



August 2016 – SUPPORT Summary of a systematic review

Does home-based HIV Voluntary Counselling and Testing (VCT) improve the uptake of HIV testing?

Knowledge about people's HIV status is important for developing effective HIV prevention, treatment and care strategies. HIV testing is typically performed using Voluntary Counselling and Testing (VCT) at dedicated VCT centres or healthcare facilities. However, many people lack access to VCT sites or prefer not to use them. One strategy to boost the uptake of HIV testing is to use trained counsellors or lay health workers to provide VCT in patients' homes.

Key messages

- **Offering people a choice of settings in which to receive VCT, including at home, may increase**
 - acceptance of HIV pre-test counselling and HIV testing and
 - acceptance of HIV post-test counselling and receipt of HIV test results.
- **People's preferred location for HIV VCT is uncertain. This outcome was not reported.**
- **The review findings come from one setting in a low-income country and may not be relevant to all settings.**



Who is this summary for?

People making decisions concerning strategies for improving the uptake of HIV testing.

! This summary includes:

- **Key findings** from research based on a systematic review
- **Considerations about the relevance of this research** for low-income countries

X Not included:

- Recommendations
- Additional evidence not included in the systematic review
- Detailed descriptions of interventions or their implementation

This summary is based on the following systematic review:

Bateganya M, Abdulwadud OA, Kiene SM. Home-based HIV voluntary counselling and testing (VCT) for improving uptake of HIV testing. *Cochrane Database of Systematic Reviews* 2010, Issue 7. Art. No.: CD006493

What is a systematic review?

A summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise the relevant research, and to collect and analyse data from the included studies

SUPPORT was an international project to support the use of policy relevant reviews and trials to inform decisions about maternal and child health in low- and middle-income countries, funded by the European Commission (FP6) and the Canadian Institutes of Health Research.

Glossary of terms used in this report:
www.supportsummaries.org/glossary-of-terms

Background references on this topic:
See back page

Background

Knowledge about people's HIV status is important for developing effective HIV prevention, treatment and care strategies. Voluntary Counselling and Testing (VCT) is one of the recommended approaches to HIV testing. VCT for HIV includes: pre-test counselling, obtaining informed consent, HIV testing, and the communication of the test results together with result-dependent, targeted counselling on risk avoidance and healthcare options. Typically, VCT is provided at dedicated VCT centres or at healthcare facilities. Providing VCT at such facilities is the standard approach when scaling-up HIV testing. However, despite substantial programme investments, the uptake of HIV testing in certain populations and population segments remains low and many people still lack access to VCT sites. One strategy to boost the uptake of HIV testing is to provide home-based VCT. Home-based VCT can be offered by trained counsellors or lay workers who visit people's homes and are able to offer a full range of counselling services, and also to collect samples, undertake HIV tests, and communicate the results to the person at their home.

How this summary was prepared

After searching widely for systematic reviews that can help inform decisions about health systems, we have selected ones that provide information that is relevant to low-income countries. The methods used to assess the reliability of the review and to make judgements about its relevance are described here: www.supportsummaries.org/how-support-summaries-are-prepared/

Knowing what's not known is important

A reliable review might not find any studies from low-income countries or might not find any well-designed studies. Although that is disappointing, it is important to know what is not known as well as what is known.

A lack of evidence does not mean a lack of effects. It means the effects are uncertain. When there is a lack of evidence, consideration should be given to monitoring and evaluating the effects of the intervention, if it is used.

About the systematic review underlying this summary

Review objective: To assess the effectiveness of home-based HIV VCT in improving the uptake of HIV testing.

| Types of | What the review authors searched for | What the review authors found |
|--|--|---|
| Study designs & Interventions | Randomized trials of home-based HIV VCT with any of the following features: <ul style="list-style-type: none">• The provision of pre-test counselling in the home followed by rapid HIV testing, or the collection of specimens sent later to laboratories for HIV testing• The provision of HIV test results and post-test counselling in the home• Referral of patients tested at home who had HIV-positive test results | 1 published randomized trial in which VCT for HIV was offered at an alternative location, including patients' homes. |
| Participants | Adults aged ≥ 15 years who were either HIV negative or unaware of their HIV status and were screened for HIV infection after giving informed consent | Male and female household members aged ≥ 15 years |
| Settings | Low- and middle-income countries with a score of < 0.9 on the Human Development Index | Community setting in Lusaka, Zambia |
| Outcomes | <ol style="list-style-type: none">1. Acceptance of HIV pre-test counselling by people2. Whether HIV post-test counselling was offered and the test results received by people3. Number of cases of HIV infection diagnosed based on rapid tests | <ol style="list-style-type: none">1. Acceptability to participants of HIV pre-test counselling alone2. Acceptability to participants of HIV pre-test counselling and HIV testing3. Proportion of people who received HIV post-test counselling and their HIV test results |

Date of most recent search: December 2008

Limitations: This is a well-conducted systematic review with only minor limitations, including some methodological problems.

