The Mood Disorders Association of British Columbia Psychiatric Urgent Care Program: A Preliminary Evaluation of a Suggested Alternative Model of Outpatient Psychiatric Care

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Objective: To describe an alternative model of psychiatric outpatient care for patients with mood and anxiety disorders (the Mood Disorders Association of British Columbia Psychiatric Urgent Care Program or the MDA Program) using group medical visits (GMV) and (or) email communications in lieu of individual follow-up appointments.

Method: Annual costs of the MDA Program were compared with average costs of private psychiatrists offering outpatient care and patients being treated in a mental health centre. In addition, questionnaires as to patient satisfaction with the MDA Program intake, GMV experience, and family physician satisfaction with the MDA Program were administered.

Results: The MDA Program model of care is significantly more cost effective than individual psychiatric outpatient care or health authority mental health centre care for patients with moderate or severe illness. Patients and family physicians were very satisfied with the model of care and GMVs offered.

Conclusions: The MDA Program model of care appears to be efficient and cost-effective, and patients and referring physicians appear satisfied with the care offered in this program.

French abstract title
abstract
Access to psychiatric care in Canada remains problematic. Patients with nonemergent care needs and nonpsychotic disorders (that is, predominately mood and anxiety disorders) have difficulty accessing timely and comprehensive care from a psychiatrist. In British Columbia, 83% of patients who were diagnosed with a mental disorder received their only care from an FP. Further, a survey conducted with physicians [FPs?] in British Columbia suggests that the wait time from an FP referral to psychiatric treatment exceeds 5 months. Hence many FP no longer even attempt to access psychiatric care for their patients.

We have long felt that the above is unacceptable in terms of medical care and services. To address this, we have developed a program called the MDABC Psychiatric Urgent Care Program (henceforth referred to as the MDA Program), which appears to be more efficient and offers potential cost savings to health funders. Our program is based on 4 tenets: encourage and empower patients to become informed consumers; GMVs in lieu of individual follow-up visits; email communication to increase patient access and in lieu of individual follow-up visits; and house the program in a milieu that offers support, advocacy, and reduces stigma.

Program Overview
In March 2009, 2 psychiatrists initiated a collaborative project with the MDABC, a not-for-profit agency, to offer in-house psychiatric assessment and treatment for MDABC members. The program began with 2 doctors, each working one-half day per week. As of January 2013, the program had 4 doctors, each working slightly over 1 full day per week (1.1 full-time equivalents, total physician [FP] staff). From the inception of the MDA Program in March 2009 through December 1, 2012, we have assessed 3976 patients. We assess about 30 patients per week (1500 per year), compared with an average of 214 patients assessed by a full-time (1.0 full time equivalents) outpatient psychiatrist using a traditional model of care (based on data from British Columbia MSP reports, 2011). About 60% of patients assessed have some follow-up contact with the MDA Program, either by attending a GMV or using email communications with the psychiatrist. Currently the wait time for new patients to be assessed is 32 days, compared with a wait time of 5 to 6 months for an outpatient psychiatric consultation in our community.

After preliminary registration (intake), patients are seen for a standard initial psychiatric assessment of 45 to 60 minutes. The psychiatrist then dictates a comprehensive consultation report that includes the preferred diagnosis and detailed treatment recommendations. This report is sent to both the referring physician [FP] and also directly to the patient so that all assessed patients are clearly informed about our recommended treatment plan. After the initial individual psychiatric assessment, the only direct face-to-face contact with psychiatrists we offer are GMVs. GMVs are a shared 60-minute medical follow-up visit in which multiple patients (in our case 6 to 12 patients) with similar conditions (mood and anxiety disorders) meet simultaneously with the psychiatrist. There is no user fee to attend GMVs, as it is a billable MSP item, it is optional and available to all

Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>BD</td>
<td>bipolar disorder</td>
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<tr>
<td>CGI</td>
<td>Clinical Global Impressions Scale</td>
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<tr>
<td>FP</td>
<td>family physician</td>
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<tr>
<td>GMV</td>
<td>group medical visit</td>
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<tr>
<td>GP</td>
<td>general practitioner</td>
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<tr>
<td>MDABC</td>
<td>Mood Disorders Association of British Columbia</td>
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<tr>
<td>MDD</td>
<td>major depressive disorder</td>
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<tr>
<td>MSP</td>
<td>Medical Services Plan</td>
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patients at anytime. We typically have 2 psychiatrists per GMV, and each patient is allotted about 5 to 10 minutes of individual exchange with the psychiatrist. However, as the broad treatment options for mood and anxiety disorders are very similar, patients receive an additional 50 minutes of education about their condition by attending the GMVs. Lastly, the MDA Program offers an option to email with the psychiatrist. Email communication can be used to ask basic questions about ongoing care, or as a means of ongoing treatment in lieu of individual or GMV follow-up. All patients sign an informed consent at intake if they wish to email with the psychiatrist. This email consent form has been vetted, revised, and approved for our MDA Program by the Canadian Medical Protections Association (October 2011). About 30% of patients assessed in the MDA Program communicate with the psychiatrist with at least 1 email.

To evaluate the MDA Program, we conducted a cost comparison analysis of the MDABC model of care, compared with traditional outpatient psychiatric care (that is, mental health centres and private outpatient psychiatric office care). Costing was based on MSP fees for psychiatrists and FPs (2011). Nursing costs in the mental health team were based on a level 2 registered nurse with 5 years experience in British Columbia based on the 2011 Registered Nurses Association of British Columbia contract ($40.22 per hour), in addition to a typical overhead cost of 22%. Costing does not include overhead costs for physicians, nursing training, vacation, or illness absences.

Subjects and Materials
The CGI was administered to all patients at intake in the MDA Program (2009 to 2011) and patients were stratified into 3 groups: mild illness (CGI 1 to 3; 15% of MDA Program patients), moderate illness (CGI 4; 30% of MDA Program patients), and severe illness (CGI 5 to 6; 55% of MDA Program patients). The total number of physician [FP?] and nursing visits for each severity category was based on estimates from senior physicians [FP?] and administrators in each category.

Results
Figure 1 shows the annual cost per patient in the MDA Program (using GMVs for follow-up visits), average costs of a private psychiatrist offering assessment and individual follow-up care, and a low and high range in a health authority using psychiatrists, FPs, and nurses for intake and follow-up care. As noted, the cost in the MDA Program for patients with moderate to severe illness was between one-third and one-sixth of the cost of the other 2 models. See Table 1 for assumptions used to estimate costs (that is, the number of visits with medical professionals).
Method

Overview

Shortly after the clinic received joint funding from the British Columbia Medical Association and BC’s Shared Care Committee, a research team was hired to complete a program evaluation. The research team collected data at the clinic from November 2010 to March 2011. Variables examined included patient satisfaction with both the initial assessment and with GMV, as well as FP satisfaction with the MDA Program. The research team obtained ethics approval from the Simon Fraser University Research Ethics Board. Written informed consent was obtained from all patients and FPs who participated in our study. Between November 24, 2010, and January 6, 2011, new patients, GMV attendees, and referring FPs were invited to participate in patient satisfaction surveys (Tables 2, 3, and 4) to gauge the level of user satisfaction with the MDA Program services.

Table 1  Key assumptions used in estimating annual costs: type of treatment by severity of illness

