# An Evaluation of the Curriculum and Training Program for Clinical Practitioners and Staff on the Younger Adult in the Long-Term Care Setting

**Final Topline Report** 



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## **Project Introduction**

AMDA—The Society for Post-Acute and Long-Term Care Medicine, was the recipient of a 3-year Centers for Medicare & Medicaid Services' Civil Money Penalty (CMP) grant to improve the quality of care and hence the quality of life for younger adults utilizing long-term care services. The grant was sought to develop a training curriculum and training program for clinical practitioners and staff related to the younger adult in the long-term care setting. This CMP Region IV grant provided training to participating states, which included Alabama, Florida, Georgia, Kentucky, Mississippi, and South Carolina.

## **Executive Summary**

The percentage of younger adults served by long-term care (LTC) facilities has grown considerably, rising from 8 percent in 1997 to 15 percent in 2012 (David et al., 2016). In 2014, approximately 5.5 million individuals between the ages of 18 and 64 received LTC in the United States (Nguyen, 2017). Younger adults in LTC often pose different clinical, social, psychological, financial, and regulatory challenges for care providers than their geriatric counterparts. However, LTC providers are often trained to provide care for older residents and have little experience with younger adult residents. As the young adult population continues to grow in LTC settings, there is a critical need to educate care providers and clinicians about the unique needs of younger adult residents.

### A. Study Overview

To address this need, AMDA—The Society for Post-Acute and Long-Term Care Medicine developed a curriculum targeting clinical care staff and professionals in LTC settings who may be involved in caring for young adults. The goal of AMDA's *The Younger Adult in the Long-Term Care Setting* (YALTC) is to educate professionals and paraprofessionals about the needs of young adults placed in LTC (AMDA, 2013). Specifically, the curriculum's overall learning objectives were training participants to achieve the following objectives:

- Consider the needs of young adult residents.
- Reflect on how the needs of young adult residents can be met.
- Identify barriers to caring for younger adults and develop strategies to overcome those challenges.
- Understand the resources, activities, and care-planning interventions that can be adapted for younger adults in the LTC setting.

AMDA conducted a pilot of the YALTC training program in six States between January 2016 and August 2017; 13 trainings were conducted in-person. An online training, covering the same material, was also developed and administered beginning in April 2017. AMDA contracted with Insight Policy Research (Insight) to complete an evaluation of the pilot program to assess its effectiveness. Insight's evaluation of the YALTC training was guided by four primary research questions:

- 1. What is the immediate impact of the YALTC training on participants' knowledge and attitudes toward younger adult residents in LTC settings?
- 2. What is the sustained impact of the YALTC training on participants' knowledge and attitudes toward younger adult residents in LTC settings?
- 3. What is the scalability of the in-person and online trainings for potential nationwide expansion?
- 4. What are the participants' perceptions of the trainings' implementation and effectiveness?

Insight's evaluation of the YALTC training included the examination of data collected at three periods during the course of the training. Training participants were asked to complete a pretest prior to the training, a posttest immediately following the training, and a follow-up survey 60 days after the training.

### **B.** Results

The results presented here briefly highlight the study's key findings.

- The YALTC training had a significant and positive immediate effect on participants' knowledge and attitudes toward young adult residents. For the combined sample (including in-person and online training participants), the number of correct answers to questions assessing their knowledge about caring for young adults in LTC settings increased significantly from pretest to posttest. There was also some evidence that the YALTC training had a significant and positive immediate impact on participants' attitudes toward young adults in LTC settings as well. The absence of a statistically significant difference between posttest and follow-up on both knowledge and attitudes items provides some evidence for a sustained impact of the YALTC training over time.
- There is strong evidence to suggest both the in-person and online YALTC training is scalable. Cumulatively, our findings suggest that both the in-person and online training formats were very successful at facilitating and encouraging participant learning and would ultimately be successful if expanded. Although both in-person and online training participants overwhelmingly agreed that the training facilitated learning, online participants unanimously agreed that the online format allowed them to review materials later, learn at their own pace, and understand the material. Given that these are some of the primary goals of the online program, these findings provide strong evidence for the scalability of the online training format for future expansion.
- The YALTC training was overwhelmingly positively received by both in-person and online training participants. Analysis of training evaluation data and open-ended comments submitted by participants revealed that they perceived the training to be useful and timely, and that they planned to incorporate what they learned from the training into their daily practice. In addition, many comments revealed a need for similar trainings on this topic in the future.
- The YALTC trainings were slightly more effective at influencing individual participants' outcomes than at affecting facility-level or organizational change. Overall, both online and inperson respondents indicated that, because of the YALTC training, they were more able to distinguish between young adult residents' wants and needs and felt better able to meet those needs. In addition, respondents from both training modalities agreed that they learned things from the YALTC that they were able to apply directly to working with younger adult residents. Evidence drawn from open-ended comments also suggest that participants planned to incorporate their YALTC trainings into their own care practices and share knowledge with others at their facility. However, far fewer participants indicated that their organization or facility had utilized the YALTC principles, and even fewer indicated that their organization or facility had made modifications to policies or programs as a result of the training.

## **Chapter 1. Introduction**

In recent years, the number of younger adults—defined as individuals under the age of 64—that receive care in long-term care (LTC) facilities has increased substantially. In 2014, approximately 5.5 million Americans receiving care in LTC settings were younger than 64 (Nguyen, 2017), and the percentage of younger adults served by LTC facilities has risen from 8 percent in 1997 to 15 percent in 2012 (David et al., 2016). A recent publication by AMDA—The Society for Post-Acute and Long-Term Care Medicine estimated that over the past 10 years, individuals aged 31 to 64 were the fastest-growing population in LTC (AMDA, 2013). Younger adults in LTC often pose different clinical, social, psychological, financial, and regulatory challenges for care providers than their geriatric counterparts. However, LTC providers are often only trained to provide care for older residents and have little experience with younger adult residents. Given the rising number of young adults placed in LTC settings, there is a growing need for care providers familiar with the unique needs of younger adults.

To address this, AMDA created a training curriculum designed to increase clinical practitioners' and care providers' knowledge about how to care for younger adults in LTC settings and conducted a pilot of the training in six States. This report presents the findings from Insight Policy Research's (Insight) evaluation of AMDA's *The Younger Adult in the Long-Term Care Setting* (YALTC) curriculum and pilot training program.

This report comprises the following chapters:

- Chapter 1, Introduction. In this chapter, we describe the background and purpose of the study, provide details about the YALTC training, and outline the methodology utilized in this evaluation.
- Chapter 2, Summary of YALTC Training Results. This chapter presents a summary of participants' knowledge and attitudes toward young adult residents over three time-periods: pretest, posttest, and follow-up. The results from a series of Wilcoxon signed-rank tests are also presented and discussed.
- Chapter 3, Summary of Follow-Up Findings. This chapter summarizes whether training participants were able to utilize the knowledge they obtained during the training and whether participants observed any changes to the quality of life or quality of care for younger adults in their LTC facility as a result of the training.
- Chapter 4, Summary of Training Evaluation Responses. In this chapter, we provide an overview of participants' opinions about the YALTC training for both the in-person and online training formats. This chapter also discusses the potential scalability of the YALTC trainings for potential expansion to other parts of the United States.
- Chapter 5, Summary of Training Participation. This chapter summarizes the YALTC training registration, attendance, and completion rates for both in-person and online trainings.
- Chapter 6, Conclusion. In this chapter, we discuss the evaluation's main findings, outline the evaluation's limitations and their implications for interpreting the evaluation's results, and provide recommendations for future study.

### A. Background

LTC provides a range of services to support patients' personal care needs and provide assistance with tasks of everyday life. One report compiled by the U.S. Senate Special Committee on Aging states that LTC

"...differs from other types of health care in that the goal of long-term care is not to cure an illness, but to allow an individual to attain and maintain an optimal level of functioning...[it also] encompasses a wide array of medical, social, personal, and supportive and specialized housing services needed by individuals who have lost some capacity for self-care because of a chronic illness or disabling condition" (2000).

LTC facilities, where such care is provided, typically include nursing homes, skilled nursing facilities, and assisted living facilities where staff receive specialized training to meet the personal care needs of individuals unable to manage independently in the community.

Because geriatric residents comprise the largest proportion of residents in LTC, professionals who work in these settings often receive geriatric-specific training. As a result, LTC professionals often have little experience caring for the needs of younger adults. In some cases, caring for younger adults in the LTC setting is similar to caring for older adults. For example, when determining a resident's capacity for decisionmaking, delivering palliative care, or medical care for serious illness, if needed (AMDA, 2013). However, young adults possess different clinical, emotional, psychological, social, and regulatory needs than their geriatric counterparts, which can pose challenges for facilities and caregivers who are unfamiliar with those needs.

The continued rise in the proportion of young adults in LTC settings has intensified the need to train LTC providers on the needs of this group. To address this demand, AMDA developed a curriculum targeting clinical care staff and professionals in LTC settings who may be involved in caring for young adults. The goal of AMDA's YALTC training is to educate professionals and paraprofessionals about the needs of young adults in the LTC setting. Specifically, the program aims to increase practitioner and staff competencies so those individuals can provide the full range of care to younger adults, and to enhance the quality of life and quality of care provided to younger individuals in LTC settings.

