Syphilis in Gay/MSM in WA

Epidemiology & Emergent Trends

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M Clinic / WA AIDS Council

WA Syphilis Symposium; ASHM Sexual Health Conference

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Disclosure of Interest

None to Declare

Disclaimer:

The comments and opinions expressed during this presentation do not necessarily represent those of the M Clinic, its staff, nor the WA AIDS Council as an organisation

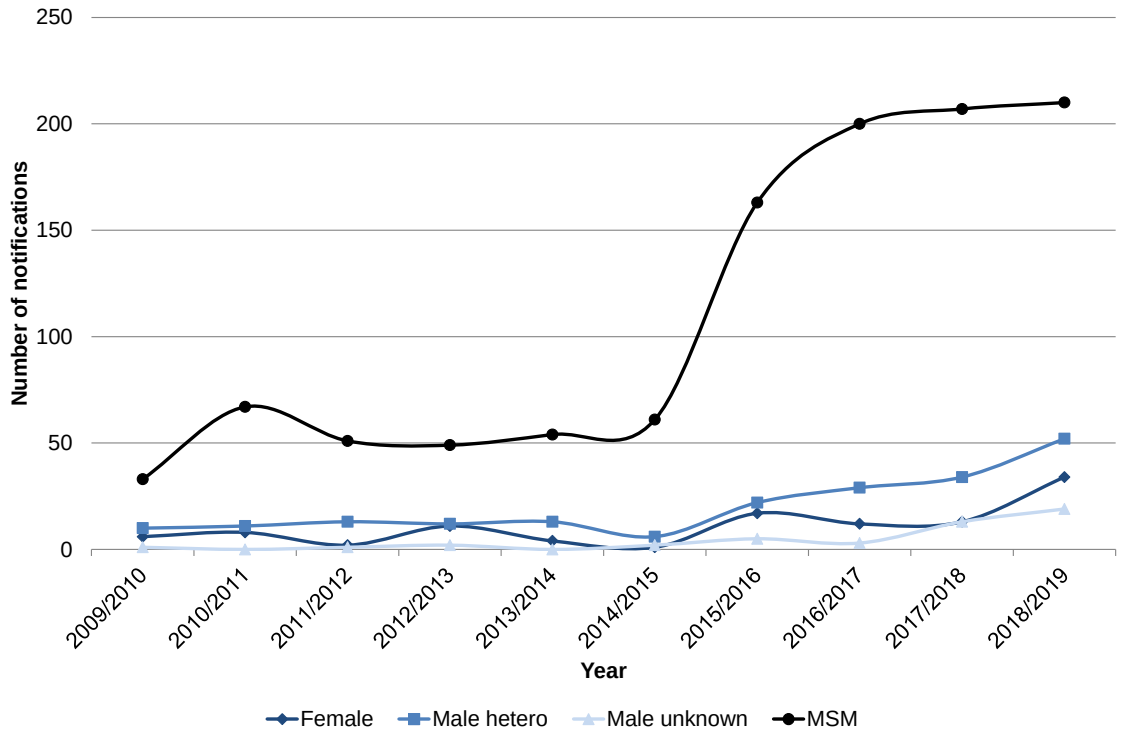
What I want to discuss & 'stir up' today

1. *Facts & Stats*

2. *'Pot Stirring' / Devil's Advocate:*

- What, or who, is to 'blame'?
- What more can we do? What might be missing that we're not doing already?
- "I heard it through the *controversial* grapevine"

