

LIGHT initiative - Phase 1

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LIGHT initiative Phase 1

*Integration of opt-out HIV tests in primary care Glandular fever serology ordersets
- simple, effective and sustainable increase in HIV testing in line with UK & European guidelines*

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LIGHT: London Initiative for Glandular fever HIV Testing

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Disclosures

- This project has been supported through an Association of the British Pharmaceutical Industry (APBI) joint working initiative with Gilead Sciences Ltd.
 - National Health Service (NHS) and Public Health England (PHE) partners contributed independent expertise and skills in their own professional capacity without additional financial support.
 - Gilead provided technical expertise, project management and funding for electronic software modification and additional HIV testing.
 - Data generation and analysis were done independently by NHS and PHE partners.
 - Content, conclusions and recommendations were agreed by consensus by all authors.
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- Anonymous seroprevalence survey was funded by NHS Lambeth Primary Care Trust (2009)

Primary HIV Infection

Highly infectious

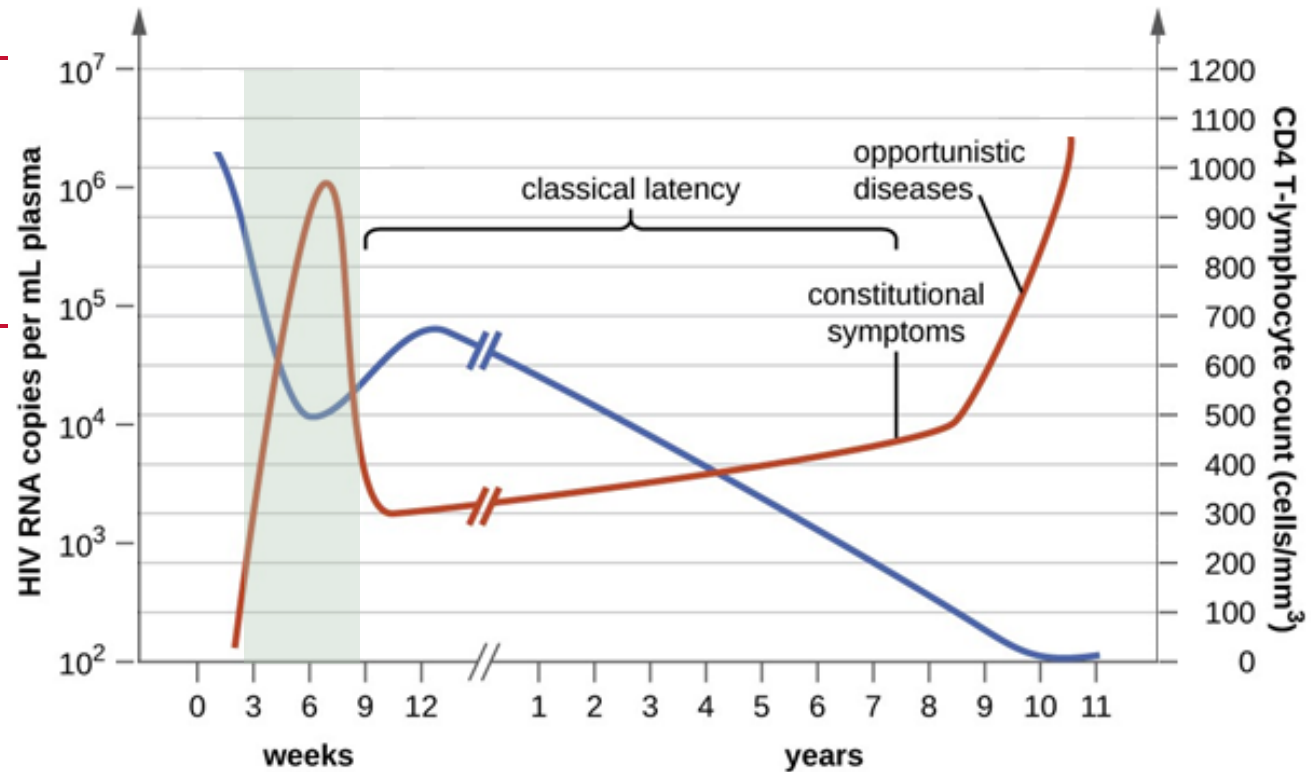
- a driver of HIV epidemics¹

Self-resolving syndrome

- Non-specific: fever, myalgia, headache & rash
- typically 2 to 5 weeks after infection – in 40-90% of individuals^{2, 3}
- “Glandular fever-like illness/Mononucleosis-like illness” (**GFLI**)

