Adapting Components of the **Multimodal Minds in Motion Activity Program into General Practice**

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Abstract

Introduction: As promoted in the Best Practice Caregiving national database, the Minds in Motion (MiM) program is an evidence-based, multimodal activity program focused on improving the physical, emotional, and mental wellbeing of older adults with cognitive impairment and their caregivers. We describe herein how we translated the MIM principles into general practice. Methods: Our program consisted of 20 unique sessions on a twice per month schedule, each featuring a different theme based on a holiday, an activity, or a common past experience. Each session included physical activity, cognitive stimulation, and support group components. Our goal was to make the experience an enjoyable social interaction, while potentially benefiting brain function and quality of life. **Results:** Twenty-two older adults with cognitive impairment participated during 2019, our last pre-COVID-19 year, average 10/session, average age 79. Discussion: Our program demonstrated that the principles of the model MiM program can be translated into a "real world" clinical setting. We engaged our participants in meaningful, multimodal physical, cognitive, and social activities. We also demonstrated that the intensity, duration, and frequency of our program sessions do not overtax them. We have included considerations that may benefit other care providers who may be interested in developing their own multimodal programs.

Keywords

cognitive impairment, combined cognitive-physical exercise intervention, dementia, multimodal activities, nonpharmacological intervention, quality of life

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Introduction

Nonpharmacological interventions have become increasingly popular as a means to improve the quality of life of older adults with cognitive impairment (CI) and their informal caregivers (Aguirre et al., 2013; Couch et al., 2020; Olazarán et al., 2010). Nonpharmacological interventions have also been shown to provide additional benefits for both the older adults with CI and their caregivers, including improvements in cognitive functioning, behavior, sleep, stress levels, and physical functioning (Aguirre et al., 2013; Olazarán et al., 2010; Scales et al., 2018).

While many studies have suggested that individual nonpharmacological interventions, such as exercise or cognitive intervention, enhance cognitive performance (Aguirre et al., 2013; Olazarán et al., 2010; Rao et al., 2014), emerging studies also suggest that multi-sensory or multimodal therapies offer additional benefits, stimulating a variety of brain areas and functions (Han et al., 2017; Karssemeijer et al., 2017; Luttenberger et al., 2012; Sánchez et al., 2013). Systematic reviews of the extant research, including both the efficacy of multimodal interventions and the mechanisms underpinning these interventions, provide additional support for their application in older adults with CI (Burgener, Jao et al., 2015; Chalfont et al., 2020; Ham et al., 2021; Özbe et al., 2019).

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Considering the need and benefits of a nonpharmacological program for our clinic older adults with CI and their informal caregivers, we adapted and implemented an activity program based upon the principles of a Minds in Motion (MiM) program. As promoted in the Best Practice Caregiving national resource database of programs for dementia caregivers (Best Practice Caregiving, 2022), MiM is a multimodal activity program focused on improving the physical, emotional, and mental well-being of both the older adults with CI and their caregivers. Developed by Burgener et al. (2008, 2011), MiM involves physical exercise, cognitive and behavioral therapy, and support group activities. In addition to improved cognitive and physical functioning of the older adults with CI, Burgener et al.'s (2008, 2011) research has suggested that MiM has both direct and indirect positive benefits for the caregivers in improving their overall role stress and in improving the quality of their relationship with the older adults with CI.

We developed our program over a 4-year period as a translational experience to benefit our center's clinic population of older adults with CI. Our primary goal was to make the program an enjoyable social interaction for the participants, while potentially benefiting brain function and quality of life. We included many opportunities for both the older adults with CI and their caregivers to interact with each other. The program focused on the remaining abilities of the older adults with CI, not on their losses. Creative activities and group interaction in a welcoming, casual atmosphere were emphasized. We included a non-threatening exercise component to help prevent falls and to improve physical wellness through balance, strengthening, and flexibility routines (Burton et al., 2015; Rao et al., 2014). In addition to the creative, physical, and cognitive components, our program also provided a support group-like atmosphere for both the older adults with CI and their caregivers.

