FINAL PROGRAM EVALUATION REPORT

FOR

The United Community Center's

"*Un Nuevo Amanecer* (A New Dawn)" Program

Grant #SM058680-01

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EXECUTIVE SUMMARY

This report describes the program evaluation results for the *Un Nuevo Amanecer* (UNA) (A New Dawn) program, housed within Milwaukee's United Community Center (UCC). The UNA program was funded by the Center for Mental Health Services (CMHS) and was designed to provide depression treatment for Latino older adults. The program's treatment model was based on the evidence-based IMPACT model (Improving Mood: Providing Access to Collaborative Treatment) (Unützer et al., 2002), which was adapted for the population served and the community-based setting. The goals of the program were to: 1) decrease older adults' severity of depression; 2) improve their level of physical functioning; 3) improve their level of quality of life; and 4) improve their level of social connectedness.

The report was prepared by the Planning Council for Health and Human Services, Inc., the external evaluators for the program. The Planning Council is a private, non-profit organization with the mission of advancing health and human services in Southeastern Wisconsin through objective planning, evaluation, and research.

The data for the report is based on structured interviews conducted with UNA participants at entry into the program and again approximately 12 months later. The interviews included National Outcome Measures (NOMs) questions required by the Government Performance and Results Act (GPRA) and the administration of the Patient Health Questionnaire (PHQ-9) (Kroenke, Spitzer, & Williams, 2001), the Short Form-12 Health Survey (SF-12) (Ware, Kosinski, & Keller, 1996), and the IMPACT Clinical Trial Quality of Life Item (Unützer et al., 2002).

Population Served

A total of 207 participants were served by the UNA program. As planned, the program served older adults, ranging in age from 59 to 92 years, with an average age of 71. Consistent with the literature on the frequency with which men and women experience symptoms of depression and seek assistance for those symptoms, the participants served by the program included more women (69%) than men (31%).

The UNA program served an entirely Latino population, with most participants (82%) describing their ethnicity as either Mexican or Puerto Rican. For most of the participants (88%), Spanish was their preferred language, and many were mono-lingual Spanish speakers. In addition, most of the participants (84%) had not completed high school, and the program staff reported that many participants had not completed education beyond the 8th grade level. Therefore, literacy issues were a challenge for many UNA participants. Given that the IMPACT model was originally developed with a primarily Caucasian, English-speaking, literate population, a number of adaptations to the model were required for the UNA program (for more information on the project's cultural adaptations, see Chavez-Korell et al., in press).

The UNA program followed the key elements of the IMPACT model, including the provision of Behavioral Activation and Problem Solving Treatment as well as the collaboration with participants' primary care physicians. However, the program also saw the need to provide participants with additional care coordination services. Specifically, most of the participants who completed the program were connected to a number of adjunct services provided through the United Community Center, including: consultation on medications (84%), social or recreational services (72%), medical support services such as health education or health screenings (71%), and transportation (63%).

The UNA program was designed to engage participants for approximately one year in an effort to meet their treatment goals, with frequent in-person contacts for the first 7 to 10 months, followed by periodic contacts for the last 2 to 5 months. As expected, the length of stay in the

program for those who had discharged at grant end was approximately 12 months (mean = 12.6 months). In addition, most of the participants who were discharged (94%) had met their treatment goals and were considered to have "graduated" from the program.

Of the 207 participants who were enrolled in the program, 138 had become eligible for a 12 month follow-up interview by the close of the grant (i.e., were continuing to participate in the program at 12 months and had a follow-up window that opened prior to the close of the grant). Of these, approximately 96% (n=133) completed a follow-up interview. Those who completed the follow-up interview were generally similar demographically to the full population of people who participated in the program, but had a slightly longer length of stay and were slightly more likely to have graduated.

Program Outcomes

Overall, the UNA program was highly successful in meeting its goals. The findings from the 12 month follow-up interviews suggest that participants experienced a decrease in the severity of their depression, improved their level of physical functioning, experienced an increase in their perceived quality of life, and increased their sense of social connectedness. It is important to note that participants' improvements occurred in the context of their continued aging, i.e., the elderly participants were a full year older at the time of their follow-up interviews.

Specific results documenting a decrease in the level of depression and an increase in mental health functioning from the time of program entry to the time of the 12 month follow-up include:

- A statistically significant decrease in depression symptoms (from a PHQ-9 baseline mean of 13.6 to a follow-up mean of 5.1).
- A decrease in the proportion of participants experiencing moderately severe or severe depression as defined by the PHQ-9 (from a baseline of 41% to a follow-up of 2%).
- A total of 81% of participants experienced a clinically significant pre-post change in depression symptoms (i.e., a follow-up PHQ-9 score of 9 or below in addition to a 50% or more decrease from baseline).
- Substantial decreases in the proportion of participants experiencing individual symptoms (e.g., 96% of participants reported feeling down, depressed, or hopeless at baseline, as compared to 59% of participants at follow-up).
- A statistically significant increase in overall mental health functioning (from a baseline mean SF-12 Mental Component Summary score of 38.1 to a follow-up mean of 44.7).

The results documenting an increase in the level of physical health functioning from the time of program entry to the time of the 12 month follow-up include:

- A statistically significant increase in overall physical health functioning (from a baseline mean SF-12 Physical Component Summary score of 36.7 to a follow-up mean of 40.0).
- A pre-post increase in physical functioning for each age group, despite the passage of one year's time (e.g., increases in SF-12 Physical Component Summary scores were seen for participants under age 65, for participants age 65-74, and for participants age 75 and older).

The results documenting an increase in perceived quality of life from the time of program entry to the time of the 12 month follow-up include:

- A statistically significant increase in participants' rating of their quality of life (from a baseline mean of 5.9 to a follow-up mean of 7.8).

- A substantial increase in the proportion of participants rating their quality of life on the higher end of a 10-point scale (e.g., at baseline 40% of participants rated their quality of life at a level of 7 or above, as compared to 87% of participants at follow-up).

Finally, the results documenting an increase in social connectedness from the time of program entry to the time of the 12 month follow-up include:

- Increases in the proportion of participants who reported that they were happy with their friendships, had people with whom they could do enjoyable things, felt they belonged in the community, and felt they had support if there were a crisis (e.g., at baseline approximately 75% of participants reported being socially connected in these ways, as compared to over 90% at follow-up).
- Participants who did not report being socially connected in these ways at entry into the program generally did have a positive perception of their social connectedness at follow-up (e.g., nearly all of the participants who appeared to be unhappy with their friendships at baseline indicated that they were happy with their friendships at follow-up).

Clearly, participants experienced positive changes in the targeted areas after approximately one year of participation in the UNA program. These changes also meant that, by the time of the follow-up interview, participants were experiencing levels of symptoms that were generally lower than those found among depressed individuals and comparable to demographically similar groups of non-depressed persons. Specifically, participants' scores on the various measures were similar to those found in normative data and in literature that included older adult and/or Latino populations. However, it must be noted that participants' scores (particularly on the SF-12) were generally lower than published norms for "well" adults in similar age groups. This finding, however, may be related to the lack of comparability between the normative groups and the Latino population served by the UNA program (i.e., a generally mono-lingual Spanish speaking population, with less than a high school education).

Finally, in addition to the documented improvements, it was also apparent that UNA participants were highly satisfied with their experiences in the program. For example, at the 12 month follow-up, all of the participants (100%) agreed or strongly agreed that the program staff helped them obtain the information they needed to take charge of managing their illness. Further, nearly all of the participants (99%) agreed or strongly agreed that the staff was sensitive to their cultural background, a key finding for the Latino population served. Finally, nearly all of the participants (99%) indicated that they would recommend the program to a friend or family member.

Conclusions

The findings from the evaluation of the UNA program indicate that, overall, the program experienced success in serving its intended population of Latino older adults experiencing depression symptoms using the locally-adapted IMPACT model. In addition, the results demonstrate that the program was successful in achieving its stated goals of decreasing the severity participants' depression symptoms, improving their physical functioning, and improving their perceived quality of life and social connectedness. Findings from the follow-up interviews also suggest that participants had an overwhelmingly positive perception of the services they received through the program, the program staff, and UCC as a whole.

The adaptation of the IMPACT model to this population and this setting clearly has promise for replication, both within UCC and potentially within other settings serving similar populations. In the absence of UCC's future replication of the program, it is recommended that UCC work to integrate the strategies and elements of the UNA model into other areas of the agency (e.g., Senior Center, Latino Geriatric Center) to continue to serve older adults who experience depression symptoms.

INTRODUCTION

This evaluation report was prepared by the Planning Council for Health and Human Services, Inc., the external evaluators for the *Un Nuevo Amanecer* (UNA) (A New Dawn) program. The Planning Council is a private, nonprofit organization that has provided independent information, research, and planning services to the Southeastern Wisconsin community for over 45 years. Its mission is to advance health and human services in Southeastern Wisconsin through objective planning, evaluation, and research. The implementation of the UNA program's evaluation was the joint responsibility of the Planning Council's external evaluation team and the program's internal evaluator. The external evaluation team from the Planning Council provided ongoing support for the program's internal evaluator and was responsible for providing oversight and support for the evaluation, conducting the data analysis, and writing the final evaluation report. The program's internal evaluator was responsible for monitoring the data collection, ensuring data integrity, and providing ongoing feedback to the program.

The UNA program was funded by the Center for Mental Health Services (CMHS) and was designed to provide depression treatment to Latino older adults, ages 60 and older. The program was designed to achieve symptomatic remission, full return of psychosocial functioning, and prevention of relapse and recurrence of depression. Services provided included: depression screenings, culturally-competent depression treatment, comprehensive care coordination, and relapse prevention services. The goals of the UNA project were to: 1) decrease older adults' severity of depression, 2) improve their level of physical functioning, 3) improve their level of quality of life, and 4) improve their level of social connectedness.

The present report summarizes three years of program evaluation results for the UNA program (SM058680-01). The report describes the older adults who participated in the program and pre-post changes that participants experienced after one year in the program.

