Best Practices for HIV and STD Screening

Brigg Reilley
National HIV/AIDS Program/
IHS Division of Epidemiology & Disease Prevention
Albuquerque, NM

4 measures total

- Prenatal HIV Screening (GPRA)
- HIV Screening of 13-64 y.o.
- Chlamydia screening of sexually active 15-24 y.o. females annually
- HIV/STD screen for patients newly diagnosed with STD
- ALL 4 MEASURES BASED ON NATIONAL GUIDELINES/RECOMMENDATIONS

Measure 1

Prenatal HIV Screening

Prenatal HIV Screening Best Practices:

- HIV test automatically bundled into prenatal panel, not ordered separately
- No signed consent
- Opportunistic: test at first HCG+

PRENATAL CARE:

FIRST PN VISIT:
CBC
1 HOUR GLUCOLA
HIV (INFORMED REFUSAL)
U/A AND URINE C&S
URINE GC & CHLAMYDIA
PRENATAL PROFILE (QUEST #15191):
- BLOOD TYPE
- RH FACTOR
- ANTIBODIES
- RUBELLA TITER
- RPR
- HBsAg

Pap done at first Dr. PN

EVERY VISIT:
U/A only if sx

16-20 WEEKS:
OFFER Quad-Test (MAFP)

28 WEEKS:
CBC
RPR
IF RH (-): ANTIBODY SCREEN
1 HOUR GLUCOLA ***
URINE CULTURE ***
URINE GC & CHLAMYDIA ***

35-36 WEEKS:
GROUP B STREP VAGINAL/RECTAL SWAB

POSTPARTUM CHECK:
HCT
PAP SMEAR
URINE GC & CHLAMYDIA
HCG**

*** **Send pt to lab prior to seeing provider**

WOMEN'S HEALTH:

WOMEN'S EXAM AGE 23-39:
PAP SMEAR (schedule prn)
LIPID PROFILE q 5 YEARS
GC/CHLAMYDIA
CBC, RPR, GLUCOSE, HIV Q 2yrs

WOMEN'S EXAM AGE 40-49:
PAP SMEAR (schedule prn)
MAMMOGRAM REFERRAL (q 2 years)
LIPID PROFILE q 5 YEARS
GC/CHLAMYDIA
RPR, GLUCOSE, HIV Q 2 yrs

WOMEN'S EXAM AGE 50-64:
PAP SMEAR (schedule prn)
MAMMOGRAM REFERRAL
LIPID PROFILE q 5 YEARS
GC/CHLAMYDIA
RPR, GLUCOSE, HIV q 2 yrs

WOMEN'S EXAM AGE 65+:
MAMMOGRAM REFERRAL
LIPID PROFILE q 5 YEARS
GLUCOSE

MEN'S HEALTH:

MEN'S EXAM AGE 23-39:
LIPID PROFILE q 5 YEARS
GC/CHLAMYDIA
RPR, GLUCOSE, HIV Q 2 yrs

MEN'S EXAM AGE 40-49:
LIPID PROFILE q 5 YEARS
GC/CHLAMYDIA
RPR, GLUCOSE, HIV Q 2 yrs

MEN'S EXAM AGE 50-64:
LIPID PROFILE q 5 YEARS
GC/CHLAMYDIA
RPR, GLUCOSE, HIV Q 2yrs

MEN'S EXAM AGE 65+:
LIPID PROFILE q 5 YEARS
GLUCOSE

WELL CHILD CHECKS:

10-14 DAYS:
PKU

9-15 MONTHS OLD:
HCT
Lead Screen (at 1 and < 2 yrs)

HEADSTART PHYSICAL:
HCT

SPORTS AND ADOLESCENT PHYSICAL EXAMS:
GC/CHLAMYDIA
RPR, HIV if over age 13yrs

DIABETES:

INITIAL VISIT AND ANNUALLY:
U/A, URINE MICROALBUMIN
CMP
LIPID PROFILE (Fasting preferable)
HEMOGLOBIN A1C ***
EKG (q 2 yrs)
CBC (only on Initial visit)

EACH VISIT q 3 MONTHS:
HEMOGLOBIN A1C ***

ACUTE ALCOHOL WITHDRAWAL / REHAB PX:

CMP (STAT)
Mg++ (STAT)
LIVER PROFILE (ASAP)
AMYLASE/LIPASE (ASAP)
U/A, HCG (ASAP)

ANNUAL:
- HEPATITIS PANEL,
- RPR, HIV
- GC/CHLAMYDIA
- PPD

*** **Send pt to lab prior to seeing provider**

Measure 2

HIV Screening of 13-64 y.o.

