

COLLAGE 360: A Model of Person-Centered Care To Promote Health Among Older Adults

Elizabeth P. Howard^{1*}, Robert Schreiber², John N Morris², Aline Russotto³, Susan Flashner-Fineman³

1. Northeastern University School of Nursing
2. Institute for Aging Research, Hebrew SeniorLife
3. Orchard Cove, Hebrew SeniorLife

Abstract

Health care leaders and providers have introduced the assumption the typical elder, even in the presence of complex, chronic disease and prevailing illness, is capable of assuming greater personal responsibility for their health care, with a shift from provider-centered to a person-centered model of care. For older adults who often face challenges managing and maintaining their health status, guidance and support is needed. In this project, *COLLAGE 360*, a comprehensive assessment system and wellness coaching program that focuses on prevention and wellness was implemented in one continuing care retirement community. Following completion of two assessment tools through directed conversations with a wellness coach, older adults developed an individualized vitality plan that outlined life goals, supporting goals and action plans for goal achievement. Results from this program suggest engagement in the assessment and wellness coaching process via the *COLLAGE 360* program translated into sample older adults sensing that they live in a more supportive environment when compared with elders not receiving any wellness coaching. In addition, the older adults had positive responses in the areas of mood and life satisfaction. Strategies to improve health and well being need an extended focus beyond the older adult's medical conditions and consider psychological, spiritual and social needs with personal preferences being paramount. These issues are foundational to a person-centered, health promotion approach needed among older adults.

Corresponding Author: Elizabeth Howard, Northeastern University School of Nursing, 360 Huntington Avenue Boston, MA 02115, **Email:** e.howard@neu.edu.

Citation: Elizabeth P. Howard, Robert Schreiber, Aline Russotto, Susan Flashner-Fineman (2016) COLLAGE 360: A Model of Person-Centered Care to Promote Health Among Older Adults. Journal Of Aging Research And Healthcare - 1(1):21-30. <https://doi.org/10.14302/issn.2474-7785.jarh-16-1123>

Keywords: person-centered care, wellness coaching, health promotion interRAI comprehensive assessment.

Received Jun 13, 2016; **Accepted** Jul 19, 2016; **Published** Jul 27, 2016;

Academic Editor: Sevnaz Sahin, ege university

Introduction

Older adults face an uncertain future, lacking guidance on a course of action to help them maintain their quality of life and independence while at the same time facing the initial onset of complex, chronic diseases and prevailing illnesses.¹ Responding to a changing health care environment with increased emphasis on self-care and self-management, attention has shifted to the older adult who may be capable of assuming greater personal responsibility for their health status and health promotion efforts. The Institute of Medicine reported active participation by the elderly will be essential in the future.² We present a project that assists elders in assuming this role – a program called *COLLAGE 360*. A detailed description of this program and analysis of select person-centered outcomes are presented.

A comprehensive review of the person including his/her goals and desires is not a standard model of care and soliciting personal preferences and life goals during scheduled health care visits is uncommon.³ The Institute for Healthcare Improvement has indicated,⁴ if population health is to improve and costs reduced, efforts to improve the patient's care experience are needed. The Affordable Care Act includes calls for a new focus on prevention and wellness, care coordination, and development of health care self-management skills by the older adults themselves.⁵ Yet for many, this goal has not been translated into action.³ Health care for elders is not focused on individual needs, but rather, is incentivized for providers to discuss disease management and preventive strategies, overlooking the person.^{3, 6}

To align with the Triple Aim of improving the care experience and health of populations while reducing cost,⁴ and, achieve the objectives of the Affordable Care Act, health assessments of older adults need to be person specific and address presenting issues as well as personal and individualized goals.^{3, 7} Rather than improve a singular disease state, "people want to live and function as well as possible in spite of the disease and its symptoms."³ For example, chronic pain is condition that affects many older adults but is often under diagnosed. Many co-morbidities develop in the presence of chronic pain including anxiety, sleep disorders, eating disorders, mobility disorders, recurrent falls, and functional decline.⁸ Health practitioners' failure

to diagnose and effectively treat chronic pain may result in decreased functional ability, cognitive performance and physical activity. In addition, depressed mood, social isolation and a reduced quality of life may result.

Personalized assessment and goal identification through a process labeled as 'health coaching' may serve as the nexus to maintaining the health and well-being of elders and positively affecting quality of life. Health coaching provides opportunity to develop an elder's ability to successfully engage in self-management.⁹ The primary goal of coaching is to focus on what the individual wants to achieve and not on their presenting health issues. Previously, wellness coaching has demonstrated effectiveness for specific problem-based health goals such as weight loss, diabetes education, and chronic disease management.^{9, 10, 11, 12} The *COLLAGE 360* program is a person-centered model where the elders goals and preferences are paramount.

