

University of St. Thomas, Minnesota

**UST Research Online**

---

Social Work Faculty/Staff Publications

School of Social Work

---

2013

## **Barriers to Improving Primary Care of Depression: Perspectives of Medical Group Leaders**

Robin R. Whitebird

*University of St. Thomas, Minnesota*

Leif I. Solberg

Karen L. Margolis

Stephen E. Asche

Michael A. Trangle

*See next page for additional authors*

Follow this and additional works at: [https://ir.stthomas.edu/ssw\\_pub](https://ir.stthomas.edu/ssw_pub)

---

This Article is brought to you for free and open access by the School of Social Work at UST Research Online. It has been accepted for inclusion in Social Work Faculty/Staff Publications by an authorized administrator of UST Research Online. For more information, please contact [asle4660@stthomas.edu](mailto:asle4660@stthomas.edu).

---

**Author**

Robin R. Whitebird, Leif I. Solberg, Karen L. Margolis, Stephen E. Asche, Michael A. Trangle, and Arthur P. Wineman

# Barriers to Improving Primary Care of Depression: Perspectives of Medical Group Leaders

Qualitative Health Research  
23(6) 805–814  
© The Author(s) 2013  
Reprints and permissions:  
sagepub.com/journalsPermissions.nav  
DOI: 10.1177/1049732313482399  
qhr.sagepub.com  


Robin R. Whitebird<sup>1</sup>, Leif I. Solberg<sup>1</sup>, Karen L. Margolis<sup>1</sup>, Stephen E. Asche<sup>1</sup>,  
Michael A. Trangle<sup>2</sup>, and Arthur P. Wineman<sup>2</sup>

## Abstract

Using clinical trials, researchers have demonstrated effective methods for treating depression in primary care, but improvements based on these trials are not being implemented. This might be because these improvements require more systematic organizational changes than can be made by individual physicians. We interviewed 82 physicians and administrative leaders of 41 medical groups to learn what is preventing those organizational changes. The identified barriers to improving care included external contextual problems (reimbursement, scarce resources, and access to/communication with specialty mental health), individual attitudes (physician and patient resistance), and internal care process barriers (organizational and condition complexity, difficulty standardizing and measuring care). Although many of these barriers are challenging, we can overcome them by setting clear priorities for change and allocating adequate resources. We must improve primary care of depression if we are to reduce its enormous adverse social and economic impacts.

## Keywords

depression; health care, access to; health care, primary; qualitative analysis; quality improvement; quality of care

Adult depression is a common condition that seriously affects the health of patients and complicates the care of other chronic conditions (Chapman, Perry, & Strine, 2005; Harpole et al., 2005; Ormel et al., 1998; Roose, Glassman, & Seidman, 2001; Steeds & Channer, 2000). It is the second leading cause of lost productivity worldwide, and is associated with high morbidity, mortality, health care costs, and social dysfunction (DiMatteo, Lepper, & Croghan, 2000; Greenberg et al., 2003; Harpole et al.; Unutzer et al., 1997). Because depression is such a common condition, its treatment occurs mostly in primary care rather than in specialized mental health settings (Bland, 2007; Edlund, Unutzer, & Wells, 2004; Wells, Schoenbaum, Unutzer, Lagomasino, & Rubenstein, 1999). However, research on depression in primary care has shown low rates of evaluation and management according to best practices (Fischer, Wei, Solberg, Rush, & Heinrich, 2003; Lin et al., 2000; Nutting et al., 2002; Rost et al., 2000; Unutzer et al., 2003; Wang, Berglund, & Kessler, 2000).

About 40 randomized controlled trials of various interventions to improve primary care of depression have consistently demonstrated patient outcomes that

are substantially better than usual care (Capoccia et al., 2004; Gilbody, Bower, Fletcher, Richards, & Sutton, 2006; Kates & Mach, 2007; Lang, Norman, & Casmar, 2006; Simon, Ludman, Tutty, Operskalski, & Von Korff, 2004; Unutzer et al., 2002; Unutzer et al., 2001; Wells et al., 2004), but those interventions are rarely sustained following study completion or spread to other practice sites (Blasinsky, Goldman, & Unutzer, 2006). Researchers have used trials to test systematic care team changes that require organizational changes, which suggests that barriers to implementing and sustaining such systems need to be addressed before improvement is possible.

<sup>1</sup>HealthPartners Institute for Education and Research, Minneapolis, Minnesota, USA

<sup>2</sup>HealthPartners Medical Group, Minneapolis, Minnesota, USA

## Corresponding Author:

Robin R. Whitebird, HealthPartners Institute for Education and Research, PO Box 1524, MS#2111R, Minneapolis, MN 55440-1524, USA.

Email: robin.r.whitebird@healthpartners.com

Studies of barriers to improving care of depression have relied on information obtained from individual physicians and other clinical staff. Barriers reported in these studies have included patient concerns about confidentiality, resistance to diagnosis or treatment, psychosocial issues, and noncompliance with treatment (Miedema, Tatemichi, Thomas-Maclean, & Stoppard, 2004; Nasir & Al-Qutob, 2005; Nutting et al., 2002). Physician barriers include competing clinical demands, time issues, deficits in knowledge about depression care, concern about inadequate reimbursement, lack of patient continuity with the physician, and problems in referring patients to mental health care specialists (Chapman, Duberstein, Epstein, Fiscella, & Kravitz, 2008; Fischer, Solberg, & Zander, 2001; Henke et al., 2008; Miedema et al., 2004; Nasir & Al-Qutob; Nutting et al.). The practice system improvements proven effective in randomized trials include use of registries, care managers, and collaborative arrangements with mental health specialists (Callahan, 2001; Gilbody, Whitty, Grimshaw, & Thomas, 2003; Simon et al., 2004; Unutzer et al., 2002; Unutzer et al., 2001; Von Korff, Katon, Unutzer, Wells, & Wagner, 2001; Wells et al., 2000).