### **B.** The YALTC Training

Created by a team of leading LTC experts including physicians, psychologists, nurses, and nurse educators, AMDA's YALTC curriculum aimed to increase awareness of younger adults in LTC settings. More specifically, the curriculum's overall learning objectives were to train participants to achieve the following objectives:

- Consider the needs of young adult residents.
- Reflect on how the needs of young adult residents can be met.
- Identify barriers to caring for younger adults and develop strategies to overcome those challenges.
- Understand the resources, activities, and care-planning interventions that can be adapted for younger adults in the LTC setting.

#### 1. Curriculum

The YALTC training curriculum consisted of four distinct learning modules. Each module contained approximately 1 hour of content, including a video clip illustrating the unit's learning objective as shown from the perspective of a younger adult in a LTC setting, and PowerPoint slides with additional information. Table 1.1 describes each unit's learning objectives.

Unit Title	Unit Learning Objectives
Module 1: Individual Perspectives	<ul> <li>Describe demographic trends on younger adults in LTC facilities.</li> <li>Identify specific challenges and opportunities when dealing with younger adults in LTC.</li> <li>Describe psychological and social issues that influence the behavior of younger adults.</li> </ul>
Module 2: Anticipate Cognitive Problems	<ul> <li>Understand the connection between behavioral problems and cognitive issues or concerns in the younger adult resident.</li> <li>Identify at least three diagnoses that can affect cognition.</li> <li>Apply the U-CARE*capacity assessment model to a case study.</li> </ul>
Module 3: Policy & Behavioral Management	<ul> <li>Identify resident rights to be considered when managing problematic behaviors.</li> <li>Differentiate between resident "needs" and "wants."</li> <li>Apply concepts of behavioral management using selected case studies.</li> </ul>
Module 4: Relationships	<ul> <li>Describe three major characteristics of a therapeutic milieu.</li> <li>Define boundaries in professional relationships.</li> <li>Discuss at least three strategies for maintaining healthy relationships.</li> </ul>

\*Understanding, Consistency, Appreciation, Reason, Express.

To make the YALTC curriculum as widely accessible as possible, AMDA designed the curriculum to be delivered in either of two modes: in-person or online. For in-person training attendees, the YALTC curriculum was delivered to participants in one sitting by an expert in the field; online training participants progressed through each of the modules at their own pace. AMDA marketed and piloted the YALTC training program in both modes in six States: Alabama, Florida, Georgia, Kentucky, Mississippi, and South Carolina. All in-person trainings were conducted between January 25, 2016, and August 16, 2017. The online trainings occurred between April 14, 2017, and August 31, 2017. We describe each type of training in detail below.

#### 2. In-Person Trainings

Approximately 2 to 3 months prior to each training event, AMDA sent emails to Health Care Associations and Centers for Medicare & Medicaid Services (CMS) affiliates located in six States (Alabama, Florida, Georgia, Kentucky, Mississippi, and South Carolina) to advertise the YALTC training. Pre-registration for in-person trainings closed one week prior to the event, although individuals who missed registration could also register onsite immediately before the training. To pre-register, participants accessed the AMDA YALTC training page by clicking on a link embedded within the marketing email. The iCohere registration platform (described in the next section) prompted registration, all participants could opt to take the training to earn 4 hours of continuing education credits (CEUs). Those registered to take the training for credit were also prompted to provide a valid registered nurse (RN) license number. The format of the in-person training was a 4-hour seminar held at a conference facility or large meeting room. During the seminar, attendees were shown four 1-hour training videos supplemented by a PowerPoint lecture given by an expert in the field. The training videos were created by a professional film crew hired by the AMDA team and included testimonials from young adult residents. Pre-registered attendees were asked to check in prior to the training. At check-in, each attendee received a packet that included training materials (including a *Young Adults in Long-Term Care Tool Kit*, authored by AMDA experts), a pretest, a posttest, and training evaluation forms. Attendees were instructed to complete the pretest prior to the training, and to complete the posttest and training evaluation questions after the training. In-person trainees were informed that all forms (including the pretest, posttest, and training evaluation questions) must be completed and submitted to onsite staff after the training to receive CEUs for the course.

### 3. Online Training

Paraprofessionals and clinical staff often work long, odd hours at LTC facilities, making it difficult to attend lengthy in-person trainings. To address this issue, AMDA worked with iCohere<sup>1</sup>—an online training platform service—to create an online training platform to offer recipients the flexibility to attend and complete the training at their own pace. Although the online platform was originally intended to occur simultaneously with the in-person trainings, development of the online training encountered significant delays. The online training platform went live on April 14, 2017 and was promoted and deployed to the states that had completed in-person trainings (Georgia, Mississippi and South Carolina). On July 1, 2017 the online training module was made available and promoted to the remaining three states (Alabama, Kentucky and Florida) to give them the opportunity to register and complete the training prior to the end of the grant. Like the in-person training, the online training contained four 1-hour training modules (see table 1.1).

The online training, like the in-person training, was open to any interested individual within the six pilot States. However, online participants were recruited separately from in-person trainees. Online trainees registered for the training using the same platform as the in-person training attendees and could similarly select either a credited option or a non-credited option. Individuals who took the online course for credit received four CEUs; individuals taking the course for no credit received a completion certificate. Because the training platform had a limited number of licenses to share between all online training participants, each participant had 30 days to successfully complete the training before being locked out of the training platform to recycle the license for use by another participant.

Once online trainees accessed the training, they were prompted to complete the pretest and progress through four training modules, which were the same 1-hour videos shown in the in-person training (see table 1.1). The online trainees also viewed the same PowerPoint presentation following each video presented by the expert trainer for the in-person training attendees. After completing all training modules, but before submitting their training to obtain CEUs, participants were prompted to complete the posttest and training evaluation questions. The online participants did not receive AMDA's *Younger Adult in Long-Term Care Tool Kit*.

<sup>&</sup>lt;sup>1</sup> AMDA hired iCohere to create the online registration and training platforms.

#### Learning Collaborative

The original plans for the YALTC online training included an online learning collaborative component. This online learning collaborative was intended to be an online community where training participants could post questions about the training, share their experiences and best practices, and receive support as they navigated the challenges of caring for younger adults in LTC. Unfortunately, participants did not take advantage of the learning collaborative component. Although AMDA is currently investigating how to develop this component further for potential future use in other States, its lack of use to date precluded the study team from evaluating the learning collaborative component for this study.

### C. Evaluation Methodology

AMDA contracted with Insight to complete an evaluation of the effectiveness of the YALTC pilot training program. Insight's goals for its evaluation of the YALTC training were to provide the following assessments:

- Whether the training effectively increased participants' knowledge about and attitudes toward younger adults in LTC settings immediately following the training.
- Whether the training had a sustained impact on participants' knowledge about and attitudes toward younger adults in LTC settings up to 60 days after the training.
- Scalability of the online and in-person training programs for potential nationwide expansion.
- Participants' perceptions of the training's implementation and effectiveness.

Insight utilized an evaluation framework that captured measures within six primary domains to assess the effectiveness and scalability of the YALTC training curriculum. We describe the planned domains in table 1.2.

Domain	Description
Knowledge	Measures the effectiveness of the training to facilitate knowledge change within the six core areas of the curriculum.
Attitudes	Measures effectiveness of the training to facilitate attitude changes toward young adult residents and the unique care challenges they present.
Knowledge utilization	Self-report measures of the ways trained participants utilize training competencies to offer younger adult residents the full range of therapy and medical care necessary to maintain their mental and physical health.
Effects of training on quality of life and quality of care	Self-reports of ways trained participants observed the impact of training on specific measures of QOL and QOC for young adults in LTC.
Scalability	Self-report measures of the benefits and challenges of the online and in-person training platforms.
Dosage*	Measure of an individual's participation in one or more training activities.

\*Due to time constraints and limitations imposed by the chosen online training platform and absence of an online learning collaborative, dosage measures were not captured or utilized for this evaluation.

To ensure the fidelity of this evaluation and to isolate the unique effect of training mode, it was important to ensure that the in-person and online trainings were as similar as possible. Therefore, although the YALTC training content was identical in the two delivery modes, the online training imposed some restrictions on participants to mimic conditions present during in-person trainings. For example, because in-person training attendees were required to attend the entire session to receive credit for attending the course, the online course was configured so that participants could not fast-forward through the videos. In addition, to discourage participants from quickly clicking through content slides, online participants were required to complete "post-unit comprehension checks" before progressing to the next module. Comprehension checks were a short set of true/false questions (two or three questions) placed at the end of each module that participants were required to correctly answer before moving on. These same knowledge-check questions appeared as a part of the in-person training presentation, but although attendees were asked to check their own knowledge, responses were not collected. Although no data from comprehension checks were recorded or saved, participants could not progress within the online course without successfully answering the comprehension check questions.

#### 1. Data Collection Procedures

Figures 1.1 and 1.2 depict the data collection procedures for both the in-person and online trainings, respectively.





Figure 1.2. Data Collection Timeline for Online Trainings



To capture the measures outlined in table 1.2, Insight collected data from training attendees at three distinct time-points: pretest, posttest, and follow-up. Below, we describe the data collection instruments and process in detail.

#### a. Pretest

The purpose of the pretest instrument was to measure participants' knowledge about and attitudes toward younger adult residents before the training, at baseline. Prior to the start of the in-person or online training, all participants were asked to fill out the pretest questions. Online training participants were instructed to complete the pretest within the online platform prior to beginning the course, and they could not progress to course content until it was completed.

