# ODHIN PROJECT FACTSHEET - WP2 -



Process and policy implications in enhancing screening and brief intervention delivery for unhealthy lifestyles: results from 3 literature reviews.

# **Key facts**

- Of all strategies applied to improve delivery of preventive services in healthcare, we found educational, e-health and combined strategies to be the most effective with regard to enhancing patient health conditions and lifestyles.
   Combining different strategies appears to be even more effective than the sum of effects of single strategies.
- With regard to strategies to improve delivery of primary healthcare preventive services for heavy alcohol consumption, however our analyses showed these strategies alone had no significant impact on the patients' alcohol consumption, although they did significantly improve primary care professionals' screening and brief intervention (SBI) delivery.
- To decrease heavy alcohol consumption, strategies that focused on the patient (e.g. patient feedback), professional (e.g. audit and feedback) or the organization (e.g. changes to the setting/ service delivery) to increase SBI delivery, should be applied in any combination. Combining strategies aimed at professionals and patients had the highest impact on SBI delivery. Involving other disciplines besides physicians appeared to be beneficial with regard to screening.
- Comparing results from our study specifically focused on patients' alcohol consumption to other lifestyle factors, shows that professional education strategies and combined strategies are likely to positively affect the patient lifestyle. An insufficient number of studies investigated the effectiveness of financial rewarding as a strategy for improvement of the delivery of preventive care. Furthermore, there are insufficient studies investigating cost-effectiveness of the different strategies for improvement of SBI in primary care to draw firm conclusions on.







# **Background**

Unhealthy life habits contribute to many non-communicable diseases, which imply a high disease burden for patients as well as a high use of healthcare. Previous reviews have shown that a variety of strategies aiming at integrating lifestyle interventions in primary care results in small to moderate improvements of provider and patient behaviour. The overall objective of this study is to bridge the gap between evidence based clinical research and everyday clinical practice by building a knowledge base on how screening and brief interventions (SBI) for lifestyle issues can be successfully disseminated and integrated in everyday routine practice. This set of reviews attempts to gain insight in the determinants affecting lifestyle behaviours, with heavy alcohol consumption as a case study in one of the reviews.

## Methodology of work

In the first review we included reviews on the (cost-) effectiveness of 1) educational, financial reimbursement and combined strategies on lifestyle and prevention, which were aimed at health professionals, and 2) ehealth strategies on lifestyle and prevention for patients/citizens. Secondly, we conducted a systematic review of trials on integrating SBI for heavy alcohol consumption in primary healthcare. Thirdly, results of this second review were compared with other reviews on three lifestyle issues; smoking, non-exercise and unhealthy diet.

### Results 1<sup>st</sup> review

The review of reviews showed that none of the categories of educational, financial, e-health or combined strategies was consistent in its effects on changing professional or patient behaviour. Nevertheless, we saw that combining different strategies appears to be more effective than the sum of effects of single strategies, especially when strategies were fine-tuned to identified barriers for use in daily practice. Furthermore, the evidence showed moderate positive effects of educational and e-health strategies on integrating delivery of healthcare preventive services and on health outcomes. The effect of financial reimbursement strategies remains inconclusive and needs further investigation.

# Results 2<sup>nd</sup> review

The results from the review of trials confirmed our presumption that several strategies significantly increased the SBI uptake by healthcare providers. With regard to patients' alcohol consumption we saw a positive trend which however was not statistically significant. Combining strategies aimed at different groups simultaneously, i.e. professional and/or organisational and/or patient oriented strategies, seem to have strongest effects on patients' alcohol consumption. Regarding SBI delivery, combining strategies aimed at professional with strategies aimed at patients had highest impact. Involving other types of professionals besides physicians also was beneficial for screening delivery. Combining strategies was especially effective for increasing the application of brief interventions.

# Results 3<sup>rd</sup> review

Comparing results of the review of trials on integrating SBI for heavy alcohol consumption, to reviews of trials on integrating preventive services for smoking, non-exercise and unhealthy diet, indicated 1) The use of electronic medical records showed positive trends with regard to improving preventive care, but were not statistically significant in either of the studies from the review of trials as well as from this comparative review; 2) Both reviews showed a strong effectiveness of combined strategies; 3) Both reviews showed that



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educational strategies aiming at professionals are likely to be effective amongst a range of lifestyles; 4) Evidence about strategies aiming at the organisation for the uptake of lifestyle interventions in primary care was hardly found.

## Conclusions for policy and research

- In general, educational, e-health and combined strategies are the most effective strategies to improve delivery of preventive services in healthcare. Combining different strategies appears even to be more effective than the sum of effects of single strategies.
- More specifically, successfully changing primary care professionals' SBI delivery does not automatically result in a reduction of patients' alcohol consumption. Therefore we recommend the use of combined improvement strategies in which strategies are not only aimed at professionals and organisations, but also aimed at patients.
- Involving other types of professionals besides physicians is likely to be more effective on screening delivery for heavy alcohol consumption than involvement of just one professional discipline.

#### Recommendations for further research

- Evaluate effects on both SBI delivery as well as patients' alcohol consumption.
- It needs some time to firstly change healthcare provider behaviour and subsequently influence patient behaviour. Measuring effectiveness on both levels requires long-term trials in which short and long term effects should be assessed.
- Investigate effectiveness of financial oriented strategies for improving delivery of preventive services, as there is a clear knowledge gap in that field.
- Investigate to what extent other providers in primary healthcare besides physicians can be involved, since many trials involve solely physicians.
- Cost-effectiveness of educational, organizational and patient oriented strategies to improve preventive services should be further investigated.
- Determinants of effective strategies to improve preventive services should be further investigated. For example: what is the optimal intensity of an educational strategies aimed at nurses and physicians to stimulate SBI for heavy alcohol consumption; what is the optimal intensity of financially incentivising general practices in stimulating them to do screening and brief interventions; what factors of e-health strategies determine the effectiveness at patient level. In addition, applied strategies for improving the uptake of preventive care delivery in studies should be described in more detail.

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