



AAFP GLOBAL HEALTH SUMMIT

Impacting Global Health through Family Medicine

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Launching a Cervical Cancer Screening and Treatment Program in Rural Haiti through a Collaborative Two Week Training and Mass Screening Event

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Learning Objectives

- Identify the successes and challenges of launching a cervical cancer screening program in a rural hospital in Haiti
- Appreciate how involving residents and students in a global health initiative contributes to its success
- Effectively involve residents and students in a global health initiative in order to enhance their educational experience

Outline

Background

The Project

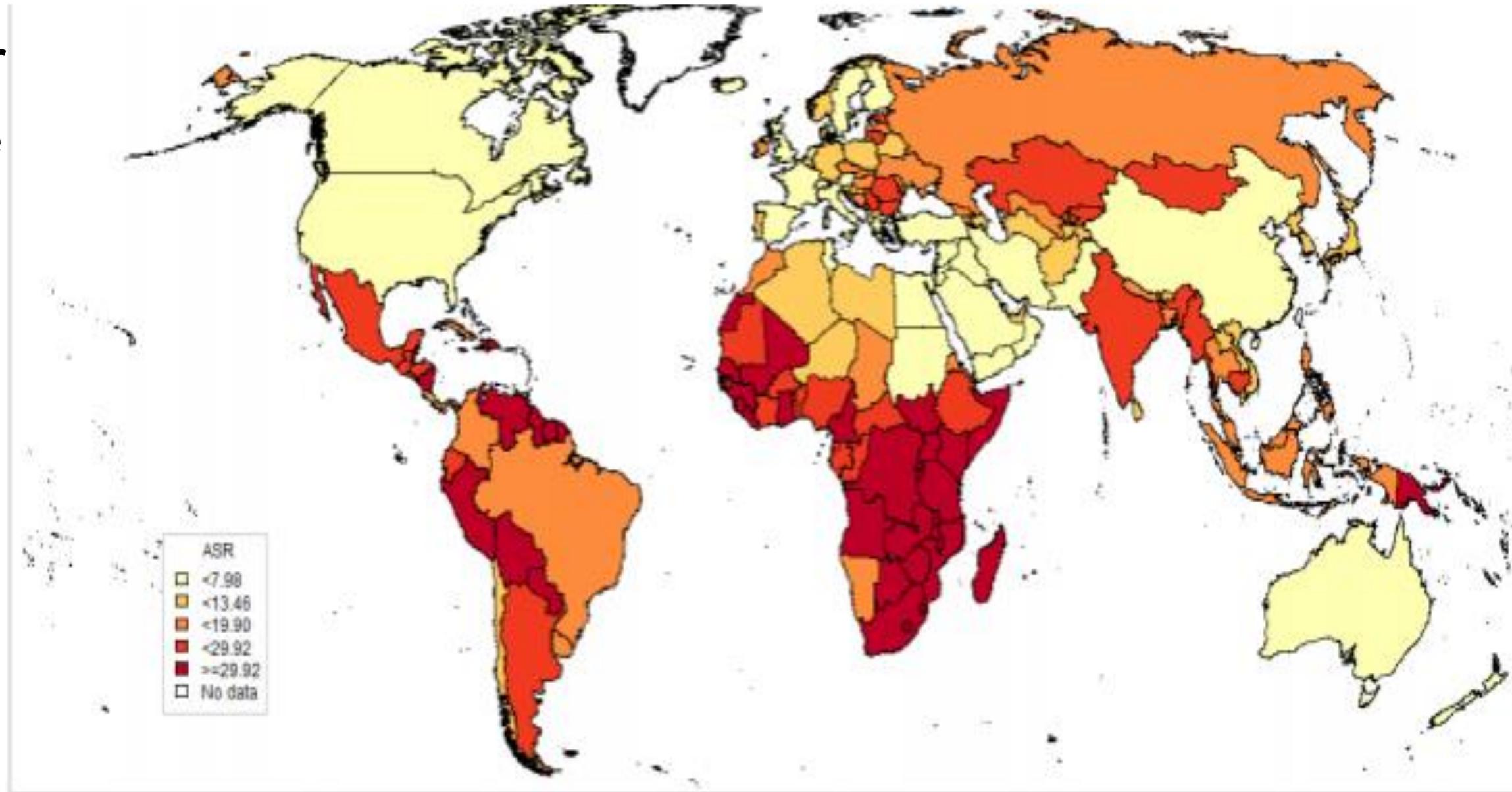
Residents' Experience with The Project

Global Health Education in Residency



Background

Cervical Cancer Incidence in the World, 2012



Data accessed on 15 Nov 2015.

Rates per 100,000 women per year.

For Sudan, South Sudan: Estimate for Sudan and South Sudan

Data sources: Ferlay J, Soerjomataram I, Ervik M, Dikshit R, Eser S, Mathers C, Rebelo M, Parkin DM, Forman D, Bray F. GLOBOCAN 2012 v1.2, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 11 [Internet]. Lyon, France: International Agency for Research on Cancer; 2013. Available from: <http://globoCAN.iarc.fr>.

Cervical Cancer in Haiti

Ranking of cervical cancer (all years): 1st for incidence; 1st for mortality

Annual number of new cases/deaths:

Incidence: 1048

Mortality: 575



Comprehensive Cervical Cancer Control

A guide to essential practice

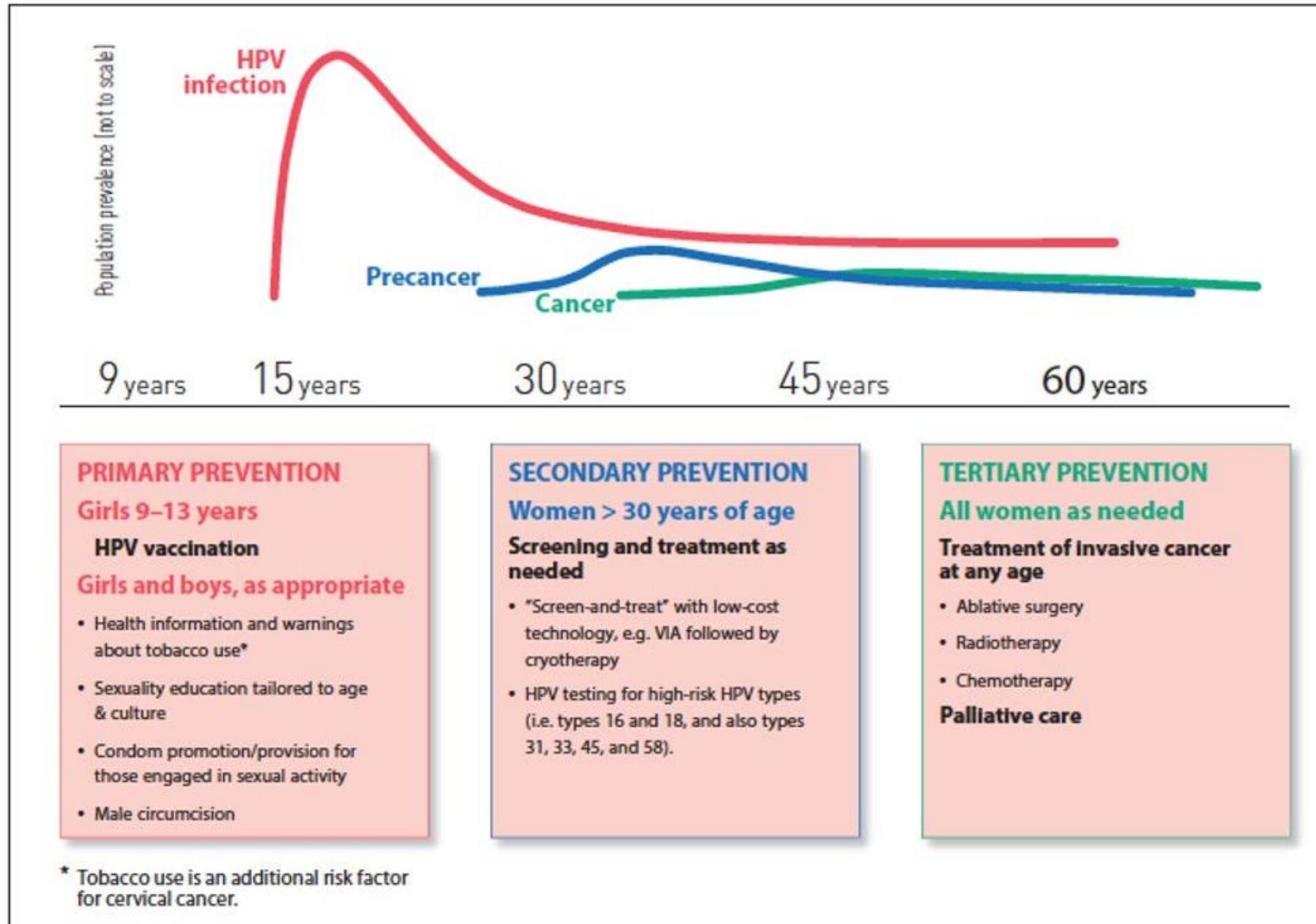
Second edition



2014

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Prevalence of HPV infection, pre-cancer and cancer over the lifespan



Methods of Cervical Cancer Screening

	VIA Visual Inspection with Acetic Acid	Pap Smear Cytology	HPV Testing
# of visits needed	1 visit	Multiple visits	1-2 visits
Cost	Low	Moderate	High, but perhaps lower in the future
Feasibility in a low resource setting	Very feasible	Not very feasible	Possibly feasible in the future

Table 1. Screening Test Sensitivity and Specificity in Detecting Cervical Disease (CIN 2+ or Cancer)

Test	Sensitivity	Specificity
Pap smear	38–83% ¹ 47–62% ²	> 90% ¹ 60–95% ²
VIA	80% ³ 65–90% ²	92% ³ 64–98% ²
HPV testing Clinician-collected Self-collected	93–98% ⁴ 80–86% ⁴	85% ⁴ 85% ⁴

Source: WHO 2006¹; FIGO 2009²; Sauvaget et al. 2011³; ACCP 2011⁴.

The Project



H3Missions, Inc.
Help for Hurting Humanity

**H3Missions, Inc. – Help for Hurting Humanity: A
Non Profit Company**
h3missions.org

Institutional Collaboration



LOMA LINDA UNIVERSITY
HEALTH





Rural hospital in Deschapelles, Haiti
90 miles north of Port-au-Prince

131 beds

350,000 people served

Multiple specialties available

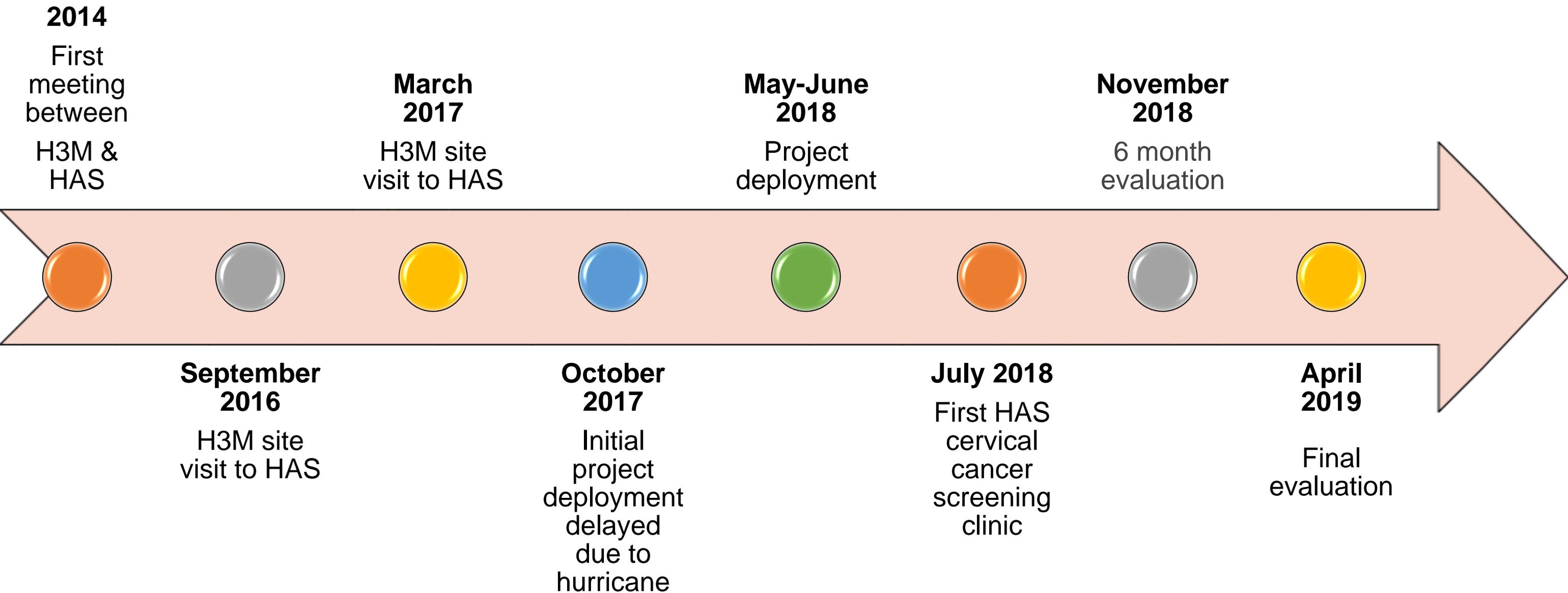
Strong Community Health Program

Established in 1956 by Larry Mellon

Long term history of international
partnerships



Project Timeline



Key Project Design Elements

Purpose: Launching a sustainable cervical cancer screening program at HAS

Duration: 1 year project (May 2018 - April 2019)

Components: Training local physicians and nurses
Mass screening (900 women)

Funding: ~\$100K grant from Rotary International

- Travel costs of 20 US-based volunteer professionals
 - Two-week initial workshop
 - Two short trips at 6 and 12 months
- Equipment and supplies

People

US Team

Role	Week 1	Week 2	Qualifications
Team Leader	+	+	
Logistics	+	+	
Media/PR		+	
Logistics/Lab	+	+	
Lead Trainer	+		Nurse Practitioner
Trainer 1	+	+	MD - FM, UCR
Trainer 1	+		MD - OB/GYN, UCR
Trainer 1		+	MD - OB/GYN
Trainer 1	+		Nurse Practitioner
Trainer 2	+		Nurse
Trainer 2	+	+	MD - FM resident, UCR
Trainer 2	+		MD - OBGYN resident, UCR
Trainer 2	+	+	MD - FM resident, UCR
Trainer 2	+	+	MD - FM resident, LLU
Pathol	+	+	MD
Cytol	+	+	Cytologist
Cytol	+	+	Cytologist
Cytol	+	+	Cytologist
Data/PtEd	+	+	MS4
PatEd	+	+	Nurse
	18	15	



Haiti Team

HAS			H3M
Hospital Director	(1)		
Program Coordinator	(1)		Logistics
			Clinic management
Hospital staff (registration)	1		Registration/Data
Community Health Director	1		Translators
Trainees:			
HAS gynecologists	3		
HAS physicians	2		
HAS midwives	3		
HAS nurses	2		



Screening and Treatment Methods

Screen with VIA and treat with cryotherapy, or LEEP when not eligible for cryotherapy

Cervical Cancer Screening Algorithm for Hôpital Albert Schweitzer

Methods:

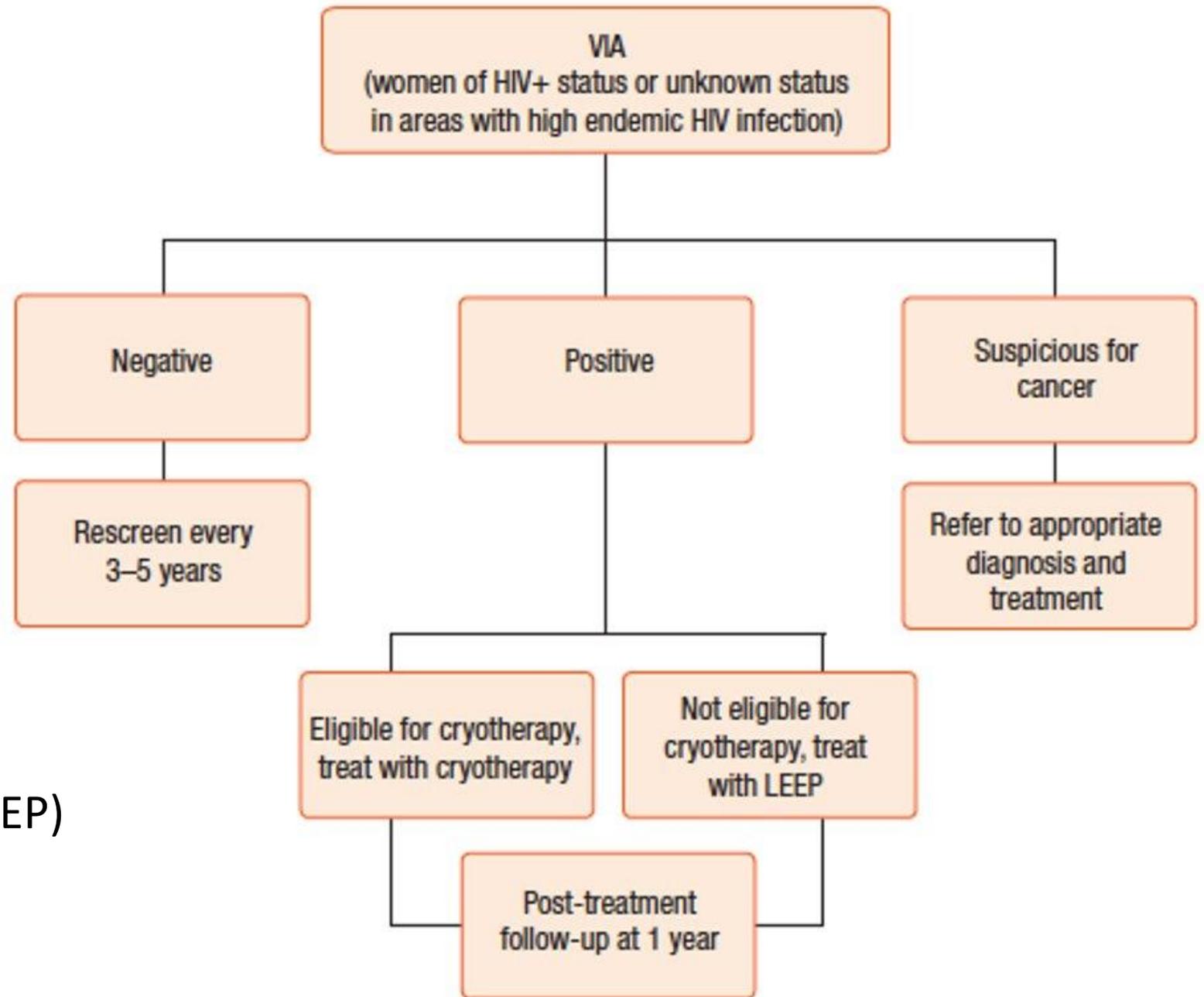
Cytology / Pap smear

Visual Inspection with Acetic Acid (VIA)