When planning our program, we first visited a site in our region that had an active multimodal program for older adults with CI based on MiM principles. It was through discussion with their director and observation of their program that we decided on the basic plan for our program. Issues such as program details, participant and volunteer instructor recruitment, venue requirements, staff and volunteer instructor qualifications and training, and time commitments were discussed and subsequently modified to best match our local resources. For example, a major deviation from the model MiM program was not including a formal cognitive-behavioral therapy (CBT) component, which would have required additional staff with professional credentials. Instead, we included a wide variety of stimulating, pleasurable cognitive activities and emphasized focused group discussion. Another deviation was reducing the frequency of the exercise component to twice per month rather than

three times per week, primarily due to budgetary limitations. Similar to the program we visited for advice, we also judged a less demanding schedule to be more suitable for our clinic population. We acknowledge that the modifications we made to the model MiM program resulted in activities that were more relaxed and less quantifiable. We are therefore presenting our work herein as a translational exercise and not as a rigorous research study.

In this report "caregiver" is used to denote the family member involved in the program. The term "participants" is used to denote both the older adults with CI and the caregivers together.

Setting

We designed our program as an activity program to support our medical school memory and aging clinic. Participants were recruited from among the day-to-day attendees in the clinic by referral from the health care providers of the clinic. Recruitment was based on the judgment of the providers without respect for age, socioeconomic status, ethnicity, relationship, or diagnosis or severity of CI. Unlike the model MiM, we did not require that the older adults with cognitive impairment have a formal diagnosis of a dementia such as Alzheimer's disease. We also did not require that they meet specific dementia severity criteria. We promoted the program as a means for the older adult with CI to participate in activities that provide cognitive, social, and physical stimulation. A secondary objective was support of the caregiver with socialization and respite opportunities.

Representative of the older adults with CI seen in our clinic, those who participated were from all socioeconomic levels, living in their own homes in small city and rural environments in the Midwest United States. Unless a field trip had been planned, the sessions were held at a local church, with no religious expectations or requirements, to avoid the hassles of after-hours staffing, room availability, security, etc. The benefits of meeting in a non-medical care facility include an emphasis on health rather than illness. Furthermore, meeting in a neutral setting potentially decreases the stigma often associated with cognitive impairment (Burgener, Buckwalter et al., 2015).

Program

How our program compared to the model MiM program is presented in Table 1, including. reasons for why we deviated from the model program. For the most part, we developed our program to be more relaxed and less demanding of the older adult with CI than the model program. Rather than follow the same routine for the cognitive stimulation each session, we included a wide range of activities that were enjoyable and practicable for the participants. Socialization of the participants with each other and our staff was emphasized, for example by including meals and snacks. We did not follow a strict protocol, and the older adults with CI were encouraged but not expected to participate in every activity.

2019 was the most recent full year that we offered our program, limited thereafter by the COVID-19 restrictions. In 2019 our program consisted of 20 unique sessions on a twice per month schedule spread throughout the year, generally held on the first and third Wednesdays of each month. Each session was 3.5 to 4 hours long, 10AM to 1:30PM–2PM, including a morning snack and a lunch that we provided free of cost to the participants.

Each session had a theme based on the season, a holiday, or other timely event and included several multi-sensory experiences that were generally complementary to the theme. Themes were also based on common subjects for which our older adults with CI would have long-term memory and experience, such as coffee, chocolate, music, art, movies, cooking, and travel. Each session included a cognitive component, such as a mild brain exercise or challenge, a social component, such as group storytelling, and a physical activity component. Many sessions also included a hands-on constructional project that the participants would bring home, like a birdhouse or a Christmas ornament. Weather permitting, outdoor activities like gardening and photography were included. Many of our sessions included a nonpharmacological intervention called TimeSlips (Phillips et al., 2010), which is a group activity for older adults with CI that encourages open storytelling by stimulating imagination rather than relying on factual reminiscence. One of the important principles of TimeSlips is that it relies on creative abilities and not memory. Table 2 presents the schedules that we developed for two of the sessions in 2019.

We selected chair yoga (McCaffrey et al., 2014; Park et al., 2020) for the physical exercise component of our program, because it is a relatively safe and secure program of stretching, muscle strengthening, breathing, and relaxation, practiced while seated in a chair. Taiji was used successfully for the physical component of many of the preceding years' sessions, but it was discontinued when the instructor moved away. We found the chair yoga to be easier than Taiji for the participants to follow. Chair yoga was also easier to implement, because it did not require the tables and chairs to be moved to make an exercise space.

Periodically, we would invite someone with a special talent to present to the group. For example, during our session that had an ice cream theme, a guest speaker gave us a humorous talk about her experiences managing an ice cream store.