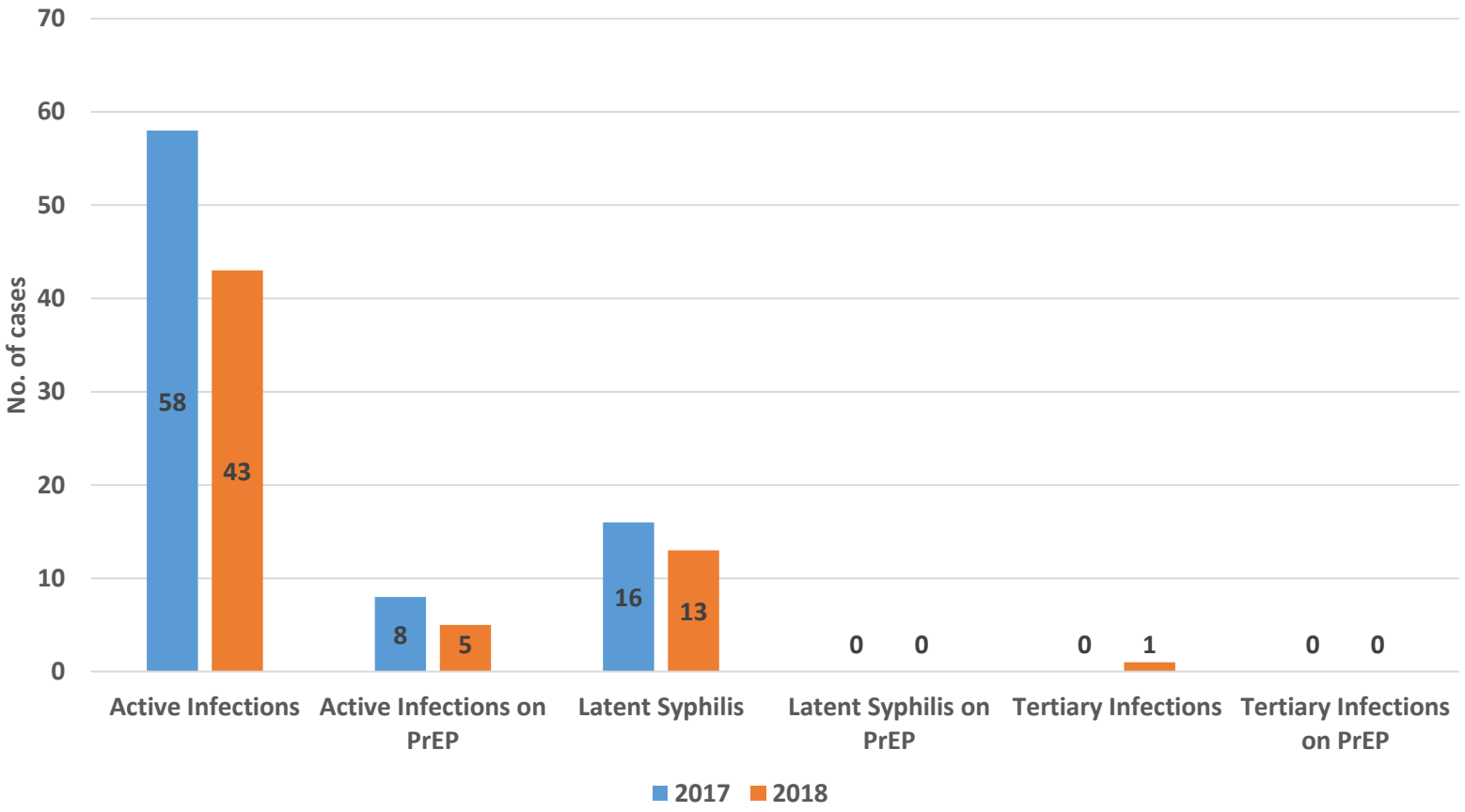
Number of Infectious Syphilis Notifications in the Metropolitan Area by exposure category, WA, 2009/2010 to 2018/2019



Data supplied by WA CDCD (2019)