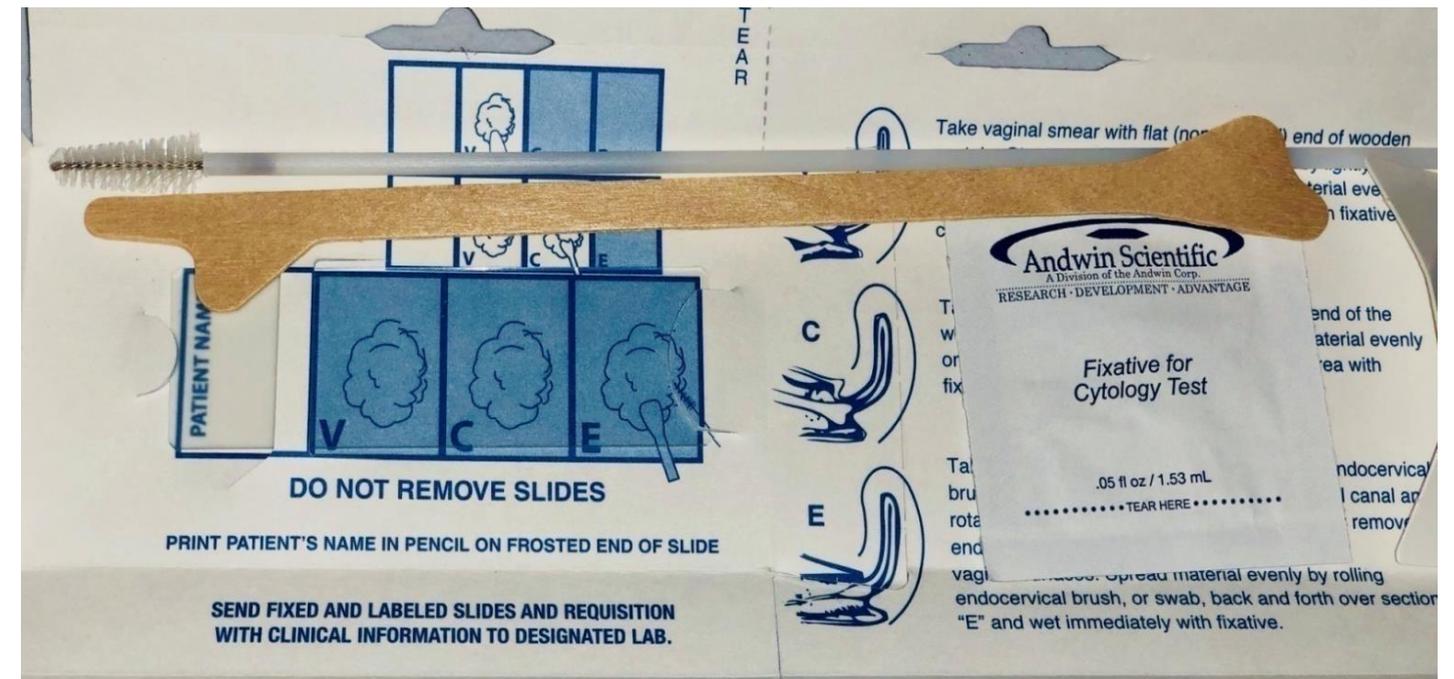
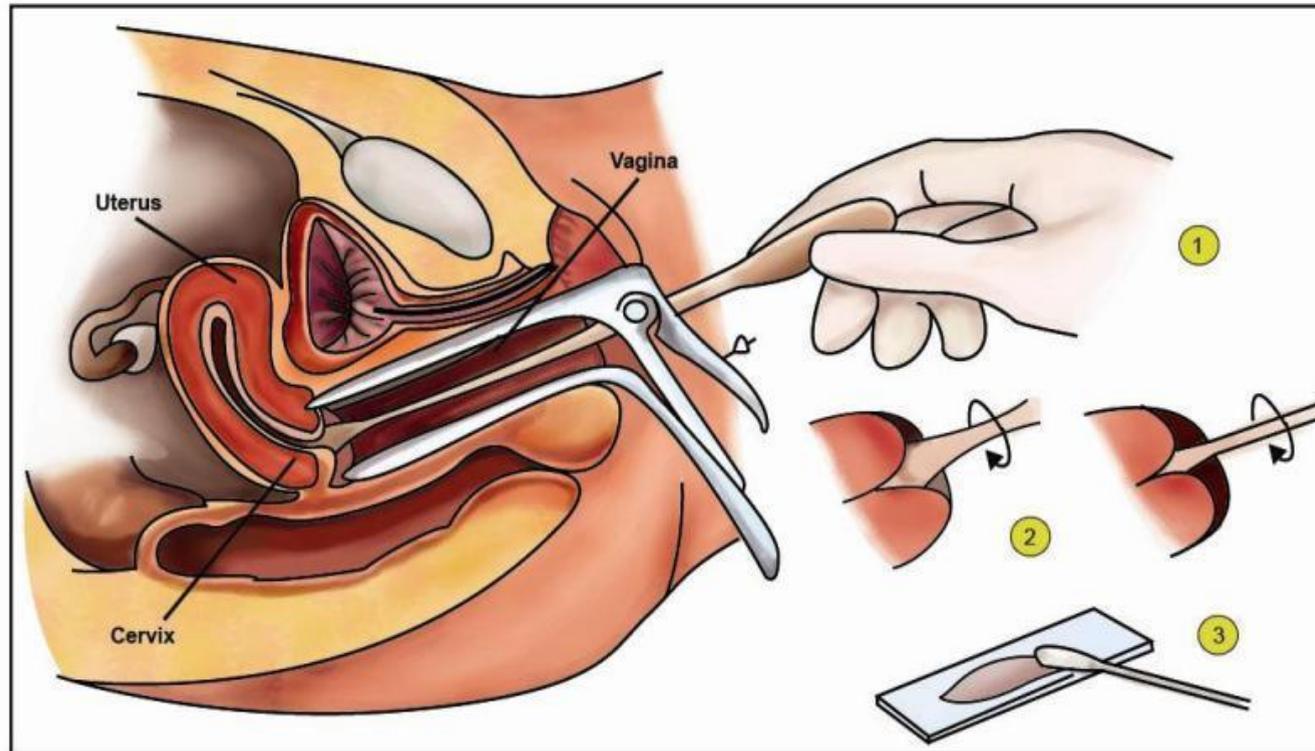
Cryotherapy

Loop Electrosurgical Excision Procedure (LEEP)

Colposcopy

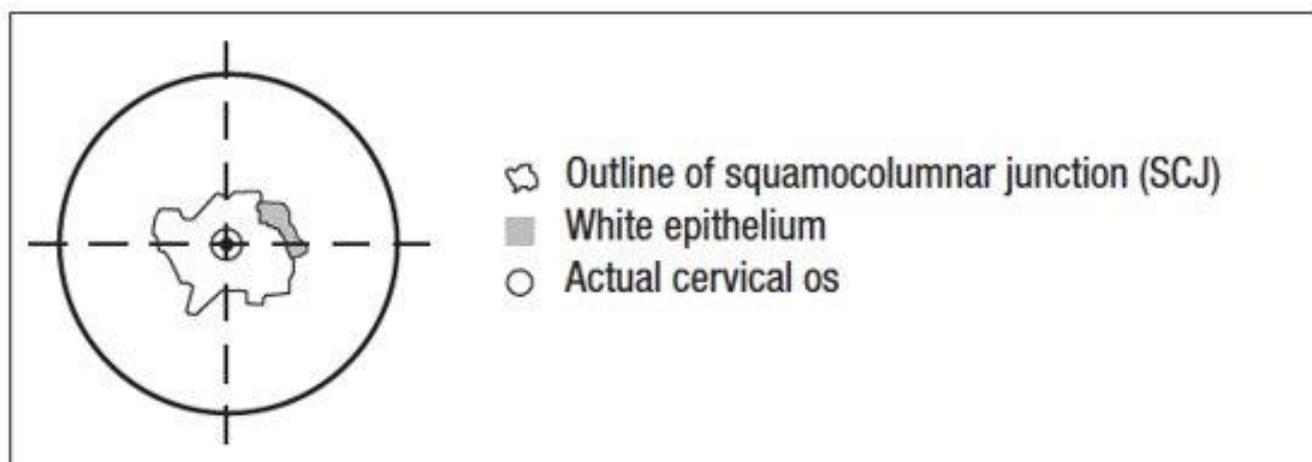


Papanicolaou (PAP) Smear



Visual Inspection with Acetic Acid (VIA)

Figure 5.1: VIA results recorded on labelled drawing



Acetowhite area far away from the squamocolumnar junction (SCJ) is not significant



Faint acetowhite areas without sharp outline are not significant



Streak-like acetowhitening is not significant



A line-like acetowhitening appearing at the brim of endocervix is usually not significant



Dot-like pale areas in the endocervix; they are due to grape-like columnar epithelium staining with acetic acid, which is normal



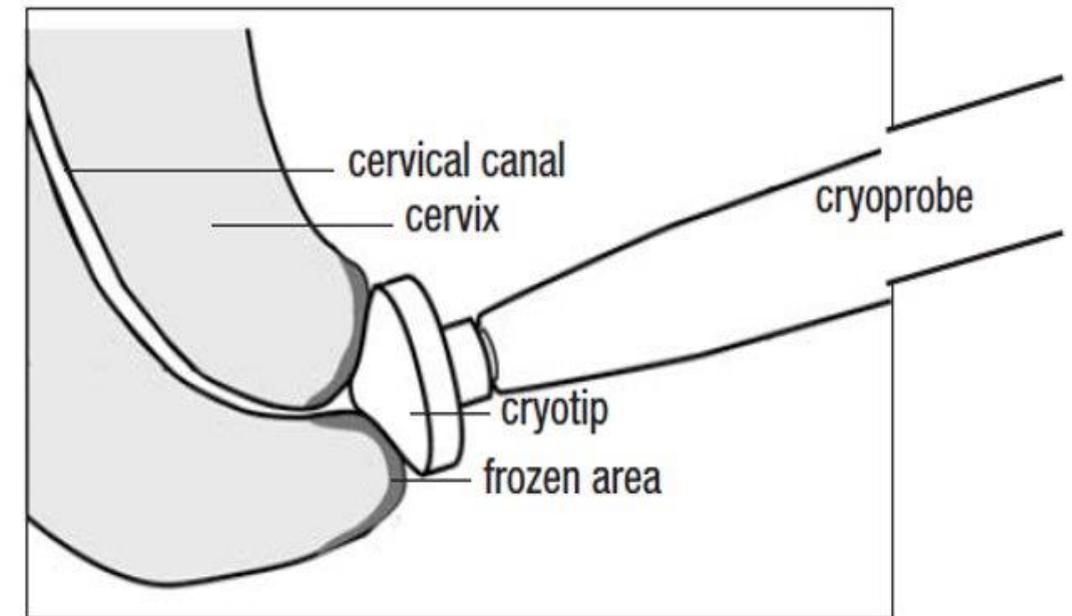
Thick, well-defined acetowhite areas, appearing immediately adjacent to the SCJ, jutting into both endocervix and ectocervix; **they are significant**

Cryotherapy

Table PS5.10.1: Eligibility and exclusion criteria for cryotherapy

Eligibility criteria <i>(all must be met)</i>	Exclusion criteria <i>(if any are met)</i>
<ul style="list-style-type: none">• Positive screening test for cervical pre-cancer• Lesion small enough to be covered by the cryoprobe• Lesion and all edges fully visible with no extension into the endocervix or onto the vaginal wall	<ul style="list-style-type: none">• Evidence or suspicion of invasive disease or glandular dysplasia (pre-cancer)• Lesion extends beyond the cryoprobe edge• Pregnancy• Pelvic inflammatory disease (until treated)• Active menstruation

Figure 5.4: Position of cryoprobe on the cervix and ice forming



LEISEGANG® LM-900 Cryosurgery System

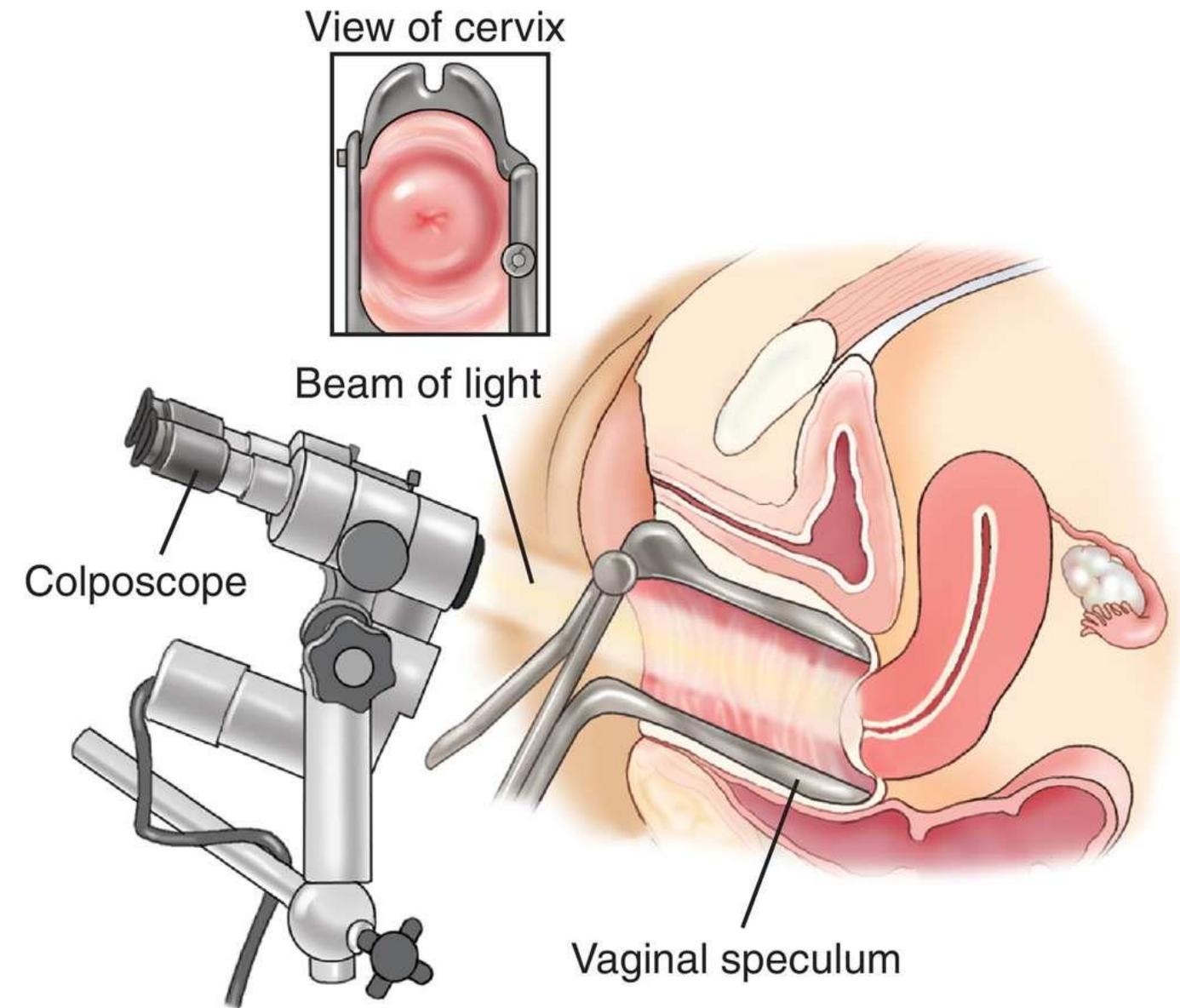
Efficient and Safe Freeze for
Cryotherapy Procedures



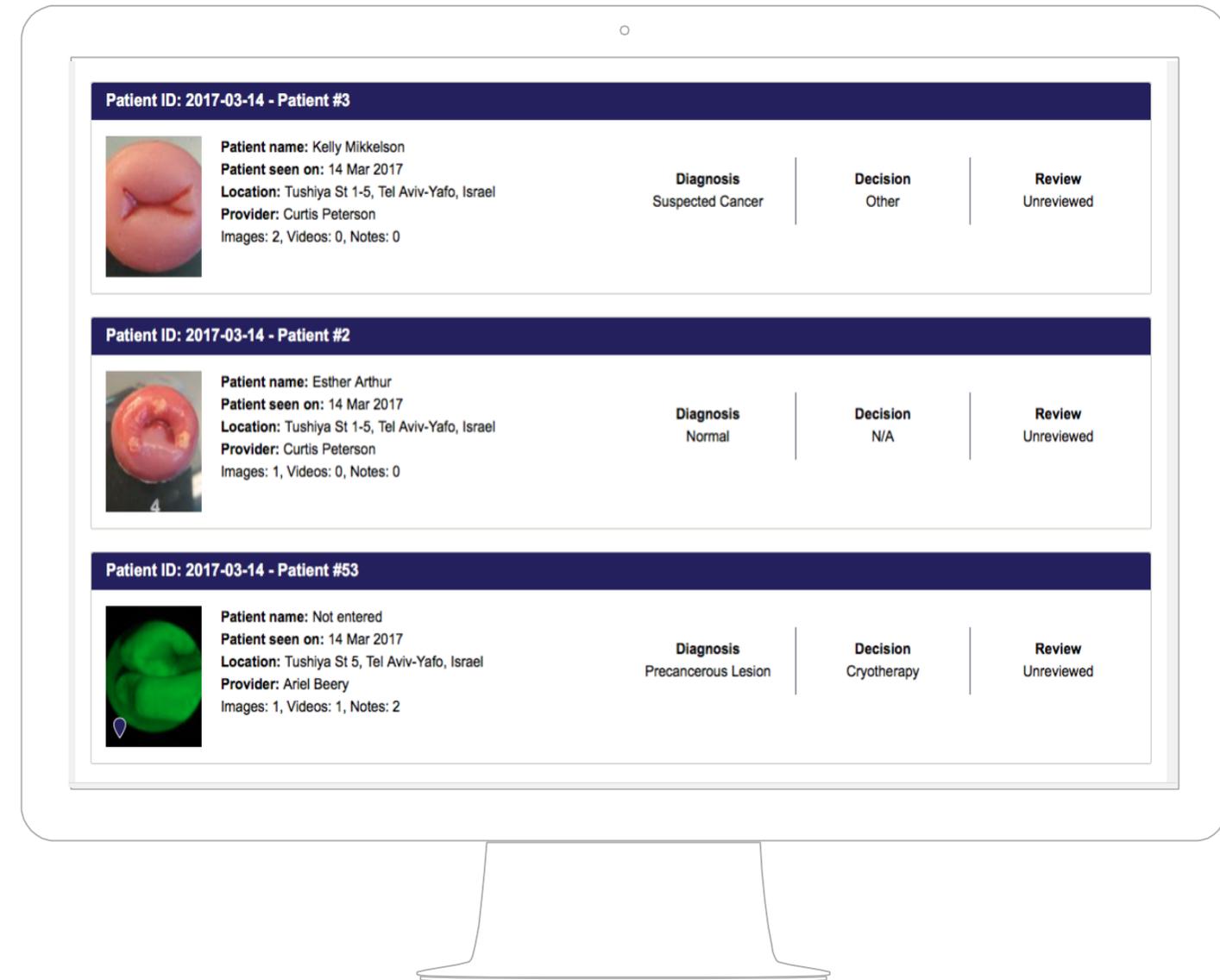
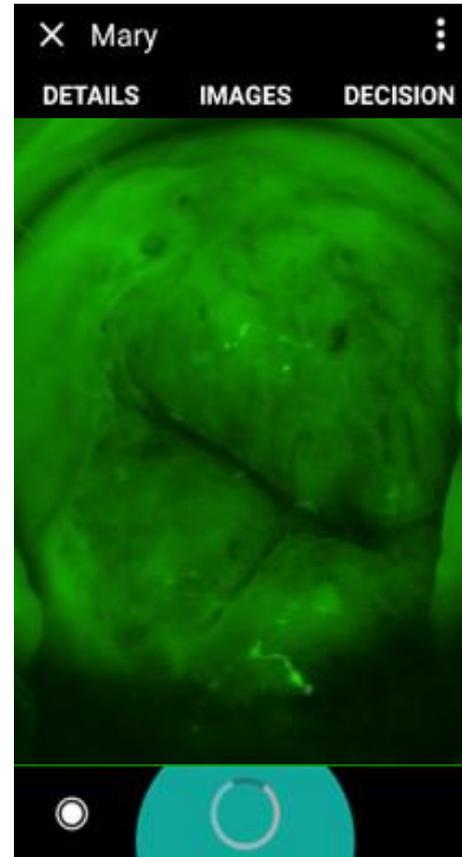
Colposcopy