<table>
<thead>
<tr>
<th></th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
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<tbody>
<tr>
<td>Traditional 1-1 patient–psychiatrist [should this be: Traditional one-on-one psychiatric care?]</td>
<td>• 1 GP visit</td>
<td>• 1 GP visit</td>
<td>• 1 GP visit</td>
</tr>
<tr>
<td>MDA Program</td>
<td>• 1 psychiatric assessment</td>
<td>• 12 psychiatric follow-ups</td>
<td>• 1 psychiatric assessment</td>
</tr>
<tr>
<td></td>
<td>• 4 GP follow-ups</td>
<td>• Estimated 30% of patients</td>
<td>• 24 psychiatric follow-ups</td>
</tr>
<tr>
<td></td>
<td>• 1 GP visit</td>
<td>• 1 GP visit</td>
<td>• Estimated 55% of patients</td>
</tr>
<tr>
<td></td>
<td>• 1 psychiatric assessment</td>
<td>• 1 psychiatric assessment</td>
<td>• 1 GP visit</td>
</tr>
<tr>
<td></td>
<td>• 2 email follow-ups</td>
<td>• 8 email follow-ups</td>
<td>• 16 email follow-ups</td>
</tr>
<tr>
<td>Health Authority costing (Vancouver Coastal Health Model)</td>
<td>• No involvement by HA likely</td>
<td>• 1 GP visit</td>
<td>• 1 GP visit</td>
</tr>
<tr>
<td></td>
<td>• 1 psychiatric assessment</td>
<td>• Ten 2-hour group sessions led by a mental health nurse with 8 patients</td>
<td>• 1 psychiatric assessment</td>
</tr>
<tr>
<td></td>
<td>• Ten 2-hour group sessions led by a mental health nurse with 8 patients</td>
<td>• 5–6 GP visits per year</td>
<td>• Ten 2-hour group sessions led by a mental health nurse with 8 patients</td>
</tr>
<tr>
<td>Health Authority costing (Interior Health Authority Model)</td>
<td>• GP assessment and follow-up; no involvement by HA likely.</td>
<td>• 1–3 psychiatric visits</td>
<td>• 7 GP visits per year</td>
</tr>
<tr>
<td></td>
<td>• 5–6 GP visits per year</td>
<td>• 1–12 contacts per year with mental health centres</td>
<td>• 7 psychiatric visits</td>
</tr>
<tr>
<td></td>
<td>• 10 group sessions</td>
<td>• 52–75 contacts per year with mental health centres</td>
<td>• community support worker 1 hour per week</td>
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HA = please define: Health Authority?

Patient and FP Satisfaction With the MDA Program

New Patient Satisfaction Survey

Subjects. Among the 121 new patients assessed at the clinic between November 24, 2010, and January 6, 2011, 64 new patients (32 males) agreed to participate and complete the survey, 76.6% of participants were diagnosed with a mood disorder (that is, MDD, depression, BD I, or BD II), 15.7% were diagnosed with an anxiety disorder, 1.6% had no Axis I diagnosis, and 1.6% reported their diagnosis as other. The remaining 4.5% of participants did not report their diagnosis.

Procedure and Materials. Participants completed a survey asking questions about their satisfaction level with the MDA Program assessment. They responded to 8 items asking about their experience with the assessment process (Table 2). Participants were also asked to report the reasons they decided to attend the MDA Program assessment (multiple responses were allowed). Patients completed the survey after their initial assessment and returned the survey to the research assistant who was in the waiting area at the clinic.

GMV Patient Satisfaction Survey

Subjects. All of the patients who attended 1-hour, drop-in GMVs from November 24, 2010, to January 5, 2011 (n = 153) were invited to participate in the GMV Patient Satisfaction Survey. Among the 153 patients, 75 (28 males)
were unique patients. A total of 51 completed the survey, for a return rate of 68%. There were 86.3% of participants diagnosed with a mood disorder (that is, MDD, depression, BD I, or BD II), 9.8% were diagnosed with an anxiety disorder, and the remaining 3.9% reported their diagnosis as other. About 45.1% of patients had concurrent mood and anxiety disorders, and 9.8% had concurrent mood or anxiety disorders with substance abuse. Most participants (58.8%) had attended 6 or more GMVs; 17.6% had attended 4 to 6 sessions, 9.8% had attended 1 to 3 sessions, and for the remaining 13.7%, this was their first session.

Procedure and Materials. The GMV Patient Satisfaction Survey asked patients about the reasons for their participation, previous psychiatric care, and their level of satisfaction with the GMV (Table 3).

FP Satisfaction Survey

Subjects. A total of 72 referring FPs were identified from the MDA Program database as potential participants for the FP user Satisfaction Survey. A total of 19 (10 males) FPs participated in the survey.

Procedure and Materials. The research assistant faxed a survey to all 72 FPs once, followed by a phone call to solicit participation. FPs were invited to complete the survey and return it at their convenience. The return rate was 26.4%.

The survey was designed to gain information about FP satisfaction with the MDA Program (Table 4).

