



Costa Rica Project report - June 2023

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Executive Summary:

The HERhealthEQ x Lutech Industries 10-for-10 project endeavors to facilitate equitable access to cervical cancer screening in developing economies. This initiative facilitates the deployment of 100 LT-300 Colposcopes across 10 distinct countries, aiming to address the pressing need for reliable screening services and foster better healthcare outcomes.

To date, the project has achieved significant success by deploying 10 devices in suburban areas of Costa Rica. These devices have been strategically allocated to 10 distinct regional healthcare centers, serving as crucial catch-all locations for rural inhabitants. This initiative has resulted in a remarkable increase in access to cervical cancer screening and treatment, conducting 786 screenings in Q1 '23. The increase in device accessibility will prompt an increase in regular screening, allow for larger portions of the population to be seen more frequently, and thus reduce the mortality rate of Cervical Cancer (nearly 8%)¹.

Introduction:

Established in 2016, HERhealthEQ was born out of a need to reduce the equity gap in access to healthcare for women around the world. What began as a singular donation of a mammography machine to a Costa Rican hospital, has now grown into an international web of healthcare solutions. The HERhealthEQ team is driven by a desire to see fewer women face the choice between their own healthcare and putting food on the tables of their families.

Our Mission is to improve women's health in developing countries by providing access to medical devices & equipment, creating an equitable standard of care.

The 10-for-10 project is designed to deliver maximum impact through targeting specific countries, placing devices in established healthcare systems, creating a network of trusted local healthcare providers, and educating women about their health. When you invest in women's health, you impact an entire community.

¹ Various. "Costa Rica: Human Papillomavirus and Related Diseases, Summary Report 2023." *Costa Rica: Human Papillomavirus and Related Cancers, Fact Sheet 2023*, 2023, hpvcentre.net/statistics/reports/CRI.pdf.



HERhealthEQ previously worked with Lutech on the delivery of 2 colposcopes to the Wajamama clinic in Zanzibar, Tanzania. This deployment created the impetus for the creation of the larger project, after seeing just how strong of an impact the Tanzania colposcopes had. Lutech agreed to set aside 100 Colposcopes as part of their ongoing philanthropic commitments, working with HERhealthEQ to find the most affordable cost for execution. End users are fully relieved from the cost-burden of these devices, including their 2 year service contracts and shipping logistics. All deployments are fully funded by HERhealthEQ dollars.

The primary objective of the project is to significantly diminish the incidence of Cervical Cancer morbidity on a global scale. By strategically deploying these devices to underserved rural locations and augmenting their presence in densely populated areas, we aim to enhance our ability to detect early signs of abnormal cervical cells. This proactive approach enables us to expedite diagnosis, initiate prompt treatment, and consequently improve the prospects of successful recovery.

Methodology:

1. Identify a geographic location for donation using an internal survey
 - a. Does the location meet our economic development metrics?
 - b. Is there an established healthcare system operating locally?
 - c. What is the incidence of cervical cancer in the region?
 - d. Is there government support
 - e. Is there a local strategic partner available to assist in project execution?
2. Select location and necessary partners
3. Secure device agreements and amounts
4. Leverage international shipping agreement with UPS for logistics and delivery
5. Schedule device training with Lutech Medical
6. Execute device deployment
7. Data collection

For this deployment in Costa Rica, the below table describes the medical centers that received devices and how many screenings were performed in June 2023. This data was reported directly to HERhealthEQ strategic partner Fundación Ana Ross, the local non-profit on the ground in Costa Rica providing local project support.

Location	Colposcopies performed (June 2023)
Hospital Max Peralta	130
Hospital Max Terán Valls	35
Hospital de Upala	20
Hospital de Guápiles	48
Hospital la Anexión de Nicoya	95
Clínica Moreno Cañas	70
Área de Salud de Coronado	58
Caídas de Cañas	76
Clínica Carlos Durán	177
Clínica Clorito Picado	77
Total screenings	768

Key Milestones:

In November 2022, HERhealthEQ CEO Marissa Fayer, General Coordinator Ariana Reginato and Lutech VP of Sales Jennier Fink went to Costa Rica to establish the project. On the trip, the group met with the Director of the Ministry of Health Rodrigo Marín, Head of the Coyol Free Trade Zone Carlos Wong and the Vice President of Operations at Hologic Nilo Caravaca. Additionally, the team visited 3 out of the 10 anticipated deployment locations located in the central region close to San Jose;

