March 2017 – SUPPORT Summary of a systematic review

What are the impacts of changes in user fees on access to health services?

User fees are charges paid by users of healthcare services at the point of use. They are supposed to help reduce 'frivolous' use of health services, as well as raise revenue to pay for services. If used appropriately, user fees might also motivate health professionals and improve the quality of care. However, they might also reduce appropriate use of services.

Key messages

➔ **There is some evidence that suggests**
—introducing or increasing user fees reduces utilisation,
—the combination of user fees and quality improvement increases utilisation, and
—removing or reducing user fees increases utilisation.

➔ **However, these effects are uncertain because of very low certainty of the evidence.**

➔ **The impacts of changes in user fees on utilisation may depend on whether they are for preventive or curative services, whether increases are combined with quality improvement efforts, and the size of the change in fees.**

➔ **The impact of changes in user fees on equity are uncertain. However, poorer people may be more sensitive to changes in user fees.**

➔ **Changes to user fees should be carefully planned and monitored, and the impacts of changes to user fees should be rigorously evaluated.**

Who is this summary for?

People making decisions concerning user fees

! 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:

Lagarde M, Palmer N. The impact of user fees on access to health services in low- and middle-income countries. Cochrane Database Syst Rev 2011 (4): CD009094.

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

As a financial barrier, user fees should deter people from seeking needless healthcare, and when patients pay them they constitute a source of revenue for the facility or the system. However, user fees might also deter people from seeking necessary healthcare.

Economic theory predicts that an increase in the price of a specific good will lead to a decrease in its consumption. Advocates of user fees have argued that the collected revenue would, however, improve the quality of services delivered, and hence compensate for the negative effects of user fees. However, increased poverty and poor social indicators in many countries led to growing concerns about the detrimental role played by user fees. In particular, the failure of exemption schemes in cost-recovery systems led to the realisation that a growing part of the population was excluded from the health system while others were facing catastrophic health expenditures.

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 effects of introducing, removing, or changing user fees on the access of different populations to care in low- and middle-income countries

Types of	What the review authors searched for	What the review authors found
Study designs & Interventions	Randomised trials, interrupted time series studies, and controlled before-after studies of introducing, removing, or changing user fees	Randomised trials (2), interrupted time series studies (9), and controlled before-and-after studies (6) evaluating the introduction of user fees (8 studies), the removal of fees (5), and increasing or decreasing fees (5).
Participants	People living in low- and middle-income countries	Users or potential users of outpatient facilities (8 studies), hospitals (3), both (5), or preventive drugs (school children) (1)
Settings	Any setting where health services are provided	Kenya (4 studies), Ecuador (2), Uganda (2), and 1 each from Burkina Faso, Cameroon, Colombia, Gabon, Lesotho, Niger, Papa New Guinea, South Africa, and Sudan
Outcomes	Use of health services, healthcare costs, health outcomes, and equity	Utilisation of services (14 studies), number of new patients (2), health-seeking behaviour (2)

Date of most recent search: February 2011

Limitations: This is a well-conducted systematic review with only minor limitations.

Lagarde M, Palmer N. The impact of user fees on access to health services in low- and middle-income countries. Cochrane Database Syst Rev 2011 (4): CD009094.

Summary of findings

Included studies suggest that introducing user fees decreases utilisation, but it is unclear whether this reduction persisted over time. Two studies suggest that the combination of user fees and improvements in quality can increase utilisation.

Studies suggest that removing user fees increases the utilisation of curative healthcare services, usually in the form of a sharp increase following fee removal. Removing user fees might also have a positive impact on the uptake of preventive services after a year. Other included studies suggest that reducing user fees has a positive impact on the uptake of health services, and that the size of this impact varies with the size of the fee reduction.

The included studies suggest that an increase (or a decrease) in the level of fees leads to a more than proportional decrease (or an increase) in the utilisation of health services, indicating that the demand for healthcare is elastic.

However, the impacts of changing user fees is uncertain because of very low certainty of the evidence.

➔ **There is some evidence that introducing or increasing user fees reduces utilisation, that the combination of user fees and quality improvement increases utilisation, and that removing or reducing user fees increases utilisation, but these effects are uncertain. The certainty of this evidence is very low.**

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.

