

# CONTROLLING THE HIV EPIDEMIC WITH ANTIRETROVIRALS



Treatment as Prevention  
and Pre-Exposure Prophylaxis

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# Implementing TasP - Addressing Clinical and Other Concerns

Community perspective

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[www.aidsmap.com](http://www.aidsmap.com)



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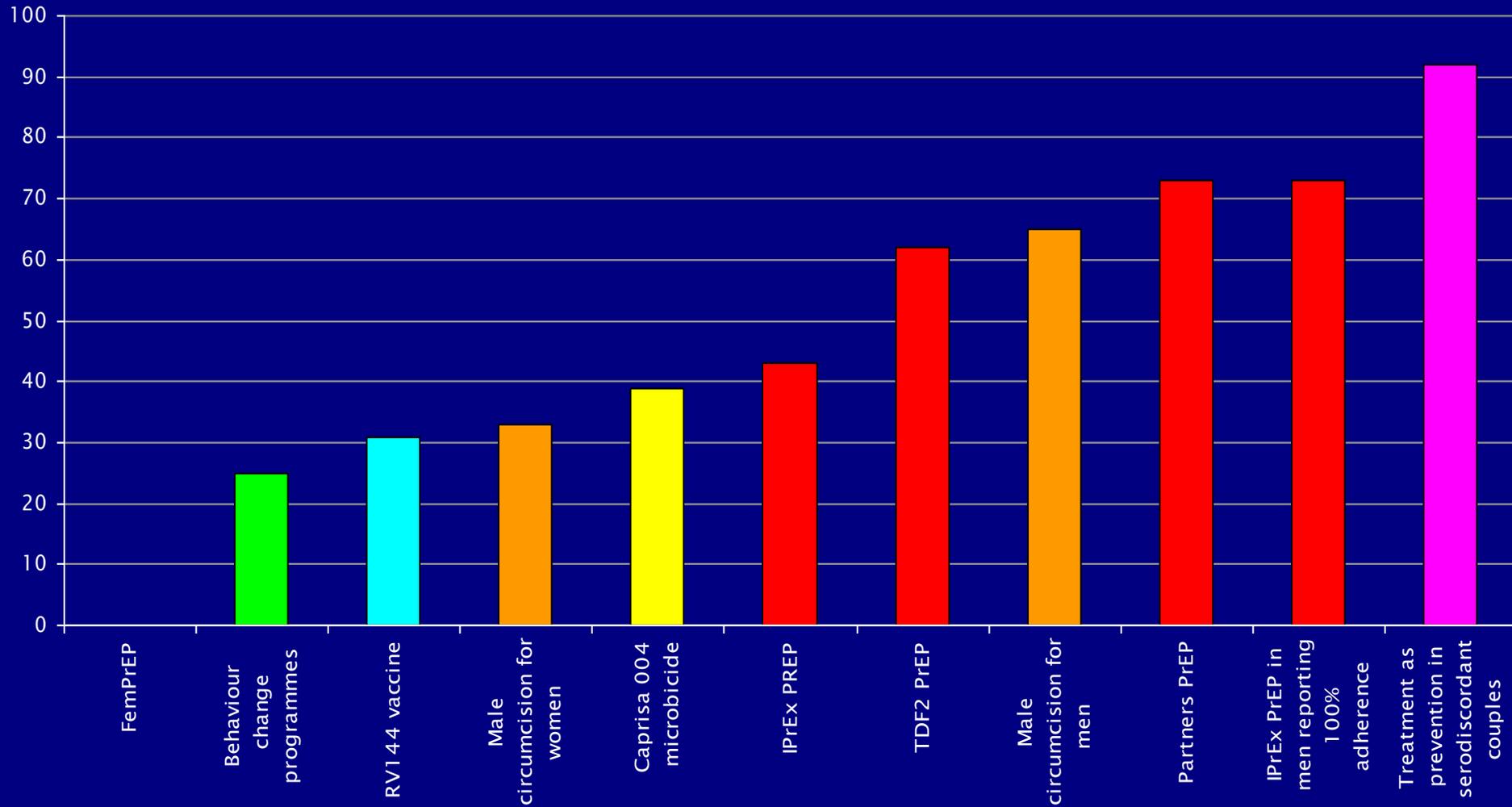
# Who is ‘The Community’?

