

Integrative Care: What the Research Shows

John W. Williams Jr

Because the majority of patients with mental illness are treated by generalist physicians, primary care has been described as the “*de facto* mental health system” [1]. Unfortunately, outcomes for patients with common mental illnesses treated in primary care settings are often poor. Fewer than half of patients with depression recover within 6 months of starting treatment, and outcomes are worse for minority and low-income patients [2, 3]. Studies show multiple problems with the quality of care, including underdiagnosis, inadequate dosage and duration of treatment when psychotropic medication is prescribed, and infrequent follow-up [4, 5]. Early attempts to improve patient outcomes focused on improving care for depression through clinician education and depression screening, but these efforts largely failed. However, important lessons were learned, and it was hypothesized that outcomes could be improved by integrating mental health care with primary care and delivering that integrated care in a primary care setting.

Over the past 2 decades, integrated care has been evaluated in a series of randomized controlled trials (the strongest design for testing a new treatment intervention). In the initial studies, including a 1995 study by Wayne Katon and colleagues [2], adult patients with depression were cared for jointly by a mental health professional and a primary care physician at the same location; often the patients alternated visits with the two providers. These studies showed improved outcomes with this approach; however, it was thought to be too expensive and to strain an already limited supply of mental health professionals. The model evolved into a team approach that incorporates specially trained nurses, pharmacists, or health coaches and makes greater use of telephone follow-up to increase the frequency of contact at reasonable cost. These integrated approaches also borrow from Edward Wagner’s chronic care model [6], empowering and preparing patients to manage their own health and health care. More systematic follow-up, stepped-care treatment algorithms, disease registries and decision support have been introduced. Decision support often takes the form of having a mental health professional supervise the nurse, pharmacist, or health coach. Various permutations of this integrated care model for depression have now been evaluated in more than 40 trials,

some of which have included up to 2 years of follow-up.

High-quality systematic reviews [7, 8] have shown that, compared with primary care treatment alone, integrated care for depression doubles the rate of medication adherence and significantly improves symptoms of depression, functional status, and patient satisfaction. In one large trial involving 1,801 older adults, treatment lasting 1 year was shown to have positive effects that were still present at 2-year follow-up, including decreased pain scores in the subset of depressed patients who also had arthritis [9-11]. The results for patients from ethnic minority groups and those with low incomes were as good as or better than those for the group as a whole.

More recent trials have shown that these positive effects extend to depressed patients who have a concurrent condition, such as a chronic medical illness (diabetes mellitus or coronary artery disease, for instance), generalized anxiety disorder, or panic disorder. Integrated care that focuses on mental health outcomes does not have a halo effect that improves general medical outcomes [12]. However, when integrated care uses similar methods for both depression and chronic medical conditions, increasing follow-up and measurement-based care for both, outcomes for both (including measures of disease control such as glycated hemoglobin and serum cholesterol levels) are improved [13, 14]. Integrated, collaborative care of this sort has been shown to be highly cost-effective, and in some subgroups of patients, it has actually produced cost savings [15, 16].

What are the key ingredients of integrated care? An analysis that sought to identify the components of integrated care that have been consistently associated with greater impact on symptoms of depression [17] concluded that the most important features are active care by the primary care physician, collaboration with a mental health professional, adherence monitoring, treatment response assessment using a symptom scale, active support for patient self-management skills, and integrated treatment lasting at least 16 weeks.

How can integrated care for depression be promoted in North Carolina? The state’s primary care physicians support integrated care, and the approach described here is consistent with the “medical home” team-based medical care delivery model. However, given current

Key partners in the early ICARE work included the North Carolina Academy of Family Physicians, the North Carolina Pediatric Society, the North Carolina Psychiatric Association, and Southern Regional AHEC. Today, representatives from more than 30 state agencies and organizations continue to serve on the Center’s Advisory Committee to assure ongoing development of, and commitment to, effective patient care by creating locally based, integrated health

systems. The Center is a resource for government, hospitals, health systems, the health care industry, Local Management Entities (LMEs), CCNC networks, health care payers, and the public. It serves as a “think tank” in which these stakeholders develop best-practice models that meet the needs of primary care and behavioral health patients and providers in a collaborative, strength-based approach to service delivery. (A strength-based approach builds upon the per-

demands on primary care practices and the precarious financial situation of many of them, support for implementation will likely be required. Free online training and support materials are readily available from such sources as the IMPACT (Improving Mood-Promoting Access to Collaborative Treatment) program at the University of Washington [18] and the MacArthur Initiative on Depression and Primary Care [19], but it would be helpful to offer some technical assistance in combination with these. The major challenge to widespread implementation is developing a successful financial model. Large health systems such as those of the Veterans Health Administration and the US Department of Defense have successfully implemented integrated care models [20, 21]. For smaller practices, which may not benefit directly from improved patient outcomes and potentially lower utilization of services, bundled payment approaches are being evaluated in the DIAMOND (Depression Improvement Across Minnesota, Offering a New Direction) study [22]. North Carolina policymakers can learn from this ongoing investigation of a model for primary care management of depression. **NCMJ**

John W. Williams Jr, MD, MHSc professor of medicine and psychiatry, Durham Veteran Affairs Medical Center and Duke University, Durham, North Carolina.

