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Interdisciplinary Stepped Care for Depression After Acute Coronary Syndrome

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Depression has long been recognized as a risk factor for developing cardiovascular disease in healthy individuals, for recurrent events in patients with established cardiovascular disease, and for adverse outcomes after coronary bypass surgery.¹ The World Health Organization highlighted the detrimental effects of depression on medical illnesses as 1 of its 10 most important global public health problems for 2007.^{2,3} These findings have ignited a debate regarding whether routine screening for and treatment of depression can improve the prognosis of patients with cardiovascular disease.

Primary care patients, including those with cardiovascular disease, clearly benefit from depression screening when staff-assisted depression care supports are in place to assure accurate diagnosis, effective treatment, and follow-up.^{4–6} Although screening alone does not improve depression or cardiovascular outcomes,^{7,8} screening can improve depression when combined with a collaborative care intervention in which a designated depression care manager, in consultation with a supervising psychiatrist, support the patient's primary care provider or treating medical specialist by providing education, patient activation, close follow-up, symptom monitoring, and treatment intensification as necessary. Collaborative care interventions typically take 6 to 12 months, and many aspects of treatment can be accomplished over the telephone.^{6,9–11} Although collaborative care is associated with increased cost in the short term,⁵ it reduces costs in the longer term.^{12–14}

The IMPACT (Improving Mood–Promoting Access to Collaborative Treatment)^{15,16} model of collaborative care has been shown to improve depression in a variety of settings including health maintenance organizations, fee-for-service groups, inner-city county hospitals, and Department of Veterans Affairs medical centers. Collaborative care programs like IMPACT are effective across different age groups¹⁷ and cultures¹⁸ as well as in patients with cancer,¹⁹ patients with diabetes,^{20,21} and patients who have undergone coronary bypass surgery.²² Project COPES (Coronary Psychosocial Evaluation Studies)²³ has now extended the proven benefits of the IMPACT model to patients with acute coronary syndrome (ACS). The COPES trial randomly assigned 157 patients with persistent depressive symptoms status post ACS from 5 hospital systems to a 6-month interdisciplinary stepped-care intervention adapted from the IMPACT model (n=80) or to usual care (n=77). After 6 months, intervention patients were more likely than usual care patients to report receiving care for distress or depression, to rate their depression care as excellent or very good, and to experience a significantly greater reduction in depressive symptoms.

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The COPES trial²³ had many important strengths. First, participants were required to show evidence of persistent depressive symptoms for 3 months. This “watchful waiting” strategy makes sense in the context of the relatively high rate of improvement in depression after hospital admission. It also focuses resource-intensive interventions on patients who may benefit most. Second, patient preferences were explicitly incorporated so that participants were encouraged to choose the treatment with which they felt most comfortable (pharmacotherapy and/or psychotherapy). This resulted in a high rate of engagement and patient satisfaction compared with usual care. Third, symptoms were monitored frequently with the 9-item Patient Health Questionnaire,²⁴ which has demonstrated excellent validity and response to change. Finally, the stepped-care approach allowed treatment to be individually tailored and intensified as necessary. This is analogous to care for cardiovascular disorders such as hypertension or dyslipidemia in which adjustments are made until treatment targets are reached.

As the authors acknowledge, there were some limitations of the intervention. Despite the overall high acceptance, 22 of the 80 patients assigned to the intervention did not participate or dropped out prematurely, suggesting that the care management strategy might be improved for future trials. Of note, the COPES intervention²³ was not truly “collaborative care” in that it was performed by members of a separate research team who were not involved in the patient’s clinical care. Collaborating with the patient’s primary care provider or cardiologist might reduce dropouts, create more patient-centered care through better integration of mental health and medical care, and further improve patient satisfaction. In the original IMPACT study,¹⁵ for example, more than 90% of participants remained actively engaged in the intervention for 10 months or more, and over 75% reported high satisfaction with care at follow-up.

Although the finding of fewer adverse cardiac events in the COPES intervention²³ group is promising, the number of events was too small to draw any definitive conclusions. However, we do not need to demonstrate a beneficial effect of depression treatment on cardiac outcomes before we implement evidence-based approaches to improving depression care. Screening plus interdisciplinary stepped care for depression improves emotional health,¹⁵ physical functioning,²⁵ and quality of life^{26,27} in patients with comorbid medical illnesses including cardiovascular disease.^{5,19–22} Helpful resources for organizations interested in implementing collaborative care programs can be found at the IMPACT implementation center (<http://impact-uw.org>), funded by the John Hartford Foundation, or on the Web site of the MacArthur Initiative on Depression in Primary Care (<http://www.depression-primarycare.org>).

In summary, the COPES trial²³ has demonstrated that a systematic stepped-care intervention for depression is well accepted and improves depressive symptoms in patients post ACS. The next step is to perform a larger randomized trial with sufficient power to evaluate the potential benefit of such an intervention on cardiovascular outcomes and cost-effectiveness. In the meantime, we have ample evidence that all primary care patients, including those with cardiovascular disease, should be screened for depression in the context of an interdisciplinary stepped-care treatment program.

References

1. Whooley MA. Depression and cardiovascular disease: healing the broken-hearted. *JAMA* 2006;295(24):2874–2881. [PubMed: 16804154]
2. Moussavi S, Chatterji S, Verdes E, Tandon A, Patel V, Ustun B. Depression, chronic diseases, and decrements in health: results from the World Health Surveys. *Lancet* 2007;370(9590):851–858. [PubMed: 17826170]
3. World Health Organization. World Health Statistics. Geneva, Switzerland: World Health Organization; 2007.