The United Community Center and the *Un Nuevo Amanecer* Program

The United Community Center (UCC) is a community-based nonprofit organization founded in 1971 in Milwaukee, Wisconsin. Its mission is to provide programs and services to Hispanics and near south side residents of all ages. It is located in the heart of Milwaukee's Latino community and serves approximately 18,000 adults and children annually. UCC offers an array of programming and services, including a K-8 charter school, a health and athletics facility, human services centered around behavioral health treatment, and a Latino Arts program which promotes local talent and brings international artists to Milwaukee.

Un Nuevo Amanecer (UNA) was housed within the context of UCC's Elderly Programs, which provide services to older adults in a familiar setting where Spanish is the primary language spoken. UCC's Elderly Programs include: 1) a Senior Center, which provides health, education, recreation, and social services to older adults; 2) a Family Care Management Unit, which coordinates long-term care services; 3) a Latino Geriatric Center (LGC), which provides comprehensive services to older adults with Alzheimer's disease, other dementias, and physical impediments; 4) an Adult Day Center, designed to meet the needs of older adults with physical and/or cognitive impairments; 5) Elderly Housing, which consists of two apartment complexes with 57 subsidized units located on the UCC campus; and 6) Olga Village, an environmentally sustainable apartment complex providing an additional 37 affordable apartments for area seniors.

The UNA program was designed to provide culturally-competent treatment and care coordination services to Latino older adults experiencing symptoms of depression. The UNA treatment model was based on the evidence-based IMPACT model (Improving Mood: Providing

Access to Collaborative Treatment) (Unützer et al., 2002). IMPACT is a collaborative depression care model designed specifically for older adults which UCC adapted to meet the needs of a Latino population and to fit with its community-based setting. UNA program eligibility was determined using the screening tool developed for the IMPACT clinical trial, which includes the nine-item Patient Health Questionnaire (PHQ-9). Individuals were eligible to participate in the UNA program if they were age 60 or older; screened positive for the presence of depression symptomology; and screened negative for severe cognitive impairment, active psychosis or mania, and problem drinking.[1]

Central to the UNA treatment model is the relationship between the participant and a Depression Care Manager, called a *Consejero Personal* (CP) (Personal Counselor) by the UNA program. The CPs' role in the program was to provide depression treatment and support characterized by the Latino cultural values of *personalismo* (personal connection)*, respeto* (respect)*,* and *dignidad* (dignity). Upon program enrollment, each participant was assigned a CP who provided education, treatment, and a consistent relationship throughout participants' engagement in the program.

The program was designed to engage participants for approximately one year, with frequent in-person contacts for the first 7 to 10 months, followed by periodic in-person and phone contacts for the last 2 to 5 months. During this time, CPs engaged participants in depression treatment; communicated regularly with their Primary Care Physician (PCP) about treatment progress; and coordinated additional support services as needed. Additional clinical support was provided to the CPs by the UNA Treatment Team, which included a Clinical Supervisor, Clinical Treatment Consultant, Consulting Psychologist, and Consulting Psychiatrist. (See Appendix A for the UNA program logic model.)

Data Collection

To comply with the Government Performance and Results Act (GPRA), SAMHSA-funded programs are required to collect and report data about program participants. Grantees funded through CMHS are required to report GPRA data on program participants using the National Outcome Measures (NOMs) Client-Level Measures Services Tool. CMHS requires that NOMs questions be asked of all program participants at program entry, every six months the participant remains in the program, and at discharge. In addition to the NOMs questions, data collection to support the local evaluation was included at each of the interview points. The NOMs and local evaluation measures were administered by CPs in an interview format in each participant's preferred language (Spanish or English).

All participants were screened for depression symptomology using PHQ-9 prior to program entry. PHQ-9 data from the screening interviews served as a baseline or pre-participation measure of depression severity. In addition, all enrolled participants completed the NOMs interview and the remaining local evaluation measures within seven days of their admission to the program. Data from these initial interviews served as a baseline description of the participants with respect to their demographic characteristics, physical functioning, and perceived quality of life and social connectedness.

Participants who were still enrolled in the program 12 months after their intake date were interviewed using the NOMs tool and the local evaluation measures. The data from the 12-month interviews served as a follow-up measure of participants' depression severity, physical functioning, and perceived quality of life and social connectedness. The 12-month interview was chosen as the

[1] Although the program's population of focus was adults ages 60 and over, the program received permission from CMHS to admit participants who would reach the age of 60 at any point during their participation in the program.

most appropriate follow-up point to use in the final analysis because it was anticipated that participants would remain in the program for approximately one year. In addition, data from the 12-month interview provides the best evidence about participants' long-term recovery.

It must be noted that the GPRA guidelines provide a two-month window of time during which follow-up interviews may be conducted (one month prior and one month after the actual interview due date). Therefore, the 12-month interviews were conducted anytime between 11 and 13 months after the initial assessment interviews. The mean length of time between the initial interview and the 12-month follow-up interviews was 11.8 months (359.8 days), and the median length of time was 11.8 months (360.0 days).

Initial interview data was collected for all participants admitted to the program from February 2, 2009 through the close of the grant period (i.e., September 30, 2011).The data collection period for follow-up interviews continued through October 21, 2011, to allow participants whose 12-month follow-up window was still open at the close of the grant period to be interviewed. Discharge data was collected for participants who were discharged from the program as of the close of the grant period (i.e., September 30, 2011).

Data Analysis and Limitations

The present report first describes the full set of older adults who participated in the UNA program. Data from the baseline and follow-up interviews and from the program itself are used to describe the enrolled participants with respect to demographics, length of stay in the program, and discharge status. The report then provides a similar description for those participants who completed a 12-month follow-up interview (comparing them to all participants and to those who were discharged as of the end of the grant).

The remainder of the report focuses on the participants who completed a 12-month follow-up interview. It provides comparisons between baseline and 12-month follow-up data related to the UNA program's goals and objectives. Specifically, pre-post changes on indicators of participants' depression symptom severity, physical functioning, quality of life, and social connectedness are explored, and paired t-tests are used to describe the statistical significance of pre-post differences when appropriate. Additional indicators of program success are also explored.

The analysis of the results has several limitations. Specifically:

- Based on the CMHS GPRA requirements, follow-up data was collected only for participants who were still enrolled in the program 12 months after their intake date. It is possible that participants who left the program prior to their 12-month date experienced different treatment outcomes than participants who remained in the program for that period of time.
- The analysis includes only those participants who completed a 12-month follow-up interview. Although the follow-up rate was very high (96.4%), it is possible that participants who did not complete a follow-up interview entered the program with different challenges or had different outcomes than those participants who completed a follow-up interview.
- The analysis is based on self-report data. Although the approach to the program evaluation interviews was carefully designed to support the integrity of the data, it is possible that some participants may not have been fully candid in their responses.
- The analysis is limited to the information gathered in the interviews. Although the questions included in the interview cover many aspects of participants' lives, inevitably they are not fully representative of participants' life experiences either prior to entering the program or at follow-up.

DESCRIPTION OF UNA PARTICIPANTS

All older adults who entered the UNA program between the time the program began admitting participants until the close of the grant (February 2, 2009, through September 30, 2011) were enrolled in the NOMs tracking and follow-up process. During that time, there were a total of 207 participants admitted to the program. The total number of participants admitted over the three year grant period was slightly less than originally anticipated. Specifically, the program served 94.1% of the targeted 220 participants, which exceeded the CMHS intake benchmark of 80% but fell slightly short of the expected number to be served.

Data from the NOMs interview and from the program were used to describe the enrolled participants with respect to: 1) demographic and descriptive characteristics, 2) services received, 3) length of stay in treatment, and 4) discharge status.

Table 1 presents the gender, age, and ethnicity of the 207 participants enrolled in the NOMs tracking and follow-up process.

Table 1: Gender, Age, and Ethnicity of all UNA Participants

Demographic Characteristics	UNA Participants	
	N	**%**
Gender		
Female	143	69.1%
Male	64	30.9%
Age at Admission		
59 years*	5	2.4%
60 to 64 years	47	22.7%
65 to 69 years	49	23.7%
70 to 74 years	36	17.4%
75 to 79 years	40	19.3%
80 to 84 years	21	10.1%
85 to 89 years	8	3.9%
90 years and over	1	0.5%
Age statistics (in years)	Mean=71.0 Median=70.3	Range=59-92 *SD*=7.7
Ethnicity[†]		
Mexican	85	41.1%
Puerto Rican	85	41.1%
Central or South America	19	9.2%
Multi-Ethnic	12	5.8%
Other (e.g., Cuban, Dominican, Tejano, Filipino)	6	2.9%

N=207

***Although the program's population of focus was adults ages 60 and over, the program received permission from CMHS to admit participants who would reach the age of 60 at any point during their participation in the program.**

[†]**All 207 participants reported being Hispanic/Latino.**

As Table 1 shows, approximately 70% of UNA participants were women, and approximately 30% were men. Two-thirds were between the ages of 59 and 74, with a mean age of 71 and a median

age of 70. All of the UNA participants reported being Hispanic/Latino, with approximately 40% describing their ethnicity as Mexican, and approximately 40% describing themselves as Puerto Rican, which is consistent with UCC's overall client population. In addition, of the 160 participants who also indicated their race at program admission, approximately 85% (86.3%, or 138 of 160) identified themselves as White. Additional information from the program indicates that Spanish was the preferred language of nearly 90% of UNA participants (87.9%, or 182 of 207).

To more fully describe the population served by UNA, additional data from the NOMs interviews and the program were explored. Table 2 presents education, employment, and housing information for all 207 UNA participants.

