Improving sexual health through partner notification: the LUSTRUM mixed-methods research Programme including RCT of accelerated partner therapy

Claudia S Estcourt,^{1,2*} Fiona Mapp,³

Melvina Woode Owusu,³ Nicola Low,⁴ Paul Flowers,⁵ Andrew Copas,³ Tracy E Roberts,⁶ Catherine H Mercer,³ John Saunders,^{3,7} Rak Nandwani,^{2,8} Christian L Althaus,⁴ Oliver Stirrup,³ Merle Symonds,⁹ Alison R Howarth,³ Anne M Johnson,³ Chidubem Okeke Ogwulu,⁶ Maria Pothoulaki,¹ Gabriele Vojt,¹ Sonali Wayal,¹⁰ Susie Brice,¹¹ Alex Comer-Schwartz,¹² Anna Tostevin,³ Eleanor Williams,⁶ Sarah Lasoye,³ Jean McQueen,¹ Zainab Abdali⁶ and Jackie A Cassell¹³

¹School of Health & Life Sciences, Glasgow Caledonian University, Glasgow, UK ²Sandyford Sexual Health Services, NHS Greater Glasgow & Clyde, Glasgow, UK ³Institute for Global Health, University College London, Mortimer Market Centre, London, UK

⁴Institute of Social and Preventive Medicine (ISPM), University of Bern, Bern, Switzerland

⁵School of Psychological Sciences & Health, University of Strathclyde, Glasgow, UK ⁶Health Economics Unit, Institute of Applied Health Research, College of Medical &

Dental Sciences, University of Birmingham, Edgbaston, Birmingham, UK ⁷UK Health Security Agency, London, UK

⁸College of Medical, Veterinary & Life Sciences, University of Glasgow, Glasgow, UK ⁹Health Promotion & Digital Services, University Hospitals Sussex NHS Foundation Trust, Crawley Hospital, Crawley, UK

¹⁰Research & Development, Development Media International, Unit R, Reliance Wharf, London, UK

¹¹All East Sexual Health, Barts Health NHS Trust, The Royal London Hospital, London, UK ¹²Central & North West London NHS Foundation Trust, London, UK

¹³Brighton & Sussex Medical School, University of Brighton, UK

*Corresponding author Claudia.Estcourt@gcu.ac.uk

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This report contains transcripts of interviews conducted in the course of the research, or similar, and contains language which may offend some readers.

Disclosure of interests

Full disclosure of interests: Completed ICMJE forms for all authors, including all related interests, are available in the toolkit on the NIHR Journals Library report publication page at https://doi.org/10.3310/TRQW3886.

Primary conflicts of interest:

Claudia S Estcourt

- NIHR for SEQUENCE digital NIHR 200856 funded under a Programme Grant for Applied Research.
- CSO Scotland for Optimising PrEP Services 2018-20.
- EPSRC for iSense Follow On funding 2020-24.
- PHS & NHS GGC for ePrEP Clinic 2019-22.

Nicola Low

- World Health Organization (WHO) contracts to conduct work about the effectiveness of different strategies for partner notification for sexually transmitted infections (STI). She is a member of the WHO STI Guidelines Development Group, which assesses evidence and makes decisions and recommendations about partner notification strategies.
- Senior editor (unfunded) of a systematic review of partner notification strategies for the Cochrane STI Group.

Paul Flowers

- NIHR EPIToPe Evaluating the Population Impact of Hepatitis C Direct Acting Antiviral Treatment as Prevention for People Who Inject Drugs.
- NIHR Shaping care home COVID- testing policy: A pragmatic cluster randomised controlled trial of asymptomatic testing compared to standard care in care home staff (VIVALDI-CT) (NIHR154310).
- Australian Research Council AMR Scapes: Building public trust in expert knowledge on the 'superbugs' crisis.
- UKRI A phase III prospective, interventional, cohort, superiority study to evaluate the benefit of rapid COVID-19 genomic sequencing (the COVID-19 GENOMICS UK project) on infection control in preventing the spread of the virus in United Kingdom NHS settings.
- CSO An implementation science evaluation of Scotland's first Heroin Assisted Treatment.
- CSO Optimising hepatitis C treatment for people who inject drugs: Developing a primary care-based patient pathway.
- CSO Optimising services for people at highest risk of HIV: developing best practice in delivering HIV Pre-Exposure Prophylaxis (PrEP) through evaluation of early implementation across Scotland.
- UK Gov Co-Chair of the UK Advisory Committee on Antimicrobial Prescribing, Resistance and Healthcare Associated Infection (APRHAI) sub-group 'Behavioural Interventions'.
- Scottish Government's COVID-19 Advisory Sub-Group on Education and Children's Issues.
- Scottish Government's COVID-19 Advisory Sub-Group on Universities and Colleges.