#### b. Posttest

The purpose of the posttest instrument was to measure the change in participants' knowledge about and attitudes toward younger adult residents compared to the pretest baseline. After completing the training, all participants were instructed to complete the posttest. The posttest instrument was identical to the pretest instrument except for the inclusion of training evaluation questions. In-person training attendees submitted their completed forms packets (including the pretest, posttest, and training evaluation questions) to onsite staff members before leaving the training. After finishing all training modules, online training participants completed the posttest and then submitted the entire course via a dedicated submission page by checking a box indicating they had completed the entire course. After checking this box, the participant would receive either their certificate of completion or CEUs for the course.

#### c. Follow-up

The purpose of the follow-up instrument was to determine how well participants retained the knowledge they gained during training compared to the pretest baseline and the posttest, as well as how participants were able to utilize what they learned from the training, if at all. Approximately 60 days after each training occurred, Insight distributed the follow-up survey instrument by email to all trainees using an online survey platform. The invitation emails were sent to in-person and online training participants using the email address provided during registration. Since online participants completed the training at different times, Insight monitored each individual online trainee to determine when to send the 60-day follow-up survey. Insight sent email reminders to nonrespondents at regular intervals throughout the survey distribution window (6 weeks).

The online follow-up instrument included all the questions that appeared on the pre- and posttest as well as new questions about knowledge utilization, perceptions of quality of life and quality of care at their facility, barriers to facility-level change, and training program scalability (discussed in further detail below). The follow-up instrument also contained a series of screening questions that directed respondents to the correct portions of the survey (e.g., participants who did not report working in a long-term care facility did not see questions relating to institutional/facility-level change) and to easily facilitate data analysis. To avoid any confusion, the survey's introductory language warned respondents that some questions might look familiar to them.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup>True/false questions appeared as the first section in follow-up surveys for early trainings (e.g., the first Alabama and Georgia trainings). However, the true/false and attitudes question sections appeared later in the instrument for all subsequent trainings because participants believed they had already filled out the follow-up survey.

#### d. Development of the Data Collection Instruments

AMDA and Insight collaborated to create several new data collection instruments to assess the domains of interest for this evaluation. Each instrument underwent several rounds of review before being finalized. Table 1.3 describes the questions used to measure each domain and the data collection instrument each domain was included on (pretest, posttest, and follow-up). Insight utilized questions provided by content experts at AMDA for the Knowledge Assessment and Training Evaluation domains. AMDA's experts created the true/false Knowledge Assessment questions from the curricular materials. To create questions within the Attitude domain, Insight utilized the theory of reasoned action (Ajzen & Fishbein, 1980) as the theoretical basis to create appropriate questions. This theory states that a person's beliefs and attitudes about a certain behavior combine to form a behavioral intention, which precedes behavioral action. In other words, a participant's beliefs and attitudes toward younger adults in LTC settings may ultimately predict their behavior toward younger adults. Insight used this framework to create questions that assessed participants' beliefs and attitudes. To construct the remaining domains, Insight worked with AMDA to create questions that relate to a participant's assessment of younger adults' quality of life and the quality of care they are provided. Insight also worked with AMDA to create scalability questions that would help AMDA improve and facilitate future YALTC trainings. The full pretest, posttest, and follow-up instruments can be found in appendices A through C.

Domain	Description of Measure	Pretest	Posttest	Follow-Up
Knowledge assessment	Number of questions and question type: 12 true/false.Scale type: Binary true/false.Description: Measures knowledge about younger adult residents in LTC.Example item: Younger adult residents and older adult residents in LTC settings have similar medical problems, treatment regimens, and emotional needs.	•	•	•
Attitudes	<ul> <li>Number of questions and question type: 13 Likert scale.</li> <li>Scale type: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree, N/A (I Am Not a Care Provider).</li> <li>Description: Measures attitudes toward young adult residents.</li> <li>Example item: When interacting with or caring for young adult residents, I am attentive and patient.</li> </ul>	•	•	•
Perception of training (training evaluation)	<ul> <li>Number of questions and question type: 10 Likert scale.</li> <li>Scale type: Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree.</li> <li>Description: Measure perceptions about the training experience.</li> <li>Example item: The topics covered were relevant to me.</li> <li>Number of questions and question type: Four open-ended.</li> <li>Scale type: N/A.</li> <li>Description: Participants provide details about training high points, how training could be improved, how they anticipate applying what they learned, and any other relevant comments.</li> <li>Example item: What did you like most about this training?</li> </ul>		•	

Table 1.3. Description	of Measurement Domains b	y Data Collection Instrument
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Domain	Description of Measure	Pretest	Posttest	Follow-Up
Knowledge utilization	<ul> <li>Number of questions and question type: Six Likert scale.</li> <li>Scale type: Strongly Disagree, Disagree, Neutral, Agree,</li> <li>Strongly Agree, N/A (I Am Not a Care Provider).</li> <li>Description: Measures perceptions of whether participants have been able to apply the knowledge gained during training.</li> <li>Example item: After attending the AMDA YALTC training, I am better able to distinguish between the wants and needs of young adult residents.</li> </ul>			•
Quality of life and quality of care	<ul> <li>Number of questions and question type: Four rating.</li> <li>Scale type: Very Good, Good, Fair, Poor, N/A.</li> <li>Description: Respondents estimate the quality of life and quality of care both before and after taking the training</li> <li>Example item: Please rate young adult residents' quality of life at my facility or organization before/after the training.</li> <li>Number of questions and question type: Six Likert scale.</li> <li>Scale type: Strongly Disagree, Disagree, Agree, Strongly Agree, N/A.</li> <li>Description: Respondents report observed changes in the quality of life and quality of care provided at their facility since taking the training</li> <li>Example item: I have observed a positive change in attitudes toward young adult residents at my facility or organization.</li> </ul>			•
Scalability	<ul> <li>Number of questions and question type: Five Likert scale.</li> <li>Scale type: Strongly Disagree, Disagree, Agree, Strongly Agree.</li> <li>Description: Measures aspects of the training that may influence scalability.</li> <li>Example item: During the AMDA YALTC training, I was able to ask questions.</li> </ul>			•
Barriers*	Number of questions and question type: One select-all. Scale type: N/A. Description: Respondents select all barriers to change they may have encountered after taking the training, if applicable. Example item: After the training, did you encounter any of the following that may have acted as barriers to change at your facility?			•

\*In response to the high proportion of respondents who indicated their organization or facility had not changed policies or practices after the YALTC training, the Barriers question was added to the second Georgia follow-up survey and all subsequent follow-up surveys.

#### 2. Database

After each in-person training, AMDA collected all form packets and sent them to Insight for analysis. Once received, the study team entered the data from the paper forms into a specially formatted database. After the online training participants completed the course, Insight downloaded the pretest, posttest, and training evaluation data from the online training platform site and added all the data to the database. Information collected from the 60-day follow-up instruments was also downloaded from Insight's survey platform and entered into the database after the survey window closed. The data from the online platform underwent additional cleaning for this report. For a full, step-by-step description of these data cleaning procedures, see appendix D.

## Chapter 2. Summary of YALTC Training Results

In this chapter, we summarize the immediate and sustained impact of AMDA's YALTC training program on participant knowledge and attitudes over three time-periods: pretest, posttest, and follow-up. We present the findings for both in-person and online trainings, as well as overall. However, due to the small number of online training participants relative to in-person, direct comparisons between the two modalities should be interpreted with caution. In each subsection, we identify the methods used to analyze the data and present the most salient findings for each measurement domain.

### A. Knowledge Assessment

The questions in the Knowledge Assessment section of the pretest, posttest, and follow-up instruments contained items designed to measure the knowledge about younger adults in LTC and training effectiveness surrounding the core areas of the curriculum. Participant knowledge was measured by a series of true/false questions at three distinct time-points to allow for the assessment of change over time. The results that follow describe the percentage of participants who answered each knowledge item correctly (see table 2.1).

Overall, the majority of participants in both the in-person and online trainings answered most Knowledge Assessment questions correctly at all three data collection time-points. The combined scores indicate that the greatest positive change in correct responses occurred with the items "A resident's right to make personal decisions (such as what to wear and how to spend free time) comes before the needs of the facility and staff," "In long-term care settings, care providers must meet all residents' needs and wants," and "In order to successfully manage difficult or problematic behavior, facilities should set limits on what can reasonably be accomplished or accommodated."

However, the majority of participants in both training modes responded incorrectly to the item "A resident's right to make personal decisions (such as what to wear and how to spend free time) comes before the needs of the facility and staff." This item also saw the greatest increase in correct responses from pretest to posttest, indicating the training may have effectively taught respondents the correct answer. However, the percentage of correct answers for this item dropped in the follow-up, indicating that the effect may be temporary. Similarly, approximately half the participants in both training modes at all three time-points responded incorrectly to the item "Since a practitioner's or psychologist's one-time capacity evaluation of a resident remains valid for all subsequent decisionmaking concerns, use of the U-CARE model at that time is optional." The results for these two items could suggest the items are unclear or confusing, leading participants to respond incorrectly. Alternatively, respondents could have incorrectly responded to these items at posttest and follow-up because the YALTC training did not address these points in sufficient detail.

