

Rapid Initiation of treatment in recently diagnosed HIV.

Dr Alan McOwan
56 Dean Street

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- Soho. Central London.
- 60% MSM
- 12,500 GUM attendances per month.
- 4000 HIV cohort.

- Focus on reducing undiagnosed HIV.
- 1 in 2 of MSM diagnosed in London.
- 50% RITA. (33% in 2014)



Diagnosis changes behaviour

- People who know they are HIV positive reduce their risk of transmission to others.
- 68% reduction in condomless sex with partners not known to be already HIV positive.

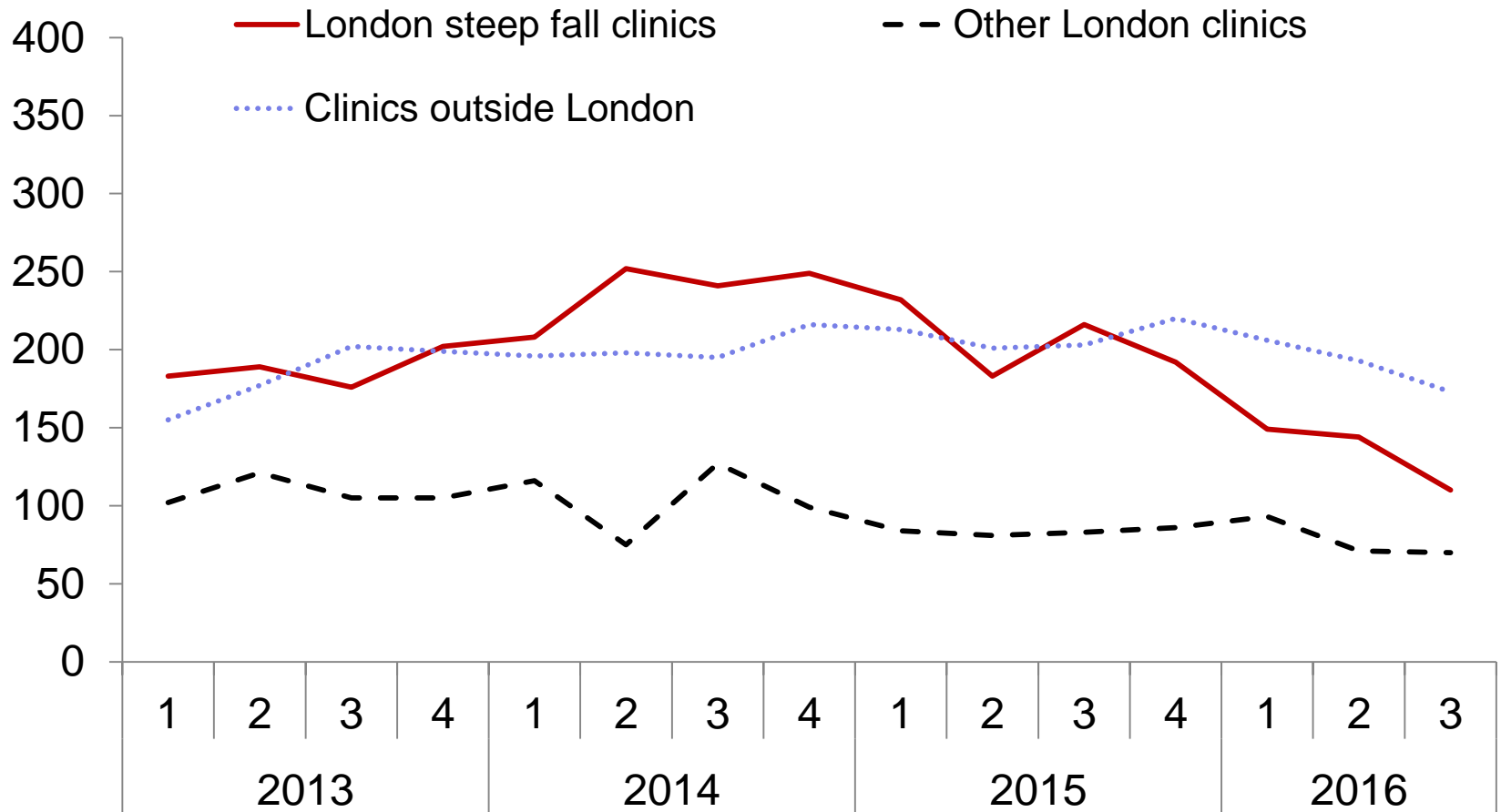
Meta-Analysis of High-Risk Sexual Behaviour in Persons Aware and Unaware They are Infected With HIV in the US: Implications for HIV Prevention Programs. JAIDS : Aug 2005, Vol 39, 4 pp 446-453.