1. Área de Salud de Coronado: Director Dra. Gina Arias Ocampo and medical team
2. Clínica Carlos Durán: Director Dra. Cristina Velásquez and medical team
3. Clínica Moreno Cañas: Director Dr. Carlos Enrique Salas and medical team

Onsite, the HERhealthEQ saw first hand the limited OBGYN resources and need for the LT-300 colposcopes. Many of the location sites are tasked with high patient turnover, quoted to see 4 patients per hour per doctor - with as many as 300 a day. There is a dire local need for access to portable and low-invasive devices that provide clear and reliable results at a fast pace. It was especially impactful to



meet these on the ground medical teams composed largely of women, led by women - bringing HERhealthEQ's mission to the forefront of the deployment.

“As an operational team member, it is easy to feel disconnected from our execution sometimes. Meeting the doctors and teams, shaking the hands of the representatives from the Ministry of Health, walking into the screening rooms and touring the facilities - it really hits home what we are doing and connects me even deeper , to the incredible mission and vision of our organization. Our impact is tangible. It's real and it's happening. There are women out there with better options now than they've ever had. We did that.”

- General Coordinator, Ariana Reginato

HERhealthEQ notes the execution timeline of this project was delayed by logistical hold-ups, with full delivery and training complete on May 31st 2023. June was the first month of device usage across all locations.

Project activities:

In the lead up to the deployment of the Costa Rica leg of the project, HERHealthEQ ran several online fundraising events to generate funds, as well as a Paddle Board race in partnership with Lutech Medical. These initiatives helped close the gap on the corporate donations we received from Hologic Inc and The Coyoil Free Trade zone, which allowed us to execute the deployment.

Results and Impact:

For Q1 '23, 768 screenings have been conducted. HERhealthEQ set a target for recipient locations of 400 screenings per month per system. Currently, reported results fall below this target, however we anticipate a 30% increase month over month through Q2 '23, resulting in a total of 3,981 colposcopies. After our Q2 reporting, we will be more accurately able to forecast the utilization rate of the devices and the number of women impacted through 2023.

From this deployment HERhealthEQ has outlined the below areas of improvement for the next location of delivery in the 10-for-10 project.

1. Ensure training is completed within first month of delivery
2. Create more detailed local campaign marketing to educate receiving community about availability of devices



3. Establish strong interpersonal relationships with receiving healthcare providers for ease of data collection and field commentary
4. Schedule quarterly check-ins with all partners for feedback and learning

Sustainability and Future Plans:

In order to sustain the project's impact in the long term, HERhealthEQ is providing service contracts on all devices for 2-years. This will cover any malfunction or issues with the devices themselves. Furthermore, HERhealthEQ and Lutech Medical are committed to providing training and education for any new users in order to increase the availability of trained physicians able to conduct screenings.

The colposcopes for the 10-for-10 project are made to order, relieving the environmental burden at both the manufacturing and storage level.

HERhealthEQ plans to continue to grow the 10-for-10 initiative, and is currently in the selection stages of the next recipient geographic location. We are currently in discussions for a large corporate grant to execute the next deployment in Mexico.

Financial Summary:

Project Budget:

Item	Cost (USD)
Colposcopes	\$31,000.00
Local partner cost (Fundación Ana Ross)	\$11,000.00
Project Management	\$11,000.00
Import taxes & shipping	\$9,200.00
Marketing and Education	\$8,500.00
Travel & Misc	\$4,000.00
Total	\$74,700.00



Funding and Grant Sources:

- Hologic Inc. - \$39,350
- Coyol Free Trade Zone - \$10,000
- Individuals - \$1,500
- Board Donations - \$10,000
- Fundraising & events - \$14,000

Conclusion:

Overall, HERhealthEQ is satisfied with the progress of this first installment of the 10-for-10 initiative. Nearly 1000 women have benefited from the deployment of the LT-300 Colposcopes into the Costa Rican healthcare system, assisting healthcare providers to catch signs of cervical cancer at much earlier instances and with greater accuracy and visibility. The project is a true reflection of HERhealthEQ's mission to bring equity in access to women's healthcare. We are grateful to the corporations and individuals who graciously donated to our project, as well as the HERhealthEQ, Lutech Medical, CAJA and Fundación Ana Ross team members who made this project possible.