Materials and Methods

The *COLLAGE 360* process (Figure 1) begins with an initial appointment, during which a directed conversation occurs and information is gathered to complete two tools, the interRAI Community Health Assessment (CHA) and the Wellness tool.(WEL) At the conclusion of this initial meeting, the coach reviews the conversation and themes with the resident and then asks them to reflect on life and personal goals prior to their next appointment. An individual's 'Assessment Indicator Report' is generated prior to the next meeting. This report provides a summary of performance on age-related scales of cognitive performance, mood, function and physical activity. In addition, the potential for adverse events including re-hospitalization, functional decline, depression, social isolation and uncontrolled pain, if present, will be identified. One to 2 weeks later, at the second appointment, there is review of the resident's reflection of their life and personal goals as well as the CHA and WEL summaries contained within the assessment indicator report. This informative discussion concludes having the resident, with support from the wellness coach, develop his/her life goals, related supporting goals, and defined action steps. The result from this interchange and discussion is summarized into a Vitality Plan, often regarded as a personalized roadmap directing one towards a higher level of wellness and quality of life. Action steps may include enrolling in an evidence-based program to

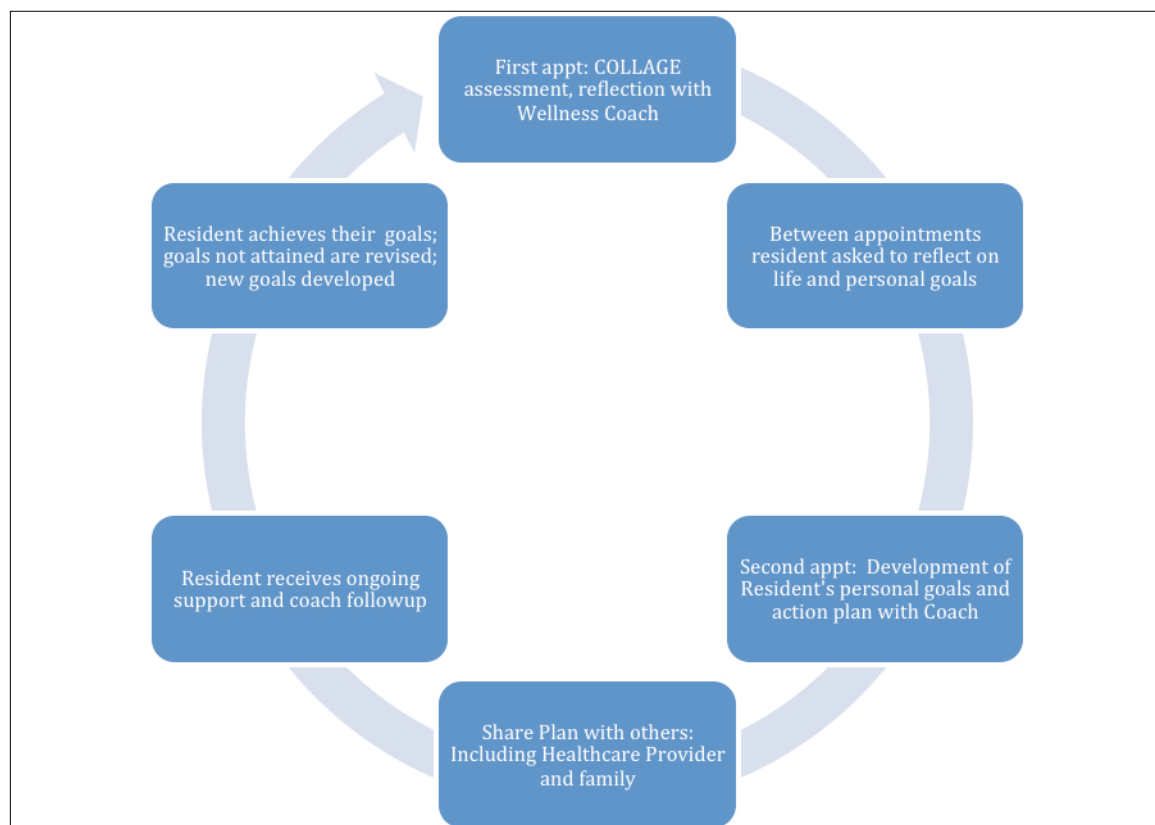


Figure 1. COLLAGE 360 Process

promote self-management of a chronic disease, volunteering at a local community initiative, participation in a Tai Chi class or actively engaging in the planning and implementation of a social event. Once the Vitality Plan is complete, the wellness coach connects with the resident no less than once every 3 months over the course of the year to monitor the progress towards goal achievement. Full reassessments occur no less than once annually and more frequently if a major life event occurs such as a hospitalization or death of spouse or other family member.

