ORIGINAL ARTICLE

Utility of the group medical visit model for medication-assisted therapy

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ABSTRACT

Objective: *To describe a group medical visit (GMV) model to facilitate medication assisted therapy.*

Design: *Retrospective cohort analysis.*

Participants: *Adult patients over 18 years of age desiring to receive medication assisted therapy (MAT).*

Methods: *We describe the MAT GMV model including the clinical flow and group facilitation processes. The key elements for documentation and the medical portion of the visit are discussed. Using descriptive methods, we report the characteristics of our patient population entailing demographics, co-occurring mental health diagnosis, and medication use.*

Results: *A total of 32 patients have participated in our MAT GMV over the past 2 years with nine active patients. Age range of participants is 20-65, with about half of them between 31 and 54; race and ethnicity have been primarily White (87 percent) with equal distribution of male and female patients. Most patients had one or more co-occurring mental health disorder. The majority of patients had a prescription of buprenorphine-naloxone 8-2 mg twice a day (62 percent). Many of our patients had repeated co-occurring illegal substance use on urine testing resulting in program dismissal.*

Conclusions: *MAT GMV is a straightforward and innovative way to deliver care to patients affected by opioid use disorder who are in a maintenance state. One of the biggest obstacles to successful participation in this program is repeated co-occurring illegal substance use. When remission is achieved via MAT GMV, provider efficiency is also increased and patients accomplish a sense of wellbeing via therapy, self-management, and medication assistance.*

INTRODUCTION

In the United States, opioid use disorder (OUD) is an epidemic and a public health crisis. From 1999 to 2018, approximately 500,000 deaths from opioid overdoses were reported.[1] Effective clinical treatment strategies are critical in combating OUD. One method to treat OUD is medication-assisted therapy (MAT). Primarily utilized to treat opioid addiction, MAT is an evidence-based treatment option that combines medication, counseling, and behavioral therapies to address patient needs.[1] Medications used to treat OUD include buprenorphine, methadone, and naltrexone. MAT has proven to be clinically effective and significantly lowers the rate of individuals needing inpatient detoxification services.[2] The ease of prescribing buprenorphine–naloxone films (Suboxone®) or the generic equivalent makes this a primary medication for MAT clinics, including our own.

Presently, MAT is not widely offered in the primary care setting with group therapy. Emerging over the past few years, group medical visits (GMVs) are an outpatient treatment option for individuals with

OUD.[3] GMVs are an evidence-based care model that allows individuals with a common condition to meet in a shared setting with providers.[4] GMVs are used for chronic conditions, eg, diabetes, hypertension, and obesity, and providers can see, review, and educate patients on their common condition.[3] From the patient's perspective, GMVs offer an opportunity to learn and exchange ideas with others in a protected environment.[3,5] The role of MAT in a GMV setting is still being formulated and is best utilized for maintenance treatment of established patients who are on a consistent visit schedule. The purpose of this brief report is to discuss the implementation, clinical workflow, and 1-year experience of the GMVs for MAT we have developed in a primary care setting.

MAT GMV MODEL

Several models exist for GMVs including shared medical appointments. The group care models are similar in their goals and structure, but they differ in their strategies used to achieve objectives.[4] Our OUD GMV model is based on Centering Healthcare™ focusing on patient education and behavior change primarily through facilitated group discussions. Our clinical structure has been previously published.[6,7] Through family medicine referral, assessment of potential inclusion in MAT is done by a team approach, including coordinator, licensed clinical addiction specialist (LCAS), and physician and pharmacist reviews. We have a health educator who is also the coordinator, contacts patients, and provides overall administration. Participants of the MAT program are informed about required attendance to GMV. They are also notified of the stipulation that diversion of buprenorphine and use of illicit substances are not compatible with participation in the program. The patient signs a treatment agreement at the first clinic visit to remain abstinent from illicit drugs as well as opioids, from any source. After several clinic visits establishing a consistent relationship, the treatment team decides if the patient is appropriate for GMVs.