The schedules for the remaining 18 sessions of 2019 may be viewed in the Supplemental Table. Although most of the activities were unique, related to the theme of the session, a 45-minute chair yoga exercise followed the same routine each session. Each session's schedule also included an initial 15-minute socialization and snack period and a 45 to 60 minutes lunch.

We welcomed caregivers to participate in the activities and encouraged them to assist the older adults with CI. Several caregivers, however, preferred to use our program as an opportunity to have some respite; they brought their older adults with CI to the venue, left, and returned later. Since our program was not conducted as a research study, any level of participation was acceptable, even if an older adult with CI just observed and didn't participate in a particular activity. We also told the older adults with CI that it was acceptable to not have to participate in the same manner as the others. The participants transported themselves to the offsite locations.

Our program director recruited volunteer instructors to help conduct the activities and to comfortably assist the older adults with CI and their caregivers each session. Although our director was the primary organizer, the instructors were actively involved in the design, planning, and implementation of the sessions. Many brought their own skill sets for the activities, such as cooking, playing the piano, and crafts. The positive, supportive attitude and initiative of the instructors were an important part of the program. The instructors were also an important factor in the development of our program, particularly since many participated in the planning of the sessions during the preceding years. We did not require any specific credentials or qualifications of the volunteer instructors other than the expectation that all were interested and enthusiastic in working with older adults with CI and their caregivers.

All instructors who had direct interaction with the older adults with CI received basic training about dementia and their role in the sessions at the start of the annual program. The training program covered topics such as the basics of dementia and how cognitive abilities change as dementia progresses. Other topics included how to accommodate the cognitive losses of the older adults with CI, principles of communicating with those who have impaired communication ability, and dealing with problematic behaviors. The training included hand-outs and lasted 2 to 3 hours. The potential expectations of the older adults with CI, their caregivers, and the instructors themselves were also discussed in the training.

Our program was partially funded by grants from a local philanthropic organization. The cost of the meals, project consumables, and equipment for the activities were covered by the grants. The church charged us a rental fee for the use of their facility each session. Instructors and staff often donated materials and food. The participants were not charged for any of the activities, including the meals and snacks. Our program directorship was funded at a 25%–30% full time position.

The program required a good deal of talent and ingenuity on the part of the director and instructors to succeed. Almost all of the activities were designed and developed by the director and the instructors, who did not have a straightforward dementia-focused guidebook

Table 1. Combanson of our riberally with the ribder rings in ribtion ribera	Table	I.Comparison	of our	Program	with	the	Model	Minds	in	Motion	Progra
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Feature	Model MiM program (Burgener et al., 2008, 2011)	Our program	Reason for deviation from the model program
Overall program			
Frequency of sessions	Four times per week; exercise activity, cognitive activity, and support group were held on separate days	Twice per month; each session included exercise, cognitive, and support group activities	Less intensive and less cost
Duration of sessions	60–90 minutes	3.5–4 hours	Longer duration allowed a more relaxed schedule and more activities per session
Severity of cognitive impairment criteria	Early to early-middle stage irreversible dementia (CDR < 2.0)	Broad range accepted, from memory loss to moderate dementia	Less restrictive for recruitment
Outdoor activities included	No	Occasional	Allowed more variety and opportunity for exercise
Assistive devices for ambulation allowed	Yes	Yes	Similar
Food provided	No	Yes	Provided another form of socialization and enjoyment
Transportation provided (if needed)	Yes	No	Limited resources
Presence of family member/ caregiver required	No	No	Same
Outcome assessments	Multiple cognitive, behavioral, physical, health, and psychological metrics	Qualitative	Much less demanding for participants and instructors
Phone call follow-up if sessions missed	Yes	Yes	Same
Physical exercise activity			
Frequency	Three times per week	Twice per month	Less demanding for participants and instructors and less cost
Duration	60 minutes, including 30 minutes of relaxation	45 minutes (included in every session)	Similar
Description	Taiji	Chair yoga	Easier activity for participants and instructors
Credentials/qualifications of instructor	At least three instructors with extensive training in Taiji, with a minimum of 5 years of practice	One instructor certified in chair yoga plus volunteer instructors	Fewer credentialed instructors required; less cost
Cognitive stimulation activity			
Frequency	Twice per month	Twice per month	Same
Duration	90 minutes	Approx. 90 minutes (included in every session)	Similar
Description	Structured, using standard CBT interventions (Teri & Gallagher-Thompson, 1991)	Variety of group activities, such as games, interactive lectures, discussions, crafts, and music	Much more relaxed, diverse activities
Credentials/qualifications of instructor	Two master's-prepared social workers certified in individual and family intervention	No specific requirement	Easier to recruit and train volunteer instructors; less cost
CBT homework assigned	Yes	No	Less demanding activity
Suddort group activity			
Frequency	Twice per month	Twice per month	Same
Duration	90 minutes	Approx. 90 minutes (included in every session)	Similar
Description	Used a group structure for support groups (Yale, 1995)	Informal socialization for patients and caregivers	More relaxed activity
Credentials/qualifications of instructor	Gerontological nurse practitioner	Master's-prepared counselor	Similar
Separate support groups for the older adults with CI and the caregivers	Yes	No	More inclusive, relaxed activity

