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Impact of Montessori-Based Dementia Programming on Engagement and Affect of Older Adults with Dementia

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Impact of Montessori-Based Dementia Programming on Engagement and Affect of Older Adults with Dementia

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University of San Francisco, School of Nursing and Health Professions

NURS 670: Internship

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Impact of Montessori-Based Dementia Programming on Engagement and Affect of Older Adults with Dementia

Abstract

The COVID-19 pandemic has profoundly impacted the Adult Day Services program and Adult Day programs across the country. As the Adult Day Services program transitions to an in-person format, goals within the organization include developing appropriate programming, increasing group size, and keeping clients entertained. The framework guiding this quality improvement project is Montessori-Based Dementia Programming ® (MBDP). This project aims to increase client engagement, decrease client anxiety, and reduce staff workload. This will be measured by a self-developed staff workload survey, the Menorah-Park Engagement, and the Affect rating scale. Implementing MBDP at the Adult Day Center did not meet all projected goals. However, the benefits of MBDP were observed. The benefits of MBDP include improved affect and engagement of clients when participating in MBDP.

The COVID-19 pandemic has profoundly impacted the Adult Day Services and Adult Day programs across the country. The pandemic has led to gaps in care, cognitive decline, functional decline, and increased isolation. The consequences of the pandemic are costly and have led to higher rates of emergency department use, increased hospitalizations, and increased admissions to institutional placement, such as a skilled nursing facility (Sadarangani et al., 2021). The microsystem discussed in this paper is an older adult day center in a metropolitan area in Northern California.

From the inception of the pandemic, the Adult Day Services team had to transition its program to an online format. As the pandemic restrictions have eased, the program has been brought back to an in-person format. However, the COVID-19 limitations on businesses, including healthcare, present a unique challenge for staff and clients. This paper will discuss an evidence-based quality improvement project to aid this facility in transitioning its Adult Day Services program back to an in-person format.

This project introduced and implemented Montessori Based Dementia Programming (MBDP) at the Adult Day Center. Benefits of this programming include helping facilities, programs, and caregivers enrich lives and promote the well-being of older adults with dementia. Implementing MBDP at the Adult Day Center prioritized increasing client engagement, decreasing client anxiety, and reducing staff perception of workload.

Problem Description

As the Adult Day Services program transitions to an in-person format, goals within the organization include developing appropriate programming, increasing group size, and keeping clients entertained. Due to current COVID-19 protocols, group size is limited. When this facility was allowed to begin in-person services, they were initially allowed a maximum of eight clients

per day. In November of 2021, they have been allowed to increase their group size to a maximum of sixteen clients per day. Staff hopes that by spring 2022, they will be allowed to host twenty-two clients daily. Staff is willing to accommodate pandemic restrictions; however, they state that working with smaller group sizes is challenging. Staff state that they must work much harder to develop a program and entertain the smaller group.

Clients must follow the updated COVID-19 protocols as they return to in-person services. These protocols include all staff and clients wearing masks and following a staggered drop-off and pick-up schedule. These protocols have led to an overall increase in client anxiety. A potential evidence-based improvement project for the Adult Day Center includes developing evidence-based daily programming to decrease client anxiety, increase client engagement, and decrease staff perception of workload.

To develop new programming, staff must reflect on the activities currently used when entertaining clients. Staff may be surveyed about their current workload and what activities have been successful and which have not. After a review of recent evidence and staff feedback, new programming may be drafted. The new programming will include activities incorporating physical activity, a healthy diet, socialization, and intellectual stimulation, as these are recommended practices when developing a care plan for patients with cognitive decline (National Institute on Aging, 2016). New programming will also follow a daily routine that supports completing purposeful activities supporting client engagement and social relationships (Stevens-Ratchford, 2005). Once evidence-based programming is developed, implementation evaluation will be assessed based on achieving established performance goals.

Available Knowledge

PICOT Question

With clients at an Adult Day Center (P), does the implementation of Montessori programming (I) instead of regular programming (C) improve client engagement and decrease client anxiety and staff workload by July of 2022 (T)?

Search Strategy

A search for literature relevant to the PICOT question was performed in February of 2022. Databases utilized in this literature search included the Cumulative Index to Nursing and Allied Health Literature (CINAHL) and PubMed. Search terms used included *Montessori programming, Montessori, dementia, Adult Day Center, engagement,* and *participation*. Inclusion criteria were set for peer-reviewed articles in the English language published from 2015 through 2022. The query resulted in a return of 45 titles, abstracts, and articles of which 13 deemed relevant were reviewed. Six articles best informed the project and were retained. The six articles included were appraised using the John Hopkins Nursing Evidence-Based Practice Research Evidence Appraisal Tool (Dang & Dearholt, 2018) (Appendix A). Of the six articles, two were appraised as Level I, one was a systematic review, and one was a randomized control trial (RCT). Of the remaining articles, two of the articles are Level III, one is level IV, and one is level V. Of the level III articles, both were quality A. One of the articles is a mixed-methods case study, and the other is a systematic review. The level IV article is a qualitative case study and is quality B. The level V article is an exploratory, descriptive case and is quality A

Synthesis of Literature

Booth et al. (2020) performed a qualitative case study that implemented person-centered Montessori-based programming in a memory support unit. Participants included seven of the

unit's residents. After program implementation, the researchers concluded that the Montessori approach support behavior changes with a notable decrease in "disruptive behaviors" and increased social connections among the participants. It was noted that the program staff reported an increase in job satisfaction.

