Collaborative Care for Primary/Co-Morbid Mental Disorders

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EXECUTIVE SUMMARY

- Depression and other common mental disorders are common, disabling, and associated with high health care costs and substantial losses in productivity. Depression increases costs in patients with chronic medical disorders by 50-100%. Depression is also ranked as the second leading cause of disability worldwide by the World Health Organization.

- Most cases of depression and other common mental disorders are treated in primary care. Existing specialty mental health programs do not have the capacity to serve all such patients, and many patients prefer treatment in primary care.

- Effective treatments are available for depression and anxiety disorders, but “usual” quality of care and outcomes are poor in most settings, and especially in primary care. Overall, only around 1/7 of patients with mental disorders receive minimally adequate care.

- “Collaborative Care” is a systematic approach to improving care for depression and other common mental disorders, in which primary care and mental health providers work closely together to deliver effective treatment in primary care.

- More than 40 randomized controlled trials have shown Collaborative Care to be more effective and cost-effective than usual care, across diverse practice settings and patient populations. Collaborative Care doubles the effectiveness of usual care for depression and has been associated with savings in overall health care costs.

- Collaborative Care follows principles of good chronic illness care. It enhances “usual” primary care by adding three crucial services: (1) care coordination and care management support for patients initiating treatment in primary care; (2) regular/proactive monitoring using validated clinical rating scales, such as the PHQ-9 for depression; and (3) regular psychiatric consultation for the primary care treatment team regarding patients who are not improving.

- A number of large health care organizations and health plans have successfully implemented Collaborative Care. This includes state-wide implementations with commercially insured and low income populations; and system-wide programs by several commercial health plans, and in the Veterans Health Administration and the US Army.

- The principal barrier to wider implementation of this evidence-based intervention is that usual insurance financing models do not consistently cover core components of Collaborative Care, particularly care coordination/management, routine patient monitoring with validated rating scales, and regular psychiatric case review.

- Real-world implementations of Collaborative Care are using capitated payments and associated benefit requirements; or case-rate payments, which provide a monthly care management fee for the services that cannot be reimbursed under tradition FFS payment. At least one state-wide implementation is also using pay-for-performance mechanisms.

- Coverage of Collaborative Care in Medicaid and Medicare would substantially improve medical and mental health outcomes and functioning, and it can reduce overall health care costs, especially in high-risk populations with co-occurring mental and medical illnesses.
1. BEHAVIORAL HEALTH SERVICES IN PRIMARY CARE

Behavioral health problems such as depression, anxiety, alcohol or substance abuse are among the most common and disabling health conditions worldwide. They often co-occur with chronic medical diseases and can substantially worsen associated health outcomes. Rates of depression have been estimated to be 11% in FFS Medicare and 20% in Medicaid populations. When behavioral health problems are not effectively treated, they can impair self-care and adherence to medical and mental health treatments and they are associated with increased mortality, substantially increased overall health care costs, and decreased work productivity.

Primary care practices are the “de facto” location of care for most adults in the US with common mental disorders such as depression, and most patients prefer an integrated approach in which primary care and mental health providers work together to address medical and behavioral health needs. Older adults in particular prefer treatment of mental disorders in primary care – and when they are referred to mental health specialists, no more than half complete such a referral. Primary care providers report serious limitations in the support available from mental health specialists.

Treatment of common mental health problems in primary care can be improved via existing, evidence-based interventions, yielding better access to care, better medical as well as mental health outcomes, and improved cost-effectiveness.

2. QUALITY OF CARE FOR COMMON MENTAL DISORDERS

Effective pharmacological and non-pharmacological treatments exist for common mental health problems, including for depression and anxiety disorders. At the same time, based on 2001-2003 data, only around 40% of Americans with a serious mental illness received any specific mental health treatment in the prior year, and only around one-third of those – and so around one in seven overall – received treatment that could be characterized as minimally adequate based on practice guidelines.