Note. CBT = cognitive behavioral therapy; CDR = Clinical Dementia Rating Scale (Hughes et al., 1982); MiM = Minds in Motion.

Time (minutes)	Type of activity*	Leader	Description
April 3; theme: r	reporting and writing	about life and peo	ple along the way
15	S	Group	Socialize and snack—donuts, coffee, hot chocolate, hot tea, bottled water; music about books, writing, newspapers.
5	S	Susan	Welcome and sing-a-long to Book of Love by The Monotones.
55	С	Guest speaker	Local writer presents an interactive talk about his writing career, including working for a major newspaper, being a lobbyist, and researching and writing about some of our state's famous people.
45	Р	Francy	Chair yoga
45	S	Group	Lunch (catered): soups, salad, bread sticks, and Texas sheetcake (provided by Paula)
30	C, S	Instructors	Writer's workshop—work in couples with one instructor per two couples
15	С	Instructors	Participants or instructors will read out loud their stories, and they will be typed and printed for the next session.
5	S	Group	Sing Book of Love before departing.
May I; theme: e	njoying nature at the	wildlife sanctuary	(field trip)
15	S	Group	Socialize, snack, and watch the bird feeders—bird's nest cookies, hot tea, hot chocolate, coffee, bottled water; music about birds (Mockingbird, Fly Robin Fly)
10	C, S	Jo	Welcome, history of the sanctuary property
30	C, S	Instructors	Bird detective activities: review common backyard birds; what do they know—using pictures; show pictures of other birds; pass bags of sand to show weight; pass stuffed "birds"; compare their wing span to that of an eagle.
40	С	Instructors	Bird count: distribute binoculars (show how to use); show tally sheet, talk about how it is done; show pictures and names of the common birds, and show how to tally the birds; do bird count.
25	S, P	Instructors	Brief trail walk (weather permitting)
30	S	Group	Lunch (catered), with birthday cake provided by spouse for her nonagenarian husband
45	Р	Francy	Chair yoga
45	Craft	Paula	Print-making using natural materials (wooden picture frame and print cards)

Table 2. Representative Schedules for 2 Sessions in 2019.

*Type of activity: C=cognitive; P=physical; S=social.

to follow. Although there was much similarity with other programs, many of the activities were unique to our program. In addition to organizational skills, it was very helpful that our director was involved in our local community and had experience in volunteer instructor recruitment, training, and retention.

Participants

During 2019, 22 older adults with CI participated in at least one of the 20 program sessions. The average of number per session was 10 (range 8–15). The average age of the older adults with CI was 79 years old (range 54–91). There were 13 men and nine women. All of the older adults with CI had been diagnosed with mild

cognitive impairment (MCI) or mild to moderate dementia according to accepted guidelines (Hugo & Ganguli, 2014). Twelve had possible/probable AD, two had MCI, one had Lewy body disease, two had frontotemporal dementia, one had vascular dementia, and four had uncertain diagnoses for their dementia. Five of the older adults with CI did not continue participating after attending only one or two sessions. The care providers in our center's clinic referred 19 to our program. Three had contacted us after learning of our program from our instructors or from other participants. Participants who needed assists for ambulation were included, and adaptations were made in the program activities as required to allow for their optimal participation.

ltem	Average cost per session (USD)	Cost for the year (USD)
Food	310	6200
Director salary and benefits	270	5400
Consumables (e.g., craft supplies)	150	3000
Facility rental (two rooms at 50 USD/room)	100	2000
Chair yoga instructor	75	1500
Travel	0	0
Guest speakers	0	0
Volunteer instructors' expenses	0	0
Totals	905	18,100

Table 3. Budget for 2019 (20 Sessions).

