A tailored, multifaceted programme in capitation-based family practices improved appropriate use of preventive care manoeuvres


QUESTION: Can a multifaceted intervention programme using nurse facilitators improve preventive care (increased rates of recommended preventive care manoeuvres and decreased rates of non-recommended manoeuvres) in capitation-based family medicine practices?

Design
Randomised [allocation concealed*†], unblinded,* controlled trial with 18 months of follow up.

Setting
46 capitation-based health services organisations (HSOs) in family practice settings in Ontario, Canada.

Practices
46 HSOs were allocated, and 45 were analysed (64% group practices, 55% university affiliated, mean of 3 physicians per practice, and mean age of patients 47 y).

Intervention
23 HSOs were allocated to each intervention. Intervention HSOs were assigned to 1 of 3 nurse facilitators. The nurse made several visits and worked with the practice physicians and staff as a facilitator to adopt a 7-component programme to each practice's needs and wishes. The intervention strategies were designed to improve preventive care performance by using audit and ongoing feedback, consensus building, opinion leaders and networking, academic detailing with educational materials, reminder systems, patient mediated activities, and patient education materials. The evaluation was based on 8 recommended and 5 inappropriate preventive manoeuvres. 1 intervention HSO was lost to follow up.

Main outcome measure
Preventive performance was calculated as the proportion of eligible patients who received recommended manoeuvres (up-to-dateness) minus the proportion of patients who received inappropriate preventive manoeuvres (inappropriateness).

Main results
At baseline, the groups had similar scores. Preventive performance increased from 92% at baseline to 43% at 18 months in the intervention HSOs and remained unchanged at 32% in the control HSOs (p for difference < 0.001). Up-to-dateness scores for the intervention HSOs increased from 52% to 62% during the intervention. Corresponding scores for the control HSOs were 55% and 57% (p for difference < 0.01). Inappropriateness scores decreased slightly in the intervention HSOs (from 21% to 19%) and increased in the control HSOs (25% to 26%) (p for difference < 0.05). Preventive performance scores for the intervention HSOs showed successive increases at 9, 15, and 18 months. For individual manoeuvres, intervention HSOs completed more influenza vaccinations, counselled more young women about folic acid, and had a decrease in inappropriate proteinuria and blood glucose screening testing (p for difference < 0.05).

Conclusion
A nurse facilitator who helped individualise and implement a multifaceted programme to improve the appropriate use of preventive care manoeuvres in health service organisations in family practice settings was successful.

*See glossary.
†Information provided by author.

COMMENTARY

Changing physician practice is not easy. Passive interventions (eg, lectures, journals, or mailed guidelines) rarely work. Interventions that use several strategies tailored to individual practice needs, as in the study by Lemelin et al, are more likely to be effective. In addition, use of an external facilitator to work with practice personnel in making these changes has been effective in other studies in various primary care settings. Only modest changes in prevention rates were noted in the study. However, the progressive increase in preventive performance over time and the differential effects on recommended and inappropriate manoeuvres suggest that the improvements signalled real and progressive changes in practice patterns rather than a general increase in awareness of prevention because of the visits of the study nurse. In other studies, such practice changes have persisted for up to 2 years after the facilitator intervention ended. Achieving these modest changes required a large effort. Study nurses made an average of 33 visits of 1 to 2 hours to each practice. However, volunteers from such organisations as the American Cancer Society can be trained in this role. Alternatively, because the actual practice changes are not complicated, a motivated physician could (in theory) make them without an external support person by using such materials as those from the Put Prevention into Practice programme of the US Public Health Service.

Lorne A Becker, MD
State University of New York Upstate Medical University
Syracuse, New York, USA