Advancing Cervical Cancer Screening

Addressing a leading cause of cancer death for women in low resource settings

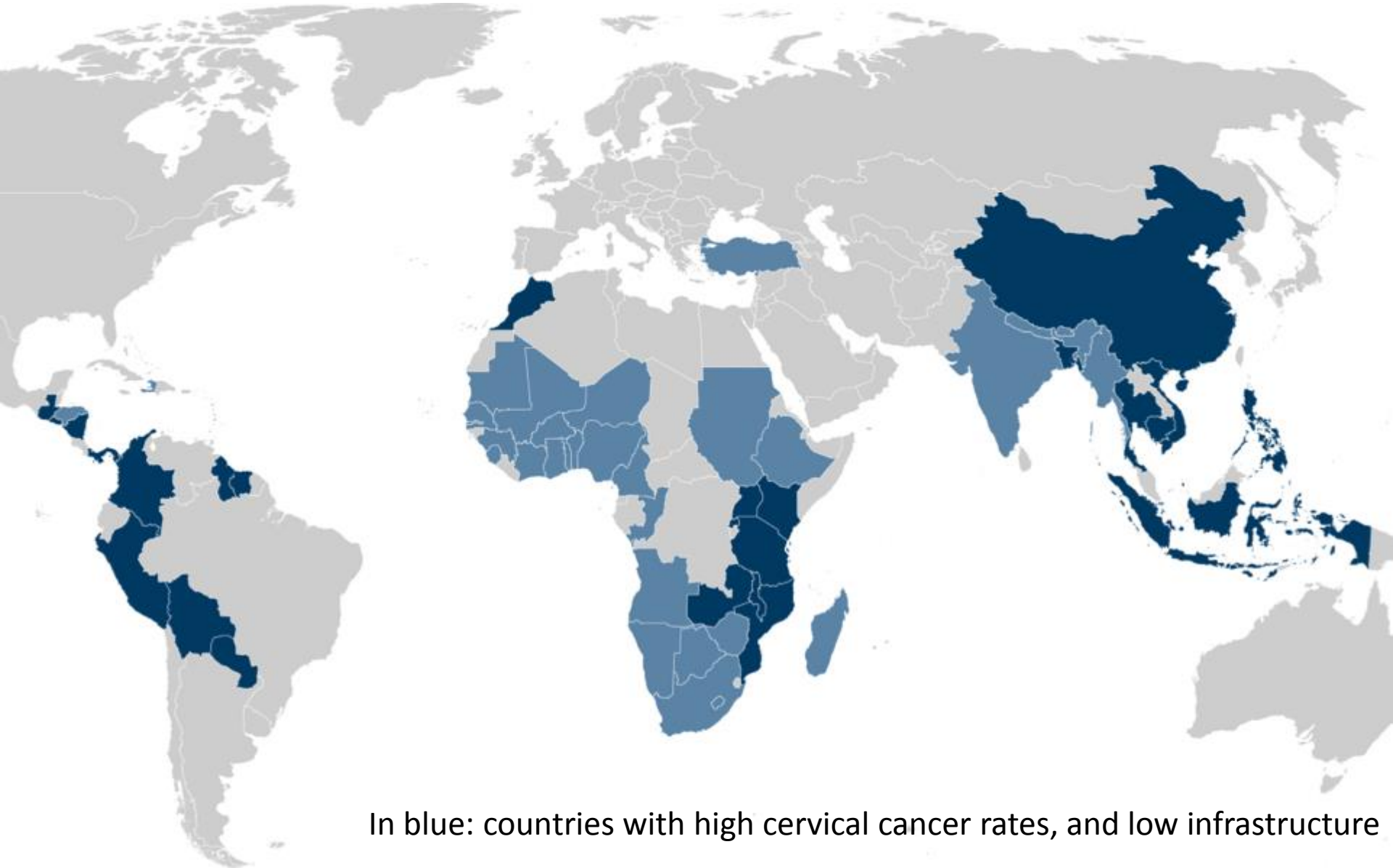
One woman dies every two minutes

Cervical cancer kills 270,000 women per year
85% in the developing world

1.2 billion screenings required per year globally
Women in low-resource settings are hard to reach

For these women, VIA is the current screening program But VIA has poor accuracy

Global need, global priority



In blue: countries with high cervical cancer rates, and low infrastructure

Multiple approaches to screening

- **HPV:** High sensitivity, high likelihood of over treatment.
- **Pap/Cytology**: Costly, greater specificity. Huge variation in quality.
- **VIA**: Least expensive and most accessible. Low sensitivity and specificity.

