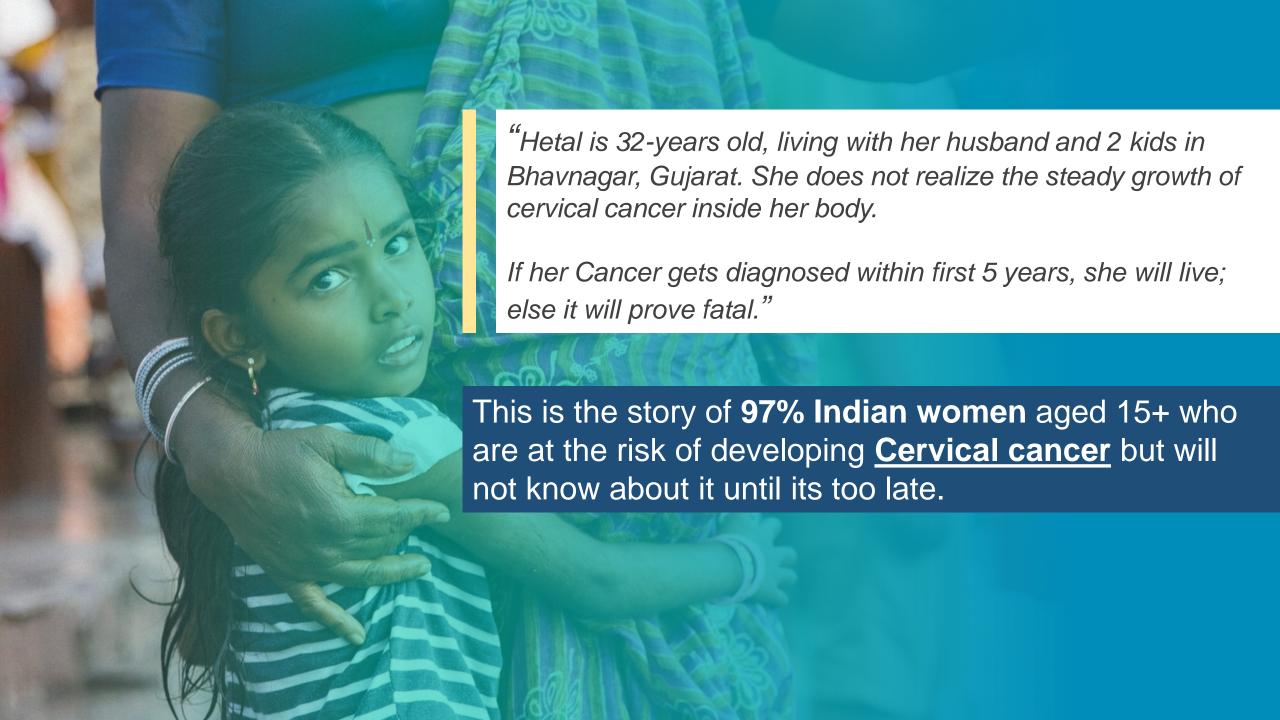




CerviScope

The smart, non-invasive, handheld Colposcopy device for quick and automated Cervical Cancer Examination and Screening



#### **Cervical Cancer: The Global Problem**

### WHO launches strategy to eliminate cervical cancer; can India achieve the target

3 min read. Updated: 17 Nov 2020, 03:33 PM IST

Neetu Chandra Sharma

 Health experts claim that in India, there is a lack of awareness about cervical cancer screening and hitches associated with the invasive nature of screening. Less than 30% of women in India aged 30-49 years have been screened for cervical cancer

# 'Screening and HPV vaccination are crucial in arresting cervical cancer in India'

In India, about 160 million women aged 30-59 years are at risk of developing cervical cancer, and 122,000 new cases are diagnosed annually with 67,800 deaths- a fatality rate of 49 per cent.