Almost 30 million Americans receive prescriptions for antidepressants each year, and a recent report from the Agency for Health Care Research and Quality (AHRQ) finds that older adults are particularly likely to be treated with an antidepressant medication, with almost 5 million older Americans taking prescription antidepressants. In analyses of recent data from a Medicare Advantage plan with more than one million members, we found that that 28% of members received an antidepressant prescription in the prior year. But many of these patients do not receive adequate trials of these medications; while others continue to medications even if they are not effective for them, rather than having their treatment adjusted, due to lack of regular monitoring and clinical inertia. As a result, as few as 20% of patients started on antidepressant medications in “usual” primary care show substantial clinical improvements. Similarly, patients referred to psychotherapy often receive inadequate trials of such treatments, and/or ineffective forms of psychotherapy, so that treatment response for this type of treatment is also as low as 20% under usual care.
3. EFFORTS TO IMPROVE CARE FOR MENTAL DISORDERS IN PRIMARY CARE

Efforts to improve the treatment of common mental disorders in primary care initially focused on screening for common mental disorders, education of primary care providers, development of treatment guidelines, and referral to mental health specialty care. These approaches – alone and in combination – have not been found to improve patient outcomes, although they may be necessary components of effective interventions.13

Another approach to improve care for patients with behavioral health problems is to co-locate mental health specialists within primary care clinics. Having a mental health professional available to see patients in primary care can improve access to mental health services, but co-location has also not been found to improve patient outcomes at a population level.14

4. EVIDENCE-BASED SOLUTIONS: COLLABORATIVE CARE

Over the past 15 years, more than 40 randomized controlled trials have established a robust evidence-base for an approach called “Collaborative Care.”15 In such programs, care is provided by a collaborative team, including

- The primary care provider (PCP)
- Care coordination staff, such as a nurse, clinical social worker, or psychologist, who can support the treatment strategy initiated by the PCP. In some implementations of Collaborative Care, this staff also provides evidence-based, brief/structured psychotherapy, such as Cognitive Behavioral Therapy
- A psychiatric consultant, who advises the primary care treatment team regarding patients who are not improving

In terms of clinical approach, Collaborative Care programs follow the principles of measurement-based care,16 treatment-to-target, and stepped care,17 and other aspects of the chronic illness care model proposed by Wagner and colleagues.18 Concretely, in Collaborative Care, each patient’s progress is closely tracked using validated clinical rating scales (e.g., PHQ-9 for depression19) – analogous to how patients with diabetes are monitored via HbA1c laboratory tests. Treatment is systematically adjusted – “stepped” up – if patients are not improving as expected. Initial adjustments can be made by the primary care treatment team, with input from the psychiatric consultant. Patients who continue not to respond to treatment, or have an acute crisis, are referred to mental health specialty care, as are patients who seek such referral; in practice, however, only a relatively small fraction of patients in Collaborative Care programs request or are otherwise referred to specialty care. Overall, such systematic ‘treatment to target’ can overcome the ‘clinical inertia’ that is often responsible for ineffective treatments of common mental disorders in primary care.20

Trials of Collaborative Care have been conducted in diverse health care settings, including network and staff systems, and private and public providers; with different financing mechanisms, including fee-for-service and capitation; different practice sizes; and different patient populations, including both insured and uninsured/safety-net populations. Of note, several studies have demonstrated that collaborative care programs are not only highly effective in safety net patients and patients from ethnic minority groups,21-26 but they can, in fact reduce health disparities observed in such populations.
Studies have also tested Collaborative Care interventions for different mental health conditions, most notably depression\(^{15, 27}\) and anxiety disorders. Across this extensive literature, Collaborative Care has consistently demonstrated higher effectiveness than usual care.\(^{28}\)

### 4.1. The IMPACT Collaborative Care Program

The largest trial of Collaborative Care to date, the IMPACT study (http://impact-uw.org), included 1,801 older adults (age 60+) with depression, in 18 primary care clinics in five US states. The trial included patients/sites with FFS Medicare as well as Medicare Advantage. In addition to having depression, IMPACT patients also averaged 3.5 chronic medical disorders. IMPACT participants were randomly assigned to a Collaborative Care program or to usual care.

