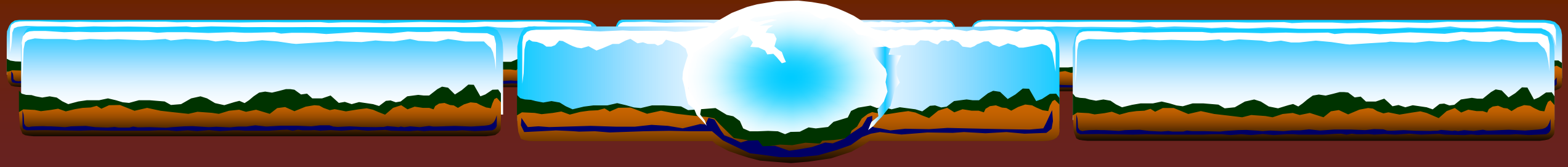

Eliminating HIV in Indian Country: The Primary Care approach

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Disclosure and Disclaimer

- I have no conflicts of interest to report

- **Disclaimer**: The opinions and findings expressed in this presentation are those of the author and do not necessarily reflect the view of the Indian Health Service.

Presentation

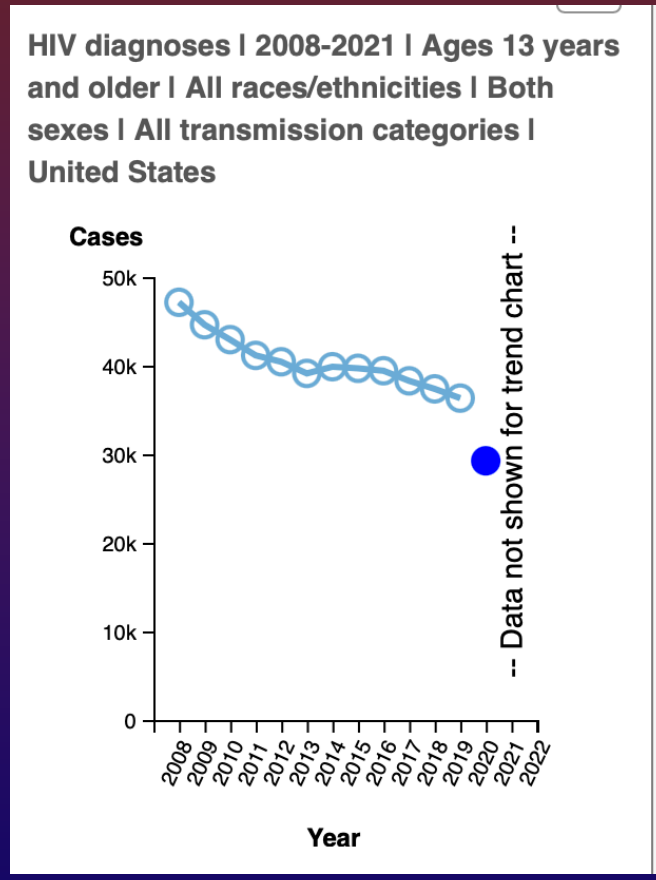
- A 52-year-old male teacher presents to the clinic for a blood pressure check after a recent emergency room visit for an ankle sprain. He feels well today and would like to establish primary care. You order a lipid panel, HgbA1c, PSA, Hepatitis C serology and fourth generation HIV test. The HIV test comes back positive.

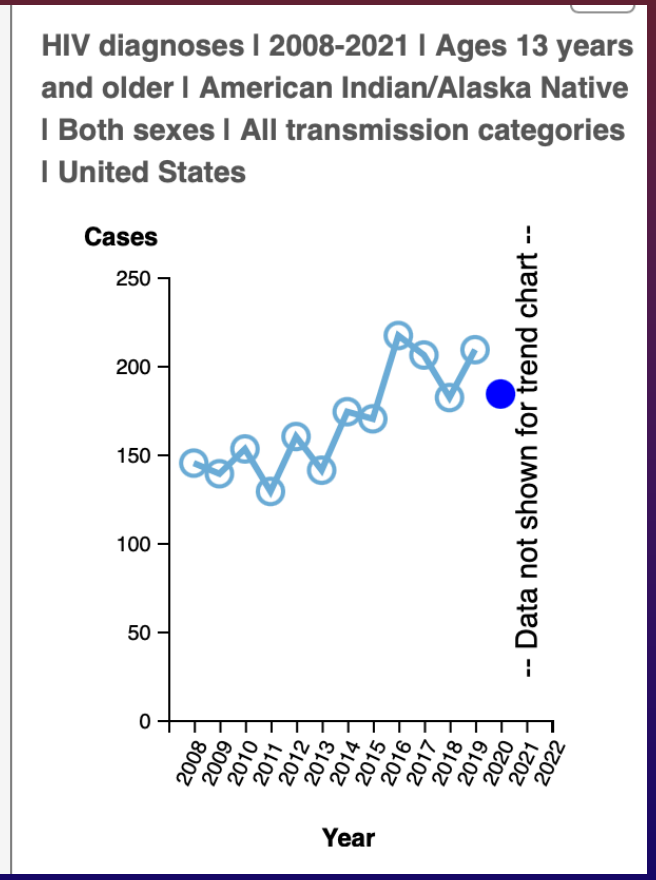
Questions to ponder…

- Why bother testing this man?
- How do you screen for HIV anyway?
- How do you get the new patient into care?
- What does HIV Primary Care entail?

Why bother?