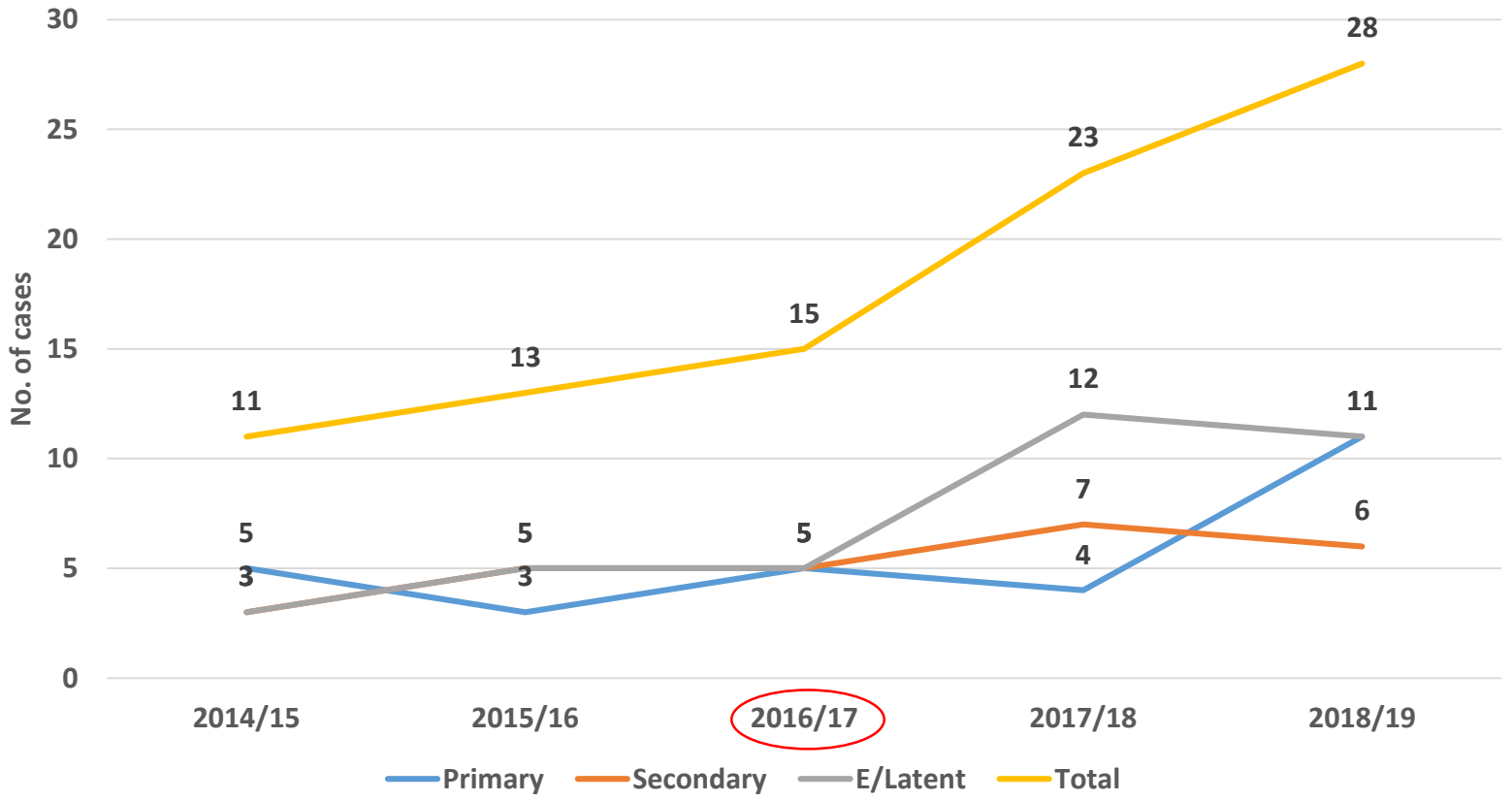
- "Notifications among MSM make up 66% of all notifications in the metropolitan area but the number of notifications have remained relatively stable since 16/17
- Increases in MSM may be the result of more comprehensive screening, an increasing trend in condomless anal sex in the context of the greater availability and awareness of highly effective HIV prevention strategies" (e.g. PREP)

Royal Perth Hospital Sexual Health Clinic



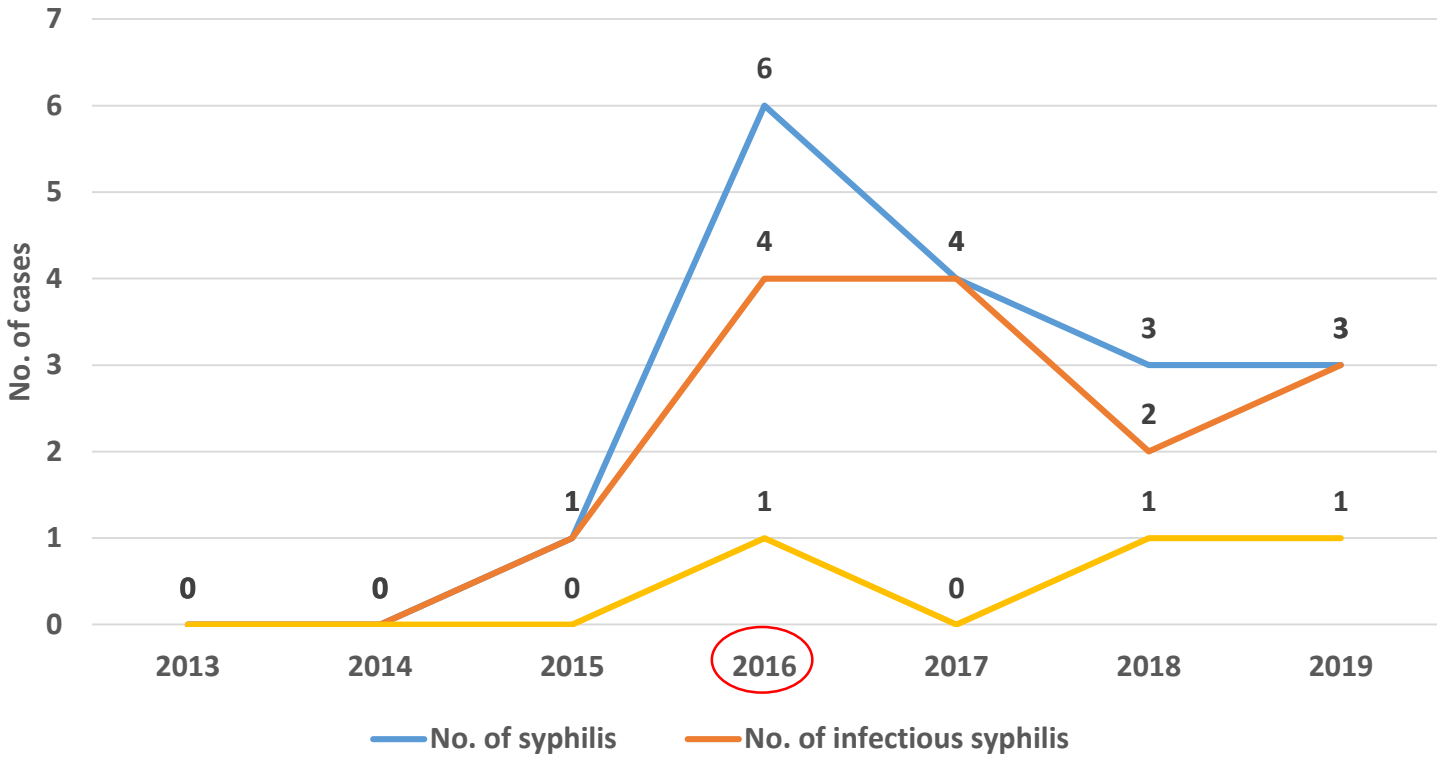
In 2017, 13.8% of MSM with active syphilis infections were on PrEP; while in 2018 11.6% of MSM with active syphilis infections were on PrEP that attended RPH.