A key, distinguishing feature of the *COLLAGE 360* is the use of standardized assessment tools (interRAI.org) to assess aging related problems and, equally important, personal preferences. The problem areas assessed using these tools include cognition, communication, mood and behavior, psychosocial well-being, physical functioning, continence, disease diagnoses, health conditions, preventive health measures, service use, medications and oral/nutritional status. The WEL solicits individual preferences for exercise-related activities, recreational activities, alternative therapies, social engagement as well as training in physical fitness, fall prevention, and cognitive stimulation.

Intervention. *COLLAGE 360* was implemented in a continuing care retirement community (CCRC), located in the northeast region of the US and serving a predominantly middle income population of older adults. This program was an in-kind service available to all residents by the organization with the overall goal of improving the residents' quality of life. The CCRC is a member of *COLLAGE* (www.collageaging.org), a national consortium of CCRCs and elder housing sites initiated and developed by Kendal Outreach, LCC (KOLCC), a subsidiary of the Kendal Corporation, a non-profit organization, and the Institute for Aging Research (IFAR) at Hebrew SeniorLife, a Massachusetts non-profit corporation. All members of the *COLLAGE* consortium participate in the application of a computerized, valid and reliable approach to annual standardized resident assessments in the US within senior housing.¹³ The CHA was developed by interRAI, a collaborative network of international researchers (interRAI.org) in over 35 countries committed to improving health care for persons who are elderly, frail, or disabled. InterRAI's goal is to promote evidence-based clinical practice and policy decisions through the collection and interpretation of high quality data about the characteristics and outcomes of persons served across a variety of health

and social service settings. The WEL was developed collaboratively by *COLLAGE* and interRAI.¹⁴ These assessment tools have been used both nationally and internationally, and represent the results of rigorous research and testing to establish the reliability and validity of their items.

The CCRC, serving as the site for this project, was the first to embark on implementation of *COLLAGE 360*, combining the interRAI comprehensive assessment tools with a formal, wellness coaching program. The coaches received specific trainings in the data collection process for the assessment tools as well as the on-going coaching process. InterRAI publishes user manuals for each assessment tool and these manuals are central to data collection training. The formal coaching model was initially established by these coaches and continues to evolve incorporating the principles of guided reflection, motivational interviewing and other coaching techniques.

Sample. As a preliminary project, the goal was to examine select outcomes from implementation *COLLAGE 360* and begin to assess the impact of this comprehensive assessment system and wellness coaching model among the residents in one community. Towards this effort, the data reports here are based on 74 residents at the CCRC who completed the CHA and WEL baseline assessments and accepted the opportunity to participate in the wellness coaching component of the program. At the one and two-year follow ups, the 74 residents were reassessed using the same assessment instruments.

Measures and Analysis. To examine the effect of *COLLAGE 360*, particularly the wellness coaching component in this project, another sample of older adults was drawn from 28 other *COLLAGE* member communities who used the same assessment system but did not offer any organized, formal, wellness coaching process. We examined 3 key outcomes in this first analysis: supportive community environment, mood, and life satisfaction. The effect analysis was based on a one-year comparison of the CCRC residents at the target site to a closely matched sample from the other 28 CCRC sites. A repeated measures ANOVA was used to test for statistical significance. For the subsequent 1 and 2 year comparisons, we drew data from 4 CCRC's who were members of the *COLLAGE* consortium, implemented the assessment system using the CHA and WEL tools, but did not implement any formal wellness coaching

program among their residents. The data were analyzed using the SPSS 18.0 statistical package.

RESULTS

The average age of the sample was 86.3 years, and 91% of the residents were female. All elders resided in independent living. Approximately 45% reported having intact cognition but with some memory problems and 45% had problems with gait. Given the organization and structure of a continuing care retirement community, we expected all residents would view their community as a supportive environment. One year following implementation of *COLLAGE 360*, there were notable differences with this outcome when compared with the matched sample. As seen in Figure 2, the target CCRC sample had a slightly higher percentage of respondents who reported they viewed their community as a supportive environment than the contrast sample at baseline. Notable, this percentage declined in one year for the comparison sample and increased 4.9 percentage points for the target sample. For the one and two year post-program comparison, the percentage of residents reporting they felt their community was supportive increased for the *COLLAGE 360* CCRC and was higher percentage than the 4 comparative, non-coaching CCRCs. Two years post program implementation, 95% of the residents from the *COLLAGE 360* CCRC evaluated their community as a supportive environment.