Importance of Visual Inspection

- HPV tests alone will lead to **over-treating 9 out of 10 women**
- Visual inspection's main goal will be increasing **specificity**
- Since histopathology is unattainable in many circumstances, visual inspection will focus on triage
- **New algorithms can aid health workers in making optimal decisions on triage**

Use of technology to aid visual inspection

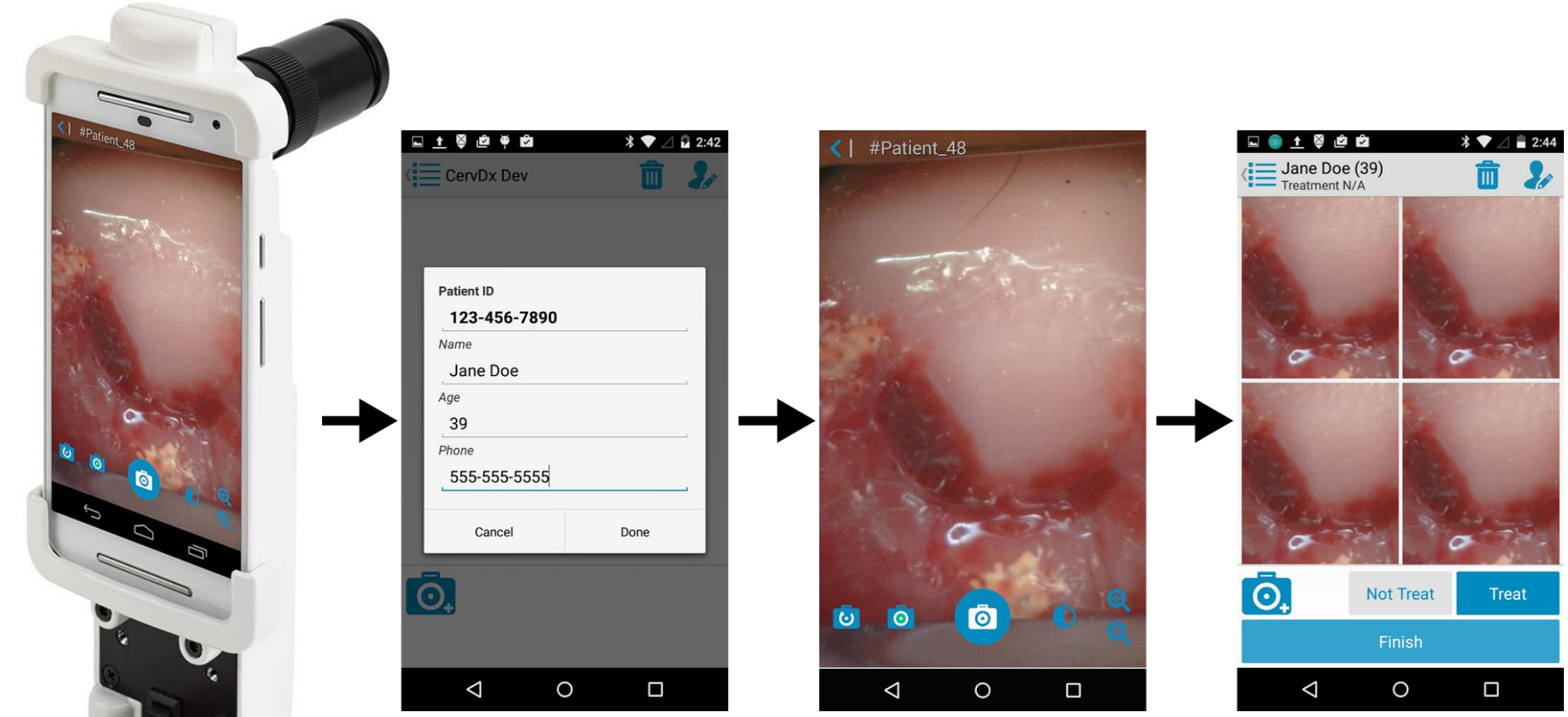
Multiple approaches have been taken to aid in visual inspection of the cervix:

- Low-cost optical colposcopy
- Visual enhancement
- Low-cost digital colposcopy
- Mobile phone based cervicography
- Mobile phone based colposcopy