Translating evidence learned from clinical trials to care improvement requires action by care delivery organizations to provide a supportive environment for depression care. Therefore, we must understand the perceptions of those responsible for implementing such organizational changes. We interviewed leaders from medical groups in Minnesota of diverse sizes and types, who identified the main barriers to improving depression care in their organizations and clinics.

## Methods

We based this study on data from "Assessing Better Care for Depression," a cross-sectional study of whether incentives, participation in quality improvement collaboratives, or various organizational characteristics of medical groups were associated with better performance measures of depression care (Margolis, Solberg, Asche, & Whitebird, 2007).

## Setting

In Minnesota, small, independent practices are rare, with nearly all primary care physicians organized into single or multispecialty organizations termed "medical groups" that usually include a number of separate clinics or practice sites. Although they have some autonomy, most groups are led by a medical director (MD) who exercises leadership to increase efficiencies and quality across the group. Many groups also have a quality improvement coordinator (QIC) who leads organization care-improvement efforts.

**Table 1.** Characteristics of Medical Groups.

Characteristics	n (%)
Practice size: Number of sites, n (%)	
1-3	11 (26.8)
4-10	14 (34.2)
>10	16 (39.0)
Practice size: Number of MDs, n (%)	
7-40	13 (31.7)
41-110	14 (34.1)
111-2000	14 (34.1)
Patient visits per week/physician, mean (SD)	81.9 (45.4)
Any psychiatrists at medical group, n (%)	18 (43.9)
Type of practice, n (%)	
Single specialty	15 (36.6)
Multispecialty	26 (63.4)
Location, n (%)	
Metropolitan	19 (46.3)
Nonmetropolitan	22 (53.7)
Ownership, n (%)	
Physicians	19 (46.3)
Hospital	12 (29.3)
Health plan	3 (7.3)
Other (foundation, nonprofit corporation)	7 (17.1)
Payer mix, mean (SD)	
Commercial	61.0 (13.0)
Medicare	22.7 (9.7)
Medicaid	10.8 (10.9)
Uninsured	3.9 (3.2)

Note. N = 41

## Recruitment

From 2006 to 2007 we recruited eligible medical groups from across Minnesota for participation in the study. To be eligible, groups needed sufficient numbers of patients treated for depression to be included in annual public reporting of performance measurement rates for depression care quality by Minnesota Community Measurement (MNCM), an organization sponsored by the region's health plans to enhance public accountability in care delivery. Forty-one medical groups were included in MNCM reports for depression and eligible for study participation; we recruited 100% of them through protocols described elsewhere (Solberg, 2006). The HealthPartners Institutional Review Board reviewed, approved, and monitored the study protocol.

## Study Population

The medical groups in this study ranged in size from small (7 physicians) to large (2,000 physicians) and were evenly divided between metropolitan and nonmetropolitan areas (Margolis et al., 2007). In Table 1, we

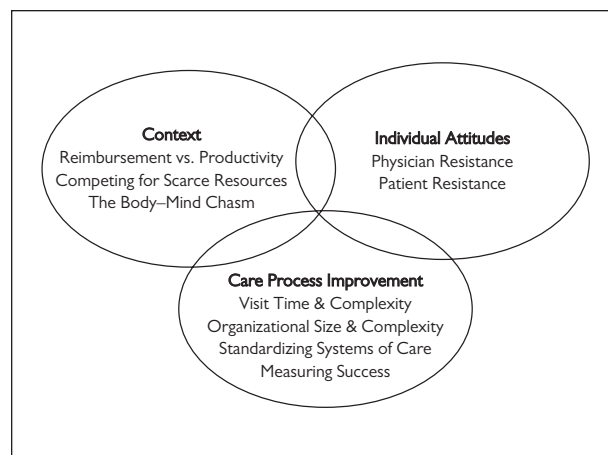
present these and other group characteristics. Among those interviewed, 73% of MDs were men, and all practiced at least part time in their medical group. Leaders of larger groups devoted more time to leadership activities than to clinical work. QICs were predominately women (92%) who were practicing nurses, whereas 2 were practicing physicians. The median tenure in position for both MDs and QICs was 4 years. Fewer than half (41%) of QICs devoted 100% of their time to quality improvement (QI) activities; another 41% devoted up to half their time, and the remaining 18% devoted 51% to 90% of their time. One third of QICs reported that their group devoted no time to QI related to depression care, one third reported 1% to 6% of their time, and one third reported spending 8% to 33% of their time on QI activities for depression care.

### Data Collection

We collected the data for this study from semistructured telephone interviews with 82 leaders (41 MDs and 41 QICs) in these 41 medical groups. Participants completed surveys and participated in taped telephone interviews regarding depression care in their groups. An interviewer trained in qualitative interviewing, telephone interviewing techniques, and study protocols conducted the interviews over 3 months. The scheduled interviews followed participant consent and lasted, on average, 25 minutes (range, 15 to 60 minutes); we developed and consistently used prompts for each question to encourage in-depth responses.

### Data Analysis

All interviews were audiotaped and transcribed verbatim using a professional transcription service; all identifying information was removed from the transcripts. Three authors comprised the data analysis team, with each independently reviewing all study data. We reviewed all data from MDs and QICs separately and then combined them for analysis. Following initial review, we met weekly to systematically review the data and agree on emerging categories and themes. We used word and data processing software to organize identification of codes and thematic structure. We used a constant comparative method for data analysis, and discussed coding differences until we reached full consensus, with final coding schemes consistently applied to all data. We kept a detailed audit trail of memos and notes mapping the development of the coding structure, themes, and decision points to establish credibility and trustworthiness of the data (Berg, 2003; Franzosi, 2004; Grinnell, 2004).