Bateganya M, Abdulwadud OA, Kiene SM. Home-based HIV voluntary counselling and testing (VCT) for improving uptake of HIV testing. *Cochrane Database of Systematic Reviews* 2010, Issue 7. Art. No.: CD006493. DOI: 10.1002/14651858.CD006493.pub4.

Summary of findings

One randomized trial of HIV testing uptake at different locations was identified. The study was implemented among teenage and adult household members in the suburb of Chelston in Lusaka, Zambia. HIV testing uptake was compared at two locations – one location was a local clinic, while the other was an optional location, including a patient’s home.

- Offering people a choice of settings in which to receive VCT, including at home, may increase patient acceptance of HIV pre-test counselling. The certainty of this evidence is low.
- Offering people a choice of settings in which to receive VCT, including at home, may increase their acceptance of HIV pre-test counselling and HIV testing. The certainty of this evidence is low.
- Offering people a choice of settings in which to receive VCT, including at home, may increase acceptance among patients of HIV post-test counselling, and increase the receipt of HIV test results. The certainty of this evidence is low.
- There is uncertainty regarding people’s preferred location for VCT, if they were offered a choice. This outcome was not reported.

About the certainty of the evidence (GRADE) *

⊕⊕⊕⊕

High: This research provides a very good indication of the likely effect. The likelihood that the effect will be substantially different† is low.

⊕⊕⊕○

Moderate: This research provides a good indication of the likely effect. The likelihood that the effect will be substantially different† is moderate.

⊕⊕○○

Low: This research provides some indication of the likely effect. However, the likelihood that it will be substantially different† is high.

⊕○○○

Very low: This research does not provide a reliable indication of the likely effect. The likelihood that the effect will be substantially different† is very high.

* This is sometimes referred to as ‘quality of evidence’ or ‘confidence in the estimate’.

† Substantially different = a large enough difference that it might affect a decision

See last page for more information.

| Impact on HIV test uptake levels of providing VCT at a local clinic only compared to providing VCT at an alternative location | | | | |
|---|--|-------------------------------------|--------------------------|-----------------------------------|
| People | Male and female household members aged ≥15 years | | | |
| Settings | Community setting in Lusaka, Zambia | | | |
| Intervention | VCT at an optional location, including a person's home, a clinic or another location | | | |
| Comparison | VCT at a local clinic only | | | |
| Outcomes | Absolute effect* | | Relative effect (95% CI) | Certainty of the evidence (GRADE) |
| | Without choice of location | With choice of alternative location | | |
| Acceptance of HIV pre-test counselling | 133 per 1000 | 614 per 1000 | RR 4.6 (3.58 to 5.91) | ⊕⊕○○ Low |
| | Difference: HIV pre-test counselling accepted 481 more times per 1000 household members ≥15 years (Margin of error: 344 more to 655 more) | | | |
| Acceptance of HIV pre-test counselling and HIV testing | 124 per 1000 | 572 per 1000 | RR 4.6 (3.51 to 5.92) | ⊕⊕○○ Low |
| | Difference: HIV pre-test counselling and HIV testing accepted 448 more times per 1000 household members ≥15 years (Margin of error: 312 more to 612 more) | | | |
| HIV post-test counselling and test results received by those tested | 118 per 1000 | 553 per 1000 | RR 4.7 (3.62 to 6.21) | ⊕⊕○○ Low |
| | Difference: HIV post-test counselling and test results received by those tested accepted 435 more times per 1000 household members ≥15 years (Margin of error: 308 more to 613 more) | | | |
| Margin of error = Confidence interval (95% CI) RR: Risk ratio GRADE: GRADE Working Group grades of evidence (see above and last page) | | | | |
| * The risk WITHOUT the intervention is based on the provision of VCT at a local clinic only. The corresponding risk WITH the intervention (and the 95% confidence interval for the difference) is based on the overall relative effect (and its 95% confidence interval). | | | | |