Typical Mayo tray set-up for colposcopy. From left to right: cotton balls, Monsel's solution, saline, vinegar, Lough's iodine, cotton-tipped applicators, rectal swabs (Texas Q-tips), Ring forceps, vaginal speculum, biopsy forceps, ECC curette, endocervical speculum. Additional possible items not shown include benzocaine solution, side-wall retractors, and cervix brush



Mobile Colposcopy



LEEP

Figure PS5.11.1: Different types and sizes of electrodes



- (a) ball electrode
- (b) square loop electrode
- (c) semicircular loop electrode

Figure 7. A Typical LEEP Instrument Tray with Necessary Instruments and Supplies

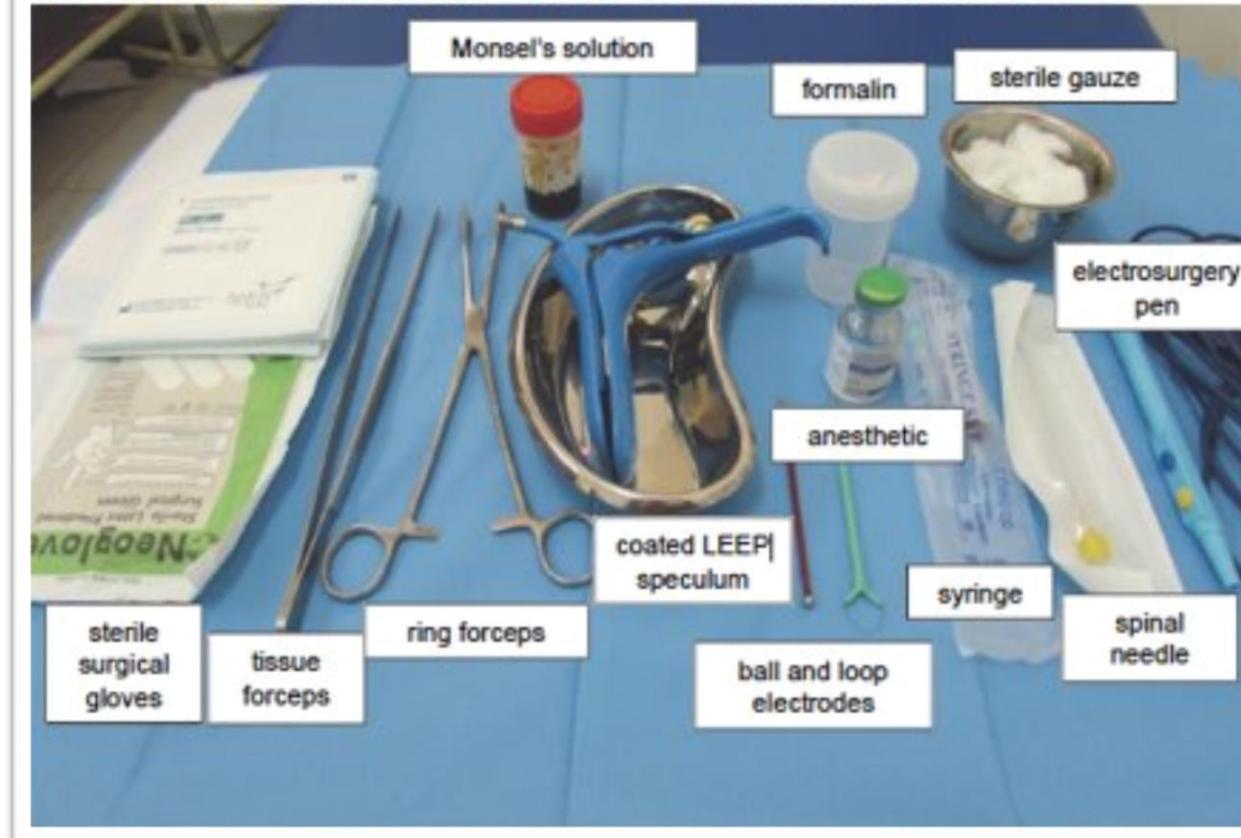


Figure 5: Loop electrode being positioned over area to be excised (top) and initial insertion of probe into cervical tissue (bottom)¹¹

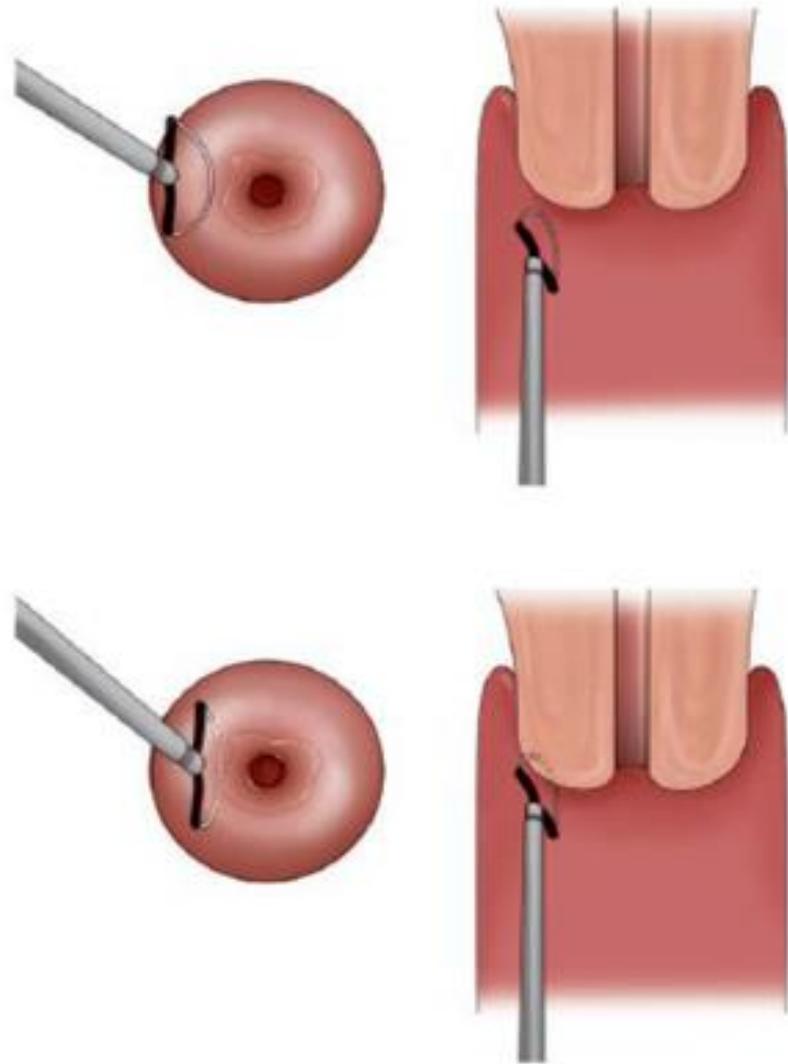


Figure 6: Loop electrode being passed through cervical stroma under the transformation zone (top) resulting in an excisional biopsy (bottom)¹²

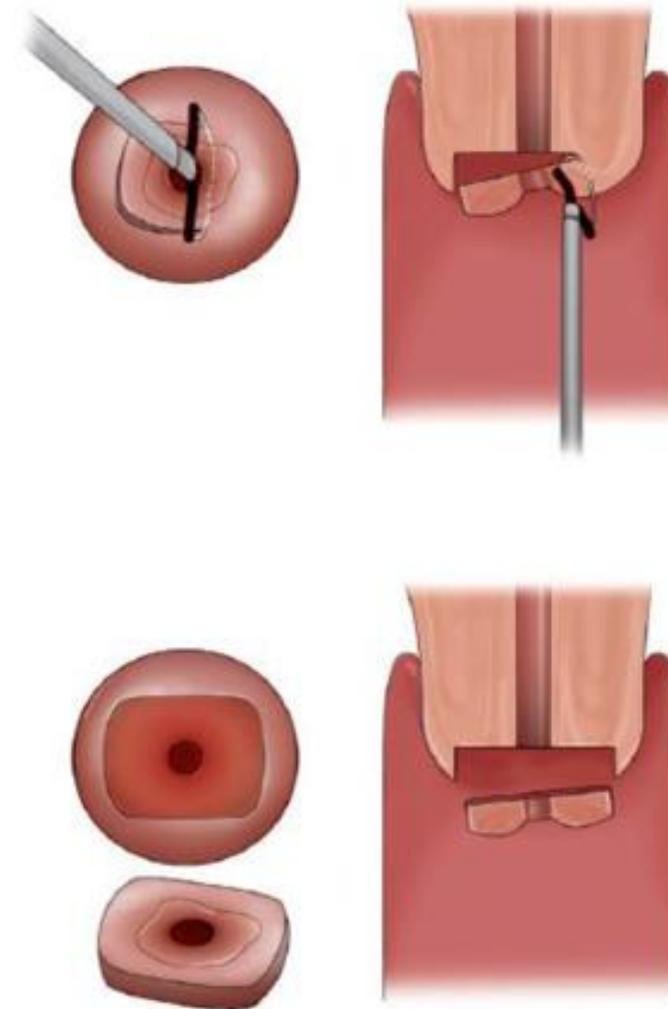


Table 1. Outpatient treatment options for preinvasive cervical lesions.

Method qualities	Cryotherapy	LEEP
Effectiveness	80–90%	90–95%
Side-effects	Watery discharge, infection risk	Bleeding
Anesthesia required	No	Yes
Tissue sample obtained	No	Yes
Power required	No	Yes
Cost of basic equipment/supplies	Relatively low (US\$ 1 000–3 000)	Relatively high (US\$ 4 000–6 000)

Training

Learning Objectives

At the end of the training program, participants will be able to:

- Explain the **epidemiology** of cervical cancer
- Describe the normal and pathologic **anatomy** of the cervix
- Identify and describe abnormal **cervical lesions** through VIA
- Explain the **treatment options** for pre-cancerous cervical lesions
- Describe and **perform the key steps** of the:
 - speculum examination
 - preparation of a pap smear
 - examination of a cervix by VIA
 - cryotherapy of eligible precancerous cervical lesions
 - colposcopic examination including biopsies [OBGYN trainees only]
 - LEEP [OBGYN trainees only]

Didactic Component

- Classroom-based, in hospital library
- First week only, from 8AM to 12PM
- Mandatory for all participants
- Primary language: Creole; also French and English
- Lectures, demonstrations, group exercises, reading and self-study

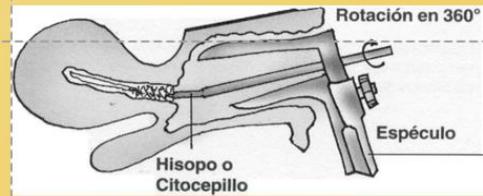


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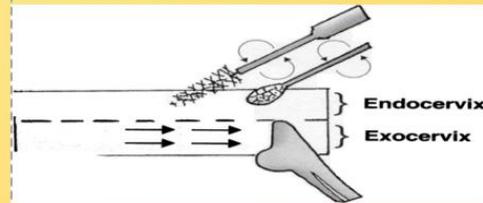
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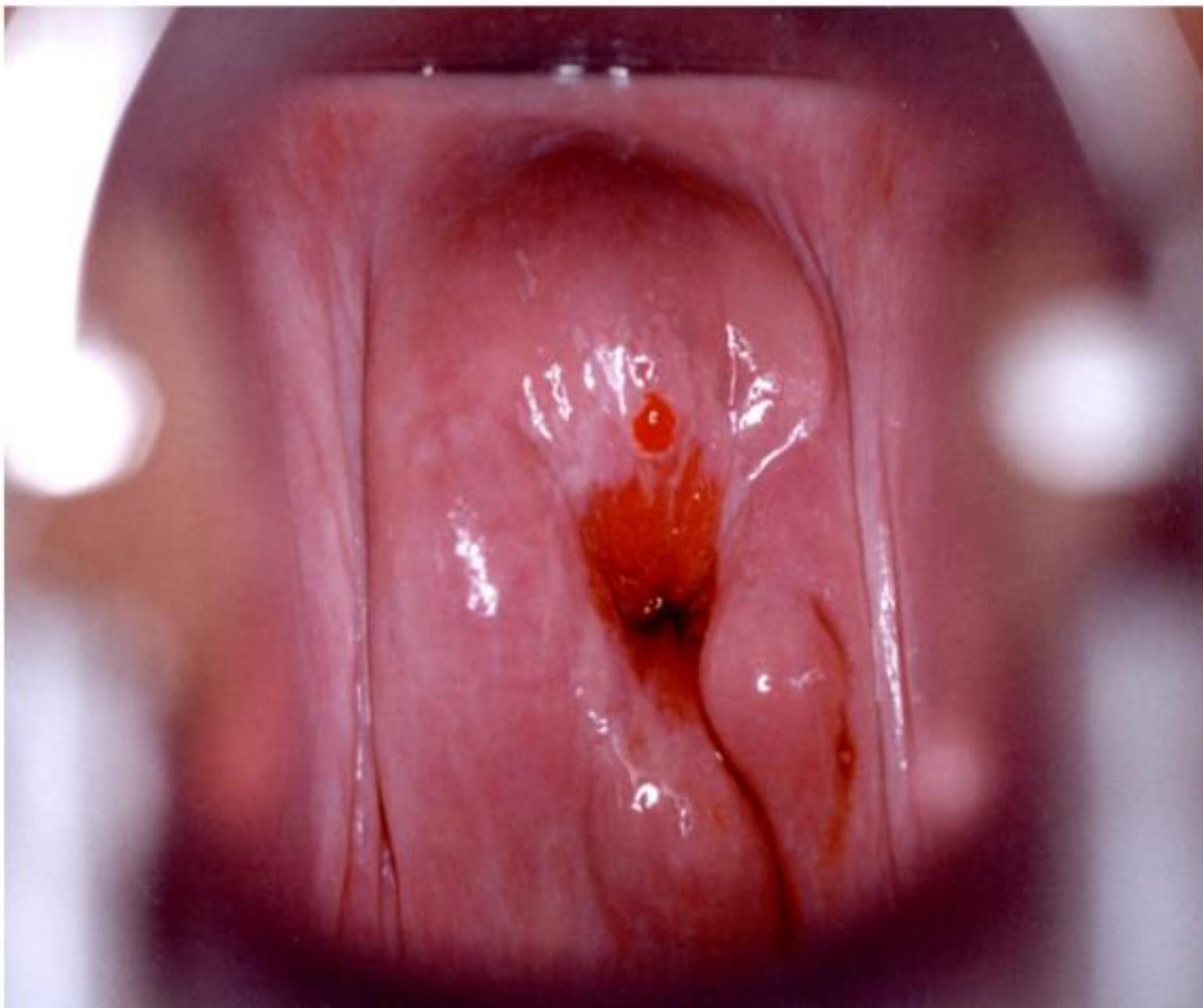
Didactic Component Schedule