US all races vs AI/AN HIV Diagnoses 2008-2019





https://gis.cdc.gov/grasp/nchhstpatlas/charts.html

Trends in HIV Epidemiology in Indian country

- An estimated 3,900 AI/AN were living with HIV in 2018
- Only 80% knew they were HIV positive
- In 2018:
  - Only 75% received HIV care
  - Only 46% were retained in care
  - Only 64% had achieved viral suppression

From: https://www.cdc.gov/hiv/group/racialethnic/aian/index.html

IHS Incidence Data

- 2273 AI/AN newly diagnosed with HIV from 2005-2014
  - Average annual incidence rate 15.1 per 100,000 population
  - Rate for males was double that of females
  - Rates were highest age 20-54
  - The Southwest had the highest rate at 19 per 100,000 population
  - Overall rates were flat from 2010 to 2014 except for:
    - Males
    - Age 15-19
    - Age 45-49
    - Age 50-54

Reilley B, Haberling D, Person M, Leston J, Iralu J, Haverkate R, Saddiqi A. Assessing New Diagnoses of HIV Among AI/AN Served by the IHS, 2005-2014. Pub Hlth Rep. 2018; 133(2): 163-168

HIV Disparity: Death Rates

- Death rates for AI/AN compared with Whites increased with time
  - 1990-1998 4.2 vs 7 deaths per 100,000 population
  - 1999-2009 3.6 vs 2 deaths per 100,000 population
- Death Rates highest in AI/AN age 24-44 and 45-64 in 1999-2009
- Disparities were highest for females

Reilley B, Bloss E, Byrd K, Iralu J, Neel L, Cheek J. Death Rates from HIV and TB Among American Indian/Alaska Native in the United States, 1990-2009. Am J Pub Health, Supplement 3, 2014(104)S253-S459.

HIV Disparities: Why?

- Rural Southwest American Indian Community (n=36) 2004-2006:
  - 58.3% male, 13.9% transgender, 27.8% female
  - 63.9% had history of ever being incarcerated
  - 41% had a household income < $1,000 per month
  - 61% were unemployed
  - 50% had a diagnosis of alcohol use disorder
  - 27.8% used traditional medicine in the las 12 months
- Alcohol was the factor most strongly associated with high viral load
- Low CD4 count was associated with recent incarceration and use of traditional medicine

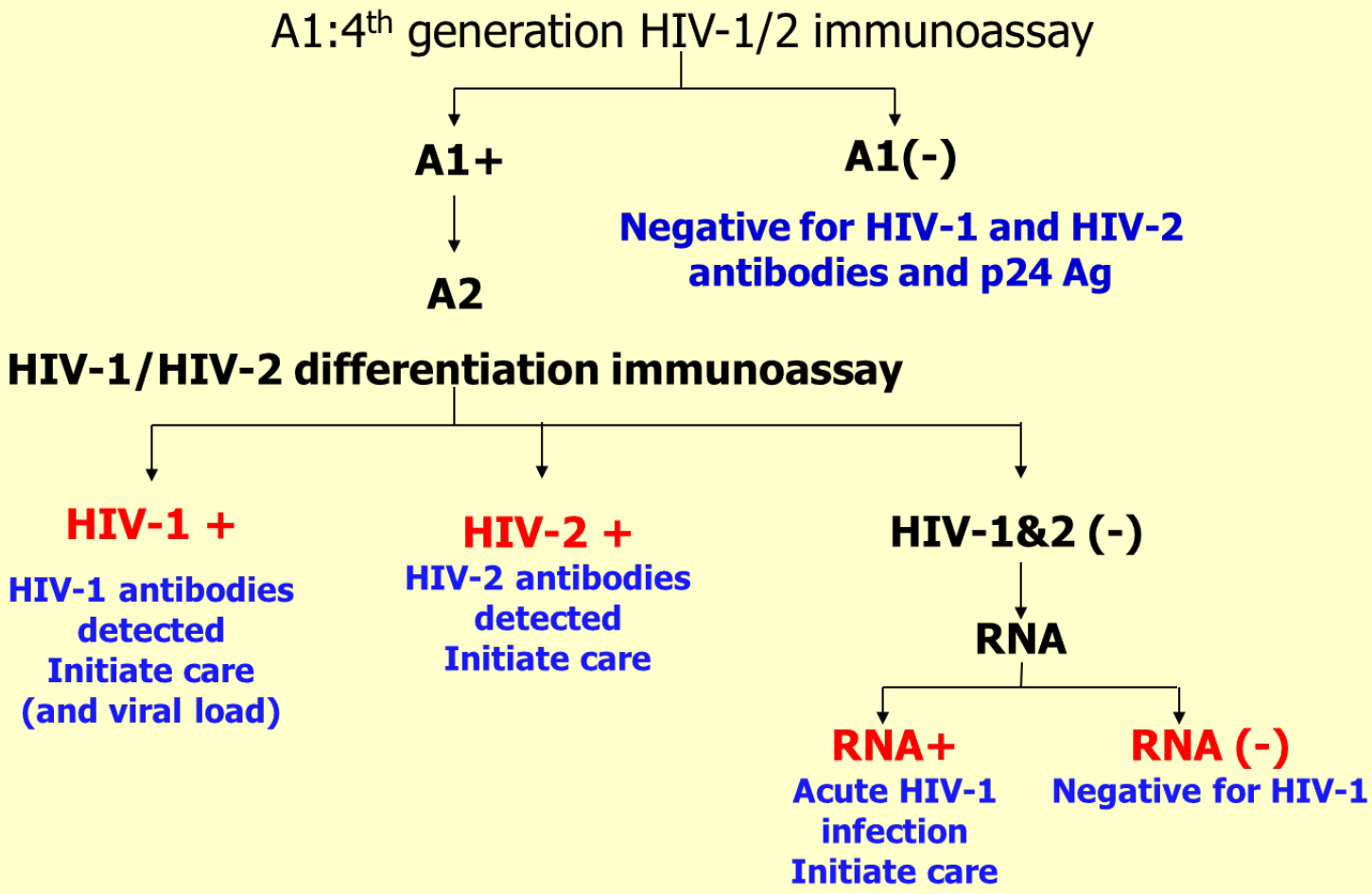
Iralu J, Duran B, Pearson C, Jiang Y, Foley K, Harrison M. Risk factors for HIV Disease Progression in a Rural Southwest American Indian Population. Pub Hlth Rep 2010 Supplement 4;125:43-50

How do you screen for HIV?

