The SUCCESS Project: Supporting the elimination of cervical cancer through an integrated approach to secondary prevention

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Worldwide, 604,127 new cases of cervical cancer are diagnosed each year, with 341,831 deaths (1). It is one of the most common cancers in women, but also one of the deadliest. The burden of cervical cancer is particularly high in developing countries, where its incidence is nearly twice as high and its death rates three times as high as in high-income countries.

Yet it is not only curable, but also preventable when detected early and treated appropriately. It is then necessary that an effective management can be deployed to prevent the hundreds of thousands of deaths that occur each year, 90% of which occur in low- and middle-income countries (LMICs).

The World Health Organization (WHO) estimates that a threshold of 4 per 100,000 women per year must be reached in order to consider cervical cancer no longer a public health problem. To achieve this, the WHO Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem sets out the following more specific targets (Figure 1) (2).

Cervical cancer elimination therefore requires a three-prong prevention strategy. The SUCCESS project: Scale up Cervical Cancer Elimination with Secondary Prevention Strategy – supports the implementation of this strategy, working in partnership with Ministries and Departments of Health to achieve their goals in deploying innovative solutions for screening and treatment of precancerous lesions to support these four countries in their fight against the disease.

Four countries of implementation, one common goal of scaling up

Implemented in Burkina Faso, Côte d’Ivoire, Guatemala and the Philippines, the SUCCESS project aims to support the elimination of cervical cancer through working in partnership with Ministries and Departments of Health to achieve their goals in deploying innovative solutions for screening and treatment of precancerous lesions to support these four countries in their fight against the disease.

Figure 1: World Health Organization specific targets for cervical cancer elimination

90% Vaccination
90% of girls fully vaccinated with the HPV vaccine by 15 years of age

70% Screening
70% of women are screened with a high-precision test at 35 and 45 years of age

90% Treatment
of women identified with cervical disease receive treatment and care
countries with the achievement of WHO targets, particularly on secondary prevention, which aims to ensure that 70% of women are screened by age 35 and again by age 45, and that 90% of those with precancerous cervical lesions receive appropriate treatment.

Adapted to the context of each country of implementation, SUCCESS aims to screen up to 175,000 women, 40% of whom are women living with HIV (WLHIV). This particular target is due to the higher prevalence of the disease among HIV-positive women. Compared to HIV-negative women, WLHIV are six times more likely to develop cervical cancer (3), and at a younger age, due to persistent HPV infection, which accounts for almost all cervical cancer. Conversely, women with persistent HPV infection are also more likely to contract HIV (4).

Following the recommendations of the second edition of the WHO Guidelines for screening and treatment of precancerous cervical lesions for cervical cancer prevention, the SUCCESS project aims to introduce new technologies for screening, treatment and follow-up. HPV testing, a molecular biological detection method, is being used as the first primary screening test, rather than visual inspection with acetic acid (VIA) or cytology. Treatment of precancerous lesions is performed by thermo-coagulation, a technology that is more portable than treatment using cryotherapy and less costly in the long run.

Building on existing experiences in the four project countries offering screening by visual inspection with VIA and treatment of precancerous lesions with cryotherapy, SUCCESS has introduced HPV testing as well as treatment with thermo-ablation. Since the launch of screening activities in June 2021, a total of 42,469 women have been screened by HPV testing in Burkina Faso, Côte d’Ivoire, Guatemala and the Philippines. Of the women screened, 8,647, or 20.4%, are women living with HIV.

Deployed in an integrated service model adapted to the specific context of each country and to existing services, screening activities are offered in a variety of public health-care settings within HIV-positive patient care, sexual and reproductive health, and family planning services. In order to achieve this integration within different services, SUCCESS is helping to strengthen relationships and communications between the various key actors involved in reproductive health and cervical cancer control.

**Strengthening collaborations for action among cervical cancer control stakeholders**

The SUCCESS model supports and depends upon energized collaboration between health stakeholders within each country to promote the integration and implementation of screening services across the range of services, settings and traditional disease areas. Ongoing technical assistance support in partnership with countries has resulted in the consolidation of policy and regulatory frameworks for cervical cancer prevention. The establishment or strengthening of national technical working groups on this topic is leading to better coordination of the various actions of stakeholders and a stronger collaborative dynamic.

SUCCESS’ support in the four intervention countries has helped partner countries to update standards and operational guidelines for the prevention and treatment of precancerous lesions in collaboration with other partners and national parties, build the capacity of providers, and monitor patients through the deployment of an innovative digital health solution. The engagement of, support and recognition given to the role of civil society in the SUCCESS project in developing and supporting the implementation of sustainable and effective screening services, has supported the development and strengthening of active civil society coalitions, advocacy efforts and demand generation as examples.