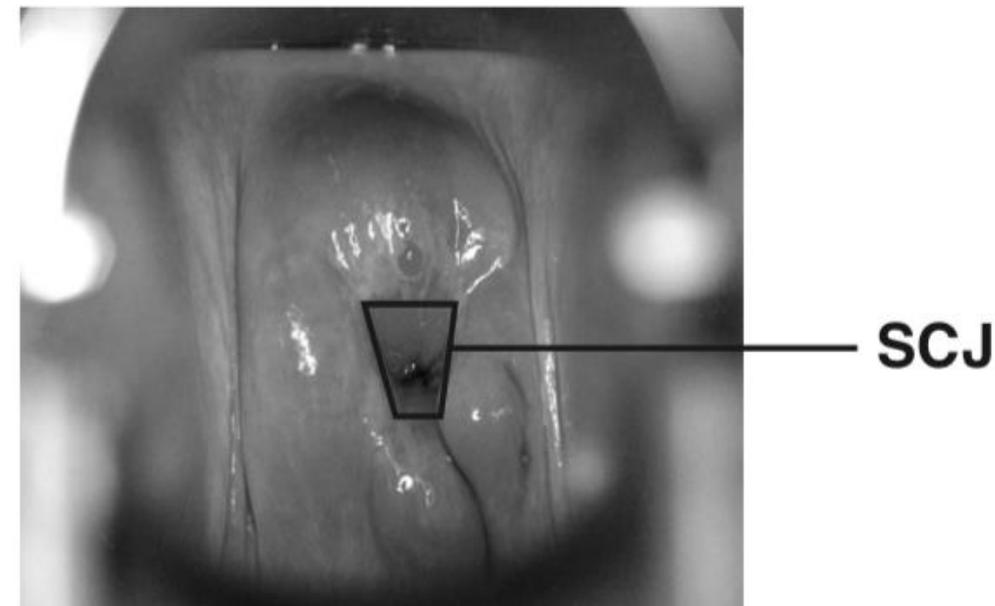
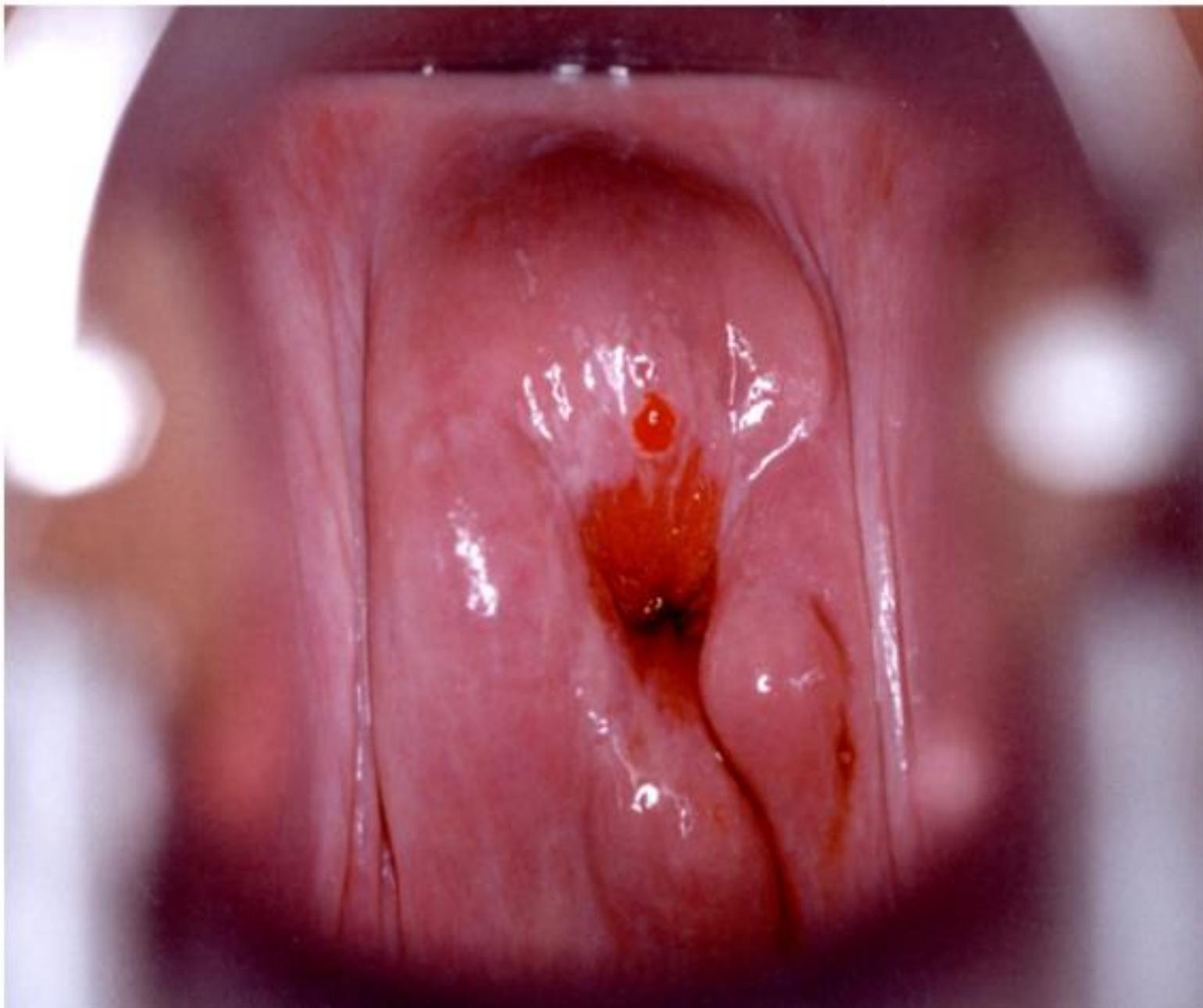
	Jour 1	Jour 2	Jour 3	Jour 4	Jour 5
8:00 -9:00	Introduction: Nyron & Marc Objectifs: Louise	Pre-test: Trina Revue Jour 1, Q&A: Louise & team Épidémiologie: Von	Revue Jour 2, Q&A: Louise & team	Revue Jour 3, Q&A: Louise & team	Revoir Jour 4, Q&A: Louise & team
9:00 - 10:00	Épidémiologie: Louise Anatomie et examen du bassin: Angie	Anatomie et pathologie: Trina	Jeu de cartes flash de VIA: Louise & Anthony	Jeu de cartes flash de VIA: Mai-Linh	Jeu de cartes flash de VIA: Erin
10:00 - 11:00	Méthodes de dépistage: Louise & Maureen	PAP Technique: Suzy	Cryothérapie: Louise	Conseils et education: Carolyn	La collecte et la gestion des données: Carolyn & Anthony
11:00 - 12:00	Conseil aux patients: Louise Décontamination: Louise Formulaire de depistage: Marc	VIA Technique: Louise HPV Technique: Trina	LEEP: Kimberly	Les infections sexuellement transmissibles : Mai-Linh	Prévention des infections: Erin Post-test: Trina Évaluation finale du programme: Carolyn

Visual Inspection of the Cervix

FLASH CARD SET

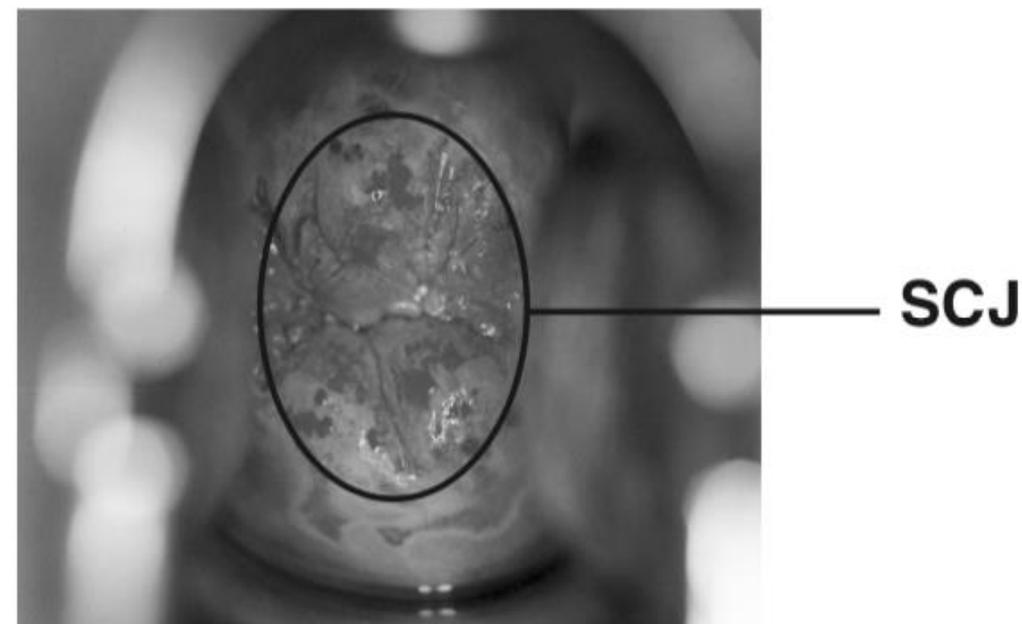
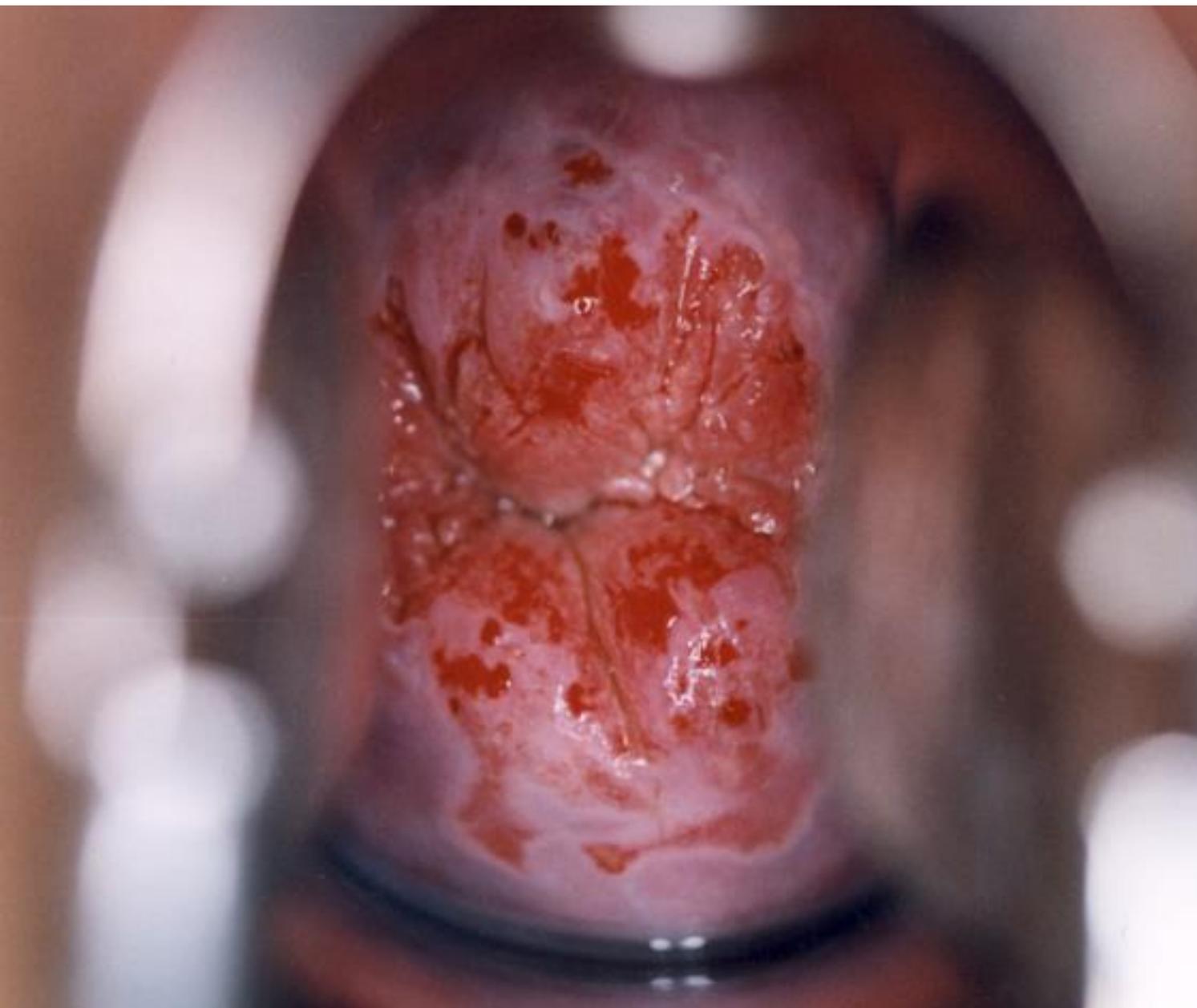




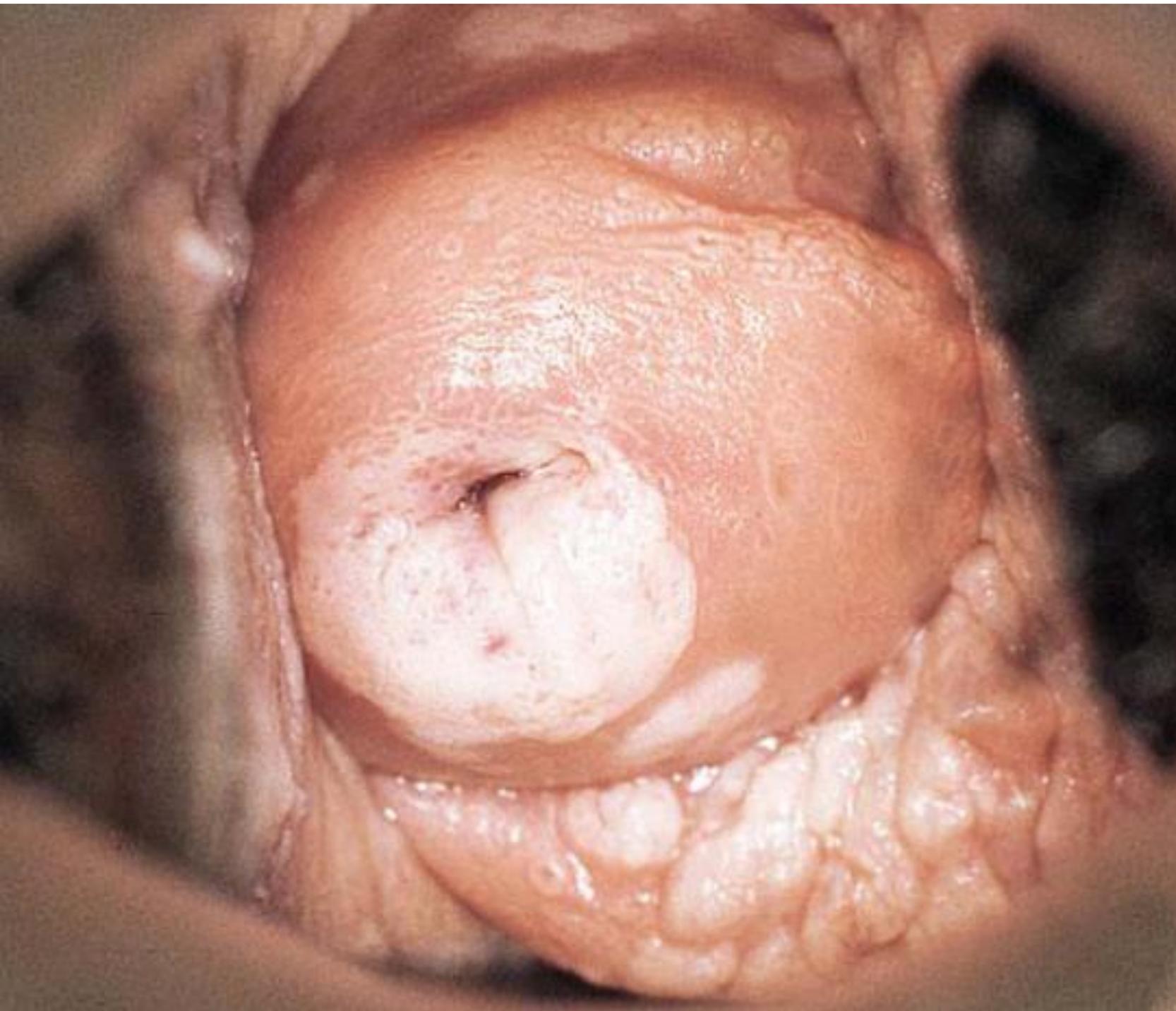


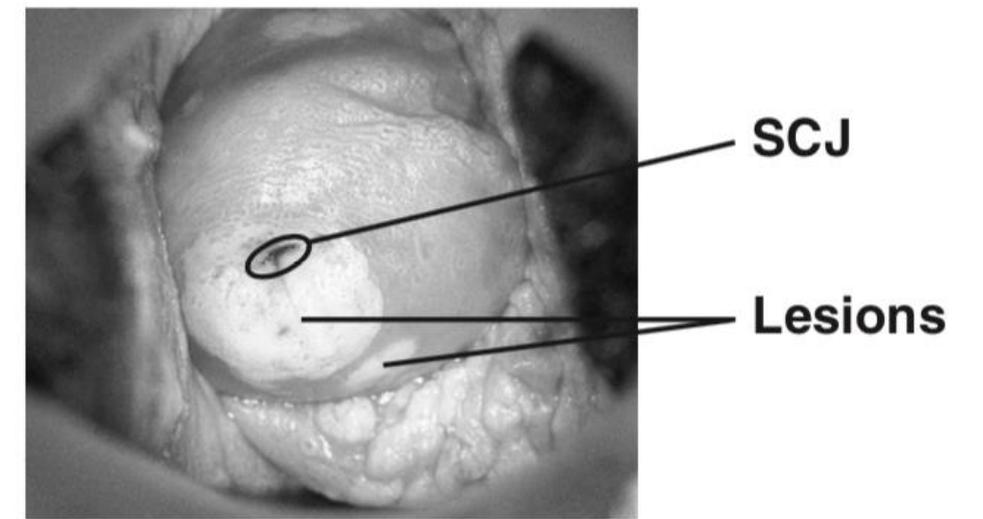
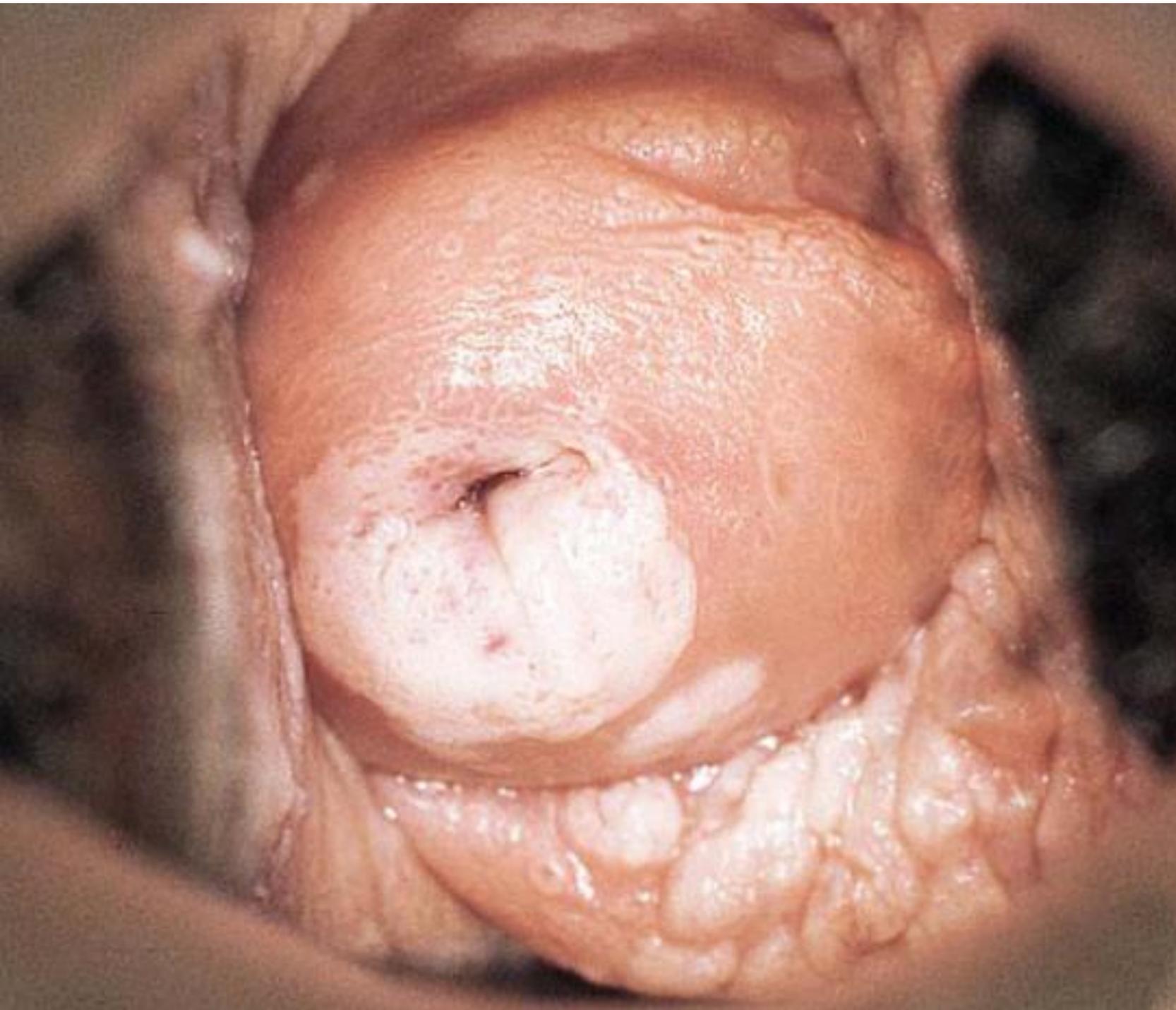
- Question 1** Is the cervix suspicious for cancer?
No.
- Question 2** If the squamocolumnar junction (SCJ) can be seen on the cervix, point to it.
The SCJ is identified above.
- Question 3** Is the cervix VIA-positive or VIA-negative?
VIA-negative.