- Activists
  - HIV treatment activists,
  - HIV prevention activists
  - Community activists
- HIV patients
- Their partners
- People at risk of HIV
- People not at-risk but affected (friends, family)
- Academics
- Healthcare providers
- Local providers
- Local politicians/leaders
- Funders/commissioners
- The law
- The media
- **Most of these categories overlap**



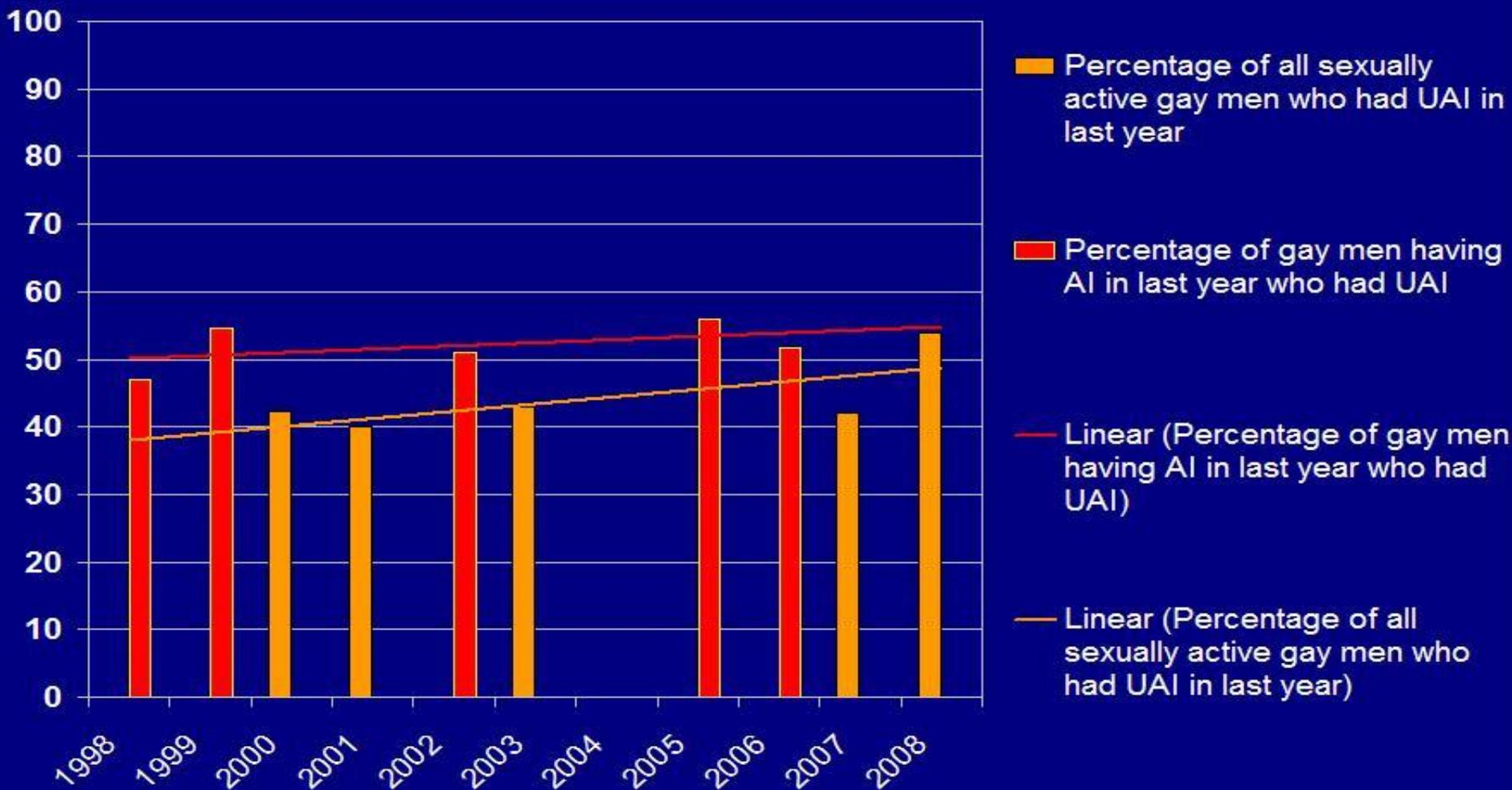
# Why we need T as P: 1, efficacy

Efficacy in prevention trials



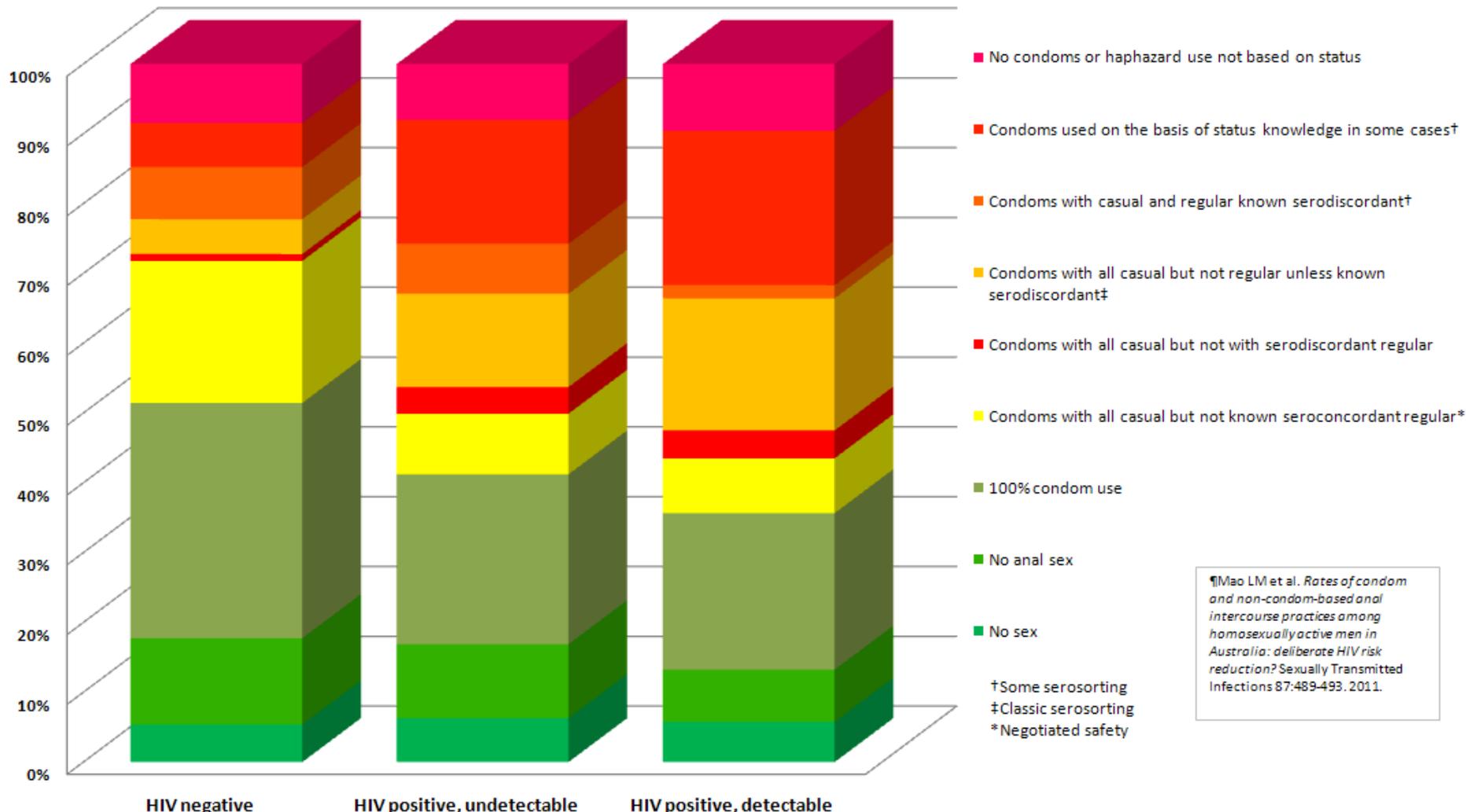