Acknowledgment

Potential conflict of interest. J.W.W. consults with 3CM which has a contract to assist the Department of Defense with implementing integrated mental health and primary care.

References

- Regier DA, Goldberg ID, Taube CA. The de facto US mental health services system: a public health perspective. *Arch Gen Psychiatry*. 1978;35(6):685-693.
- Katon W, Von Korff M, Lin E, et al. Collaborative management to achieve treatment guidelines. Impact on depression in primary care. *JAMA*. 1995;273(13):1026-1031.
- Stockdale SE, Lagomasino IT, Siddique J, et al. Racial and ethnic disparities in detection and treatment of depression and anxiety among psychiatric and primary health care visits, 1995-2005. *Med Care*. 2008;46(7):668-77.
- Katon W, Von Korff M, Lin E, Bush T, Ormel J. Adequacy and duration of antidepressant treatment in primary care. *Med Care*. 1992;30(1):67-76.
- Druss BG. A review of HEDIS measures and performance for mental disorders. *Manag Care*. 2004;13(suppl 6):48-51.
- Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. Improving chronic illness care: translating evidence into action. *Health Aff (Millwood)*. 2001;20(6):64-78.
- Williams JW Jr, Gerrity MS, 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.
- 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;166:2314-2321.
- Unützer J, Katon W, Callahan CM, et al, for the IMPACT Investigators. Collaborative care management improves treatment and outcomes of late-life depression: a randomized controlled trial. *JAMA*. 2002;288(22):2836-2845.
- Lin EHB, Katon W, Von Korff M, et al (for the IMPACT Investigators). Effect of improving depression care on pain and functional outcomes among older adults with arthritis: a randomized controlled trial. *JAMA*. 2003;290(18):2428-2429.
- Hunkeler EM, Katon W, Tang L, et al. Long term outcomes from the IMPACT randomized trial for depressed elderly patients in primary care. *BMJ*. 2006;332(7536):259-263.
- Williams JW Jr, Katon W, Lin E, et al (for the IMPACT Investigators). The effectiveness of depression care management on diabetes-related outcomes in older patients. *Ann Int Med*. 2004;140(12):1015-1024.
- Katon WJ, Lin EH, Von Korff M, et al. Collaborative care for patients with depression and chronic illnesses. *N Engl J Med*. 2010;363(27):2611-2620.
- Bogner HR, Morales KH, de Vries HF, Cappola AR. Integrated management of type 2 diabetes mellitus and depression treatment to improve medication adherence: a randomized controlled trial. *Ann Fam Med*. 2012;10(1):15-22.
- Katon W, Unützer J, Fan MY, et al. Cost-effectiveness and net benefit of enhanced treatment of depression for older adults with diabetes and depression. *Diabetes Care*. 2006;29(2):265-270.
- 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.
- Rubenstein LV, Williams JW Jr, Danz M, Shekelle P. Determining Key Features of Effective Depression Interventions. Department of Veterans Affairs Health Services Research and Development Service: Evidence-Based Synthesis Program. March 2009. <http://www.hsrd.research.va.gov/publications/esp/Depression-Interventions-2009.pdf>. Accessed April 8, 2012.
- IMPACT Evidence-Based Depression Care Web site, <http://impact-uw.org/>. Accessed April 8, 2012.
- The MacArthur Initiative on Depression and Primary Care Web site, <http://www.depression-primarycare.org/>. Accessed April 8, 2012.
- Engel CC, Oxman T, Yamamoto C, et al. RESPECT-Mil: feasibility of a systems-level collaborative care approach to depression and post-traumatic stress disorder in military primary care. *Mil Med*. 2008;173(10):935-940.
- Zivin K, Pfeiffer PN, Szymanski BR, et al. Initiation of Primary Care—Mental Health Integration programs in the VA Health System: associations with psychiatric diagnoses in primary care. *Med Care*. 2010;48(9):843-851.
- Lauren Crain A, Solberg LI, Unützer J, et al. Designing and implementing research on a statewide quality improvement initiative: The DIAMOND Study and Initiative. *Med Care*. 2012 Feb 8 [Epub ahead of print].

Electronically published June 7, 2012.

Address correspondence to John W. Williams Jr, Durham VA Medical Center and Duke University, 411 W Chapel Hill St, Durham, NC 27701 (jw.williams@duke.edu).

N C Med J. 2012;73(3):205-206. ©2012 by the North Carolina Institute of Medicine and The Duke Endowment. All rights reserved 0029-2559/2012/73312

son's strengths, rather than focusing on their weaknesses or problems.) The Center's staff members provide onsite and telephonic technical assistance and training. Coaching for practice change and for model sustainability through continuous quality improvement is customized for practice sites and enhanced by the growing use of electronic health records.

Through demonstration projects, models of bidirectional care are being developed to provide appropriate behavioral health services in primary care settings and medical interventions in behavioral health settings. The emphasis is on disease management and early identification of medical and behavioral health issues, with brief intervention and referral to appropriate specialty treatment.