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VIA-negative.





Question 1 Is the cervix suspicious for cancer?

No.

Question 2 If the squamocolumnar junction (SCJ) can be seen on the cervix, point to it.

The SCJ is identified above.

Question 3 Is the cervix VIA-positive or VIA-negative?

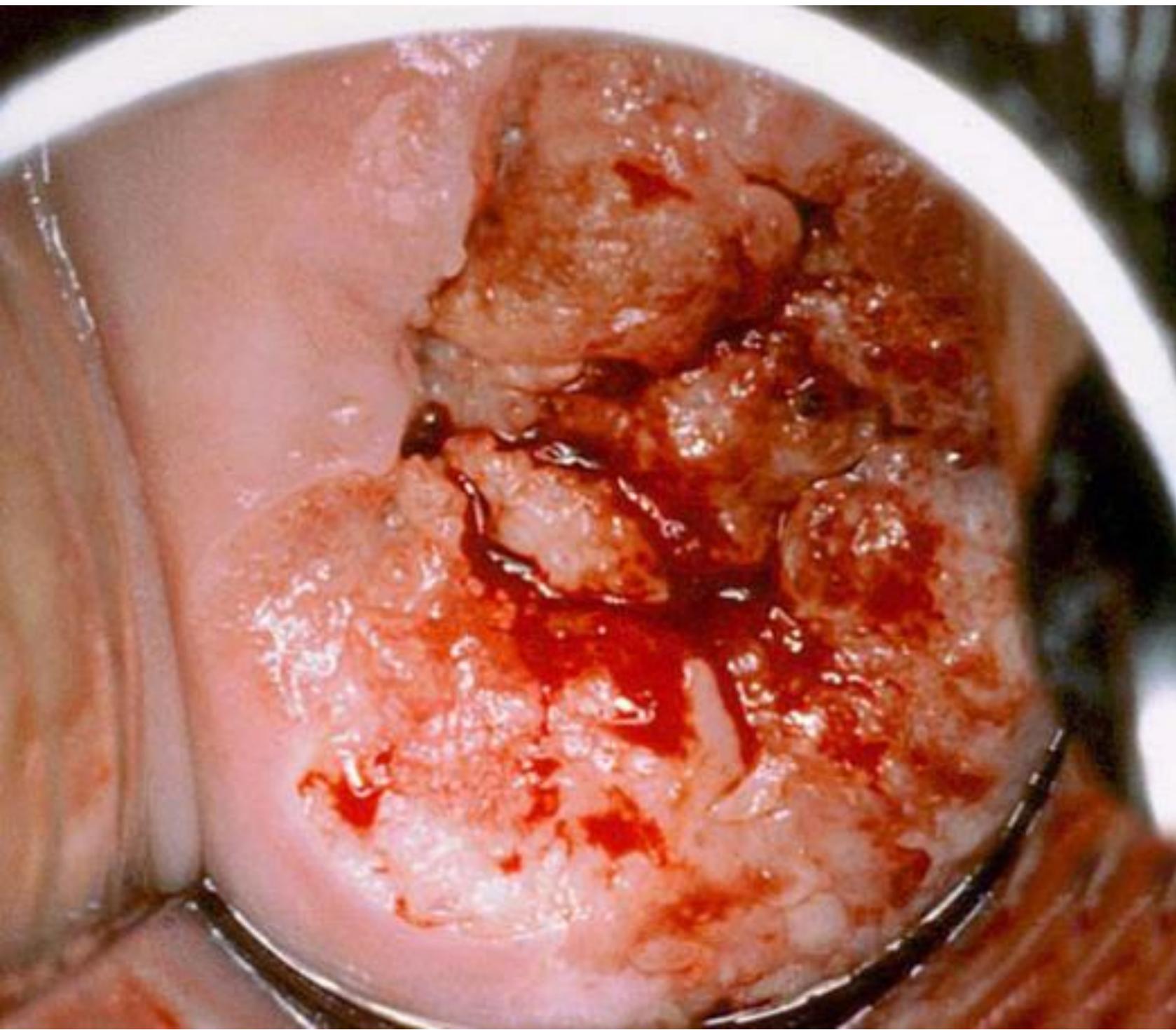
VIA-positive.

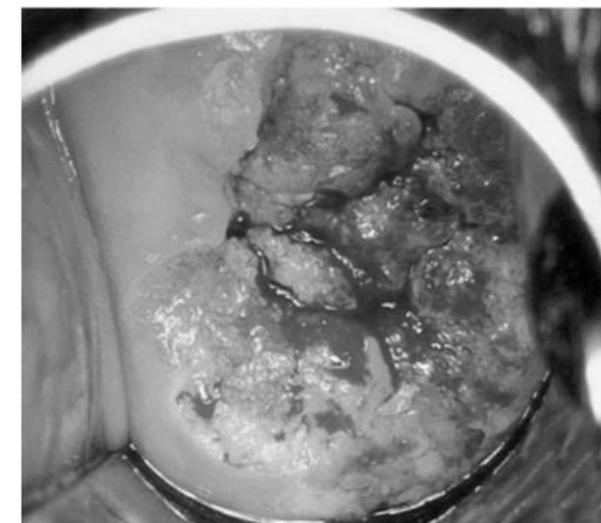
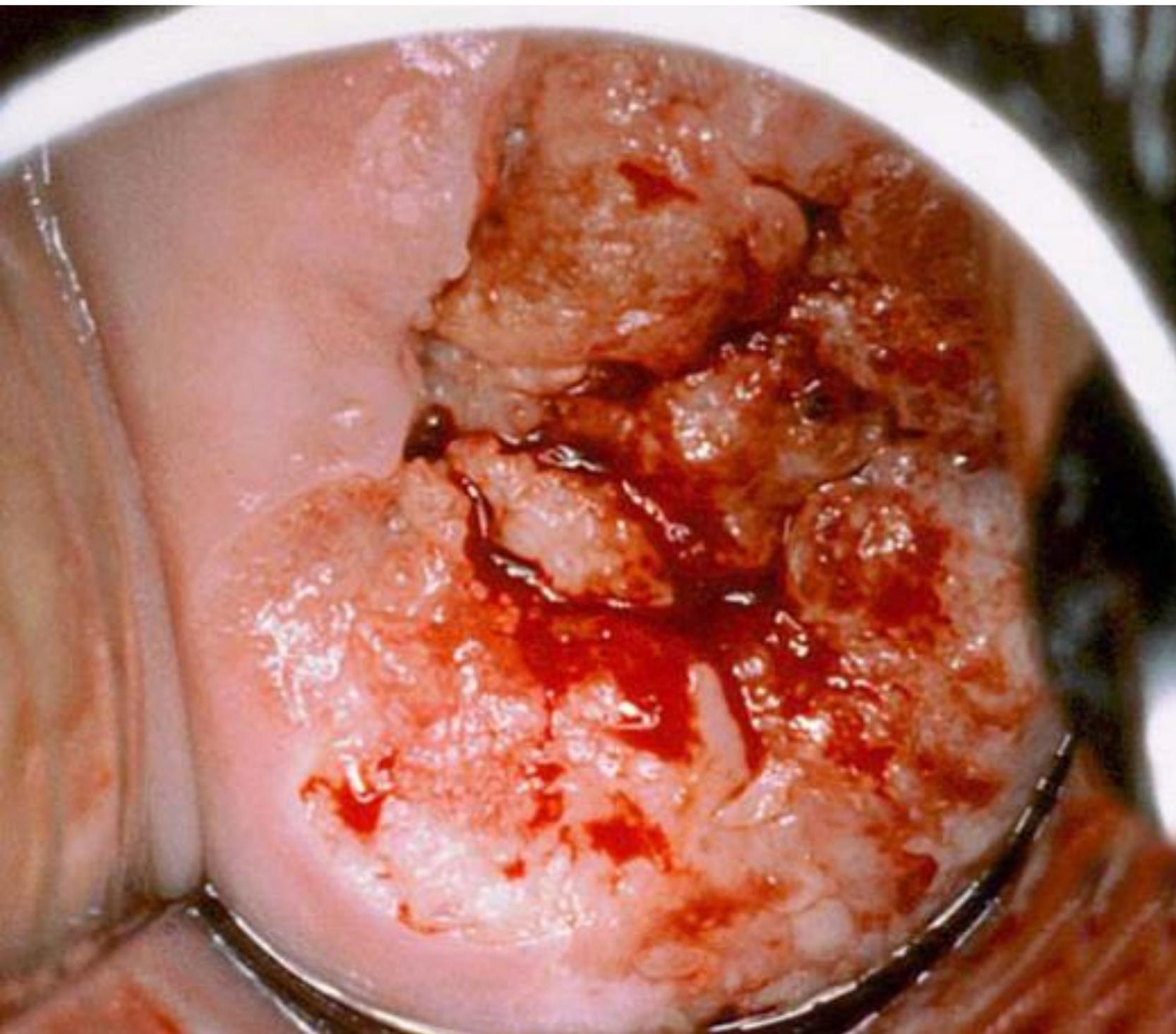
Question 4 Point to the acetowhite lesion(s) on the cervix.

The lesions are identified above.

Question 5 Is this patient a good candidate for cryotherapy?

Yes. (The provider needs to ensure that the cryoprobe completely covers all lesions.)





- Question 1** Is the cervix suspicious for cancer?
Yes.
- Question 2** If the squamocolumnar junction (SCJ) can be seen on the cervix, point to it.
The SCJ is not visible.
- Question 3** Is the cervix VIA-positive or VIA-negative?
VIA-positive.
- Question 4** Point to the acetowhite lesion(s) on the cervix.
The whole cervix is affected.
- Question 5** Is this patient a good candidate for cryotherapy?
No, because the cervix is suspicious for cancer.

Practical Component



Gradual progression from observation to supervised then independent practice:

- Days 1 to 3:
 - 3 sessions of 4 hours in PM
 - 6 patients per table
 - (36 patients per session)
- Days 4 to 9:
 - 10 sessions of 4 hours
 - 12 patients per table
 - (72 patients per session)



1. Number of patients screened according to selected parameters

PARAMETERS	BASIC	Models			Total
		A	B	C	
Number of days of work	1	3	2	4	9
Work hours per day	4	4	4	8	
Number of exam tables/stations	1	3	6	6	
Pelvic, VIA, Pap smear +breast, others	20	20	20	20	
Duration of exam (minutes)	20	20	20	20	
% screened women to treat (cryo or LEEP)	5%	5%	5%	5%	
RESULTS					
Number of women screened	12	108	144	576	828
Number of women treated	0.6	5	7	29	41

Models:
 A: first three days of week 1
 B: last two days of week 1
 C: first four days of week 2

2. Number of patients needed to achieve competency in VIA/pap, cryo and Colpo/LEEP by type of trainee

TRAINEES	Number	Number of patients needed per			Total number of patients needed		
		VIA/Pap	Cryo	Colpo/LEEP	Screen	Cryo	Colpo/LEEP
GYN	3	12	5	5	36	15	15
Physician	2	75			150	0	0
Nurse mid-wife	3	50	10		150	30	0
Nurse practitioner	2	75			150	0	0
Total	10				486	45	15



WEEK 1

WEEK 1	Monday			Tuesday			Wednesday			Thursday			Friday		
AM															
Didactics															
Lead trainer	Louise			Louise			Louise			Louise			Louise		
Trainees	10			10			10			10			10		
Trainer 1	Angie			Trina			Anthony			Mai-Linh			Anthony	Carolyn	
Trainer 2	Von	Marc		Von	Marc		Von	Marc	Kimberly	Von	Marc		Von	Erin	
Employee Screening															
Room #	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3
Employees	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Trainer 1	Anthony	Mai-Linh	Trina	Angie	Anthony	Mai-Linh	Trina	Mai-Linh	Angie	Angie	Anthony	Trina	Angie	Trina	Mai-Linh
Trainer 2	Kimberly			Kimberly/Erin			Erin			Erin			Kimberly		
Off / Unassigned	Erin														
PM															
Patients Screening															
Room #	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3
Patients	12	12	12	12	12	12	12	12	12	24	24	24	24	24	24
Trainees	3	3	4	3	2	3	3	3	3	2	2	2	2	2	3
OBGYN	Saintvil	Petit-Frere	Jean-Louis	Jean-Louis		Petit-Frere	Petit-Frere	Saintvil							Petit-Frere
Sage-Femmes	Janise	Elmise	Garlinne	Janise	Elmise	Garlinne	Elmise	Garlinne	Janise	Janise		Elmise	Garlinne	Janise	Elmise
Infirmiere		Gracieuse	Pascale	Gracieuse		Pascale	Gracieuse		Pascale		Pascale	Gracieuse			Pascale
MD	Isidore		Benoit		Isidore			Isidore	Benoit	Isidore	Benoit		Benoit		Isidore
Trainers															
Trainer 1	Angie	Trina	Mai-Linh	Anthony	Trina	Angie	Angie	Mai-Linh	Anthony	Mai-Linh	Anthony	Trina	Mai-Linh	Anthony	Trina
Trainer 2	Kimberly	Erin/Marc	Louise	Kimberly	Erin	Louise	Louise	Erin	Marc	Louise	Erin	Marc	Louise	Erin	Marc
Support (decontamination, education, data, mobile)				Saint-Ville, Benoit			Jean-Louis			Garlinne			Gracieuse		
	Anthony			Mai-Linh			Trina			Angie			Anthony		
	Markenley			Markenley			Markenley/Carolyn			Markenley/Carolyn			Markenley/Carolyn		
	Feda			HAS Educ/Freda			HAS Educ/Freda/Carolyn			HAS Educ/Freda/Carolyn			HAS Educ/Freda/Carolyn		
Colpo/LEEP	-			-			-			Kimberly, Saintvil/Petit-Frere			Kimberly, Jean-Louis/Saintvil		
Supervision/cryotherapy	-			Marc			Kimberly			Louise/Marc			Louise/Marc		
Off / Unassigned										Jean-Louis					

WEEK 2

WEEK 2	Monday			Tuesday			Wednesday			Thursday			Friday					
AM																		
Patients Screening																		
Room #	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	-	-			
Patients	24	24	24	24	24	24	24	24	24	24	24	24	24	-	-			
Trainees	2	2	3	2	2	2	2	2	2	2	2	2	2	Final Review Action Plans Certification				
OBGYN			Jean-Louis															
Sage-Femmes	Jeanise	Elmise		Garlinne		Elmise	Jeanise	Elmise		Garlinne	Elmise							
Infirmiere		Gracieuse	Pascale		Pascale	Gracieuse		Gracieuse	Pascale		Gracieuse	Pascale						
MD	Isidore		Benoit	Benoit	Isidore		Isidore		Benoit	Isidore		Benoit						
Trainers																		
Trainer 1	Angie	Anthony	Mai-Linh	Angie	Anthony	Mai-Linh	Marc	Anthony	Jean-Louis	Angie	Petit-Frere	Mai-Linh						
Support <i>(decontamination, education, data, mobile colpo)</i>	Guarline, Petit-Frere			Saintvil, Jeanise			Petit-Frere			Jeanise								
	Markenley/Carolyn HAS Educ/Freda/Carolyn			Markenley/Carolyn HAS Educ/Freda/Carolyn			Markenley/Carolyn HAS Educ/Freda/Carolyn			Markenley/Carolyn HAS Educ/Freda/Carolyn								
Colpo/LEEP	-			-			-			Ginger, Jean-Louis/Sainvil			Ginger, Petit-Frere/jean-Louis					
Supervision/cryo	Marc/Ginger			Ginger			Ginger/Sainvil			Marc			-					
Off / Unassigned	Saintvil			Marc, Jean-Louis, Petit-Frere			Angie, Mai-Linh, Garlinne			Anthony								
PM																		
Patients Screening																		
Room #	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3			
Patients	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24			
Trainees	2	3	3	2	2	2	2	2	2	2	2	3	Departure					
OBGYN		Sainvil	Petit-Frere			Saintvil												
Sage-Femmes	Elmise	Jeanise	Garlinne	Jeanise	Garlinne	Elmise	Jeanise	Elmise	Garlinne	Jeanise	Elmise	Garlinne						
Infirmiere		Gracieuse		Pascale	Gracieuse		Pascale				Gracieuse	Pascale						
MD	Benoit		Isidore					Isidore	Benoit	Isidore		Benoit						
Trainers																		
Trainer 1	Angie	Anthony	Mai-Linh	Angie	Anthony	Mai-Linh	Angie	Anthony	Mai-Linh	Angie	Anthony	Mai-Linh						
Support <i>(decontamination, education, data, mobile colpo)</i>	Jean-Louis, Pascale			Benoit, Isidor			Gracieuse			Isidor								
	Markenley/Carolyn HAS Educ/Freda/Carolyn			Markenley/Carolyn HAS Educ/Freda/Carolyn			Markenley/Carolyn HAS Educ/Freda/Carolyn			Markenley/Carolyn HAS Educ/Freda/Carolyn								
Colpo/LEEP	-			Ginger, Petit Frere/ Jean Louis			Ginger, Sainvil/Petit-Frere			-								
Supervision/cryo	Marc/Ginger			Marc			Marc/Jean-Louis			Ginger/Saintvil								
Off / Unassigned										Marc, Petit-Frere, Jean-Louis								

Trainee Evaluation

Pre/Post Test for Didactic Component

Series of 20 questions

Pre-test administered on Day 1

Post-test administered on Day 5

Competency Observation Checklist for Practical Component

Developed based on training manuals from other organizations

Administered on Day 5 and Day 9

Certificate of completion was awarded at the end of the training



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Patient Group Counseling

- Essential for women to understand importance of cervical cancer screening & dispels myths
- Script with key message created in Creole, French and English; no printed pamphlets due to low literacy
- Verbally explained to women in waiting room by Nurse Educator in Creole
- Helps reduce clinician time spent on individual counseling during mass screening event