Our Current Goal for the IHS

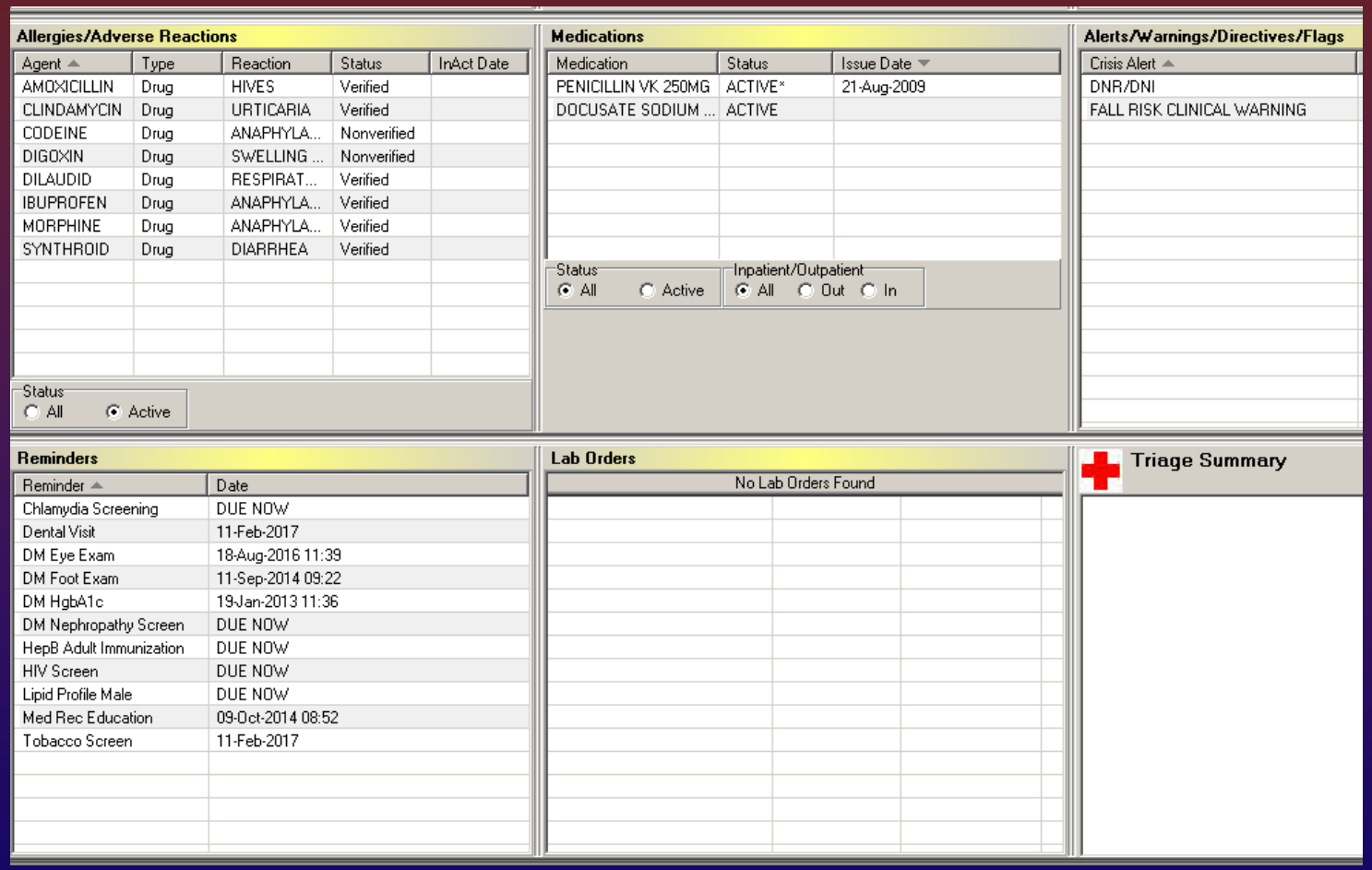
Offer HIV screening to every American Indian and Alaskan Native patient at least once in their life… and more often based on risk.

HIV Diagnostic Testing Algorithm: Fourth Generation Test



https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiFkfak1OT2AhX1lWoFHT35B4kQFnoECAMQAQ&url=https%3A%2F%2Fwww.cdc.gov%2Factagainstaids%2Fppt%2Fcme-slide-deck.pptx&usg=AOvVaw3_-2UN7vXNDRB4ZoJFJie-

EHR reminders are not the be all and end all



Allergies/Adverse Reactions

Agent	Type	Reaction	Status	InAct Date
AMOXICILLIN	Drug	HIVES	Verified	
CLINDAMYCIN	Drug	URTICARIA	Verified	
CODEINE	Drug	ANAPHYLA...	Nonverified	
DIGOXIN	Drug	SWELLING ...	Nonverified	
DILAUDID	Drug	RESPIRAT...	Verified	
IBUPROFEN	Drug	ANAPHYLA...	Verified	
MORPHINE	Drug	ANAPHYLA...	Verified	
SYNTHROID	Drug	DIARRHEA	Verified	

Status: All / Active

Medications

Medication	Status	Issue Date
PENICILLIN VK 250MG	ACTIVE*	21-Aug-2009
DOCUSATE SODIUM ...	ACTIVE	

