

## *Mr. TN*

24-year-old man with HIV, probably acquired the virus 2 years ago

He has no symptoms, no serious prior illnesses. Smokes ½ pack/d. Uninsured.

Attending graduate school. Moved here from East Coast with his partner who is HIV-negative. Monogamous, safer sex

Healthy appearing with normal exam

## *Mr. TN*

Hepatitis B immune. Hepatitis C & RPR negative. General lab panels normal.

CD4 566 (33%) and HIV viral load 18,000

He has been reading & chatting online. Is contemplating starting HIV therapy, but is also looking to you for guidance.

*Mr. TN*

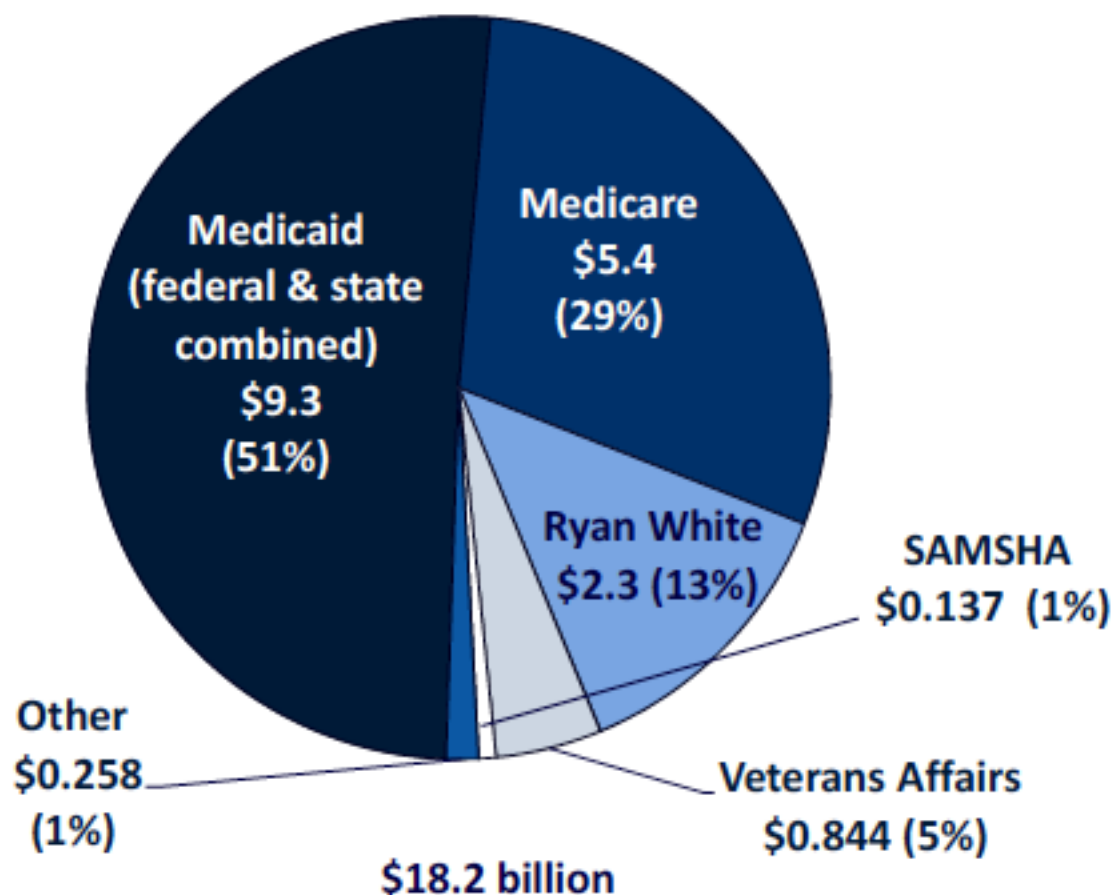
**What is your advice to Mr. TM about starting combination antiretroviral treatment (cART)?**