New CDC Testing Recommendations Fall, 2006

- Screen all persons ages 13-64 routinely
- “Routine” is relative: each year/each visit for high-risk, less frequently for low-risk
- Repeat testing “based on clinical judgment”

- ‘once in a lifetime’ screen, although some sites have chosen a 5 year screening interval

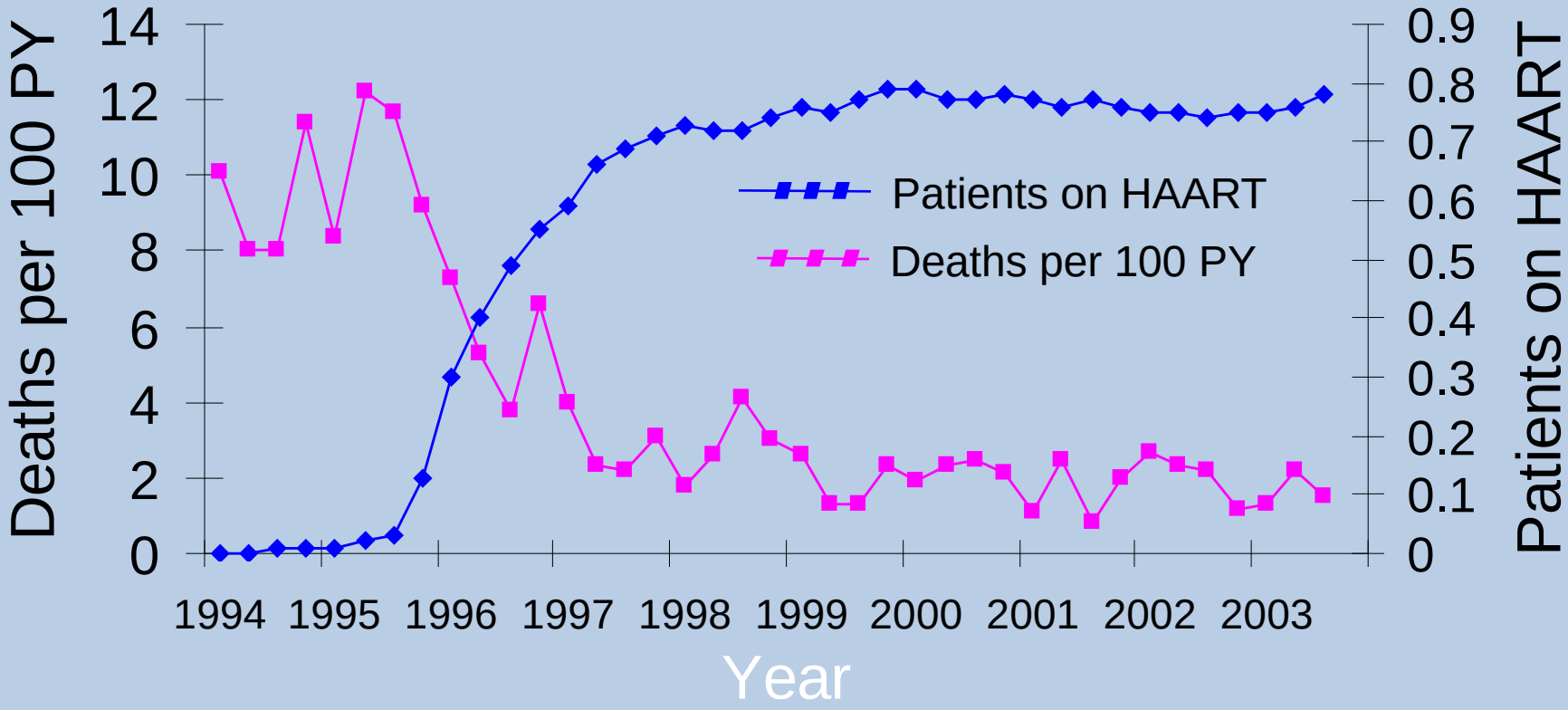
CDC Screening Rationale

- HIV is a serious disorder that can be diagnosed before symptoms develop
- HIV can be detected by reliable, inexpensive, and noninvasive screening tests
- Infected patients have years of life to gain if treatment is initiated early, before symptoms develop
- The costs of screening are reasonable in relation to the anticipated benefits

HIV Screening: More and More Widespread

- Initially, entirely risk-factor based
- Gradually, screening increased with success and new medical interventions
  - 1985 donated blood
  - 2001 pregnant women

1. Treatment Is Effective



Mortality and HAART Use Over Time
HIV Outpatient Study, CDC, 1994-2003

2. Important Benefits for Prevention

After people become aware they are HIV-positive, the prevalence of high-risk sexual behavior is reduced substantially.