Note. USD = United States dollars.

Thirty-nine primary caregivers or other family members also participated during the year, averaging 11 per session. The number of caregivers exceeded the number of older adults with CI, because at times additional family members would accompany the older adults with CI, or different secondary caregivers would attend different sessions. Nine primary caregivers used the program as an opportunity for respite by recruiting other family members to substitute for them for some of the sessions.

Forty-six additional people assisted in the activities at various times throughout the year as instructors, averaging five per session (range 3–7). As an exception, 12 instructors helped during the group's field trip to a wildlife sanctuary. In addition to the director, two staff personnel from our center usually attended each session.

Findings

The older adults with CI and their caregivers reported that our program was very enjoyable and worthwhile, providing welcoming, stimulating, and constructive activities. Most participants looked forward to the twice per month meetings, and many expressed disappointment when a session had to be canceled or postponed.

Similarly, the program benefited caregivers by providing activities and supervision for their older adults with CI. Our program provided them an opportunity to socialize with others who were dealing with similar caregiving circumstances in an informal support group environment. Our program also allowed many to take a scheduled break from caregiving. As a testament to its value, one of the caregivers continued to participate in our program as a volunteer instructor after her husband died.

The instructors also told us that their participation was meaningful and worthwhile. All said that they enjoyed their experience. Attrition was low among the instructors.

The average cost per session was 905 USD, including the salary of the director and the food for the entire group, including the participants, instructors, staff, and director. See Table 3 for additional budgetary details. The greatest challenges we encountered during the development of our program were the search for a suitable, affordable venue and the implementation of the exercise component. In contrast to the model program, we decided that conducting Taiji multiple times per week was not practicable both from the participant and staffing requirements, particularly after our Taiji instructor left. We therefore settled on a twice per month chair yoga option.

We did not assess program results by systematically querying either the older adults with CI or their caregivers. However, we did encourage the caregivers to give us qualitative feedback, as shown in Table 4.

Discussion

The principle features of the model MiM activity program for older adults with MCI or early to mid-stage dementia are well represented in our program. As a growing body of research promotes the need for diverse, nonpharmacological interventions, programs such as MiM may provide the needed support and interventions not currently widely available. Although our program was less rigorous than the model MiM program, we are confident the effect that our program had on our participants was consistent with the conclusions of recent reviews of such multimodal programs that have found positive effects on cognitive abilities, activities of daily living, and quality of life (Chalfont et al., 2020; Ham et al., 2021; Özbe et al., 2019).

The focus on retained abilities, rather than on the losses often inherent in dementia, promotes the identification and utilization of a wide variety of interventions, focusing on supporting and improving physical, mental, and emotional wellbeing. Encouraging the participation of family caregivers also increases the potential benefits of such wellness-focused programs, essentially maximizing outcomes of the caregiving dyad within one program. As there exist other similar protocols for supportive services, as described in the *Best Practice Caregiving* national database (Best Practice Caregiving, 2022), replication of these types of community-based

Table 4. Quotes from Caregivers Supportive of our Program.

"Minds in Motion gives us a reason to get out and be with people. It's a way for us to have family bonding time. And he really likes the exercise; it's his favorite thing. This class really helps us to connect with him in a different way than at home."

"There are outstanding and interesting presentations at Minds in Motion. You have chosen lots of great programs. We really like the ability to bring family members as part of this program, such as his daughter and grandson. It really provides me the opportunity for some respite. The people here are friendly, we've met some of the nicest people who are in similar situations to what we're going through. The chair yoga is great, not just for him, but for me, too!"

"Thank you so much for giving my husband a chance to see a light at the end of the tunnel. He certainly has improved. Thank you very much for all your help."

"Bird class was fantastic—making bird feeders."

