

# Feedback to physicians plus telephone care management improved outcomes in primary care patients with depression

Simon GE, VonKorff M, Rutter C, Wagner E. Randomised trial of monitoring, feedback, and management of care by telephone to improve treatment of depression in primary care. *BMJ*. 2000 Feb 26;320:550-4.

## QUESTION

Does feedback to physicians or feedback plus telephone care by case managers improve outcomes in patients treated for depression?

## DESIGN

Randomized {allocation concealed\*}†, blinded (outcome assessors)\*, controlled trial with follow-up at 3 and 6 months.

## SETTING

5 primary care clinics in Washington State, United States.

## PATIENTS

Of 872 eligible patients, 613 (mean age 47 y, 72% women) who had received new prescriptions for antidepressants participated. Exclusion criteria were nondepression indication for antidepressants, bipolar or psychotic disorder in the previous 2 years, alcohol or substance abuse, or a visit to a psychiatrist in the previous 90 days. Follow-up was 97% at 3 months and 94% at 6 months.

## INTERVENTION

221 patients were allocated to feedback only (a detailed report that included data on anti-

depressant dosage, repeat prescriptions, number of follow-up visits, and limited treatment recommendations based on a computerized algorithm). 196 patients were allocated to feedback plus care management, which comprised a 5-minute introductory telephone call from the case manager and two 10- to 15-minute telephone assessments at 8 and 16 weeks. Physicians also received feedback reports from care managers after each assessment. 196 patients were allocated to usual care only.

## MAIN OUTCOME MEASURES

Data on follow-up visits were obtained from computerized records. Depression was assessed by telephone interview, using the 20-item depression scale from the Hopkins symptom checklist and the structured clinical interview for the current DSM-IV depression module. Treatment cost was calculated from the 1997 Medicare fee schedule for visits and actual costs for all other services.

## MAIN RESULTS

Analysis was by intention to treat. At 3 months, the intervention groups did not differ from the usual-care group for number

of primary care, follow-up, or total follow-up visits. At 6 months, patients in the feedback-plus-care-management group had lower depression scores, a higher probability of showing a 50% decrease in depression scores on the symptom checklist (odds ratio [OR] 2.22, 95% CI 1.31 to 3.75), and a lower probability of persistent major depression (OR 0.45, CI 0.24 to 0.86); the feedback-only group did not differ from the usual-care group. Mean incremental costs after adjustment for age, sex, chronic disease score, and baseline depression score were U.S. \$22 to \$71 for feedback only and \$83 to \$134 for care management.

## CONCLUSIONS

Among patients treated for acute depression in primary care settings, feedback to physicians plus care management by telephone reduced depression at 6 months; feedback only did not differ from usual care.

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\*See Glossary.

†Information provided by author.

## COMMENTARY

Interventions ranging from simple screening to multicomponent programs have been evaluated for the treatment of depression in primary care. Although screening alone is not effective, multicomponent programs that target detection, patient self-management, systematic follow-up, and integration of mental health services improve patient outcomes (1, 2).

The study by Simon and colleagues involved an intervention of intermediate complexity and cost. It was done in a staff model health maintenance organization that primarily served employed patients. Care managers were experienced in telephone assessment but had no special expertise in depression and required minimal supervision by a psychiatrist. Patients' initial depression scores were in the range for major depression, but the entry criteria ensured a broad spectrum of depressive disorders. The care managers' general skills and the broad inclusion criteria may facilitate implementation in other primary care settings. Additional strengths were the high enrollment and completion rates for telephone contacts, which indicate high patient acceptance.

Feedback alone was not effective, a finding consistent with studies of other single-component interventions and a previous study that

relied on feedback (3). The mechanism for the positive effects found by Simon and colleagues is not entirely clear. The proportion of patients who received adequate pharmacotherapy increased only slightly, and follow-up visits did not increase. After scheduled phone calls, 40% of patients needed moderate to substantial additional assistance. Some of the treatment effects may be because of this additional assistance and problem solving.

To replicate this particular intervention, clinics will need computerized diagnostic and pharmacy information, dedicated care managers, and limited access to a psychiatrist. Adapting these interventions to practices with fewer resources or more complex patients will be challenging.

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## References

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