Reduction in Unprotected Intercourse with HIV-neg partners: HIV-pos Aware vs. HIV-pos Unaware

68%

Meta-analysis of high-risk sexual behavior in persons aware and unaware they are infected with HIV in the U.S.
Marks G, et al. JAIDS. 2005;39:446

Screening: HIV vs Cervical Cancer

	HIV	Cervical CA
Annual new cases	56,300	11,270
Deaths	15,564	4,070

Missed Opportunities: South Carolina

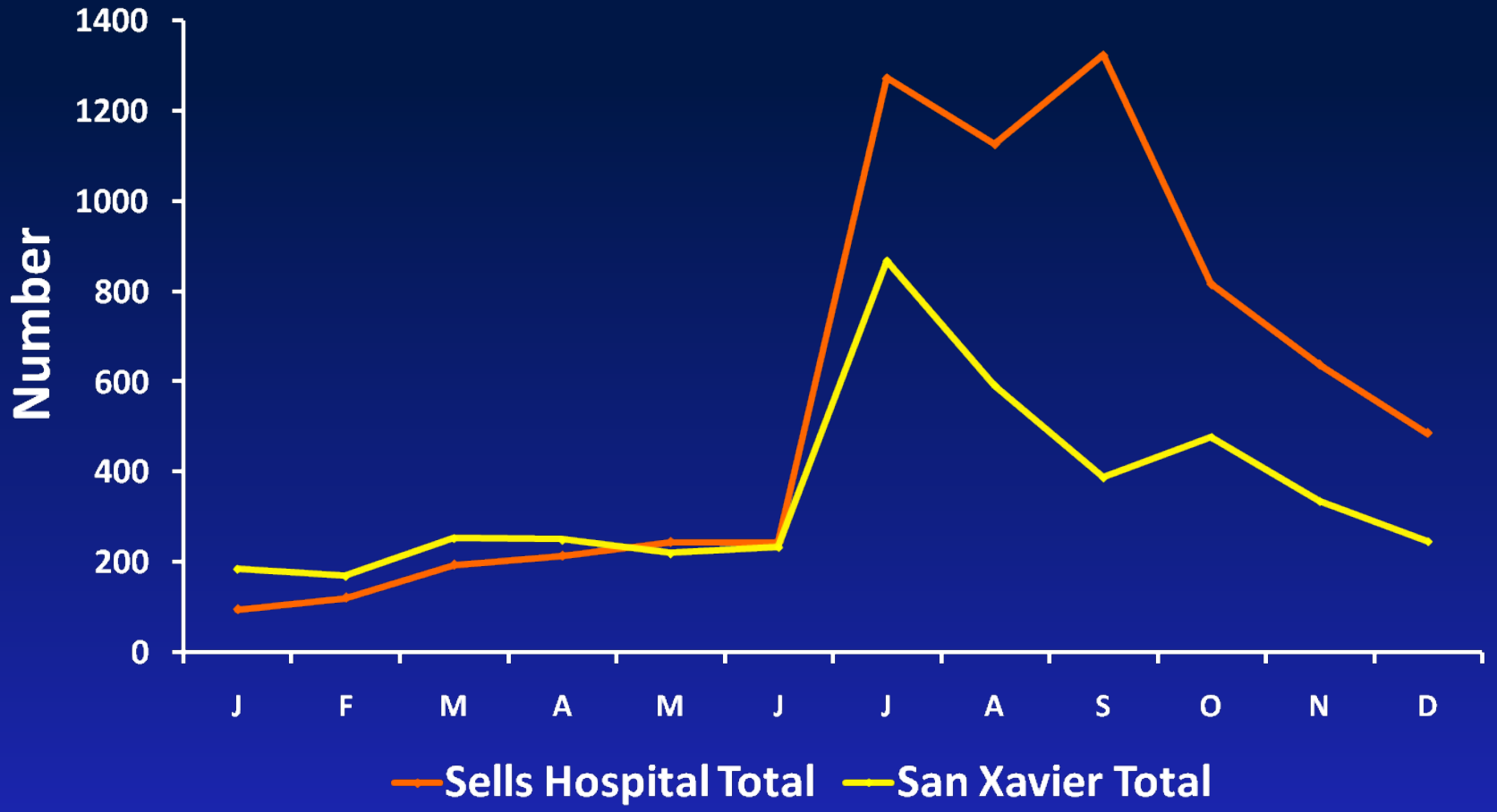
- 4,315 reported HIV cases
  - 3,157 (73%) made 20,271 health-care visits prior to their first positive HIV test
  - Diagnosis codes at 15,648 (77%) of prior visits would not have prompted an HIV test