In a randomized control trial (RCT), Jarrot et al. evaluated the effect of Montessori-based activities with ten clients at an Adult Day Center. The researchers evaluated the engagement and affect of the older adults exposed to Montessori-based activities versus the regularly scheduled programming participants randomly selected from the Adult Day Center. The study outcomes show that Montessori programming elicits higher levels of adaptive behavior, constructive engagement, and lower levels of non-engagement in comparison to traditional programming.

Lee et al. (2007) performed an RCT with 14 nursing home residents in a dementia special care unit in a skilled nursing facility. The positive and negative resident engagement was measured when participating in the intergenerational Montessori-based programming compared with the standard activities programming. Utilizing Montessori-based Dementia Programming resulted in higher levels of positive attention and lower levels of negative engagement when compared with standard activities programming. This study also provides a programming framework for implementing Montessori programming at the San Francisco Adult Day Center due to the similar patient populations and goals behind the intervention.

Sadarangani et al. (2021) performed an exploratory, descriptive study with 20 Adult Day Center program directors. This study provides background regarding the closure of Adult Day Centers due to the pandemic. It demonstrates the need for focused interventions to address the unmet needs of older adults, identify revenue streams, and engage in advocacy efforts. Pandemic

closures have led to increased caregiver strain. The impact on older adults was increased cognitive and functional decline and increased utilization of higher-cost settings.

Sheppard et al. (2015) performed a systematic review of 44 articles. The systematic review supports implementing Montessori-based activities for older adults with dementia. It shows explicitly strong evidence regarding the benefits related to eating behaviors. The level of evidence varies from firm to weak related to the benefits of affect and engagement.

Turcotte et al. (2015) performed a mixed-methods study that included 33 participants, 11 older adults, 11 caregivers, and 11 healthcare providers. The study provides insights into older adults' participation and social activities. Older adults' unmet needs primarily involve leisure, fitness, community life, interpersonal relationships, and mobility. Community organizations may target these needs to promote more geriatric adult health and well-being.

Rationale

The framework guiding this quality improvement project is Montessori-Based Dementia Programming ® (MBDP). Persons with dementia desire to feel important, included, and enjoy being exposed to new information. The goals behind MBDP include helping facilities, programs, and caregivers enrich lives and promote the well-being of older adults with dementia. MBPD activities can be done one-on-one, with a small group, or with a large group. Activities may include sorting pictures or words into categories, delicate motor tasks such as stringing beads, and serving as a group leader. Utilizing MBPD allows persons with dementia to have a role in fulfilling where they can express interests and discuss their memories. MBPD also aids in the reduction of anxiety and agitation while fulfilling needs for belonging, security, and self-esteem (Malone & Camp, 2007).

Project Aim

The project has three total aims: to develop and implement Montessori based programming; at the Adult Day Center; to increase client engagement with the average of 80% of clients demonstrating constructive engagement (CE), decrease client anxiety with the average of 80% of clients demonstrating pleasure while reducing staff workload measured by a self-developed staff workload survey where 80% of staff rate their workload as moderate.

Context

Microsystem assessment of the Adult Day Services Program was conducted using the five P's framework (Appendix B).

Process

The Adult Day Services program provides affordable care, support for caregivers, companionship, social activities, and support for activities of daily living to the senior population of San Francisco. This facility also provides support and various resources for the caregivers of older adults.

Patients

This program supports approximately 50 clients over 60 and 75 caregivers annually. The primary patient population includes older adults diagnosed with dementia or Alzheimer's. Based on pandemic restrictions, this program can host up to 16 clients daily. The program is open Monday through Friday from 9 am until 3 pm and can host up to sixteen clients daily.

Professionals

The Adult Day Services team includes two program directors and three activity assistants. The program director's educational background includes a bachelor's degree and certifications, including Activities Coordinator specializing in dementia care, Program Assistant,

first aid, and cardiopulmonary resuscitation (CPR). Currently, the number of staff is appropriate for the clients and caregivers served.

Process

Clients may be admitted to the Adult Day Services program by referral from Catholic Charities' case management team or upon personal request to Adult Day Services. Any client can be referred or requested to join this program. When a client is referred or presents to the Adult Day Services program, staff perform an intake assessment and complete intake paperwork with the client and family. Next, the client must report to their physician to file a Physician Report with the Adult Day Services program. After completing this, the client may partake in Adult Day Services. Admission into this program takes approximately one week from referral or request.

Patterns

The COVID-19 pandemic has significantly impacted the Adult Day Services program. The Adult Day Services team recently transitioned their program from an online format back to an in-person format. With COVID-19 restrictions still in place, clients and staff must wear masks, making it more difficult to hear and recognize each other. There is also a daily group size limit of 16 clients per day. Smaller group sizes have made it increasingly challenging to develop programming and entertain the group.

Catholic Charities supports quality improvement and team communication by having monthly meetings with program directors. The Adult Day Services team also has a bi-monthly online team meeting. During these meetings, the program director and the Adult Day Services team focus on identifying gaps within the program and strategies to improve.

Intervention

The proposed change is to implement MBDP at the Adult Day Center. Client engagement will be measured using the Menorah-Park Engagement scale, levels of client anxiety will be measured using the Affect Rating scale, and perception of staff workload will be measured using a self-developed staff workload survey.

