Integration of Cervical Cancer Screening and Prevention into HIV-care at the Family AIDS Care and Education (FACES) clinics in Kisumu, Kenya
Background

• HIV-infected women have up to four-fold risk of HPV infection, cervical precancer and invasive cancer

• Cervical cancer and HIV prevalence highest in developing countries

• HIV care and prevention efforts have significantly decreased incidence and improved disease prognosis over past decade

• No concomitant improvement in cervical cancer prevention or survival
Challenges to Cervical Cancer Screening in Low-Resource Settings

• Care and prevention of chronic illnesses have lower priority given competing mortalities

• Successful programs in resource-rich settings require health care infrastructure for
  – Specimen transport and follow-up
  – Clinic supplies and staffing
  – Lab equipment and supplies
  – Tracking strategies
  – Follow-up visits
  – Space, water and electricity
Strategies for Cervical Cancer Prevention in Low-Resource Settings

• Appropriate screening techniques
  – Visual Inspection with Acetic Acid
  – Biomarker testing (HPV)

• Single visit approach

• Provide treatment in clinic

• Integrate into existing health care infrastructure

• HIV clinics provide
  – Trained staff
  – Regular follow-up
  – High-risk population
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Visual Inspection with Acetic Acid

- Application of 3-5% acetic acid to the cervix
- Examination of the cervix after 1-2 minutes
- Positive test: any white lesions near transformation zone
- Negative test: no change, 99% negative predictive value
Cervical Cancer Screening and Prevention at FACES

- WHO and IARC guidelines for resource-limited settings
- Clinic and community awareness building
- Educate and train staff and providers
- Screen all non-pregnant women >23 yrs with VIA
- Diagnosis with colposcopy/biopsy
- Treat CIN2/3 with LEEP
FACES Screening Protocol

V.I.A. +

- CIN1

Colposcopy

CIN2+

Biopsy

CIN1/Negative

Colposcopy in 1 yr

Colposcopy in 6 mos

CIN2+

LEEP

V.I.A. in 3 yrs
How integrated screening happens

• CCSP team incorporates all departments
• Client Enrollment
  – CCSP education part of HIV education talks
• Routine Clinic Visits
  – Eligible women identified at reception, triage and in clinician rooms
  – Counseling done by CCHAs, nursing and clinical officers
  – All clinical officers trained in VIA
• Follow-up
  – Treatment and follow-up exams done at next scheduled visit
  – Home visits done with CCHA team
Patient Outcomes

*October 2007 to July 2012*

- 6740 women screened with VIA
- 574 cases of CIN2/3 diagnosed (8.5% prevalence)
- 493 LEEP performed
  - No moderate or severe adverse events
  - 10% recurrence rate at 1 yr; 19% at 2 yrs
- 58 cases of invasive cancer
  - 54 Stage IA1
  - 4 Stage IB or greater
Clinician Outcomes

• **Training**
  - 70 clinical offers and nurses trained in screening techniques
  - 12 clinical offers trained in LEEP
  - 35 CCHAs trained in cervical cancer screening education
  - Data manager trained in monitoring and evaluation

• **Staff satisfaction**
  - 100% reported increased knowledge of and comfort with pelvic exams
  - 90% enjoyed mentorship process and felt skills would be valuable to career
Lessons Learned

• FACES-CCSP is an example of a successful cervical cancer screening and prevention program in an HIV-care setting
  – Initial and follow-up visits nested within routine clinic visits
• Team-approach including all departments key factor in success
• Community awareness and patient education essential
• Sustainability depends on all clinical staff being trained
• Data collection and tracking systems should be designed at start of project to monitor and evaluate program
Next Steps

• Scale-up services to other FACES-supported district in partnership with MoH
  – Single visit “see & treat” model

• Evaluations in progress to determine efficiency and cost-effectiveness of more streamlined (“see & treat”) programs

• Need to design large scale, rigorous trials to determine optimal mode of integration

• Can lessons learned from HIV-CCSP integration spread to general outpatient settings?
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