Table 2: Education, Employment, and Housing Information for All UNA Participants

Descriptive Characteristics	UNA Participants	
	N	%
Highest Level of Education Completed		
Less than high school	173	83.6%
12th grade/high school diploma/equivalent (GED)	18	8.7%
Vocational/technical diploma	2	1.0%
Some college or university	7	3.4%
Bachelor's degree or higher	7	3.4%
Employment Status at Admission		
Employed full time	9	4.3%
Employed part time	8	3.9%
Unemployed, retired	116	56.0%
Unemployed, disabled	44	21.3%
Unemployed, other (e.g., volunteer, looking for work)	30	14.5%
Housing Situation at Admission		
Owned or rented house, apartment, trailer, room	175	84.5%
Someone else's house, apartment, trailer, room	30	14.5%
Other (e.g., nursing home, adult foster care)	2	1.0%

N=207

As Table 2 demonstrates, UNA participants had relatively limited education, with approximately 85% of participants having not completed high school. In addition, approximately 90% reported being unemployed at the time of program admission. However, approximately 85% of those participants who reported being unemployed were either retired or disabled.

Table 2 also shows that nearly all UNA participants were living in the community at program admission, either in housing that they owned or rented or in someone else's housing. Just two participants reported living in assisted-living facilities at admission. Additional program data indicates that most participants lived near UCC at admission. Specifically, two-thirds of the program participants with known ZIP Code information (67.3%, or 138 of 205) resided in the ZIP Code in which UCC is located (53204) or in the adjacent ZIP Code regions (53215, 53207, 53208, and 53233). (See Appendix B for additional information about the ZIP Codes in which UNA participants resided at the time of admission.)

PARTICIPANTS DISCHARGED AS OF GRANT END

As of the end of the grant period (i.e., September 30, 2011) a total of 158 participants had been formally discharged from the UNA program and the NOMs tracking and follow-up process. Among these 158 participants, six passed away while still receiving services from the program. Because these participants were not discharged from the program voluntarily, they have been excluded from the following analyses. Information about length of stay in the program, services received, and status at discharge are presented for the remaining 152 participants who were discharged from the program as of the end of the grant.

Program Length of Stay

At the outset of the UNA program, the expectation was that participants would remain engaged in the program for approximately one year. Specifically, the UNA model anticipated frequent in-person contacts with participants for the first 7 to 10 months, followed by periodic in-person and phone contacts for the last 2 to 5 months. Table 3 describes the length of program participation for all enrolled participants who had been discharged as of the end of the grant period.

Table 3: Length of Stay for Participants Discharged as of Grant End

Length of UNA Program Participation	UNA Participants	
	N	**%**
Less than 1 month	2	1.3%
1 month to 2.9 months	2	1.3%
3 months to 4.9 months	4	2.6%
5 months to 8.9 months	5	3.3%
9 months to 11.9 months	43	28.3%
12 months or more	96	63.2%
Length of stay statistics (in months)	Mean=12.6 Median=12.7	Range=0.0-23.1 *SD*=3.5

N=152. Six participants passed away while still receiving services from the program and were therefore not included in the length of stay analysis. The mean length of stay for these six participants prior to their death was 5.7 months (174 days).

As Table 3 illustrates, nearly two-thirds of the participants who were discharged as of the close of the grant were enrolled in the program for the anticipated length of stay of 12 months or more. Approximately 30% were enrolled in the program 9 to 11.9 months, and the remaining participants (approximately 10%) were enrolled in the program under 9 months. The length of stay for the 152 participants discharged from the program as of grant end ranged from one day to 23 months, with a mean of 12.6 months.

Services Received

The program's treatment model was based on the IMPACT model, adapted for the population served and the community-based setting (for more information on the adaptations made, see Chavez-Korell et al., in press). Data was available that allowed for an estimate of the amount of depression treatment received by participants and the additional support services provided within UCC.

Depression Treatment

Information from the program and the NOMs interviews indicates that all of the 152 UNA participants who were discharged as of the end of the grant received screening, assessment, treatment planning, and mental health treatment services following the IMPACT model.

Depression treatment sessions were typically provided weekly or every two weeks early in the initial treatment phase and then less frequently once participants' symptoms had begun to stabilize. During each treatment session, the UNA CPs administered the PHQ-9 to monitor the participant's progress with respect to their depression symptoms. The number of times the PHQ-9 was administered to monitor the depression symptoms of participants was therefore used as an approximation of the frequency with which participants received depression-focused treatment services while enrolled in the program. Table 4 provides information about the number of treatment sessions provided to UNA participants prior to their discharge from the UNA program.

Table 4: Depression Treatment Sessions Provided to Participants Discharged as of Grant End*

Number of Depression Treatment Sessions	UNA Participants	
	N	%
Less than 5 sessions	9	6.1%
5 to 9 sessions	24	16.3%
10 to 14 sessions	64	43.5%
15 to 19 sessions	38	25.9%
20 to 24 sessions	9	6.1%
25 sessions or more	3	2.0%
Statistics treatment sessions provided	Mean=12.8 Median=13.0	Range=1-33 *SD*=4.9

N=147. Five participants were missing information on the number of times they were administered the PHQ-9, and six participants passed away while still receiving services from the program. These 11 participants were therefore excluded from the analysis.
***The number of times each participant was administered the PHQ-9 to monitor their progress was used as an approximation of the number of treatment sessions received.**

As Table 4 illustrates, the number of treatment sessions provided to UNA participants who were discharged as of the end of the grant ranged from one to 33, with a mean of 13 sessions. Approximately 20% of participants received fewer than 10 sessions, approximately 70% received 10 to 19 treatment sessions, and approximately 10% received 20 or more treatment sessions during the time they were enrolled in the program.

Support Services

In addition to providing IMPACT model services directly focused on depression treatment, UNA CPs also provided UNA participants with additional support and care coordination services through UCC according to their individual needs. These additional services may have included assisting participants with access to support services through UCC such as transportation, medical services, and social and recreational programming. Information from the NOMs

interviews and the program suggests that the program assisted participants in accessing an array of additional services.[2] For example:

- Approximately 85% of UNA participants who were discharged as of the end of the grant (83.6%, or 127 of 152) received psychopharmacological services, such as medication consultation with the UNA program nurse or Consulting Psychiatrist.
- Approximately 70% of participants (72.4%, or 110 of 152) received social or recreational services, such as getting connected to activities through UCC's Latino Arts program or its Senior Center.
- Approximately 70% of participants (71.1%, or 108 of 152) received medical services through UCC, such as health education, physical therapy, or screening services from UCC, or services through UCC's Family Care nurses or its Memory Clinic.
- Approximately 65% of participants (63.2%, or 96 of 152) received transportation services, such as assistance getting to medical appointments or van transportation to the UCC campus.
- Approximately 25% of participants (25.7%, or 39 of 152) received services to support additional family members, such as counseling or services provided by UCC's Family Care social workers.
- Approximately 20% of participants (22.4%, or 34 of 152) received education services, such as English as a Second Language (ESL) classes, Spanish literacy classes, or computer technology classes offered by UCC.
- Approximately 15% of participants (15.8%, or 24 of 152) received housing services, such as housing seminars offered by UCC or assistance accessing housing through UCC's Housing Development or Family Care programs.

A small number of UNA participants were also documented as having received employment support services (11.8%, or 18 of 152), services to address trauma (5.9%, or 9 of 152), and child care services (2.6%, or 4 of 152) from UCC as a result of their participation in the UNA program. In addition, approximately 20% of UNA participants who were discharged as of the end of the grant (18.4%, or 28 of 152) were referred to other providers for additional support services.

Discharge Status

It was anticipated that the primary reason for a participant's discharge from the UNA program would be the successful achievement of their treatment goals. As indicated above, participants' depression symptom severity was monitored during their enrollment in the program through the regular administration of the PHQ-9 by their CP. Following the IMPACT protocol, participants who achieved and maintained a PHQ-9 score indicative of no or minimal depression symptoms were discharged from the program after developing a personalized relapse prevention plan with their CP. Participants may have also been formally discharged from the program if they were referred to specialty mental health care, if they decided to withdraw from the program, or if they passed away while enrolled in the program. In addition, the GPRA guidelines required that any participant who could not be contacted for 90 days or more be discharged from the program.

[2] The additional services described represent those provided through the UNA program or through other UCC programs. It is also possible that participants were connected to and received services from agencies other than UCC as well.

Table 5 describes the discharge status of the 152 participants who were discharged from the UNA program as of the end of the grant.

Table 5: Discharge Status for All Participants Discharged as of Grant End

Discharge Status	UNA Participants	
	N	%
Met treatment goals	143	94.1%
Withdrew from/refused treatment	4	2.6%
No contact	3	2.0%
Clinically referred out	2	1.3%

N=152. An additional six participants were discharged because they passed away while still receiving services from the program.

Approximately 95% of the UNA participants who were discharged from the program as of the end of the grant met their treatment goals and were considered to have "graduated" from the program. These participants typically continued to engage in relapse prevention strategies through other services provided though UCC (e.g., socialization activities, art therapy, etc.). The small number of participants who were discharged without meeting their treatment goals were discharged from the program because they passed away, voluntarily withdrew from the program, could not be contacted for 90 days or more, or were referred to another provider for specialty services.

PARTICIPANTS INTERVIEWED AT 12-MONTHS

Demographic Comparison with all Participants

CMHS requires that the NOMs questions be asked of all program participants at program entry, every six months the participant remains in the program, and at discharge. Therefore, participants who were still enrolled in the program 12 months after their intake date were interviewed using the NOMs tool and the local evaluation measures. Among all UNA participants, 138 were eligible for a 12-month follow-up (i.e., had reached their 12-month window by the close of the grant). [3] A total of 133 participants completed the 12-month interview, for a follow-up rate of 96.4%. Table 6 compares the demographic information for all enrolled participants to demographic information for the 133 UNA participants who completed a 12-month interview.