4. US Preventive Services Task Force. Screening for depression in adults: U.S. Preventive Services Task Force recommendation statement. *Ann Intern Med* 2009;151(11):784–792. [PubMed: 19949144]
5. Gilbody S, Bower P, Fletcher J, Richards D, Sutton AJ. Collaborative care for depression: a cumulative meta-analysis and review of longer-term outcomes. *Arch Intern Med* 2006;166(21):2314–2321. [PubMed: 17130383]
6. Williams JW Jr, Gerrity M, Holsinger T, Dobscha S, Gaynes B, Dietrich A. Systematic review of multifaceted interventions to improve depression care. *Gen Hosp Psychiatry* 2007;29(2):91–116. [PubMed: 17336659]
7. Gilbody S, House AO, Sheldon TA. Screening and case finding instruments for depression. *Cochrane Database Syst Rev* 2005;(4):CD002792. [PubMed: 16235301]
8. Thombs BD, de Jonge P, Coyne JC, et al. Depression screening and patient outcomes in cardiovascular care: a systematic review. *JAMA* 2008;300(18):2161–2171. [PubMed: 19001627]
9. Simon GE, VonKorff M, Rutter C, Wagner E. Randomised trial of monitoring, feedback, and management of care by telephone to improve depression treatment of depression in primary care. *BMJ* 2000;320(7234):550–554. [PubMed: 10688563]
10. Hunkeler EM, Meresman JF, Hargreaves WA, et al. Efficacy of nurse telehealth care and peer support in augmenting treatment of depression in primary care. *Arch Fam Med* 2000;9(8):700–708. [PubMed: 10927707]
11. Simon GE, Ludman EJ, Tutty S, Operskalski B, Von Korff M. Telephone psychotherapy and telephone care management for primary care patients starting antidepressant treatment: a randomized controlled trial. *JAMA* 2004;292(8):935–942. [PubMed: 15328325]
12. Katon WJ, Schoenbaum M, Fan MY, et al. Cost-effectiveness of improving primary care treatment of late-life depression. *Arch Gen Psychiatry* 2005;62(12):1313–1320. [PubMed: 16330719]
13. Simon GE, Katon WJ, Lin EH, et al. Cost-effectiveness of systematic depression treatment among people with diabetes mellitus. *Arch Gen Psychiatry* 2007;64(1):65–72. [PubMed: 17199056]
14. Unützer J, Katon WJ, Fan MY, et al. Long-term cost effects of collaborative care for late-life depression. *Am J Manag Care* 2008;14(2):95–100. [PubMed: 18269305]
15. Unützer J, Katon W, Callahan CM, et al. IMPACT Investigators. Improving Mood-Promoting Access to Collaborative Treatment. Collaborative care management of late-life depression in the primary care setting: a randomized controlled trial. *JAMA* 2002;288(22):2836–2845. [PubMed: 12472325]
16. Hunkeler EM, Katon W, Tang L, et al. Long term outcomes from the IMPACT randomised trial for depressed elderly patients in primary care. *BMJ* 2006;332(7536):259–263. [PubMed: 16428253]
17. Richardson L, McCauley E, Katon W. Collaborative care for adolescent depression: a pilot study. *Gen Hosp Psychiatry* 2009;31(1):36–45. [PubMed: 19134509]
18. Gilmer TP, Walker C, Johnson ED, Philis-Tsimikas A, Unützer J. Improving treatment of depression among Latinos with diabetes using project Dulce and IMPACT. *Diabetes Care* 2008;31(7):1324–1326. [PubMed: 18356401]
19. Ell K, Xie B, Quon B, Quinn DI, Dwight-Johnson M, Lee PJ. Randomized controlled trial of collaborative care management of depression among low-income patients with cancer. *J Clin Oncol* 2008;26(27):4488–4496. [PubMed: 18802161]
20. Katon WJ, Von Korff M, Lin EH, et al. The Pathways Study: a randomized trial of collaborative care in patients with diabetes and depression. *Arch Gen Psychiatry* 2004;61(10):1042–1049. [PubMed: 15466678]
21. Kinder LS, Katon WJ, Ludman E, et al. Improving depression care in patients with diabetes and multiple complications. *J Gen Intern Med* 2006;21(10):1036–1041. [PubMed: 16836628]
22. Rollman BL, Belnap BH, LeMenager MS, et al. Telephone-delivered collaborative care for treating post-CABG depression: a randomized controlled trial. *JAMA* 2009;302(19):2095–2103. [PubMed: 19918088]
23. Davidson KW, Rieckmann N, Clemow L, et al. Enhanced depression care for patients with acute coronary syndrome and persistent depressive symptoms: Coronary Psychosocial Evaluation Studies randomized controlled trial. *Arch Intern Med* 2010;170(7):600–608. [PubMed: 20386003]
24. Kroenke K, Spitzer RL, Williams JB. The PHQ-9: validity of a brief depression severity measure. *J Gen Intern Med* 2001;16(9):606–613. [PubMed: 11556941]

25. Callahan CM, Kroenke K, Counsell SR, et al. IMPACT Investigators. Treatment of depression improves physical functioning in older adults. *J Am Geriatr Soc* 2005;53(3):367–373. [PubMed: 15743276]
26. Simon G. Collaborative care for depression. *BMJ* 2006;332(7536):249–250. [PubMed: 16455698]
27. Katon W, Unützer J. Collaborative care models for depression: time to move from evidence to practice. *Arch Intern Med* 2006;166(21):2304–2306. [PubMed: 17130381]