Results

Overview

All analyses performed were descriptive. As we were trying to gauge patient and FP satisfaction with the program, participants completed a survey asking questions about their satisfaction level with the MDA Program. For the new patient and GMV patient satisfaction surveys, participants responded to items by indicating if they felt the service received was excellent, very good, good, fair, or poor. For the FP Satisfaction Survey, participants were asked to indicate their agreement level (strongly agree, agree, disagree, or strongly disagree) with statements about the program. For all surveys, we report the number of participants and percent of the sample who indicated each specific response to each item.

New Patient Satisfaction

For 6 out of the 8 items in the survey (Table 2), most participants indicated that their experience was either excellent or very good. For the remaining 2 items, most
reported their experience was excellent, very good, or good. See Table 2 for a detailed report of each item.

In terms of reasons that new patients attended the MDA Program, 19 patients (29.7%) reported that their FP had referred them. Eighteen patients (28.1%) said they came for assessment because of the shorter wait time to see a psychiatrist. Ten patients (15.6%) reported that they wanted information from a psychiatrist. Other reasons included seeking support from other patients (10.9%) and financial constraints (10.9%).

Overall, the new patients surveyed indicated a very high level of satisfaction with the wait time for initial consultation and the overall quality of care and information they received in their first appointment.

GMV Patient Satisfaction
In the GMV [Patient Satisfaction Survey?] survey (Table 3) in 4 of 6 items most participants indicated that their experience was excellent. For the remaining 2 items, most reported their experience was either excellent or very good.

In terms of why participants attended a GMV (multiple responses allowed), 34 patients (67%) reported that they attended the GMVs because of a shorter waiting time to access psychiatric care. Thirty-four patients (67%) said they attended GMVs because of the helpful information about medication side effects and symptom monitoring from the psychiatrists. Twenty-eight patients (55%) reported that they attended the GMVs because of the support and reassurance from others. Other reasons included the clinic being closer to home than other programs or psychiatrists (18%), preference to attend a group visit to one-on-one individual visits (14%), and more frequent and regular access to psychiatrists (12%).

Overall, the patients indicated a very high level of satisfaction with the wait time for initial consultation and the quality of medical information and consultations provided in GMVs.

**FP Satisfaction**
Participating FPs completed a survey indicating their agreement level with 7 statements asking about their experience with the program (Table 4). All statements were written from a positive standpoint, such that agreeing with the statement suggests a positive experience with the program, while indicating disagreement with an item suggests a negative experience. For 6 out of 7 items, most FPs were in strong agreement with the statements. For the remaining item, 42.1% agreed. See Table 4 for a detailed report of each item.

**Discussion**
In our paper, we have described an alternative model for outpatient psychiatric follow-up care for patients with mood and anxiety disorders. With this program, we appear to have shortened wait lists for referral by one-fifth, and we are assessing more than 6 times the amount of new assessments, compared with traditional psychiatric outpatient care. In addition, our costs per patient appear to be one-third to one-sixth that of traditional outpatient care in our community. Not only is our program efficient and cost-effective, but also our data also show that our patients are satisfied with both the assessment process and the follow-up care (GMVs), and referring FPs report a very high level of satisfaction as well.

The most significant limitations of our evaluation are related to the use of satisfaction questionnaires for the collection of much of the data. Satisfaction questionnaires, especially without an incentive (for example, a monetary reward for participation), generally produce low response rates. In one study conducted with cancer patients, the average response rate was 64%, which they report as a relatively high response rate. The average response rate for our patient questionnaires was 60%, which is similar to that reported in the above-cited paper.4 Physician [FP?] response rates are even lower than studies with the general population, likely because physicians [FPs?] have demanding schedules and participating in a survey is not a high priority.5 In addition, owing to physicians' [FPs?] expertise, they are frequently asked to participate in surveys, possibly making them more reluctant to participate.5
In addition, much of our data on patient and FP satisfaction come from questionnaires without the use of a comparison group. In other words, these data are simply descriptive. Therefore, we cannot be sure that patient and FP ratings of a traditional psychiatric practice would be better, worse, or equal to the ratings received at our program. We have addressed this limitation, in the context of patient satisfaction with GMVs, in a subsequent study,10 and found that patients rated their experience with GMVs to be equal to their experience with traditional one-on-one psychiatric care. In addition, previous research done on GMVs, discussed in detail below, has found that patients attending GMVs report equal levels or higher levels of satisfaction when compared with control groups.