Often the only clinical manifestation before more advanced disease many years later –

➤ a diagnostic opportunity



1. Brenner BG, Roger M, Routy JP, et al. High rates of forward transmission events after acute/early HIV-1 infection. J Infect Dis. 2007;195:951–959.

2. UK National Guidelines for HIV Testing. 2008. British HIV Association, British Association of Sexual Health and HIV, British Infection Society, 2008. Available at www.bashh.org/documents/1838

3. Panel on Antiretroviral Guidelines for Adults and Adolescents. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. Available at <http://aidsinfo.nih.gov/contentfiles/lvguidelines/AdultandAdolescentGL.pdf> (Accessed on May 01, 2014).

Background

GFLI is a **recognised HIV indicator condition** in European¹ & UK² guidelines

Historically...

- A 'Glandular Fever Screen' (**GFS**) = EBV & CMV & Toxoplasmosis
- HIV testing required additional test ordering
- Concomitant HIV testing in patients who receive GFS in primary care has been poor in our area (*anonymous seroprevalence survey 2010: 11.4%*)³

1. Public Health guidance on HIV, hepatitis B and C testing in the EU/EEA. European Centre for Disease Prevention and Control (ECDC). 2018. Available at https://ecdc.europa.eu/sites/portal/files/documents/hiv-hep-testing-guidance_0.pdf (accessed on 8 August 2019).

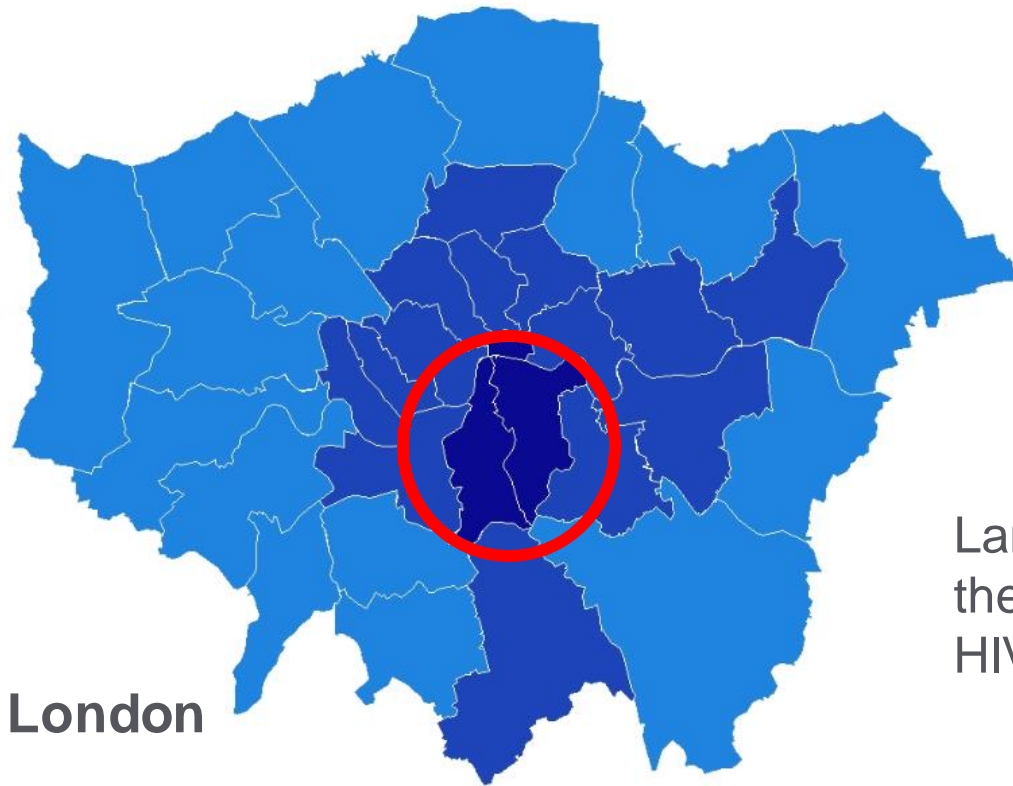
2. HIV testing: Increasing uptake among people who may have undiagnosed HIV. NICE Guidelines. 2016. Available at www.nice.org.uk/guidance/ng60 (accessed 21 August 2019).