In the IMPACT intervention arm, the program added two new team members to primary care, a depression care manager and a consulting psychiatrist. It also introduced two important clinical processes, systematic tracking of clinical outcomes and stepped care in which treatments are systematically adjusted with consultation from a psychiatrist if patients are not improving as expected. IMPACT participants were more than twice as likely as those in usual care to experience a substantial improvement in their depression over 12 months.\(^{11}\) They also had less physical pain, better social and physical functioning, and better overall quality of life than patients in care as usual. This Collaborative Care approach was strongly endorsed by patients and primary care providers.\(^{29}\) More recent studies have demonstrated the effectiveness of the IMPACT program in depressed adolescents,\(^{30}\) depressed cancer patients\(^{31}\) and diabetics,\(^{32}\) including low income Spanish speaking patients.\(^{33}\)

### 4.2. Collaborative Care as “Best Practice”

The Collaborative Care approach tested in IMPACT and similar studies has been recognized as an evidence-based practice by SAMHSA and recommended as a “best practice” by the Surgeon General’s Report on Mental Health (http://www.surgeongeneral.gov/library/mentalhealth/home.html), the President’s New Freedom Commission on Mental Health (http://store.samhsa.gov/product/SMA03-3831), and a number national organizations including the National Business Group on Health (http://www.businessgrouphealth.org/benefitstopics/et_mentalhealth.cfm). In a recent evidence-based practice report by AHRQ that reviewed the existing literature on approaches to Integration of Mental Health/Substance Abuse and Primary Care (http://www.ahrq.gov/clinic/tp/mhsapctp.htm), the IMPACT program was profiled as “the study with the strongest results.”\(^{34}\)

Over the past 10 years, the AIMS Center (Advancing Integrated Mental Health Solutions; http://uwaims.org) at the University of Washington has provided technical assistance and training to over 4,500 clinicians in over 500 primary care practices to implement effective Collaborative Care.

### 4.3. Effects of Collaborative Care on Health Care Costs

Depression has been shown to increase overall health care costs by 50-100%. This is true for adult patients generally; the increase in costs associated with depression are particularly large in patients with multiple chronic medical disorders.\(^{35-37}\)
Several studies have demonstrated that collaborative care for depression is more cost-effective than usual care, and a recent review concluded that collaborative care programs generate net social benefits at conventional valuations of quality-adjusted life years.\textsuperscript{38,39}

Importantly, several evaluations have demonstrated that Collaborative Care is associated with cost savings. Long-term (4-year) cost analyses from the IMPACT study found that patients in the Collaborative Care intervention arm had \textbf{substantially lower overall health care costs} than those in usual care.\textsuperscript{40} An initial “investment” in Collaborative Care of $522 during Year 1 resulted in net cost savings of $3,363 over Years 1-4. This corresponds to a \textbf{return on investment (ROI) of $6.50 per dollar spent}, with average annual savings of $841. The Collaborative Care intervention yielded \textbf{net savings in every category of health care costs} examined, including pharmacy, inpatient and outpatient medical, and mental health specialty care.\textsuperscript{40}

The reported cost and savings estimates listed above used health care cost data from 1999 through 2003. After adjusting for health care cost inflation and taking into account recent cost estimates from over 80 clinics implementing collaborative care in the Minnesota DIAMOND program, we estimate today’s cost of implementing an effective, evidence-based collaborative care program to be approximately $900 per program participant; that cost would be incurred in the first year – and mainly in the first six months – after diagnosis. Using published data\textsuperscript{40} adjusted for health care cost inflation\textsuperscript{40}, we estimate net savings of approximately $5,200 per program participant over four years, so approximately $1,300 per year. Similar cost savings have been identified in Collaborative Care studies that included patients with depression and diabetes\textsuperscript{32} and patients with severe anxiety (panic disorder).\textsuperscript{41}