MMWR 55:47, December 1, 2006

Case Study: Tucson

- Service Unit in Area with syphilis outbreak
- One clinic, one hospital

Sells Service Unit
STD/HIV Tests per Month
2007



Outcomes: HCW Interviews

- Interviews with health care workers
  - 88% said patient acceptance high or very high
  - 61% said new testing policy added negligible time to overall consults
  - 93% said wider testing policy should continue indefinitely

Lessons Learned from Tucson: Planning

- Have clear policy and ‘go to’ date to start new testing policy
- Offer counseling training/CME to nurses/MDs
- Have clear protocol for patient follow up, including linkages to medical/social services as needed

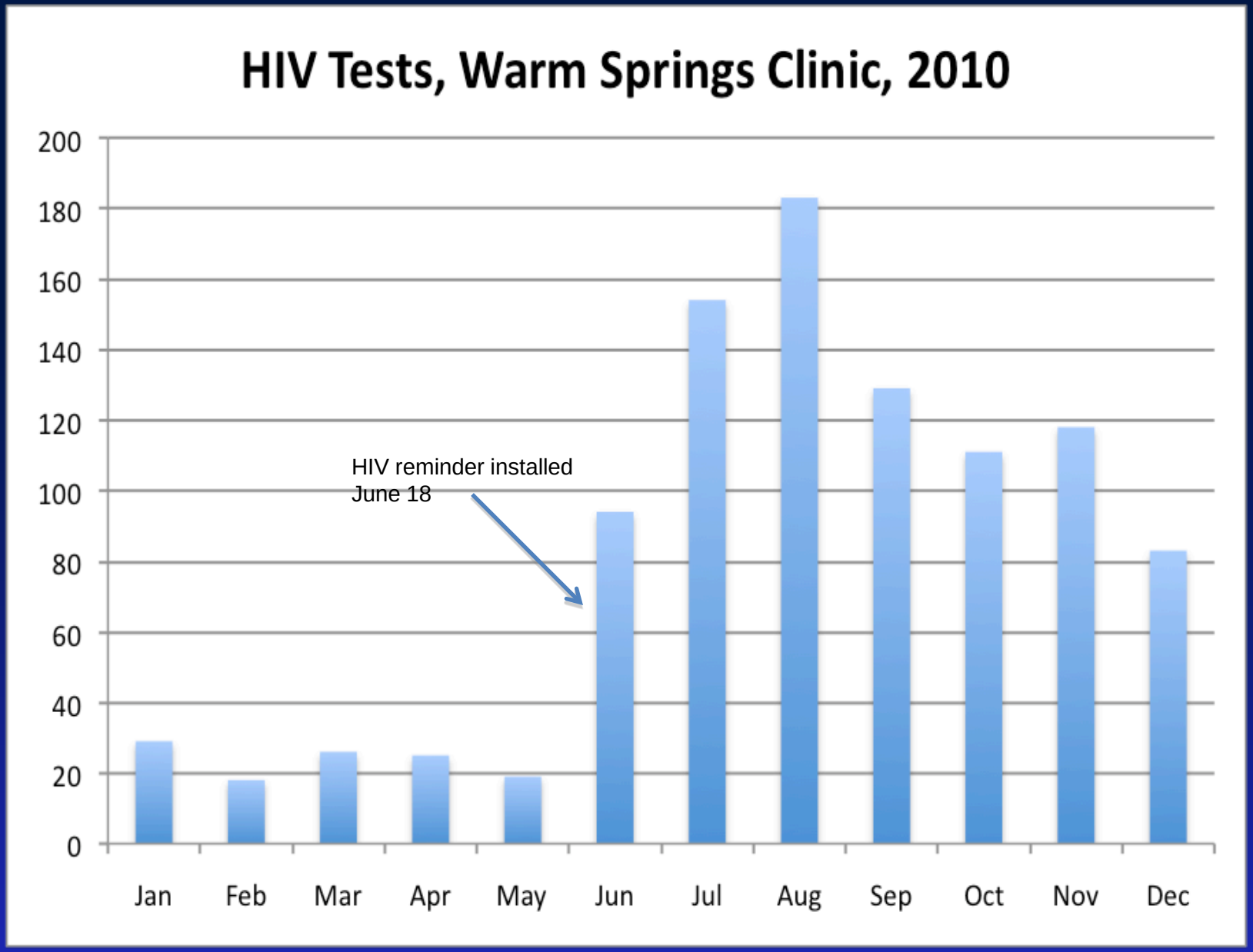
Lessons Learned from Tucson: Rollout

- Integrate HIV and STD testing
- Need private area to offer testing
- Enable one-step testing in EHR/PCC
- Division of labor (Nurse, MD, lab) as appropriate
- Ongoing challenge to offer testing in Emergency Room or specialty clinics

Main tools to identify persons eligible for screening

- Standing orders
- Clinical reminders
- Other (provider orientation, telephone triage nurse)

Once patient is identified, clear responsibility for who should order screening test