Table 6: Demographic Characteristics of All Enrolled Participants and Those who Completed a 12-Month Interview

Demographic Characteristics	All UNA Participants (N=207)		Participants who Completed a 12-Month Interview (N=133)	
	N	%	N	%
Gender				
Female	143	69.1%	96	72.2%
Male	64	30.9%	37	27.8%
Age at Admission				
59 years*	5	2.4%	4	3.0%
60 to 64 years	47	22.7%	34	25.6%
65 to 69 years	49	23.7%	32	24.1%
70 to 74 years	36	17.4%	21	15.8%
75 to 79 years	40	19.3%	24	18.0%
80 to 84 years	21	10.1%	15	11.3%
85 to 89 years	8	3.9%	2	1.5%
90 years and over	1	0.5%	1	0.8%
Age statistics (in years)	Mean=71.0 Median=70.3	Range=59-92 *SD*=7.7	Mean=70.4 Median=69.0	Range=59-92 *SD*=7.8
Ethnicity[†]				
Mexican	85	41.1%	57	42.9%
Puerto Rican	85	41.1%	51	38.3%
Central or South America	19	9.2%	13	9.8%
Multi-Ethnic	12	5.8%	8	6.0%
Other (e.g., Cuban, Dominican, Tejano, Filipino)	6	2.9%	4	3.0%

***Although the program's population of focus was adults ages 60 and over, the program received permission from CMHS to admit participants who would reach the age of 60 at any point during their participation in the program.**

[†] **All participants reported being Hispanic/Latino.**

[3] Among the 69 participants who did not become eligible for a 12-month interview within the grant period, 21 were discharged prior to reaching the follow-up window, and 48 were still enrolled in the program as of grant end.

The demographic information presented in Table 6 illustrates that the 133 UNA participants who completed a 12-month interview were generally comparable to all admitted participants with respect to their age, gender, and ethnicity. Similar to all 207 program participants, approximately 70% of the participants who completed a 12-month interview were women, and two-thirds were between the ages of 59 and 74 at the time of their admission to the program. Approximately 40% of participants who were interviewed at 12 months described their ethnicity as Mexican, and approximately 40% described themselves as Puerto Rican.

Program Length of Stay

Table 7 compares the length of stay in the program for those participants who were discharged as of the end of the grant period to the program length of stay for the 133 participants who completed a 12-month interview.

Table 7: Length of Stay for All Participants Discharged as of Grant End and Participants who Completed a 12-Month Interview

Length of UNA Program Participation	Participants Discharged as of Grant End (N=152)*		Participants who Completed a 12-Month Interview (N=133)	
	N	%	N	%
Less than 1 month	2	1.3%	0	0.0%
1 month to 2.99 months	2	1.3%	0	0.0%
3 months to 4.99 months	4	2.6%	0	0.0%
5 months to 8.99 months	5	3.3%	0	0.0%
9 months to 11.99 months	43	28.3%	41	30.8%
12 months or more	96	63.2%	92	69.2%
Length of stay statistics (in months)	Mean=12.6 Median=12.7	Range=0.0-23.1 *SD*=3.5	Mean=13.4 Median=12.8	Range=11.1-23.1 *SD*=2.3

***A total of six participants who were discharged as of grant end passed away while still receiving services from the program and were therefore not included in the length of stay analysis. The mean length of stay for these six participants prior to their death was 5.7 months (174 days).**

As indicated above, CMHS only requires that program participants who are still enrolled 12 months after their intake date be administered the NOMs Tool at the 12-month follow-up point. Therefore, as Table 7 demonstrates, participants who completed the 12-month interview had a slightly longer mean length of stay than all participants discharged as of grant end (13.4 months versus 12.6 months), and none of the participants who completed the 12-month interview had a length of stay under 11 months.

Discharge Status

Participants who met their treatment goals (i.e., achieved and maintained a PHQ-9 score indicative of no or minimal depression symptoms), were referred to specialty mental health care, voluntarily withdrew from the program, passed away, or could not be contacted for 90 days or more were formally discharged from the program and the NOMs tracking and follow-up process. Table 8 compares the discharge status for the 152 participants who were discharged as of the end of the grant period to the discharge status for the 133 participants who completed a 12-month interview.

Table 8: Discharge Status for All Participants Discharged as of Grant End and Participants who Completed a 12-Month Interview

Discharge Status	Participants Discharged as of Grant End (N=152)*		Participants who Completed a 12-month Interview (N=133)	
	N	%	N	%
Met treatment goals	143	94.1%	133	100.0%
Withdrew from/refused treatment	4	2.6%	0	0.0%
No contact	3	2.0%	0	0.0%
Clinically referred out	2	1.3%	0	0.0%

***An additional six participants were discharged because they passed away while still receiving services from the program.**

As can be seen in Table 8, all of the participants who completed the 12-month follow-up interview were documented as having met their treatment goals as of discharge. This reflects the policy that only participants who were still engaged in treatment through the UNA program 12 months following their admission date were interviewed at the 12-month follow-up point. Participants who were discharged for reasons other than successful program completion were generally discharged prior to the 12-month follow-up point. However, very few participants overall were discharged for reasons other than having met their treatment goals.

12-MONTH INTERVIEW FINDINGS

Program Outcomes

The *Un Nuevo Amanecer* (UNA) program was designed to provide culturally competent depression treatment and care coordination service to Latino older adults with the goals of: 1) significantly reducing the severity of their depression symptoms, 2) improving their level of physical functioning, 3) improving their overall quality of life, and 4) increasing their level of social connectedness. Data provided by the NOMs interviews and the local evaluation measures was used to examine progress towards each of these goals.

Mental Health

Older adults admitted to the UNA program entered experiencing depression symptoms ranging from mild to severe. Many in UNA's population of focus do not understand depression as a treatable illness and are, therefore, reluctant to seek treatment through traditional mental health systems. Language, stigma, and trust barriers can also prevent Latino older adults from seeking mental health treatment through traditional systems. The UNA program therefore was designed to provide participants with education and depression treatment in a comfortable setting to help decrease their depression severity while maintaining respect for their individual and cultural contexts.

Physical Functioning

In addition to their depression symptoms, many UNA participants entered the program suffering from limited physical functioning and from chronic medical conditions such as diabetes, heart disease, arthritis, and chronic lung disease. The presence of depression symptoms among these older adult participants can exacerbate their physical symptoms, can magnify the discomfort of physical symptoms, and can also lead to non-compliance with recommended medical treatment. In addition, language barriers and the Latino cultural value of *respeto* can also lead to Latino older adults not reporting physical pains, symptoms, or concerns to their PCPs. Therefore, the role of the UNA CPs was to provide depression treatment, collaborate with PCPs, and bridge the communication gap to help older adults manage their symptoms and improve their level of physical functioning.

Quality of Life & Social Connectedness

Depression can lead to difficulties with the activities of daily living and poor physical functioning, which can diminish a person's overall quality of life. For UNA participants, who were typically not strongly acculturated, these deleterious effects were often compounded by difficulties in carrying out activities that must be undertaken outside the Latino, Spanish-speaking community. In addition, depression can lead to social isolation which can deprive these older adults of the familial and community connections that form a strong component of Latino identity. The program was therefore designed to support participants in navigating systems, accessing resources, and participating in pleasant activities to help increase their social connectedness and overall quality of life.

Outcome Measures

Patient Health Questionnaire (PHQ-9)

The initial screening questionnaire for UNA participation and the follow-up evaluation interviews included the nine item Patient Health Questionnaire (PHQ-9) as a screen for depression and to measure pre-post changes in depression symptom severity (Kroenke et al., 2001). The PHQ-9 was adapted from the Primary Care Evaluation of Mental Disorders Patient Health Questionnaire (PRIME-MD PHQ) (Spitzer et al., 1999), with each item corresponding to one of the DSM-IV criteria for depression. Participants are asked to rate the frequency with which they experienced each symptom over the past two weeks. Responses to each item range from 0 to 3, providing a depression severity score of 0 to 27. Cutoff points for mild, moderate, moderately severe, and severe depression are total scores of 5, 10, 15, and 20 on the PHQ-9, respectively. The UNA program considered for enrollment all participants who scored a 5 or above on the PHQ-9.[4]

Short Form Health Survey (SF-12)

The evaluation interviews also included the twelve-item Short Form Health Survey (SF-12) as a pre-post measure of mental health and physical functioning (Ware, Kosinski, and Keller, 1996). The SF-12 includes twelve items which ask respondents to rate their physical and emotional functioning over the past four weeks. The measure yields a Mental Component Summary (MCS) score and a Physical Component Summary (PCS) score, each ranging from 0 to 100, using scoring algorithms based on 1998 general U.S. population norms. Higher scores are indicative of higher functioning with respect to physical or mental health, while lower scores are indicative of poorer functioning in these areas.

IMPACT Clinical Trial Quality of Life Item

The IMPACT clinical trial used a single quality of life item which asked participants to rate their overall quality of life (Unützer et al., 2002). This item was included in the baseline and follow-up interviews for the UNA program, to measure pre-post changes in participants' perceived overall quality of life. The item asks participants to rate their quality of life over the past month on a scale ranging from 0 to 10, with 0 representing "as bad as dying" and 10 representing "perfect".

NOMs Social Connectedness Items

In addition to participants' global assessment of their quality of life, the evaluation included a focus on social connectedness as a culturally-significant aspect of quality of life for UNA's population of Latino older adults. The evaluation therefore utilized data from the items that comprise the Social Connectedness section of the NOMs Tool. These items were developed with support and guidance provided by SAMHSA (Lutterman et al., 2008). They ask participants to rate, on a 5-point scale (ranging from "strongly disagree" to "strongly agree"): 1) their happiness with friendships, 2) the extent to which they have people in their lives with whom they can do enjoyable things, 3) their sense of belonging in their community, and 4) whether they would have support from family or friends in a crisis.

[4] It must be noted that in the original IMPACT model a PHQ-9 score of 10 or above (indicative of moderate to severe symptom severity) is required for people to be selected for services. In consultation with IMPACT experts, UCC reduced the required score for enrollment into the program to 5 due to the tendency for Latino older adults to under-report depressive symptomology.

Pre-Post Changes on Outcome Measures

Depression Severity: Patient Health Questionnaire (PHQ-9)

Participants' baseline and 12-month PHQ-9 scores were used to measure pre-post changes in depression symptom severity. All 133 UNA participants who completed the 12-month interview completed the PHQ-9 at that data collection point and were therefore included in the analysis.

Table 9 outlines the number of UNA participants whose PHQ-9 scores fell within the ranges for the PHQ-9 depression severity categories at baseline and the 12-month follow-up interview.