3. Hsu DTS, et al. Diagnosing HIV infection in patients presenting with glandular fever-like illness in primary care: are we missing primary HIV infection? *HIV Medicine* Jan;14(1):60-3. 2013.

Diagnosed HIV prevalence per 1,000 population aged 15-59 years accessing HIV care, 2017



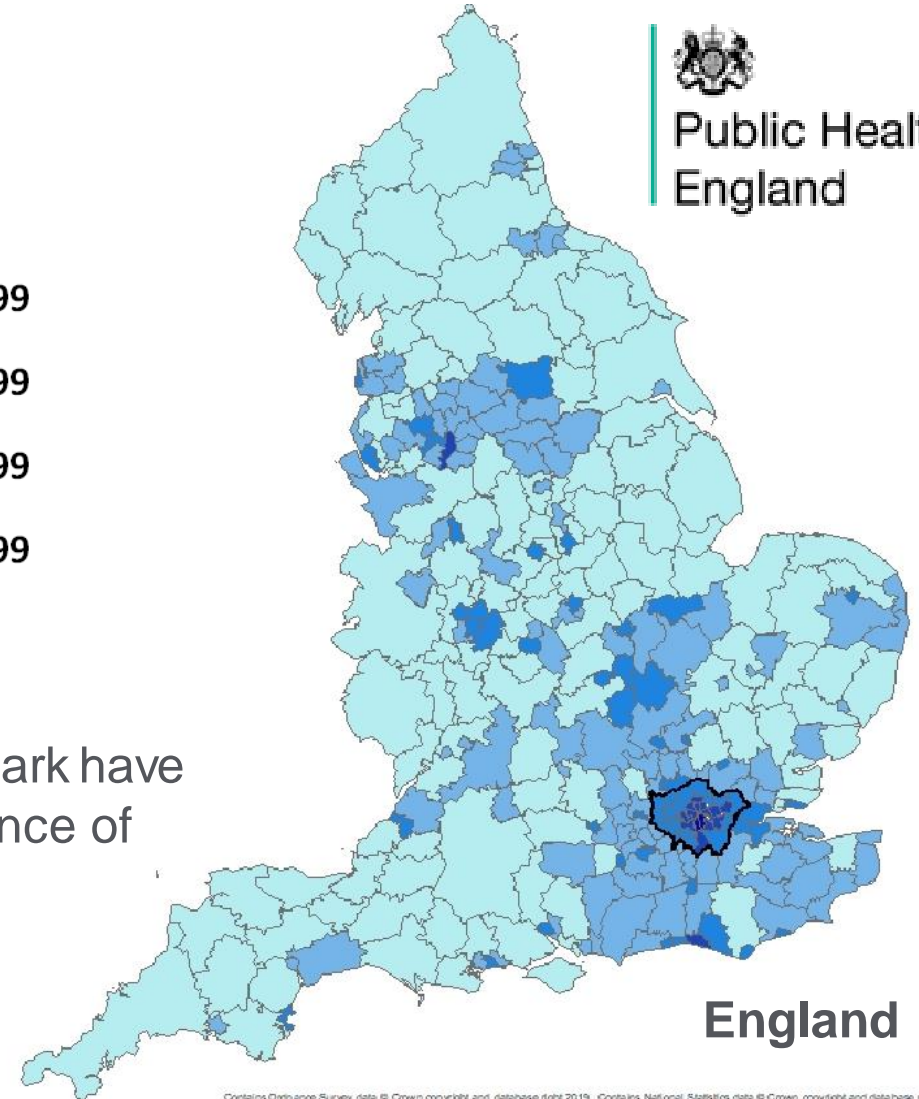
Public Health
England



London



Lambeth & Southwark have the highest prevalence of HIV in the UK



England

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Aim

To evaluate effectiveness of ***modification of electronically requested serology order sets*** to increase opt-out HIV testing for recognised HIV indicator condition in primary care (phase 1)