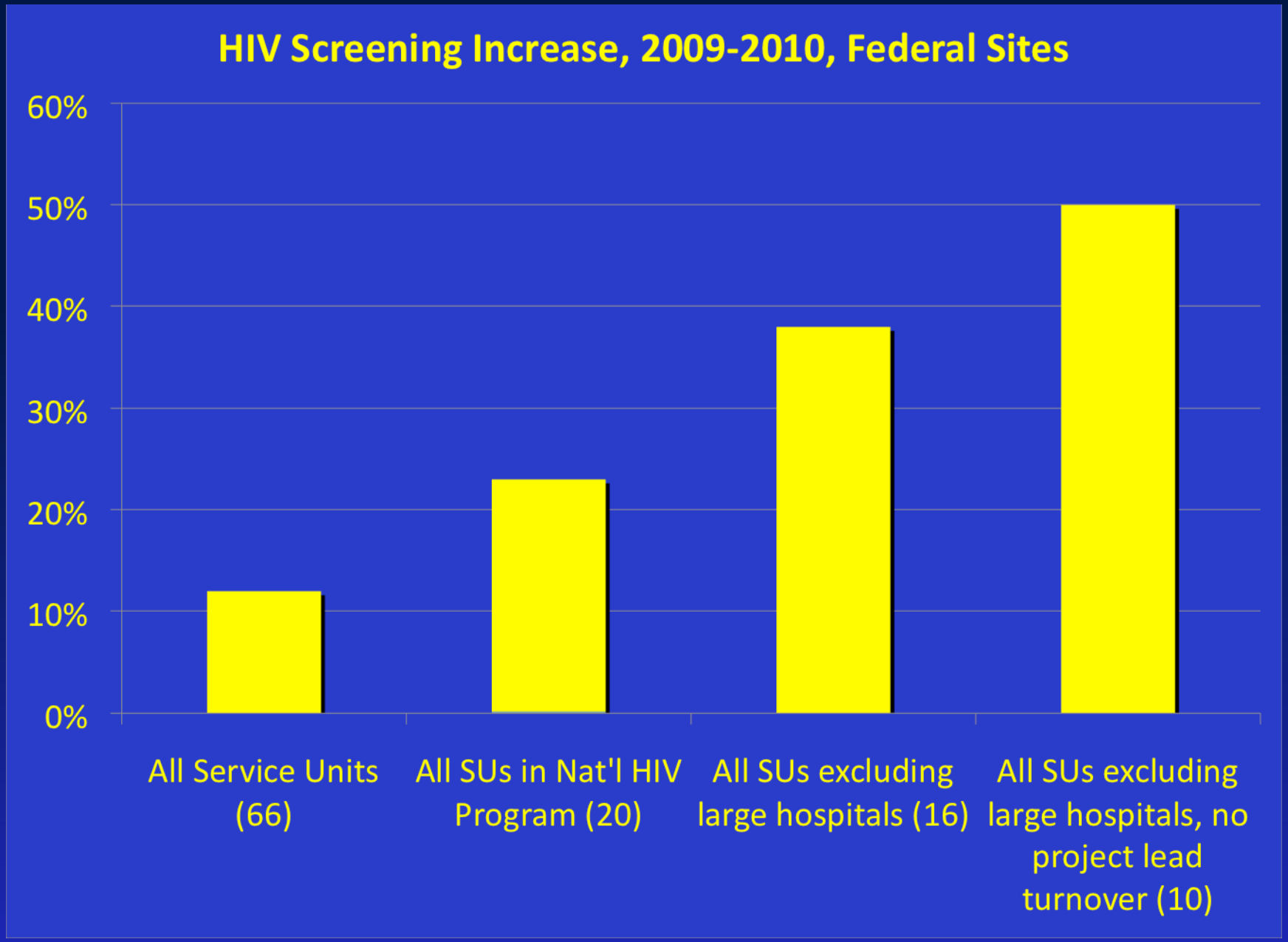

HIV Tests, Warm Springs Clinic, 2010
200
180
160
140
120
100
80
60
40
20
0
HIV reminder installed
June 18
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec

Need support? National HIV/AIDS program (1 of 2)

- Funding
- Guidance on local decisions for each SU: age range, include STD test, follow up HIV+ protocol, others