Mobile colposcopy to optimize visualization

- All visual enhancement techniques enable **better visualization of the cervix** than VIA
- Digital methods of viewing **lose 3D, but gain image enhancements**
- The mobile phone revolution provides us with powerful new tools for **optimal imaging and mobile analysis**
- **Mobile phones enable native collaboration.**

How mobile colposcopy works



Mobile phone platform ensures collaboration is built in, algorithmic analysis forthcoming

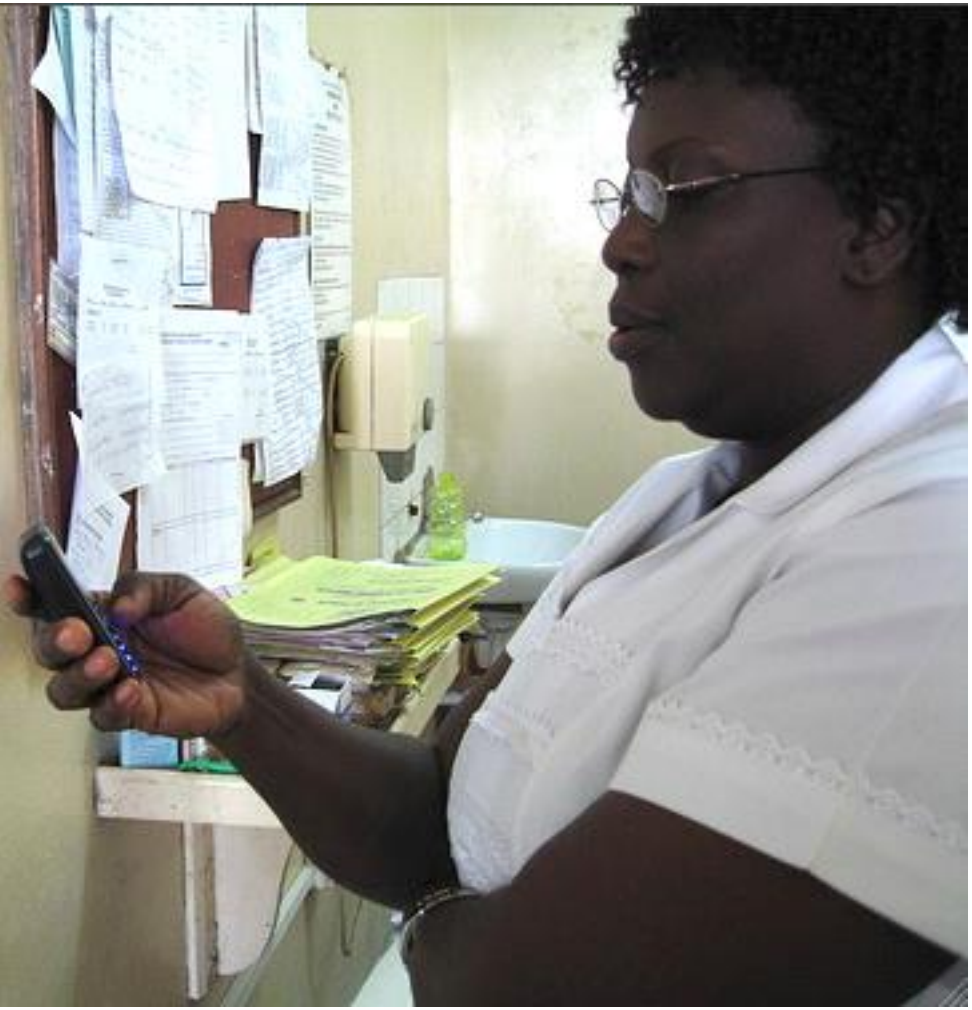
Preliminary data on outcomes

- Enhanced visualization tools have been used worldwide, and tested in multiple countries.
- The mobile colposcope has been tested in 7 countries in over 1000 screenings.
- Preliminary data shows that enhanced visualization can significantly improve specificity.

Preliminary data from one country case study:

Patients screened using VIA	**750**
Positive screens based on VIA	25
VIA+ patients screened with the Mobile Colposcope	
Positive screens	20
Overtreatments avoided	5
% of overtreatments avoided	20%
Estimated cost savings for one week	$140

Mobile phones as a point of care



- Today, everyone walks around with a supercomputer in their pocket.
- Mobile phones already recognize faces; soon they will spot disease.
- As smartphones become smarter, augmented visualization can revolutionize the point-of-care – and turn any phone owner into a primary screener.

Together we can defeat cervical cancer in our lifetime.

For more information **Ariel Beery**
ab@mobileodt.com