Collaboration for Leadership in Applied Health Research and Care North Thames

CLAHRCBITE

National Institute for Health Research

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Brokering Innovation Through Evidence Is screening for HIV in primary care cost-effective?



Offering a HIV test to people when they register with a new GP in highprevalence areas is cost-effective and will save lives

CLAHRC researchers created and applied a new model - the first of its kind in England - to explore the cost effectiveness of screening for HIV in primary care in UK metropolitan areas

Background

People with HIV have near normal life expectancy if they are diagnosed early and have access to treatment. Those taking effective treatment are no longer infectious and their care is less expensive.

Early diagnosis reduces morbidity and mortality as well as the probability of onward transmission & associated costs *but* might increase cost because of earlier initiation of antiretroviral treatment (ART).

CLAHRC researchers investigated this trade off.

Methods

Our model used data collected from an earlier trial (RHIVA 2) based in Hackney - a London borough with high HIV prevalence, defined as an area with two or more adults living with HIV per 1000 population. The trial involved 40 general practices, testing the effect of including rapid finger prick HIV testing as part of the standard health check during registration. This led to a four-fold higher HIV diagnosis rate.

Building on this research we applied the model to estimate costs and results in other areas of high HIV prevalence. We included costs associated with HIV testing, and took account of costs arising from treating people diagnosed earlier in the course of infection.

Results

Our model showed that screening in areas of higher HIV prevalence is cost effective and potentially cost saving. It also falls within the threshold of cost-effectiveness of interventions used by the NICE in the UK.

Initial costs are high due to more people being diagnosed and needing anti-retroviral treatment - but these programmes become cost-effective in the longer-term.

Onward transmission of the virus is brought under control, and earlier treatment increases chances of staying healthy.

Conclusions

For the first time in England we have devised a model to explore the cost effectiveness of screening for HIV in primary care.

Screening for HIV in primary care has important public health benefits as well as clinical benefits.

It can both save and improves lives and reduce onward transmission.

Our data provide the most reliable analyses to date and justify the investment needed to deliver HIV screening in primary care in the 74 localities considered to have high HIV prevalence – essentially most UK metropolitan areas.

Recommendations and next steps

In England, about 13,500 people are unaware they have HIV and almost 40% of those diagnosed already have advanced infection. This means that many people with HIV are missing out on best treatment outcomes, remain infectious to others and are more expensive to treat.

As a result HIV screening is a key intervention for better individual and public health outcomes.

At a time where pressures on local authority public health budgets mean HIV testing costs are under intense scrutiny, our results will give commissioners confidence that investing in HIV testing in primary care is a cost effective and potentially cost saving intervention.

We recommend investment in HIV screening in primary care as a matter of urgency.

Useful links

Read more about the RHIVA2 trial: http://www.blizard.qmul.ac.uk/research-project/1430-rhiva-2.html National Institute for Health and Care Excellence (NICE) briefing: *Judging whether public health interventions offer value for money*; https://www.nice.org.uk/advice/lgb10/chapter/Introduction

Read the full paper

Baggaley RF, Irvine MA, Leber W, Cambiano V, Figueroa J McMullen H Anderson J Santos AC Terris-Prestholt F Miners A Hollingsworth TD Griffiths CJ Cost-effectiveness of screening for HIV in primary care: a health economics modelling analysis

The Lancet HIV. Published online July 30, 2017 doi.org/10.1016/S2352-3018(17)30123-6

Keep up to date with this study Improving the identification and management of people with HIV

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