**Deployment of an open-source digital-health technology for optimized patient monitoring and communications**

Integrating multiple components associated with data tracking and evaluation, one of the objectives of the SUCCESS project model is to use innovative technologies to minimize the number of patients who do not return for results and/or treatment (“lost to follow-up”). While paper-based registries are still widely used, the project is introducing digital registries that allow for a single patient record that can be referred to by both health-care providers during consultation and by laboratory technicians during analysis of screening tests.

In Côte d’Ivoire and Burkina Faso, in close collaboration with the information and technology departments of the Ministries of Health, the project supports the development and deployment of an open source m-health solution already used by the countries for other programmes and services, the DHIS2 Tracker, for patient navigation and specific patient data. This solution is adapted to the different national systems already in place to ensure interoperability, a crucial factor for sustainability.

The DHIS2 platform, used in both Burkina Faso and Côte d’Ivoire, is a global public good that continues to transform health information management worldwide, including its accessibility, database capabilities, data visualization, and the ability for data users and policy-makers to generate analyses from real-time data. The “Tracker” component of this solution enables data collection, surveillance and case tracking, analysis and reporting within the national DHIS2 database.

This component being rolled out for HPV screening and
treatment in Côte d’Ivoire and Burkina Faso, will eventually improve patient follow-up by sending SMS messages to announce the availability of results or remind patients of an appointment. Compatible with both smartphones and mobile phones, in addition to increasing patient communications to preventing patient drop out of follow-up care, the deployment of this digital strategy aims to make it easier to track a patient’s progress, particularly in the event of a women using cancer prevention services from multiple health centres. Ultimately, digitization and the use of national data systems can remove the limitations of paper registers and enhance data security and quality. Collaboration with key national institutions, such as national statistical offices and national health information services departments, as well as national cancer control programmes, has been an important step in promoting national ownership of this data approach, especially in contexts where there are future plans for digital health strategies.

Ensuring that cervical cancer screening and treatment information management systems are interoperable with population-based cancer registries to measure the impact of interventions and to observe changes in incidence, disease stage, survival and mortality, and ensure these surveillance systems cover the same well-defined populations to enable documentation of programme quality, outcomes, and impact is a key component to reach the elimination goals (5). This use of the DHIS2 Tracker supports this purpose by providing more efficient information to the national health data system, which can ultimately be used to support advocacy activities and build responsive context-specific cervical cancer control programmes and strategies.

Understanding cervical cancer control financing: A necessity for scale up
SUCCESS has worked globally to collate and share evidence on financing for cervical cancer control. A report published in 2021 by the Economist Intelligence Unit explored the challenges and opportunities of financing cervical cancer control, and identified lessons learned from other areas of public health, with a focus on low-resource settings. This global report has provided a set of priorities for advocacy and engagement with policy-makers and funders.

Building on this to support progress in each of the four project countries, assessments of the status of health financing for cervical cancer elimination in each of the four project countries, Burkina Faso, Guatemala, Côte d’Ivoire, and the Philippines, were subsequently conducted by Thinkwell. These profiles propose concrete policy solutions to support civil society organizations and key stakeholders to inform evidence-based policy dialogues and empower them to advocate for the integration of cervical cancer interventions into national health financing frameworks and in the context of universal health coverage (UHC).

In order to further strengthen advocacy efforts for the financing of cervical cancer elimination and to support the development of a costed transition plan for scaling up SUCCESS in all countries, a costing exercise using an adapted and simplified version of the WHO Cervical Cancer Prevention and Control (C4P) Costing tool will be conducted in collaboration with ministries. The C4P tool has been specifically developed to help governments estimate the costs of cervical cancer interventions. It provides estimates of several cost measures related to vaccination, screening, and treatment, taking into consideration several variables and possible scenarios.

Ultimately, the cost estimate should enable the country to better determine funding needs. The experience acquired by the project countries will be shared within relevant countries in the region to support collective progress. This exercise will allow each country to assess the costs of implementing a cervical cancer control programme and to encourage coverage by UHC.

A regional impact
In order to increase the outreach of certain activities and to share the learning from SUCCESS project countries with others in the regions, the project has developed a series of activities to catalyze regional dialogues and to support national technical assistance with a focus on a subset of 20 countries identified due to various criteria of which a preliminary situational analysis cervical cancer prevention gaps (Figure 2).

This regional component aims to share technical and operational experience to implement an integrated service delivery model for cervical cancer screening and treatment of precancerous lesions, including the use of new technologies. SUCCESS’ interventions in the four countries also provide an opportunity to share lessons learned on advocacy and demand generation, helping to create an enabling environment, training/mentoring, monitoring and evaluation, and costing and resource mobilization. The regional relationship building approach aims to facilitate collaboration between countries in order to maximize impact in each region.