The outcome of mood demonstrated improvement after one year for the CCRC sample. Self-reported mood was measured with response to the question, "in the last 3 days, how often have you felt sad, depressed, or hopeless. The response options were: "not in the last three days, not in the last 3 days but often feels that way, in 1-2 of the last 3 days, and daily in the last 3 days" and scored 0, 1, 2, and 3 respectively. Thus, with this mood score, a lower score represented a better mood state. For the contrast sample, mood scores worsened at the one year follow-up but improved markedly for the *COLLAGE 360* project sample. With the multiple site comparison, 'good mood' was summarized as the total percentage of people who selected 0, response option "not in the last 3 days" for the question, 'how often have you felt sad, depressed or hopeless'. One and 2- year comparisons demonstrate

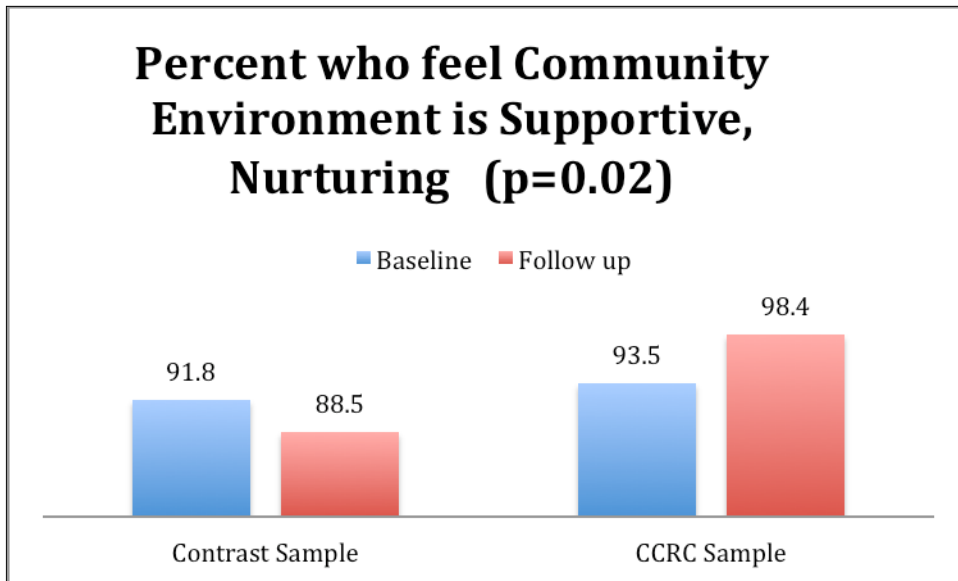


Figure 2. Community Environment – Percentage reporting they view their community as a supportive environment

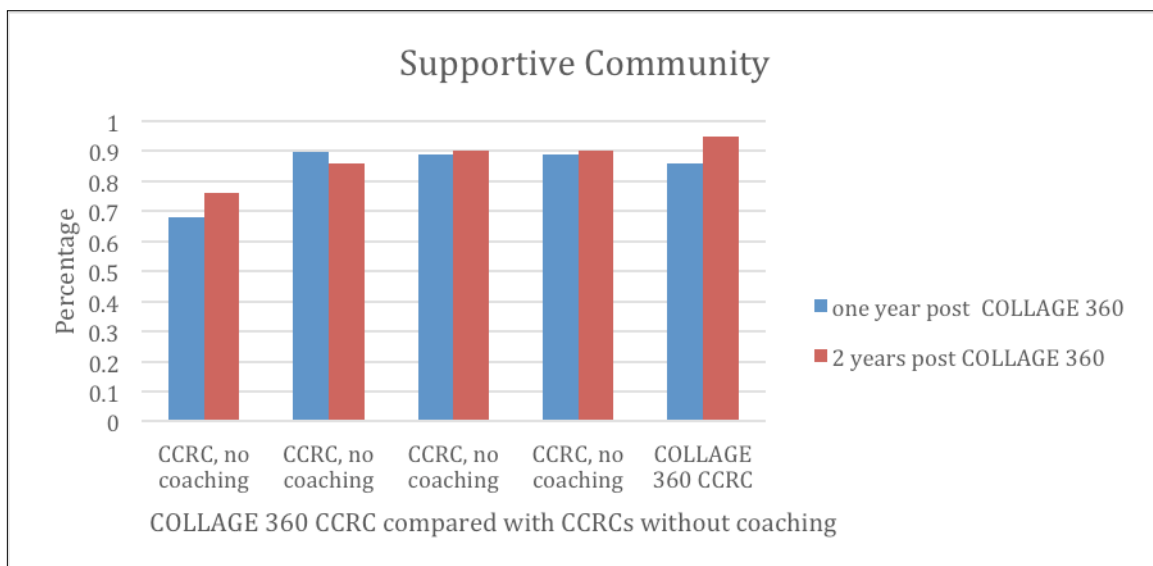


Figure 3. Comparison of Community Environment 1 and 2 Year Post-implementation

only moderately favorable results with regard to mood. Figures 4 and 5 display these results. The percentage of residents reporting good mood was not highest for the *COLLAGE 360* CCRC but demonstrated fairly consistent results with percentages of 89% and 86% for 1 and 2 years post-program implementation respectively.