Registration & Waiting Room



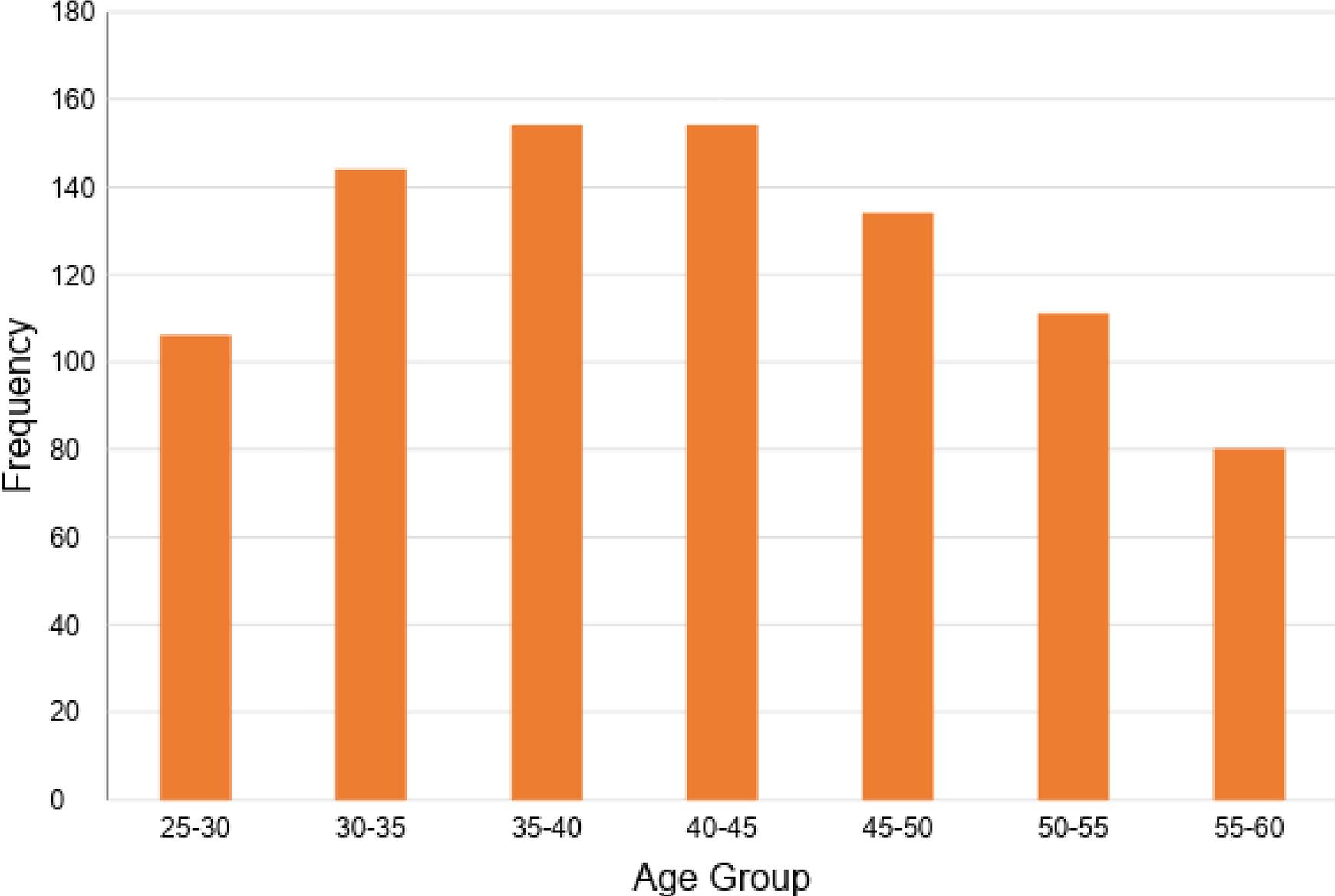
Results

Women Screened

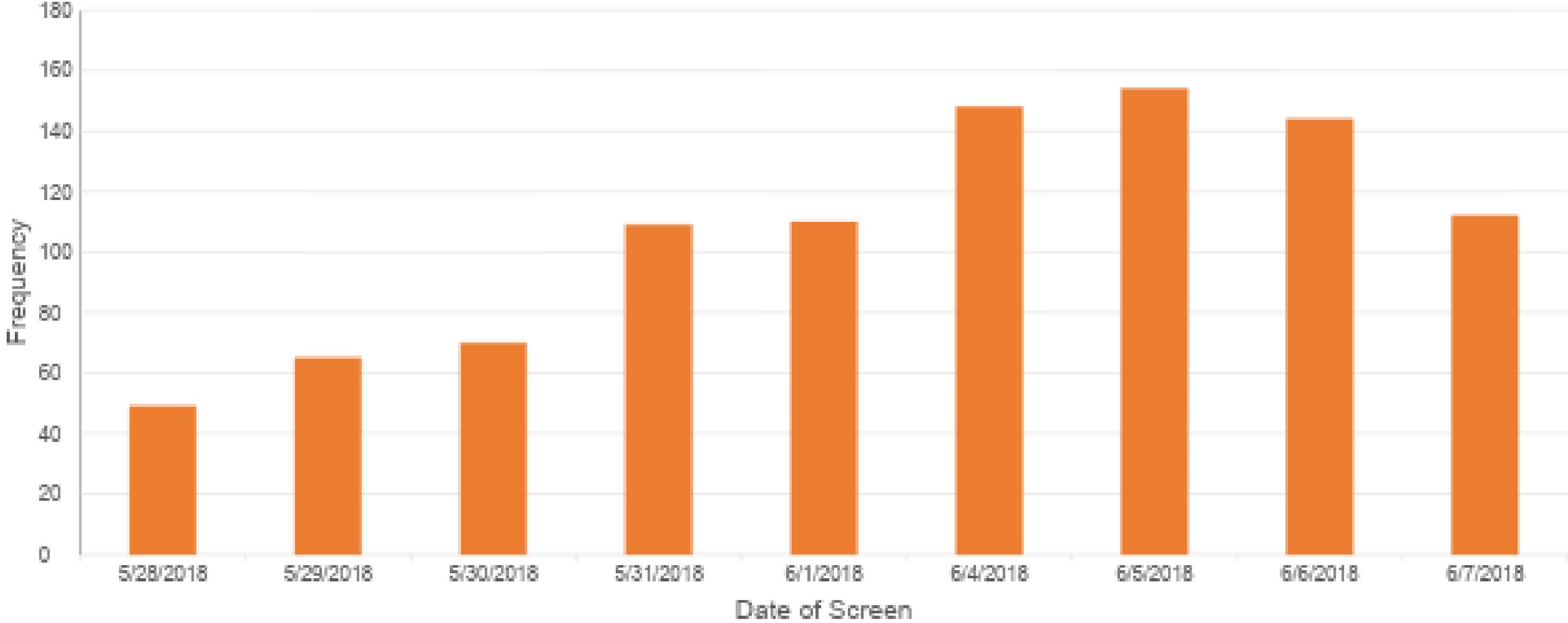
Number of Women Screened (by method)	
PAP	822
VIA	775
All women (VIA or PAP)	988

Women Screened by Age

Average age: 42.4
Age range: 20 to 60
Post-menopausal: 20%



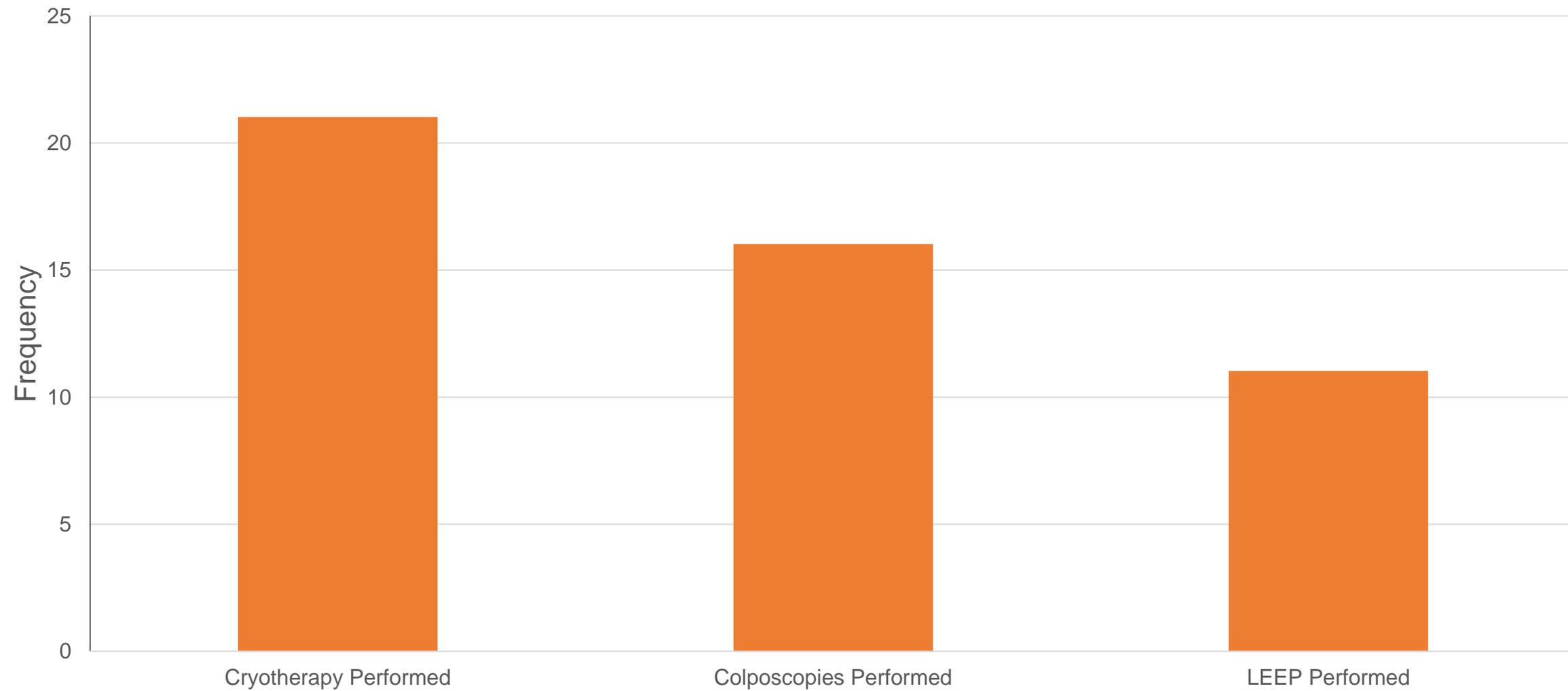
Women Screened by Date



Abnormal Screening Tests

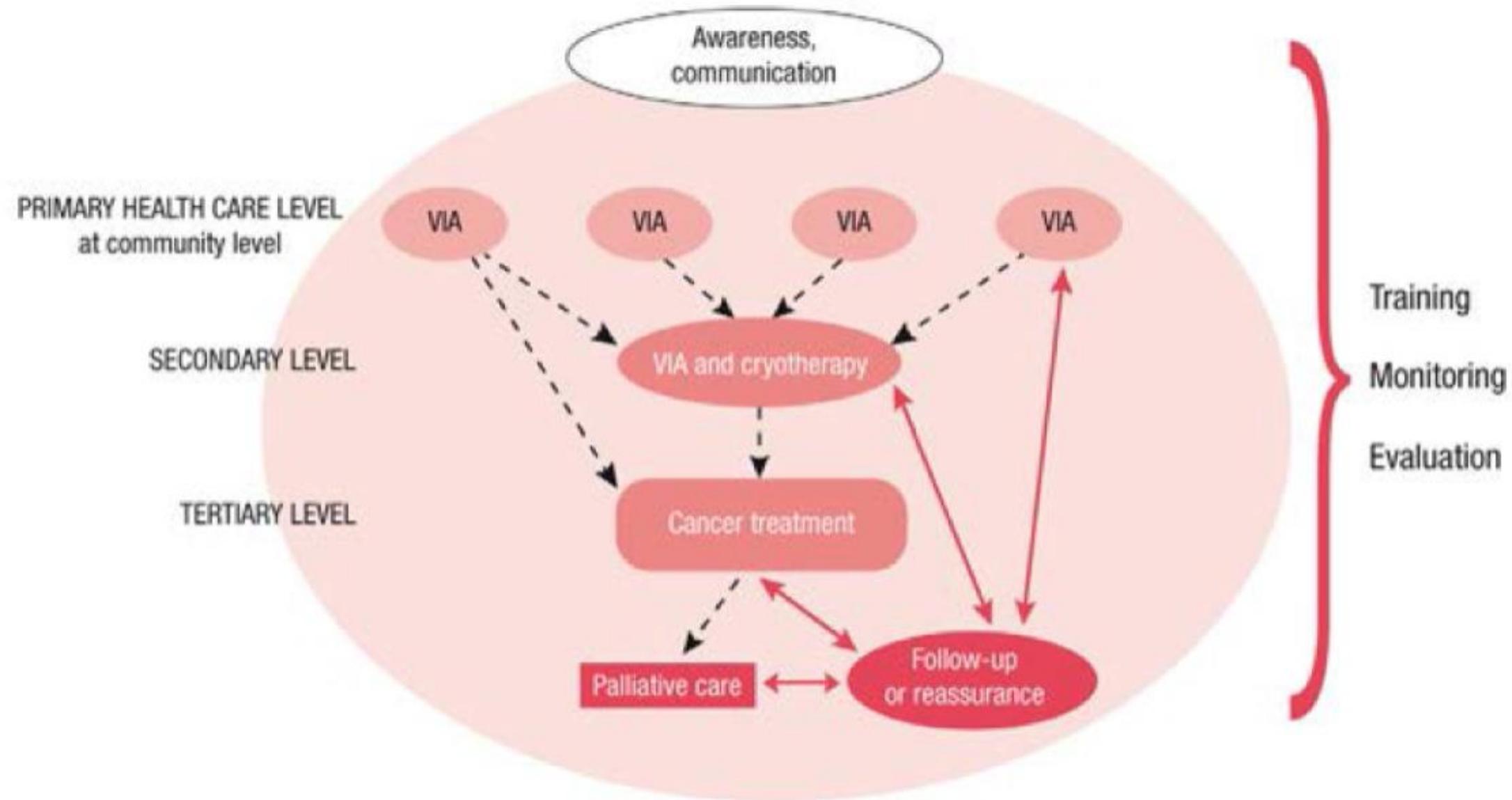
	No. Positive	No. Negative	Total	% Positive
PAP	44	780	824	5.3%
VIA	46	729	775	5.9%

Number of procedures



Next Steps

Screening and Treatment Methods by Health Care System Level



Cervical Cancer Screening Services at HAS

Monthly clinic:

2 days every third week of the month
Up to 150 women
Using VIA + Pap
Pap smears sent to US
Limited use of local pathology

Screening team:

1 gynecologist & 4 providers
2 registration/data management staff
2 health aides
1 data entry person

Monitoring & Evaluation

Information system

- Revision of patient intake form
- Consistent use and management of forms
- Data entry and analyses by H3M/UCR first, then gradual take-over by HAS
- Mid-term and final evaluation

Follow-up visit at 6 and 12 months

- Small team
- Observation of HAS 2-day screening clinic
- Review quality of services
- Review data collection
- Discuss potential follow-up projects

Program Expansion

- Routine use of mobile colposcope and EVA system
- Introduction of HPV Testing
- Comparative evaluation of VIA/PAP/HPV at HAS
- Management of cervical cancer cases at HAS
- Expansion to HAS Community Health Program
 - 4 surrounding community health centers
 - Training Director and 5 additional nurses
- Introduction of HPV Vaccine

Residents' Experience with The Project

US Medical Education Team

- Faculty:
 - Family Medicine: 1 UCR
 - OB-GYN: 1 UCR
- Residents
 - Family Medicine: 2 PGY-1 UCR
 - 1 PGY-3 LLU
 - OB-GYN: 1 PGY-1 UCR
- Medical Students: 1 MS-4 LLU



Role of Medical Learners

- Involved in all aspects of project
 - Pre-trip
 - During trip
 - Post-trip



Preparation for the Trip

- Formalizing didactic curriculum*
 - learning objectives
 - daily schedule
 - training materials (folders, USB drives, references)
- Translating documents from English to French
- Developing :
 - Pre/post knowledge tests
 - Clinical skills observation checklists
 - Clinical protocols & practice guidelines
 - Patient educational materials
 - Patient clinical intake forms and other data collection tools
- Managing equipment and supplies inventory

*Note: curriculum content based on materials used by US-based women's health nurse practitioners and team members who have been training physicians and nurses in VIA & cryotherapy near the southern Haiti-Dominican Republic border for several years.

Clinical Skills Assessment Form

VIA Skills Assessment

Rate the performance of each individual per case observed.

Scores:

1. Needs improvement: Step or task not performed correctly, out of sequence or omitted
2. Competently performed: Tasks performed correctly in proper sequence but participant does not progress from step to step efficiently
3. Proficiently Performed: Steps performed efficiently and in the proper sequence

VIA					
Tasks	Cases				
Initial Interview					
1. Greet the woman respectfully and kindness					
2. Establish purpose of the visit and answer questions. Assures patient privacy.					
3. Provide general information about preventing cancer by early detection					
4. Explain expectations of clinic visit <ul style="list-style-type: none"> • Explain how pelvic exams are done • How VIA can prevent cervical cancer 					
Counseling					
1. Obtain patient information <ul style="list-style-type: none"> • Reproductive health history: first sexual contact? STD's 					
2. Ability to provide additional information <ul style="list-style-type: none"> • Explain cervical cancer and relationship to HPV • Discuss risk factors • Significance of VIA and possible findings • Treatment options based on VIA results 					
3. Asks patient about their attitudes and concerns					
4. Assures that patient understands procedure and obtain consent					
Procedure					
1. Prepares efficiently for procedure <ul style="list-style-type: none"> • Instruments and supplies are available • Light source is ready to use 					

Cryotherapy Skills Assessment

Rate the performance of each individual per case observed.

Scores:

1. Needs improvement: Step or task not performed correctly, out of sequence or omitted
2. Competently performed: Tasks performed correctly in proper sequence but participant does not progress from step to step efficiently
3. Proficiently Performed: Steps performed efficiently and in the proper sequence

Cryotherapy					
Tasks	Cases				
Initial Interview					
1. Greet the woman respectfully and kindness					
2. Establish purpose of the visit and answer questions. Assures patient privacy.					
3. Provide general information about preventing cancer by early detection					
4. Explain expectations of clinic visit <ul style="list-style-type: none"> • Explain how pelvic exams are done • Cryotherapy explained, risks, benefits and alternatives 					
Counseling (If not completed already)					
1. Obtain patient information <ul style="list-style-type: none"> • Reproductive health history: first sexual contact? STD's 					
2. Ability to provide additional information <ul style="list-style-type: none"> • Explain cervical cancer and relationship to HPV • Discuss risk factors • Significance of cryotherapy 					
3. Asks patient about their attitudes and concerns					
4. Assures that patient understands procedure and obtain consent					
Procedure					
1. Prepares efficiently for procedure <ul style="list-style-type: none"> • Instruments and supplies are available • Light source is ready to use • Ensure patient is ready: undressed from waist, proper positioning on table, proper 					

Patient Flow Protocol

Registration and consent

1. Upon arrival, patient is directed to the registration table to present her pre-registration card
2. If scheduled today, patient is invited to return to waiting area; if patient cannot be seen, she is rescheduled or explained that she is not eligible for this service
3. Eligible patient is called by a registration staff by her name or registration number
4. Registration staff fill in demographic section of patient form
5. Counselor HEALTH STAFF explains procedure to patient and obtains signed informed consent
6. Patient returns to waiting area and participate in group education activities
7. Clinician or aids called patient when ready to proceed with the examination

Clinical examination

1. UNDRESSED
2. Patient is introduced in the examination room by one of the clinicians or aids
3. Clinician welcomes patient, review demographics and check informed consent, and complete clinical history information
4. Clinician or aids install patient on examination table, ensuring comfort and privacy
5. Clinician places speculum and examine cervix for any abnormal finding
6. Clinician take cytology specimen and prepare pap smear
7. Clinician apply acetic acid and examine cervix for any abnormal finding

Cervical Cancer Prevention Patient Educational Materials

Overview:

This guide will provide information for group education as well as individual counseling. The goals of these educational exercises will be to educate our patients on cervical cancer and its risk factors. We also hope to explain the importance of cervical cancer screening. Finally, we want to prepare patients for the experience of cervical cancer screening, the possible results and potential treatment. This patient education is critical in order to ensure the patient's comfort throughout the process, make sure women have accurate information about screening and treatment and to help the patient make an informed decision about screening.