ECHÒ SUCCESS Programme for Francophone Africa
Following the launch of the WHO Global Strategy to Accelerate the Elimination of Cervical Cancer as a Public Health Problem, very few French-speaking LMICs have had the opportunity to develop national strategic plans to adapt global and regional guidelines to their local contexts in order to achieve and monitor progress toward the 2030 elimination targets set by WHO. The SUCCESS project has thus developed its ECHÒ® (Extension for Community Healthcare Outcomes)
programme, a collaborative medical education model that aims to build workforce capacity in underserved rural areas, with the goal of supporting countries in achieving these goals. This free educational model is based on four principles: the use of technology to maximize the use of scarce resources, the sharing of best practices to reduce disparities, case-based learning to overcome complex situations, and the use of digital databases to track outcomes.

The ECHO® SUCCESS programme for Francophone Africa aims to create a virtual learning space that promotes and stimulates the exchange of knowledge and practices to support Francophone LMICs in the development and implementation of national strategic plans for cervical cancer eradication. The ECHO® SUCCESS programme will bring together different francophone LMICs (AFRO and Caribbean region) to support the process of preparing and implementing a strategy to eliminate cervical cancer. A curriculum of 12 sessions, one per month, has been developed based on the six building blocks approach, international guidelines and the global/regional framework for cervical cancer control, good practices and experience sharing – including from the SUCCESS project – and key themes and needs expressed by participants.

Regional Dialogues on women's cancers

In addition to sharing experiences and lessons learned virtually, SUCCESS will leverage UICC’s global membership of 1,200 organizations and its regional platforms to support the exchange of experiences and stimulate synergies in-person across three different continents. The Regional Dialogues aim to build and sustain an active community of leaders, including from both civil society organizations and government institutions, at the regional level. These meetings provide opportunities to share best practices and experiences around key thematic priorities in the region, which can then be consolidated through short-term learning exchanges. These platforms are designed to galvanize thinking and encourage collaboration tailored to specific regional needs and facilitate engagement and opportunities through targeted promotion and language support.

French adaptation of the documentary film

Conquering Cancer is a global social impact communication initiative designed to stimulate and celebrate efforts to eliminate cervical cancer worldwide. The campaign also aims to disseminate the results achieved in countries where elimination is imminent in order to inspire policy-makers in other countries to join the movement. As part of this social communication campaign, a documentary film has been produced. Filmed in several countries around the world, this production traces the history of cervical cancer and the various
measures available to achieve the elimination of this disease. Between patient testimonies and interviews with experts, viewers follow the path that leads to the hope of eliminating this disease by 2030.

As a tool for raising awareness among health-care providers and women, as well as for advocacy with relevant stakeholders, the SUCCESS project has harnessed the opportunity of this campaign by filming video vignettes in Côte d’Ivoire and Burkina Faso, in addition to coordinating the French translation of the original production. This French version of Conquering Cancer, incorporating the realities of West Africa with the integration of footage shot in the two project countries, is now available for broadcast in all Francophone countries.

**Conclusion**

SUCCESS will continue its cervical cancer prevention engagement, support and activities with Ministries and Departments of Health in Côte d’Ivoire, Burkina Faso, Guatemala, and the Philippines. In addition, it will continue to harness, promote and support the role of civil society, as a key factor in ensuring the continued accountability and sustainability of achievements and progress made at the national level, both in the project countries and beyond. As described, SUCCESS will also deliver a series of activities through to November 2023 with the goal of being able to sustain the model and encourage its adoption by other countries, thereby contributing to the elimination of cervical cancer globally.

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**Tracey Shissler** is Implementation Director, SUCCESS, Jhpiego, based in Baltimore, USA. She is an experienced global health project leader, with over 20 years of international development and programme management experience. Tracey manages reproductive health projects and portfolios with regional and country colleagues and consortia partnerships on integrated health system interventions including cervical cancer prevention in sub-Saharan Africa and Asia. Tracey prioritizes supporting team development and growth within projects to have an impact on women’s health outcomes beyond projects. Tracey currently leads Jhpiego’s overall approach and implementation under the Unitaid-funded SUCCESS project and is a co-Chair to Jhpiego’s Diversity, Equity, and Inclusion Committee.

**Dr Kirstie Graham** is the Director of Capacity Building at the Union for International Cancer Control (UICC), and leads a team responsible for developing and delivering a portfolio of activities that supports UICC’s 1,200-strong membership. Prior to this, Kirstie led and supported a series of operational research projects at Malaria Consortium and at the University of Leeds, UK, focused on improving the delivery of health services in LMICs, following the completion of her Masters in International Health at the University of Leeds. Beginning her career in scientific laboratory research, she also has a PhD in Cardiovascular Research from the University of Sheffield, UK.

**Mélissa Archambault** is SUCCESS Project Manager, Expertise France, based in Abidjan, Côte d’Ivoire. She joined Expertise France as Project Manager for SUCCESS in 2020. With over eight years of professional experience in Canada and Côte d’Ivoire, she first established herself in public communication project management in the area of citizen mobilization before transitioning to public relations, where she was able to lead media campaigns in the education, health and social entrepreneurship sectors. Mélissa now capitalizes on her communication expertise to strengthen awareness and advocacy on public health issues.

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