# Why we need TasP 2: inevitability

Unprotected anal sex, from GMSS



# Why we need TasP 3: complexity

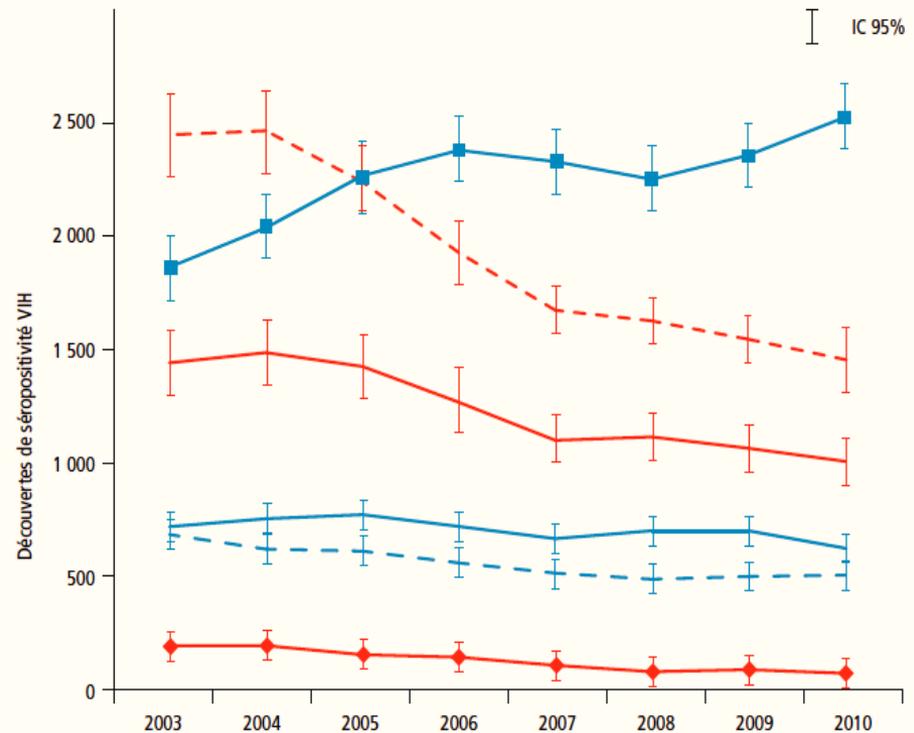
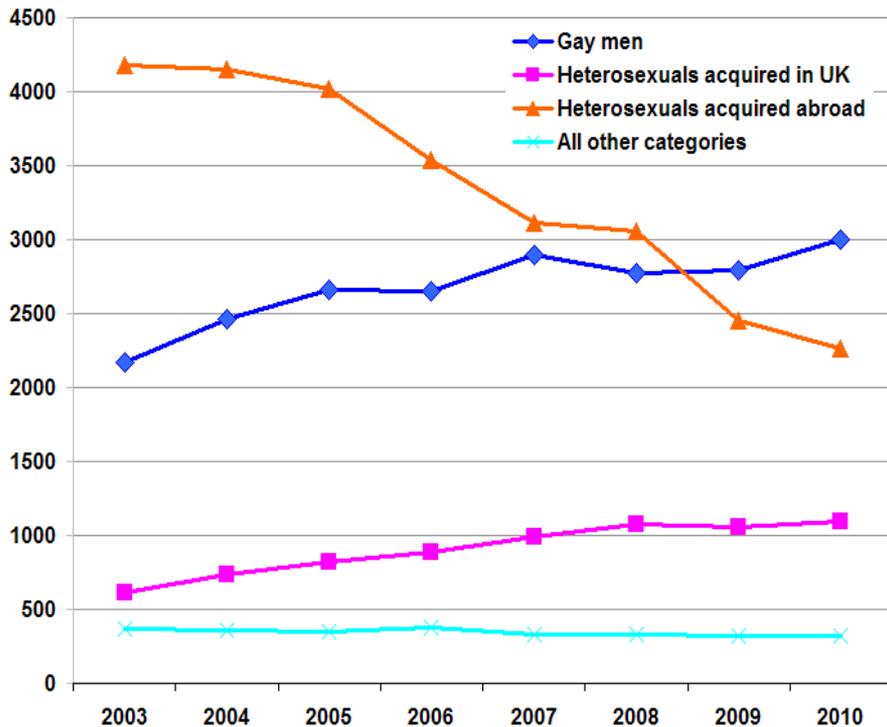
Gay men's choices: Australian national study<sup>¶</sup>