Table 9: Participants' Depression Severity at Baseline and 12-Months Follow-Up (based on total PHQ-9 score)

Depression Severity (Range)	UNA Participants at Baseline		UNA Participants at 12 Months	
	N	%	N	%
None (0 – 4)	0	0.0%	68	51.1%
Mild (5 – 9)	27	20.3%	49	36.8%
Moderate (10 – 14)	52	39.1%	13	9.8%
Moderately Severe (15 – 19)	40	30.1%	2	1.5%
Severe (20 – 27)	14	10.5%	1	0.8%
PHQ-9 total score statistics	Mean=13.6 Median=14.0	Range=5-26 *SD*=4.7	Mean=5.1 Median=4.0	Range=0-21 *SD*=4.0

N=133

As Table 9 illustrates, approximately 60% of the UNA participants had baseline PHQ-9 scores that fell in the range for mild to moderate depression, and approximately 40% had scores in the range for moderately severe or severe depression. At 12 months, however, half of UNA participants had PHQ-9 scores indicative of no depression symptoms. In addition, 37% had scores in the range of mild depression, and 10% had scores in the range for moderate depression. Just three participants (or 2%) had PHQ-9 scores that fell in the range for moderately severe or severe depression at 12 months.

A paired samples t-test was performed to compare participants' total PHQ-9 scores at baseline and at the 12-month follow-up interview. The results of the paired t-test indicate that there was a statistically significant improvement in participants PHQ-9 scores from baseline to 12-month follow-up, $t(132)=17.4$, $p<.001$.[5] Specifically, while participants had a mean PHQ-9 score of 13.6 (*SD*=4.7) at baseline, UNA participants demonstrated a mean score of 5.1 (*SD*=4.0) at 12 months. This suggests that, overall, UNA participants experienced a significant reduction in their depression symptoms during their participation in the program.

In addition to exploring the statistical significance of the differences in participants' mean PHQ-9 scores at baseline and 12 months, the analysis also explored the extent to which UNA participants' PHQ-9 scores provided evidence of clinically significant change. The authors of the PHQ-9 (Kroenke et al., 2001) suggest considering a post-treatment score of ≤ 9 combined with a ≥ 50% decrease from

[5] The *p* value refers to the level of statistical significance of the *t* value from the paired samples *t*-test. *P* values of less than 0.05 are considered statistically significant.

the pre-treatment score as evidence of clinically significant improvement in depression symptoms. Using this standard definition, UNA participants' baseline and 12-month PHQ-9 scores suggest that in addition to demonstrating a statistically significant pre-post change in scores, approximately 80% of participants also demonstrated a clinically significant improvement in their depression symptoms. Specifically, a total of 108 participants (or 81.2% of 133) demonstrated both 12-month PHQ-9 scores of 9 or below in addition to 50% or greater decreases from their baseline scores.

Finally, PHQ-9 item-level data from the baseline and follow-up interviews was analyzed to explore pre-post changes in the types of depression symptoms experienced by participants. As indicated above, each item on the PHQ-9 corresponds to one of the DSM-IV criteria for depression. Therefore, participants' responses to each item on the PHQ-9 can be used to describe their depression symptoms at baseline and following 12 months in the UNA program. Table 10 presents the number of participants who reported experiencing each symptom included on the PHQ-9 on any of the days during the two weeks prior to the baseline and 12-month follow-up interviews.

Table 10: Participants Endorsing PHQ-9 Items at Baseline and 12 Months*

PHQ-9 Item	In the Two Weeks Prior to Baseline		In the Two Weeks Prior to 12 Months	
	N	%	N	%
1. Little interest or pleasure in doing things	109	82.0%	62	46.6%
2. Feeling down, depressed, or hopeless	127	95.5%	79	59.4%
3. Trouble falling or staying asleep, or sleeping too much	112	84.2%	75	56.4%
4. Feeling tired or having little energy	118	88.7%	73	54.9%
5. Poor appetite or overeating	76	57.1%	28	21.1%
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	99	74.4%	31	23.3%
7. Trouble concentrating on things, such as reading the newspaper or watching television	93	69.9%	68	51.1%
8. Moving or speaking so slowly that other people could have noticed. Or the opposite—being so fidgety or restless that you have been moving around a lot more than usual	80	60.2%	49	36.8%
9. Thoughts that you would be better off dead, or of hurting yourself in some way	32	24.1%	3	2.3%

N=133

***Participants were considered to have endorsed any item if they reported experiencing the symptom "several days", "more than half the days", or "nearly every day" during the two weeks prior to the interview.**

As Table 10 shows, the proportion of participants who endorsed each item decreased considerably from baseline to follow-up. While most of the symptoms were endorsed by 60% or more of the participants at baseline, none of the symptoms was endorsed by this many participants at follow-up. Specifically, the depression symptoms experienced most commonly among UNA participants in the two weeks prior to the baseline interview included feeling down, depressed, or hopeless; lacking energy; experiencing sleep problems; and little interest or pleasure in doing things. However, responses to the 12-month interview suggest that substantially smaller proportions of UNA participants experienced these symptoms in the two weeks prior to their 12-month interview.

Table 10 also illustrates that although the proportion of participants who reported experiencing the depression symptoms included on the PHQ-9 decreased from baseline to 12-months, several symptoms were reported by over half of the participants at the 12-month interview. At 12 months, 59% of participants reported feeling down, depressed, or hopeless; 56% reported experiencing sleep problems; 55% reported having little energy; and 51% reported having trouble concentrating. An analysis of the frequency with which participants reported experiencing these symptoms at the 12-month interview suggests that a fair number of those who reported these symptoms experienced them infrequently, rather than on most or nearly all of the days prior to the interview. Specifically:

- Of the participants who reported feeling down, depressed, or hopeless in the two weeks prior to the 12-month interview, a fair number (n=54 of 79) reported experiencing that symptom only “several days” (rather than “more than half the days” or “nearly every day”).
- Of the participants who reported having trouble falling or staying asleep, or sleeping too much in the two weeks prior to the 12-month interview, the majority (n=59 of 75) reported experiencing that symptom only “several days”.
- Of the participants who reported feeling tired or having little energy in the two weeks prior to the 12-month interview, a fair number (n=47 of 73) reported experiencing that symptom only “several days”.
- Of the participants who reported having trouble concentrating in the two weeks prior to the 12-month interview, approximately half (n=37 of 68) reported experiencing that symptom only “several days”.

Mental Health: SF-12 Mental Component Summary (MCS)

In addition to using the PHQ-9 as a measure of participants’ depression symptom severity at baseline and 12-months, participants’ MCS scores from the SF-12 were used to measure pre-post changes in overall mental health functioning. A total of 130 UNA participants completed the SF-12 at both baseline and 12-months and therefore had MCS scores that could be included in the analysis.

Table 11 presents participants’ overall mean MCS scores at baseline and at 12-months as well as pre-post scores by age group. Higher MCS scores indicate higher mental health functioning.

Table 11: Mental Component Summary (MCS) Scores for UNA Participants at Baseline and 12 Months

Group	UNA Participants at Baseline		UNA Participants at 12 Months*	
	N	Mean (*SD*)	N	Mean (*SD*)
Ages 59-64	36	32.6 (8.2)	32	45.3 (7.8)
Ages 65-74	52	38.7 (9.7)	54	45.0 (7.6)
Ages 75 and above	42	42.1 (7.2)	44	43.9 (10.2)
All UNA participants	130	38.1 (9.2)	130	44.7 (8.6)

N=130 UNA participants at baseline and 12 months. Three participants did not complete the SF-12 at the 12-month follow-up interview and were therefore excluded from the analysis. Higher PCS scores indicate higher levels of physical functioning.
***Participants' 12-month age categories are based on age at the time of the 12-month interview.**

As Table 11 illustrates, the 12-month mean MCS score for all UNA participants who completed the follow-up interview was higher than the mean score for these participants at baseline, suggesting higher mental health functioning at follow-up. In addition, the mean 12-month scores for participants under the age of 75 were higher than the scores for these age groups at baseline. The mean 12-month MCS score for participants ages 75 and older was also slightly higher than the baseline mean score for this age group; however, the increase in baseline and 12-month scores for this age group was somewhat smaller than that seen for younger age groups.

A paired samples t-test was performed to compare participants' MCS scores at baseline and at the 12-month follow-up interview. The results of the paired t-test indicate that the improvement in participants' MCS scores from baseline to 12-month follow-up was statistically significant, $t(129)=6.6$, $p<.001$. Specifically, while participants had a mean MCS score of 38.1 (SD=9.2) at baseline, they had a mean score of 44.7 (SD=8.6) at 12 months. These findings confirm that, in addition to a reduction in depression symptoms, UNA participants also experienced an improvement in their overall mental health functioning.

Physical Functioning: SF-12 Physical Component Summary (PCS)

PCS scores from the SF-12 were used to measure pre-post changes in participants' perceived level of physical functioning. A total of 130 UNA participants completed the SF-12 at baseline and at 12-months and therefore had PCS scores that could be included in the analysis.

Table 12 presents participants' overall mean PCS scores at baseline and the 12-month follow-up as well as pre-post scores by age group. Higher PCS scores indicate higher levels of physical functioning.

Table 12: Physical Component Summary (PCS) Scores for UNA Participants at Baseline and 12 Months

Group	UNA Participants at Baseline		UNA Participants at 12 Months*	
	N	Mean (*SD*)	N	Mean (*SD*)
Ages 59-64	36	37.4 (10.0)	32	41.8 (10.3)
Ages 65-74	52	38.7 (11.5)	54	40.8 (10.1)
Ages 75 and above	42	33.7 (9.6)	44	37.8 (10.2)
All UNA participants	130	36.7 (10.6)	130	40.0 (10.2)

N=130 UNA participants at baseline and 12 months. Three participants did not complete the SF-12 at the 12-month follow-up interview and were therefore excluded from the analysis.
Higher PCS scores indicate higher levels of physical functioning.
***Participants' 12-month age categories are based on age at the time of the 12-month interview.**

As Table 12 above shows, the 12-month mean PCS score for all UNA participants who completed the follow-up interview was somewhat higher than the mean score for these participants at baseline. In addition, for each age group the mean 12-month PCS scores were generally higher than those at baseline. However, 12-month mean PCS scores were somewhat higher for participants in the 59 to 64 and 65 to 74 age groups, suggesting that these participants had higher levels of physical functioning at 12 months than participants 75 and older.