Finally, we focused our attention on self-reported life satisfaction, an important aspect of daily life for elders and often associated with successful aging. One year following implementation of *COLLAGE 360*, notable improvements within the *COLLAGE 360* CCRC sample were achieved, particularly in comparison with the contrast sample. Perhaps most remarkable among the key evaluative outcomes is the change with life satisfaction. Sample residents responded to the question, "How satisfied are you with your life as a whole?" using a five-point measure, 'delighted, pleased, mostly satisfied, mixed, mostly dissatisfied.' Figure 6 summarizes the number of respondents reporting they were 'delighted.' The comparison sample had a decrease in the number of elders 'delighted' at the one-year follow-up while *COLLAGE 360* project CCRC follow-up assessment demonstrated a large increase in the percentage of residents who were 'delighted' after one year. The comparison between the coached and non-coached residents was statistically significant ($p=0.032$) One and 2 year post-program comparisons with 4 non-coaching CCRCs demonstrate stability and consistency of the results for the *COLLAGE 360* CCRC. Notably, the percentage of *COLLAGE 360* program participants reporting delight with their life increased from 85% to 92% at 1 and 2 years post-program implementation. These results are summarized in Figures 6 and 7.

Discussion

Key goals of the Affordable Care Act are to focus on wellness and prevention and to have all adults become more involved in the management of their own health care. In the data presented here summarizing key outcomes from the *COLLAGE 360* program, there is confirmation of the benefit of such engagement. The engagement in the assessment and wellness coaching process via the *COLLAGE 360* program translated into the sample older adults sensing that they lived in a more supportive and nurturing environment. In terms of

personal outcomes, we saw positive effects in the areas of mood and overall satisfaction with life.

Older adults face significant healthcare challenges as they live with multiple morbidities and experience frequent illness episodes. The results from this project support the call for health care providers to become more focused on understanding the personal goals and values of elders. Without this important, basic knowledge, medical delivery of services is not targeted on what matters most to these individuals and cannot, by definition, be person centered. Health care plans need to be focused on more than just the elder's medical conditions, moving into issues relevant to a person's psychological, spiritual and social needs with personal preferences being paramount. These issues are foundational to any health promotion effort.

The program evaluation results reported here thus represent a small but favorable movement towards improving the mood and life satisfaction of residents who participate in the comprehensive assessment system and wellness coaching program, *COLLAGE 360*. In the present health care delivery model, minimal attention is directed towards the psychosocial aspects of life for elders although their influence on overall health status is well known. One year following implementation of *COLLAGE 360*, the target CCRC participants demonstrated improved mood state. Environment influences the lives of older adults and all CCRCs strive to create an environment that supports the daily lives of its residents. Our analysis demonstrated participation in *COLLAGE 360* improved resident recognition of community support.

Wellness among the older adult population is focused on preventing the progression of chronic disease and its associated complications. The majority of health outcomes are driven by chosen personal behaviors as well as social determinants.¹⁵ As a result, the person needs to be involved and help direct their healthcare. Individual involvement best begins with an understanding of a person's individual values, goals and purpose in life to provide optimal health care, attend to their current needs, and facilitate goal achievement. Community-based healthcare providers typically lack comprehensive assessment systems to capture data beyond disease state and clinical complications and to include cognition, function, mood, social supports,