These findings from research studies are consistent with published data from large integrated health care systems, including Kaiser Permanente and Intermountain Healthcare - which function like mature Accountable Care Organizations – that have implemented Collaborative Care programs and realized substantial cost savings associated with these programs.\textsuperscript{42, 43}

Based on a conservative depression prevalence estimate of 10\% in the Medicare population, and the data on ROI just described, we estimate that \textbf{Medicare could save approximately $6 billion per year from effective implementation of Collaborative Care} for all eligible Medicare beneficiaries, relative to current practice. This corresponds to \textbf{savings of approximately 1\% of total annual Medicare spending}. Longer-term savings from Collaborative Care would be approximately $24 billion over four years for each annual cohort of Medicare beneficiaries with depression. As above, savings would arise across all categories of service.

We estimate that implementation of Collaborative Care in Medicaid would yield savings on a similar scale. Given depression prevalence of 20\% in the Medicaid population,\textsuperscript{2} we estimate that \textbf{Medicaid could save approximately $15 billion per year from effective implementation of Collaborative Care} for all eligible Medicaid members. This corresponds to \textbf{savings in excess of 2\% of total annual Medicaid spending}.

5. IMPLEMENTING COLLABORATIVE CARE

Several large health care organizations have undertaken large-scale implementations of evidence-based Collaborative Care programs such as IMPACT. These include national and regional health plans, including Kaiser Permanente and Intermountain Health.\textsuperscript{42, 43} In Minnesota, the Institute for Clinical System Improvement's DIAMOND program
(http://www.icsi.org/health_care_redesign/diamond_35953/) has implemented Collaborative Care in 8 commercial health plans, 25 medical groups, and 80+ primary care clinics across the state, in a Fee-for-Service environment. In the State of Washington, the Mental Health Integration Program (MHIP; http://integratedcare-nw.org), sponsored by the Community Health Plan of Washington and Seattle King County Public Health, has implemented Collaborative Care across more than 100 community health centers and over 30 community mental health centers, for safety net clients with medical and behavioral health needs.

Other large-scale implementations include the Army’s RESPECT-MIL program (http://www.pdhealth.mil/respect-mil/index.asp), implemented in 100+ Army primary care clinics in the US and abroad; and the Department of Veterans Affairs’ Veterans Health Administration (http://www.hsrdr.research.va.gov/publications/internal/depression_primer.pdf), which has implemented Collaborative Care in hundreds of primary care clinics across the US.

5.1. Payment Models for Collaborative Care

Large-scale implementations of Collaborative Care have used a number of different payment approaches ranging from fully capitiated payment (e.g. Kaiser Permanente, VA, Army/DoD) to case-rate payment that augment fee-for-service billing by primary care providers (e.g., Minnesota’s DIAMOND program).

**FIGURE 1**: Pay-for-performance-based quality improvement dramatically reduces median time to depression improvement in a state-wide collaborative care program.

In Washington, the Mental Health Integration Program incorporates a pay-for-performance component, in which 25% of the payment for the program is tied to effective treatment. Performance is assessed on a number of quality indicators, including timely follow-up with patients; and demonstration of improved patient outcomes, or of systematic consultation and
treatment adjustment for patients who are not improving. Since the pay-for-performance component was introduced in 2008, the effectiveness of the program has substantially improved; so, for instance, Figure 1 shows significant reductions in median time-to-improvement, based on a study of 8,000 depressed adults served in 29 community health clinics participating in MHIP after pay-for-performance was implemented.

5.2. Gaps in Payment for Collaborative Care

The principal barrier to wider implementation of Collaborative Care programs is the fact that under “standard” fee-for-service payment models, two key components of Collaborative Care are generally not reimbursable: (1) care coordination and care management services provided in primary care, including regular/proactive monitoring using validated clinical rating scales; and (2) regular psychiatric caseload review and consultation that does not involve face-to-face contact with the patient.