What are the Characteristics of a Good Counselor?

Remember: Counseling is all about ensuring patient comfort, providing adequate and correct information and help patients make informed decisions.

Group Training:

This will be an interactive experience with patient groups. Props (i.e. speculum, acetic acid, swabs, etc) may be available for demonstration.

Start by asking women if they have heard of cervical cancer and what they know about cervical cancer. Also ask women what may increase the risk of cervical cancer.

What is Cervical Cancer?

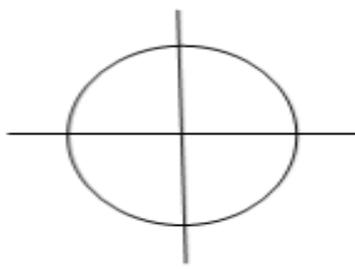
The cervix is located in the lower part of the womb and is connected to the birth canal (vagina). Cervical cancer can develop in the cervix. Cervical cancer occurs when normal cells in the cervix become cancer cells. These cancer cells are usually caused by a cancer causing infection called HPV (Human Papilloma Virus). Cervical cancer can be prevented with screening.

Who is at Risk?

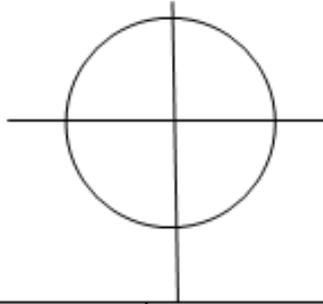
Women who are at higher risk for cervical cancer include those women: whose sexual debut occurred early (before the age of 20), who have had multiple sexual partners (greater than 6), who have a history of sexually transmitted infections, who have previously had an abnormal screening, who smoke, who have some form of immunosuppression (i.e. HIV/AIDS, malnutrition).

Patient Clinical Intake Forms

HÔPITAL ALBERT SCHWEITZER DESCHAPELLE, HAÏTI PROGRAMME DE DÉPISTAGE DU CANCER DU COL UTERIN

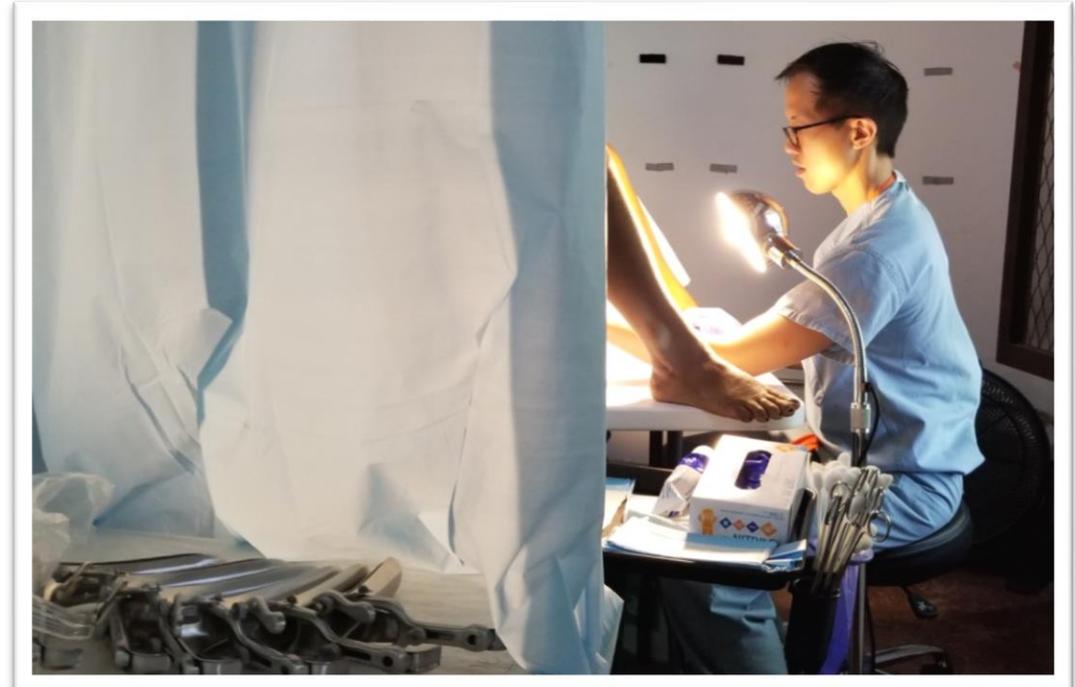
DEPISTAGE ET TRAITEMENT				
Nom	Prenom	Date de naissance	Age	HAS #:
Date de la visite	Lieu de la clinique			
G P A V	Hystérectomie O N	Aménorrhée pendant > 12 mois O N	Ménopause O N	
FDLMP	Enceinte O N	Désir grossesse O N	Contraception O N	Méthode
Saignement anormal O N	Si oui:	Postcoital O N	Entre les règles O N	Post-ménopause O N
Antécédent de sitage du cancer du col O N	Si oui:	Frottis Cervical/Pap Date: Résultats:	IVAA Date: Résultats:	HPV Date: Résultats:
Antécédent test VIH O N	Si oui:	Date: Résultats:	Lieu de la clinique	
Frottis cervical O N	Si oui:	Cervical: O N	Endocervical: O N	Pap#
Test HPV O N	Si oui:	Type de test:	HPV#	
IVAA O N				
Le col de l'utérus est-il suspect pour le cancer? O N				
L'ensemble de la jonction squammo-cylindrique JSC est-elle visible? O N Si oui, dessinez la JSC sur le diagramme				
Le col de l'utérus est-il IVAA-positif? O N Si oui, dessinez la lésion acidophile sur le diagramme				
Cette patiente est-elle candidate pour la cryothérapie? O N		Cryothérapie		
Réalisée: O N	Consentement signé: O N	Instructions post-opératoires données: O N		
Commentaire				
Disposition				
Dépistage normal: Suivi pour dépistage de routine dans 5 ans				
Dépistage anormal: Cryothérapie terminée: Suivi dans 1 an				
Dépistage anormal: Référence vers: Ref. #				
Signature:				
Date Nom en capitales:				
PATHOLOGIE				
Résultats frottis cervical / Pap				
Cytologie: Satisfaisant: O N Commentaire:				
Si satisfaisant: Aucune lésion intra-épithéliale ou maligne: O N				
Si Non, encadrer le résultat: ASC-US ASC-H LSIL HSIL SCC AGC AIS AC Autre: _____				
Résultats test HPV				
Positif O N Institution Date				

RÉFÉRENCE POUR LA COLPOSCOPIE / LEEP / CRYOTHERAPIE

Prénom:	Date de naissance:	Age	HAS #:
Date de la visite	Emplacement de la clinique		Fournisseur (Nom / Titre)
G P A L	FDLMP:	Ménopause: O N	Enceinte: O N
Indications de colposcopie			
Pap anormal:	Rendez-vous amoureux:	Résultats:	Institution:
Abnormal VIA:	Rendez-vous amoureux:	Résultats:	Institution:
Formulaire de consentement signé par le patient / tuteur? O N			
Résultats de la colposcopie			
Aspect brut: Normal Anormal			
Si anormal expliquez:			
Jonction pavimento-cylindrique: Vu non vu			
Veuillez dessiner une jonction pavimento-cylindrique (JCI) et une zone de transformation (TZ) sur le diagramme et marquer toutes les constatations pertinentes comme suit:			
Acétowhite (AW) Navires anormaux (AV) Condylome (CO) Erosion (ER) Inflammation (IN) Leucoplaxie (LE) Masse (MA) Mucocoele (MO) Kyste de Naboth (NC) Polype (PO) Postcoital (PU) Métaplasie squameuse (SM)			
Biopsies	Dessinez ci-dessus avec "x"	ECC Y N	EMB Y N
Vaginal (site)			
Empreinte colposcopique: Ordinaire Faible teneur Haut grade Envahissant			
Cryothérapie			
Consentement signé: Y N		Cryothérapie terminée: Y N	Instructions post-opératoires données: Y N
Commentaire			
Procédure d'excision électrique en boucle (LEEP)			
Bloc intracervical:	2% de Xylo avec Epi (mL):		Autre (mL):
Excision de la lésion cervicale:	Tout Y N	Partiel (expliquer)	
Hémostase:	Monsel's: Y N	Nitrate d'argent: Y N	Perte de sang (mL):
Commentaires / complications:			
Instructions post-opératoires données: Y N			
Disposition		Suivi dans 1 an	
Référez-vous à une gestion plus poussée pour:			
Signature:			
Rendez-vous amoureux:			
PATHOLOGIE			
Biopsie			
Pathologiste:		Institution:	Rendez-vous complet:
Résultats: Normal CIN1 CIN2 CIN3 AIS AC SCC			
Commentaires:			
Excision de boucle			
Pathologiste:		Institution:	Rendez-vous complet:
Résultats: Normal CIN1 CIN2 CIN3 AIS AC SCC			
Marges positives: Y N			
Commentaires:			

During the Trip

- Clinical services
 - Screening hospital employees
- Training
 - Didactic
 - Lectures
 - Pre/post tests
 - Practice
 - Instruction and supervision of trainees
 - Competency assessments
 - Mobile colposcopy
- Management of clinic flow

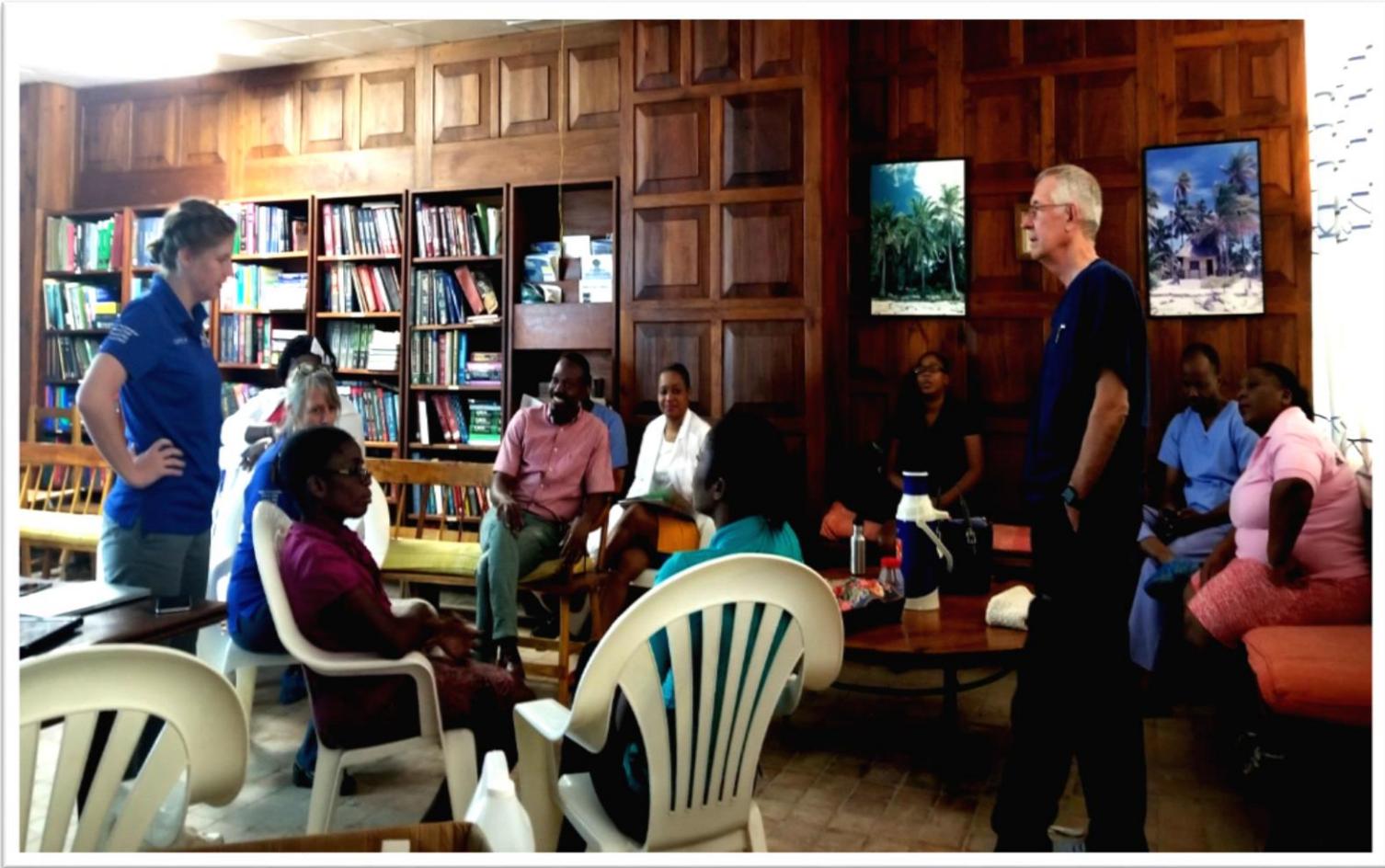


Key Supervisory Responsibilities

WEEK 1	Monday			Tuesday			Wednesday			Thursday			Friday		
AM															
Didactics															
Lead trainer	Louise			Louise			Louise			Louise			Louise		
Trainees	10			10			10			10			10		
Trainer 1	Angie			Trina			Anthony			Mai-Linh			Anthony	Carolyn	
Trainer 2	Von	Marc		Von	Marc		Von	Marc	Kimberly	Von	Marc		Von	Erin	
Employee Screening															
Room #	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3
Employees	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Trainer 1	Anthony	Mai-Linh	Trina	Angie	Anthony	Mai-Linh	Trina	Mai-Linh	Angie	Angie	Anthony	Trina	Angie	Trina	Mai-Linh
Trainer 2	Kimberly			Kimberly/Erin			Erin			Erin			Kimberly		
Off / Unassigned	Erin									Kimberly					
PM															
Patients Screening															
Room #	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3
Patients	12	12	12	12	12	12	12	12	12	24	24	24	24	24	24
Trainees	3	3	4	3	2	3	3	3	3	2	2	2	2	2	3
OBGYN	Saintvil	Petit-Frere	Jean-Louis	Jean-Louis		Petit-Frere	Petit-Frere	Saintvil							Petit-Frere
Sage-Femmes	Janise	Elmise	Garlinne	Janise	Elmise	Garlinne	Elmise	Garlinne	Janise	Janise		Garlinne	Garlinne	Janise	Elmise
Infirmiere		Gracieuse	Pascale	Gracieuse		Pascale	Gracieuse		Pascale		Pascale	Gracieuse			Pascale
MD	Isidore		Benoit		Isidore			Isidore	Benoit	Isidore	Benoit		Benoit		Isidore
Trainers															
Trainer 1	Angie	Trina	Mai-Linh	Anthony	Trina	Angie	Angie	Mai-Linh	Anthony	Mai-Linh	Anthony	Trina	Mai-Linh	Mai-Linh	Angie
Trainer 2	Kimberly	Erin/Marc	Louise	Kimberly	Erin	Louise	Louise	Erin	Marc	Louise	Erin	Marc	Louise	Erin	Marc
Support (decontamination, education, data, mobile)				Saint-Ville, Benoit			Jean-Louis			Elmise			Gracieuse		
	Anthony			Mai-Linh			Trina			Angie			Anthony		
	Markenley			Markenley			Markenley/Carolyn			Markenley/Carolyn			Markenley/Carolyn		
	Feda			HAS Educ/Freda			HAS Educ/Freda/Carolyn			HAS Educ/Freda/Carolyn			HAS Educ/Freda/Carolyn		
Colpo/LEEP	-			-			-			Kimberly, Petit-Frere, Saintvil			Kimberly, Jean-Louis, Saintvil		
Supervision/cryo	-			Marc			Kimberly			Louise/Marc			Louise/Marc		
Off / Unassigned										Jean-Louis					

WEEK 2	Monday			Tuesday			Wednesday			Thursday			Friday			
AM																
Patients Screening																
Room #	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	288
Patients	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Trainees	4	4	3	4	4	3	4	4	3	4	4	3	4	4	3	
Trainer 1	Angie	Anthony	Mai-Linh	Angie	Anthony	Mai-Linh										
Trainer 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Supervision/cryo	Marc/Ginger			Marc			Marc			Marc/Ginger			Final Review Action Plans Certification			
Support	Trainee (1 every 2 hours)															
	Carolyn Freda			Carolyn Freda			Carolyn Freda			Carolyn Freda						
Colpo/LEEP				Ginger/OBGYN Trainees			Ginger/OBGYN Trainees							Ginger/OBGYN Trainees		
Off / Unassigned																
PM																
Patients Screening																
Room #	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	#1	#2	#3	288
Patients	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Trainees	4	4	3	4	4	3	4	4	3	4	4	3	4	4	3	
Trainer 1	Anthony	Mai-Linh	Angie	Anthony	Mai-Linh	Angie										
Trainer 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Supervision/cryo	Marc/Ginger			Marc/Ginger			Marc/Ginger			Marc/Ginger			Departure			
Support	Trainee (1 every 2 hours)															
	-			-			-			-						
	Carolyn Freda			Carolyn Freda			Carolyn Freda			Carolyn Freda						
Colpo/LEEP																
Off / Unassigned																

Learners as Trainers



During the Trip

- Supervision of decontamination process
- Daily set up & cleaning of exam room stations
- Management of supplies & inventory

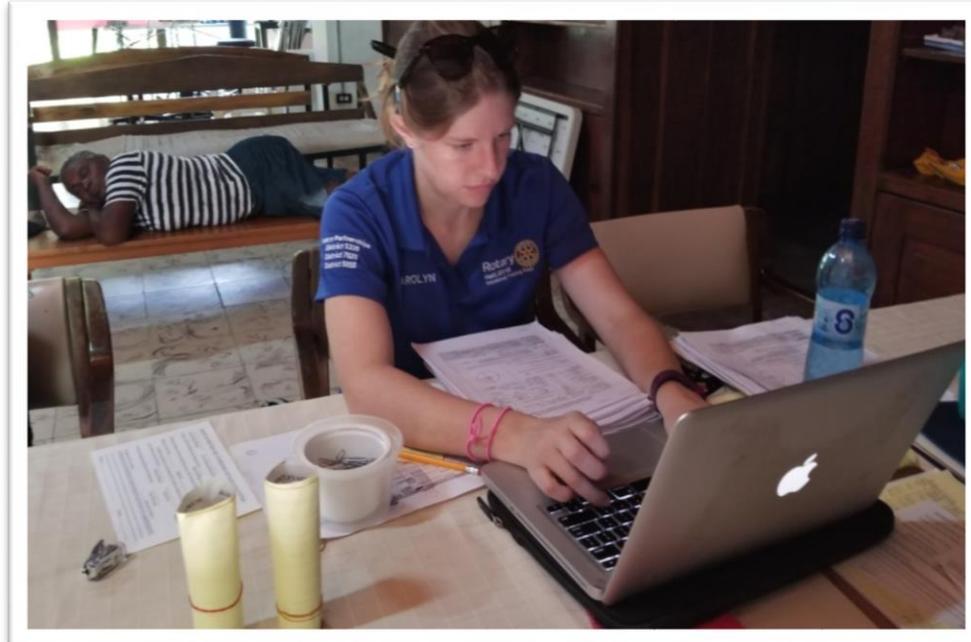


During the Trip

- Data collection and management
 - Verifying completion of patient clinical intake form
 - Tracking abnormal results & return appointments
 - Updating patient registration forms
 - Handling specimens
 - Data entry



Data Management



Inventory Management



Learning From Other Professionals



After the Trip

- Data analysis
- Trip report
- Local dissemination
 - Newsletters
 - Presentations
- Conference presentations

Reflections

- Participating in a global health experience helps residents to put into perspective the resources that are taken for granted in training programs.
- Residents can also recognize the importance and significance of their clinical work in global service compared to the routine of daily resident life.