Before the implementation of MBDP, the clinical nurse leader (CNL) will conduct a microsystem assessment and a review of the current programming schedule. The project will then be proposed to the two program directors. After receiving approval from the program directors, the CNL will develop the MBDP schedule. The MBDP schedule will have at least three MBDP activities per week over seven weeks. The project's goals, benefits, and MBDP schedule will be presented to the program directors and activity assistants. The CNL teaches the activity assistants how to carry out MBDP and answer any questions or concerns raised by the staff.

To collect baseline data, the CNL will develop and distribute the staff perceived workload. The CNL will observe clients during non-MBDP programming. The CNL will complete the Menorah-Park Engagement scale (Appendix C) and the Affect Rating scale (Appendix D). After the implementation of MBDP, the CNL will observe clients and complete the Menorah-Park Engagement scale and the Affect Rating scale during MBDP. After MBDP has been implemented, the CNL will have staff fill out the team perceived workload survey (Appendix E).

A Gant chart depicts the period for this project which is seven weeks (Appendix F). When the seven weeks are completed, the CNL will review all data collected. This data will be compared by grouping staff workload before and after the implementation of MBDP, clients'

level of engagement before and after the implementation of MBDP, and clients' affect before and after the implementation of MBDP. After comparing the data results, conclusions will be drawn to understand if MBDP supported the project's goals of reducing staff workload, increasing client engagement, and decreasing client anxiety. A driver diagram was created at the outset to help identify the microsystem's driving forces and inform the project (Appendix G).

Study of Intervention

This project aims to increase client engagement, decrease client anxiety, and reduce staff workload. Two scales and one survey will be used to accumulate data to obtain measures before the intervention and measure changes after the intervention. A self-developed survey asked staff to rate different aspects of their workload to examine staff workload. To discuss client engagement, the Menorah-Park Engagement scale was used. The Menorah-Park engagement scale ranks how engaged clients are during an activity. The scale includes constructive engagement (CE), passive engagement (PE), self-engagement (SE), and non-engagement (NE). The highest level of engagement is CE, and the lowest level is NE. The Affect Rating scale will be used to assess the affect/emotions of the older adults while participating in MBDP. The Affect Rating scale includes affects of pleasure, anger, anxiety/fear, sadness, interest, and contentment.

Before implementing MBDP at the Adult Day Center, the staff will be asked to complete the staff workload survey. Clients will be observed while participating in their regular programming and rated using the Menorah-Park Engagement scale and the Affect Rating Scale. After MBDP is implemented in the Adult Day Services program, clients will be ranked with the Menorah-Park Engagement Scale and the Affect Rating scale when participating in MBDP. After implementing MBDP, staff will be asked to complete the staff workload survey. Data before and after MBDP implementation will then be assessed and compared.

Measures

A project charter was used to develop the aims and measures for the project (Appendix H). Measures chosen to study the impact of MBDP at the Adult Day Center are the staff perceived workload survey, the Menorah Park Engagement Scale, and the Affect Rating Scale. The staff perceived workload was self-developed and questioned staff regarding different aspects of their workload. The survey is graded on a Likert scale of one to five. One was rated as light workload, two was rated as mild workload, three was rated as moderate workload, four was rated as heavy workload, and five was rated as very heavy workload. This survey was developed to assess how MBDP impacts staff workload.

The Menorah-Park Engagement scale was selected because it rates client behavior. Constructive engagement is the most engaged while non is the least engaged. Constructive engagement (CE) shows active engagement in the presented activity with motor or verbal response. Passive engagement (PE) shows passive engagement in the proposed activity by listening or observing the action. Self (SE) shows repetitive self-stimulating behaviors such as excessive rubbing, wringing hands, or wandering. Non (NE) shows the client asleep or disengaged from the activity, such as a blank stare. This rating scale was chosen so client engagement can be assessed before and after the implementation of MBDP. The Affect Rating scale measures the duration of client affect/emotions on a five-point scale. The measured emotions include pleasure, interest, anger, anxiety, and sadness. Each emotion is rated for five minutes and rated. A rating of one means the emotion was never displayed. A rating of two means the emotion was displayed for less than 16 seconds. A rating of three means the emotion was displayed between 16 and 59 seconds. A rating of four means the emotion was displayed between one and two minutes. Lastly, a rating of five means the emotion was displayed between

2-5 minutes (Jarrot et al. 2008). This rating scale was chosen to assess client affect/emotion before and after the implementation of MBDP.

Ethical Considerations

Before this project's implementation, it was reviewed and approved by the faculty within the School of Nursing and Health Professions at the University of San Francisco. This project follows the guidelines of quality improvement (QI) projects by the clinical nurse leader (CNL) program (Appendix I). This project does not require review or approval from the University's Institutional Review Board (IRB). This project implemented evidence-based practice to improve the care delivered to the older adult clients within the Adult Day Services program. Participation of staff and clients was entirely voluntary. All participants received the standard of care. Transparency during this project was prioritized by providing education to staff and clients before implementing this project. Team, client, and institutional anonymity was upheld during the collection and communication of information.