5.2.1. Care Management and Care Coordination

Care managers support PCPs who are responsible for patients’ treatment. They work closely with, and are often located in, the primary care practice. With appropriate training and supervision, Collaborative Care programs have successfully used personnel with various types of professional background as care managers, including licensed clinical social workers, licensed counselors (i.e., master’s level therapists), nurses, and medical assistants under the supervision of a nurse.

Care manager responsibilities include:

- Screening for depression and other common mental disorders
- Patient engagement and education
- Close and pro-active follow-up focusing on treatment adherence, treatment effectiveness, and treatment side effects
- Brief counseling using established and evidence-based techniques such as Motivational Interviewing, Behavioral Activation, and Problem-Solving Treatment in Primary Care
- Regular (usually weekly) review of all cases who are not improving as expected with a psychiatric consultant
- Facilitation of communication between the PCP and the psychiatric consultant
- Facilitation of referrals to and coordination with outside mental health specialty care or medical specialty care, substance abuse services, and social services. Once patients have shown improvement, the care manager meets with the patient to establish a relapse prevention plan.

While these services are often provided via in-person patient contact in the patient’s primary care clinic, telephonic or other electronic contact can also be effective (and efficient). However, it is particularly rare for telephonic contact to be reimbursable under current payment mechanisms. A typical care manager carries an active caseload of 50-100 patients.

Appendix A provides a sample 'job description' for a care manager providing these services in Washington's MHIP program. Appendix B provides a job description for similar care management services in Minnesota’s DIAMOND program.
5.2.2. Psychiatric Consultation with the Primary Care Treatment Team

Psychiatric consultants provide mental health specialty support for the primary care treatment team, particularly regarding patients who are not improving as expected. Because clinical recommendations often involve management of psychotropic medications, psychiatrists and psychiatric nurse practitioners are the two types of clinicians eligible to provide these services in most settings.

Consultation responsibilities include regular (usually weekly) reviews of a caseload of patients treated for common mental disorders such as depression in a primary care practice by a consulting psychiatrist, with a focus on patients who are not improving as expected and treatment recommendations on those patients to the treating primary care provider. Recommendations are summarized in brief, focused written or electronic notes to the primary care provider (PCP).

In most cases, the review and recommendations are provided through a care manager supporting the PCP in primary care but in some cases, the communication is directly between the primary care provider and the consulting psychiatrist. The consulting psychiatrist is also available to the PCP during the week by pager to answer questions about recommendations made. The level of effort for consultants is typically three hours per week for each care manager's primary care caseload (typically 50-100 patients, as in Section 5.2.1.).

Appendix C provides a sample ‘job description’ for consulting psychiatrists providing these services in a state-wide program in Washington. Appendix D provides a similar job description for the state-wide DIAMOND program in Minnesota.

5.3. Payment for the Missing Components

Care management services in Collaborative Care are similar to and compatible with care management services provided in the context of Patient Centered Medical homes. These services are often billed as a monthly fee, in addition to physician fee-for-service billing for direct patient contacts.

Psychiatric case review (that does not involve face-to-face patient contact) can be reimbursed on a per-patient basis; or through a monthly rate that is a function the number of FTE care managers supported or the size of the patient caseload supervised.

In the DIAMOND program, a bundled monthly care management fee includes both the (1) psychiatric caseload review and consultation and the (2) care management services. Clinics request a monthly payment for patients active in the care management program by billing a specified ‘T-code’ to any of the six participating commercial health plans. Payment for the monthly fee is contingent on having trained and certified care managers and consulting psychiatrists and on regular reporting of patient outcomes (e.g., PHQ-9, for depression). Payment for administering the outcome assessment can be bundled as part of a case rate, or reimbursed on a fee-for-service basis, as with lab tests.
6. SUMMARY & PROPOSAL

In our view, the research evidence for Collaborative Care for depression and anxiety disorders, along with robust experience implementing such programs in diverse health care systems around the country, support establishing coverage for all components of the Collaborative Care model in Medicare and Medicaid. Based on available evidence, large-scale implementation of Collaborative Care would substantially improve medical and mental health outcomes and functioning, and it can reduce overall health care costs, especially in high risk populations with co-morbid mental health and medical illnesses.