South Terrace Clinic, Fremantle



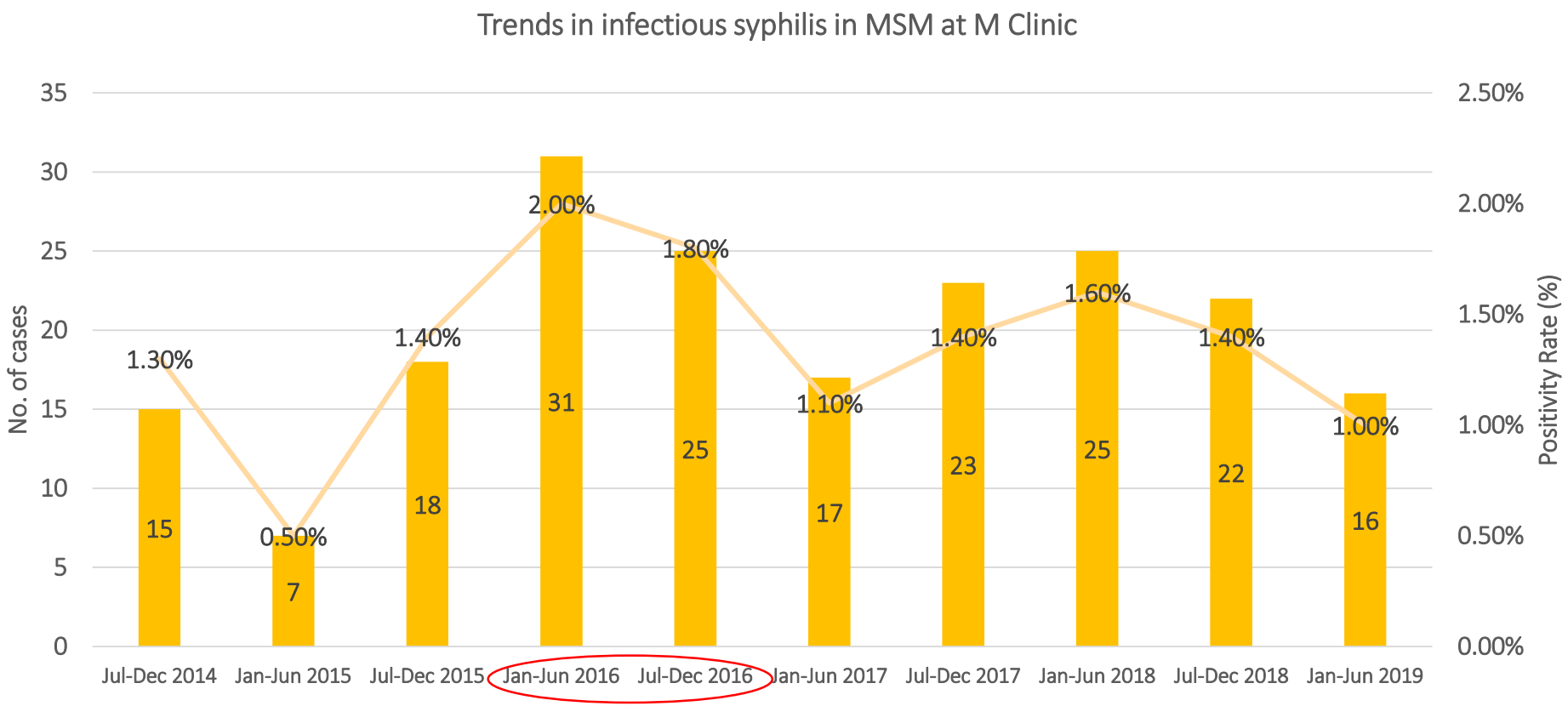
- 35 new infections in MSM over the past 18 months