This project followed the American Nurses Association's *Code of Ethics* and is based on provisions two and four. The project was also motivated by the Jesuit values of the University of San Francisco. Provision two states, "The nurse's primary commitment is to the patient, whether an individual, family, group, community, or population" (American Nurses Association, 2015). This project aims to improve the care delivered to the older adult clients the San Francisco Adult Day Center serves. Provision four states, "The nurse has authority, accountability, and responsibility for nursing practice; makes decisions; and takes action consistent with the obligation to provide optimal patient care" (American Nurses Association, 2015). This project's Jesuit value is cura personalis, or care of the whole person. This project is committed to providing evidence-based care to enrich the lives of older adults living with dementia. As a

registered nurse leading this project, a level of accountability and responsibility has been assumed while implementing evidence-based practice at the Adult Day Center.

Outcome Measure Results

A total of five goals were put forward during the implementation of MBDP programming. For outcome measurements, a goal of 60% of the days where the Adult Day Center is open, clients will participate in an MBDP activity. When participating in an MBDP activity, 80% of the clients will be considered constructively engaged (CE) on the Menorah-Park Engagement scale. When participating in an MBDP activity, 80% of clients will demonstrate pleasure according to the Affect Rating Scale. Lastly, based on the staff workload survey, 80% of staff feel workload has decreased to level 3/5 based on a survey before and after implementation of MBDP. For process measurements, 5 MBDP-based activities will be implemented into programming at the Adult Day Center.

Of the outcome goals, the clients participated in an MBDP activity three out of five days per week for an average of 80%. This exceeded the original goal of 60%. When clients participated in MBDP activities, it was found that 61% of clients demonstrated CE, 18% demonstrated PE, 0% demonstrated SE, and 21% demonstrated NE. When clients participated in activities that were not Montessori based, 33% percent of clients demonstrated CE, 36% of clients showed PE, 14% showed SE, and 17% of clients demonstrated NE. This did not meet the goal of 80% of the clients demonstrating CE. When clients participated in MBDP, 39% of clients exhibited pleasure, 46% showed contentment, and 18% of clients expressed anxiety. When clients participated in non-MBDP activities, 0% of clients showed pleasure, 69% of clients exhibited contentment, and 0.05% of clients demonstrated anxiety. This did not meet the goal of 80% of clients demonstrating pleasure when participating in MBDP. Before and after

implementation, staff rated that their workload remained the same at 3/5 or moderate. This did meet the goal of staff ranking their workload as moderate; however, implementing MBDP did not aid in workload reduction. Lastly, the process measure goal was met, and five MBDP activities were implemented at the Adult Day Center.

Most of the results did not meet the project goals. The goals that were met included implementing. Staff implementing MBDP at least 60% of the days when clients were present, implementing at least five MBDP activities, and rating their workload as a 3/5 or moderate when implementing MBDP. Before implementation, it was expected that more clients would demonstrate CE and pleasure when participating in MBDP. However, once implementation started, it was observed that some clients would become more confused when participating in less familiar activities. They also became confused when a person whom they were not as familiar with introduced and explained the activity. Due to the increased confusion, data may not have been optimized to reflect the benefit of MBDP.

Summary

While implementing MBDP at the Adult Day Center did not meet all projected goals, some goals of the intervention were met. The unmet goals of the project include 80% of clients demonstrating CE during MBDP and 80% of clients showing pleasure during MBDP. Upon examination of the data, the benefits of MBDP can still be observed. The benefits of MBDP include improved affect and engagement of clients when participating in MBDP. Based on data gathered from the intervention, when clients participated in MBDP activities, 61% of clients were measured to meet CE based on the Menorah-Park Engagement scale. When clients did not participate in MBDP, 33% of clients were estimated to be CE, and 36% of clients were measured to be PE. When participating in MBDP, 39% of clients exhibited pleasure. When clients did not

participate in MBDP, 0% of clients exhibited pleasure. This data shows that MBDP increased levels of client engagement and pleasure.

As mentioned previously, some of the data may likely have been skewed during the explanation of MBDP activities. When a person unfamiliar with the clients and their level of functioning explained an MBDP activity, many clients became confused and distracted during the explanation. Thus, this leads to decreased CE and pleasure when documenting data for a specific activity. After discussing this issue with staff, all agreed that a new activity should be presented to the clients by an experienced staff member whom the clients recognized. Because the experienced staff member was trusted by the clients and explained the activity in a way tailored to their cognitive abilities, MBDP activities had better-measured outcomes. If experienced staff members explained all activities, it is thought that the data would demonstrate higher levels of CE and pleasure when MBDP was performed.

Conclusions

This project demonstrated how MBDP impacts levels of client engagement, client affect, and staff workload. Some of the project-specific goals were met, including implementing MBDP at least 60% of the days when clients were present, implementing at least five MBDP activities, and staff rating their workload as moderate. The project-specific goals that were not met included 80% of clients demonstrating CE during MBDP and 80% demonstrating pleasure during MBDP. After a review of the data, it was found that although the project-specific goals of engagement and affect were not met, clients still demonstrated a positive response to MBDP. Clients who participated in MBDP increased engagement and significantly higher levels of pleasure.

To develop more data to support MBDP, it is recommended that the Adult Day Center and other facilities caring for older adults with dementia incorporate MBDP and measure levels of client engagement and affect. If more data is obtained, it may show further support for MBDP as an evidence-based practice. Support for MBDP as an evidence-based practice helps facilities, programs, and caregivers enrich lives and promote the well-being of older adults with dementia.