# *Considerations*

- ❑ Science (what's known)
- ❑ Unknowns - longterm
  - Brain, heart, liver, bone, & kidney health
  - Cancer risk
  - Aging (frailty & longevity)
- ❑ Psychosocial, substance use factors
- ❑ Patient readiness
- ❑ Public health (risk to partner)
- ❑ Payer (\$\$)

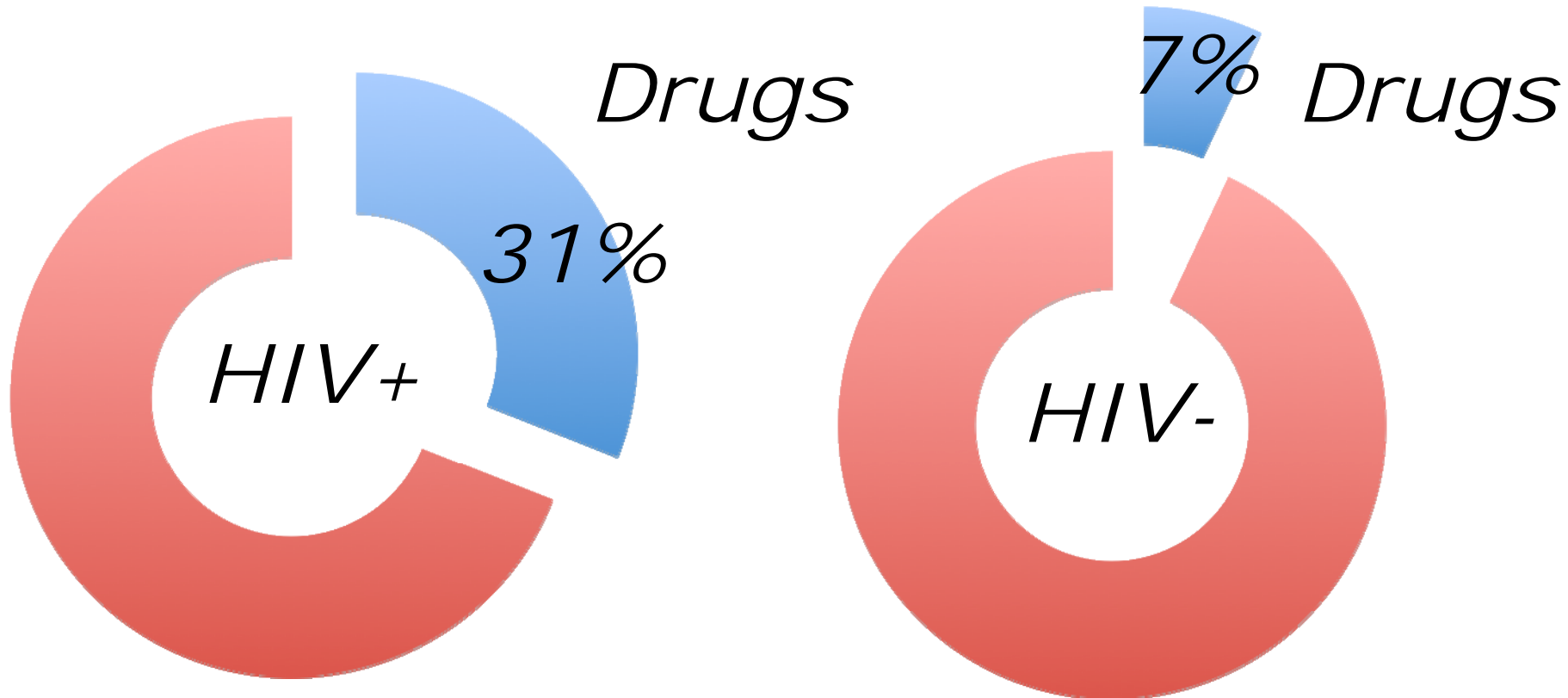
# Federal Spending for HIV Care by Program (including state share of Medicaid), FY 2011

