

The DIAMOND Initiative: A First Year Report

Abstract:

This article describes DIAMOND (Depression Improvement Across Minnesota, Offering a New Direction), a program launched by the Institute for Clinical Systems Improvement (ICSI) in March 2008. DIAMOND changes how treatment for patients with depression is delivered and paid for in the primary care clinic. Background on the program's development and an explanation of how the program works is presented. Initial results of patients enrolled in the DIAMOND program for at least six months shows a 43 percent remission rate. Other measurement data is included, as is an update on the current status of the DIAMOND initiative in Minnesota.

Why DIAMOND was Developed

According to the National Institute of Mental Health, severe depression affects about 8 percent of the U.S. population¹, and is the leading cause of disability for ages 15-44. These numbers suggest roughly 415,000 Minnesotans may struggle with this debilitating disease. Adults suffering from depression make up one of the most underserved groups in our health care system. However, primary care providers treat about 75 percent of the patients with depression. A study published in the *Journal of the American Medical Association* found that primary care providers detect only 35-50 percent of adult patients with major depression. Only about half of these patients get treated, and just 20-40 percent of treated patients show substantial improvement within 12 months of diagnosis². This is in part because more than 80 percent of them have an additional health condition or disease³, and pri-



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mary care physicians are usually better trained to address physical versus mental health problems.

The burden of this gap in care affects not only the patients who experience poor outcomes, but also employers. Employers collectively lose \$44 billion per year in productivity². One third of the economic burden of depression is direct treatment costs; two-thirds is lost productivity and disability².

Research identified multiple barriers to good depression treatment in the primary care clinic. Obstacles ranged from technical problems like unclear medical coding of depression services, to cultural challenges like primary care physicians' unease in discussing mental health issues with their patients. Well-defined diagnostic criteria were not used. Follow-up care for depressed patients was hit or miss. And physicians who spent extra time serving their patients with depression typically were not compensated for their additional care.

These multitude of factors convinced ICSI to try to develop a new model for treating patients with depression in primary care. In formulating the model, ICSI convened a steering committee with members representing medical groups, psychiatrists, health plans, purchasers, patients and the Minnesota Department of Human Services. Committee subgroups focused on care delivery, funding, measurement and integration with mental health services.

Care Practice Redesign

ICSI first conducted extensive research on existing care models. These included Wagner's chronic care model for overall redesign of care delivery⁴, as well as a review of 37 controlled trials specifically looking at collaborative approaches to depression care (full bibliography is available at www.icsi.org). Many of these trials indicated that by integrating care managers and mental health professionals into primary care, outcomes of patients with depression are improved.



Of all the trials examined, the most comprehensive were the work of Wayne Katon⁵, and by Jürgen Unützer, both of the University of Washington. The latter's IMPACT⁶ model became the basis for the DIAMOND program. IMPACT offered a scientifically sound conceptual framework, an established training program, and alignment with ICSI's goal of seeking evidence-based, collaborative, measurable and actionable solutions.

ICSI's DIAMOND model adopted the following six components of the IMPACT study:

- Use of a **validated screening tool**—the PHQ-9—for assessment and ongoing management of depression.
- A **patient registry** for systematic monitoring and tracking.
- Use of **evidence-based guidelines** and a stepped-care approach for treatment modification or intensification.
- **Relapse prevention** plan for patients ready to move out of the care management program.
- **Care manager** role for a clinic staff person who educates, coordinates and troubleshoots services for patients with depression.
- **Consulting psychiatrist** role that serves as a liaison to the care manager for consultation and caseload review.

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DIAMOND in Action

Before a clinic can offer DIAMOND, it has to complete an operational readiness assessment, hold collaborative team meetings, help train staff, build the infrastructure for the program's components, and agree to data submission.

Certified DIAMOND clinics hire care managers, usually with nursing or mental health care experience, to help patients with education, self-management support, stepped therapy, primary care-mental health care coordination, and relapse prevention. The care manager uses telephone calls, e-mails and/or face-to-face meetings with the patient. These contacts occur more frequently than is feasible for office visits with the primary care physician. The care manager typically contacts the patient on a weekly basis. As the patient improves, contact is scaled back.