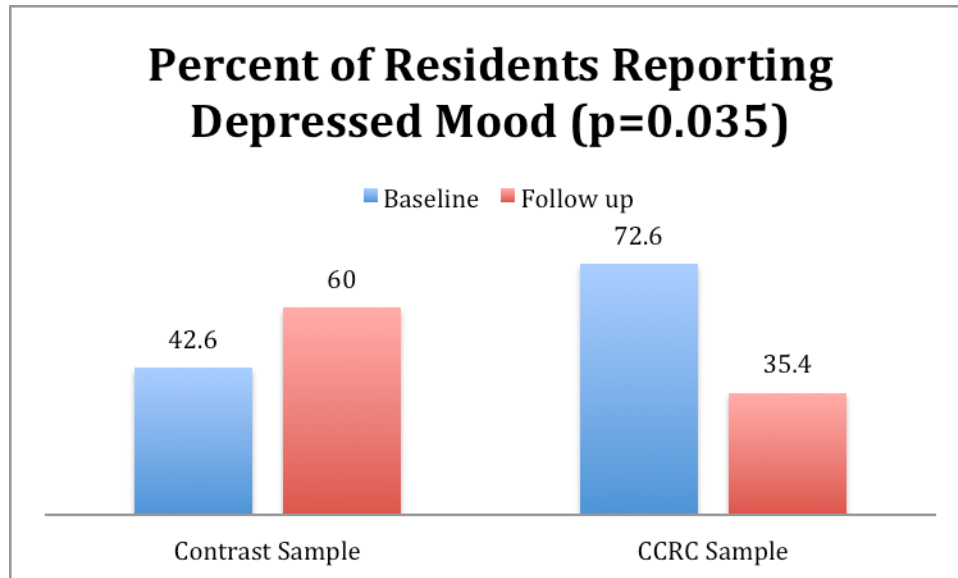


Figure 4. Self-Reported Mood

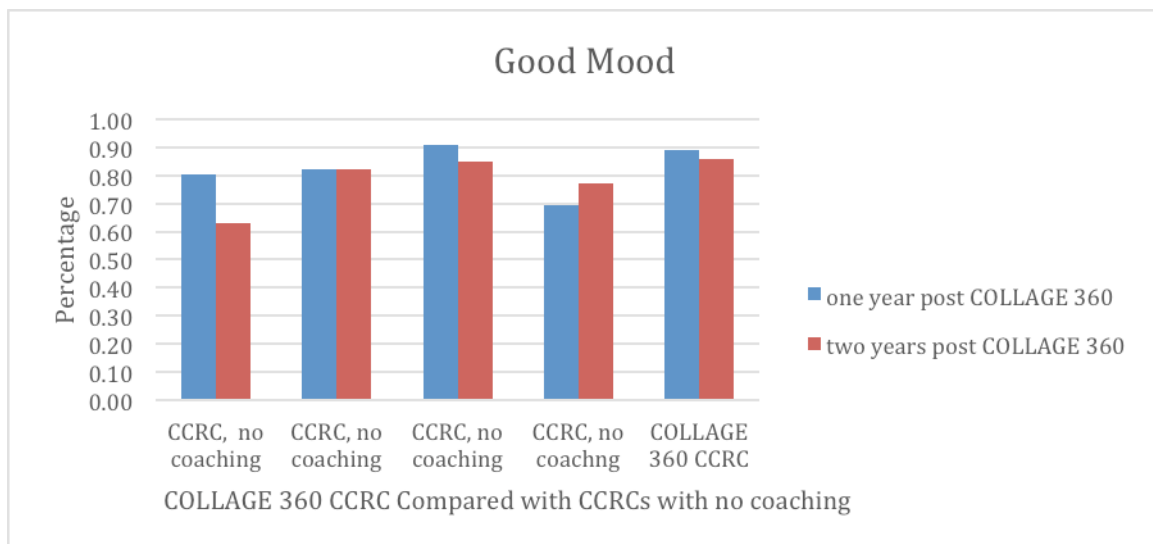


Figure 5. Comparison of Good Mood 1 and 2 Year Post-implementation

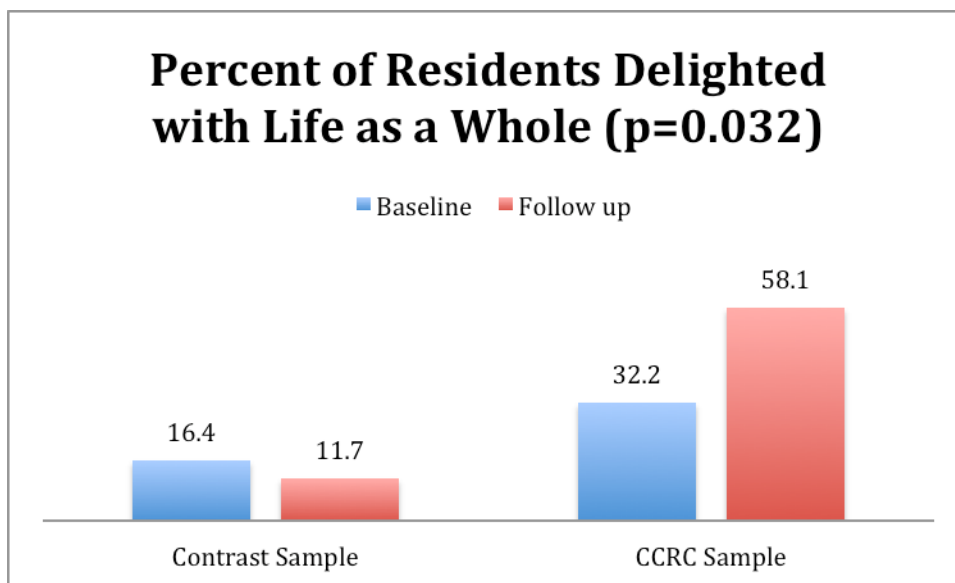


Figure 6. Life Satisfaction

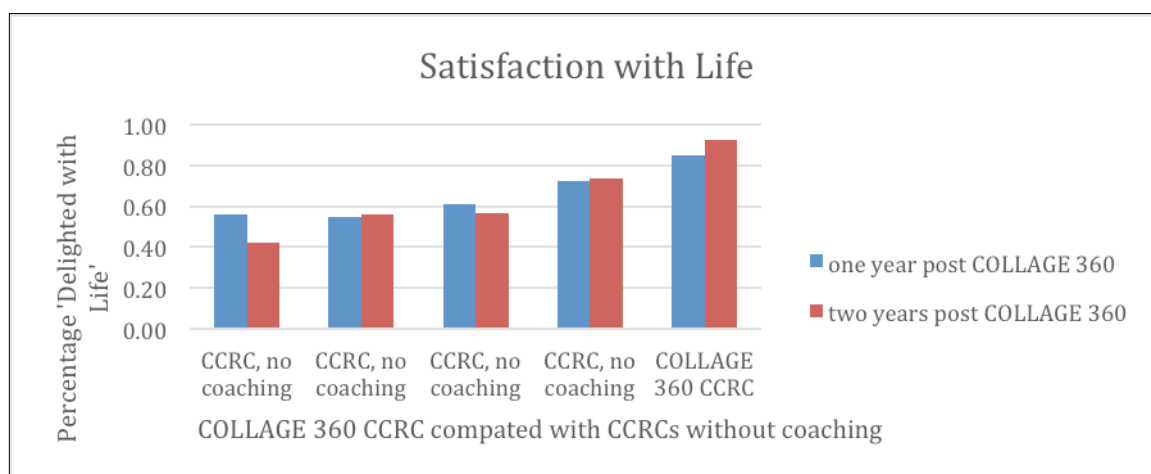


Figure 7. Comparison of Life Satisfaction 1 and 2 Years Post-Implementation

environmental conditions, medication use, health service use, etc. The individual's personal goals and preferences often remain unknown. Additionally, little time and attention is given to a process to evaluate changing needs and service outcomes over time. At the organizational level, outcome data that measures the effectiveness of services from one site in addition to comparing outcomes to those of other communities or settings is needed. *COLLAGE 360*, the comprehensive assessment system and wellness coaching program contains the essential components to address these voids.

Conclusion

Within *COLLAGE 360*, the coaching goal is to provide a comprehensive and holistic approach to improving the lives of older adults. This approach is responsive to changing needs within the current healthcare environment, namely increased self-management and self-care behaviors while permitting the elder to speak for his/her self and set priorities. Such an approach supports the adoption and maintenance of program participation, as decisions reflect a personal sense of meaning and purpose.¹⁶

The concept of "life goals" for individuals in the later decades of life is foreign to many, including health care providers. Older adults may have personal

objectives that include volunteering, mentoring, traveling, writing memoirs, helping their families, or just making a difference in others' lives. To achieve these goals, they need to maintain or improve their health. With proper resources and support, older adults can actualize their potential for becoming their own 'health care leader', assume responsibility for their wellness and pursue their self-identified personal goals.¹⁷ "Stay as independent and healthy as possible," "Become stronger," "Maintain my current level of independence," and "To do as much for myself as possible" are direct quotes taken from the reflection and vision worksheets. They convey a common desire among elders to maintain their health, independence and well-being.