Global Health Areas of Practice



Lessons Learned

More formal pre-trip training related to site

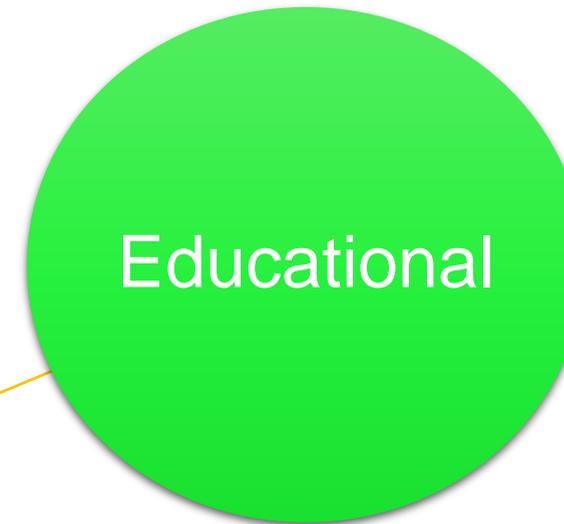
- Cultural awareness and sensitivity
- Local epidemiology and pathology
- Other specific data related to site and country

More formal debriefing

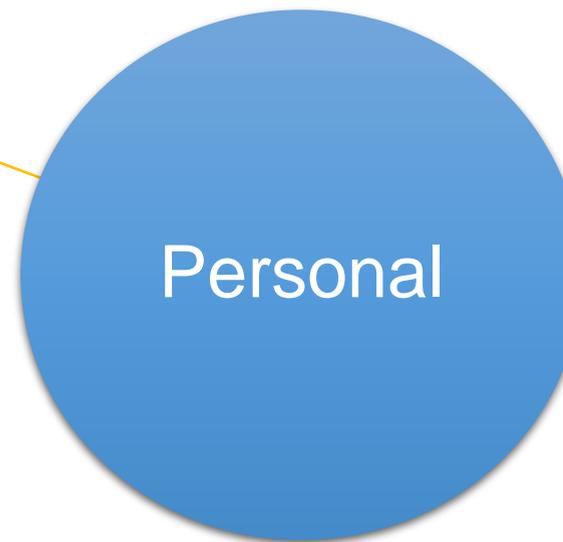
More faculty and residents time for preparation and follow-up

Global Health Education in Residency

Benefits

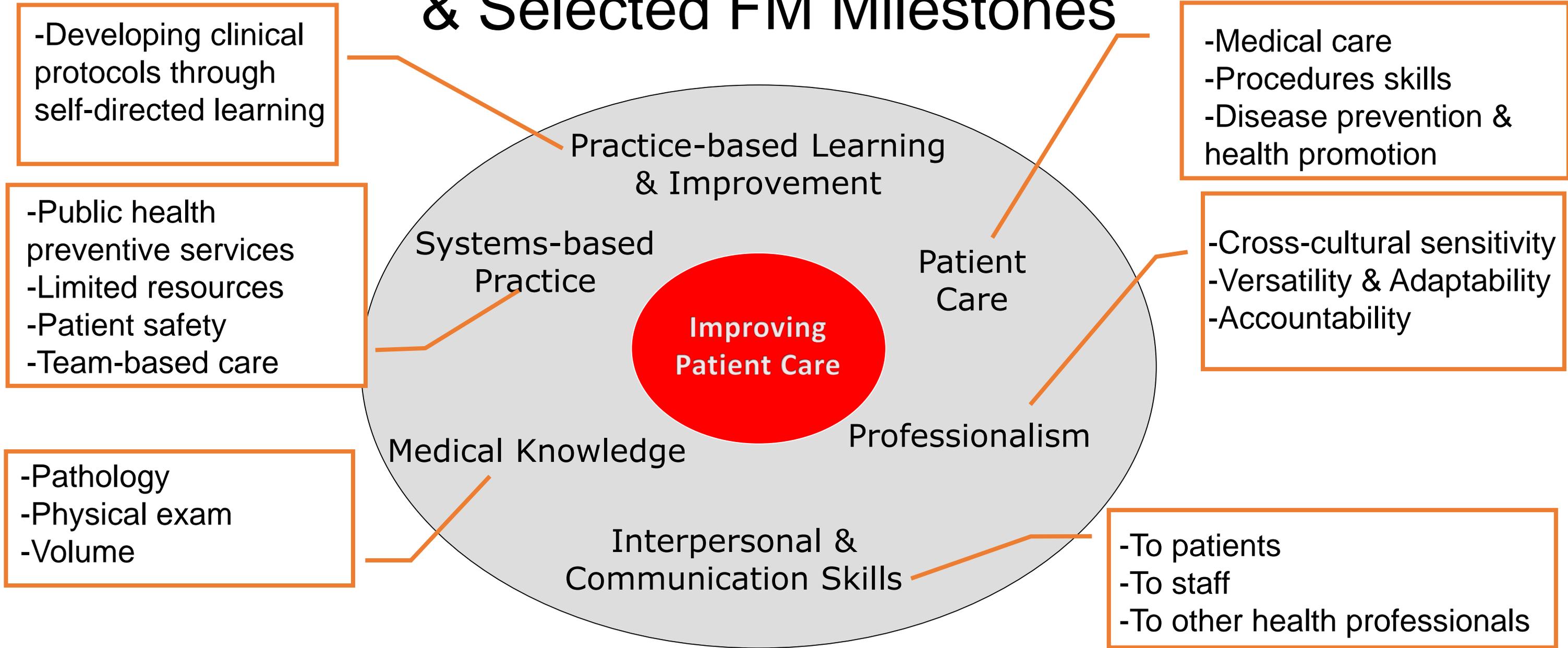


- Pathology variety, advance disease
- Adapt to limited resources
- Develop clinical & procedural skills
- Need for public health education
- Different approach to similar pathology
- Learn about health disparities

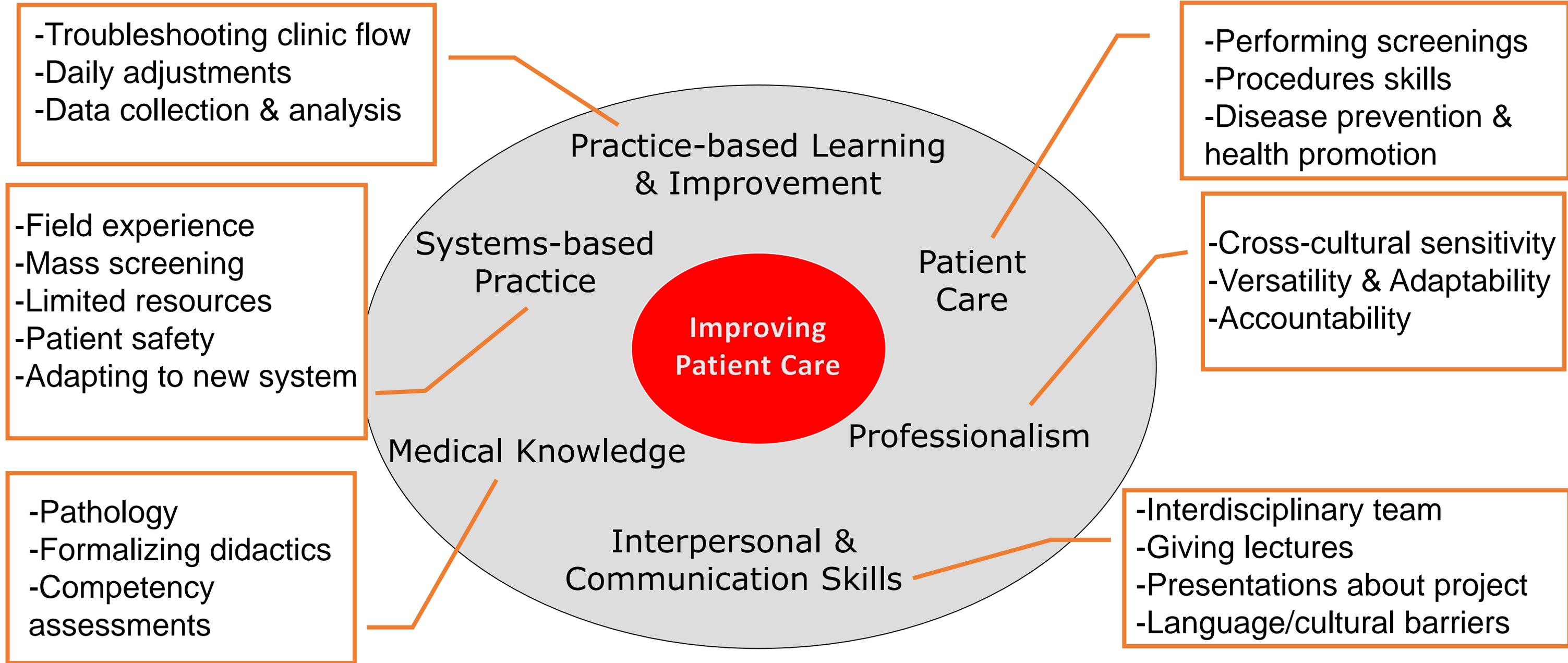


- Encouraged to work with underserved
- Experience new people & culture
- Patient gratitude
- Exposure to poverty & suffering
- Adventure & Tourism

ACGME Six Core Competencies & Selected FM Milestones



Residents Activities Supporting Core Competencies



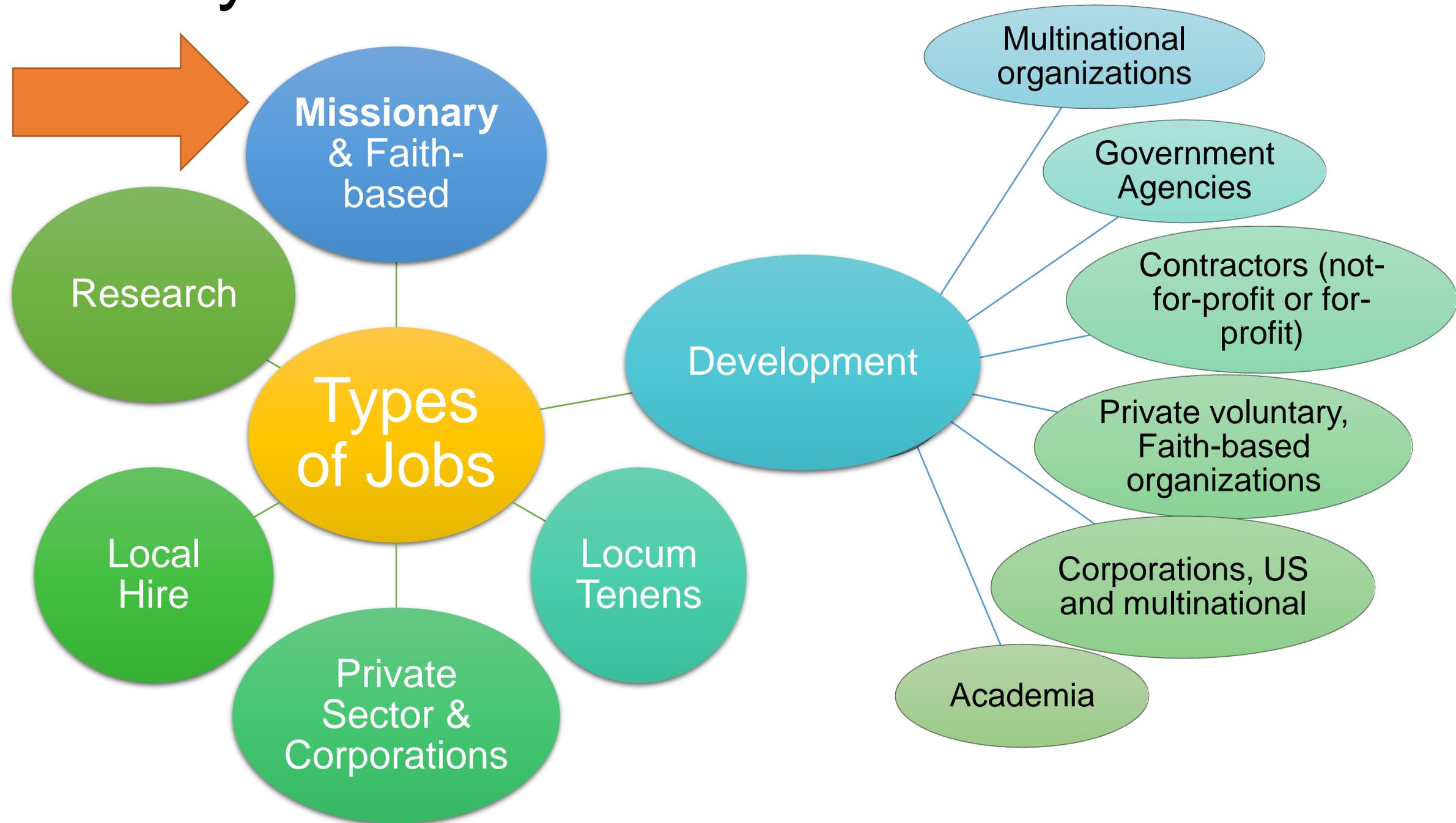
Barriers

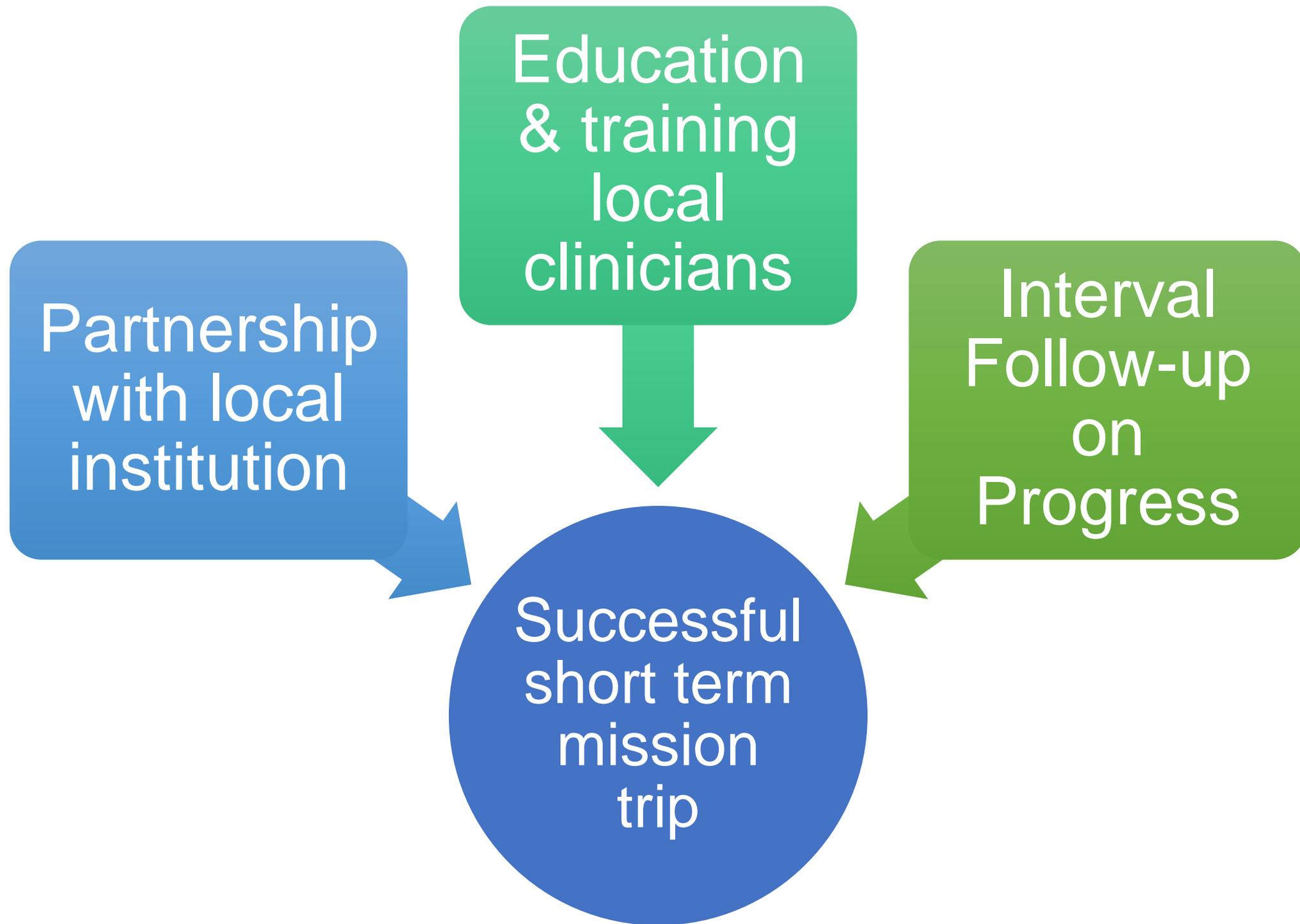
- **Residency program support for global health projects**
 - No resident salary support from CMS
 - Residents used vacation time to be able to attend the program.
 - Requirement of 40 weeks of continuity clinic in 1 academic year (ABFM)
 - Lack of rotation schedule flexibility & dedicated time to work on the project
 - Global health experience not formally part of residency curriculum
 - No established global health education
- **Residents' interest/commitment/motivation**
 - Changing availability, priorities, adaptability
 - Risk of engaging in medical tourism
 - Limited global health education background

Barriers

- Limited funding for
 - Project expenses:
 - Salary: resident & faculty
 - Trip expenses: travel, lodging, food, insurance
 - Supplies, equipment
 - Limited experience in accessing potential sources
 - Grants
 - Donations
 - Fundraising
 - Consulting

Variety of Global Health Jobs Available





Conclusions

- Involving residents and students in a global health initiative contributes to its success and to their own educational experience
- Medical education programs would benefit from supporting global health experiences
- Short term medical missions although controversial may bring significant resources and lasting positive changes when carefully done

Questions?

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AMERICAN ACADEMY OF FAMILY PHYSICIANS

STRONG MEDICINE FOR AMERICA