#### Table 2.1. Average Percentage Correct Responses to Knowledge Assessment Questions

	In-Person <sup>a</sup>			Online⁵			All (Combined)		
Survey Question	Pretest N = 772	Posttest N = 702	Follow- Up <i>N</i> = 163	Pretest N = 44	Posttest N = 22	Follow- Up <i>N</i> = 11	Pretest N = 816	Posttest N = 724	Follow- Up <i>N</i> = 174
Cognitive deficits due to developmental delays, traumatic brain injuries, and neurologic illnesses (such as multiple sclerosis) occur more often in younger adult residents than in older residents.	92.0	94.2	91.4	84.1	86.4	90.9	91.5	93.9	91.4
Younger adult residents and older adult residents in long-term care settings have similar medical problems, treatment regimens, and emotional needs.	85.4	85.9	85.3	84.1	86.4	90.9	85.3	85.9	85.6
Since a practitioner's or psychologist's one-time capacity evaluation of a resident remains valid for all subsequent decisionmaking concerns, use of the U-CARE model at that time is optional.	58.0	55.1	57.7	59.1	45.5	72.7	58.1	54.8	58.6
Identifying residents' defense mechanisms and coping strategies help the inter-professional team address challenges posed by caring for younger adult residents.	98.3	97.4	98.8	100	100	90.9	98.4	97.5	98.3
Staff should avoid apologizing for mistakes because it will undermine the trust they have built in their relationships younger adult residents.	92.2	90.9	87.7	93.2	90.9	90.9	92.3	90.9	87.9
Boundaries are behavioral limits designed to protect residents from exploitation or harm.	89.5	91.9	92.6	88.6	100	100	89.5	92.1	93.1
A resident's right to make personal decisions (such as what to wear and how to spend free time) comes before the needs of the facility and staff.	21.4	44.2	16.6	20.5	27.3	27.3	21.3	43.6	17.2
Age and developmental stage have little effect on residents' ability to adapt to challenging situations.	93.7	91.5	86.5	95.5	100	90.9	93.8	91.7	86.8
Caregivers should not acknowledge inappropriate behaviors from residents with dementia or neurocognitive decline because those behaviors are not fully under the residents' control.	87.7	83.5	81.0	79.5	72.7	63.6	87.3	83.1	79.9

	In-Person <sup>a</sup>			Online⁵			All (Combined)		
Survey Question	Pretest <i>N</i> = 772	Posttest N = 702	Follow- Up <i>N</i> = 163	Pretest N = 44	Posttest N = 22	Follow- Up N = 11	Pretest N = 816	Posttest N = 724	Follow- Up N = 174
To successfully manage difficult or problematic behavior, facilities should set limits on what can reasonably be accomplished or accommodated.	89.3	94.7	89.6	77.3	90.9	90.9	88.6	94.6	89.7
Negotiation (i.e., finding a solution that all parties can live with) is a key skill necessary in creating a therapeutic milieu (or positive therapeutic community).	96.6	95.2	95.1	100	95.5	90.9	96.8	95.2	94.8
In long-term care settings, care providers must meet all residents' needs and wants.	84.1	90.3	81.0	63.6	95.5	90.9	83	90.5	81.6

<sup>a</sup>The denominators used in these calculations include participants who submitted a forms packet and answered at least one Knowledge question. <sup>b</sup>The denominators used in these calculations include all participants who answered at least one Knowledge question.

To assess whether the YALTC training had a statistically significant initial or sustained impact on participants' knowledge about younger adults in LTC (pretest to posttest, and posttest to follow-up), the study team planned a series of paired t-tests. However, due to the non-normal distribution of responses at all three time-points for both in-person and online training modalities, a non-parametric two-tailed Wilcoxon signed-rank test was used to evaluate differences in scores between time-points. The Wilcoxon signed-rank test examined the change in each respondent's results from the first time-point to the second time-point, taking into account the direction of the change. In other words, both the amount of change and the direction of the change (positive or negative) were measured. At each time-point, respondent scores were only included in the analysis if they answered 50 percent or more of the Knowledge questions at that time-point. Table 2.2 illustrates the differences in the number of correct responses (out of a possible 12) to Knowledge items on the pretest, posttest, and follow-up for both training modalities (in-person and online) combined. Unfortunately, due to the low sample size for the online group (n = 11), the results for the online and in-person trainings could not be analyzed separately.

The Wilcoxon signed-rank test was used to assess whether there were statistically significant differences between scores at two time-points, and that any differences detected at the p < 0.05 level of significance are not likely due to chance.<sup>1</sup> While the Wilcoxon signed-rank test can provide estimates for the amount of change detected in the sample, (i.e., the respondents who participated in the training and answered at least half of the questions at both time-points), it does not assess what is likely to happen in the population (i.e., all individuals who might take this training). To extrapolate these results from the sample to the population, we also included the 95-percent confidence intervals. Confidence intervals are a range of values above and below the estimated difference that indicate the degree of certainty that the range will contain the true mean of the population. In this case, it indicates that we are 95 percent confident that the mean change in the population will lie between the lowest value and highest value given in the range.

For the combined sample, we found that the number of correct responses to Knowledge Assessment questions increased by 3 percentage points from pretest to posttest, which was statistically significant when tested at the 95-percent confidence level. However, there was no significant change from posttest to follow-up for the combined sample. These results suggest that the YALTC training program had a significant immediate impact on in-person participants' knowledge about young adults in LTC settings directly after the training. While there was some evidence of a small decrease in the percentage of correct answers from posttest to follow-up, the difference was not significant. In this case, the absence of a statistically significant difference between posttest and follow-up provides some evidence that the YALTC training had a moderate sustained impact on participants' knowledge. In sum, the YALTC training program had success increasing participants' immediate overall knowledge about younger adult residents and these results were largely sustained. This seemed to be true particularly for items assessing resident's right to make personal decisions, how facilities should manage difficult or problematic behavior, and how to meet residents' needs and wants, although increases did not appear to be sustained on the follow-up these items.

<sup>&</sup>lt;sup>1</sup> All significance testing was conducted at the 95% confidence level.

	Mean Percentag Point Differenc		95% Confidence Interval		
Comparison	Eligible Respondents†	in Percentage of Correct Responses	Lower Bound	Upper Bound	
Pretest to posttest	700	3.12*	2.31	3.93	
Posttest to follow-up	150	-1.67	-4.07	0.74	

#### Table 2.2. Wilcoxon Signed-Rank Test Results: Knowledge Assessment

 + Only respondents who answered 50 percent or more of Knowledge Assessment questions at both relevant time-points (pretest to posttest, and posttest to follow-up) were considered "eligible respondents" for the purposes of this test.
 \*Denotes significant result at the p < 0.05 level.</li>

### **B.** Attitudes

The Attitudes portion of the pretest, posttest, and follow-up assesses participants' attitudes toward young adult residents and the care challenges that they present. Evaluating participants' attitudes toward younger adults was a critical portion of this evaluation because a central aim of the YALTC training program was to encourage LTC clinical practitioners and staff to consider the needs, goals, and care of younger adult residents. Like the knowledge questions, participant agreement with attitudes statements were captured at three time-points (pretest, posttest, and follow-up) to measure change over time. For ease of interpretation, results are organized in three discrete categories: General Attitudes items, Self-Efficacy items, and Negative Attitudes items. Table 2.3 illustrates the percentage of participants who strongly agreed or agreed with each attitude statement at each of the three time-points.

Most participants in both in-person and online modes agreed that each young adult resident is an individual and that younger adults have different needs than older residents. The majority in both modes disagreed, however, that the factors that constitute a high quality of life for younger adults are the same as those for older adult residents. Overall, participants expressed more self-efficacy about their abilities to recognize and address young adult residents' wants and needs after the YALTC training, at posttest. The greatest positive change in strongly agree/agree responses overall to attitude statements occurred with the items, "I feel capable of addressing the needs of young adult residents" and "I am knowledgeable about the needs of young adult residents." These results suggest that the YALTC training bolstered participants' confidence in addressing the needs of and providing a high quality of care for young adult residents. Collectively, strongly agree/agree responses with the Self-Efficacy Attitudes statement, "I am knowledgeable about the needs of young adult residents" increased the most from pretest to follow-up. In addition, participants' agreement with negatively worded attitudes items diminished over time; and agreement with these statements was lowest at follow-up, suggesting that the YALTC training has a positive effect on participants' negative preconceptions about younger adult residents. Of all the negative attitudes items, participants agreed most with the item, "Young adult residents are more difficult to deal with than older adult residents" at all three time-points.