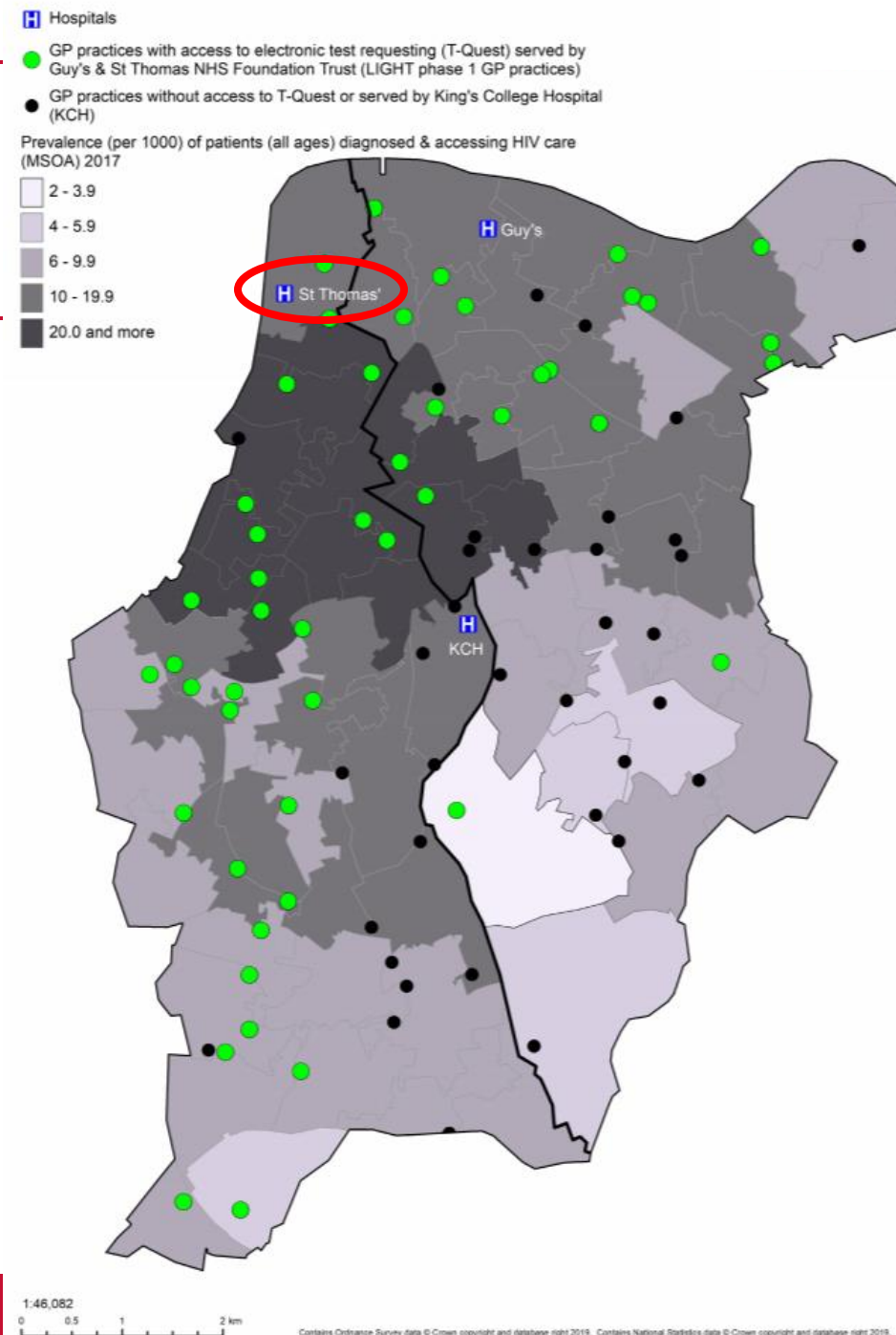
Intervention

Pre-LIGHT: GFS requested by either electronic (**e-Original**) or Paper-based requesting (Paper)