In Billions

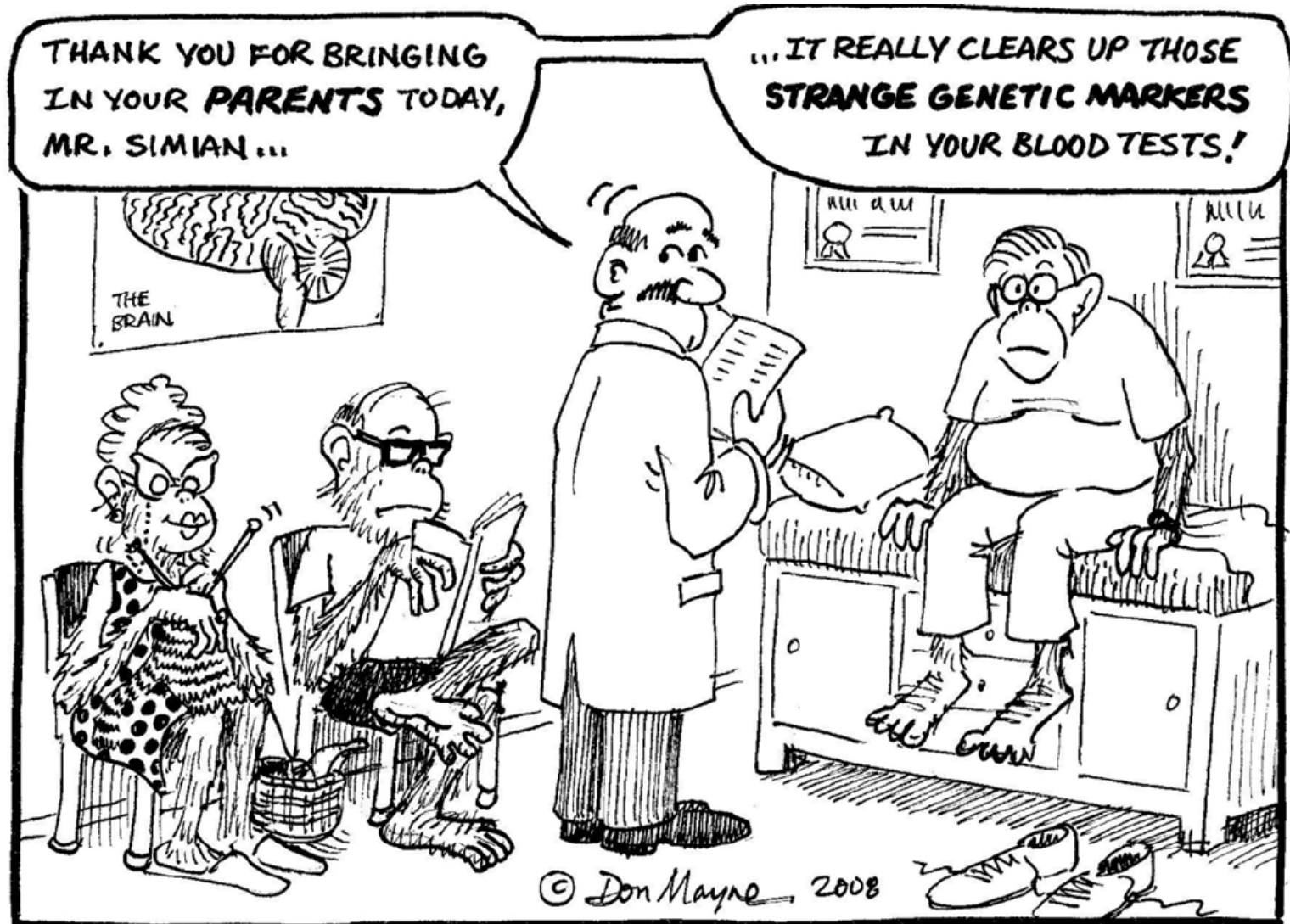


NOTE: Other includes spending at DoJ, DoD, FEHB, and HHS Office of the Secretary. SOURCE: Kaiser Family Foundation, analysis of data provided by the Office of Management and Budget and Centers for Disease Control and Prevention, 2011.