**Figure 1.** Conceptual model of barriers to improving depression in primary care.

## Results

We identified three primary categories, with nine themes related to barriers to improving the primary care of depression at the medical-group level from the perspective of MDs and QICs. A model of these categories, including context, individual attitudes and care process improvement, and their corresponding themes are presented in Figure 1. As can be seen in the model, the categories were interrelated and had areas of overlap.

### Context

This category represented themes related to the larger environment of health care; that is, the larger context in which medical groups delivered primary care. We identified three themes in this category: reimbursement vs. productivity, competing for scarce resources, and the body–mind chasm. Issues addressed in these themes were related to the costs and payment for depression care in an era focused on physician productivity, relationships with health plans, and the divide between the delivery of primary and mental health care.

**Reimbursement vs. productivity.** Fifty-one percent of medical groups identified low reimbursement rates and decreases in physician productive time in conjunction with delivering depression care. Respondents talked about the amount of time required for depression care relative to other types of care:

The system certainly doesn't reward you for doing the right thing. If I could work on a laceration [wound], that would be great; I could do that in 15 minutes and get paid what I would get paid for seeing three depressed people. (MD)

This was seen as especially problematic because physicians today are expected to be extremely productive: “The amount you get reimbursed relative to the amount of time you spend is a big issue because you can only bill so much and you’re in the room for an hour” (MD). Respondents also talked about clinician confusion about reimbursement rates related to changes in the payment structure for depression; historically, depression care was covered only under mental health and often “carved out” from medical care. Thus, visits for depression in primary care settings often were not covered by insurers.

This policy has changed, but many clinicians continue to think they will not be paid if they code for depression: “The old notions are still out there and going strong that if they code for depression, they won’t be reimbursed” (QIC), and “There are still a lot of docs [doctors] that labor under the assumption that, you know, the payers aren’t going to reimburse people for this. The payers kind of shot themselves in the foot” (MD). Reimbursement issues also included the limitations in reimbursement imposed by insurance plans, such as limiting visits or the types of medications that could be used:

Reimbursements aren’t as appropriate for those sorts of diagnoses. (MD)

I had a patient in yesterday who was stabilized on brand name Paxil, and the insurance company insisted that they be switched to generic, which just wasn’t working for him, and they would not allow him to go back to the brand name. (MD)

**Competing for scarce resources.** Increasingly, health insurance plans and government programs are setting priorities on which chronic conditions most need improvement efforts; this can determine how resources for medical groups are allocated: “The main reason we have not started with depression and have with diabetes and asthma has been that’s our pay-for-performance measurements from our major health plan that we work with” (QIC). Sixty-one percent of groups stated that insurance payers are increasingly pressing for initiatives on specific chronic conditions that require identifying, tracking, and improving measurable outcomes, that are then linked to pay for performance in these areas:

Well, there are too many other things on the landscape, is probably the biggest thing right now and, with all the pay-for-performance initiatives from payers, not only is the list getting to be incredibly long, it’s getting kind of complicated, and so which one do you focus people on? (MD)

When combined with regulatory rules and oversight by multiple payers, this creates competition for increasingly limited resources:

What I’m hearing from clinic managers and directors of nursing . . . we’re pushed to do so many regulatory, CMS [Centers for Medicare and Medicaid Services]-type things. How do you prioritize? How do you do well at everything you’re required to do? And then, how do you add one more thing? (QIC)

Medical directors and quality improvement coordinators are forced to direct their priorities to chronic conditions with higher potential for reimbursement: “It’s competing for scarce resources with things that have a lot more potential for return on investment: diabetes, heart disease, and congestive heart failure” (QIC).

**The body–mind chasm.** Problems in obtaining specialty mental health care for patients were cited by 75% of groups and reflect the complex problems of access, resources, and coordination of services between primary and mental health care. Respondents cited lack of communication, the inability to share medical records and information, and the time and effort needed to establish any kind of collaboration as significant barriers:

There’s a barrier between mental health and physical health care providers. There’s a detachment to the point where they actually have separate medical records and where you are actually sharing the treatment program. You cannot share the data . . . we’ve built into the system by dividing the treatment for depressed people—a very large barrier. (QIC)

It’s very clear that not all depression can be managed by psychiatrists or psychologists, and that primary care needs to play a major role in management of depression, but communication, amount of time, and the collaboration between clinicians are probably the three major barriers. (MD)

Respondents used terms and phrases like *frustrating*, *difficult*, *not adequate*, and *hard to improve* to describe the problems of coordination between these separate systems. Respondents identified problems of access and resources, with a lack of access to psychiatrists and availability of mental health specialists posing a significant problem. This was especially true in rural areas, where there are typically few, if any, mental health specialists: “Psychiatry availability is a major problem. Getting them to see a psychiatrist for a different medication perspective is very, very difficult. Access to psychiatry is worse than access to psychology” (MD).

### Individual Attitudes

The barriers to depression care represented in this category are related to individual perceptions about depression and its care and includes two themes: physician

resistance and patient resistance. Unlike the macrocosm represented by the first category, it represents barriers at the microcosm of care delivery, the physician who delivers care, and the patient who receives it.

**Physician resistance.** There is resistance to delivering depression care by physicians who focus on the distinctions between physical and mental health problems and also have a perceived lack of comfort and willingness to treat depression. Depression is traditionally seen as the purview of the mental health system, and respondents noted that some physicians continue to think that depression should be treated in specialty mental health, not in primary care:

Depression, like other psychological, psychiatric diseases can be a real complicated, time-consuming endeavor. And so I think there are times when docs will shy away from asking the questions because they are worried about what they are going to get for an answer, and then wonder what are they going to do after that. (MD)

I would list a second one as lack of passion for working on this. I don't identify any providers at all that have much passion—especially primary care providers—that have much passion for working on depression care. (QIC)

They observed that some physicians make a clear distinction between physical and mental health and are simply not comfortable treating mental health problems: “I think that's an area that maybe comes less naturally to physicians than some of the easier conditions where you make the diagnosis, run the lab [laboratory] test, and order the medication, cure the problems” (MD). “It's not like you can run a blood test every month to determine if they're improving or every three months to see if they're getting better. It's a self-reported type of thing that you rely on” (QIC).