A paired samples t-test was performed to compare participants' PCS scores at baseline and at the 12-month follow-up interview. The results of the paired t-test indicate that the improvement in participants' PCS scores from baseline to 12-month follow-up was statistically significant, $t(129)=3.8$, $p<.001$. Specifically, while participants had a mean PCS score of 36.7 ($SD=10.6$) at baseline, UNA participants demonstrated a mean score of 40.0 ($SD=10.2$) at 12 months. This suggests that, overall, UNA participants' perceived level of physical functioning improved while participating in the UNA program. In addition, Table 12 above also suggests that participants' perceived level of physical functioning improved over time within each age group.

Quality of Life: IMPACT Clinical Trial Quality of Life Item

Participants' responses to the IMPACT Quality of Life Item were used to measure pre-post changes in their perceived quality of life. A total of 130 UNA participants responded to the Quality of Life Item at baseline and at 12-months and were therefore included in the analysis.

Table 13 provides additional details about UNA participants' Quality of Life ratings at baseline and the 12-month follow-up interview.

Table 13: Participants' Quality of Life Rating at Baseline and 12 Months

Quality of Life Rating	UNA Participants at Baseline		UNA Participants at 12 Months	
	N	%	N	%
0 ("as bad as dying")	0	0.0%	0	0.0%
1 – 3	13	10.0%	1	0.8%
4 – 6	65	50.0%	16	12.3%
7 – 9	49	37.7%	108	83.1%
10 ("perfect")	3	2.3%	5	3.8%
Quality of Life rating statistics	Mean=5.9 Median=5.5	Range=1-10 *SD*=1.9	Mean=7.8 Median=8.0	Range=3-10 *SD*=1.3

N=130. Three participants did not complete the Quality of Life Item at the 12-month follow-up interview and were therefore excluded from the analysis.

As Table 13 illustrates, approximately 40% of UNA participants rated their quality of life at seven or above on the IMPACT Quality of Life Item at baseline. By the time of the 12-month follow-up interview, almost 90% of participants rated their quality of life at seven or above.

A paired t-test was performed to compare participants' mean ratings on the Impact Quality of Life Item at baseline and at the 12-month follow-up interview. The results of the paired t-test indicate that there was a statistically significant increase in participants' Quality of Life ratings from baseline to the 12-month follow-up interview, $t(129)=11.1$, $p<.001$. Specifically, while participants' mean quality of life rating was 5.9 (*SD*=1.9) at baseline, their mean quality of life rating was 7.8 (*SD*=1.3) at 12 months. This suggests that, overall, UNA participants' perceptions of their quality of life improved following 12 months of participating in the program.

Social Connectedness: NOMs Social Connectedness Items

Participants' baseline and 12-month responses to the NOMs Social Connectedness items were used to explore pre-post changes in participants' perceived level of social connectedness. All of the UNA participants who completed the 12-month interview provided a response to each of the NOMs Social Connectedness items.

Table 14 presents the number and percent of participants who responded "agree" or "strongly agree" to each of the NOMS Social Connectedness items at baseline and the 12-month follow-up interview. (Detailed results for each item can be found in Appendix C.)

Table 14: Participants Endorsing NOMs Social Connectedness Items at Baseline and 12 Months

Social Connectedness Item	"Agree" or "Strongly Agree" at Baseline		"Agree" or "Strongly Agree" at 12 Months	
	N	%	N	%
I am happy with the friendships I have.	98	73.7%	127	95.5%
I have people with whom I can do enjoyable things.	99	74.4%	127	95.5%
I feel I belong in my community.	104	78.2%	122	91.7%
In a crisis, I would have the support I need from family or friends.	116	87.2%	124	93.2%

N=133

As Table 14 above shows, at baseline approximately 75% of UNA participants reported that they were happy with their friendships, had people with whom they could do enjoyable things, and felt they belonged in their community, and approximately 85% felt they would have support in a crisis. At 12 months, over 90% of participants reported having these sources of social connection and support in their lives. This suggests that, overall, UNA participants' perceived level of social connectedness increased during their engagement with the UNA program.

The analysis of the NOMs Social Connectedness data also explored whether participants who had a negative or undecided response to each item at baseline had a positive perception of that item at the 12-month interview. The results of this analysis indicate that:

- Of the participants who did not agree that they were happy with their friendships at baseline, nearly all (n=33 of 35) agreed or strongly agreed with the item at the 12-month follow-up interview.
- Of the participants who did not agree that they had people with whom they could do enjoyable things at baseline, most (n=31 of 34) agreed or strongly agreed with the item at 12 months.
- Of the participants who did not agree that they felt they belonged in their community at baseline, most (n=27 of 29) agreed or strongly agreed with the item at 12 months.
- Of the participants who did not agree that they would have support from family or friends in a crisis at baseline, a fair number (n=13 of 17) agreed or strongly agreed with the item at 12 months.

Perception of Daily Functioning

In addition to the analysis of pre-post changes on the UNA program's outcome measures, the analysis also explored additional indicators of program success. The NOMs interview includes several items focusing on participants' general functioning in their daily life and relationships during the 30 days prior to the interview. The items ask participants to rate, on a five-point scale (ranging from "strongly disagree" to "strongly agree") the extent to which they feel able to manage in their daily life, crisis situations, relationships with family, and social situations.

Table 15 presents the number of participants who strongly agreed or agreed with the NOMs Functioning items at the time of the baseline and the 12-month follow-up interviews.

Table 15: Participants Endorsing NOMs Functioning Items at Baseline and 12 Months

Functioning Item	"Agree" or "Strongly Agree" at Baseline		"Agree" or "Strongly Agree" at 12 Months	
	N	%	N	%
I deal effectively with daily problems.	83	62.4%	128	96.2%
I am able to control my life.	78	58.6%	122	91.7%
I am able to deal with crisis.	82	61.7%	123	92.5%
I am getting along with my family.	96	72.2%	120	90.2%
I do well in social situations.	81	60.9%	120	90.2%

N=133

As Table 15 above illustrates, at baseline less than 65% of participants reported that they dealt effectively with daily problems, could control their life, could deal with crisis, and did well in social situations, and approximately 70% reported that they got along with their family. At 12 months, however, participants generally had a more positive perception of these areas of daily functioning, with 90% or more of participants either strongly agreeing or agreeing with each of the items.

Participants' responses to the NOMs Functioning items were also analyzed to explore whether participants who had a negative or undecided response to each item at baseline had a positive perception of that item at the 12-month interview. The results of this analysis indicate that:

- Of the participants who did not agree that they could deal effectively with daily problems at baseline, nearly all (n=47 of 50) strongly agreed or agreed with the item at 12 months.
- Of the participants who did not agree that they were able to control their life at baseline, most (n=51 of 55) strongly agreed or agreed with the item at 12 months.
- Of the participants who did not agree that they were able to deal with crisis at baseline, most (n=47 of 51) strongly agreed or agreed with the item at 12 months.
- Of the participants who did not agree that they were getting along with their family at baseline, most (n=30 of 37) strongly agreed or agreed with the item at 12 months.
- Of the participants who did not agree that they did well in social situations at baseline, most (n=44 of 52) strongly agreed or agreed with the item at 12 months.

Perceptions of Services Received at 12 Months

The NOMs Tool also includes several items which allow participants to provide feedback on the care they received in the 30 days prior to the follow-up interviews. The items ask participants to rate, on a five-point scale (ranging from "strongly disagree" to "strongly agree") the extent to which they believed, for example, that they liked the services they received, that staff were helpful and sensitive to their needs and cultural background, and that they would recommend

the agency to a friend or family member. Participants' responses to these items on the 12-month follow-up interview were overwhelmingly positive, suggesting that UNA participants had favorable opinions about the services they received, the program staff, and UCC overall. For example:

- All of the participants who completed a 12-month interview strongly agreed or agreed that program staff believed that they could grow, change, and recover.
- All of the participants who completed a 12-month interview strongly agreed or agreed that program staff helped them obtain the information they needed to take charge of managing their illness.
- Nearly all of the participants who completed a 12-month interview (98.5%, or 131 of 133) strongly agreed or agreed that program staff were sensitive to their cultural background (race, religion, language, etc.).
- Nearly all of the participants who completed a 12-month interview (98.5%, or 131 of 133) strongly agreed or agreed that they liked the services they received through the program.
- Nearly all of the participants who completed a 12-month interview (98.5%, or 131 of 133) strongly agreed or agreed that if they had other choices, they would still get services from UCC.
- Nearly all of the participants who completed a 12-month interview (98.5%, or 131 of 133) strongly agreed or agreed that they would recommend UCC to a friend or family member.

Conclusions from the 12-Month Findings

Overall, the findings from the 12-month interviews suggest that the UNA program was successful in achieving its objectives of improving older adults' depression symptoms and overall mental health functioning, increasing their level of physical functioning, increasing their perceived level of quality of life, and increasing their level of social connectedness. Specific findings on the program's outcome measures include:

- *Depression Symptom Severity:* There was a statistically significant improvement in participants' scores on the PHQ-9 from baseline to 12 months, from a mean total score of 13.6 at baseline to a mean score of 5.1 at follow-up. In addition, participants' scores on the PHQ-9 also indicate a clinically significant improvement in symptoms of depression, with 81% of participants demonstrating both a 12-month PHQ-9 score of 9 or below as well as a 50% or greater decrease from their baseline score.
- *Mental Health Functioning:* There was a statistically significant improvement in participants' Mental Component Summary scores on the SF-12 from baseline to 12 months, from a mean MCS score of 38.1 at baseline to a mean score of 44.7 at follow-up, suggesting improved mental health functioning.
- *Physical Functioning:* There was a statistically significant improvement in participants' Physical Component Summary scores on the SF-12 from baseline to 12 months, from a mean PCS score of 36.7 at baseline to a mean score of 40.0 at follow-up, suggesting improved physical functioning.
- *Quality of Life:* There was a statistically significant increase in participants' ratings on the IMPACT Quality of Life Item from baseline to 12 months, from a mean quality of life rating of 5.9 at baseline to a mean quality of life rating of 7.8 at follow-up.