Undetectable = Uninfectious

- PARTNER Study
- >58,000 condomless sex
- No HIV transmission if undetectable



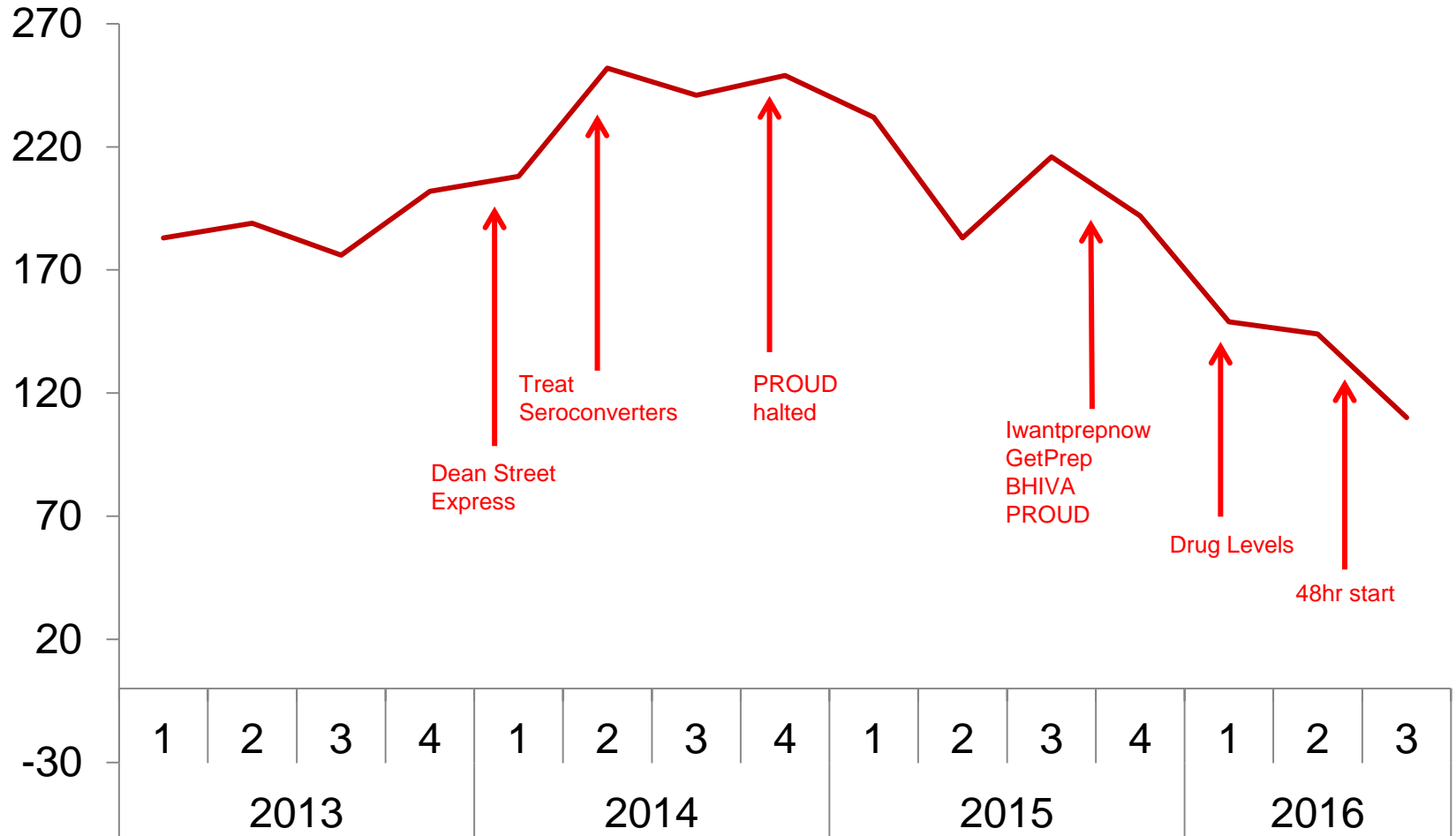
New HIV diagnoses among gay men attending sexual health clinics England



Steep fall definition: Clinics with >20% decrease in HIV diagnoses between Oct 2014-Sep 2015 and Oct 2015-Sep 2016, and over 40 diagnoses during this period.