#### Table 2.3. Percent Strongly Agree/Agree Responses to Attitudes Questions, by Training Modality and Time-Point

	In-Person		Online		All (Combined)				
Survey Question	Pretest <sup>a</sup> N = 737	Posttest <sup>b</sup> N = 630	Follow-Up <sup>c</sup> N = 154	Pretest <sup>d</sup> N = 17	Posttest <sup>e</sup> N = 10	Follow-Up <sup>f</sup> N = 11	Pretest <i>N</i> = 754	Posttest <i>N</i> = 640	Follow-Up N = 165
		Gene	ral Attitudes	Items					
Each young adult resident is an individual with unique challenges and needs.	91.3	88.6	89.0	100.0	100.0	90.9	91.5	88.8	89.1
The factors that constitute a high quality of life are the same for all residents.	28.4	23.2	30.5	35.3	40.0	27.3	28.5	23.4	30.3
Young adult residents in long-term care settings have different social, psychological, and physical needs than older residents.	84.5	83.3	85.7	94.1	100.0	81.8	84.7	83.6	85.5
		Self-Eff	icacy Attitud	es Items					
I feel capable of addressing the needs of young adult residents.	73.3	83.2	79.9	100.0	100.0	81.8	73.9	83.4	80.0
I feel capable of providing a high quality of care for young adult residents.	67.4	74.4	73.4	94.1	90.0	63.6	68.0	74.7	72.7
I feel capable of cultivating personal relationships with young adult residents.	80.3	81.0	82.5	94.1	100.0	72.7	80.6	81.3	81.8
When interacting with or caring for young adult residents, I am attentive and patient.	83.2	80.8	82.5	94.1	100.0	81.8	83.4	81.1	82.4
I am knowledgeable about the needs of young adult residents.	71.8	79.4	81.2	100.0	100.0	63.6	72.4	79.7	80.0

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	In-Person		Online			All (Combined)			
Survey Question	Pretest <sup>a</sup> N = 737	Posttest <sup>b</sup> N = 630	Follow-Up <sup>c</sup> N = 154	Pretest <sup>d</sup> N = 17	Posttest <sup>e</sup> N = 10	Follow-Up <sup>f</sup> N = 11	Pretest <i>N</i> = 754	Posttest <i>N</i> = 640	Follow-Up <i>N</i> = 165
		Negat	ive Attitudes	ltems					
I dislike it when young adult residents whine or complain.	26.3	25.7	18.2	17.6	20.0	18.2	26.1	25.6	18.2
Caring for young adult residents is something I would rather avoid.	13.3	11.1	7.8	11.8	10.0	0.0	13.3	11.1	7.3
Young adult residents are more difficult to deal with than older adult residents.	45.5	40.6	36.4	29.4	30.0	18.2	45.1	40.5	35.2
I am uncomfortable dealing with young adult residents.	21.0	20.8	14.3	5.9	20.0	18.2	20.7	20.8	14.5
Young adult residents are too demanding.	25.5	21.3	16.9	17.6	20.0	9.1	25.3	21.3	16.4

<sup>a</sup>The denominator used in these calculations includes in-person participants who submitted a forms packet and answered at least one Attitudes question on the pretest.

<sup>b</sup>The denominator used in these calculations includes in-person participants who submitted a forms packet and answered at least one Attitudes question on the posttest.

<sup>c</sup>The denominator used in these calculations includes in-person participants who submitted a forms packet and answered at least one Attitudes question on the follow-up.

<sup>d</sup>The denominator used in these calculations includes online participants who answered at least one Attitudes question on the pretest.

<sup>e</sup>The denominator used in these calculations includes online participants who answered at least one Attitudes question on the posttest.

<sup>f</sup>The denominator used in these calculations includes online participants who answered at least one Attitudes question on the follow-up.

To determine whether there was an initial effect (pretest to posttest) and a sustained effect of the YALTC training on participant attitudes toward younger adults in LTC settings, the study team planned a series of paired t-tests. However, as with the Knowledge Assessment questions, t-tests could not be conducted because the distribution of responses at every time-point for both training modalities (in-person, and online) was not normally distributed. Consequently, a series of non-parametric two-tailed Wilcoxon signed-rank tests were performed to detect significant differences between each time-point. Respondents who answered "N/A" were coded as missing a response for that question. In addition, the number of online responses at each time-point (pretest, posttest, and follow-up) were insufficient to allow us to examine each modality separately. Therefore, the Wilcoxon results are presented for the in-person and online modalities combined. Unlike the Knowledge Assessment items, the Attitudes items do not have correct answers; respondents rated their agreement with each attitude statement on a 1-to-4 scale (1 = Strongly Disagree; 2 = Disagree; 3 = Agree; 4 = Strongly Agree).

The results of the Wilcoxon signed-rank tests appear in tables 2.4 through 2.6. Preliminary analysis revealed that the Cronbach alpha coefficient—a statistic used to determine whether there is internal consistency between a group of items measuring facets of the same factor—exceeded 0.7 for both the Self-Efficacy and the Negative Attitudes items, indicating that the items in those sections can be considered a group and assessed as a group. The General Attitudes scale consisted of three items ( $\alpha = 0.03$ ), the Self-Efficacy Attitudes scale consisted of five items ( $\alpha = 0.93$ ), and the Negative Attitudes scale consisted of five items do not group together to form a construct and should not be analyzed as a scale. Therefore, we present the Wilcoxon results for all items in the Self-Efficacy and Negative Attitudes as scales and the results for the General Attitudes items individually.

As table 2.4 shows, tests of the combined responses to the General Attitudes reveal one significant difference for an item from pretest to posttest; tests of all other questions revealed no significant difference at any of the three time-points. Agreement with the statement "The factors that constitute a high quality of life are the same for all residents" significantly increased from pretest to posttest. This item did not significantly change from posttest to follow-up. Participants agreed with the statements, "Each young adult is an individual with unique challenges and needs" and "Young adult residents" approximately the same amount at each time-point. This finding seems to indicate that the YALTC training program has little immediate or sustained effect on participants' agreement with these attitudes statements.

For the Self-Efficacy Attitudes items, respondents were asked how much they agreed with statements asking about how capable they felt in both identifying and responding to the needs of young adult residents. Overall, significantly more respondents agreed with self-efficacy items at posttest than at pretest (also significant within the 95-percent confidence interval), and results were largely sustained between the posttest and follow-up (no significant difference); see table 2.5. The biggest positive change was found for items assessing feelings of capability of providing a high quality of care for young adult residents and feeling knowledgeable about the needs of young adult residents.

The Negative Attitudes items asked respondents how much they agreed with negatively-phrased attitudes items such as "I am uncomfortable dealing with young adult residents" and "Caring for young adult residents is something I would rather avoid." In this case, because the items are negatively worded, decreases in average responses indicate less agreement (i.e., less negative and more positive responses to those questions). As depicted in table 2.6, for the combined sample, the number of

respondents agreeing with these items decreased significantly between the pre- and posttest. Gains were sustained at the follow-up and over time, with the number of people agreeing significantly decreasing between posttest and follow-up. Both changes were also statistically significant, falling within the 95-percent confidence interval. The biggest change between pre- and posttest was found for items assessing desire to avoid caring for young adults, and agreement that young adults are too demanding.

Commention	Eligible	Mean Difference in	95% Confider	nce Interval				
Comparison	Respondents†	Attitude Score	Lower Bound	Upper Bound				
Each y	oung adult resident is a	n individual with unique chal	lenges and needs.					
Pretest to posttest	548	-0.02	-0.07	0.03				
Posttest to follow-up	108	-0.02	-0.15	0.11				
The factors that constitute a high quality of life are the same for all residents.								
Pretest to posttest	531	-0.09*	-0.16	-0.01				
Posttest to follow-up	99	0.19	-0.00	0.39				
Young adult residents in long-term care settings have different social, psychological, and physical needs than								
older residents.								
Pretest to posttest	527	0.05	-0.01	0.11				
Posttest to follow-up	102	-0.03	-0.18	0.12				

#### Table 2.4. Wilcoxon Results for General Attitudes Items (Combined)

<sup>+</sup> Only respondents who answered the question at both relevant time-points (pretest to posttest, and posttest to follow-up) were considered "eligible respondents" for the purposes of this test.

\*Denotes a significant result at the p < 0.05 level.

#### Table 2.5. Wilcoxon Results for Self-Efficacy Items (Combined)

Comparison	Eligible Perpendents+	Mean Difference in	95% Confidence Interval		
Comparison	arison Engible Respondents	Attitude Score	Lower Bound	Upper Bound	
Pretest to posttest	541	0.16*	0.13	0.20	
Posttest to follow-up	100	-0.05	-0.13	0.03	

<sup>+</sup> Only respondents who answered at least one question in the self-efficacy attitudes questions at both relevant time-points (pretest to posttest, and posttest to follow-up) were considered "eligible respondents" for the purposes of this test. \*Denotes a significant result at the p < 0.05 level.

#### Table 2.6. Wilcoxon Results for Negative Attitude Items (Combined)

Comparison	Eligible Perpendents+	Mean Difference in	Difference in 95% Confidence Interval		
Comparison	Engible Respondents	Attitude Score Lower Bou		Upper Bound	
Pretest to posttest	545	-0.04*	-0.07	-0.01	
Posttest to follow-up	103	-0.13*	-0.23	-0.02	

<sup>+</sup> Only respondents who answered at least one question in the negative attitudes questions at both relevant time-points (pretest to posttest, and posttest to follow-up) were considered "eligible respondents" for the purposes of this test. \*Denotes a significant result at the p < 0.05 level.

## Chapter 3. Summary of Follow-Up Findings

This chapter presents the findings from the follow-up surveys for both the in-person and online YALTC trainings. Although follow-up results for both in-person and online trainings are presented below, differences between the two modalities should be interpreted with caution, due to the small number of completed follow-up responses obtained for the online group (n = 10).

## A. Knowledge Utilization

The questions in the Knowledge Utilization section of the follow-up instrument assessed whether training participants were able to apply what they learned at the training either at their organization or in working with younger adult residents. Only participants who reported on filter questions that they either worked in a LTC facility or had direct interactions with young adult residents were prompted to answer Knowledge Utilization questions. As illustrated in the results displayed in figure 3.1, participants rated questions that asked about two facets of knowledge utilization: actions taken by themselves or their organization, and the degree to which respondents felt personally prepared to interact with younger adults in LTC facilities posttraining.

Figure 3.1 depicts the responses from participants about actionable ways they utilized their knowledge from the YALTC training. The vast majority (over 90 percent) of participants in both training modes indicated they learned things at the YALTC training that they were able to apply when working with young adult residents. Fewer indicated that their facility utilized principles from the training (70 percent of in-person and 42 percent of online participants). Even fewer participants in both modes indicated their organization or facility changed policies or programs related to younger adults in LTC after the YALTC training. This finding is somewhat unsurprising, as it is easier for individual participants to apply what they learned at the training than for an entire organization or facility to make programmatic changes.