Relevance of the review for low-income countries

| → Findings | ▷ Interpretation* |
|---|--|
| APPLICABILITY | |
| → The review included only one study, and this study was conducted in a low-income country | <ul style="list-style-type: none">▷ <i>Home-based HIV VCT may only be feasible for people who live at a fixed location and are available at the time of a VCT visit. In some low-income countries, population groups such as migrant workers or nomads may live in camps or mobile residences. Reaching these groups at home or at other locations than a health facility may be challenging.</i>▷ <i>Counsellors need to be able to visit households at times outside regular working hours. This may not be achievable in some low-income countries.</i> |
| EQUITY | |
| → There was no information in the included study regarding the differential effects of the interventions on specific populations | <ul style="list-style-type: none">▷ <i>In urban settings, home-based VCT for HIV may be more likely to reach members of society who live at a fixed address and who are at home during normal working hours. This might include domestic workers and child minders .</i>▷ <i>In rural settings, home-based VCT for HIV is more likely to increase access among those who lack the time or resources to seek testing at a health facility or who live very far from a health facility.</i>▷ <i>Making home-based VCT for HIV available outside regular working hours may expand access among poorer groups who cannot afford time off work to attend health facilities.</i>▷ <i>Reaching particular population groups such as migrant workers, nomads or homeless people will probably require specifically-tailored VCT delivery strategies.</i>▷ <i>Offering patients a choice of locations and times for VCT for HIV may improve access for those unable to visit usual VCT locations or unable to visit health facilities during working hours.</i> |
| ECONOMIC CONSIDERATIONS | |
| → The systematic review did not provide information regarding economic considerations | <ul style="list-style-type: none">▷ <i>Providing VCT in locations other than health facilities may require the recruitment of additional counsellors. In addition, the travel costs incurred may be substantial and may make the provision of these services more expensive. However, higher VCT uptake using these approaches may improve the overall cost-effectiveness of the programmes.</i> |
| MONITORING & EVALUATION | |
| → The review concludes that further research evidence is needed before large-scale implementation is undertaken | <ul style="list-style-type: none">▷ <i>All home-based VCT for HIV programmes should be accompanied by rigorous evaluation of impacts and cost effectiveness.</i> |

*Judgements made by the authors of this summary, not necessarily those of the review authors, based on the findings of the review and consultation with researchers and policymakers in low-income countries. For additional details about how these judgements were made see: www.supportsummaries.org/methods

Additional information

Related literature

Fonner VA, Denison J, Kennndyl CE, O'Reilly K, Sweat M. 2012. Voluntary counseling and testing (VCT) for changing HIV-related risk behavior in developing countries. *Cochrane Database Syst Rev*. CD001224.

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Conflict of interest

None declared. For details, see: www.supportsummaries.org/coi

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This summary has been peer reviewed by: Ekwaro A. OBUKU, Allen Nsangi, Harriet Nabudere, Moses Bateganya, and Hanna Bergman

This review should be cited as

Bateganya M, Abdulwadud OA, Kiene SM. Home-based HIV voluntary counselling and testing (VCT) for improving uptake of HIV testing. *Cochrane Database of Systematic Reviews* 2010, Issue 7.

The summary should be cited as

Steinmann P. Does home-based HIV Voluntary Counselling and Testing (VCT) improve the uptake of HIV testing? A SUPPORT Summary of a systematic review. August 2016. www.supportsummaries.org

About certainty of the evidence (GRADE)

The “certainty of the evidence” is an assessment of how good an indication the research provides of the likely effect; i.e. the likelihood that the effect will be substantially different from what the research found. By “substantially different” we mean a large enough difference that it might affect a decision. These judgements are made using the GRADE system, and are provided for each outcome. The judgements are based on the study design (randomised trials versus observational studies), factors that reduce the certainty (risk of bias, inconsistency, indirectness, imprecision, and publication bias) and factors that increase the certainty (a large effect, a dose response relationship, and plausible confounding). For each outcome, the certainty of the evidence is rated as high, moderate, low or very low using the definitions on page 3.

For more information about GRADE:
www.supportsummaries.org/grade

SUPPORT collaborators:

The Cochrane Effective Practice and Organisation of Care Group (EPOC) is part of the [Cochrane Collaboration](http://www.cochrane.org). The Norwegian EPOC satellite supports the production of Cochrane reviews relevant to health systems in low- and middle-income countries. www.epocoslo.cochrane.org

The Evidence-Informed Policy Network (EVIPNet) is an initiative to promote the use of health research in policymaking in low- and middle-income countries. www.evipnet.org

The Alliance for Health Policy and Systems Research (HPSR) is an international collaboration that promotes the generation and use of health policy and systems research in low- and middle-income countries. www.who.int/alliance-hpsr

Norad, the Norwegian Agency for Development Cooperation, supports the Norwegian EPOC satellite and the production of SUPPORT Summaries. www.norad.no

The Effective Health Care Research Consortium is an international partnership that prepares Cochrane reviews relevant to low-income countries. www.evidence4health.org

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