Status: All / Active
Inpatient/Outpatient: All / Out / In

Alerts/Warnings/Directives/Flags

Crisis Alert
DNR/DNI
FALL RISK CLINICAL WARNING

Reminders

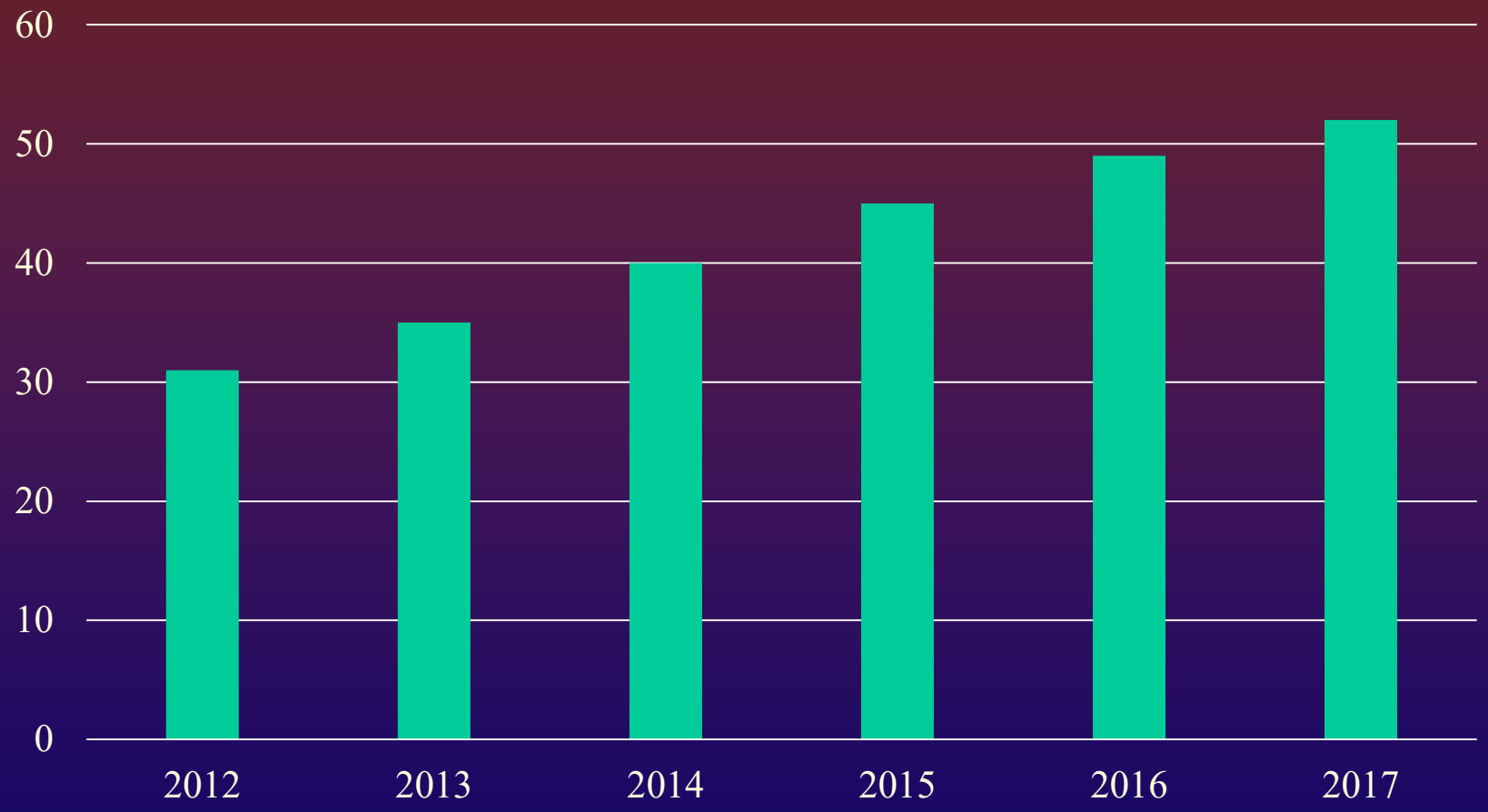
Reminder	Date
Chlamydia Screening	DUE NOW
Dental Visit	11-Feb-2017
DM Eye Exam	18-Aug-2016 11:39
DM Foot Exam	11-Sep-2014 09:22
DM HgbA1c	19-Jan-2013 11:36
DM Nephropathy Screen	DUE NOW
HepB Adult Immunization	DUE NOW
HIV Screen	DUE NOW
Lipid Profile Male	DUE NOW
Med Rec Education	09-Oct-2014 08:52
Tobacco Screen	11-Feb-2017