The YALTC training was perceived as particularly helpful in terms of participants' use of YALTC training knowledge for personal preparation in their jobs (see figure 3.2). The vast majority of in-person training participants (88 percent) and all participants in the online training (100 percent) indicated they were better able to distinguish between young adult residents' wants and needs. Similarly, most participants in both training modes felt better able to identify possible reasons behind young adult resident behaviors and felt more capable of addressing the needs of young adult residents. In sum, the YALTC training appears to have been more effective in facilitating individuals' own application of training knowledge than in facilitating organization- or facility-wide programmatic changes or outcomes.

*Figure 3.1. Percentage of Strongly Agree/Agree Responses with Knowledge Utilization Questions: Action Taken* 



Figure 3.2. Percentage Strongly Agree/Agree with Knowledge Utilization Questions: Personal Preparation



#### a. Barriers to Knowledge Utilization

In some cases, despite attempting to affect larger scale facility-level change, participants may encounter systemic or organizational barriers to utilizing the knowledge from the YALTC trainings. When asked to describe what barriers to utilizing their training knowledge they may have encountered at their facility, over half the participants indicated they did not encounter any systemic barriers to change (figure 3.3). Among those who did cite some barriers, resistance by co-workers and budget constraints were most the frequently mentioned. Taken together, these finding suggest that although there are few institutional organizational barriers prohibiting individuals from utilizing training knowledge, some individuals may not have the resources, support, or rank to utilize their training knowledge on a larger scale.



Figure 3.3. Barriers to Posttraining Knowledge Utilization (Combined)

Note: The "No barriers" response option was mutually exclusive to all other response options.

## B. Quality of Life, Quality of Care

The questions in this section of the follow-up survey indicate ways initiatives derived from the YALTC training have affected participants' perceptions of the quality of life (QOL) and quality of care (QOC) for young adults in LTC facilities. Only participants who either work in a LTC facility or have had direct interactions with young adult residents were prompted to answer QOL and QOC questions (in-person, n = 141; online, n = 12).

Participants were asked to rate the YALTC training's effect on QOL and QOC in several ways. First, participants were asked to assess the QOL and QOC of younger adult residents at their facility or organization both before and after the YALTC training. Next, participants were asked to indicate whether they had observed any changes to the QOL and QOC provided to younger adult residents (e.g., positive attitude shifts among staff or positive change in staff interactions with younger adult residents) at their facility since the YALTC training. Finally, participants were prompted to indicate their personal beliefs about the QOL and QOC provided to younger adult residents.

### a. Recalled Change

On the follow-up survey, respondents were asked to provide a global rating of the quality of life at their facility both before and after they attended the training. These items asked participants to rate the quality of life for young adult residents at their facility before and after the training, *using the knowledge they gained from the training.* Therefore, these items reflect participants' recollection of the quality of life at their facility of young adult residents' life as being higher after the training than before the training. This was true for both in-person and online trainees.

In the same way, participants were also asked to rate on the follow-up survey the quality of care at their facilities before and after the AMDA training. As shown in figure 3.5, participants generally rated the quality of care as higher after the training than before the training regardless of their interview training mode.

Cumulatively, these findings suggest that participants noticed an increase in young adult residents' quality of life and quality of care after they took the YALTC training, possibly as a result of the participant utilizing the knowledge they gained during the training. Alternatively, participants could have learned more about what constitutes a high quality of life and high quality of care from the YALTC training and were simply more attuned to these factors posttraining.









#### b. Observed Change

Participants were asked to report whether they had observed specific changes related to the quality of life and quality of care offered at their facilities Across all indicators, approximately half the participants reported that they had observed changes in their facilities since attending the YALTC training, including observing a positive change in attitudes toward young adults at their facilities, observing a positive change in staff interactions with young adult residents, perceiving that the facility had increased the quality of care for young adult residents, and perceiving that their facility had increased the quality of life for young adult residents (see figure 3.6). This was true for both in-person and online trainees.

Participants were also asked to consider their personal beliefs about the quality of care provided to young adults at their facility. On these items (see figure 3.7), half of in-person respondents agreed that the quality of care at their facility had improved since the YALTC training, and a little less than two-thirds (62 percent) agreed that quality of care at their facility could be improved for young adult residents. Online participants felt similarly. Approximately 58 percent believed that the quality of care had

improved since the YALTC training, and half believed the quality of care offered to young adult residents at their facility could be improved.

These findings suggest that the YALTC training had some effect on both observed quality of life and quality of care changes at participants' facilities, as well as on their personal beliefs about the quality of care provided by their facility. The findings also suggest that while approximately half of all participants did observe positive changes, a slight majority of both in-person and online training participants felt that the quality of care offered to young adult residents at their facility could still be improved. Taken together, these findings indicate that the YALTC has been somewhat effective at influencing quality of life and quality of care at the facility-level, but that there is still a need for future trainings and support.





Figure 3.7. Personal Beliefs About Quality of Care



## **Chapter 4. Summary of Training Evaluation Responses**

This chapter provides results that address the third primary objective of this evaluation: assessing the potential scalability of the YALTC training program. We discuss the following factors that are relevant in determining the potential scalability of the YALTC program: in-person and online participants' training evaluation responses, participants' comments about the YALTC trainings, and responses to training scalability questions.

### A. Training Evaluation Responses

Participants' responses to the training evaluation questions provide important insight into the scalability of the YALTC training program. A participant's experience with the logistics of a training can have a significant impact on their overall experience with the training and may consequently affect the absorption of training content. In the sections below, we provide participants' training evaluation ratings and example responses to open-ended training evaluation questions.

#### 1. In-Person and Online Training Evaluation Ratings

On the posttest, both in-person and online training participants were asked to evaluate the YALTC training in terms of the clarity of its objectives, the organization of the training materials, and whether the topic was relevant to them (see figure 4.1). In-person training participants were also asked to evaluate the effectiveness of the trainer (see figure 4.2). As the figures indicate, both the in-person and online trainings were overwhelmingly positively received by training participants; the vast majority indicated that the objectives of the training were clear, the topics were relevant, and the materials were helpful. The majority of in-person training participants also indicated that the trainer was knowledgeable and well-prepared. However, in-person training participants were somewhat critical of the meeting facilities. Analysis of the open-ended comments (see the full results of open-ended comments in section B below) revealed that the majority of critical comments in this area focused on the temperature; many participants felt that the meeting rooms were too cold. Fewer online participants (91 percent) than in-person participants (95 percent) agreed that the time allocated to cover the content presented in each module (i.e., video length) was appropriate.



#### Figure 4.1. Strongly Agree/Agree Responses to Training Evaluation Questions



Figure 4.2. Strongly Agree/Agree Responses Training Evaluation Questions: In-Person Only

#### 2. Online Platform Comments

On the posttest, online participants were prompted to comment on two specific aspects of the online training: course pacing (i.e., the amount of content presented in the allocated amount of time for videos) and the online training platform itself. Samples of respondent comments to both pacing and online platform appear below.

#### c. Online Course Pacing

Participants' perspectives about the pace of the online training platform were mixed. Many reported that the pace of the training was appropriate, given the volume of information; one individual reported that the pace was "a little slow."

"[The pace] was okay; very informative!"

"I thought it was a good pace."

"Good."

"Fine."

"A little slow."

"The material in this training was well organized and there was a lot of information given."

"I felt that the amount of content delivered was adequate."

"[It was] about the right [amount of] time."

"[The training covered] a lot of material that is extremely relevant and critical to my job as a Clinical Social Worker in LTC."

"Pace was appropriate for the information given."

"[The pace was] reasonable."

#### d. Online Platform

Online participants were asked, "Please share any additional comments you may have about the online training platform." Participant responses to this question were overwhelmingly positive. Several pointed

out that they appreciated the convenience offered by the online training, citing that the training was "easy" and "fast."

"[The online training was] very convenient. [I] completed [the training] in the comfort of my office with no interruptions."

"Please continue providing CEUs for this training."

"This presentation shows a more realistic and successful approach to dealing with problem behaviors, and individuals who need our help!"

"Access to the training was easy and fast."

"I hope that there will be more in the future."

"Much, MUCH appreciated!"

"Good training. [I am] seriously considering making it a mandatory training for CNAs and LTC staff."

"I thoroughly enjoyed the training."

"THANK YOU!!!! Please do more trainings like this!!!"

"[The online platform] makes [training] easier since you can do it at your own pace."

### 3. Evaluation Questions Addressing Scalability

Some training evaluation questions on the follow-up assessment provide insight on the future scalability of the trainings by measuring how participants engaged with the material during the training. These questions assess the benefits and challenges of the two training modalities and provide insight about the potential scalability of the YALTC training for the further dissemination of this training program to other regions of the United States.

As illustrated in figure 4.3, nearly all participants indicated that the AMDA in-person trainings facilitated learning. The overwhelming majority of in-person participants reported that the training allowed them to ask questions (93 percent), permitted them to review materials at a later time (96 percent), allowed them to learn at their own pace (93 percent), encouraged engagement with the course material (95 percent), and facilitated an understanding of the material (96 percent). Only a small percentage (an average of 6 percent across all categories) of participants disagreed or strongly disagreed that the training facilitated learning in these ways. These responses are again consistent with past reports and indicate that in-person training attendees found that the YALTC training and materials were successful at facilitating learning in these ways.