# *Prescription Drugs Account for Largest Share of Medicaid Spending for HIV+*



# Making the most out of what we have



# *Pre-Exposure Prophylaxis, PrEP*

CDC issues interim guidance on PrEP use  
for men who have sex with men (MSM)

MMWR. January 2011

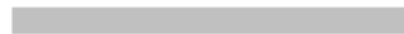
Two-thirds of HIV-negative  
MSM likely to use PrEP

National HIV Prevention Conference, 2011

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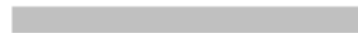
Can we afford to invest in PrEP (*pre-exposure prophylaxis*)?

Yes



(53%)

No



(47%)

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# *PrEP*



- ❑ Once-daily pill - 2 antiretroviral drugs
  - Truvada = tenofovir (TDF) and emtricitabine (FTC)
- ❑ ~\$17 per day; \$6,000-14,000 annually
- ❑ Generic version in other country as low as 40 cents per day

# *PrEP*

**What is your experience and thought about PrEP?**

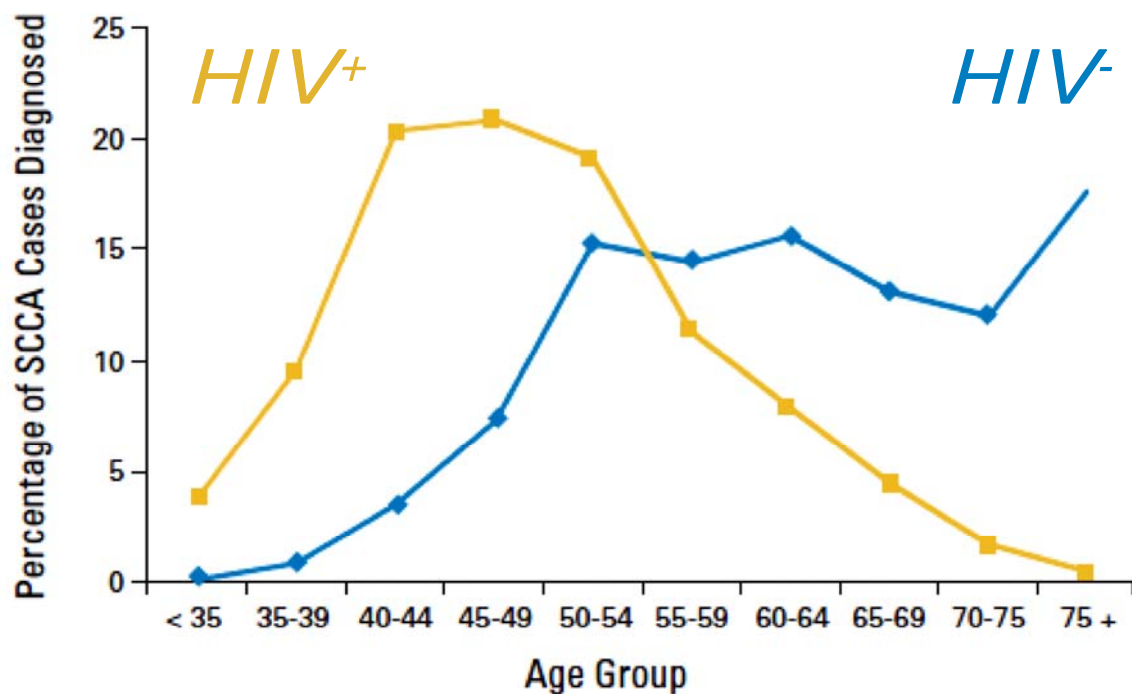
# *HPV-Related Anal Cancer*

- ❑ Incidence of anal cancer in HIV+ MSM exceeding incidence of cervical cancer<sup>1</sup>
- ❑ High grade dysplasia not uncommon<sup>2</sup>
- ❑ High-risk HPV types (16 & 18) common
- ❑ Need not have anal-receptive intercourse