This discomfort was also related to concerns about the depth of clinician knowledge regarding depression care: “Tackling the knowledge deficit. The knowledge-base deficit should also be dealt with” (MD). The knowledge deficit was perceived in part as being aggravated by the increasing number of medication options and problems of prescribing and monitoring medications, especially in adolescents, postpartum women, and those with bipolar disorder:

Probably our knowledge or our comfort level of using all these medications in combination. Those with bipolar diagnosis, things like that, would probably have little expertise or very poor comfort level prescribing those medications in a certain number of patients who need them. (MD)

**Patient resistance to depression care.** Patient resistance to treatment of depression was identified by 73% of medical

groups. The resistance was associated with the fear and stigma about depression, poor adherence and follow-up, and the costs of medications. Patient-perceived stigma about depression was the most commonly cited barrier: “People don't like to feel like they're depressed. They'd rather have a physical ailment. As an endocrinologist, I see this a lot” (MD). This reflects the intense social stigma still associated with mental illness in the larger culture:

There's still so much stigma. Patients still tell us, “You're saying I'm crazy?” and we're not saying that at all. I don't know how we [can communicate] that it's a medical condition. They say they don't want depression as their diagnosis. (MD)

Patients who do decide to accept treatment for depression often do so reluctantly, and many do not adhere to the treatment plan and follow up needed for care: “Patients following up on return visits. Sometimes getting them in was not easy. But that's always a problem. Sometimes patients just don't come, no matter if you send cards, send letters, beg them to come; they are ‘no-shows’” (QIC). “Noncompliance of the patients in follow up and staying on medication. A lot of patients come in only once, and we never hear from them again” (MD). Respondents also cited problems related to medications, including both adherence and costs, as significant barriers: “There are people who have side effects from the medications and just stop them and don't come back. Or they feel good, finish out their one-month prescription, and stop. That was supposed to fix it” (QIC). “One of the barriers may be the cost of treatment; many of them do not have pharmacy coverage for the cost of the medications that may be needed” (QIC).

### Care Process Improvement

This category represents barriers in the care system that exist between the individual and the context of health care. It includes four themes: visit time and complexity, organizational size and complexity, standardizing systems of care, and measuring success. It represents barriers at the organizational and care-system levels, and interacts and overlaps with both the context and individual attitude categories.

**Visit time and complexity.** The combination of limited visit time and the complexity needed to manage depression was a significant barrier reported by 78% of groups, with a general lack of time being one of the barriers most commonly cited by both MDs and QICs: “I think time is probably the biggest barrier. Depression takes a lot of time to manage and to do a good job with it to really have an

impact on the patient that you need to” (MD). Respondents stated that depression often competes with other medical needs for attention during time-limited visits and frequently doesn’t come up until the end of the visit, overextending visit time:

We always get feedback from providers that time is just so short. There are so many things that you need to attend to in the fifteen-minute patient visit, and if the patient’s blood pressure is off the charts, or they are dealing with lots of physical complications, they just really feel the need to address those first and then try to figure out how to work in the piece around depression. I think this is a difficult position for them. (QIC)

Time/complexity problems can be multiplied when systems are not in place to support care for depression. QICs in particular focused on the challenge of addressing the problem of the time needed to deal with the complexity of depression care.

*Organizational size and complexity.* Organizational size and complexity can also act as major barriers to improving depression care, with 75% of medical groups citing these as significant barriers. Respondents discussed how group size, practice systems used, and type of leadership can make care improvement in this area a challenging endeavor. This was especially true in larger groups with multiple clinic sites and complex chains of command. Getting all of the leaders involved and supportive of improving depression care can prove difficult: “The size and the breadth of our medical staff and our ‘spread-outness,’ for lack of a better way to describe it. Maybe our chain of command could be a barrier at times” (QIC).

Barriers that increased with organizational size included identifying which systems might need adjustment, resistance across sites to changing well-established processes or practices, lack of teamwork and communication, and the technical and implementation issues in multiple practice sites:

Making it clear that this is one of our objectives for improving care. So, how do we just get all of our leaders aligned? I think it’s maybe just globally the size and complexity of this organization. It’s hard to have everyone hear the same message—just size and complexity makes it more difficult. (QIC)

These leaders also discussed the importance and difficulty of finding a “physician champion,” someone willing to lead the organization in improving depression care and keeping the group focused on implementing care improvements: “And depression was certainly there, but it just didn’t hit the mark, and part of it was because I think we didn’t have a physician champion” (MD).

*Standardizing systems of care.* Standardizing systems of care is a frequently used tool to improve care delivery; this includes developing standardized processes for screening, diagnosis, follow up, and education for specific chronic conditions at the system level. Developing these standardized systems was cited by 80% of medical groups and was the most frequently cited barrier:

Identifying the systems and processes that need to change to improve care. I think systematic and process improvement changes are always the toughest. (MD)

You know, they’re all different, with different cultures and personalities, and what works easily at one clinic doesn’t necessarily work well with another. So the ability to standardize becomes difficult because tools that we demonstrated to work well always have to be tweaked and played with and adapted to the different sites. (QI)

Standardizing the screening processes for depression, for example, includes choosing and incorporating a screening tool into clinical practice, as well as getting support from physicians to use it. Although a variety of screening tools are available, there was little consensus in groups about which tool is best, and physician support for any standardized tool appeared minimal:

Use of a standardized questionnaire might be a tool that would be helpful. I wouldn’t be overly optimistic we could get people to use it. I feel we’re still in the mode of herding cats at this, at our facility in terms of “This is the way I’ve always done it. I’m not familiar with it. I’m not exactly sure what it means, so I just stick with what I know.” (MD)

From the physician perspective, standardizing care can also be seen as an intrusion into professional autonomy and can be resisted by physicians who have developed their own approach to depression care: “They always say they don’t want to practice cookbook medicine. You know every patient is individual” (QIC). “One [barrier] would be a belief that each patient is unique enough to defy standardization” (MD). Standardizing care for depression is also challenging given the complexity of mental health diagnoses:

I think depression can become very confusing. Sometimes—oftentimes—it’s real straightforward, but when a person’s got mixed anxiety with depression or has got a situational depression, are they then labeled and do we do special follow ups for them? (MD)

Respondents also reported a lack of standard processes to educate patients about depression as a barrier, with many groups having no written materials: “We don’t have a systematic way of making sure they’re



getting the education they need so they will stay on their medications, so they will do their follow up” (MD). They also cited problems with setting up standard processes for monitoring patients with depression and developing systems to identify when they need follow up; a number of groups have no monitoring systems at all: “I guess the lack of our internal ability to follow them and set up some kind of recall system. That is something we are working on” (QIC).

**Measuring success.** The ability of groups to measure their success in depression care was seen as a barrier by 41% of the groups; this is related to both the capacity of the groups to gather the internal data needed for measurement as well as the way success is measured. The national performance measures for depression currently are the National Committee for Quality Assurance-required proportion of newly treated patients who remain on antidepressants for 3 or 6 months and have follow-up visits. Groups without electronic medical records (EMRs) or access to pharmacy data must conduct manual audits of records to obtain medication adherence information, a time-consuming and labor-intensive process: “To gather any data about depression in particular, we are not finding that easy at all to do. It’s very, very challenging. Much of that is because we don’t have access to pharmacy data” (QIC).

However, tracking care and outcomes was difficult even for groups with EMRs, given that most do not have depression registries: “The hardest part is being able to do the measurements and audits. It is very time consuming. Our system doesn’t allow an easy way to pull out the information and to aggregate the information” (QIC). Respondents also voiced concerns about whether measures directed only to medication adherence and follow up adequately reflected patient outcomes. They noted that patients might decide to look to counseling or other alternatives rather than accept medications, and that providers should not be penalized for patient decisions:

Measurement from the HEDIS [Healthcare Effectiveness Data and Information Set] perspective—for measurement of quality of care—it’s misleading sometimes, if you’re trying to get a picture of how well patients are or are not doing. If a patient doesn’t choose medication as their route, they get labeled as not being compliant or not meeting care criteria if you are only doing administrative runs and looking at pharmacy data. (QIC)

## Discussion

This study revealed many barriers to improving depression care from the perspective of medical group leaders whose responsibility is to set an agenda and implement care improvements in their groups. From their unique

perspectives, they identified barriers at the macro level of the context of the health care environment, through the care delivery system with its barriers to care process improvement, to the micro-systems level of care delivery: the individual physician and patient. Unlike other studies that have focused on one area of care or specific types of barriers, these leaders identified barriers across the spectrum of health care, including reimbursement and productivity and how groups compete for scarce resources from the payers, as well as barriers from the great divide between primary and mental health care. They also included barriers to improving care processes in health systems, such as the complexity of clinic visits for depression, organizational complexity, and the difficulties of standardizing care and measuring success, down to the individual level of barriers for both physicians and patients regarding depression care. The collective weight of these barriers effectively prevents these leaders from translating the research on depression care improvement into clinical reality.

The perspectives of these leaders are critical in that many of the barriers they identified keep them from implementing the kinds of system changes they have applied to chronic conditions such as diabetes. To prioritize improvement for depression, they needed financial support for the practice system changes proven in controlled trials, such as registries, onsite care managers, monitoring and recall systems, and ways to collaborate with mental health specialists (Wells et al., 2000; Wells et al., 2004; Wilkinson et al., 2000). In a systematic review of trials, Gilbody and colleagues (2003) noted that depression guidelines and strategies to implement them are not effective unless they are accompanied by supportive organizational interventions. Similarly, without payer cooperation for addressing reimbursement problems or competing demands to focus on improving other clinical areas, medical groups cannot commit resources to care improvement processes competing with other higher-priority and better-reimbursed chronic conditions.

Randomized clinical trials have identified interventions that can improve depression care if they are implemented (Gilbody et al., 2006; Gilbody et al., 2003; Kates & Mach, 2007; Simon et al., 2004; Unutzer et al., 2002; Wells et al., 2007; Wells et al., 2000). However, the improvement that occurs during these studies is rarely sustained after the trials end, because the barriers reemerge. Research studies bring increased change capacity to the clinics in the form of staff education, training, tools to aid in diagnosis and treatment, funding to support collaborative care, and methods to measure improvement. Medical group leaders cite lack of these very resources as barriers to improving their practice systems for depression care. Blasinsky and colleagues (2006) also identified these barriers when investigating

sustainability for Project IMPACT, an intervention proven to improve depression care for older adults. They pointed to four key determinants of sustainability: demonstration of positive clinical outcomes, organizational support, trained staff, and continued funding sources. Without dedicated resources to these areas, the capacity for care improvement diminishes.