Introduction of user fees

People Anyone using any type of health service in low- and middle-income countries
Settings Burkina Faso, Kenya, Lesotho, Papua New Guinea
Intervention Introduction of user fees
Comparison No user fees

Outcomes	Relative change in utilsation	Certainty of the evidence*	Comments
Utilisation of preventive services	-15.4% immediately -17% after 12 months	⊕◯◯◯ Very low	Antenatal care visits dropped in one study where fees were introduced. One additional study found a decrease in utilisation of deworming drugs following an introduction of fees.
Utilisation of curative services	-28% to -51% immediately -9% to +8% after 12 months	⊕◯◯◯ Very low	Four of six studies showed a decrease in the number of outpatient visits in different types of facilities, although some drops in attendance might have been by chance.
Equity	Not reported	⊕◯◯◯ Very low	One study where quality improvements were introduced at the same time as user fees found an increase in utilisation for poor groups.

*GRADE: GRADE Working Group grades of evidence (see above and last page)

Increasing user fees

People Anyone using any type of health service in low- and middle-income countries
Settings Ecuador, Gabon
Intervention Increasing user fees
Comparison Previous user fees

Outcomes	**Net elasticity of the demand for services***	Certainty of the evidence†	Comments
Preventive services	-0.1 to -0.2	⨁◯◯◯ Very low	
Curative services	-0.2 to -2.8	⨁◯◯◯ Very low	Each of two studies had 2 arms - in three out of four arms, the results showed elasticities smaller than -1.
Equity	Not reported	-	

*Calculated as relative % change in utilisation of services/% change in fees. This represents the degree to which use of health services changes when user fees are changed.
†GRADE: GRADE Working Group grades of evidence (see above and last page)

Removing user fees

People Anyone using any type of health service in low- and middle-income countries
Settings Kenya, South Africa, Uganda
Intervention Removal of user fees
Comparison Previous user fees

Outcomes	**Relative change in utilsation**	Certainty of the evidence*	Comments
Utilisation of preventive services	+1.3% to +249% immediately +5% to +92% after 12 months	⨁◯◯◯ Very low	Most of the immediate changes might have been by chance, but several of the changes after 12 months were unlikely to have been by chance.
Utilisation of curative services	-28% to -51% immediately -9% to +8% after 12 months	⨁◯◯◯ Very low	There was an increase in the uptake of outpatient visits across studies. Inpatient visits did not increase in the one study that measured this.
Equity	Not reported	-	

*GRADE: GRADE Working Group grades of evidence (see above and last page)

Decreasing user fees

People Anyone using any type of health service in low- and middle-income countries
Settings Colombia, Sudan
Intervention Decreasing user fees
Comparison Previous user fees

Outcomes	**'Net' elasticity of the demand of services***	Certainty of the evidence†
Preventive and curative services	0 to -6.23	⊕◯◯◯ Very low
Equity	Not reported	-

*Calculated as relative % change in utilisation of services/% change in fees. This represents the degree to which use of health services changes when user fees are changed.
†GRADE: GRADE Working Group grades of evidence (see above and last page)

Relevance of the review for low-income countries

➔ Findings	▷ Interpretation*
APPLICABILITY	
➔ **Most of the included studies were from low-income countries.**	▷ *The impacts of changes in user fees on utilisation are uncertain and may depend on whether they are for preventive or curative services, whether increases are combined with quality improvement efforts, and the size of the change in fees.*
EQUITY	
➔ **Differential impacts on poorer populations were only reported in one study where quality improvements were introduced at the same time as user fees.**	▷ *Poorer people may be more sensitive to changes in user fees.*
ECONOMIC CONSIDERATIONS	
➔ **The review did not report economic consequences of changes to user fees.**	▷ *Revenue generated by increasing user fees may be limited and there may be management and capacity constraints on facilities' abilities to retain user fees and use them effectively.* ▷ *Poorly planned or resourced removal of user fees (e.g. not increasing drug supplies or managing the motivation of health workers faced with an increased workload) may have adverse effects.*
MONITORING & EVALUATION	
➔ **The certainty of the evidence is very low.**	▷ *Changes to user fees should be carefully planned and monitored. The impacts of changes to user fees should be rigorously evaluated.*

*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

Ridde V, Morestin F. A scoping review of the literature on the abolition of user fees in health care services in Africa. Health Policy Plan 2011; 26:1-11.

James CD, Hanson K, McPake B, et al. To retain or remove user fees? Reflections on the current debate in low- and middle-income countries. Appl Health Econ Health Policy 2006; 5:137-53.

Gilson L, McIntyre D. Removing user fees for primary care in Africa: the need for careful action. BMJ 2005; 331:762-5.

Rezayatmand R, Pavlova M, Groot W. The impact of out-of-pocket payments on prevention and health-related lifestyle: a systematic literature review. Eur J Public Health 2013; 23:74-9.

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Conflict of interest

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

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This review should be cited as

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The summary should be cited as

Oxman AD. What are the impacts of changes in user fees on access to health services? A SUPPORT Summary of a systematic review. March 2017. 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. 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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