Similarly, the majority of the online training participant group felt that the YALTC training and materials facilitated their learning. All online training participants reported that the trainings allowed them to review materials at a later time, learn at their own pace, and understand the material (100 percent). These findings are consistent with the main objectives of offering an online course of providing a flexible learning environment where training participants can learn at their own pace. Most online participants agreed that the training allowed them to engage with the material (92 percent). However, relatively fewer online participants indicated that the training encouraged them to ask questions (75 percent).

Given that this inability to ask questions is an inherent limitation of the current online training format, AMDA should consider adding an additional component to the online training program that would facilitate participants' ability to receive answers to their questions. This could be achieved in several ways; an FAQ page or a "Submit a Question" button might be a good starting point.

Cumulatively, these findings suggest that both the in-person and online training formats are very successful at facilitating and encouraging participant learning. In-person training participants provided overwhelmingly positive feedback about the training's ability to facilitate learning. Further, 40 percent of in-person training participants plan to train on the topic of younger adults in LTC settings in the future (see figure 4.4). Taken together, these findings suggest that not only would the in-person format of the YALTC training be successful if expanded nationwide, but that there is a continued need for trainings on this topic.





Figure 4.4 Percentage of Respondents Planning to Train on Topic in the Future



## **B.** Summary of Training Evaluation Comments

At posttest, all participants (in-person and online) were asked to describe what they liked most about the YALTC training, what aspects of the YALTC training they felt could be improved, and how they planned to change their practice after the training. This section represents a selection of the most helpful comments from participants describing their perceptions of the YALTC training. In sum, training participants found the YALTC trainings to be helpful and informative in both the in-person and online training formats.

### 1. High Points of Training

The most common themes identified in participants' responses to the "high points" of the YALTC training were an appreciation of the enthusiasm and knowledge of the trainer; the helpfulness of the real-life case study videos featuring younger adults in LTC settings; the timeliness, relevance, and importance of the training topic; and the ease of applicability of the content and materials. A selection of comments from both in-person and online participants follows:

*"It actually discussed issues/problems I have had to deal with on my job with residents. Good topic!" –In-Person Training Participant* 

*"It was useful information. Informative, good tools and ideas to utilize in the environment. Case scenarios were applicable to my LTC setting." –In-Person Training Participant* 

"How it brought out the young adult resident in nursing homes today- the differences in their expectations, how they perceive their rights, different areas of their life that play into how they are cared for. They are a growing LTC population and have needed specific recognition in their care to meet their needs." –In-Person Training Participant

"[The trainer] was an excellent speaker and very knowledgeable. Most of all she works in LTC setting and related to those of us who actually are caregivers and work directly with the residents. This is a difficult and challenging job and she does it rather than just talking about it." —In-Person Training Participant

"The training was very informative. The two booklets provided will allow me to bring any learned information back to my staff. The speaker was wonderful in all aspects." —In-Person Training Participant

"In 24 years of nursing, it was the first training I've been to about younger residents and their behaviors. Awesome training, should be a requirement!" –In-Person Training Participant

"The thing I liked most about this training was the real life stories and videos of the LTC patients. This really allows you to see how young adults are living in LTC facilities and the struggles they are facing. The videos also allow you to see the staff perspective and ways to handle certain situations." –In-Person Training Participant

*"I enjoyed the layout of the presentation: the slides followed by short videos and the series made it easy to understand and kept the meeting flowing." –In-Person Training Participant* 

*"It had some very informative information...Needed the refresher course." –Online Training Participant* 

*"[I appreciated the] video presentation and quiz after the unit material [was] presented." – Online Training Participant* 

"The idea of treating all people as people and not just labels and diagnoses!"-Online Training Participant

"The format [was the high-point for me]." –Online Training Participant

"[I liked that the training was] online." –Online Training Participant

"The videos were very helpful in that they gave a first-hand experience." –Online Training Participant

*"I work in a ltc for young people this is the only training for this age group." –Online Training Participant* 

"I like that you could go at your own pace." –Online Training Participant

### 2. Suggestions for Improvement

When asked to provide suggestions for the improvement of future YALTC trainings, nearly half of respondents indicated "N/A" or "No suggestions for improvement." Of the remaining suggestions, many focused on addressing facility issues, such as the room being too cold or audio equipment malfunctions; more effectively aligning the presentation with the training materials; incorporating more participant interaction and participation; and providing more examples of specific interventions for younger adults in LTC. A selection of participants' (in-person and online) comments follows:

"An aspect that could help improve the training maybe more interactive activities that the audience could do in small groups. An example might be different case studies that can be talked through in small groups." —In-Person Training Participant

"[The training was] difficult to follow [because the] manual and workbook didn't follow the slides. [I] had to put so much effort into taking notes [that I] missed content. Optimally [you should] have the sides as a handout....So could you at least have an outline to follow and take notes on. "Lost" a lot of good info." —In-Person Training Participant

"Include more regarding medically fragile young adults that maybe coming from another facility. Caring for DD, medically fragile, non-verbal, highly involved young adults." —In-Person Training Participant

"[The training should offer] more possible solutions to identified problems." —In-Person Training Participant

"[There should be] more time spent on addressing how average nursing homes with a majority of elderly residents and a few young residents deal with the different needs." —In-Person Training Participant

"[I] would have liked to have been able to follow along in book with the speaker." –In-Person Training Participant

"The pre-test should be called a pre-test, not a course evaluation. It was confusing."-Online Training Participant "The videos and slides need to have captions." -Online Training Participant

"[The] website could be easier to use." –Online Training Participant

"[I would like to see] the ability to download some of this into PDF files so that staff education sessions can take place in 15 minute info sessions." –Online Training Participant

"I think some of the modules could be condensed." -Online Training Participant

"Provide more online training, that is capable of completing at home or at your place of employment." –Online Training Participant

"[Add] More activities such as quizzes/ tests." –Online Training Participant

### 3. How Participants Will Change Their Practice Posttraining

Participants were asked to indicate how they anticipated changing their practice after receiving the YALTC training. Many participants indicated they planned to share the information they learned with other staff members or stakeholders at their facility; they would use the information learned at the training to be more patient and understanding with younger adult residents at their facilities; and they would use the information from the training to update young adult residents' care plans. A selection of both in-person and online participant comments follows:

"[I] hope to be able to use some of these practices in the facility and to educate the staff." –In-Person Training Participant

"[I will] be more understanding of the age differences and the issues younger people in nursing home face. [I will] be more understanding with staff who deal with residents." —In-Person Training Participant

"Make better decisions to meet the specific needs of each of my residents whatever their age." – In-Person Training Participant

*"Continue to think outside the box and change care plan rather than trying to change the resident." –In-Person Training Participant* 

"[I will] look at the residents' behavior. Try to figure out their need. Why they are acting that way? What can be done to help them? [I will] make sure the resident is given reasonable choices, [and] that residents and staff can live up to. [I will] stay positive." —In-Person Training Participant

"I hope to take the information I learned back to work and educate my staff on some of the trainings. I now have concrete resources that will help me walk through situations at work with the many young adults we have seen come to the skilled nursing facility." —In-Person Training Participant

*"I will look more closely at the young resident population and make sure that I consider their emotional needs and spend more time with them." –In-Person Training Participant* 

"[I] got great ideas on areas my facilities can improve, starting with attitudes." –In-Person Training Participant *"I hope to get other caregivers in my facility to try to look for better options in meeting the needs of the residents." –In-Person Training Participant* 

*"I will take the learning tools and apply it to my daily work schedules with clients." –Online Training Participant* 

*"I am going to be more mindful of my tone when speaking to people. And improve my listening skills." –Online Training Participant* 

"[I will be] more prepared to take care of younger residents." –Online Training Participants

"[I will be] more understanding of the limits that have to be set." –Online Training Participant

*"I hope to be able to use this training to better understand the younger residents and be an advocate for them." –Online Training Participant* 

"[After this training, I will have] 1-increased ability to set limits with younger residents 2increased skill in individualized behavior management plans 3-ability to effectively teach staff." – Online Training Participant

*"[The] training gave me a new perspective to consider." –Online Training Participant* 

"[This training will allow me to] help educate staff." –Online Training Participant

## Chapter 5. Summary of Training Participation

This section describes the registration, attendance, and completion rates for the in-person trainings, the online trainings, and overall. Registration and attendance tables also appear in the Topline Excel document that accompanies this report. Additional registration and attendance information can be found in the Post-Training Reports and in the Quarterly Reports, previously submitted to AMDA.

### A. Training Registration and Attendance Rates

The in-person training modality had a higher attendance rate than the online training modality (see table 5.1). Out of the 1,327 in-person participants who registered (either before the training as a preregistrant or in person as a new registrant), 69 percent had at least one measure of attendance, meaning they either checked in or turned in a packet. In comparison, only 43 percent of the 103 participants who registered for the online course proceeded to the pretest. Differences in the number, frequency, or kind of reminders sent to in-person versus online registrants (i.e., if the in-person preregistrants receive reminder emails prior to the training, and the online training participants do not), could be a source of the difference. AMDA should consider frequent and often reminders for online participants to address this difference.