- Remote audit to check accuracy of individual SU screening scores according to CRS/GPRA

Need Support? (2 of 2)

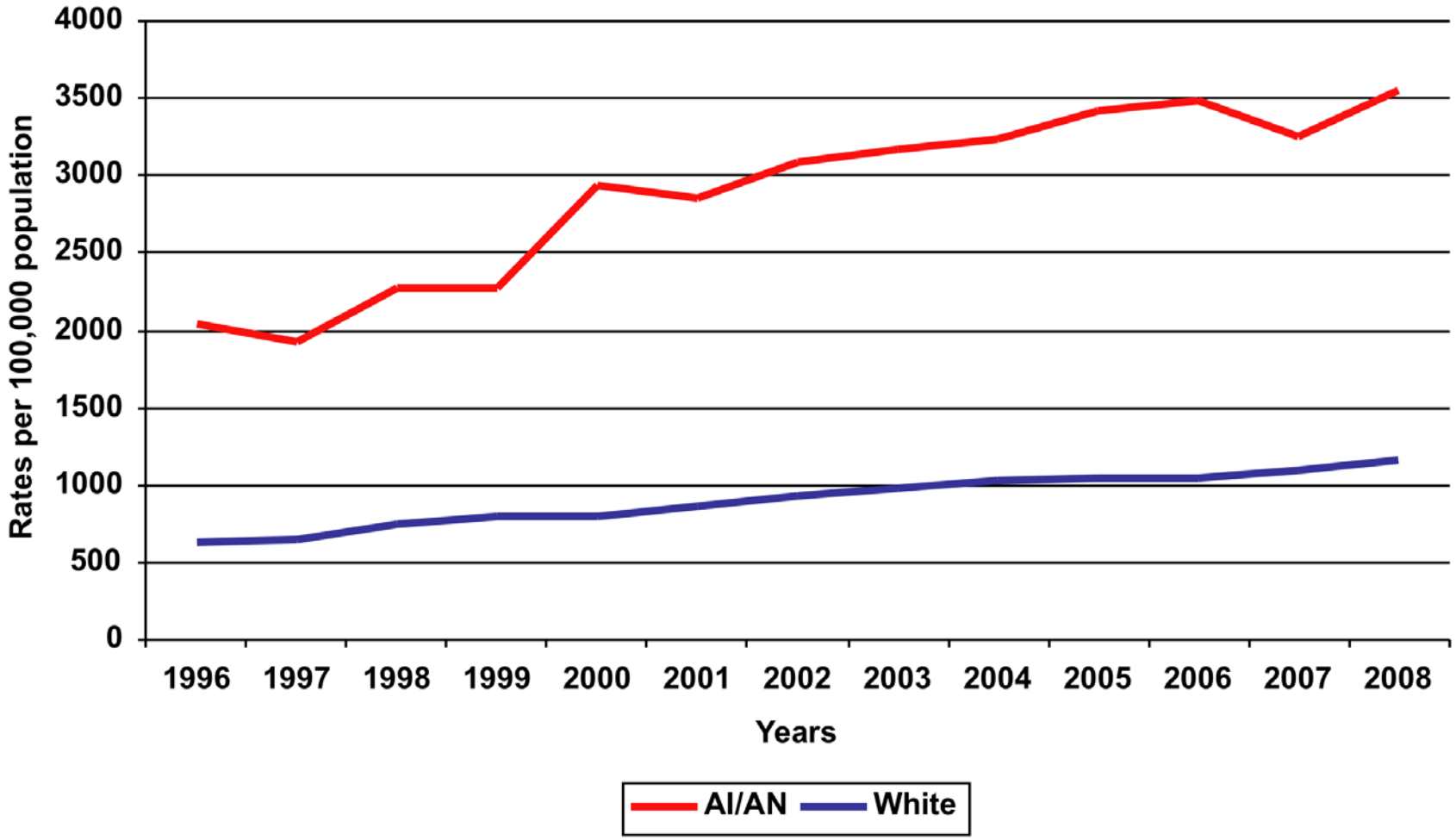
- Regional AIDS Education & Training centers come to SUs, provide CMEs
- Links to others in IHS who have implemented wider HIV screening
- Links to telemedicine/clinical support