Given the national mandate for increased self-care management to maintain optimal health, this project sought preliminary evidence to determine if the personalized assessment and coaching approach of *COLLAGE 360* is a potential, effective strategy to promote adaptive behavior change for a growing population of older adults. The United States has embarked on health care reform of its system delivery based upon the Affordable Care Act. The Triple Aim is based on the concept that improving care systems requires simultaneous pursuit of three aims: improving the health of the population, improving the experience of care for the patient and reducing per capita costs of health care.⁴ The Affordable Care Act aims to reach these objectives through focusing on prevention and wellness, care coordination, and the need for self-management of health care; these key elements are the foundation of *COLLAGE 360*.

Acknowledgements

Partial financial support for the preparation of this manuscript came from Boston Roybal Center for Active Lifestyle Interventions (RALI Boston), Grant# P30 AG048785 and Northeastern University Center for Self-Care and Health Technology, Grant# P20NR015320.

The authors wish to thank Ms. Margaret Bryan for her assistance with the data management for this project and the many older adult residents of CCRC communities within *COLLAGE* who provided data for this paper.

Conflict of Interests

Dr. Elizabeth P Howard and Dr. John N Morris

report no conflict of interests. They served as researchers examining the outcomes from project implementation Dr. Robert Schreiber served as the Medical Director of *COLLAGE 360*. Ms Aline Russotto and Ms. Susan Flashner-Fineman participated in the development of the training component of the *COLLAGE 360* program and both have participated in the dissemination of the program.