Lab Orders

No Lab Orders Found

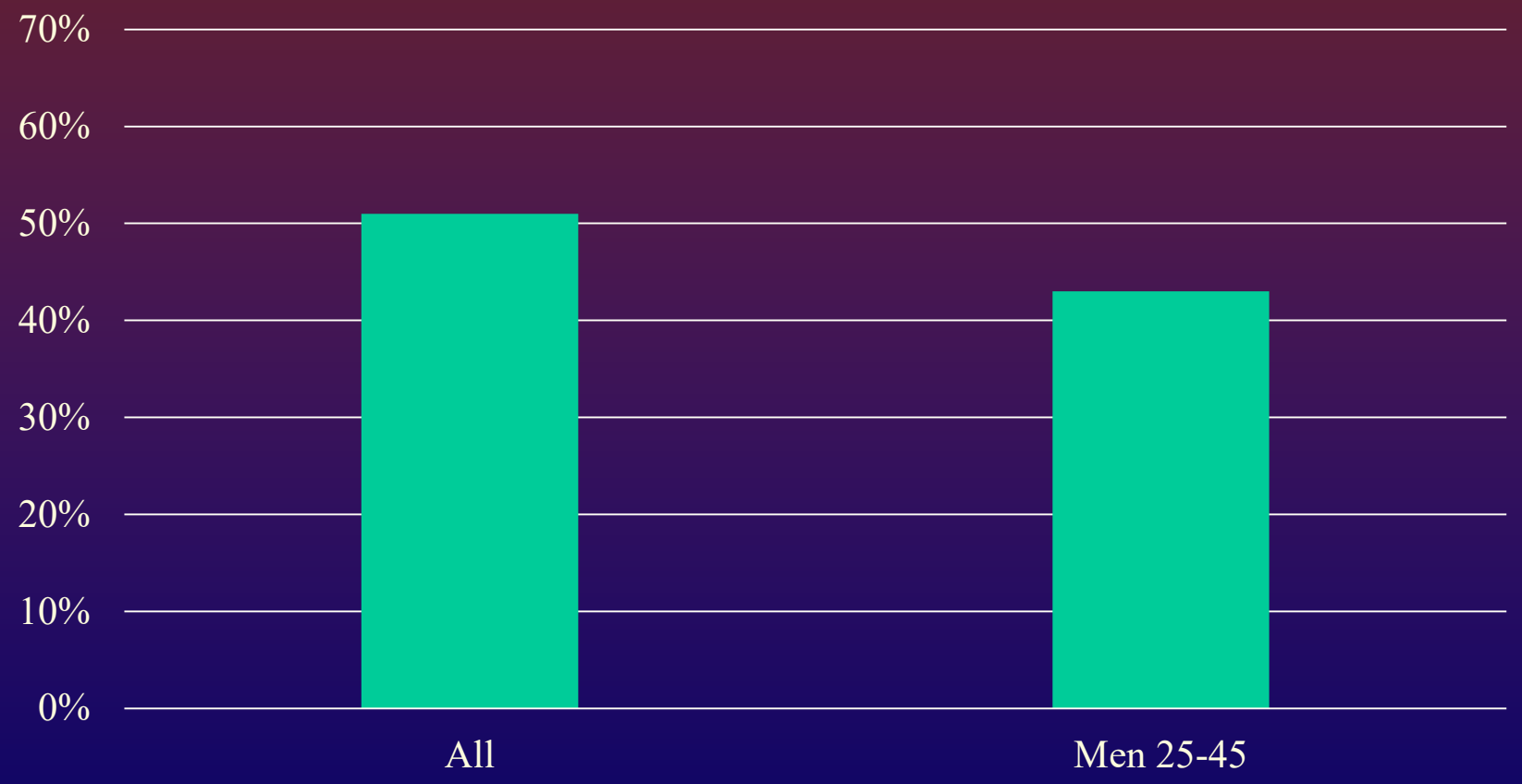
Triage Summary

HIV Screening, Cumulative, IHS, 2012-2017



IHS GPRA/NPIRS data

HIV Screening Ever, Q2 2017, IHS facilities



Citation

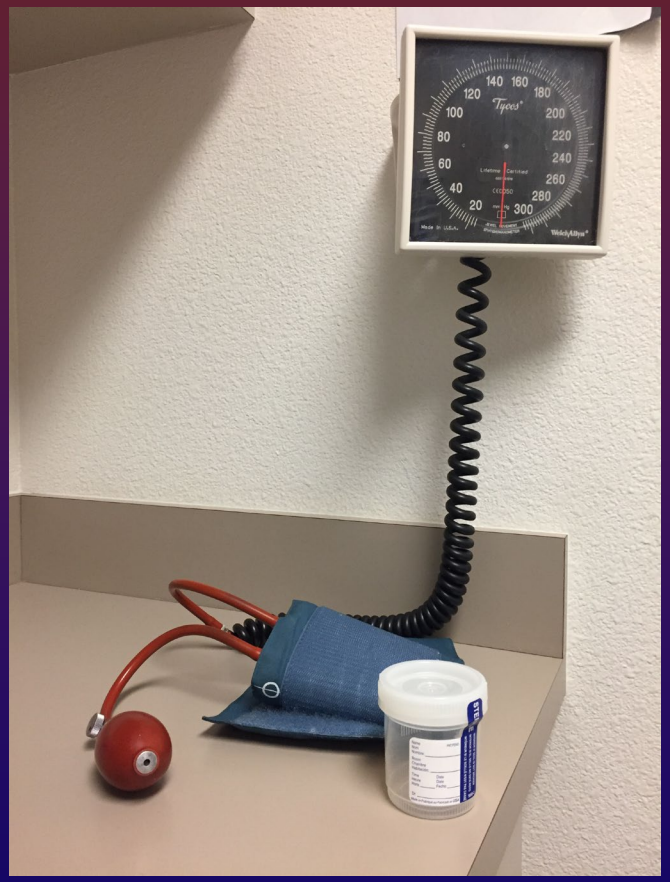
Try screening in novel places

- Screen every admission to the hospital
- Rapid testing available 24/7 in ED, Urgent Care, L & D
- ER/ Urgent Care based universal screening now practiced at several IHS facilities

Northern Navajo Medical Center
Emergency Department HIV Screening

- Triage RN screening and order entry
- Eligible: Age 18-50, no prior test on file
- Opt-out verbal consent
- 15 weeks of screening:
  - 465 screening tests
  - 4 HIV-ab positive
    - 1 acute infection, newly diagnosed
    - 2 known infections
    - 1 false positive
  - 74% of those screened do not have PCP

Gallup Indian Medical Center "Cups by Cuffs" Gonorrhea/Chlamydia screening program