- "My husband had a neurology appointment following our last Minds in Motion class, and he actually scored 5 points higher on the memory test!"
- From a wife whose husband attended with a paid caregiver: "(My husband) is thrilled to have a 'friend' and I am thrilled to have 6 hours."
- "(My husband) was thrilled to present me with his decorated pumpkin. So happy to have 'things to do' for him and things to look forward to. Bless all of you for your efforts to keep our lives as normal and fulfilled as possible."

programs may now be possible for the growing population of older adults with CI and their caregivers.

As described herein, we implemented and refined our program over a 4-year period. A critical ongoing issue is the value of the program. What characteristics of value are most important and how should those characteristics be assessed? We agree with Barrios et al. (2016) that quality of life of both the older adults with CI and the caregivers may be one of the most important, and in our opinion our program helps to provide that. The responses of our caregivers (Table 4) provide testimony to its value.

Considerations for Future Programs

While the older adults with CI and their caregivers reported positive benefits from their participation, objective measures were not included to assess the program's potential effects on cognition, overall functioning, and psychological wellbeing. Without these objective outcome indicators, our thoughts regarding dissemination of our program are tentative, based primarily on the qualitative feedback from the older adults with CI and their caregivers as well as the subjective outcomes. Quality of life and stress-related measures would be most helpful to document our program's value, both for the older adults with CI (Barrios et al., 2016) and the caregiver (Farina et al., 2017). We are therefore considering the inclusion of validated quality of life instruments like the QOL-AD (Logsdon et al., 2002) for the older adults with CI and the SF-36 (Ware & Sherbourne, 1992) for the caregiver to provide valuable internal (and external) quality improvement information. Of course, quantifying value characteristics such as improved behavior or slowing the progression of dementia would be very desirable, but we believe those goals to be beyond the scope of our program.

Questions also evolved regarding the potential to reduce the costs/session for participants. As shown in

Table 3, the single greatest cost was for food, so having the entire group (participants, instructors, staff, and director) pay for their food would obviously result in a major cost savings. Recruiting a site that would not charge facility fees would result in significant savings as would cutbacks in session consumables like craft supplies. An increase in the number of older adults with CI per session could reduce the cost per older adult with CI but not substantially reduce the cost per session. Over time, greater experience with MiM may result in greater efficiencies and improved cost per older adult with CI, especially if the program were expanded using the same director and existing program resources. Reducing the length of each session to eliminate the lunch would save considerable expense, but that would also dramatically reduce the social aspect of our program sessions. Strictly following the model MiM program would result in greater costs, since the exercise, CBT, and support group components require multiple credentialed instructors. Increasing the frequency of sessions to four times/week as in the model program would also greatly increase the cost.

We could have designed the program to be more straightforward and easier to administer if each session were identical (same construction project, same brain game, same exercise, etc.), since the instructors and caregivers (and older adults with CI) would become accustomed to the rote activities over time. But we intentionally designed each session to be different and stimulating for both the older adults with CI and their caregivers (and the instructors), potentially increasing benefits for cognitive and physical functioning. Even though simplifying the program would have administrative advantages, the potential cost savings and need for fewer instructors may not outweigh the benefits of diverse, more-stimulating program components.

Our program may not be suitable for all older adults with CI and caregivers. Several chose not to return after the first session. Our older adults with CI and caregivers were therefore a select group. An important future task would be to interview those who leave or choose not to participate in the first place to learn their reasons for not participating.

Another important factor to be considered is the ratio of volunteer instructors and staff per adult with CI when considering optimal participant numbers. In our program the average numbers per session were 10 adults with CI, five instructors, two staff, and one director. We judge this to be near-optimal. When the 11 caregivers are added, the average group size was 29. Occasionally the group would be over 40, which is a fairly large group, especially if travel is involved. In our experience, many more than 15 older adults with CI per session would probably have overwhelmed the ability of the director, instructors, and staff to keep the sessions' activities running smoothly and the logistics under control.

Conclusions

We have developed, implemented, and refined a program that encompasses the MiM principles of engaging older adults with CI and their caregivers in physical, cognitive, and support group activities. We have shown that the intensity, duration, and frequency of the sessions do not overtax older adults with CI. We have learned the staffing and venue requirements as well as the costs. We have learned how many older adults with CI (and caregivers) can be comfortably and safely engaged during the sessions. We are confident we have benefited the wellbeing and quality of life of our older adults with CI and their caregivers. Considerations for other institutions that may be interested in MiM are provided.

Declaration of Conflicting Interests

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Supplemental Material

Supplemental material for this article is available online.

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