In this context, we propose coordinated large scale demonstrations of Collaborative Care in Medicare and Medicaid populations that would provide the evidence needed to support coverage of Collaborative care for all Medicare and Medicaid populations. These demonstrations should demonstrate the value of Collaborative Care in reaching the 'triple aim' including improved patient care, better health outcomes, and overall cost savings. Such demonstrations should focus on several important populations:

We believe that there are a number of opportunities for such large scale demonstrations:

• **Medicare Fee-for-Service:**

  One of the most compelling opportunities to demonstrate the value of Collaborative Care in FFS Medicare is in the context of the DIAMOND program in the state of Minnesota. In this program, more than 80 primary care clinics affiliated with over 20 Medical groups already receive payment for evidence-based Collaborative Care from the 6 largest commercial payers in the state. Both the clinical and the payment models have been fully worked out, and the participating clinics are highly interested in and capable of implementing the program for FFS Medicare clients.

  Several other large medical groups in a number of states would similarly be interested in participating in a demonstration project of Collaborative Care for FFS Medicare patients. In several instances, private insurers have expressed interest in partnering in such an initiative if CMS were the lead payer in a particular market.

• **Patient Centered Medical Homes and Accountable Care Organizations**

  Medicare could demonstrate the value of Collaborative Care in the context of existing or planned demonstrations of Patient Centered Medical Homes or Accountable Care Organizations. These approaches have similar objectives and methods as those underlying Collaborative Care and medical groups participating in Medical Home or ACO demonstrations have expressed strong interest in implementing evidence-based Collaborative Care programs for depression.

  An example would be the Federally Qualified Health Center (FQHC) Advanced Primary Care Practice Demonstration. FQHCs serve populations with high rates of co-occurring medical and mental health disorders and many FQHCs around the country have expressed interest in implementing evidence-based integrated care or Collaborative Care.
• **Other populations** in which there would be great opportunity and potential value from demonstrating cost savings associated with evidence-based Collaborative Care include:

  o **“Dually-eligibles”,** a population with particularly high rates of co-occurring medical and mental health disorders and thus high potential for benefits and savings associated with effective Collaborative Care. A recent study suggests that quality improvement initiatives centering on depression management present important opportunities for collaboration between Medicare and Medicaid, and we estimate substantial cost savings associated with implementing Collaborative Care in this population.

  o **Medicare Advantage beneficiaries,** a population with high rates of depression and traditionally low rates of specialty mental health care use.

Specific payment mechanisms would vary according to setting/population, but all mechanisms should cover all the components of the Collaborative Care model, and pay-for-performance components where possible.

We are aware of limited pilots by a few private insurers (outside of the successful comprehensive implementations listed above) and disease management firms to pay for some elements of Collaborative Care, such as PHQ-9 tracking. These efforts have had limited success, for several likely reasons. One was that these insurers represented a small percent of a given medical group’s billings, thus reducing the incentives for primary care practices to fully engage and deploy the program. Another was that, in practice, the care management function was delivered by the managed care company and was not closely tied to primary care practices; this differs from effective implementations of the Collaborative Care model. Finally, few of the previously tried programs in the private sector have included systematic psychiatric caseload review and consultation regarding patients who are not improving as expected. If CMS were to do a large-scale demonstration of Collaborative Care as proposed, it would need to replicate successful implementations that include principles of population-focused measurement-based practice, stepped care, and treatment to target that are outlined in Section 5.
REFERENCES


2. Center MHI. Depression among New Hampshire Medicaid Members. 2007.


APPENDIX A: Care manager job description, Washington State Mental Health Integration Program

APPENDIX B: Care manager job description, Minnesota DIAMOND Program

APPENDIX C: Consulting psychiatrist job description, Washington State Mental Health Integration Program

APPENDIX D: Consulting psychiatrist job description, Minnesota DIAMOND Program

APPENDIX E: Draft Specifications for Payment of Evidence-Based Collaborative Care under Fee-for-Service Medicare