# Why we need TasP 4: consequences

- HIV diagnoses in UK and in France, 2002-2010

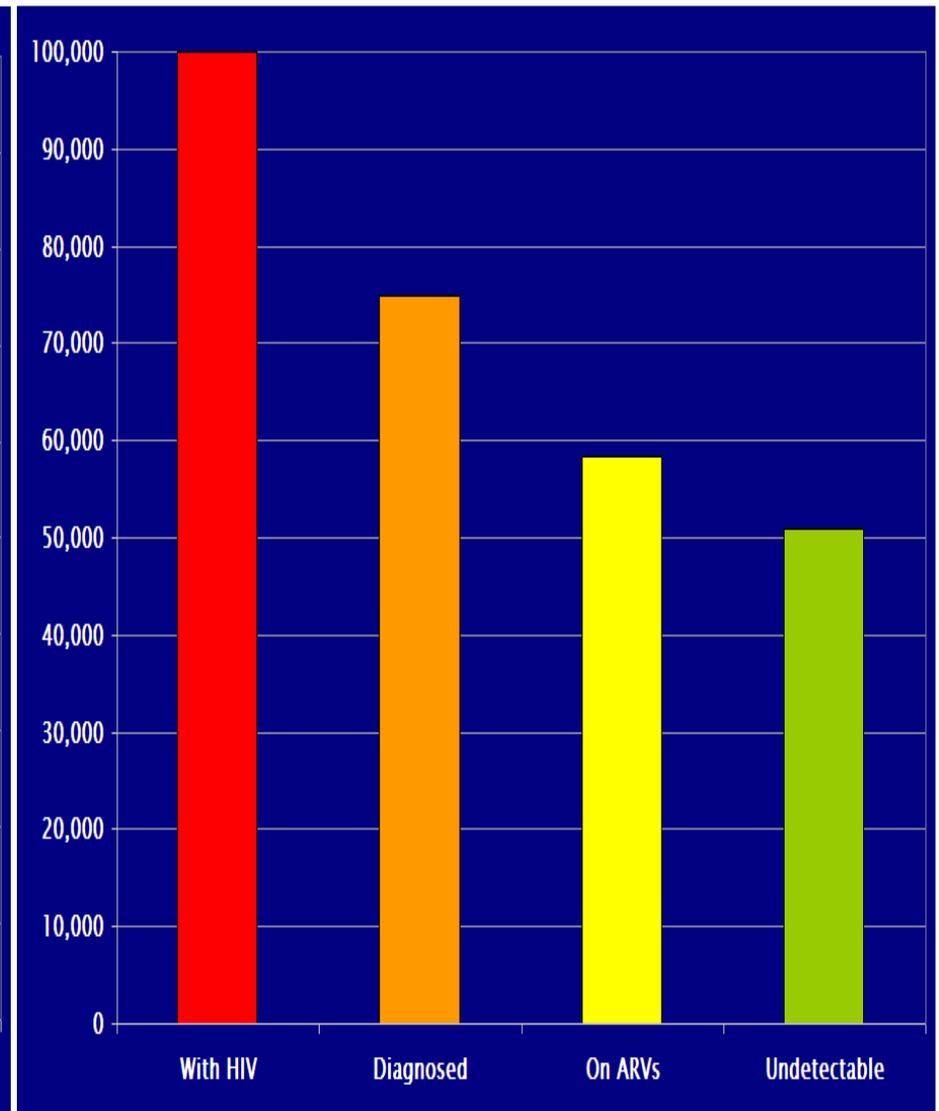
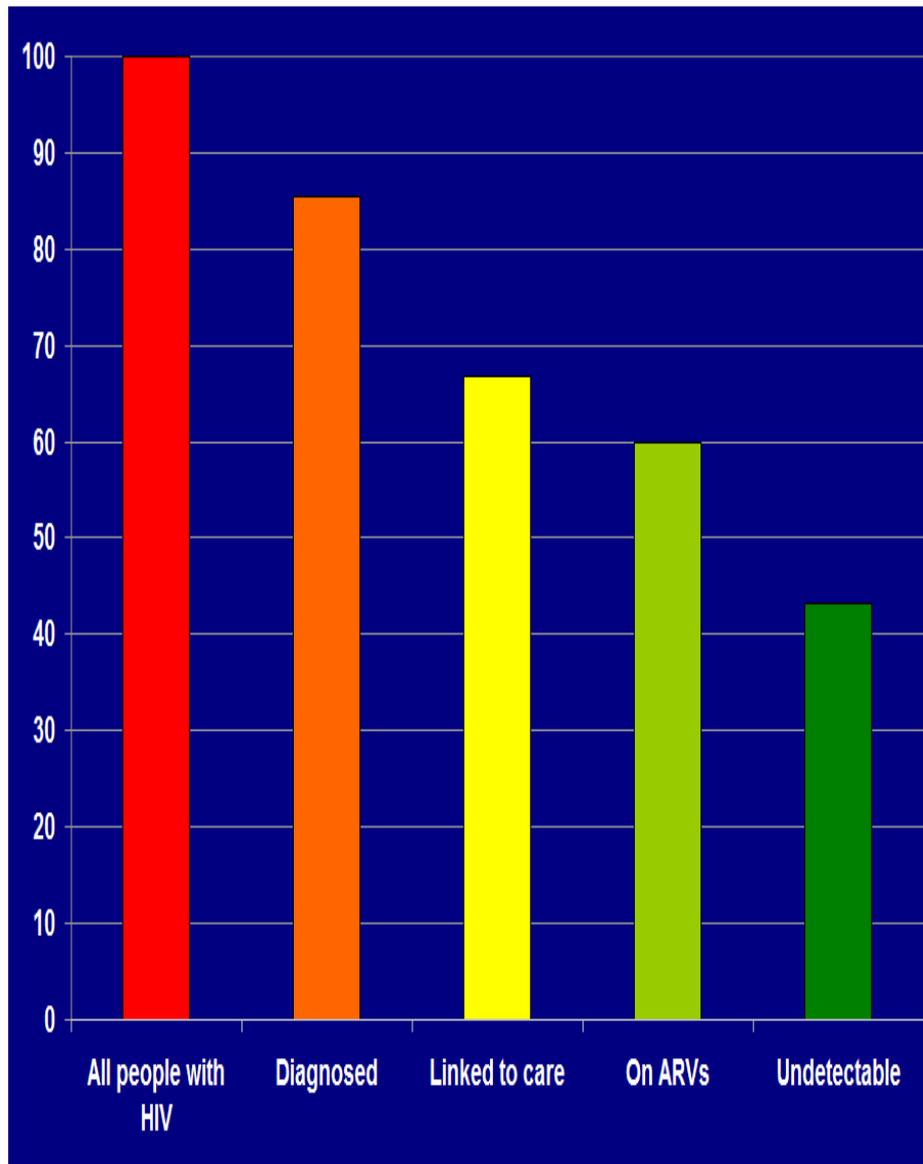
HIV diagnoses in UK, 2002-2010



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# Why not universal test-and-treat?