- *Social Connectedness:* Participants' responses to the NOMs Social Connectedness items suggest that their perceived level of social connectedness increased from baseline to 12 months. Specifically, at baseline approximately 75% to 85% of participants endorsed each NOMs Social Connectedness item, while over 90% of participants endorsed each item on the follow-up interview.

In addition to the analysis of pre-post changes on each of the program's outcome measures, participants' 12-month scores on the PHQ-9 and the SF-12 were compared to scores published in the literature for similar populations. Similarly, participants' ratings on the IMPACT Quality of Life Item were compared to those published in the IMPACT literature. These comparisons indicate that UNA participants' 12-month scores on the PHQ-9 and SF-12 are generally comparable to those published for similar populations. In addition, UNA participants' baseline and follow-up ratings on the IMPACT Quality of Life Item showed a similar pattern of pre-post change as published in the IMPACT literature. Additional details on the extent to which UNA participants' scores on these measures compared to those found in the literature can be found in Appendix D.

Finally, the analysis explored additional indicators of program success using information gathered though the NOMs interviews. This additional information suggests that, consistent with the other changes noted, participants also experienced improvements in their general daily functioning. Specifically, although approximately 60% to 70% of participants reported that that they dealt effectively with daily problems, could control their life, could deal with crisis, did well in social situations, and got along with their family at baseline, 90% or more of participants strongly agreed or agreed with these items at 12 months. In addition, at the 12-month follow-up interview, participants had overwhelmingly positive responses to items that asked about their perception of the services they received through the program, the program staff, and UCC overall.

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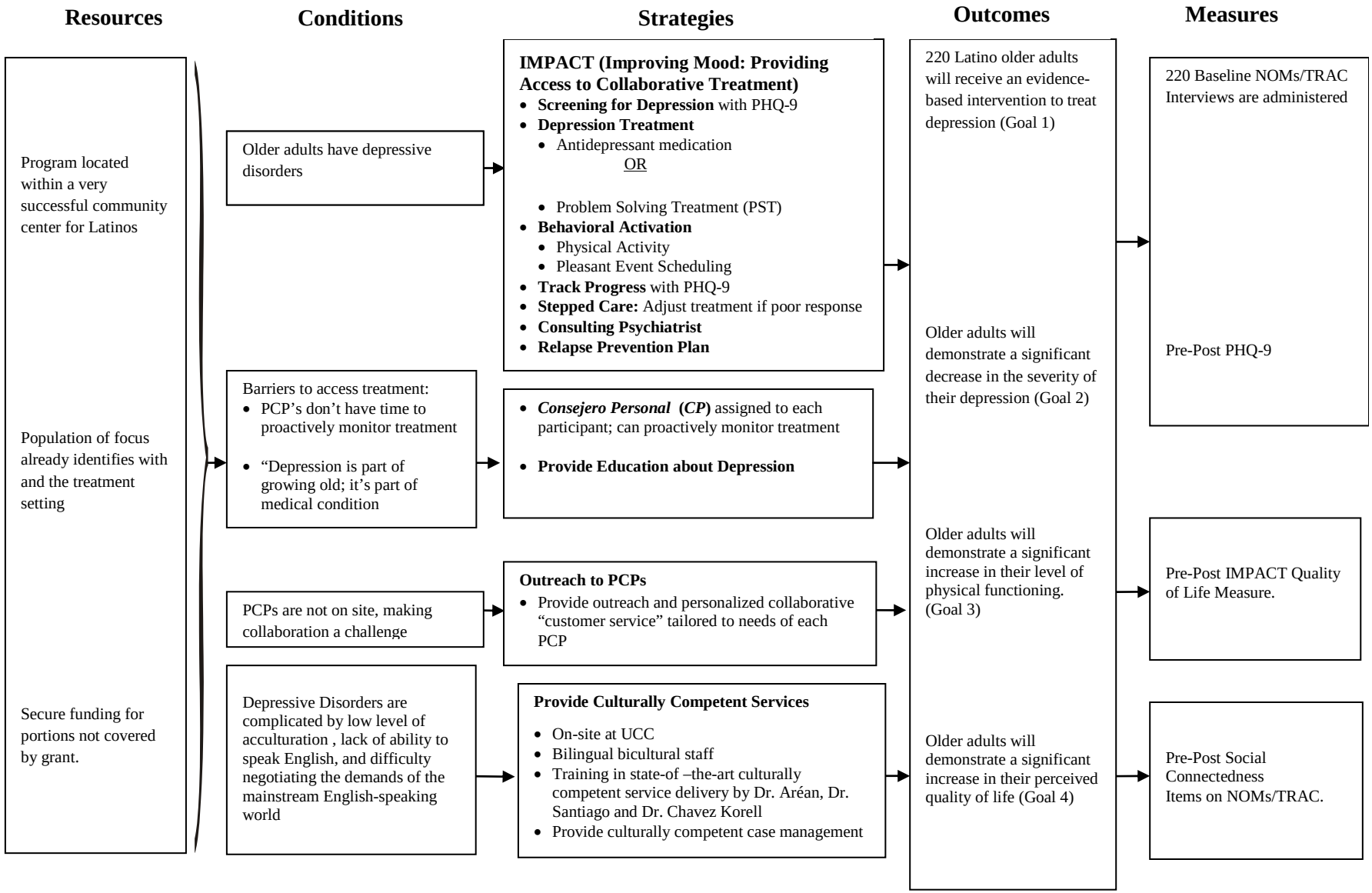
APPENDIX A:

UN NUEVO AMANECER
PROGRAM LOGIC MODEL

APPENDIX A: *UN NUEVO AMANECER* PROGRAM LOGIC MODEL



APPENDIX B:

ZIP CODE INFORMATION FOR ALL PARTICIPANTS

APPENDIX B: ZIP CODE INFORMATION FOR ALL PARTICIPANTS

Table 16: ZIP Codes in which UNA Participants Resided at Admission

ZIP Code (Milwaukee Region)	UNA Participants	
	N	%
53204 (South; includes UCC)	84	41.0%
53215 (South; adjacent to 53204)	45	22.0%
53221 (South)	16	7.8%
53220 (Southwest)	11	5.4%
53212 (North)	7	3.4%
53207 (Southeast; adjacent to 53204)	5	2.4%
53154 (Oak Creek)	4	2.0%
53205 (Central)	4	2.0%
53208 (West; adjacent to 53204)	3	1.5%
53210 (West)	3	1.5%
53214 (West)	3	1.5%
53219 (Southwest)	3	1.5%
53211 (Northeast)	2	1.0%
53222 (Northwest)	2	1.0%
53224 (Northwest)	2	1.0%
Other*	11	5.4%

N=205. Two participants did not have ZIP Code information recorded.
***Other ZIP Codes included 53129, 53172, 53201, 53209, 53216, 53218, 53225, 53226, 53227, 53233, and 53235, with one participant residing in each of these ZIP Codes.**

Table 17: Milwaukee Regions in which UNA Participants Resided at Admission

Milwaukee Region	UNA Participants	
	N	%
South	145	70.7%
Southwest	15	7.3%
West	10	4.9%
Northwest	9	4.4%
North	7	3.4%
Southeast	6	2.9%
Downtown	5	2.4%
Northeast	2	1.0%
Other Community*	6	2.9%

N=205. Two participants did not have ZIP Code information recorded.
***Other communities included Oak Creek, Greendale, and South Milwaukee.**

APPENDIX C:

DETAILED RESULTS FOR NOMS SOCIAL CONNECTEDNESS ITEMS

APPENDIX C: DETAILED RESULTS FOR NOMS SOCIAL CONNECTEDNESS ITEMS

Table 18: Responses to "I am happy with the friendships I have" at Baseline and 12-Months

Response	Baseline Interview		12-Month Interview	
	N	%	N	%
Strongly Agree	12	9.0%	10	7.5%
Agree	86	64.7%	117	88.0%
Disagree	18	13.5%	0	0.0%
Strongly Disagree	4	3.0%	1	0.8%
Undecided	13	9.8%	5	3.8%

N=133

Table 19: Responses to "I have people with whom I can do enjoyable things" at Baseline and 12-Months

Response	Baseline Interview		12-Month Interview	
	N	%	N	%
Strongly Agree	14	10.5%	10	7.5%
Agree	85	63.9%	117	88.0%
Disagree	14	10.5%	2	1.5%
Strongly Disagree	3	2.3%	0	0.0%
Undecided	17	12.8%	4	3.0%

N=133

Table 20: Responses to "I feel I belong in my community" at Baseline and 12-Months

Response	Baseline Interview		12-Month Interview	
	N	%	N	%
Strongly Agree	9	6.8%	10	7.5%
Agree	95	71.4%	112	84.2%
Disagree	17	12.8%	3	2.3%
Strongly Disagree	2	1.5%	1	0.8%
Undecided	10	7.5%	7	5.3%

N=133

Table 21: Responses to "In a crisis, I would have the support I need from family or friends" at Baseline and 12-Months

Response	Baseline Interview		12-Month Interview	
	N	%	N	%
Strongly Agree	16	12.0%	14	10.5%
Agree	100	75.2%	110	82.7%
Disagree	8	6.0%	5	3.8%
Strongly Disagree	4	3.0%	0	0.0%
Undecided	5	3.8%	4	3.0%

N=133

APPENDIX D:

COMPARISONS WITH THE LITERATURE ON OUTCOME MEASURES

APPENDIX D: COMPARISONS WITH THE LITERATURE ON OUTCOME MEASURES

In addition to the analysis of pre-post changes on each of the program's outcome measures, participants' status on each measure at the 12-month follow-up was compared with published literature to benchmark their progress against similar populations. The pre-post findings would be strengthened further if program participants reached a level of functioning similar to that of non-depressed Latino older adults. As a result, participants' scores on the PHQ-9 and the SF-12 were compared to scores published in the literature for similar populations. Similarly, participants' ratings on the IMPACT Quality of Life Item were compared to those published in the IMPACT literature. These comparisons indicate that UNA participants' 12-month scores on the PHQ-9 and SF-12 are generally comparable to those published for similar populations. In addition, UNA participants' baseline and follow-up ratings on the IMPACT Quality of Life Item showed a similar pattern of pre-post change to that published in the IMPACT literature.