John Saunders

- NIHR, Co-Investigator, Programme Grant NIHR200856 Improving care for people with sexually transmitted infections (STIs) in a digital NHS.
- Scottish CSO, Co-Investigator, Scottish government health directorates research grant, Optimising services for people at highest risk of HIV: developing best practice in delivering HIV Pre-Exposure Prophylaxis (PrEP) through evaluation of early implementation across Scotland.
- NIHR, Co-Investigator, Health Protection Research Unit in Blood Borne and Sexually Transmitted Infections.

- British HIV Association/British Association for Sexual Health and HIV, Conference attendance registration 2019, 2020, 2021.
- British Association for Sexual Health and HIV, Non-financial, Member of National Audit Group and Bacterial Special Interest Group.

Rak Nandwani

- Scottish Government Chief Scientist's Officer (CSO) 'Optimising Services for People at Highest Risk of HIV: Developing Best Practice in Delivering HIV Pre-Exposure Prophylaxis (PrEP) Through Evaluation of Early Implementation Across Scotland', Grant reference number: HIPS/17/47, 24 months from December 2017 to December 2019.
- Public Health Scotland (established 1 April 2020), Non-Executive Director of Board.
- Glasgow Caledonian University Unpaid Honorary Professor from April 2022.
- University of Glasgow Unpaid Honorary Clinical Associate Professor to March 2022, Honorary Senior Research Fellow from April 2022.

Anne M Johnson

- President, Academy of Medical Sciences.
- UKRI, Advice on various funding advisory committees and scientific advisory groups.
- HM Government, Independent scientific advice on COVID-19 including SAGE sub-group
- Chair, Committee for Strategic Coordination of Health of Public Research.
- Member (ex-officio), Committee on Science and Technology.

Jackie A Cassell

- UKRI, Research on household risk of Covid payment to institutions.
- NIHR, Applied Research Collaboration Kent Surrey Sussex payment to institution.
- NIHR, Research Design Service payment to institution.
- Non-executive Director University Hospitals Sussex (previously Brighton and Sussex University NHS Trust) payment to self.
- NIHR, Travel in relation to Programme Grant for Applied Research Grant RP-PG-0614-20009.
- NIHR, VITAE study, chair of Trial Steering Committee (no payment).
- Editor in Chief, BMJ Sexually Transmitted Infections journal, honorarium paid.
- NIHR/UKRI panel memberships payment to self.
- Health Research Board Ireland panel membership payment to self.

Melvina Woode Owusu

- University College London, consulting fees received directly from institution.
- Central & North West London Foundation Trust, consulting fees received directly from institution.

Fiona Mapp, Andrew Copas, Tracy Roberts, Catherine H Mercer, Christian L Althaus, Oliver Stirrup, Merle Symonds, Alison R Howarth, Chidubem Okeke Ogwulu, Maria Pothoulaki, Gabriele Vojt, Sonali Wayal, Susannah Brice, Alex Comer-Schwartz, Anna, Tostevin, Eleanor Williams, Sarah Lasoye, Jean McQueen, Zainab Abdali declare no conflicts of interest.

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Plain language summary

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Plain language summary

We aimed to improve the sexual health of people most impacted by sexually transmitted infections and human immunodeficiency virus (young people and men who have sex with men), by preventing transmission and reducing undiagnosed infection. We focused on partner notification (contact tracing and management), particularly accelerated partner therapy.

Our research included:

- a clinical trial
- interview/focus group studies
- literature reviews
- mathematical modelling and
- health economic evaluations.

Firstly, we improved accelerated partner therapy by finding out what people did/didn't like about it and which types of sex partners might use it. We included some people with mild learning difficulties to see if they could help us improve accelerated partner therapy for people who might find self-managed care tricky. Then, we measured accelerated partner therapy's value for money in a large clinical trial in people with chlamydia, Britain's commonest sexually transmitted infection. Finally, we worked with men who have sex with men, sexual healthcare professionals, public health and health planners to make recommendations for new partner notification methods to suit their needs.

We found accelerated partner therapy could be less costly than current practices and likely reduce transmission of chlamydia in the population. Our new classification of partnership types showed that accelerated partner therapy suited 'emotionally connected', rather than one-off, partners. These partners are important for controlling onward transmission but are traditionally harder to reach.

Findings from our stakeholder event suggest that partner notification approaches for men who have sex with men are likely to work best by involving communities as well as clinics, but we were only able to focus on sexually transmitted infections other than human immunodeficiency virus due to COVID-19 impacts.

Future research should aim to improve partner notification for one-off partners, simplify the sexually transmitted infection and human immunodeficiency virus self-testing kits used in accelerated partner therapy, explore the pros and cons of immediate antibiotics, and develop and evaluate a system-wide partner notification approach for men who have sex with men, guided by health economics evaluation.

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