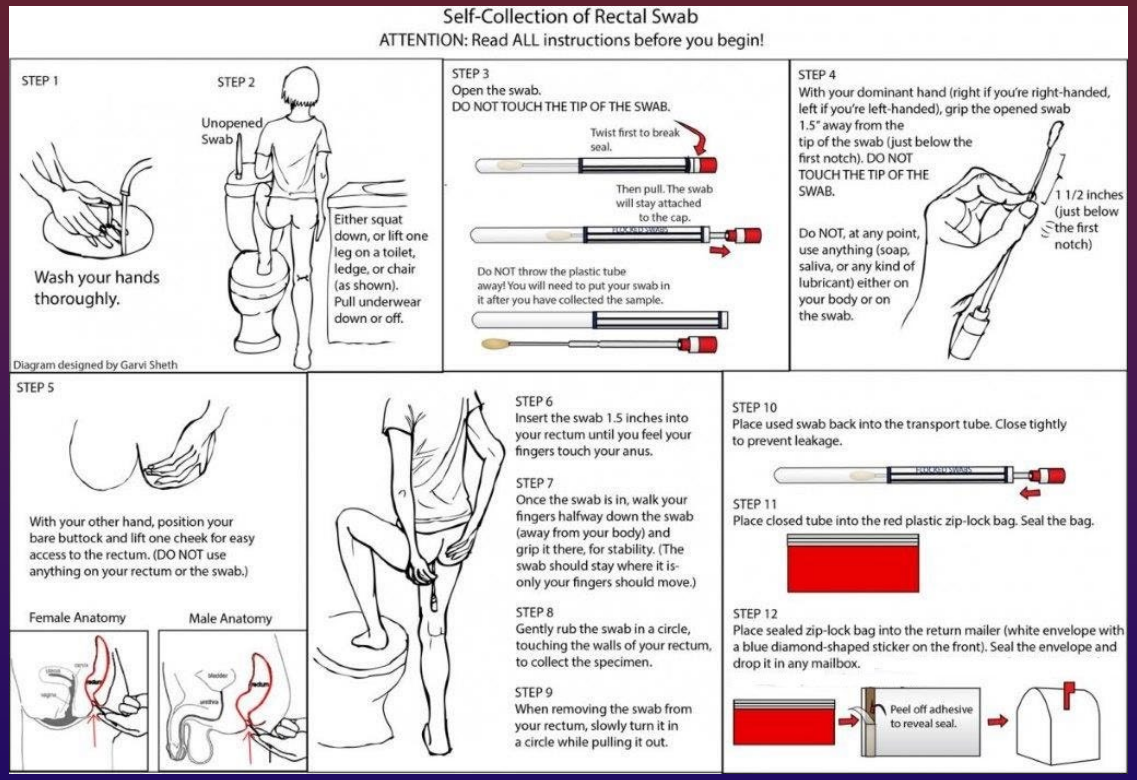
- 7063 total tests done in 2016 at GIMC
  - 467 positive for chlamydia
  - 103 positive for gonorrhea
- Emergency Department/Urgent Care triage nurse offers screening for GC/CT starting September 2016
- Public Health Nurses are responsible for finding and treating positives
  - 385 positives evaluated in 2016-2017
  - 99.4% treated

Tsehootsooi Medical Center Mobile Health Program

- Mobile Women's clinic
  - 2 x per month, walk-ins only
  - Nurse Midwife, RN, Lab tech
  - PAP/HIV/STI testing
- Mobile Wellness Clinic
  - Public Health nurse, lab tech
  - HIV/STI testing, BP check

Phoenix Indian Medical Center- walk-in screening
Walk in STD Testing

- Walk-in STD/HIV testing at lab
  - HIV
  - HCV
  - Syphilis
  - Gonorrhea/STD “selfies”



How do you get the new patient into care?

HIV Outreach Patient Empowerment
Navajo Area IHS HIV Home Treatment:
TEAM NIZHONI

Gallup Indian Medical Center
Team Nizhoni

- HIV Nurse Specialist
  - Home visits to monitor therapy
  - Jail/Detox outreach visits
  - Nurse Clinic visits: STI care, counseling, crisis intervention
- Two Health technicians
  - Navajo Speakers
  - “Home” visits to established high risk and newly diagnosed patients
- Four Pharmacists
  - Med refills
  - Adherence counseling in clinic at every visit
  - Interactions, prophylaxis, lipids, etc
  - Jail Detox visits
- 2 IM and 3 ID doctors
  - HIV ID referral and HIV Primary Care
  - Transgender care
  - Suboxone and Naltrexone
  - HCV-coinfection

HOPE Program essential tools:
Flip Charts and Blister packs

Home visits to monitor challenging patients

What does HIV Primary Care Entail?

COMPASSION is the essential

"the secret of the care of the patient is in caring for the patient"