Sexual Health Quarters, Northbridge



- *100% of syphilis cases reported condomless anal intercourse. C*omputer-based notes began ~ 2014 hence data skew
- First infection in 2015; biggest spike in 2016 and pretty constant since
- Up until 2019 all syphilis was referred to RPH for treatment
- Treating onsite began 2019; clients likely chose not to screen @ SHQ as couldn't be managed at one site
- Since starting syphilis treatment onsite it's likely numbers will now rise
- Anecdotal reporting from MSM: choosing to screen @ because of wait times at M Clinic & RPH *(glass half full?!)*

M CLINIC



- *13 in Jan-Jun 2014 (total), 17 in Jul-Dec 2013 (total). Positivity rates not determined in those time periods.*

M Clinic – Infectious Syphilis Risk Factors

Risks factors for infectious syphilis cases January – June 2019				
	Positives	Tests	Positivity Rate	Relative Risk
New vs Returning Patients				
New	6	245	2.4%	3.37
Returning	10	1377	0.7%	0.30
Age Group				
Under 30 years old	4	536	0.7%	0.68
30+ years old	12	1086	1.1%	1.48
HIV status				
PLHIV	1	33	3.03%	2.74
Not PLHIV[1]	15	1360	1.02%	0.34
Aboriginal or Torres Strait Islander				
ATSI	1	33	3.03%	2.75
Not ATSI[2]	15	1360	1.10%	0.36
Country of birth				
Australia	10	786	1.3%	0.79
Overseas	12	743	1.6%	1.27
AOD use before or during sexual activity in the last 6 months				
AOD use[3]	17	1076	1.6%	1.43
No AOD use	5	453	1.1%	0.70
Methamphetamine use before or during sexual activity in the last 6 months				
Methamphetamine use	4	119	3.4%	2.63
No methamphetamine use	18	1410	1.3%	0.38
Alcohol use before or during sexual activity in the last 6 months				
Alcohol use	8	769	1.0%	0.56
No alcohol use	14	760	1.8%	1.77
Group sex in the last 6 months				
Group sex	11	601	1.8%	1.54
No group sex[4]	11	928	1.2%	0.65
PrEP use in the last 6 months				
PrEP use	11	494	2.2%	2.10
No PrEP use[5]	11	1035	1.1%	0.48
Number of male anal sex partners in the last 6 months[6]				
>10 partners	7	208	3.4%	2.92
0-10 partners	14	1215	1.2%	0.34
Condomless anal intercourse with casual sexual partners (CLAIC) in the last 6 months				
CLAIC	15	824	1.8%	1.83
No CLAIC[7]	7	705	1.0%	0.55