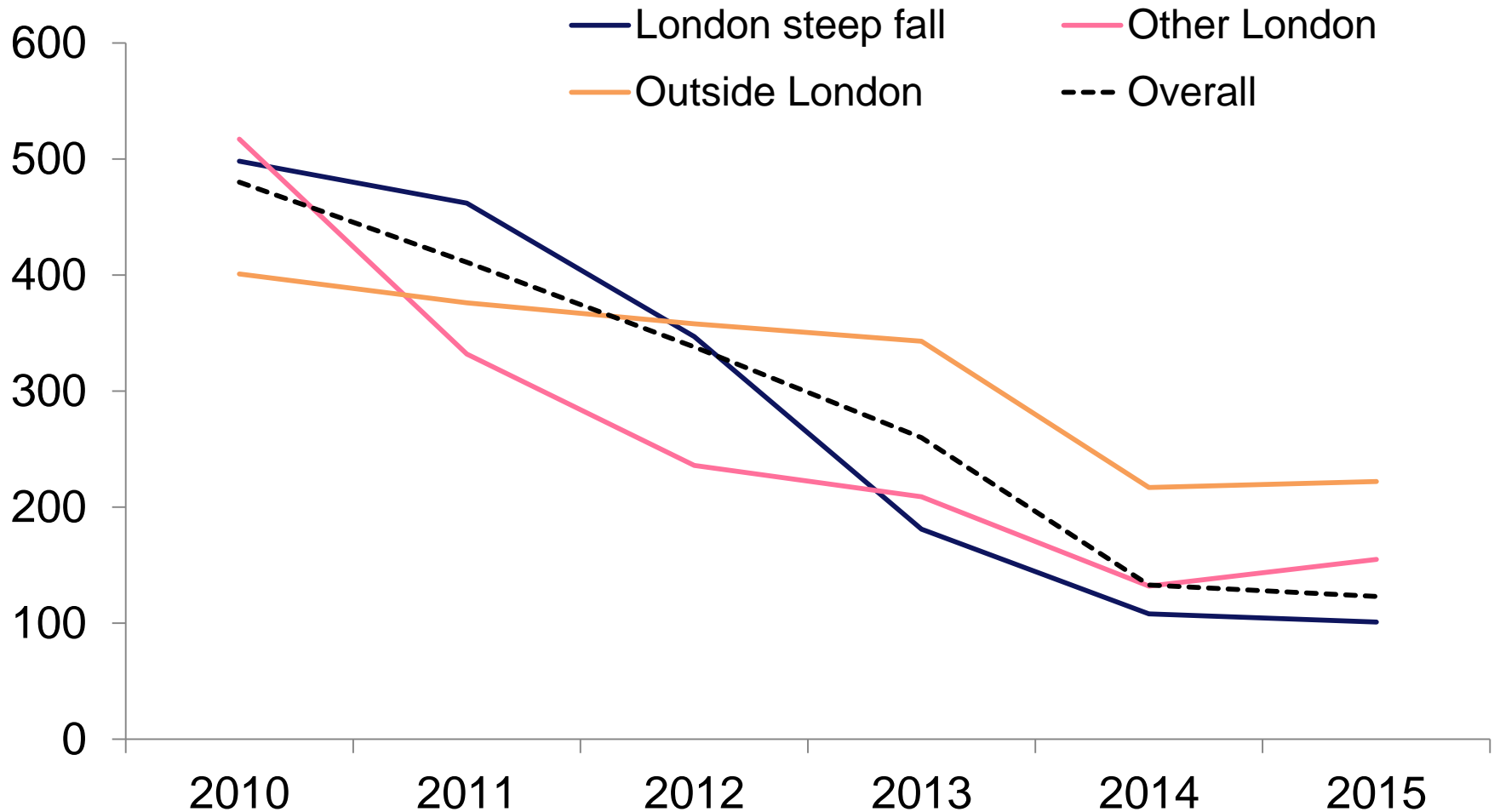


New MSM HIV diagnoses





Median days from HIV diagnosis to ART initiation among gay men in England





AIDS 2016
21ST INTERNATIONAL
AIDS CONFERENCE
DURBAN, SOUTH AFRICA JULY 18-22, 2016
WWW.AIDS2016.ORG

Superior Outcomes with Same-Day HIV Testing and ART Initiation

Serena Koenig, MD, MPH

GHESKIO, Haiti

Brigham and Women's Hospital, USA



Results at 1 year

	Same-Day (n=279)	Day 21 Start (n=285)	P-value
Initiated ART	279 (100%)	262 (92%)	p<0.001
Died	8 (3%)	19 (7%)	p=0.035
In care with VL <50 copies/ml	151 (54%)	120 (42%)	p=0.004



SF RAPID programme

- Same day access to HIV provider
- Offer of immediate start
- Intensive support and information
- Taxi vouchers
- Accelerated insurance approval process
- Pre-approved ART regimens
- 5-day starter pack

SF RAPID programme

Characteristic	RAPID	Non-RAPID	P-value
Days to ART initiation (range)	1 (0-5)	10 (7-17)	<0.001
Time from diagnosis to viral suppression <200 cpm in days (range)	65 (52-119)	170 (79-363)	0.009
<u>Retention in care</u> Loss to follow-up	4/39 (10.3%)	7/47 (14.9%)	0.52

Pilcher et al. JAIDS 2016

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**San Francisco can do it.
Why not the UK?**

**HIV
PREVENTION
ENGLAND
CONFERENCE 2017**

56DS RAPID

- Offer start ART within 48 hours.
- Minimize viral reservoir in seroconversion.
- Undetectable = Uninfectious.
- Respond to patient demand.

I'm ready to start today

I don't want to be infectious

I want to preserve my immune system

Will this lead to cure?

Is it safe?

What about resistance?

Am I pressurizing the patient?

Classic pathway (2013)

New HIV+



1st Doctor



Start Treatment



14 days



1 year

Standard pathway (2014)



New HIV+



1st Dr



14 days

Standard pathway (2014)