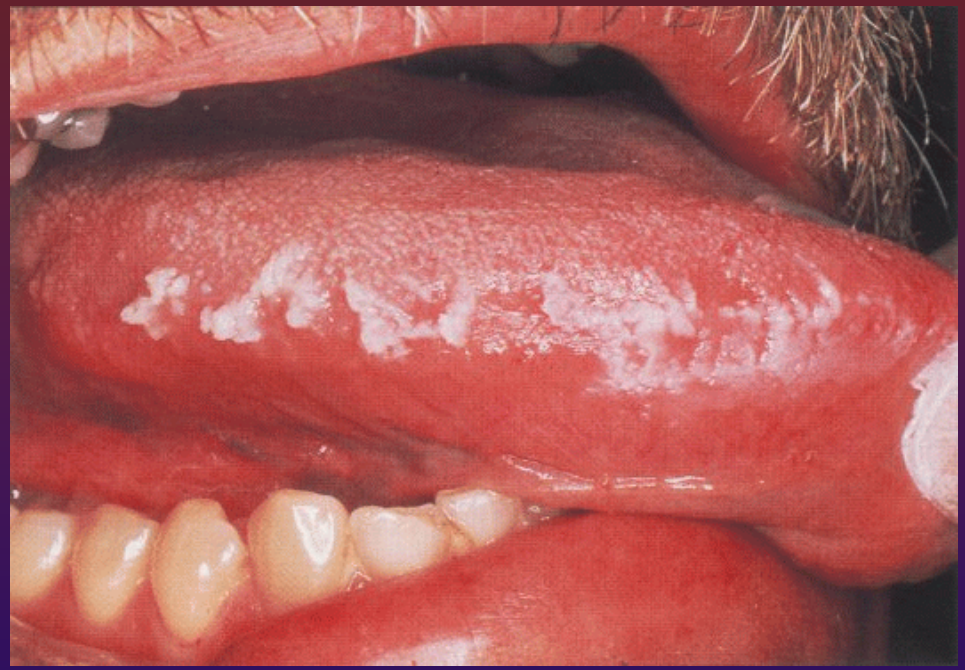
— Dr. Francis Peabody

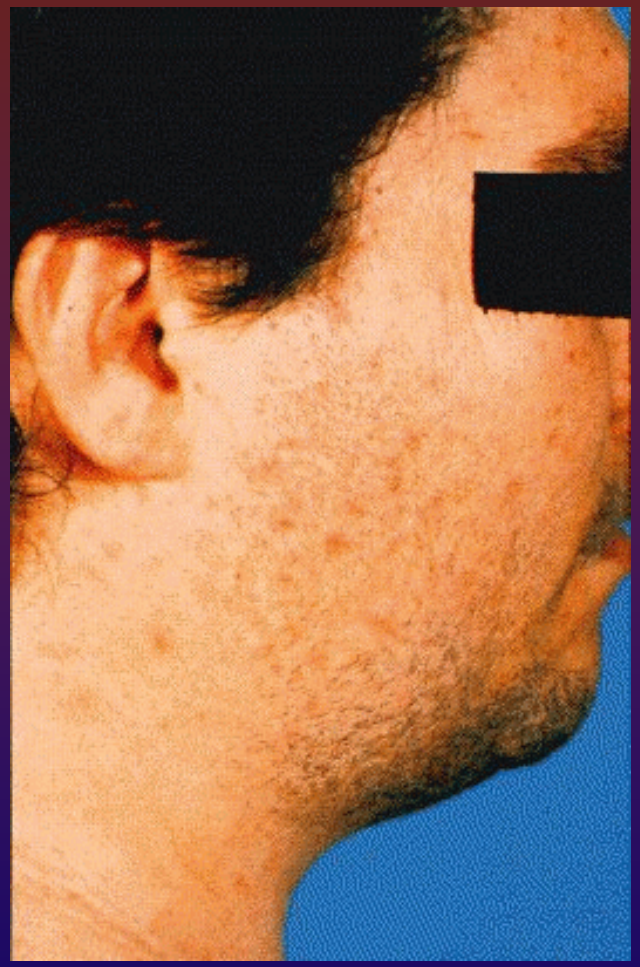
History

- Current symptoms
- Risk factor screening
- Sexual history
- Psychiatric history
- Substance Use
- Social: supports, employment, housing, etc
- Domestic violence

Physical Exam

- Lymphadenopathy
  - Cervical
  - Epitrochlear
- Oral Hairy Leukoplakia
- Oral Thrush
- Cotton Wool Spots
- Splenomegaly
- Rashes
  - Acute HIV rash
  - Syphilis





Baseline Laboratory Testing

CD4 Count	At diagnosis, then 3 months after starting ART then ever 3-6 months for two years. After 2 years of virological suppression, monitor CD4 count every 3-6 months when CD4 < 300. If 300< CD4 <500, then monitor every year. If CD4 > 500, then monitoring is optional. CD4 monitoring is indicated at any time there is loss of virological control.	Use one laboratory and methodology
HIV Viral Load	At diagnosis & q 3-6 months at first then every 6 months after 2-3 years of virologic control	Use one laboratory and methodology
Genotypic antiretroviral resistance test	At diagnosis on all patients and with failure of virologic control	Test prior to starting antiretroviral therapy on all patients: NRTI, NNRTI, PI

Baseline Laboratory Testing

RPR or T. pallidum EIA	At diagnosis and yearly	LP if evidence for neuro/ocular syphilis
GC/Chlamydia NAAT	At diagnosis and yearly Consider q 3-6-month test if ongoing STI risk	Order rectal & pharyngeal test if at risk, in addition to urine
IGRA assay or PPD	At diagnosis and yearly	INH or 3HP if (+)
Hep A total Ab HBsAg, HBsAb HCV Ab	Once for all patients. Test MSM, transgender women and IDUs annually for Hepatitis B and C	Vaccinate for Hep A if serology is negative. Vaccinate for Hep B if no prior infection or vaccination
Toxoplasma Ab	Once	Prophylaxis if CD4<100
CMV Ab	Once	Test only if low risk (non MSM, non IDU)
Varicella Ab	Once if no h/o Chickenpox or Shingles	Consider vaccination if negative and CD4>200

Baseline Laboratory Testing

CXR	Once	Only if symptoms or PPD+
Cervical PAP Smear	Baseline then yearly	See below for age > 30
Anal PAP Smear	Anal cytology annually	Refer positives for high resolution anoscopy/surgery clinic
Lipids	Baseline and annually	Avoid simva/lovastatin
Urinalysis	Baseline and annually if at risk for renal disease	
HGB A1c/fasting glucose	Baseline and annually	Fasting glucose is more accurate for diagnosing DM in HIV (+) persons
G-6-PD Level	Once	If sulfa allergic

Baseline Laboratory Testing

Pregnancy test	Obtain at baseline and before ART initiation	
Trichomonas vaginalis	Screen women at entry to care and annually	
HLA B*5701 assay	Once if considering ART that includes Abacavir	Used to detect risk for Abacavir hypersensitivity

Antiretroviral Therapy Basics

Treat all HIV positive patients regardless of CD4 count

Antiretroviral Basics

Tenofovir/Emtricitabine/Bictegravir 1 po daily

Or

Abacavir/Lamivudine/Dolutegravir 1 po daily

(if HLA B*5701 (-) and HBV negative)