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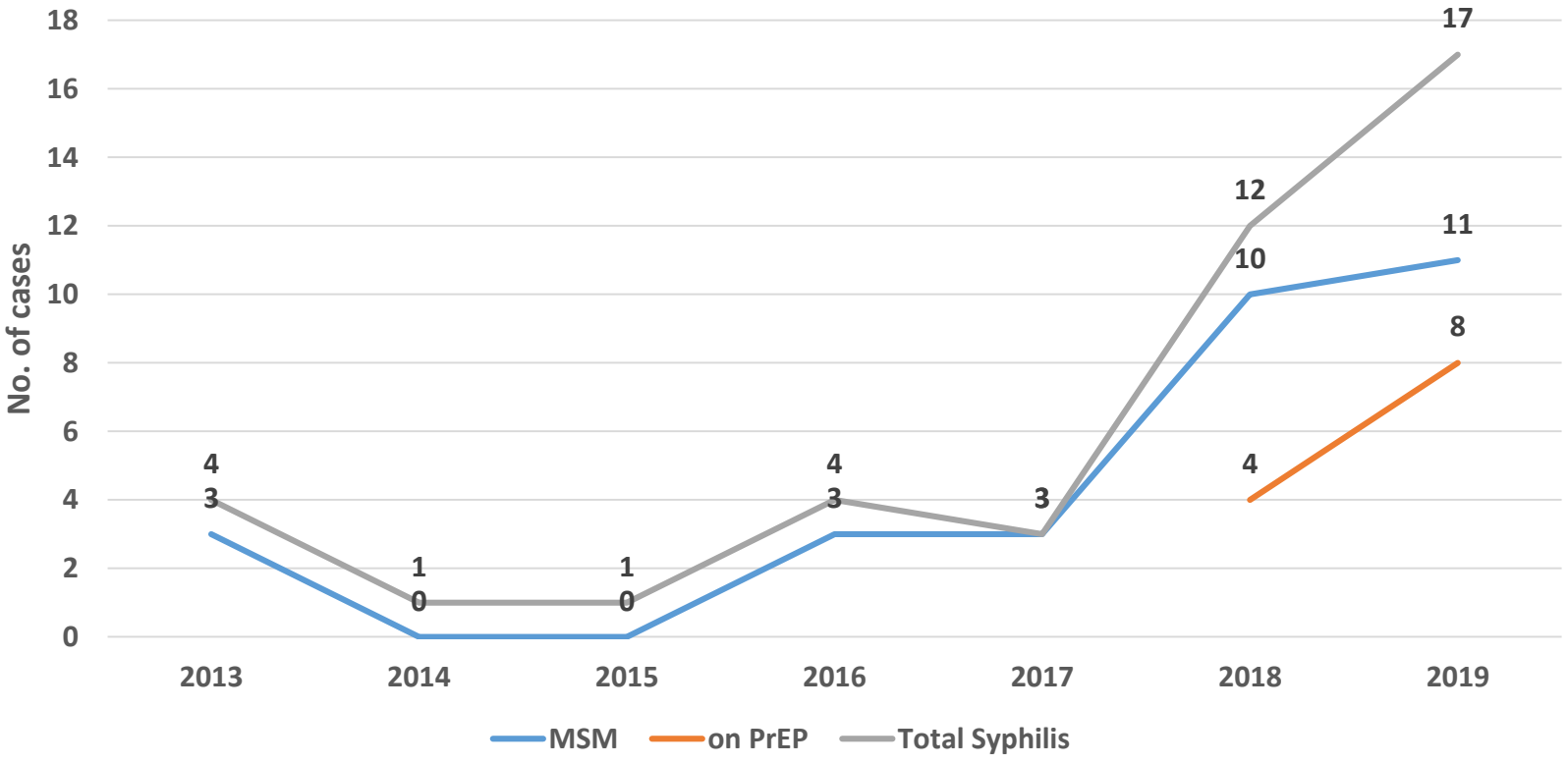
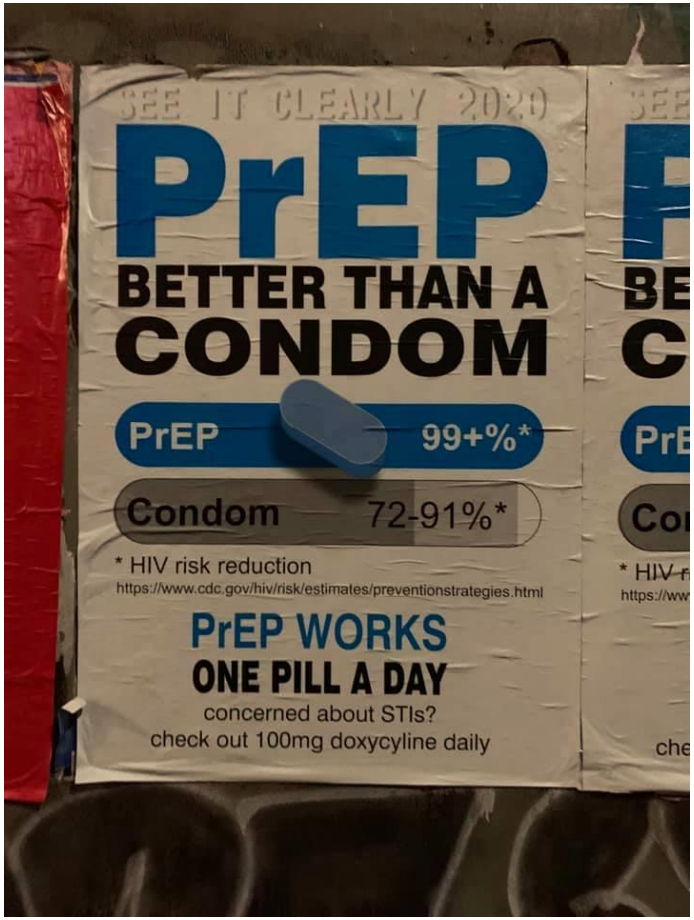
Northbridge Medical Centre



**2016 new gay friendly GP commenced work at NMC*

'Pot-Stirring'



https://www.pinknews.co.uk/2019/08/05/poster-campaign-bareback-sex-prep-better-than-condom/

- ***'See It Clearly 2020**,' said*:

"Presenting four choices of HIV prevention [PrEP, condoms, PEP and U=U] as somehow all equal and all good is a disservice."