The barriers to improving depression care described by these leaders are complex and numerous, many overlap and interact, and there is no clear linear process or order in which they should be addressed. As one QIC stated, "It's like solving world hunger." However, there are new initiatives that provide examples of how improvement for depression can be achieved by addressing multiple barriers to change simultaneously. The DIAMOND (Depression Improvement Across Minnesota, Offering a New Direction) program is an example of this. A state-wide improvement initiative developed by the Institute for Clinical Systems Improvement, it focuses on monitoring patients' progress for depression treatment in primary care and paying clinics based on improvement. The program provides a case manager and consulting psychiatrist at each participating clinic and tracks patients' progress through questionnaires and keeping treated patients in remission (Beck et al., 2011; Margolis et al., 2011). The program is currently the focus of a large evaluation study, with promising results, and is an example of how providers and payers can work together to make a difference (Bao et al., 2011; Solberg et al., 2010).

Our study findings offer a fresh perspective on barriers to improving care of depression and highlights the complex problems involved in implementing care process changes. The sample for the study was large and complete and represents medical groups that provide the vast majority of care for patients in Minnesota. The qualitative data methods were rigorous and complete. We also acknowledge limitations. First, the interviews were limited to groups in Minnesota that are both larger and more likely to have organized systems and quality improvement capabilities than most other settings in much of the country. Second, both the barriers and their approach to improvement might be different for smaller groups that lack these features. Thus, there are limits to the capacity to generalize these findings.

In summary, our data suggest that the depression care improvements shown in trials require an approach directed more at overcoming organizational and environmental barriers than at changing patients or physicians. Clinics and medical groups that wish to replicate the results of those trials need to address these barriers as they create the necessary practice systems and supports that mimic those in place during the trials. In addition, health plans and other payers need to provide better and different reimbursement approaches, including recognition

of the need to support the collaborative role of mental health specialists. Much of the research on improving depression care has been focused on the importance of collaborative care models and quality improvement processes that require investment and change in practice systems (Boudreau et al., 2002; Callahan, 2001; Gilbody et al., 2006; Greenberg et al., 2003; Von Korff et al., 2001; Wells et al., 2007). These organizational changes are possible only when clear priorities for change are set and adequate resources are allocated. Clarifying and addressing system barriers to improving depression care is essential if we are to reduce the enormous adverse social and economic impacts of depression—a most important and urgent task.

### Acknowledgments

We acknowledge Mary Hroschikoski, who conducted the study interviews, and the medical groups that participated in the study.

### Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Funding for this article was provided by Robert Wood Johnson Foundation Grant #051647: Depression in Primary Care—Linking Clinical and System Strategies Initiative.

### References

- Bao, Y., Casalino, L. P., Ettner, S. L., Bruce, M. L., Solberg, L. I., & Unutzer, J. (2011). Designing payment for collaborative care for depression in primary care. *Health Services Research, 46*(5), 1436-1451. doi:10.1111/j.1475-6773.2011.01272.x
- Beck, A., Crain, A. L., Solberg, L. I., Unutzer, J., Glasgow, R. E., Maciosek, M. V., & Whitebird, R. (2011). Severity of depression and magnitude of productivity loss. *Annals of Family Medicine, 9*(4), 305-311. doi:10.1370/afm.1260
- Berg, B. L. (2003). *Qualitative research methods for the social sciences* (5th ed.). Boston: Allyn & Bacon.
- Bland, R. (2007). Depression and its management in primary care. *Canadian Journal of Psychiatry, 52*(2), 75-76. Retrieved from <http://publications.cpa-apc.org/media.php?mid=319>
- Blasinsky, M., Goldman, H. H., & Unutzer, J. (2006). Project impact: A report on barriers and facilitators to sustainability. *Administration and Policy in Mental Health, 33*(6), 718-729. doi:10.1007/s10488-006-0086-7
- Boudreau, D. M., Capoccia, K. L., Sullivan, S. D., Blough, D. K., Ellsworth, A. J., Clark, D. L., & Stevens, N. G. (2002). Collaborative care model to improve outcomes in major depression. *Annals of Pharmacotherapy, 36*(4), 585-591. doi:10.1345/aph.1A259