References

1. Szanton, S. L., Thorpe, R. J., Boyd, C., Tanner, E. K., Leff, B., Agree, E., Gitlin, L. N. (2011). Community aging in place, advancing better living for elders: a Bio-Behavioral Environmental Intervention to Improve Function and Health-Related Quality of Life in Disabled Older Adults. *Journal of the American Geriatrics Society*, 59(12), 2314–2320. <http://doi.org/10.1111/j.1532-5415.2011.03698.x>.
2. Retooling for an Aging America: Building the Health Care Workforce. (2008). Retrieved April 2, 2015, from http://www.iom.edu/Reports/2008/Retooling-for-an-Aging-America_Building-the-Health-Care-Workforce.aspx.
3. Westphal, EC, Alkema, G, Seidel, R, Chernof, B. (2016). How to get better care with lower costs? See the person, not the patient. *Journal of the American Geriatrics Society*, 64(1), 19-21. DOI: 10.1111/jgs.13867.
4. Berwick, D. M., Nolan, T. W., & Whittington, J. (2008). The triple aim: care, health, and cost. *Health Affairs*, 27(3), 759–769. <http://doi.org/10.1377/hlthaff.27.3.759>.
5. Ory, M. G., Ahn, S., Jiang, L., Smith, M. L., Ritter, P. L., Whitelaw, N., & Lorig, K. (2013). Successes of a national study of the chronic disease self-management program: meeting the triple aim of health care reform. *Medical care*, 51(11), 992-998. DOI: 10.1097/MLR.0b013e3182a95dd1.
6. Evans, K., & Robertson, S. (2009). "Dr. Right": Elderly women in pursuit of negotiated health care and mutual decision making. *The Qualitative Report*, 14(3), 409-432. Retrieved from <http://nsuworks.nova.edu/tqr/vol14/iss3/3>. Accessed November 14, 2015.
7. Kogan, A, Wilber, K., Mosqueda, L. (2016). Person-

- centered care for older adults with chronic conditions and functional impairment: a systematic literature review. *Journal of the American Geriatrics Society*, 64(1), e1-e7. DOI: 10.1111/jgs.13873.
8. Ben Natan, M., Ataneli, M., Admenko, A., & Har Noy, R. (2013). Nurse assessment of residents' pain in a long-term care facility. *International Nursing Review*, 60(2), 251–257. <http://doi.org/10.1111/inr.12006>.
 9. Kaplan, R. L. (2011). Older Americans, Medicare, and the Affordable Care Act: What's really in it for elders? *Journal of the American Society on Aging*, 35(1), 19–25.
 10. Thom, D. H., Ghorob, A., Hessler, D., Vore, D. D., Chen, E., & Bodenheimer, T. A. (2013). Impact of Peer Health Coaching on Glycemic Control in Low-Income Patients with Diabetes: A Randomized Controlled Trial. *The Annals of Family Medicine*, 11(2), 137–144. <http://doi.org/10.1370/afm.1443>.
 11. Mettler, E. A., Preston, H. R., Jenkins, S. M., Lackore, K. A., Werneburg, B. L., Larson, B. G., ... Clark, M. M. (2014). Motivational improvements for health behavior change from wellness coaching. *American Journal of Health Behavior*, 38(1), 83–91. <http://doi.org/10.5993/AJHB.38.1.9>.
 12. Shahnazari, M., Ceresa, C., Foley, S., Fong, A., Zidaru, E., & Moody, S. (2013). Nutrition- focused wellness coaching promotes a reduction in body weight in overweight US veterans. *Journal of the Academy of Nutrition and Dietetics*, 113(7), 928–935. <http://doi.org/10.1016/j.jand.2013.04.001>.
 13. Sgadari, A., Morris, J. N., Fries, B. E., Ljunggren, G., Jónsson, P. V., DuPaquier, J. N., & Schroll, M. (1997). Efforts to establish the reliability of the Resident Assessment Instrument. *Age and Ageing*, 26 Suppl 2, 27–30.
 14. Hirdes, J. P., Ljunggren, G., Morris, J. N., Frijters, D. H., Soveri, H. F., Gray, L., Gilgen, R. (2008). Reliability of the interRAI suite of assessment instruments: a 12-country study of an integrated health information system. *BMC Health Services Research*, 8(1), 277. <http://doi.org/10.1186/1472-6963-8-277>.
 15. Schroeder, S. A. (2007). We can do better — improving the health of the American people. *New England Journal of Medicine*, 357(12), 1221–1228. <http://doi.org/10.1056/NEJMsa073350>.
 16. Röcke, C., & Lachman, M. E. (2008). Perceived trajectories of life Satisfaction across past, present, and future: profiles and correlates of subjective change in young, middle-aged, and older adults. *Psychology and Aging*, 23(4), 833–847. <http://doi.org/10.1037/a0013680>.
 17. Gordon, L., Graves, N., Hawkes, A., & Eakin, E. (2007). A review of the cost- effectiveness of face-to-face behavioural interventions for smoking, physical activity, diet and alcohol. *Chronic Illness*, 3(2), 101–129. <http://doi.org/10.1177/1742395307081732>.