After all, we'll never manage to virally suppress everyone, even in the best systems –  
'cascades' from SF (left) and UK (right)



# Do good – or do no harm?

- From Hippocratic oath, original:
- “I will prescribe regimens for the good of my patients according to my ability and my judgment and never do harm to anyone.
- I will give no deadly medicine to any one if asked, nor suggest any such counsel.”



# Would universal T and T do harm?

Table from BHIVA guidelines 2012

**Table 1** Predicted 6-month risk of AIDS in antiretroviral therapy-naïve patients according to current age [(a) 25 years, (b) 35 years, (c) 45 years and (d) 55 years], CD4 cell count, viral load and whether antiretroviral therapy is initiated immediately or deferred

Treatment	Viral load (copies/mL)	Risk (%)									
		CD4 count (cells/μL)									
		50	100	150	200	250	300	350	400	450	500
<i>(a)</i>											
Deffered	3000	6.8	3.7	2.3	1.6	1.1	0.8	0.6	0.5	0.4	0.3
Ini tiated		2.3	1.2	0.8	0.5	0.4	0.3	0.2	0.2	0.1	0.1
Deffered	10000	9.6	5.3	3.4	2.3	1.6	1.2	0.9	0.7	0.5	0.4
Ini tiated		3.2	1.8	1.1	0.8	0.5	0.4	0.3	0.2	0.2	0.1
Deffered	30000	13.3	7.4	4.7	3.2	2.2	1.6	1.2	0.9	0.7	0.6
Ini tiated		4.4	2.5	1.6	1.1	0.7	0.5	0.4	0.3	0.2	0.2
Deffered	100000	18.6	10.6	6.7	4.6	3.2	2.4	1.8	1.4	1.1	0.8
Ini tiated		6.2	3.5	2.2	1.5	1.1	0.8	0.6	0.5	0.4	0.3
Deffered	300000	25.1	14.5	9.3	6.3	4.5	3.3	2.5	1.9	1.5	1.2
Ini tiated		8.4	4.8	3.1	2.1	1.5	1.1	0.8	0.6	0.5	0.4
<i>(b)</i>											
Deffered	3000	8.5	4.7	3.0	2.0	1.4	1.0	0.8	0.6	0.5	0.4
Ini tiated		2.8	1.6	1.0	0.7	0.5	0.3	0.3	0.2	0.2	0.1
Deffered	10000	12.1	6.7	4.3	2.9	2.0	1.5	1.1	0.9	0.7	0.5
Ini tiated		4.0	2.2	1.4	1.0	0.7	0.5	0.4	0.3	0.2	0.2
Deffered	30000	16.6	9.3	5.9	4.0	2.8	2.1	1.6	1.2	0.9	0.7
Ini tiated		5.5	3.1	2.0	1.3	0.9	0.7	0.5	0.4	0.3	0.2
Deffered	100000	23.1	13.2	8.5	5.8	4.1	3.0	2.3	1.7	1.3	1.1
Ini tiated		8.0	4.5	2.8	1.9	1.4	1.0	0.8	0.6	0.4	0.4
Deffered	300000	30.8	18.0	11.7	8.0	5.7	4.2	3.1	2.4	1.9	1.5
Ini tiated		10.3	6.0	3.9	2.7	1.9	1.4	1.0	0.8	0.6	0.5
<i>(c)</i>											
Deffered	3000	10.7	5.9	3.7	2.5	1.8	1.3	1.0	0.7	0.6	0.5
Ini tiated		3.6	2.0	1.2	0.8	0.6	0.4	0.3	0.2	0.2	0.2
Deffered	10000	15.1	8.5	5.4	3.6	2.6	1.9	1.4	1.1	0.8	0.7
Ini tiated		5.0	2.8	1.8	1.2	0.9	0.6	0.5	0.4	0.3	0.2
Deffered	30000	20.6	11.7	7.5	5.1	3.6	2.6	2.0	1.5	1.2	0.9
Ini tiated		6.9	3.9	2.5	1.7	1.2	0.9	0.7	0.5	0.4	0.3
Deffered	100000	28.4	16.5	10.6	7.3	5.2	3.8	2.9	2.2	1.7	1.3
Ini tiated		9.5	5.5	3.5	2.4	1.7	1.3	1.0	0.7	0.6	0.4
Deffered	300000	37.4	22.4	14.6	10.1	7.2	5.3	4.0	3.1	2.4	1.9
Ini tiated		12.5	7.5	4.9	3.4	2.4	1.8	1.3	1.0	0.8	0.6
<i>(d)</i>											
Deffered	3000	13.4	7.5	4.7	3.2	2.3	1.7	1.2	0.9	0.7	0.6
Ini tiated		4.5	2.5	1.6	1.1	0.8	0.6	0.4	0.3	0.2	0.2
Deffered	10000	18.8	10.7	6.8	4.6	3.3	2.4	1.8	1.4	1.1	0.8
Ini tiated		6.3	3.6	2.3	1.5	1.1	0.8	0.6	0.5	0.4	0.3
Deffered	30000	25.4	14.6	9.4	6.4	4.6	3.3	2.5	1.9	1.5	1.2
Ini tiated		8.5	4.9	3.1	2.1	1.5	1.1	0.8	0.6	0.5	0.4
Deffered	100000	34.6	20.5	13.3	9.2	6.5	4.8	3.6	2.8	2.2	1.7
Ini tiated		11.5	6.8	4.4	3.1	2.2	1.6	1.2	0.9	0.7	0.6
Deffered	300000	44.8	27.5	18.2	12.5	9.1	6.7	5.0	3.9	3.0	2.4
Ini tiated		14.9	9.2	6.1	4.2	3.0	2.2	1.7	1.3	1.0	0.8