U&E
LFT
FBC



Hep A/B/C
Syphilis
glucose
lipids



CD4

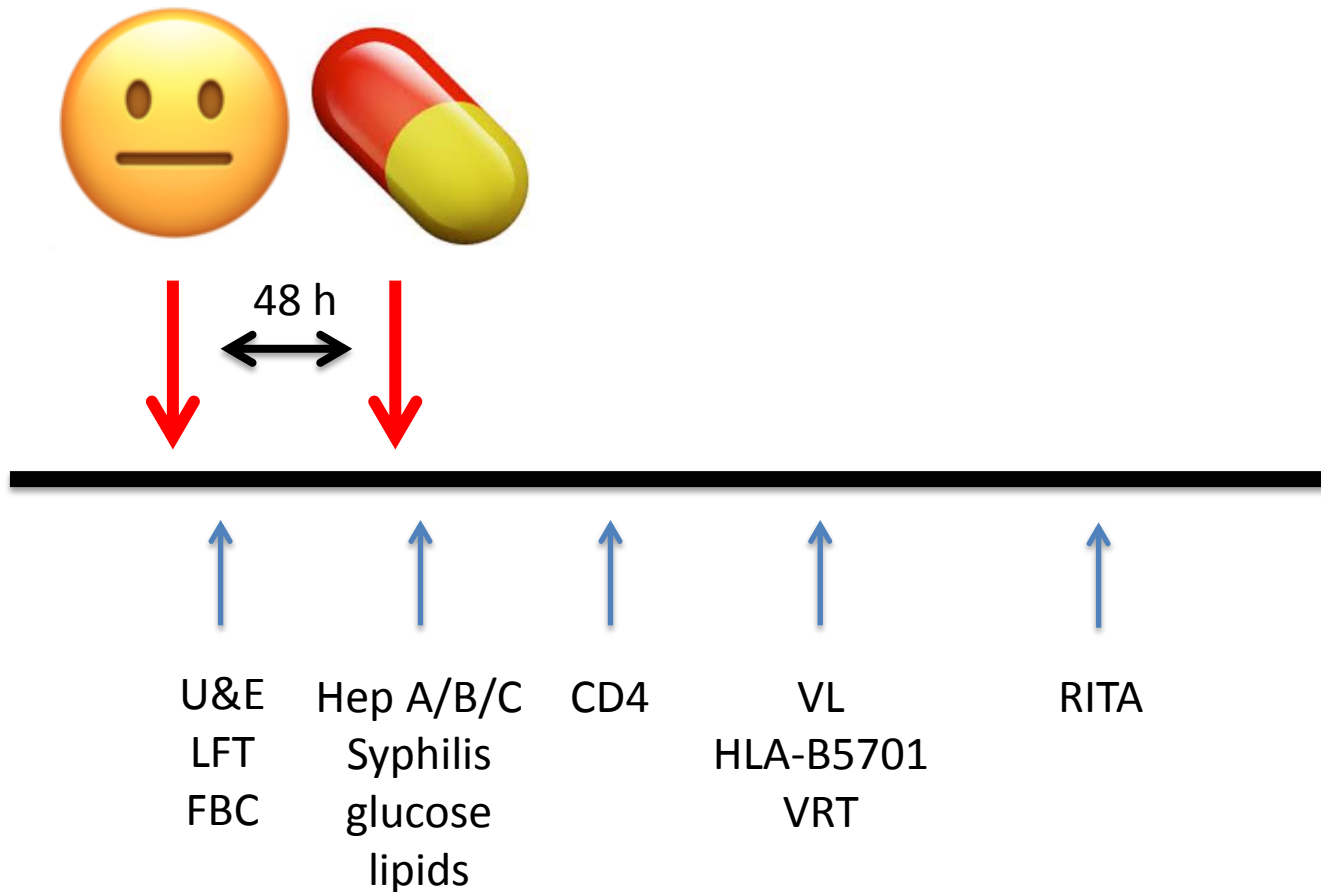


VL
HLA-B5701
VRT



RITA

RAPID pathway (2016)



