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## Evaluation of a Portable Gynecological Examination Table on Increasing Access to Cervical Cancer Screenings

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## **Evaluation of a Portable Gynecological Examination Table on Increasing Access to Cervical Cancer Screenings**

**Introduction:** Cervical cancer is a preventable disease affecting millions of women worldwide, with higher prevalence and mortality in developing countries. One explanation of this disparity is due to reduced access to screenings, especially in rural communities where mobile health clinics are limited by what medical equipment they can bring. To address these barriers, an engineering team called Project MESA (Making Examinations Safe and Accessible) designed a gynecological examination table that is portable, lightweight, and easily sanitizable.

**Objective:** This study aims to (1) evaluate whether the implementation of this device improves the clinician's ability to perform pap smears as opposed to alternative surfaces, and (2) investigate the impact on patients' comfort with cervical cancer screening.

**Methods:** Two gynecological exam tables are being used by a partner organization with clinics in Perú and Nicaragua. Since September of 2022, 42 responses have been recorded. Using clinician and patient questionnaires that were developed based on field observations, the team will perform a mixed methods analysis to compare clinician and patient preferences on the new device versus alternative surfaces.

**Results:** Preliminary data may support greater clinician and patient satisfaction with the new device, but cannot be statistically confirmed yet due to ongoing data collection. Results that can be discussed are dynamic testing on the gynecological table which supported safety through 15,600 uses and positive feedback from many clinicians and international partners.

**Conclusion:** This project provides a construct to address barriers to cervical cancer screenings, with more quantitative results becoming available soon.