Table 2.1 foot note: Predicted risk of AIDS if ART is deferred is taken from [10]. The predicted 6-month risk if ART is initiated is based on the assumption that the rate with immediate therapy initiation is one-third the rate without therapy initiation. This (probably conservative) value is based on considering evidence from multiple sources, including references [11–16]



# How does patient choice fit into this?

Also from BHIVA guidelines 2012

- **4.4.1 Recommendations**
- We recommend the evidence that treatment with ART lowers the risk of transmission is discussed with all patients, and an assessment of the current risk of transmission to others is made at the time of this discussion. (GPP)
- We recommend following discussion, if a patient with a CD4 count above 350 cell/ $\mu$ L wishes to start ART to reduce the risk of transmission to partners, *this decision is respected* and ART is started. (GPP)



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# Patient choice also means not taking treatments

Readiness is all - EACS algorithm

## Part II ARV treatment of HIV-infected patients

### Assessing patients' readiness to start ART <sup>(1)</sup>

Goal: Facilitate decision making and starting ART for patients who qualify according to international guidelines

#### Before initiating ART, screen for decision making and adherence barriers:

Patient-related factors:

- Depression <sup>(2)</sup>
- A. Harmful alcohol or recreational drug use <sup>(3)</sup>
- B. Cognitive problems <sup>(4,5)</sup>
- C. Low health literacy

System-related factors:

- D. Health insurance and drug supply
- E. Continuity of drug supply
- F. Social support and disclosure

Recognise, discuss and reduce problems wherever possible!

Assess patients' readiness and support progress between stages: <sup>(6)</sup>

"I would like to talk about HIV medication." <wait> "What do you think about it?" <sup>(7,8)</sup>

Remember:

- Set the agenda before every interview
- Use open questions whenever possible
- Use the WEMS-technique <sup>(9,10)</sup>

**Precontemplation:** "I don't need it, I feel good". "I don't want to think about it"

**Support:** Show respect for patient attitude / Try to understand health and therapy beliefs / Establish trust / Provide individualised short information / Schedule the next appointment

**Restage again** **Contemplation:** "I am weighing things up and feel torn about what to do about it"

**Support:** Allow ambivalence / Support to weigh pros and cons together with patient / Assess information needs and support information seeking / Schedule the next appointment

NO



**Restage again** **Preparation:** "I want to start, I think the drugs will allow me to live a normal life"

**Support:** Reinforce decision / Make shared decision on most convenient regimen / Educate: adherence, resistance, side effects / Discuss integration into daily life / Assess self-efficacy

**Ask:** Do you think you can manage to take cART consistently once you have started?

**Use:** VAS 0-10 <sup>(11)</sup>

0 ..... 5 ..... 10

NO



Patients presenting in the clinic may be at different stages of readiness: Precontemplation, contemplation or preparation [Transtheoretic model; Prochaska JO, Am Psychol 47:1102-1114, 1992]. The first step is to assess this stage, and then to support/intervene accordingly. An exception is if a patient presents late or very late, i.e. < 200 or < 50 CD4/μL. In this case the initiation of ART should not be delayed; the clinician should try to identify the most important adherence barriers which may be present, and support the patient to be prepared for prompt initiation of ART.