FLOW OF MAT GMV

The process of our MAT GMVs has several components. We have a large conference room regularly reserved for our sessions that take place every 2 weeks. Upon arriving to the clinic, patients check-in and pay any applicable copays. Patients then submit a urine drug screen (UDS), which is required for all MAT visits. From the lab, the patients move to the large conference room where GMV activities take place. Nursing staff obtain vital signs in one corner of the room (blood pressure, heart rate, and temperature). The rest of the large room is divided, such that about one-third is devoted to medical provider–patient exams and prescriptions, and the remainder of the room is devoted to the group visit with chairs arranged in a large circle.

The medical provider reviews the regulated controlled substance monitoring system for opioid and other controlled medications, including buprenorphine to ensure it is consistent with medications recorded in the patient's medical record before writing maintenance buprenorphine prescription. The UDS is evaluated after the visit as the confirmatory for buprenorphine metabolite requires a send out lab for our clinic. Our LCAS leads the group session, typically with about 5-10 patients for about 1 hour. The time of our GMV is at 5 PM and ends by 6:30 PM most sessions. We ask that patients come in about 15 minutes early to get UDS prior to lab closure.

DOCUMENTATION AND MEDICAL PORTION OF GMV

To make our GMV time-efficient, we created "smart sets" on our electronic medical record that includes template notes and lab orders. The key elements of the documentation are reviewed in Table 1 for patient initiation and maintenance. While these are established patients, attention to changes in their status of triggers and stressors, as well as any new substance use or acute issues is of key importance for their success in continuation in MAT. During one-on-one interviews between medical provider and patient, an intake of what has taken place over the past 2 weeks is conducted in a corner of the large room and documentation of the point of care and confirmatory UDS. The importance of establishing a space for privacy between the medical provider and the patient away from group sight was realized as sometimes emotional conversation occurs. To remedy this, a privacy screen was used during personal interviews. In this way, group time was still a time to share, and the time with the medical provider was a more private experience.

GROUP FACILITATION AND PATIENT OVERVIEW

The LCAS guides the GMV process to provide the patients an opportunity to share experiences and

Table 1. Key elements for documentation

	Subjective	Objective	Assessment and plan
Initiation*	• History of prior and recent opioid use	• Vital signs	• Determine readiness for MAT in group setting vs. higher level of care within our clinic (1:1 visits) vs. methadone clinics vs inpatient rehab
	• History of other substance use	• Gen appearance	
	• Prior use of BUP (Rx or off street)	• Skin evaluation (cellulitis and turgor)	
	• Perceived barriers to care and staying engaged	• HEENT	• Determine induction plan including dosing and frequency and set up return plan
	• Motivation for overcoming barriers and staying engaged in group MAT	• Respiratory effort	• Techniques discussed in person and in group in aiding with managing triggers
	• Triggers	• CV: LE edema	
	• SDH: transportation, support system at home, employment status, insurance, and housing	• Neurologic status (alertness and orientation, gait, and tremors)	
		• Psychiatric: speech, mood, affect, behavior, eye contact, insight	
		• Lab results: POC UDS	
		• If not previously done offer: Hep C screen, HIV, and CMP	
Continuation	• Current dose of BUP-naloxone	• Vital signs	• Current status/effectiveness of MAT
	• Response to treatment	• Gen appearance	
	• Triggers and cravings	• Skin evaluation (cellulitis and turgor)	• Dose change or continuation
	• Illicit and/or recreational substance use	• HEENT	• Status of visit frequency and number of films sent out
		• Respiratory effort	
	• Review of UDS expectations	• CV: LE edema	• Techniques discussed in person and in group in aiding with managing triggers
	• Review of state PDMP	• Neurologic status (alertness and orientation, gait, and tremors)	
	• If female and fertile contraception method review	• Psychiatric: speech, mood, affect, behavior, eye contact, and insight	
		• Lab results: POC UDS and BUP breakdown	

*Initiation should be 1:1 if at all possible but could take place within group setting if patient has been appropriately screened and it is done before the group members arrive.
BUP, buprenorphine; CMP, complete metabolic panel; CV, cardiovascular; HEENT, head eyes ears nose throat; HIV, human immunodeficiency virus; LE, lower extremity; MAT, medication-assisted therapy; PDMP, prescription drug monitoring program; POC, point of care; SDH, social determinants of health; UDS, urine drug screen.