HIV Screening Increase, 2009-2010, Federal Sites
60%
50%
40%
30%
20%
10%
0%
All Service Units (66)
All SUs in Nat'l HIV Program (20)
All SUs excluding large hospitals (16)
All SUs excluding large hospitals, no project lead turnover (10)

Measure 3

Annual Chlamydia Trachomatis (CT) Screening among sexually active women ages 15-24

Chlamydia rates for women 15-24 years old by race, 1996-2008



Source: Centers for Disease Control and Prevention, Sexually Transmitted Disease Surveillance, 2008. Atlanta, GA: U.S. Department of Health and Human

Chlamydia screening—site audit

- Overall screening rate about 40%
- Most women overdue for CT screen had several medical visits but were not screened
- Missed opportunity medical visits included urinalysis, pregnancy test, family planning, or vaccination

Chlamydia Screening Best Practices

- Clinical reminder/standing order in EHR if >1 since test
- Bundled with family planning, annual checkup, or other visit
- Bundle with all pregnancy tests, screen women in age range in ER for next 6 months

Measure 4

HIV/STD screen of patients with STD

HIV/STD screen of STD patients

- If patient diagnosed with HIV, chlamydia, gonorrhea, syphilis, patient should be tested for the other 3 conditions within 60 days
- Syphilis might not be applicable for all sites

STI Screening-Site Audit

- Overall national STI screening rate under 50%

- Most non-screened STD patients were
  - Females with chlamydia (>90%)
  - Not screened for HIV and syphilis (>90%)

  -Complete screening significantly higher in prenatal patients

Best Practices

- EHR clinical reminders or standing orders:
  - Follow up chlamydia dx with HIV/syphilis test
  - Reminder for STD screen linked to prescription of 1 gram azithromycin

Other tools

-Test of Cure follow up due to high rates of re-infection

- Expedited Partner Therapy

Reminders

Reminder Challenges

- Inaccurate
- Too many
- Inflexible

A poorly deployed reminder undermines confidence in all reminders, “car alarm syndrome”

Deploying Reminders (AK site method)

1) Pilot test and refine with 1-2 doctors
2) Deploy reminder with all physicians
3) Allow doctors to see screening scores (iCare)
4) Engage nurses, NAs, pharmacists, etc. as much as possible to delegate screenings away from physicians
5) Each professional sees a subset of total reminder that they alone are responsible for

National Reminders available in next patch:

- HIV screening
- Chlamydia Screening

Wrap Up

IHS Vacancies

Profession	Federally Funded Health Centers (Rural)(2004)	IHS Vacancy Rate (1/2010)
Nurse	9%	16%
Family Practice Physician	15.7%	21%
Pharmacist	16.6%	11%

Step 1: Know your numbers

- Most sites had no idea of their screening score
- Apart from Prenatal HIV Screening, most sites don't know measures exist

Step 2: understand your numbers

- Identification and audit of 20-30 non-screened patients using will find systemic gaps, and takes only a couple hours
- If you don’t have the support to identify and audit charts, contact me and I will do it for you remotely

Step 3: Improve Screening

Identify and screen appropriate patients using:

- Standing orders
- Clinical Reminders
- Provider Orientation
- Telephone triage nurse