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Turcotte, P., Lariviere, N., Desrosiers, J., Voyer, P., Champoux, N., Carbonneau, H., Carrier, & Levasseur, M. (2015). Participation needs of older adults having disabilities and receiving home care: Met needs mainly concern daily activities, while unmet needs mostly involve social activities. *BMC Geriatrics. 15*(95). https://doi.org/10.1186/s12877-015-0077-1

Appendix A

Evidence Evaluation Table

Study	Design	Sample	Outcome/Feasibility	Evidence Rating
Booth, S., Zizzo, G., Robertson, J., & Smith, I. G. (2020). Positive interactive engagement (PIE): A pilot qualitative case study evaluation of a person-centered dementia care programme based on Montessori principles. *Dementia. 19*(4), 975-991. https://doi.org/10.1177/1471301218792144	Qualitative Case Study	7 program participants	Provides evidence supporting Montessori programming as an intervention. Programming led to more positive and less disruptive behaviors, increased social connection between older adults, and increased job satisfaction among staff.	Level IV B
Jarrott, S. E., Gozali, T., & Gigliotti, C. M. (2008). Montessori programming for persons with dementia in the group setting an analysis of engagement and affect. *Sage Journals. 7*(1), 109-125. https://doi.org/10.1177/1471301207085370	Randomized Control Trial (RCT)	10 Adult Day Center Clients (5 male, 5 female)	Provides evidence supporting Montessori programming as an intervention. Evidence shows Montessori programming elicits higher levels of adaptive behavior, constructive engagement, and lower levels of non-engagement in comparison to traditional programming.	Level I

Lee, M. M., Camp, C. J., & Malone, M. L. (2007). Effects of intergenerational Montessori-based activities programming on engagement of nursing home residents with dementia. *Clinical Interventions in Aging. 2*(3), 477-483. https://doi.org/10.1177/147130120707909 9	Randomized Control Trial (RCT)	14 Nursing home residents on a dementia special care unit in a skilled nursing facility.	Provides evidence and programming ideas for implementation of Montessori programming at the Adult Day Center. Utilizing Montessori-Based Dementia Programming resulted in higher levels of positive engagement and lower levels of negative engagement when compared with standard activities programming.	Level I
Sadarangani, T., Zhong, J., Vora, P., & Missaelides, L. (2021). "Advocating every single day" so as not to be forgotten: Factors supporting resiliency in adult day service centers amidst COVID-19 related closures. *Journal of Gerontological Social Work. 64*(3), 291-302. https://doi.org/10.1080/01634372.2021.1879339	Exploratory Descriptive Study	20 Adult Day Center Directors	Provides background regarding closure of Adult Day Centers due to the pandemic. Demonstrates need for intervention to be aimed at identifying the unmet needs of older adults, identifying revenue streams, and engaging in advocacy efforts. Pandemic closures have led to increased caregiver strain, increased cognitive and functional decline, and increased use of care in higher cost settings.	Level VA

Sheppard, C. L., McArthur, C., & Hitzig, S. L. (2015). A systematic review of montessori-based activities for persons with dementia. *JAMDA. 17*(2), 117-122. https://dx.doi.org/10.1016/j.jamda.2015.10.006	Systematic Review	44 Articles	Supports the implementation of Montessori-based activities for older adults with dementia. Specifically shows strong evidence regarding the benefits related to eating behaviors. Level of evidence varies from strong to weak related to the benefits for affect and engagement.	Level III A
Turcotte, P., Lariviere, N., Desrosiers, J., Voyer, P., Champoux, N., Carbonneau, H., Carrier, & Levasseur, M. (2015). Participation needs of older adults having disabilities and receiving home care: Met needs mainly concern daily activities, while unmet needs mostly involve social activities. *BMC Geriatrics. 15*(95). https://doi.org/10.1186/s12877-015-0077-1	Mixed-Methods study	33 participants (11 older adults, 11 caregivers, 11 healthcare providers)	Study provides insights related to older adult's participation and needs for social activities. Older adult's unmet needs primarily involve leisure, fitness, community life, interpersonal relationships, and mobility. Community organizations may target these needs to promotes older adult health and well-being.	Level III A

Appendix B

Outpatient Microsystem Assessment

Specialty Care Practice Profile

A. Purpose: Provides affordable care, support for caregivers, companionship, social activities, support with activities of daily living.
Why does your practice exist?

Site Name: Catholic Charities - Adult Day	Site Contact: Patty Clement	Date: 9/7/2021
Practice Manager: Patty Clement	MD Lead: N/A	Nurse Lead: N/A

B. Know Your Patients: Take a close look into your practice, create a "high-level" picture of the PATIENT POPULATION that you serve. Who are they? What resources do they use? How do the patients view the care they receive?