coping strategies collectively. Utilizing the "Whole Person Care Approach to Recovery" with emphasis on the multiple needs of a person and not just their drug use.[7] Motivational interviewing techniques are used by the LCAS to elicit change talk within the group setting.[8] The MAT group setting allows the participant to share and to address personal issues and daily living stressors. Recently, one group

Table 2. Patient characteristics

	Active patients, n = 9 (percent)	Past patients, n = 23 (percent)	Total, n = 32
Age (in years)			
Mean ± SD	42.44 ± 12.56	42 ± 12.94	42.13 ± 12.85
≤30	2 (22.2)	6 (26.1)	8 (25)
31-54	4 (44.4	11 (47.8)	15 (46.9)
55 and older	3 (33.3)	6 (26.1)	9 (28.1)
Gender			
Male	4 (44.4)	11 (47.8)	15 (46.9)
Female	5 (55.6)	12 (52.2)	17 (53.1)
Race and ethnicity			
Black	1 (11.1)	3 (13.0)	4 (12.5)
White	8 (88.9)	20 (87.0)	28 (87.5)
Hispanic	0 (0)	1 (4.3)	1 (3.1)
Smoking status			
Smoker	6 (66.7)	20 (87.0)	26 (81.3)
Nonsmoker	3 (33.3)	3 (13.0)	6 (18.7)
Marital status			
Married	2 (22.2)	5 (21.7)	7 (21.9)
Never married	5 (55.6)	13 (56.5)	18 (56.2)
Divorced/ separated/ widowed	2 (22.2)	5 (21.7)	7 (21.9)
Employment status			
Employed	5 (55.6)	13 (56.5)	18 (56.2)
Not employed	4 (44.4)	10 (43.5)	14 (43.8)
Health insurance			
Private	4 (44.4)	8 (34.8)	12 (37.5)
Medicare and/or Medicaid	4 (44.4)	10 (43.5)	14 (43.8)
No insurance	1 (11.1)	5 (21.7)	6 (18.7)

Table 2. Patient characteristics (continued)

	Active patients, n = 9 (percent)	Past patients, n = 23 (percent)	Total, n = 32
Co-occurring mental health disorder diagnoses			
Anxiety disorder	6 (66.7)	12 (52.2)	18 (56.3)
Depression	7 (77.8)	17 (73.9)	24 (75)
Attention deficient disorders	2 (22.2)	2 (8.7)	4 (12.5)
Bipolar affective disorder	1 (11.1)	3 (13.0)	4 (12.5)
3 or more mental health disorder	1 (11.1)	5 (21.7)	6 (18.7)
None	2 (22.2)	5 (21.7)	7 (21.9)
Co-occurring substance use			
Alcohol	1 (11.1)	10 (43.5)	11 (34.4)
Cannabis	4 (44.4)	13 (56.5)	17 (53.1)
Cocaine	4 (44.4)	11 (47.8)	15 (46.9)
Ampheta-mines	3 (33.3)	8 (34.8)	11 (34.4)
Benzodiaz-epines	5 (55.6)	14 (60.9)	19 (59.4)
3 or > besides opioids	3 (33.3)	10 (43.5)	13 (40.6)
Opioid drug use history			
Opioid pills	6 (66.7)	16 (69.6)	22 (68.8)
Heroin or fentanyl	3 (33.3)	11 (47.8)	14 (43.8)
Reason for MAT			
Opioid use disorder	8 (88.9)	19 (82.6)	27 (84.4)
Chronic pain	1 (11.1)	4 (17.4)	5 (15.6)