ICSI trains care managers on all aspects of the program, from using the PHQ-9 and the patient registry to assess and track patients' progress, to knowing when to engage the consulting psychiatrist and primary care physician.

The consulting psychiatrist, in collaboration with the care manager, reviews the clinic's DIAMOND patient caseload weekly and recommends changes in treatment for patients who are not improving. The primary care physician makes all final treatment decisions and initiates changes to patient treatment plans. Recommendations from the consulting psychiatrist could include changes to medications or referrals to mental health specialists. Psychologists, social workers, and other mental health providers continue to play a key role. Patients may be referred for therapy and other services as part of their treatment plan. In this way, DIAMOND helps ensure that patients requiring behavioral health expertise are more apt to get to specialists, while those that can be helped in primary care receive the evidence-based level of care known to get results.

Care Payment Redesign

The DIAMOND program could not have been implemented without also reforming payment because the care manager and consulting psychiatrist roles and services were not reimbursable under the Minnesota fee-for-service system. Four years of data from the IMPACT study indicated that while health plan costs for coverage increased the first year, after four years there was a \$3,330 savings in overall health care costs with IMPACT⁷. Health plans and medical groups collaborated to create a new payment model to

reimburse participating medical groups. They had to determine such things as what specific services would be covered, what patients would be eligible, how long patients would remain in the program, and how participating medical groups would be reimbursed.

The bundle of services covered under DIAMOND program includes: care manager services—patient tracking, use of the registry, contacts with patients in the program, administration and use of the PHQ-9, and relapse prevention visits with the patient; and consulting psychiatrist services—weekly consultation with the care manager and case review.

The program defined patient eligibility as: adults, age 18 and older; diagnosis of major depression or dysthymia with any of three diagnosis codes—296.2x, 296.3x and 300.4x, and a PHQ-9 score of 10 or above. Coverage of service was for 12 consecutive months. A single billing code, useable only by certified DIAMOND sites, was established. Each health plan and medical group negotiated the specific fee to be paid to avoid any violation of anti-trust law.

Measurement

Program measurement includes collecting of process and outcome measures, including patient enrollment, the number of PHQ-9s administered, patients in remission, and patients responding to treatment at six and 12 months. ICSI's measures are aligned with MN Community Measurement's depression care quality measure, which is reported publicly and is being used by the Buyers Health Care Action Group (BHCAG) in 2009 to make awards to both providers and behavioral health physicians through the Bridges to Excellence pay-for-performance program.

In addition, the National Institute of Mental Health (NIMH) has awarded HealthPartners Research Foundation a \$3 million grant to study the DIAMOND initiative over five years. The study will evaluate all aspects of DIAMOND, including patient satisfaction, productivity, and program cost-effectiveness.

Launch and Initial Patient Results

In addition to the 10 Minnesota primary care clinics that launched DIAMOND in March 2008, another 20 clinics began offering DIAMOND last September, and 18 more launched the program March 1, 2009. Additional clinics will come on board every six months until roughly 90 clinics are scheduled to offer the program in 2010.

To date, more than 1,300 patients have been enrolled into the program. Of those that have been enrolled for at least six months (results did not start being collected until October, six months after launch), 183 have been contacted. Of those, 43 percent were in remission. An additional 10 percent of the 183 enrollees showed at least a 50 percent improvement in their PHQ-9 scores. These results exceed the "stretch" goals set by the ICSI DIAMOND Steering Committee for patient outcomes.

ICSI and the participating clinics continue to learn from the new DIAMOND model. Best practices, such as how to make the primary care provider to care manager handoff to increase the number of patients opting in the program, are shared among existing and new DIAMOND clinics coming on board. Clinics are determining the size of patient caseloads that a care manager can handle.

As the DIAMOND program completes its first year, it has proven in a real world setting that the collaborative care model indeed significantly improves the outcomes of patients with depression in the primary care setting. Continuous improvements with the model and the spread of DIAMOND to more clinics will help determine just how much impact the program will have in managing patients with depression in Minnesota in 2009 and beyond. ♦

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