Depression Symptom Severity: PHQ-9

UNA participants' mean 12-month PHQ-9 scores were compared to PHQ-9 scores that have been published for similar populations (with respect to age, ethnicity, and participation in depression treatment). Overall, UNA participants' 12-month PHQ-9 scores were generally similar to or lower than those found in the literature for samples of older adults treated for depression and for community samples of Latino patients in medical settings. For example:

- UNA participants' mean 12-month PHQ-9 score of 5.1 (*SD*=4.0) was similar to Grypma et al.'s (2006) sample of older adults following 6 months of participation in depression treatment using the IMPACT model (*M*=6.3, *SD*=6.2).
- UNA participants' mean 12-month PHQ-9 score of 5.1 (*SD*=4.0) was similar to Huang et al.'s (2006) sample of mostly non-depressed, Latino primary care patients (*M*=4.7, *SD*=5.0).
- UNA participants' mean 12-month PHQ-9 score of 5.1 (*SD*=4.0) was similar to Annunziato et al.'s (2009) sample of older Hispanic cardiology patients (*M*=6.7, *SD*=6.4).

Mental Health Functioning: SF-12 MCS

UNA participants' mean Mental Component Summary (MCS) scores from the SF-12 were compared to the published SF-12 MCS general U.S. population norm, the norms for women and men in similar age groups, and the norm for adults with depression (Ware et al., 2002).[6] Table 22 presents UNA participants' MCS scores at 12 months as well as the published SF-12 MCS norms, including comparisons by gender and age group. [7] A higher MCS score is indicative of higher mental health functioning.

[6] It must be noted that the SF-12 normative sample was representative of the 1998 general U.S. population, thus the published norms are based on a primarily White/Caucasian population.

[7] The SF-12v2 Health Survey User's Manual (Ware et al., 2002) recommends a minimum sample size of N=23 to detect a 5 point difference in MCS/PCS scores over time within one group, and a minimum sample size of N=32 is recommended to detect a 5 point difference between a group mean MCS/PCS score and a fixed norm. Therefore, caution is needed when comparing results for small sample sizes.

Table 22: Mental Component Summary (MCS) Scores for UNA Participants at 12 Months and SF-12 MCS Norms

Group	UNA Participants at 12 Months*		Normative Population†	
	Mean (SD)	N	Mean (SD)	N
All UNA participants	44.7 (8.6)	130	*n/a*	*n/a*
General U.S. population	*n/a*	*n/a*	49.4 (9.8)	6,924
Adults with depression	*n/a*	*n/a*	37.4 (10.8)	927
Adults, ages 55-64±	45.3 (7.8)	32	50.8 (8.6)	1,072
Women, ages 55-64	44.8 (8.0)	24	50.1 (8.2)	664
Men, ages 55-64	46.8 (7.5)	8	51.6 (9.2)	408
Adults, ages 65-74	45.0 (7.6)	54	51.6 (8.4)	838
Women, ages 65-74	45.7 (8.0)	39	51.1 (8.2)	485
Men, ages 65-74	43.1 (6.4)	15	52.2 (8.5)	353
Adults, ages 75+	43.9 (10.2)	44	48.9 (9.3)	728
Women, ages 75+	41.7 (10.2)	32	49.1 (9.4)	469
Men, ages 75+	50.0 (7.6)	12	48.5 (9.3)	259

N=130 UNA participants at 12 months. Three participants did not complete the SF-12 at the 12-month follow-up interview and were therefore excluded from the analysis.
***Participants' 12-month age categories are based on age at the time of the 12-month interview.**
†1998 SF-12 Health Survey U.S. population norms; norms for the general U.S. population and age and gender groups based on "well" (i.e., non-depressed) adults, as defined by the SF-12 Health Survey developers.
±All UNA participants were at least 59 years of age at the time of their admission to the program.

As Table 22 above illustrates, as a whole the UNA participants' mean 12-month MCS scores were higher than the published norm for adults with depression. This suggests that their level of mental health functioning at follow-up was better than that found among the SF-12's depressed norm group, which included all ages of adults and a primarily White/Caucasian population. However, the UNA participants' mean 12-month MCS scores generally were lower than the published norms for "well" adults and for "well" adults in similar age groups. This finding is consistent with published research, which has documented that MCS scores for ethnic minorities are generally lower than population norms (Jenkinson, 2001).

Although UNA participants' mean MCS scores at follow-up were generally lower than published SF-12 MCS norms for older adults, they were similar to scores documented in the literature for more comparable populations. For example:

- UNA participants' mean 12-month MCS score of 44.7 (*SD*=8.6) was similar to Guerra and Shea's (2007) community sample of Latinos and African Americans (*M*=44.0, *SD*=11.5).
- UNA participants' mean 12-month MCS score of 44.7 (*SD*=8.6) was also similar to Courtney et al.'s (2009) sample of community-dwelling older adults (*M*=46.4, *SD*=10.6).

Physical Functioning: SF-12 PCS

UNA participants' mean Physical Component Summary (PCS) scores were also compared to the published SF-12 PCS general U.S. population norms (Ware et al., 2002). Table 23 presents UNA participants' PCS scores at 12 months as well as the published SF-12 PCS norms, including comparisons by gender and age group. A higher PCS score is indicative of higher physical functioning.

Table 23: Physical Component Summary (PCS) Scores for UNA Participants at 12 Months and SF-12 PCS Norms

Group	UNA Participants at 12 Months*		Normative Population†	
	Mean (SD)	N	Mean (SD)	N
All UNA participants	40.0 (10.2)	130	*n/a*	*n/a*
General U.S. population	*n/a*	*n/a*	49.6 (9.9)	6,917
Adults with depression	*n/a*	*n/a*	45.6 (11.7)	928
Adults, ages 55-64±	41.8 (10.3)	32	46.9 (9.2)	1,071
Women, ages 55-64	41.0 (10.6)	24	46.3 (8.7)	663
Men, ages 55-64	44.5 (9.4)	8	47.6 (9.9)	408
Adults, ages 65-74	40.8 (10.1)	54	43.9 (9.3)	835
Women, ages 65-74	38.4 (10.1)	39	43.6 (9.3)	483
Men, ages 65-74	46.8 (7.3)	15	44.3 (9.3)	352
Adults, ages 75+	37.8 (10.2)	44	39.8 (9.3)	731
Women, ages 75+	38.6 (10.7)	32	39.5 (9.2)	471
Men, ages 75+	35.6 (9.0)	12	40.1 (9.5)	260

N=130 UNA participants at 12 months. Three participants did not complete the SF-12 at the 12-month follow-up interview and were therefore excluded from the analysis.
***Participants' 12-month age categories are based on age at the time of the 12-month interview.**
†1998 SF-12 Health Survey U.S. population norms; norms for the general U.S. population and age and gender groups based on "well" (i.e., non-depressed) adults, as defined by the SF-12 Health Survey developers.
±All UNA participants were at least 59 years of age at the time of their admission to the program.

As Table 23 illustrates, at 12 months, the mean PCS scores for UNA participants were slightly lower than the norm for adults with depression, for "well" adults, and for "well" adults in similar age groups. This suggests a lower level of physical functioning at follow-up among UNA participants than that found in the normative samples. This finding is also consistent with literature documenting lower PCS scores among ethnic minorities than the general population norms (Jenkinson, 2001).

UNA participants' mean 12-month PCS scores were also compared with PCS scores that have been published for similar populations (with respect to age, ethnicity, and depression symptom presence). Overall, UNA participants' 12-month PCS scores were generally similar to those found in the literature for more comparable populations. For example:

- UNA participants' mean 12-month PCS score of 40.0 (*SD*=10.2) was similar to Callahan et al.'s (2005) sample of older adults after 12 months of receiving treatment using the IMPACT model (*M*=40.9, *SD*=7.3).
- UNA participants' mean 12-month PCS score of 40.0 (*SD*=10.2) was similar to Guerra and Shea's (2007) sample of Latino and African American primary care patients (*M*=41.5, *SD*=11.5).
- UNA participants' mean 12-month PCS score of 40.0 (*SD*=10.2) was similar to Boutin-Foster and Rodriguez's (2009) sample of Latino adults with coronary artery disease (*M*=42, *SD*=10).

Quality of Life: IMPACT Clinical Trial Quality of Life Item

Finally, the UNA participants' mean scores and pattern of pre-post changes on the Quality of Life Item were compared to findings in the literature. The UNA participants' 12-month mean of 7.8 (*SD*=1.3) was somewhat higher than the Quality of Life Item ratings published for the IMPACT Clinical Trial, suggesting a somewhat higher perceived quality of life among UNA participants. However, the pre-post change demonstrated in the UNA program (from a baseline mean of 5.9 to a 12-month mean of 7.8) was similar to the pre-post changes found in the IMPACT literature. For example:

- The total sample of depressed older adults who participated in the IMPACT Clinical Trial (Unützer et al., 2002) had a mean baseline Quality of Life rating of 5.4 (*SD*=2.0) and a mean rating of 6.6 (*SD*=2.2) following 12 months of IMPACT treatment.
- Katon et al.'s (2010) sample of older adults with comorbid depression and diabetes/heart disease had a mean baseline Quality of Life rating of 4.2 (*SD*=1.9) and a mean rating of 6.0 (*SD*=2.2) following 12 months of IMPACT treatment.

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