LIGHT intervention: July 2014

- **e-Modified** replaces **e-Original**
- **e-Original** remained available via archive

Paper	CMV EBV Toxo
e-Original	CMV EBV Toxo
e-Modified	e-Original including opt-out HIV test for patients >16yrs



***This is the LIVE electronic requesting
EDITESTPATIENT, ONE (27/01/1925) (NHS: 999 999 9468)

Patient	Request	Order
Routine Haematology		
<input type="checkbox"/> FBC & Diff		<input type="checkbox"/> Serum Folate
<input type="checkbox"/> ESR (long esr tube)		<input type="checkbox"/> Ferritin
<input type="checkbox"/> Vitamin B12		
Routine Virology		
<input type="checkbox"/> Pre Hepatitis B Vaccine (Hep B core Ab)		<input type="checkbox"/> Hepatitis B surface Ab-mIU/ml (post vaccine)
<input type="checkbox"/> Rubella IgG (Immunity Screen)		<input type="checkbox"/> Hepatitis C IgG Abs
<input type="checkbox"/> Varicella-zoster IgG (immunity status)		<input type="checkbox"/> Hepatitis A IgG (Immunity status)
<input type="checkbox"/> HIV antigen/antibody		<input type="checkbox"/> Treponemal pallidum antibodies
<input type="checkbox"/> Hepatitis A IgM		<input type="checkbox"/> Glandular fever screen plus
<input type="checkbox"/> Hepatitis B surface Ag		
Routine Coag - Non Electronic Orders and Results		
<input type="checkbox"/> INR		<input type="checkbox"/> Coagulation Screen
Microbiology - Non Electronic Orders		
<input type="checkbox"/> Microbiology Culture - Urine		<input type="checkbox"/> Microbiology Culture - Faeces
<input type="checkbox"/> H. pylori Antigen		<input type="checkbox"/> Microbiology Culture - Swab

e-Modified

Finish

Additional questions / information regarding Glandular fever screen plus

1. HIV testing is now part of this test in line with national guidance.
2. 1% of people older than 16 years with a glandular fever like illness in South-East London have HIV.
3. Please ensure that your patient is aware that their sample will be tested for HIV.
4. Please ensure the patient is aware that they should attend Blood Tests-at Viapath (GSTT Labs) for this test.
5. To order a Glandular fever screen plus click save. To order a test without HIV click cancel and order Glandular fever screen basic.

Modification announced via routine GP communication channels

Cancel Save

Results

Time period	Test ordering	GFS tests ordered	Concomitant HIV tests ordered (95% CI)		Positive HIV tests	No. of Male Positive HIV
Pre- LIGHT Jan - Dec 2013 (12 months)	<i>e-Orders & Paper</i>	880	295	33% (30 – 38%)	3 (1.0%)	-
LIGHT Dec 2015 - Aug 2017 (20 months*)	<i>e-Orders</i>	1,857	1,442	78% (74 – 82%)	10 (0.7%)	9 (90%)
	<i>Paper (control)</i>	485	136	28% (24 – 33%)	1 (0.7%)	1

* Data from March 2016 missing

Key points

- ~ 135% (78%/33%) sustainable increase in guidelines recommended HIV tests
- LIGHT (20 month sample): HIV test positivity 0.7% (11/1578)
 - 64% (7/11): **new diagnoses**
 - 43% (3/7): clinical and/or laboratory evidence of **recently acquired HIV***
- Simple, sustainable and low-cost intervention:
<£8,000 one-off (2014) for laboratory requesting IT modification covering 53 primary care practices

*within the last year

Limitations

- Real world service development project; no dedicated research staff
- Snapshot data: random 20 month period only
- No recording of reason for opting-out of HIV testing

Conclusions

- Our simple modification of electronic pathology requesting panel significantly and sustainably increased the rate of guideline recommended HIV tests
- This system-wide, replicable and low one-off cost intervention targets patients presenting with a recognised HIV indicator condition
- “Ebola-proof”

Next steps:

- NHS Lambeth & Southwark (King’s College Hospital) independently initiated 2017¹
- Phase 2 expansion planning across NHS East London 2019²

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2. Chris Lovitt, Associate Director Public Health, Tower Hamlets, London