- Callahan, C. M. (2001). Quality improvement research on late life depression in primary care. *Medical Care*, 39(8), 772-784. doi:10.1097/00005650-200108000-00004
- Capoccia, K. L., Boudreau, D. M., Blough, D. K., Ellsworth, A. J., Clark, D. R., Stevens, N. G., & Sullivan, S. D. (2004). Randomized trial of pharmacist interventions to improve depression care and outcomes in primary care. *American Journal of Health-System Pharmacy*, 61(4), 364-372. Retrieved from <http://www.ajhp.org/content/61/4/364.full.pdf>
- Chapman, B. P., Duberstein, P. R., Epstein, R. M., Fiscella, K., & Kravitz, R. L. (2008). Patient-centered communication during primary care visits for depressive symptoms: What is the role of physician personality? *Medical Care*, 46(8), 806-812. doi:10.1097/MLR.0b013e31817924e4
- Chapman, D. P., Perry, G. S., & Strine, T. W. (2005). The vital link between chronic disease and depressive disorders. *Preventing Chronic Disease*, 2(1), A14. Retrieved from [http://www.cdc.gov/pcd/issues/2005/jan/04\\_0066.htm](http://www.cdc.gov/pcd/issues/2005/jan/04_0066.htm)
- DiMatteo, M. R., Lepper, H. S., & Croghan, T. W. (2000). Depression is a risk factor for noncompliance with medical treatment: Meta-analysis of the effects of anxiety and depression on patient adherence. *Archives of Internal Medicine*, 160(14), 2101-2107. Retrieved from <http://archinte.jamanetwork.com/journal.aspx>
- Edlund, M. J., Unutzer, J., & Wells, K. B. (2004). Clinician screening and treatment of alcohol, drug, and mental problems in primary care: Results from healthcare for communities. *Medical Care*, 42(12), 1158-1166. doi:00005650-200412000-00002
- Fischer, L. R., Solberg, L. I., & Zander, K. M. (2001). The failure of a controlled trial to improve depression care: A qualitative study. *Joint Commission Journal of Quality Improvement*, 27(12), 639-650. Retrieved from <http://www.ingentaconnect.com/content/jcaho/jcjqis/2001/00000027/00000012/art00001>
- Fischer, L. R., Wei, F., Solberg, L. I., Rush, W. A., & Heinrich, R. L. (2003). Treatment of elderly and other adult patients for depression in primary care. *Journal of the American Geriatrics Society*, 51(11), 1554-1562. doi:10.1046/j.1532-5415.2003.51506.x
- Franzosi, R. P. (2004). Content analysis. In M. Hardy & A. Bryman (Eds.), *Handbook of data analysis* (pp. 547-565). Thousand Oaks, CA: Sage.
- Gilbody, S., Bower, P., Fletcher, J., Richards, D., & Sutton, A. J. (2006). Collaborative care for depression: A cumulative meta-analysis and review of longer-term outcomes. *Archives of Internal Medicine*, 166(21), 2314-2321. Retrieved from <http://archinte.jamanetwork.com/article.aspx?articleid=411326>
- Gilbody, S., Whitty, P., Grimshaw, J., & Thomas, R. (2003). Educational and organizational interventions to improve the management of depression in primary care: A systematic review. *JAMA*, 289(23), 3145-3151. doi:10.1001/jama.289.23.3145
- Greenberg, P. E., Kessler, R. C., Birnbaum, H. G., Leong, S. A., Lowe, S. W., Berglund, P. A., & Corey-Lisle, P. K. (2003). The economic burden of depression in the United States: How did it change between 1990 and 2000? *Journal of Clinical Psychiatry*, 64(12), 1465-1475. Retrieved from <http://www.psychiatrist.com/>
- Grinnell, R.M. (2004). *Social work research & evaluation: Quantitative and qualitative approaches* (7th ed.). Itasca, IL: F. E. Peacock.
- Harpole, L.H., Williams, J.W., Jr., Olsen, M.K., Stechuchak, K.M., Oddone, E., Callahan, C., & Unutzer, J. (2005). Improving depression outcomes in older adults with comorbid medical illness. *General Hospital Psychiatry*, 27(1), 4-12. doi:10.1016/j.genhosppsych.2004.09.004
- Henke, R. M., McGuire, T. G., Zaslavsky, A. M., Ford, D. E., Meredith, L. S., & Arbelaez, J. J. (2008). Clinician- and organization-level factors in the adoption of evidence-based care for depression in primary care. *Health Care Management Review*, 33(4), 289-299. doi:10.1097/01.HCM.0000318766.29277.49
- Kates, N., & Mach, M. (2007). Chronic disease management for depression in primary care: A summary of the current literature and implications for practice. *Canadian Journal of Psychiatry*, 52(2), 77-85. Retrieved from <http://publications.cpa-apc.org/browse/documents/175>
- Lang, A. J., Norman, G. J., & Casmar, P. V. (2006). A randomized trial of a brief mental health intervention for primary care patients. *Journal of Consulting and Clinical Psychology*, 74(6), 1173-1179. doi:10.1037/0022-006X.74.6.1173
- Lin, E. H., Katon, W. J., Simon, G. E., Von Korff, M., Bush, T. M., Walker, E. A., & Ludman, E. J. (2000). Low-intensity treatment of depression in primary care: Is it problematic? *General Hospital Psychiatry*, 22(2), 78-83. doi:S0163834300000542
- Margolis, K. L., Solberg, L. I., Asche, S. E., & Whitebird, R. R. (2007). Use of practice system tools by medical groups for depression. *American Journal of Managed Care*, 13(6 Part 1), 305-311. Retrieved from <http://www.ajmc.com/publications/issue/2007/2007-06-vol13-n6-Pt1/June07-2491p305-311>
- Margolis, K. L., Solberg, L. I., Crain, A. L., Whitebird, R. R., Ohnsorg, K. A., Jaeckels, N., & Glasgow, R. E. (2011). Prevalence of practice system tools for improving depression care among primary care clinics: The DIAMOND initiative. *Journal of General Internal Medicine*, 26(9), 999-1004. doi:10.1007/s11606-011-1739-0
- Miedema, B. O., Tatemichi, S., Thomas-Maclean, R., & Stoppard, J. (2004). Barriers to treating depression in the family physician's office. *Canadian Journal of Community Mental Health*, 23(1), 37-46. Retrieved from <http://cjcmmh.metapress.com/link.asp?id=hm4532151p883122>
- Nasir, L. S., & Al-Qutob, R. (2005). Barriers to the diagnosis and treatment of depression in Jordan. A nationwide qualitative study. *Journal of the American Board of Family Medicine*, 18(2), 125-131. doi:10.3122/jabfm.18.2.125
- Nutting, P. A., Rost, K., Dickinson, M., Werner, J. J., Dickinson, P., Smith, J. L., & Gallovic, B. (2002). Barriers to initiating depression treatment in primary care practice. *Journal of General Internal Medicine*, 17(2), 103-111. doi:10.1046/j.1525-1497.2002.10128.x

