# **REDESIGNING THE C SPEC**

Enhancing Comfort, Ease of Disassembly, and Healthcare Professional Satisfaction for Cervical Cancer Screening Procedures in Low-Resource Settings



## **SPECULUM-STYLE HANDLE**

The new C Spec operates via a handle that feels intuitive for users, making product implementation easier.

## LINEAR CAM MECHANISM

This mechanism is used to open the flaps at the end of the product body to view the cervix via the mobile phone.





#### **CAN BE FULLY DISASSEMBLED**

The new C Spec can be fully disassembled for sterilization for repeated product use.

Mirthe Hofstede Redesigning the C Spec 27.06.2024 Integrated Product Design Committee

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## **THE PROBLEM**

Cervical cancer is the development of abnormal cell growth on a woman's cervix. It is a highly preventable and highly curable disease if detected early. Notably, 22.5% of cervical cancer related deaths occur in Africa but, they have the lowest rate of cervical cancer prevention measures worldwide.

This project focuses on increasing women's participation in cervical cancer screenings through redesigning the C Spec, a product that lowers the patient discomfort barrier associated with cervical cancer screenings.

# THE NEW C SPEC DESIGN

The C Spec was developed by the startup company GIC Space. Its design utilises a narrow body and an endoscopic camera to visualise the cervix via a live mobile phone feed, reducing the diameter needed to stretch the vaginal walls to view the cervix.

Although the original C Spec design improves patient comfort, healthcare professional ease of use was limited. This new C Spec design therefore utilizes a speculum style handle attached to the original C Spec main body to allow for intuitive use by healthcare professionals while maintaining patient comfort.