- ***Rodney Ellis**, founding member of PrEP Access Now (PAN), defended the poster's message:*

*"…**STIs are curable**, HIV is not, and I've lost two decades of friends to HIV but **not a single one to an STI…***

"That condoms 'prevent STIs' was a convenient myth at the time**. It reinforced condom use for HIV, but before HIV**, condoms were never considered for STI prevention for gay men. Condoms only reduce some risk for some STIs and with some sexual acts.

*"**Testing every three months is the more effective STI prevention…** The early adopters of Doxy-PrEP are also reporting good things and **I've been on it since 2015 and not had an STI since."***

Ellis pointed to a recent study which suggests that increased use of PrEP among men who have sex with men could lead to a decline in the rates of gonorrhoea and chlamydia, even if they use condoms less frequently.

'Pot-Stirring' cont

Clinical Infectious Diseases

MAJOR ARTICLE

Incidence of Gonorrhea and Chlamydia Following Human Immunodeficiency Virus Preexposure Prophylaxis Among Men Who Have Sex With Men: A Modeling Study

Samuel M. Jenness,[1] Kevin M. Weiss,[1] Steven M. Goodreau,[2] Thomas Gift,[3] Harrell Chesson,[3] Karen W. Hoover,[4] Dawn K. Smith,[4] Albert Y. Liu,[5] Patrick S. Sullivan,[1] and Eli S. Rosenberg[1]

[1]Department of Epidemiology, Emory University, Atlanta, Georgia; [2]Department of Anthropology, University of Washington, Seattle; [3]Division of STD Prevention, and [4]Division of HIV/AIDS Prevention, Centers for Disease Control and Prevention, Atlanta, Georgia; and [5]San Francisco Department of Public Health, California

Background. Preexposure prophylaxis (PrEP) is highly effective for preventing human immunodeficiency virus (HIV) infection, but risk compensation (RC) in men who have sex with men (MSM) raises concerns about increased sexually transmitted infections (STIs). The Center for Disease Control and Prevention's (CDC's) PrEP guidelines recommend biannual STI screening, which may reduce incidence by treating STIs that would otherwise remain undiagnosed. We investigated these two counteracting phenomena.

Methods. With a network-based mathematical model of HIV, *Neisseria gonorrhoeae* (NG), and *Chlamydia trachomatis* (CT) transmission dynamics among MSM in the United States, we simulated PrEP uptake following the prescription indications and HIV/STI screening recommendations in the CDC guidelines. Scenarios varied PrEP coverage (the proportion of MSM indicated for PrEP who received it), RC (a reduction in the per-act probability of condom use), and the STI screening interval.

Results. In our reference scenario (40% coverage, 40% RC), 42% of NG and 40% of CT infections would be averted over the next decade. A doubling of RC would still result in net STI prevention relative to no PrEP. STIs declined because PrEP-related STI screening resulted in a 17% and 16% absolute increase in the treatment of asymptomatic and rectal STIs, respectively. Screening and timely treatment at quarterly vs biannual intervals would reduce STI incidence an additional 50%.

Conclusions. Implementation of the CDC PrEP guidelines while scaling up PrEP coverage could result in a significant decline in STI incidence among MSM. Our study highlights the design of PrEP not only as antiretroviral medication but as combination HIV/STI prevention incorporating STI screening.

Keywords. *Neisseria gonorrhoeae*; *Chlamydia trachomatis*; men who have sex with men; preexposure prophylaxis; mathematical model.

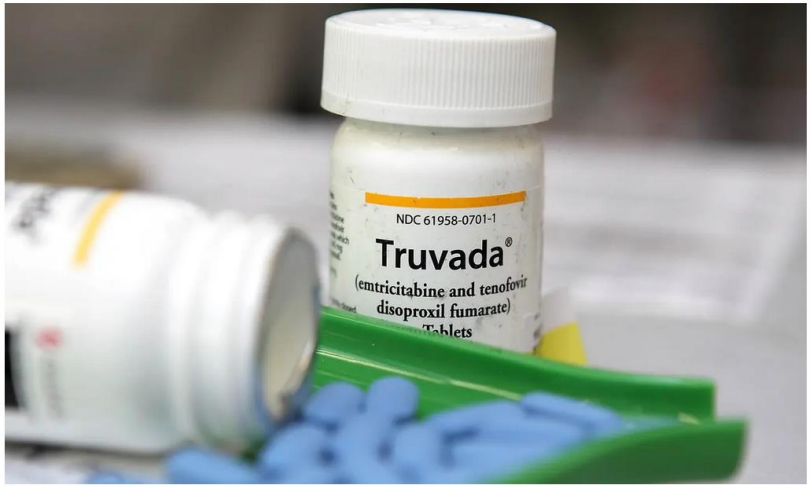
https://www.poz.com/article/scaling-prep-reduce-rate-stis-even-condom-use-declines

- A mathematical modeling study projected the effect of routine STI screening among a population of gay and bi men on PrEP. Increased use of PrEP among MSM could lead to a decline in the rates of gonorrhea & chlamydia among them, even if starting PrEP leads them to use condoms less frequently.

