

# Cervical Cancer Elimination: Why Europe's Screening Registries Fall Short

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The World Health Organization's ambitious targets for cervical cancer elimination depend on high screening coverage and timely follow-up of abnormal results. But many countries, including those in Europe, operate with outdated systems that cannot track the entire screening pathway. This gap in infrastructure directly impedes the ability to monitor progress and identify areas for improvement.<sup>1</sup>

## KEY TAKEAWAYS

- **The Pivot:** Most existing registries track cancer incidence, not the full screening continuum from invitation to outcome.
- **The Data:** A global framework now outlines 6 core functions and a minimal data set for modern HPV-era screening registries.<sup>1</sup>
- **The Action:** Countries must establish or strengthen comprehensive cervical screening registries to meet WHO elimination targets.

Achieving the World Health Organization's cervical cancer elimination targets requires more than just vaccination and screening; it demands robust data infrastructure. Most countries currently lack comprehensive cervical screening registries capable of tracking the full continuum from invitation to testing, triage, management, and outcomes. Existing registries typically capture only cancer incidence, which is insufficient for monitoring the complex pathways of modern screening programs.<sup>1,2</sup>

The shift to human papillomavirus (HPV) primary testing and the rapid expansion of self-sampling necessitate modern screening registries. Without these systems, countries cannot effectively monitor every step of the elimination cascade. A narrative review published in *International Journal of Gynecological Cancer* proposes a comprehensive framework for cervical screening registries, adaptable across diverse health-system contexts.<sup>1</sup>

## The Framework for Modern Screening

The proposed framework outlines 6 core functions essential for evaluating screening programs. These include defining the eligible population, monitoring or issuing invitations and reminders, maintaining a complete screening history (including HPV and triage testing), tracking follow-up and management, linking to pathology and cancer registries, and supporting routine quality assurance.<sup>1</sup>

A minimal data set is also described, covering population records, eligibility, invitations, and sample characteristics, including self-sampling. It also specifies data points for HPV results, triage investigations, follow-up procedures, and outcomes such as cervical intra-epithelial neoplasia grade 2 or worse and interval cancers. This level of detail is critical

for understanding program effectiveness.<sup>1</sup>

Implementation principles for these registries emphasize interoperability across health information systems, digital architecture options, and robust data quality assurance. Governance and privacy considerations are paramount, as are equity-focused strategies for underserved or displaced populations. This comprehensive approach ensures that no population is left behind in the push for elimination.<sup>1</sup>

## Europe's Progress and Challenges

While the framework offers global guidance, many European countries still face significant hurdles. The time required to reach HPV vaccination targets across Europe varies widely, with some nations lagging due to implementation challenges and vaccine hesitancy.<sup>3</sup> This directly impacts the long-term effectiveness of elimination strategies, as vaccination is a cornerstone. Vaccination aids cervical cancer elimination in multiple countries, but only if coverage is high enough.<sup>3</sup> Latin America and the Caribbean also struggle with similar issues, with many countries lacking the robust systems needed to accelerate cervical cancer elimination. A cross-sectional examination of cancer prevention and control in that region highlighted the widespread absence of comprehensive screening registries, with only 3 out of 33 countries having such systems (9% [95% CI 2-23%]).<sup>2</sup> The challenges are not unique to any single continent; they are systemic. Income isn't the only barrier to cervical cancer elimination, as infrastructure and policy gaps also play a significant role.<sup>2</sup>

The transition to HPV-based screening, while more effective, complicates data collection for systems not designed for it. Self-sampling, a tool for increasing participation, is promising because it has been shown to increase screening uptake by 1.6 times compared to standard clinic-based screening. It also requires careful tracking to ensure follow-up. Without integrated registries, the benefits of these advancements are diminished. Home cervical cancer screening can increase participation, but only if the results are effectively integrated into a functional registry.<sup>1</sup>

Establishing or strengthening cervical screening registries will be essential to support modern HPV-based screening and accelerate progress toward cervical cancer elimination. The lack of global guidance on how to design or implement these systems has been a significant barrier, but this new framework provides a clear path forward.<sup>1</sup>

The transition to human papillomavirus primary testing, the rapid expansion of self-sampling, and the need to monitor every step of the elimination cascade make modern screening registries essential.<sup>1</sup> The open-label design of many national screening programs is the obvious caveat; data collection often relies on disparate systems that do not communicate. This fragmentation makes it nearly impossible to get a holistic view of a patient's screening journey. The framework addresses this by emphasizing interoperability, but implementing such systems across existing, often siloed, healthcare IT infrastructure will be a monumental task.<sup>1</sup>

### CLINICAL IMPLICATIONS

The push for cervical cancer elimination is laudable, but it is built on a foundation of sand if countries cannot track their progress. Relying on cancer incidence data alone is like trying to navigate a ship by looking only at the wake. Clinicians need to know if their patients are being invited, if they are attending, and if abnormal results are being followed up. Without this granular data, program managers are flying blind.

The proposed framework for modern screening registries is not just an academic exercise; it is a practical blueprint. GPs and specialists in Europe should be advocating for its adoption. The transition to HPV primary screening and the rise of self-sampling are positive steps, but their full impact will only be realized if the data

infrastructure can support them. This means investing in integrated digital systems, not just more tests. For policymakers, the message is clear: the WHO targets are not achievable through good intentions alone. They require tangible investment in health information systems that can track every patient through the screening pathway. The Oxford Handbook of Health Care Management outlines the policy and organizational developments needed to support such systemic changes. Without this, we will continue to see disparities in screening coverage and outcomes, particularly for underserved populations.

The current situation, where many countries lack these essential registries, means we cannot accurately assess where we stand on the path to elimination. This is not merely an administrative inconvenience; it is a public health failure. We cannot fix what we cannot measure.

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#### REFERENCES

1. Nordqvist Kleppe S, Almstedt P, Dillner J. Design principles and core components of cervical screening registries in the human papillomavirus era: a narrative review and global framework. *Int J Gynecol Cancer* 2026. PMID: 42229118.
2. Benitez Majano S, Katz N, Urrutia S. Accelerating the elimination of cervical cancer: cross-sectional examination of cancer prevention and control in Latin America and the Caribbean. *Lancet Reg Health Am* 2026. PMID: 41867410.
3. Gountas I, Aman M, Alexander D. Estimating the time required to reach HPV vaccination targets across Europe. *Expert Rev Vaccines* 2025. PMID: 39269212.

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