GMVs are not new or novel. GMVs have been used in medicine for more than a decade. The GMV model is increasingly used in other aspects of medicine, specifically in the treatment of chronic illnesses, such as hypertension, diabetes, or asthma.7–17 Given that mental illness is also a chronic condition, it seems logical to adopt this model in psychiatry, as it affords the opportunity to assess patients with homogeneous chronic illnesses in a more efficient format. Further, research on group, compared with individual, therapy (for example, psychotherapy, cognitive-behavioural therapy, or mindfulness therapy) shows that group therapy is equal in efficacy to individual treatment.18–22

The GMV model was originally developed by Dr Edward Noffsinger at Kaiser Permanente. Noffsinger’s aim in developing this model of treatment was to improve efficiency, accessibility, and quality of care.23 Jaber et al11 conducted a comprehensive review of the GMV literature and concluded that this model of treatment is in fact a promising approach for managing chronic illness. Specifically, Jaber et al11 found that across all studies reviewed, compared with control groups, patients attending GMVs reported higher levels of satisfaction with care, demonstrated a decreased use of certain health services (that is, emergency department visits, visits to specialists, and hospitalizations), and received better care (for example, receiving more preventative procedures and having medications reviewed). Reasons that patients preferred GMVs included the benefits provided by group interaction (such as support and advice from other group members), more time spent with the physician [FP?], more education, and increased access to prescription refills and examinations. In addition, physician [FP?] satisfaction was high across all GMV studies, likely because physician [FP?] productivity increased in the GMV modality. More recent studies continue to show the GMV method of treatment is either equivalent to or superior to the traditional method of patient care. Patients attending GMVs with diabetes and heart disease demonstrate improved disease-specific health outcomes when compared with control subjects.8,12,16,17 In a year-long observational study of patients with diabetes and risk factors for heart disease, Geller et al10 found that patients with high attendance to GMVs (compared with those with low attendance) had decreased depression and loneliness and improved quality of life (as measured by general health, vitality, bodily pain, and mental health). In a different patient population, Meehan et al6,13 findings showed an extremely high level of patient satisfaction and the preference to attend future GMVs in cancer patients receiving bone marrow transplants. Dorsey et al7 also examined the effectiveness of GMVs in a different patient population, those with Parkinson disease. While they did not find GMVs to be superior to traditional treatment in this population, they did find the 2 modalities to be equal in efficacy. The results appear quite consistent throughout the literature; GMVs are an effective means of managing care in patients with chronic illness.

Email communication or some type of electronic communication is an essential aspect of all other aspects of our business and social communications. Somehow, email has not caught on in medicine. Seeman and Seeman24–26 urged physicians [FPs?] to embrace email as a more efficient means of patient communication. Electronic communication (email, instant messaging, and social networks) with the treating psychiatrist allows patients further access to their physician [FP?] and adds another dimension to follow-up care.25–27 Previous research has shown that electronic communication is associated with increased patient satisfaction38,29 and better health outcomes.28,30,31 Email in particular offers patients quicker access for basic medical services and offers a more useful response system for many routine clinical situations that currently require telephone communication or a scheduled individual office visit. Further, in an age of medical consumerism, patients know a great deal about their medical disorders and we need to welcome informed consumers and collaborators in their medical care. This type of expectation can be very empowering for patients, particularly those with mood and anxiety disorders.

Conclusions
This model of care (MDA Program) is not for everyone. Indeed, it is unlikely to work for people who cannot assume a degree of responsibility for their care or who lack insight (for example, those with chronic schizophrenia or dementia). However, for most patients who are seen in outpatient departments, mental health clinics, or private psychiatric offices, we believe this model, or some aspect of it, will result in more efficient and cost-effective care. Many psychiatrists will feel uncomfortable with this model, as it is clearly not how we have been trained. While it will be outside the comfort zone of many psychiatrists, we would suggest that it will result in seeing far more patients and offering a better service to our FP colleagues who are often frustrated with our long wait lists or closed practices. Likewise, patients who have had traditional individual care are often uneasy or skeptical about GMVs or email communications, initially. Our experience would suggest that most patients, once they experience this type of care,
are quite satisfied, and a significant minority actually prefer it over individual care.

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