Appendix 1: Data report - CAJA COSTARRICENSE DE SEGURO SOCIAL



CAJA COSTARRICENSE DE SEGURO SOCIAL

GERENCIA MEDICA

Proyecto Fortalecimiento Atención Integral del Cáncer

Correo electrónico: coincss@ccss.sa.cr

Centro Corporativo Internacional, Torre B, piso 2, Barrio Don Bosco, Avenida 8, calles 26 y 28

GM-UEP-0246-2023

04 de julio de 2023

Licenciada
Victoria G. Ross
FUNDACION ANNA ROSS
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ASUNTO: Reporte "cantidad de colposcopias realizadas por los centros médicos beneficiados, con los equipos donados por Herhealth EQ- Fundacion Anna Ross

Estimada señora,

Reciba un cordial saludo. De acuerdo con el compromiso adquirido en referencia a brindar los reportes mensuales del uso que cada centro médico realiza con el equipo donado por su representada, esta dirección procede con lo respectivo.

La tabla N°1 muestra el número de colposcopias realizadas, los datos inscritos son copia fiel de la información aportada por centro médico.

Centro Médico	Colposcopias (junio 2023)
Hospital Max Peralta	130
Hospital Max Terán Valls	35
Hospital de Upala	20
Hospital de Guápiles	48
Hospital la Anexión de Nicoya	95
Clínica Moreno Cañas	70
Área de Salud de Coronado	58
Caís de Cañas	76
Clínica Carlos Durán	177
Clínica Clorito Picado	77

Sin más por el momento

Proyecto de Fortalecimiento de la Atención Integral del Cáncer

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Dr. Gonzalo Azúa Córdova
Director Ejecutivo



CAJA COSTARRICENSE DE SEGURO SOCIAL

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GAC/MRL/

CC: Dr. Marino Ramírez Carranza, Gerente, Gerencia Médica
Licda. Maureen Rojas Líos, Proyecto de Fortalecimiento en la Atención Integral del Cáncer

Costa Rica

Human Papillomavirus and Related Cancers, Fact Sheet 2023 (2023-03-10)



I. Key data on HPV and HPV-related cancers



Costa Rica has a population of 2.07 million women ages 15 years and older who are at risk of developing cervical cancer. Current estimates indicate that every year 367 women are diagnosed with cervical cancer and 192 die from the disease. Cervical cancer ranks as the 5th most frequent cancer among women in Costa Rica and the 3rd most frequent cancer among women between 15 and 44 years of age. About 3.3% of women in the general population are estimated to harbour cervical HPV-16/18 infection at a given time, and 62.9% of invasive cervical cancers are attributed to HPVs 16 or 18.

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Table 1. Crude incidence rates of HPV-related cancers

	Male	Female
Cervical cancer	-	14.4
Anal cancer	0.08	0.27
Vulva cancer	-	1.02
Vaginal cancer	-	0.59
Penile cancer	1.45	-
Oropharyngeal cancer	1.18	0.27
Oral cavity cancer	1.85	1.29
Laryngeal cancer	3.14	0.47