Est. Age Distribution of Patients:	%
Birth-10 years	
11-18 years	
19-45 years	
46-64 years	1
65-79 years	4
80 + years	12
% Females	

List Your Top 5 Diagnoses	List Your Top 5 Procedures
1. Dementia	1. N/A
2. Alzheimer's disease	2. N/A
3. Stroke	3. N/A
4.	4. N/A
5.	5. N/A

List Your Top 5 Referrers	
Referrer	What are they referring?
Catholic Charities Case Management	

Health Outcomes
promotion of independence
limit isolation
enhance socialization

Emergency Room Visit Rate
N/A

Patient Satisfaction Scores	% Excellent
Experience via phone	N/A
Length of time to get your appointment	N/A
Saw who patient wanted to see	N/A
Satisfaction with personal manner	N/A
Time spent with person today	N/A

Pt Population Census: Do these numbers change by season? (Y/N)	#	Y/N
Patients seen in a day	16	
Patients seen in last week	12-16	
New patients in last month	8	
Encounters per provider per year	Out/IN	
Same Day Procedures		
Inpatient Procedures		
In-Clinic Procedures		
Specialty Yield Rate	125 clients/year	

***Complete "Through the Eyes of Your Patient", pg 9**

C. Know Your Professionals: Create a comprehensive picture of your practice. Who does what and when? Is the right person doing the right activity? Are roles being optimized? Are all roles who contribute to the patient experience listed? What hours are you open for business? How many and what is the duration of your appointment types? How many exam rooms do you currently have? What is the morale of your staff?

Current Staff	FTEs	Days/Hours						3rd Next Available				Cycle Time Range
		M	T	W	TH	F	S	New	F/U	OR	Minor	
MD Total												
NP/PAs Total												
RNs Total												
LPNs Total												
LNA/MAs Total												
Others Total	4	9-3	9-3	9-3	9-3	9-3						
Secretaries Total												

Do you use Float Pool? ____ Yes __x__ No
Do you use On-Call? ____ Yes __x__ No

Do you offer any of the following? Check all that apply.
- [x] Group Visit
- [x] E-mail
- [x] Web site
- [ ] RN Clinics
- [x] Phone Follow-up
- [ ] Phone Care Management
- [x] Registries
- [x] Protocols/Guidelines

 # Exam Rooms N/A
 # Minor Rooms N/A
Supporting diagnostic Depts. (e.g. respiratory, lab, cardio.)
N/A

Appt. Type	Duration	Comment
New Pt		
Follow-up		
Minor		

Staff Satisfaction Scores	%
How stressful is the practice?	% Not Satisfied
Would you recommend it as a good place to work?	% Strongly Agree

***Each staff member should complete the Personal Skills Assessment and "The Activity Survey", pgs 11-13**

D. Know Your Processes: How do things get done in the microsystem? Who does what? What are the step-by-step processes? How long does the care process take? Where are the delays? What are the "between" microsystems hand-offs?

1. **Track cycle time for patients from the time they check in until they leave the office using the Patient Cycle Time Tool. List ranges of time per provider on this table, pg 14/15**
2. **Complete the Core and Supporting Process Assessment Tool, pg 16**

E. Know Your Patterns: What patterns are present but not acknowledged in your microsystem? What is the leadership and social pattern? How often does the microsystem meet to discuss patient care? Are patients and families involved? What are your results and outcomes?

- Does every member of the practice meet regularly as a team? yes
- How frequently? monthly, bi-monthly
- Do the members of the practice regularly review and discuss safety and reliability issues? yes
- What have you successfully changed? online services
- What are you most proud of? covid transition
- What is your financial picture? $40,231,968
- What is the most significant pattern of variation?

***Complete "Metrics that Matter", pg 22**

Appendix C

Menorah Park Engagement Scale

Table 1 **Menorah Park Engagement Scale coding categories**

Category	Description of behavior
Constructive (CE)	Active engagement in presented activity: motor or verbal response to the activity
Passive (PE)	Passive engagement in presented activity: listening to or observing the activity
Self (SE)	Repetitive or self-stimulating behaviors: excessive rubbing, wringing hands, wandering
Non (NE)	Asleep or disengaged from an activity: 'zoned out' or blank stare

Appendix D

Affect Rating Scale

Table 1. Philadelphia Geriatric Center Affect Rating Scale

Pleasure

Signs: Smile, laugh, stroking, touching with "approach" manner, nodding, singing, arm or hand outreach, open-arm gesture, eye crinkled

Anger

Signs: Clench teeth, grimace, shout, curse, berate, push, physical aggression or implied aggression, like fist shaking, pursed lips, eyes narrowed, knit brows/lowered

Anxiety/Fear

Signs: Furrowed brow, motoric restlessness, repeated or agitated motions, facial expression of fear or worry, sigh, withdraw from other, tremor, tight facial muscles, calls repetitively, hand wringing, leg jiggling, eyes wide

Sadness

Signs: Cry, tears, moan, mouth turned down at corners, eyes/head down turned and face expressionless, wiping eyes, horse-shoe on forehead

Interest

Signs: Eyes follow object, intent fixation on object or person, visual scanning, facial, motoric or verbal feedback to other, eye contact maintained, body or vocal response to music, wide angle subtended by gaze, turn body or move toward person or object

Contentment (less intense than pleasure)

Signs: Comfortable posture, sitting or lying down, smooth facial muscles, lack of tension in limbs, neck, slow movements