- The mathematical modeling projected that twice-annual STI screening & quarterly HIV screening [reduce] STI rates over time

'Pot-Stirring' cont

Truvada and the truth: is HIV prevention propelling the STI epidemic?



▲ Bottles of antiretroviral drug Truvada are displayed at Jack's Pharmacy in San Anselmo, California. Photograph: Justin Sullivan/Getty Images

https://www.theguardian.com/society/2018/oct/21/truvada-prep-hiv-prevention-sti-msm

- *"It has been abundantly clear that PrEP arrived **amid a two-decade decline in condom use among MSM***
- *"This…trend [is] driven by multiple factors, including **diminishing anxieties about HIV following [introduction of HAART]** in 1996, and in the 2010s, an accumulation of evidence indicating that successfully treating HIV effectively blocks transmission [U=U]."*

Comments…

- *We have seen a **significant rise in cases which also coincides with wider access to PREP. ?Coincidence, ?better testing** though the recent rise in primary syphilis is not about testing as these people came with symptoms obviously. **There is a true increase in infectious syphilis in our data at least over the past 5 years.***

- *The main concern for me anecdotally is the feeling that **quite a lot of the MSM don't really take getting STIs seriously anymore and it is sad we are seeing people reinfected with syphilis more than once**, <u>even despite the nasty treatment that we give for it!</u> I'm at a loss to how we can make people understand (not just MSM) how important it is to not keep acquiring STIs over and over as **the message doesn't seem to get through to some of them***

- ***Sex makes people dumb**; they panic after the fact. [too many] have a **sense of entitlement** i.e. 'I don't need to worry or take precautions because I'll get treated & "it's my right" '. [there's] no need to worry because the [bacterial] STIs are treatable*

Comments…

- *Client seen @ M Clinic:* ***"if I don't go on PREP I'll be a social pariah";*** *implied pressure to be on PREP because "everyone else is"; "We're all on PREP, why aren't you?* ***VS*** *Clients who express concerns: "sure PREP protects you against HIV but it doesn't protect you against anything else" i.e. they see* ***some people on PREP as 'reckless' or thinking the other STI's don't matter***

- ***I think the disapproval [from clinicians] around MSM acquiring STI's is all about moral & value judgement. We regularly treat people who are overweight, those with diabetes & hypertension with empathy; why is it that we treat the acquisition of STIs differently. Its all about moral & value judgements***

- ***GK****:* ***Astonishing lack of public awareness*** *even with M Clinic clients; "I thought that was a disease of the middle ages, all those old kings and queens". The only public health campaign I've seen over recent years has been about chlamydia. Ad hoc out-shopping – D/W shop staff – "I'd better tell my sons!"*

Key Points

- Worrying lack of general public awareness about syphilis
- Syphilis is a disease of the “old days”
- Lack of awareness that *any* kind of sexual or intimate contact could lead to transmission of syphilis
- ‘Blasé’ attitudes that “it’s easily treated therefore nothing to especially worry about” (?)
- Despite our/your own moral & value judgements: *yes, always* still emphasising how serious syphilis can be, but *please* exhibit a *non-judgemental* attitude – you don’t want to lose them!

Acknowledgments

- *Joe Staniszewski; Practice Manger M Clinic*
- *Dr Lewis Marshall, South Terrace Clinic*
- *Cara Taheny, Clinical Nurse, Sexual Health Quarters*
- *Dr Richelle Douglas, Medical Director Sexual Health Quarters*
- *Dr Jenny McCloskey & Jonathan La , RPH Sexual Health Clinic*
- *Kellie Mitchell, Senior Research Officer, WA Communicable Disease Control Directorate*
- *Donna Keeley, Nurse Practitioner, South Terrace Clinic*
- *Dr Craig Shaw, Northbridge Medical Centre*
- *Dr Fergus McCabe, GP on Beaufort & M Clinic*
- *Dr Goran Pervan, GP on Beaufort (*unfortunately, despite gallant efforts, GPoB had significant issues with data extraction; having a relatively high & loyal MSM case load it's a shame the IT Gremlin meant their valuable data were not able to be included in this presentation)*