

Nurses as substitutes for doctors in primary care: What are the effects?

Photo by Nena Terrell/USAID Ethiopia



During pandemics, the need for healthcare workers increases as more people get sick and need care. At the same time, healthcare workers may fall ill themselves or be placed in quarantine. Governments across the world are trying different solutions to address this problem. One possible solution is to move the care of some patient groups from more specialised to less specialised health workers, for instance by moving certain tasks from doctors to nurses.

About the review

A Cochrane Review of effectiveness research assessed the effects of moving primary healthcare services from doctors to nurses (Laurant 2018). The review analysed 18 studies of effectiveness, mainly from high-income countries. In some studies, nurses were responsible for all patients who came to the clinic or for all patients who needed urgent consultation. In some studies, nurses were responsible for patients with particular chronic diseases, or were responsible for providing healthcare education or preventive services to certain groups of patients. Included studies compared these nurses to doctors carrying out the same tasks.

Main results of the review

Our review shows that nurse-led primary care may lead to slightly fewer deaths among certain groups of patients, compared to doctor-led care. However, the results vary and it is possible that nurse-led primary care makes little or no difference to the number of deaths. In addition, patients probably have similar or better results in areas of health such as heart disease, diabetes, rheumatism,

Who is this summary for?

Implementation agencies, ministries of health, programme managers, and other stakeholders who are considering strategies where tasks are moved from doctors to nurses.

Key messages

The review shows that delivery of primary healthcare services by nurses instead of doctors probably leads to similar or better patient health and higher patient satisfaction. Nurses probably also have longer consultations with patients. Using nurses instead of doctors makes little or no difference in the numbers of prescriptions and tests ordered. However, the impacts on the amount of information offered to patients, on the extent to which guidelines are followed and on healthcare costs are uncertain.

How up-to-date was this review?

The review authors searched for studies that had been published up to March 2017.

and high blood pressure. Patients also are probably slightly more satisfied with their care and may have a slightly better quality of life when treated by nurses.

This review also shows that, compared to doctors, nurses probably have longer consultations, and their patients are slightly more likely to keep follow-up appointments. Studies found little or no difference in the number of prescriptions and there may be little or no difference in the numbers of tests and investigations ordered, or in patients' use of other services. The effects of nurse-led primary care on the amount of advice and information given to patients, and on whether guidelines are followed, are uncertain as the certainty of these findings is very low.

Our review suggests that the impacts on the costs of care of using nurses instead of doctors to deliver primary care are uncertain. We assessed the certainty of this finding as very low.

The questions presented in this summary are from a Cochrane Review. **This summary does NOT include recommendations.** The review authors have searched for, assessed and summarised relevant studies of effectiveness using a systematic and predefined approach.

The review authors assessed the certainty of each finding using a systematic approach called GRADE. GRADE uses criteria such as the risk of systematic errors (bias) in the finding of each study and the risk of errors due to the play of chance (because of few people or events in the studies).

In a summary of another Cochrane review, we present implementation considerations when moving tasks from doctors to nurses in primary care. Review title: *Barriers and facilitators to the implementation of doctor-nurse substitution strategies in primary care: a qualitative evidence synthesis.*

[Find the summary and review here](#)

Reference

This review is among a series of systematic reviews informing the WHO recommendations on: *Optimizing health worker roles for maternal and newborn health through task shifting* (<https://optimizemnh.org/>)

The information for this summary is taken from the following Cochrane Review: Laurant M, van der Biezen M, Wijers N, Watananirun K, Kontopantelis E, van Vught AJAH. Nurses as substitutes for doctors in primary care. Cochrane Database of Systematic Reviews 2018, Issue 7. Art. No.: CD001271. DOI: [10.1002/14651858.CD001271.pub3](https://doi.org/10.1002/14651858.CD001271.pub3).

Prepared by 'Briefly Summarised', Cochrane Norway/EPOC, April 2020. Contact: claire.glenton@fhi.no

The Norwegian Satellite of the *Effective Practice and Organisation of Care (EPOC) Group* receives funding from the *Norwegian Agency for Development Cooperation (Norad)*, via the *Norwegian Institute of Public Health* to support review authors in the production of their reviews.