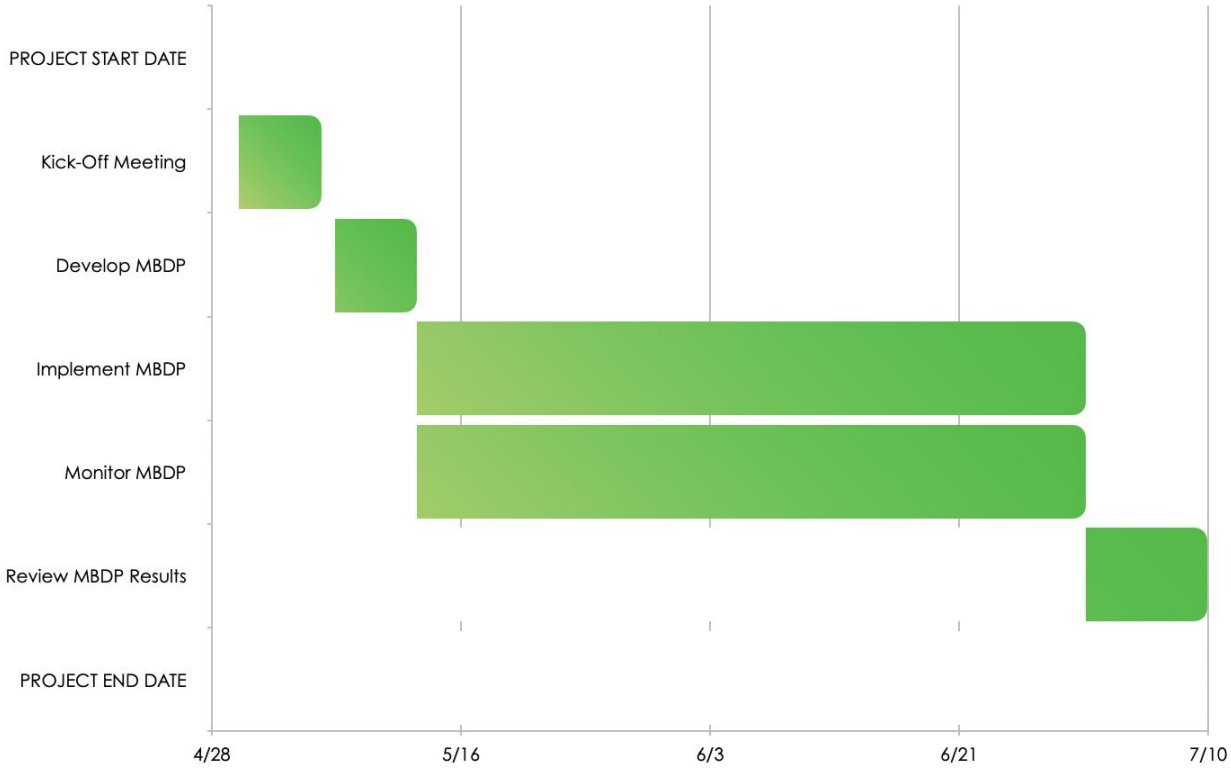
Appendix E

Staff Workload Survey

1.) How do you feel your current workload is?
    a. Very heavy workload
    b. Heavy workload
    c. Moderate workload
    d. Light workload
    e. Minimal workload
2.) What takes up the majority of your workload?
    a. Managing clients/keeping them involved in activities
    b. Developing activities for clients
    c. Carrying out activities
    d. Other
3.) If you answered other in the last question, please explain what takes up the majority of your workload?

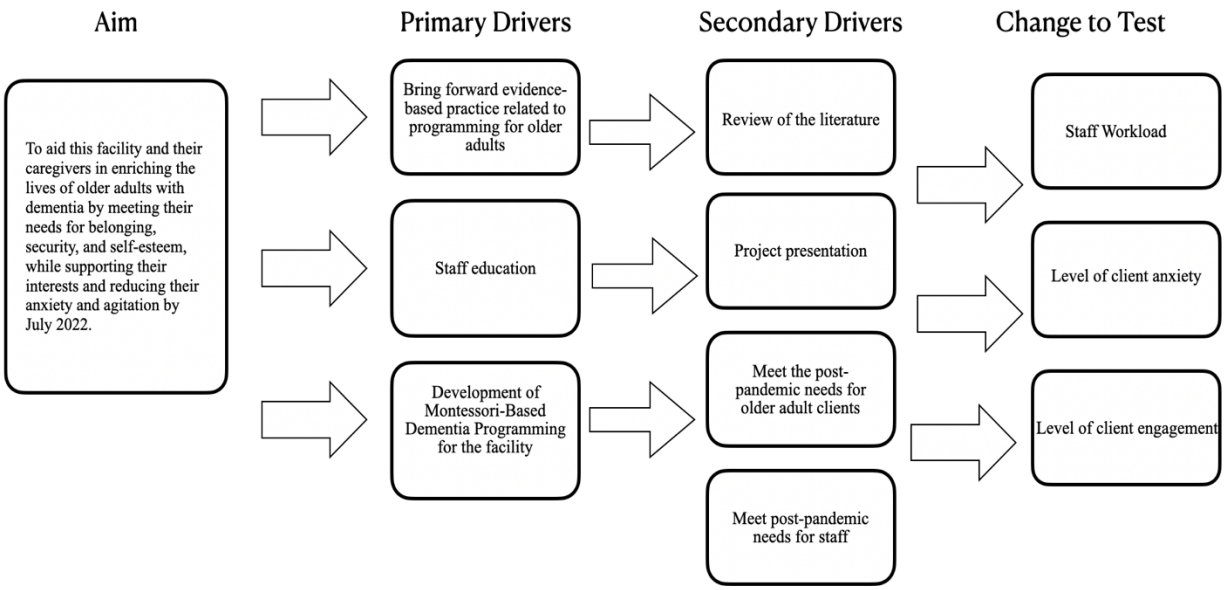
Appendix F

Gantt Project Timeline



Appendix G

Driver Diagram



Appendix H

Project Charter

Implementation of Montessori-Based Dementia Programming at an Adult Day Center

Title: Implementation of Montessori-Based Dementia Programming at an Adult Day Center

Global Aim: To aid this facility and their caregivers in enriching the lives of older adults with dementia by meeting their needs for belonging, security, and self-esteem, while supporting their interests and reducing their anxiety and agitation by July 2022.