Challenge – Awaiting Results

- No viral load result
- No HLA result
- No resistance test result

- Truvada + Boosted Protease Inhibitor

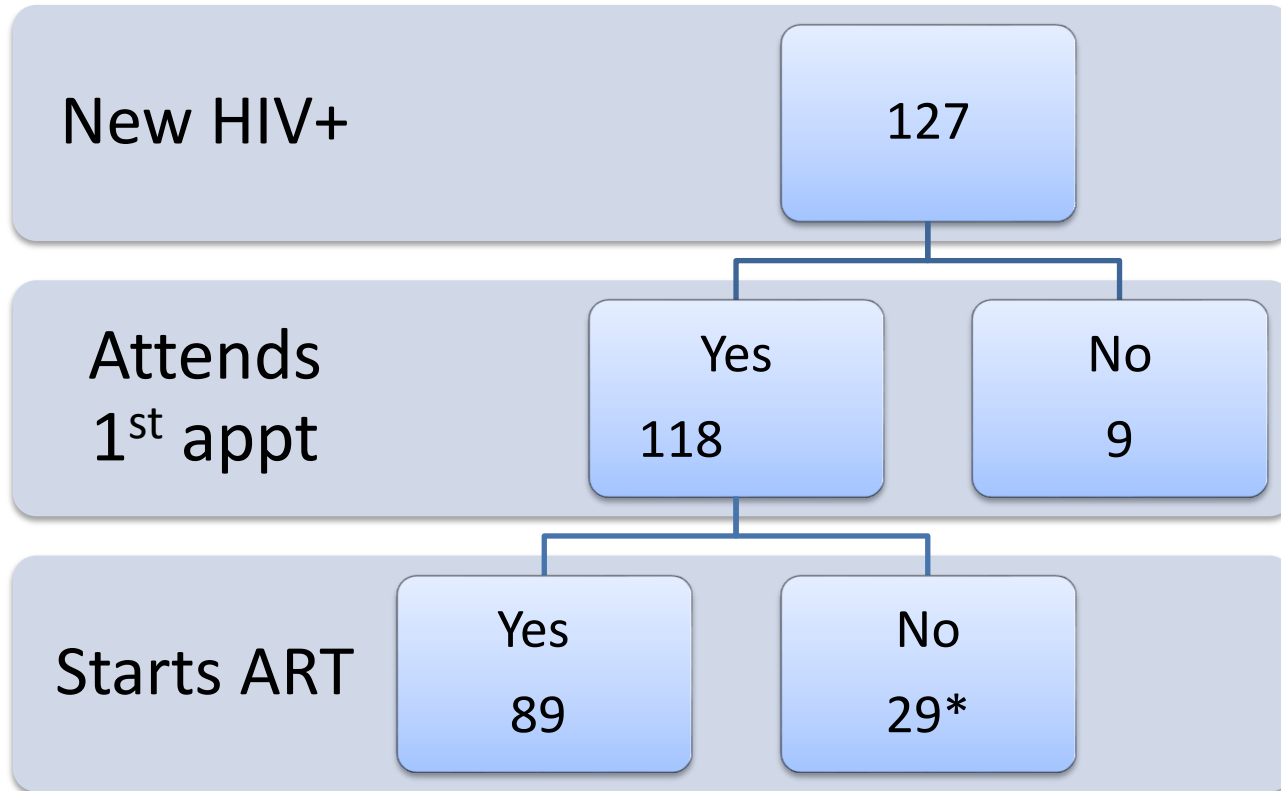
Challenge - Capacity

Week	Mo	Tu	We	Th	Fr	Sa	Su
13					1	2	3
14	4	5	6	7	8	9	10
15	11	12	13	14	15	16	17
16	18	19	20	21	22	23	24
17	25	26	27	28	29	30	

Daily urgent appointments

July – November 2016

Characteristic	
New diagnoses	127
Sex: Male of which, MSM	100% (127/127) 98% (125/127)
Recent infection (RITA) %	50% (58/116)
Baseline CD4 (median, IQR) cells/mm ³	466 (310 - 578)



Of 118 who attend 1st Dr appt, 89 (75%) started ART at 1st appt

*Of the 29 who did not start, 26 subsequently start ART

First medical appointment

Characteristic (median days, IQR)	Pre-pilot* (n=214)	Pilot (n=118)	P-value
Time to 1 st Dr appt	16 (14-21)	6 (2 – 12)	<0.05

* May-September 15

Time to ART

Characteristic (median days, IQR)	Baseline (n=214)	Pilot (n=115*)	P-value
Time to ART (days)	26 (16 – 55)	7 (3 - 20)	<0.05

Time to ART

Time to start ART	n = 115 (%)
Within 48h	28 (24%)
48h – 7d	30 (26%)
7d – 14d	20 (17%)
>14d	37 (32%)

*Includes the 26 who do not start at 1st appt and subsequently start