#### Consider skills training:

- Medication-taking training, possibly MEMS (2-4wk) <sup>(12)</sup>
- Directly Observed Therapy with educational support
- Use aids: Pillboxes, cell phone alarm, involve contact persons where appropriate

#### START AND MAINTAIN ADHERENCE

**Screen:** For adherence problems in each meeting <sup>(13)</sup>

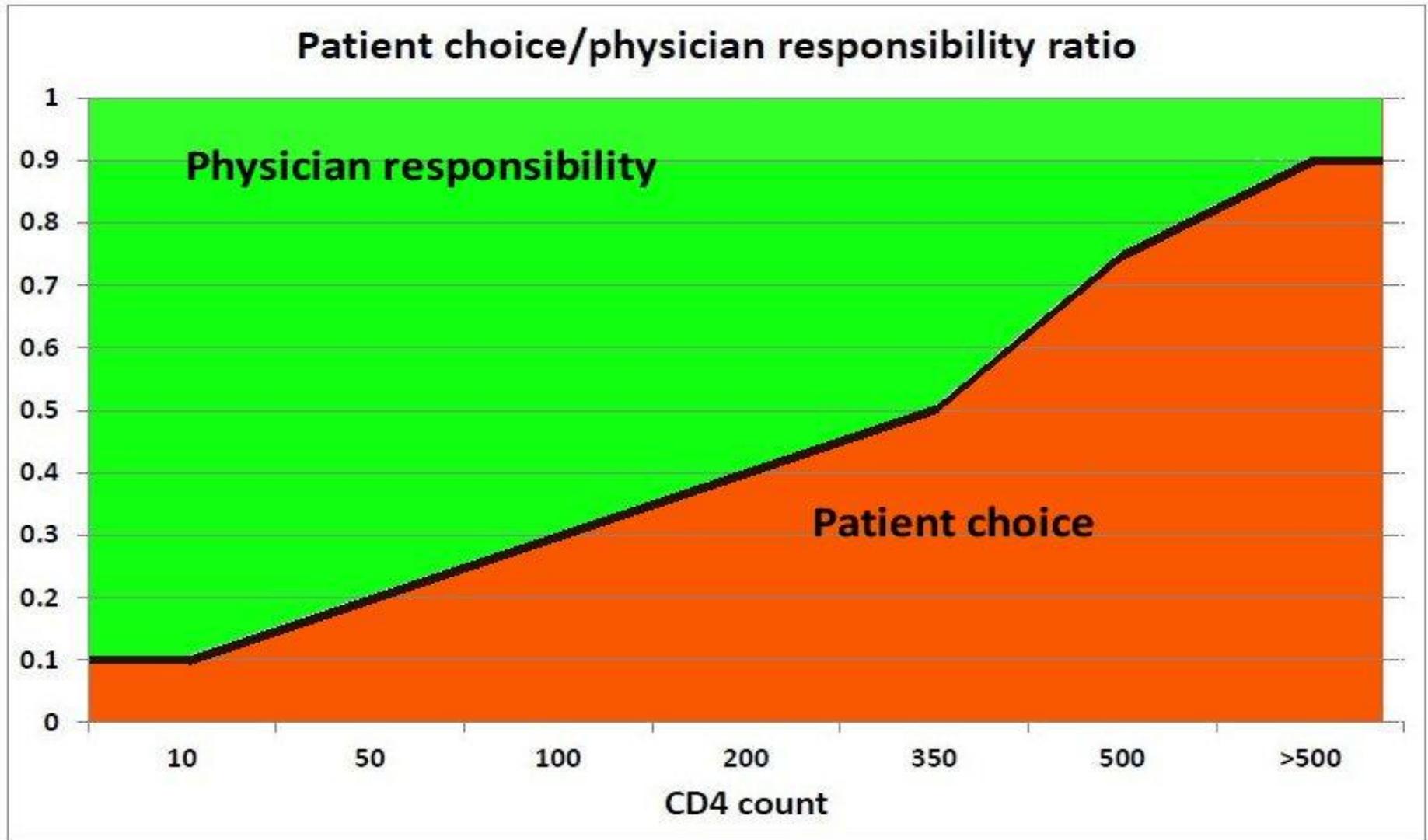
**Support:** Discuss side effects, educate about surrogate markers, discuss integration of drug-taking schedule

**Empower:** Give positive feedback



# Patient choice versus physician responsibility

Maybe we think of it like this



# Things that matter to doctors and patients

- Side effects
  - Adherence
  - Behaviour change
  - STDs
  - Onward infections
- I can't take ART because he'll see the pills and he'll know I'm positive
  - I must take ART because otherwise I'll have to use a condom and then she'll know I'm positive
  - I'm scared to take ART because if my partner finds out he'll use it to insist we don't use condoms any more
  - I must take ART because I can then prove to my partner that I'm not infectious and she won't insist we use condoms
  - I have to take ART because condoms make me lose my erection
  - I mustn't take ART because someone told me that it makes you impotent
  - I can't take ART because they're sending me back home and I won't be able to get it and then I'll become drug resistant
  - I must take ART because once I'm on the pills they won't be able to send me back home to where it's not available
  - I must take ART because someone told me HIV gives you cancer
  - I mustn't take ART because someone told me the pills give you cancer
  - I mustn't take ART because my pastor tells me I should trust in God
  - I must take ART because I want to live long enough to see my son graduate