Rashmi Mabiyan • ETHealthWorld • Updated: January 18, 2020, 15:02 IST





Cervical cancer elimination: WHO makes landmark commitment

Latest Health News Popular Health News Special Reports Latest Press Releases

The WHO Has Released A Plan To **Eradicate Cervical Cancer** 

"We want countries to aim for 90% of girls under 15 vaccinated, 70% of eligible women identified and treated, 90% of women with invasive cancer treated," Dr. Princess Nothemba Simelela from South Africa, WHO WHO launches strategy to accelerate elimination of cervical cancer



### The problem is worse than what we already know...



#### 469+ Million

Indian women are at risk of developing Cervical Cancer

### 67,000+

annual deaths each year in India (higher mortality rate than COVID-19)

**3%** of women ever get screened even once (for a 100% curable disease)

Existing tests: Pap Smear | HPV Test | VIA-VILI



Expensive tests



Long turn around times



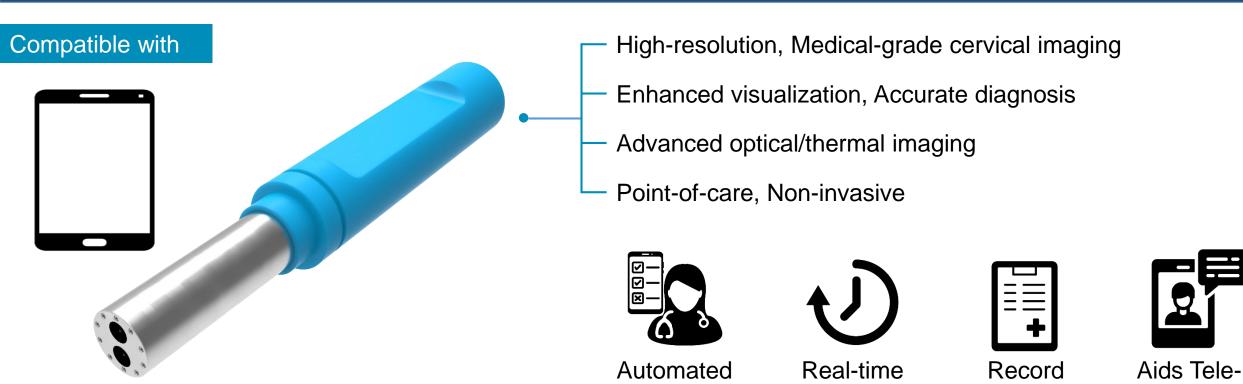
Low Accuracy
Visual inspection



No visual data for referral / counselling

Democratize and make cervical cancer screening accessible for all

## ..so, here's a solution for cervical health examination and cancer screening.



CerviScope

INPUT	PROCESS	OUTPUT
Medical grade cervical image	<ul> <li>Pixel Intensity Processing</li> <li>ML based predictive analysis</li> <li>Mark Image Annotations</li> <li>Contextual questions</li> </ul>	<ul> <li>Detailed patient report</li> <li>Follow on treatment documentation</li> <li>Doctor-patient dashboard</li> </ul>

Results

Oncology

Management

Screening

# **Use Cases and Value Proposition**

USE CASES	VALUE PROPOSITION
For On-demand Screening	<ul> <li>Enhanced Visualization, better diagnosis</li> <li>Cost-effective</li> <li>Real-time results</li> <li>Portability, ease-of-use</li> </ul>
For Mass-screening camps	<ul> <li>Accuracy Enhancement for VIA/VILI</li> <li>Easy Patient Record Management</li> <li>Remote collaboration via Tele-oncology</li> </ul>

## This is how we plan to integrate Microsoft Azure Services in our solution -

AZURE SERVICE	USE
Azure cosmos DB - NoSql DB	To store patient details and test reports
Azure Files	To store medical-grade cervical images
Azure Machine Learning & Computer Vision	To perform predictive analysis on cervical images to screen abnormalities