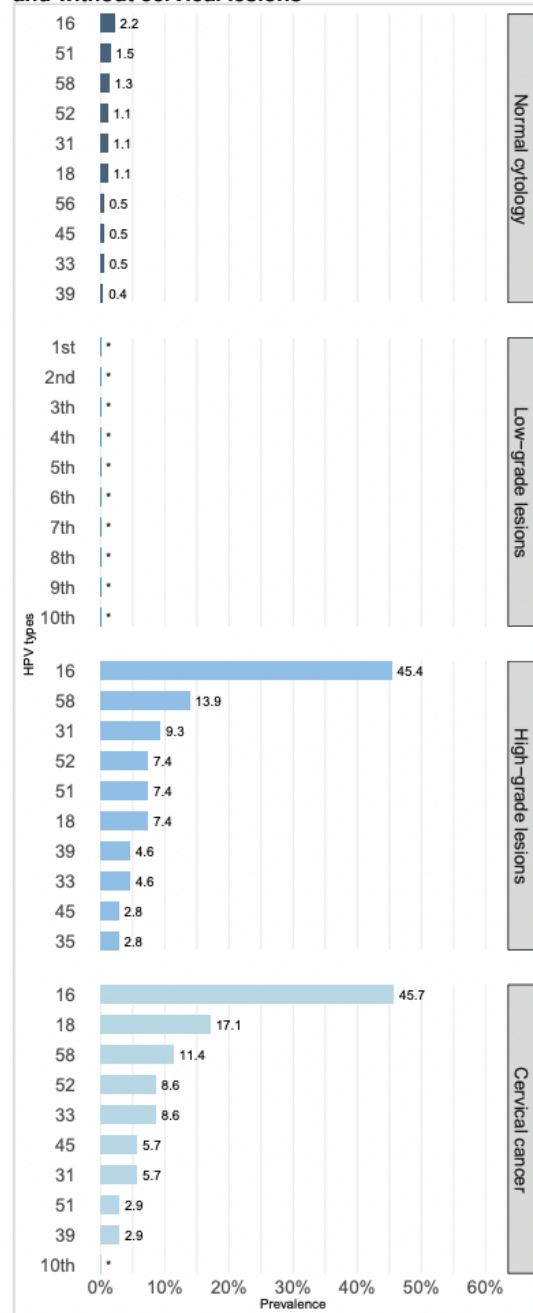
Table 2. Burden of cervical cancer

	Incidence	Mortality
Annual number of new cases/deaths	367	192
Crude rate	14.4	7.53
Age-standardized rate	11.7	5.40
Cumulative risk 0-74 years (%)	1.07	0.53
Ranking of cervical cancer (all years)	5th	4th
Ranking of cervical cancer (15-44 years)	3rd	1st

Table 3. Burden of cervical HPV infection Costa Rica

	No. Tested	% (95% CI)
HPV 16/18 prevalence:		
Normal cytology	7459	3.3 (2.9-3.7)
Low-grade cervical lesions	-	-
High-grade cervical lesions	108	52.8 (43.4-61.9)
Cervical cancer	35	62.9 (46.3-76.8)

Figure 1. Comparison of the ten most frequent HPV oncogenic types in Costa Rica among women with and without cervical lesions



Costa Rica

Human Papillomavirus and Related Cancers, Fact Sheet 2023 (2023-03-10)



II. Complementary data on cervical cancer prevention

Table 4. Factors contributing to cervical cancer (co-factors)

Smoking prevalence (%) [95% UI], women	6.3 [4-8.9]
Total fertility rate (live births per women)	1.8
Hormonal contraception use (%)	22.7
HIV prevalence (%) [95% UI] (15-49 years)	0.2 [0.2-0.2]

Table 5. Sexual behaviour

MEN	
Percentage of 15-year-old who have had sexual intercourse	-
Range of median age at first sexual intercourse	-
WOMEN	
Percentage of 15-year-old who have had sexual intercourse	-
Range of median age at first sexual intercourse	21.4

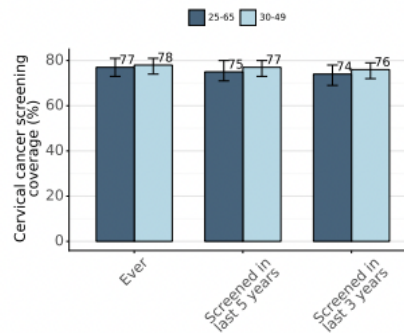
Table 6. HPV vaccine introduction

Females	
HPV vaccination programme	Introduced
Year of introduction	2019
Year of estimation	2021
HPV coverage – first dose (%)	77
HPV coverage – last dose (%)	59
Males	
HPV vaccination programme	Not Available/Not Introduced
Year of introduction	-
Year of estimation	-
HPV coverage – first dose (%)	-
HPV coverage – last dose (%)	-

Table 7. Cervical screening practices and recommendations

Existence of official national recommendations	Yes
Starting year of recommendations	2007
Active invitation to screening	No
Screening ages (years), primary screening test used, and screening interval or frequency of screenings	>=20 (cytology, 2 years)

Figure 2. Estimated coverage of cervical cancer screening in Costa Rica*



* Estimated coverage and 95% confidence interval in 2019

Contact information:

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