1. Frisch, M., et al. J. Natl Cancer Inst. 2000; 92:1500

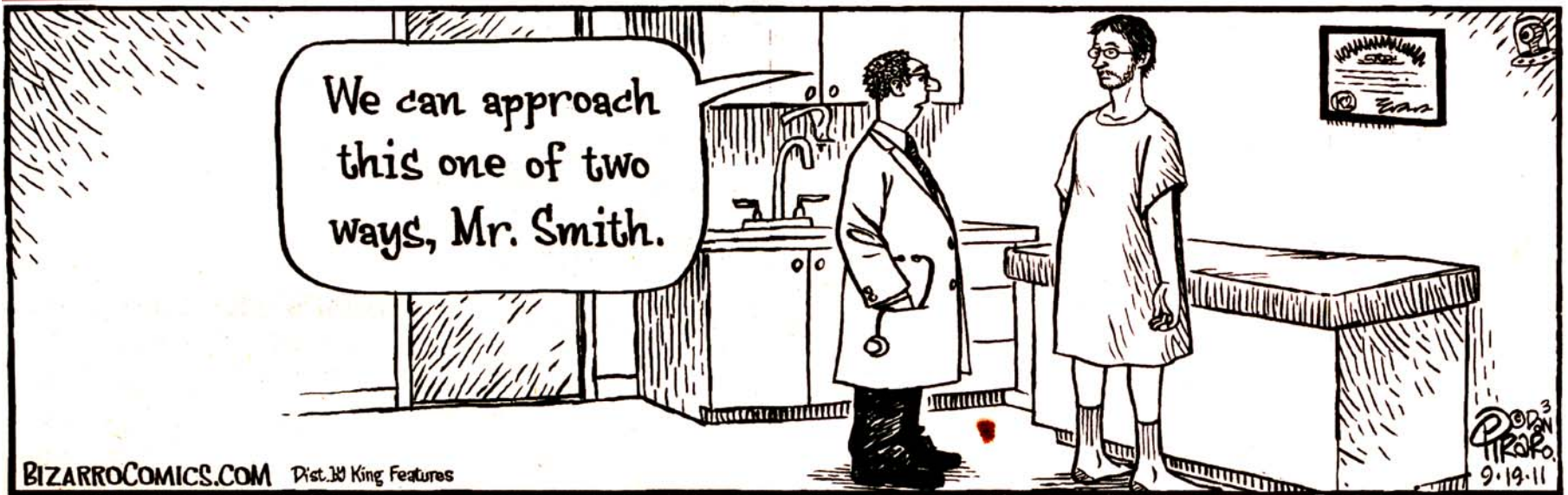
2. Chiao, E.Y., et al. Clin Infect Dis 2006; 43:233

# *Anal Cancer at Earlier Age*



Diagnosed among US Veterans (N=1112), 1998-2004

# *Anal Cancer Screening*



**What should we be doing?**

# *Anal Cancer Screening*

- Anal PAP
- High resolution anoscopy
- Digital rectal exam

**When should a biopsy be performed?**

# *HPV4 Vaccine*

□ Quadrivalent HPV vaccine for HPV types 6, 11, 16, & 18 (*Gardasil*)

GARDASIL is indicated in boys and men 9 through 26 years of age for the prevention of the following diseases caused by HPV types included in the vaccine:

- Anal cancer caused by HPV types 16 and 18
- Genital warts (condyloma acuminata) caused by HPV types 6 and 11

And the following precancerous or dysplastic lesions caused by HPV types 6, 11, 16, and 18:

- Anal intraepithelial neoplasia (AIN) grades 1, 2, and 3. (1)

# *HPV4 Vaccine*

□ Safe & immunogenic in HIV<sup>+</sup> men<sup>1</sup>  
(on cART + CD4 > 200 or CD4 > 350)

AIDS Malignancy Consortium

~ \$400 for vaccine, 3 doses

1. Wilken, T., et al. J Infect Dis 2010; 202:1246

# *HPV4 Vaccine*

**Who should be vaccinated?**

**What are the obstacles,  
problems, or uncertainties?**