Time to undetectable

	Time to undetectable (median days, IQR)
56 Dean Street RAPID	62 (44 – 117)
San Francisco RAPID	65 (52-119)

*First 3 months of pilot. N =55

Key Points

- Patient demand.
- Not for everyone.
- Immediate diagnosis and rapid treatment can reduce onward transmission.
- UK can match San Francisco results.

Thank you

Dr Gary Whitlock
Dr Nneka Nwokolo

Baseline characteristics

Characteristic	
Baseline ALT (median, IQR) iU/L	29 (22 – 44)
ALT > 100 iU/L	7% (9/125)
Baseline eGFR > 60 mL/min/1.73 m ²	100% (125/125)
Baseline Hepatitis C antibody positive	2% (3/125)
Transmitted resistance*	24% (28/118)

*3 not sent; 6 did not amplify

Baseline resistance mutations

Major resistance mutations	N
L90M	9
M46L	2
E138A	3
V179E	3
V179D	2
K103N	1
M184V	2
M41L T215E	1
D67N T69D K219Q	1
M46L K103N	1
K219N H221Y	2
E138G T215L K238T	1

ART regimen

ART regimen initiated*	N (%*)	VRT available?
Boosted-PI	62 (54%)	7**
INSTI	33 (29%)	31***
NNRTI	12 (10%)	12
4-drug ART (as part of RIVER)	7 (6%)	3
RCT (GEMINI)	1 (1%)	1

*Includes the 26 who do not start at 1st appt and subsequently start (n=115)

**All 7 had major resistance mutations

***2 on PEP at diagnosis: VL<20