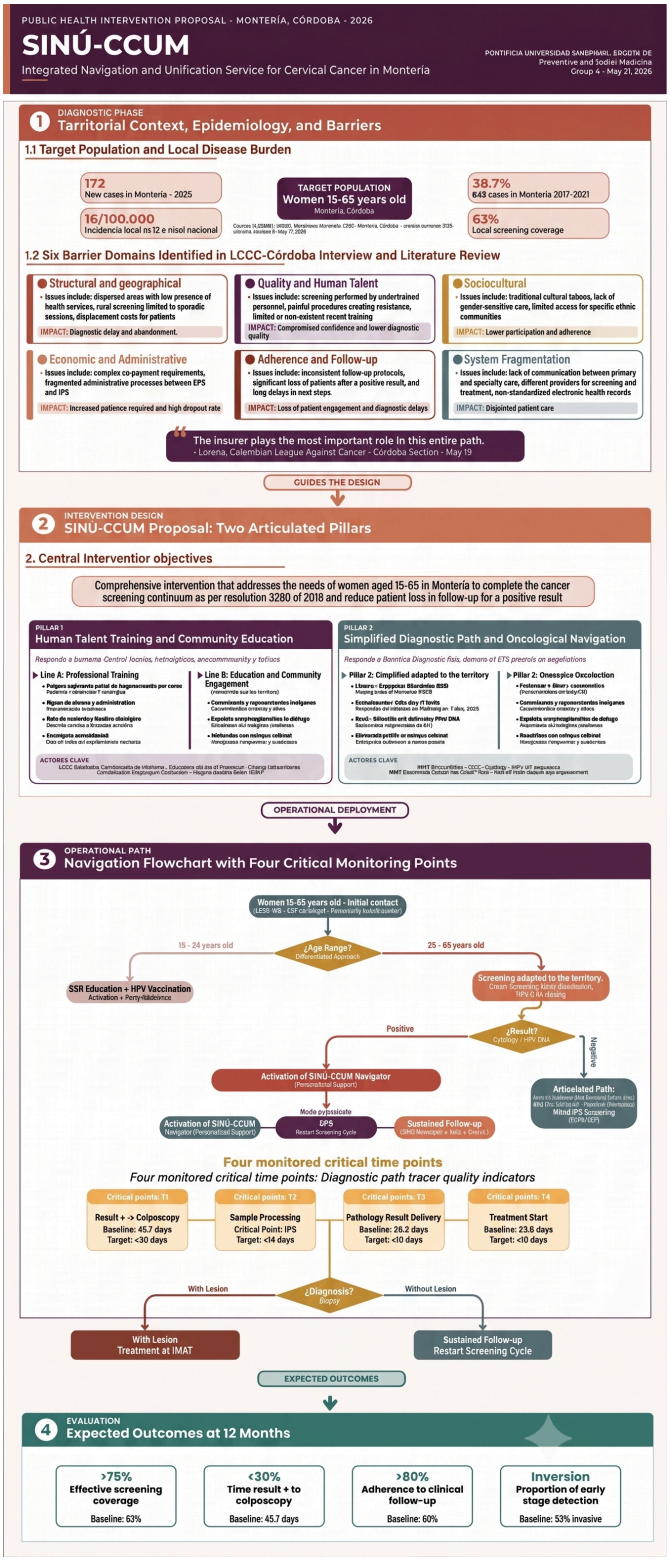


Figure 3

Figure 3. SINÚ-CCUM flow diagram. (Authors' own work.)