Table 3. Medication-assisted therapy (MAT) overview

	Active patients, n = 9 (percent)	Past patients, n = 23 (percent)	Total, n = 32
MAT medication			
Buprenorphine–naloxone 12-3 mg	1 (11.1)	1 (4.3)	2 (6.3)
Buprenorphine–naloxone 8-2 mg	4 (44.4)	15 (65.2)	20 (62.5)
Buprenorphine–naloxone 4-1 mg	1 (11.1)	0 (0)	1 (3.1)
Buprenorphine–naloxone 2-0.5 mg	2 (22.2)	0 (0)	2 (6.3)
Subutex® 8 mg	1 (11.1)	0 (0)	1 (3.1)
Zubsolv® 1.4-0.36 mg	0 (0)	1 (4.3)	1 (3.1)
None*	0 (0)	5 (21.7)	5 (15.6)
Miles traveled to MAT			
Mean ± SD	11.4 ± 19.3	15.6 ± 11.2	14.4 ± 13.7
Median ± SD	6	13	9.5
Weeks in program			
Mean + SD	29 ± 20.5	7.3 ± 7.0	14.3 ± 16.7
Median	20	4.5	9
Frequency of visits			
Weekly	0 (0)	12 (52.2)	12 (37.5)
Bimonthly	6 (66.7)	3 (9.4)	9 (28.1)
Monthly	3 (33.3)	1 (4.3)	4 (12.5)
One visit	0 (0)	2 (8.7)	2 (6.3)
Declined/not ready for program	0 (0)	5 (21.7)	5 (15.6)
MAT program outcomes			
Completed no longer taking			2 (6.3)
Buprenorphine and opioid free			
Dismissed from program			13 (40.6)
Never started			4 (12.5)
Switched to individual office			4 (12.5)
Visits with a provider			
Current patients in group			9 (28.1)
Medical visits (GMVs)			

*Patient unable to discontinue opioids.
SD, standard deviation.

member was having some difficulty with prescription medication, and they welcomed the group to hold them accountable for a clean UDS.

Matching the appropriate patients for GMV requires a comfort level in sharing experiences with others openly. The patients who have participated in our MAT program did not all take part in the GMV process. In Table 2, active patients (GMV group), past patients, and all participants to date are outlined. Our GMV consists of otherwise healthy younger adults, new mothers to middle aged and those with several medical comorbidities. Their backgrounds are equally diverse when looking at demographics such as health care coverage and employment which both can be seen as proxy to socioeconomic status. Most patients had some co-occurring mental health disorder diagnosis with depression being the highest (n = 7). The use of other illegal substances was common including cannabis and cocaine with those repeatedly failing their UDS being dismissed from the program.

Table 3 shows the overall use of buprenorphine products in our MAT program. Most patients use generic buprenorphine–naloxone films at varying dosages; the most common dose is 8-2 mg twice daily. There are nine active patients and most are coming to GMV biweekly. We are one the few outpatient MAT clinics in a 30-mile area and the only one in a primary care facility with MAT. The average mile traveled by our patients is about 11.

SUMMARY

Several lessons have been learned thus far during our implementation of GMV for MAT. While the time within the group is a necessary interactive component, we found that privacy is imperative for the medical portion of the visit. Having individuals be able to come together as a group and open in front of others and retain them in group has not come without its challenges. Many iterations of our group were seen before we established a successful cohort. We learned that patients who (1) routinely engage in therapy prior to entering the group, (2) consistently have UDS without substances other than buprenorphine, and (3) on MAT for longer than 6 months (as transfers from other clinics or our own patients) are best suited for GMV. Importantly, we did not exclude patients from attempting participation in GMV even if they did not meet these three criteria. The retention in our GMV process was augmented with at least two of the three points met.

From the team perspective, having a small, yet consistent group has been paramount to being able to properly support the GMV for MAT. Our coordinator can solve most barriers patients face from accessing transportation, to addressing pharmacy's issues, to assisting with making follow-up appointments for MAT, as well as to setting up chronic and acute visit appointments within our main primary care clinic. Our LCAS shares with the team insightful information regarding patients' current life stressors and ways they are coping with these and any challenges they foresee in their commitment to GMV for MAT. Medical provider and pharmacist collaborate in making clinical decisions regarding dosing and frequency of buprenorphine–naloxone and if additional pharmacotherapy may be appropriate at the time of visit to address other comorbidities, most commonly depression and anxiety. The coordinator and pharmacist cross cover each other for patient needs.

We believe that the model of GMV for MAT in a primary care setting has the potential to significantly expand access to the treatment for OUD. It is efficient and engaging for patients and health care providers alike. From a provider's perspective, this model is capable of seeing many patients at once and is cost effective. It is our experience that once proper elements are in place, it can flow with ease and integrate into the fabric of a primary care clinic.

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