Specific Aim: This project aims to develop Montessori-based dementia programming that may be implemented into the programming staff carry out at the Adult Day Center with the goals of increasing client engagement, decreasing client anxiety, while reducing staff workload.

Background Information/Rationale for the Project:

The COVID-19 pandemic has had a profound impact at Adult Day Services programs around the country. During the beginning of the pandemic, many Adult Day Services programs have had to transition their program to an online format. As the pandemic restrictions have eased, some programs have been brought back to an in-person format. The Adult Day Services program However, the COVID-19 restrictions present a unique challenge for both staff and clients involved in these programs (Sadarangani et al., 2021). At the specific Adult Day Center where this quality improvement project will take place, staff have reported difficulty developing programming, working with, and entertaining smaller group sizes due to pandemic restrictions. The framework guiding this quality improvement project is Montessori-Based Dementia Programming ® (MBDP). Persons with dementia have the desire to feel important, included, and exposed to new information. The goals behind MBDP include helping facilities, programs, and caregivers enrich the lives and promote the well-being of older adults with dementia. MBPD activities can be done one-on-one, with a small group, or with a large group. Utilizing MBPD allows persons with dementia to have a role to fulfill where they can express interests and discuss their memories. MBPD also aids in the reduction of anxiety and agitation while fulfilling needs for belonging, security, and self-esteem (Malone & Camp, 2007).

Sponsors:

Director of Client Services	Patty Clement
Director of Adult Day Services Programs	Carmen Santoni

Goals:

1. Develop Montessori-Based Dementia Programming (MBDP) for the Adult Day Center.
2. Implement of Montessori-Based Dementia Programming (MBDP) at the Adult Day Center
3. Implementation of Montessori-Based Dementia Programming (MBDP) will reduce overall staff workload.
4. Montessori-Based Dementia Programming (MBDP) will reduce overall client anxiety.

5. Montessori-Based Dementia Programming (MBDP) will reduce overall client agitation.

Measures:

Measure	**Data Source**	**Target**
Outcome		
Client participation in Montessori-Based Dementia Programming (MBDP) that has been implemented into daily activities programming.	Daily Activities Programming	60% of days where clients are present for activities programming.
Increased client engagement during MBDP.	Menorah-Park Engagement Scale	80% of clients score within the constructive engagement (CE) category.
Decreased client anxiety and agitation during MBDP.	Affect Rating Scale	80% of clients scores reflect level four of pleasure.
Reduction of overall perceived staff workload.	Workload Survey	80% of staff feel workload has decreased to level 3/5 based on survey before and after implementation of MBDP.
Process		
Development of Montessori-Based Dementia Programming (MBDP) that is ready for implementation at the Adult Day Center.	Daily Activities Programming	5 MBDP activities may be implemented into programming.

Team:

RN Leader	Meredith Sheppard, RN
Director of Client Services	Patty Clement
Director of Adult Day Services Program	Carmen Santoni
Staff	Activities Assistants

Appendix I

UNIVERSITY OF SAN FRANCISCO | School of Nursing and Health Professions

CNL Project: Statement of Non-Research Determination Form

Student Name: Meredith Sheppard

Title of Project: Implementation of Montessori-Based Dementia Programming at an Adult Day Center

Brief Description of Project: The evidence-based improvement project proposed for the Adult Day Center includes the development of Montessori-based daily programming with the goals of decreasing client anxiety, increasing client engagement, and decreasing staff workload.

A) Aim Statement: The project has three total aims: (1) to develop Montessori based programming; (2) that may be implemented into the programming staff carry out at the Adult Day Center; (3) with the goals of increasing client engagement, decreasing client anxiety, while reducing staff workload.

B) Description of Intervention: New Montessori-based programming shall be implemented at the Adult Day Center and include activities that incorporate physical activity, socialization, and intellectual stimulation. New programming may also follow a daily routine that supports the completion of purposeful activities that supports client engagement and social relationships

C) How will this intervention change practice? The goals behind Montessori Based Dementia Programming (MBDP) include helping facilities, programs, and caregivers enrich the lives and promote the well-being of older adults with dementia. MBPD allows older adults with dementia fulfill and express their interests while supporting the

reduction of anxiety and agitation while fulfilling needs for belonging, security, and self-esteem.

D) Outcome measurements: Level of client engagement, level of client anxiety, perceived staff workload.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: (http://answers.hhs.gov/ohrp/categories/1569)

☐ This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

☐This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

Project Title:	**YES**	**NO**
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	**X**	
The specific aim is to improve performance on a specific service or program and **is a part of usual care**. ALL participants will receive standard of care.	**X**	
The project is **NOT** designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does **NOT** follow a protocol that overrides clinical decision-making.	**X**	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does **NOT** develop paradigms or untested methods or new untested standards.	**X**	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does **NOT** seek to test an	**X**	