- Ormel, J., Kempen, G. I., Deeg, D. J., Brilman, E. I., van Sonderen, E., & Relyveld, J. (1998). Functioning, well-being, and health perception in late middle-aged and older people: Comparing the effects of depressive symptoms and chronic medical conditions. *Journal of the American Geriatrics Society*, *46*(1), 39-48. doi:10.1198/Funcweanh
- Roose, S. P., Glassman, A. H., & Seidman, S. N. (2001). Relationship between depression and other medical illnesses. *JAMA*, *286*(14), 1687-1690. doi:10.1001/jama.286.14.1687
- Rost, K., Nutting, P., Smith, J., Coyne, J. C., Cooper-Patrick, L., & Rubenstein, L. (2000). The role of competing demands in the treatment provided primary care patients with major depression. *Archives of Family Medicine*, *9*(2), 150-154. Retrieved from [http://www.clockss.org/clockss/Archives\\_of\\_Family\\_Medicine](http://www.clockss.org/clockss/Archives_of_Family_Medicine)
- Simon, G. E., Ludman, E. J., Tutty, S., Operskalski, B., & Von Korff, M. (2004). Telephone psychotherapy and telephone care management for primary care patients starting antidepressant treatment: A randomized controlled trial. *JAMA*, *292*(8), 935-942. doi:10.1001/jama.292.8.935
- Solberg, L. I. (2006). Recruiting medical groups for research: Relationships, reputation, requirements, rewards, reciprocity, resolution, and respect. *Implementation Science*, *1*(25). doi:10.1186/1748-5908-1-25
- Solberg, L. I., Glasgow, R. E., Unutzer, J., Jaeckels, N., Oftedahl, G., Beck, A., & Crain, A. L. (2010). Partnership research: A practical trial design for evaluation of a natural experiment to improve depression care. *Medical Care*, *48*(7), 576-582. doi:10.1097/MLR.0b013e3181d8ea62
- Steeds, R. P., & Channer, K. S. (2000). Depression: The sleeping giant. *European Heart Journal*, *21*(6), 427-429. doi:10.1053/euhj.1999.1638
- Unutzer, J., Katon, W., Callahan, C. M., Williams, J. W., Jr., Hunkeler, E., Harpole, L., . . . for the Impact Investigators. (2002). Collaborative care management of late-life depression in the primary care setting: A randomized controlled trial. *JAMA*, *288*(22), 2836-2845. doi:10.1001/jama.288.22.2836
- Unutzer, J., Katon, W., Callahan, C. M., Williams, J. W., Jr., Hunkeler, E., Harpole, L., & Hoffing, M. (2003). Depression treatment in a sample of 1,801 depressed older adults in primary care. *Journal of the American Geriatrics Society*, *51*(4), 505-514. doi:10.1046/j.1532-5415.2003.51159.x
- Unutzer, J., Patrick, D. L., Simon, G., Grembowski, D., Walker, E., Rutter, C., & Katon, W. (1997). Depressive symptoms and the cost of health services in HMO patients aged 65 years and older. A 4-year prospective study. *JAMA*, *277*(20), 1618-1623. doi:10.1001/jama.1997.03540440052032
- Unutzer, J., Rubenstein, L., Katon, W. J., Tang, L., Duan, N., Lagomasino, I. T., & Wells, K. B. (2001). Two-year effects of quality improvement programs on medication management for depression. *Archives of General Psychiatry*, *58*(10), 935-942. doi:10.1001/archpsyc.58.10.935
- Von Korff, M., Katon, W., Unutzer, J., Wells, K., & Wagner, E. H. (2001). Improving depression care: Barriers, solutions, and research needs. *Journal of Family Practice*, *50*(6), e1. Retrieved from <http://www.jfponline.com/pages.asp?aid=2253>
- Wang, P. S., Berglund, P., & Kessler, R. C. (2000). Recent care of common mental disorders in the United States: Prevalence and conformance with evidence-based recommendations. *Journal of General Internal Medicine*, *15*(5), 284-292. doi:10.1046/j.1525-1497.2000.9908044.x
- Wells, K. B., Schoenbaum, M., Duan, N., Miranda, J., Tang, L., & Sherbourne, C. (2007). Cost-effectiveness of quality improvement programs for patients with subthreshold depression or depressive disorder. *Psychiatric Services*, *58*(10), 1269-1278. doi:10.1176/appi.ps.58.10.1269
- Wells, K. B., Schoenbaum, M., Unutzer, J., Lagomasino, I. T., & Rubenstein, L. V. (1999). Quality of care for primary care patients with depression in managed care. *Archives of Family Medicine*, *8*(6), 529-536. doi:10.1176/appi.ps.58.10.1269
- Wells, K. B., Sherbourne, C., Schoenbaum, M., Duan, N., Meredith, L., Unutzer, J., & Rubenstein, L. V. (2000). Impact of disseminating quality improvement programs for depression in managed primary care: A randomized controlled trial. *JAMA*, *283*(2), 212-220. doi:10.1001/jama.283.2.212
- Wells, K. B., Sherbourne, C., Schoenbaum, M., Ettner, S., Duan, N., Miranda, J., & Rubenstein, L. (2004). Five-year impact of quality improvement for depression: Results of a group-level randomized controlled trial. *Archives of General Psychiatry*, *61*(4), 378-386. doi:10.1001/archpsyc.61.4.378
- Wilkinson, E. K., McColl, A., Exworthy, M., Roderick, P., Smith, H., Moore, M., & Gabbay, J. (2000). Reactions to the use of evidence-based performance indicators in primary care: A qualitative study. *Qualitative Health Research*, *9*, 166-174. doi:10.1136/qhc.9.3.166

### Author Biographies

**Robin R. Whitebird**, PhD, MSW, is a research investigator at HealthPartners Institute for Education and Research in Minneapolis, Minnesota, USA.

**Leif I. Solberg**, MD, is the associate medical director for HealthPartners Medical Group Care Improvement in Minneapolis, Minnesota, USA.

**Karen L. Margolis**, MD, MPH, is a professor at the University of Minnesota and the director of clinical research at HealthPartners Institute for Education and Research, Minneapolis, Minnesota, USA.

**Stephen E. Asche**, MA, is a statistician and research investigator at HealthPartners Institute for Education and Research in Minneapolis, Minnesota, USA.

**Michael A. Trangle**, MD, is associate medical director, behavioral health, at both HealthPartners Medical Group and Alcohol and Drug Abuse Program, Regions Hospital in Minneapolis, Minnesota, USA.

**Arthur P. Wineman**, MD, is regional assistant medical director of HealthPartners Medical Group in Minneapolis, Minnesota, USA.