Or

Dolutegravir/Lamivudine 1 po daily

(if HIV VL< 500K, HBV negative, sensitive on GART)

Antiretroviral Therapy Basics

- The goal: Undetectable viral load at 4-6 months

- Consult and HIV Specialist if
  - Viral load fails to drop to undetectable at 4-6 month
  - Viral load rebounds to detectable level after previously undetectable
  - Pregnancy or contemplating pregnancy
  - Hepatitis B or C, TB co-infection present

Preventing Opportunistic Infections

Organism	CD4 Count Cutoff	Drug Regimens
Pneumocystis	≤ 200	TMP/SMZ DS 1 po qd Dapsone 100 mg po qd Atovaquone 1500 mg po qd
Toxoplasmosis	≤100 & (+) serology	TMP /SMZ DS 1 po qd Pyrimethamine, Leukovorin Dapsone
Mycobacterium Avium complex	≤50 and not starting ART	Azithromycin 1200 mg po weekly Clarithromycin 500mg po BID

Health Maintenance

- Eye Care:
  - Annual eye clinic check-up to rule out HIV related eye disease.
- Dental Care:
  - Annual dental clinic check-up to rule out HIV related oral disease.
- GYN Care:
  - Pap smear preferred for women < 30 years of age.
    - If negative, repeat in 1 year
    - If 3 consecutive annual Paps are negative, test every 3 years
  - Pap plus HPV co-testing can be done every 3 years for women ≥ 30
  - Biennial Mammography age 50-74

Health Maintenance

- Bone Health
  - DEXA scans are indicated for post-menopausal women and for men age 50 or greater with HIV, especially those on Tenofovir.
  - Vitamin D level testing is recommended once and periodically as indicated.
- TB screening:
  - An IGRA test (or PPD) should be done at diagnosis and annually.
  - Twelve weeks INH-Rifapentine or 9 months of INH are indicated for PPD tests greater than 5 mm induration (not 10 mm) or positive Quantiferon tests.
  - INH-Rifapentine can also be used with dolutegravir
  - A symptom review and CXR are mandatory to rule out TB disease first.

Health Maintenance

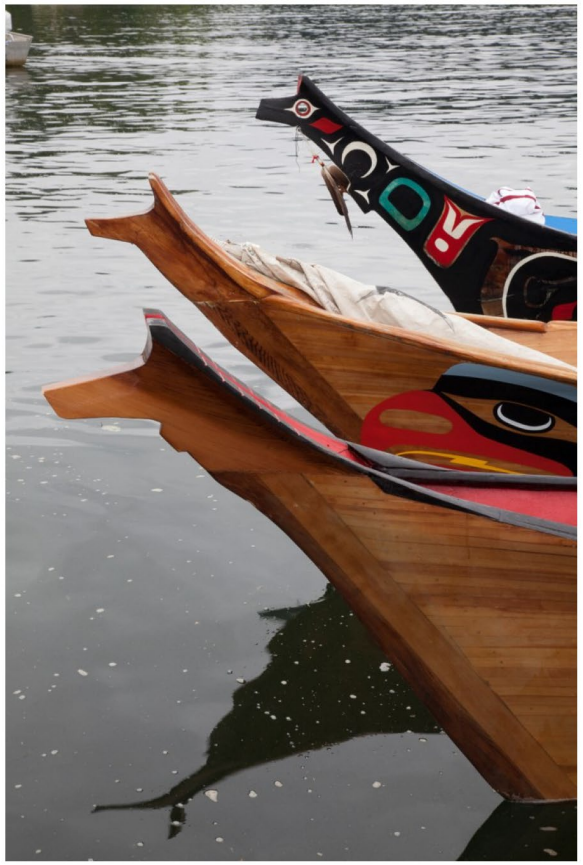
- Vaccines:
  - Hepatitis B, influenza, TdAP and pneumococcus vaccines.
    - Consider double dose Hep B vaccine or Heplisav for failure to convert to HBsAb +
  - PCV-20 alone or PCV-15 followed by PPSV-23
  - HPV vaccine for females and males 9-26 per ACIP (up through age 45 permitted by FDA and recommended by IHS)
  - Meningococcal vaccine (Menactra® or Menveo®)
  - Offer Varicella vaccine if CD4> 200 and nonimmune
  - Shingrix recommended for HIV positive people (aged 19 and up) regardless of CD4 count

Health Maintenance

- Mental Health:
  - All patients should be screened for depression, anxiety, suicidal ideation and substance abuse at every visit.
  - Refer to a mental health provider or substance abuse counselor.
  - Domestic violence screening is indicated at every visit

Health Maintenance

- Spiritual Health:
  - All patients should be screened for spiritual health issues and referred to a medicine man or other spiritual health provider if desired by patient.



INDIAN HEALTH SERVICE

HIV Primary Care Treatment Guidelines for Adults and Adolescents

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https://www.ihs.gov/sites/hivaids/themes/responsive2017/display_objects/documents/ihshivguidelinesadultadolescent.pdf


Speaker View
IHS HIV
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Jaclyn Kotula PharmD IHS
Project ECHO
IT Support
Project ECHO IT Support
Cheryl
Join Audio
Start Video
Invite
Participants
10
Share Screen
Chat
Record
Leave Meeting

IHS HIV Project ECHO

- Monthly IHS telemedicine telemedicine conference
  - Sponsored by University of New Mexico and IHS
  - Twenty-minute didactic talk re HIV care
  - Participants present 2-3 active cases

IHSECHO@unm.salud.edu

Second Wednesday each month, noon Mountain Time

Closing thoughts…

- HIV incidence is rising in Indian Country: don't miss a single case
- Testing is simple and should be routine part of primary care, emergency/urgent care and inpatient care
- A team approach using a PCMH model is the way to go
- HIV is a primary care disease: we can teach you how to do it!