	In-Pe	erson	On	line
Measure of Attendance	N	%	N	%
Did not attend	409	30.8	59	57.3
Attended	918	69.2	44	42.7
Total registered	1,327	100	103	100

#### Table 5.1. Attendance by Training Modality

In addition, participants in the in-person training were required to be physically present and to take the course in a 1-day session. Online participants were allowed to progress through the course at whatever pace they wanted as long as they completed the course within 30 days. Due to this key difference between the modalities, in-person participants experienced the training in one session and had limited ability to influence the speed of information dissemination. By contrast, online participants could review the information in as many sessions as they desired, provided they completed the course in one month. Online training participants could also pause a training module or re-watch a module. Although the online training provided multiple features that might make it easier for participants to attend and complete the training, attendance and pretest/posttest completion rates were lower for online training participants.

Examining course completion of the pretest and posttest<sup>1</sup>, in-person participants had a much higher completion rate, as illustrated in table 5.2. The in-person participants had a very high percentage of preand posttest completion compared to the online group. Out of all participants, 87 percent of in-person participants completed both the pre- and posttest, while only 50 percent of online training participants completed both.

<sup>&</sup>lt;sup>1</sup> Presence of posttest information was determined by whether the participant had either answered one question from the posttest Knowledge section or the posttest Attitudinal section. Completion of the evaluation was not considered in determining completion of the posttest.

Durante of Durate of	Proconce of Posttost	In-Pe	erson	Online		
Presence of Pretest	Presence of Positiest	N	%	N	%	
No pretest	No posttest	23	2.9	N/A	N/A	
No pretest	Posttest	10	1.2	N/A	N/A	
Pretest	No posttest	68	8.4	22	50	
Pretest	Posttest	706	87.0	22	50	

#### Table 5.2. Pre- and Posttest Completion by Training Modality

Although online participants had the option of completing the course in multiple sessions during a 1month period, relatively few who completed the training chose to do so. Half the participants who passed the training completed everything (from the welcome screen to the completion screen) in one day, and 76 percent of participants who passed the training viewed all the course content (units 1 through 4) on the same day. Of those who passed the training and did not complete all content in one day (n = 6), the time it took to complete units 1 through 4 ranged from 2 days to 16 days, with an average of 6.2 days. Of the 22 online training participants who began the course but failed to complete it, only 7 viewed any of the course's content. Three of those participants only completed unit 1, and one completed unit 2. Collectively, 86 percent of online participants who began the pretest never continued to view the course content.

## **B.** Completion Rates

This section provides the completion rates for the follow-up survey efforts for every in-person training and the online training, organized by date of training and State. We also provide overall follow-up completion rates by job title. As table 5.3 indicates, the overall follow-up survey completion rate for both in-person and online trainings was 27.6 percent. Follow-up completion rates for participants who took the training in person ranged from 6.7 percent to 54.8 percent across States, which are about average response rates for online-only surveys (Kaplowitz, Hadlock, & Levine, 2004). Despite the relatively few online training completions, the completion rate for the follow-up survey among those who took the training online was very high at 84.6 percent. The high follow-up completion rate could be due to several factors. It may be that online training participants were more likely than in-person training participants to provide valid email addresses because communication about that training was fully online. Another possible reason could be that participants who took the online training were more comfortable working and navigating within a virtual environment, and were therefore more likely to fill out an online follow-up questionnaire than participants who took the training in-person.

The response rates for the follow-up survey also varied by job title. As demonstrated in table 5.4, certified nursing assistants (CNAs) were least likely to respond to the follow-up survey (0 percent), whereas representatives from CMS (66 percent) were most likely to respond.

Training	N Invitations Sent	N Surveys Received	Response Rate*					
Alabama								
January 25, 2016	148	42	28.4%					
June 22, 2017	50	16	32.0%					
	Florida	1						
July 6, 2017	43	6	14.0%					
August 15, 2017	38	7	18.4%					
August 16, 2017	22	5	22.7%					
	Georgi	a						
January 21, 2016	98	18	18.4%					
February 23, 2017	15	1	6.7%					
	Kentuck	۲y						
May 11, 2017	31	17	54.8%					
May 24, 2017	49	9	18.4%					
	Mississip	орі						
May 3, 2016	75	23	30.7%					
May 4, 2016	60	14	23.3%					
	South Card	olina						
June 8, 2016	37	18	48.6%					
October 5, 2016	9	3	33.3%					
	Online trai	ining						
April 14-October 31, 2017	17	12	70.6%					
Overall	692	191	27.6%					

#### Table 5.3. Follow-Up Response Rates by Training

\*Computed by dividing the number of follow-up surveys received by the number of invitations sent.

#### Table 5.4. Follow-Up Response Rates by Job Title (Combined)

Job Title	N Invitations Sent	N Surveys Received	Response Rate (%)
Activities professional	58	11	19.0
CMS	7	4	57.1
CNA	13	0	0.0
DON	40	9	22.5
LPN	21	3	14.3
MD	6	2	33.3
NHA	54	11	20.4
Other	148	59	39.9
RN	91	21	23.1
SW	145	43	29.7
State agency	78	22	28.2
No information	31	6	19.4
Total (cumulative)	692	191	27.6

## Chapter 6. Conclusion

This report presents the findings of Insight's evaluation of the AMDA YALTC training. In response to the growth of the younger adult population in LTC settings, AMDA created the YALTC training program to increase clinical practitioner and caregiver awareness of younger adults in LTC settings. This evaluation broadly aimed to assess the following outcomes of the training:

- Immediate impact on participant knowledge and attitudes toward young adults in LTC settings.
- Sustained impact on participant knowledge and attitudes toward young adults in LTC settings.
- Scalability of the in-person and online trainings for potential future nationwide expansion.
- > Participants' perceptions of the trainings' implementation and effectiveness.

This section summarizes the evaluation's key findings in these areas. The study team also presents a series of recommendations for AMDA to consider in future studies and suggestions for improving future in-person and online YALTC trainings.

### A. Summary of Findings

This section summarizes the key findings from this evaluation, focusing on the impacts of the YALTC program on important participant outcomes.

#### 1. Impact of the YALTC program

Two of the major research questions that guided this evaluation were as follows: 1) What is the immediate impact of the YALTC training program on participants' knowledge and attitudes, and 2) What is the sustained impact of the YALTC training program on participants' knowledge and attitudes?

Overall, the YALTC training program had a significant, positive initial impact on participants' knowledge about younger adult residents. For the combined sample (in-person and online), the number of correct answers to Knowledge Assessment questions significantly increased from pretest to posttest. There was no statistically significant difference between the percentage of correct responses from posttest to follow-up, suggesting that the YALTC training had a lasting effect on participant knowledge.

Similarly, agreement with Attitudes statements significantly increased from pretest to posttest for the combined sample. Again, no significant differences were detected between posttest and follow-up, which suggests that the initial impact of the training was sustained over time. These findings suggest that the YALTC had a significantly positive immediate impact on respondents' attitudes toward young adults and a positive effect on their beliefs about being capable of caring for them.

#### 2. Scalability of the YALTC program

The third major research question guiding this evaluation was an assessment of the scalability of the inperson and online training formats. Cumulatively, our findings suggest that both the in-person and online training formats are very successful at facilitating and encouraging participant learning and would ultimately be successful if expanded. Although both in-person and online training participants overwhelmingly agreed that the training facilitated learning, online participants unanimously agreed that the online format allowed them to review materials at a later time, learn at their own pace, and understand the material. Given that these are some of the primary goals of the online program, these findings provide strong evidence for the scalability of the online training format for future expansion. Approximately 40 percent of both in-person and online training participants plan to train on this topic at some point in the future, further underscoring the need to continue offering the YALTC trainings in both formats.

#### 3. Perceptions of the YALTC program

Based on this report's cumulative findings, the overwhelming majority of in-person and online participants found the YALTC training to be useful, timely, and meaningful. Although some suggestions for improvement of future YALTC trainings were offered by participants, many comments revealed that participants planned to apply the knowledge they learned from the training to their own practice and foresee a need for additional future trainings on this topic.

AMDA's primary goals in creating the YALTC training were to encourage caregivers and practitioners to 1) consider the needs of young adult residents, 2) reflect on how the needs of those young adult residents can be met, 3) identify barriers in caring for younger adult residents, and 4) understand the resources, activities, and care-planning interventions that can be adapted to provide better care for young adult residents.

Overall, both online and in-person respondents indicated that the YALTC training met these goals. As a result of the YALTC training, in-person and online training participants were more able to distinguish between young adult residents' wants and needs and felt better able to meet those needs. In addition, respondents from both training modalities also agreed that they learned things from the YALTC that they were able to apply directly to working with younger adult residents. Evidence drawn from open-ended comments also suggest that participants planned to bring the information they learned from the YALTC trainings to bear on their own care practices and to share that knowledge with others at their facility.

However, far fewer participants indicated that their organization or facility had utilized the YALTC principles, and fewer yet indicated that their organization or facility made modifications to policies or programs as a result of the training. Taken together, this indicates that currently, both in-person and online formats of the YALTC training are useful for individual participants, but are less useful in terms of facilitating organization-wide change. This finding is somewhat unsurprising; facilitating organization-wide change a significant investment of effort and time. To address this, AMDA might consider modifying marketing materials to specifically target whole facilities for future YALTC trainings.

### **B.** Recommendations

In the following section, we provide recommendations for future evaluations and for improvement of future YALTC trainings.

1. **Require valid, unique email addresses upon registration.** In future evaluations, the study team recommends that the online registration platform require each registrant to provide a single valid, unique email address. This evaluation hinged on the successful measurement of respondents' knowledge and attitudes at three discrete time-points: pretest, posttest, and

follow-up. In particular, the ability to obtain data for the follow-up portion relied on being able to send follow-up invitations to each individual training participant at a valid email address. Although each attendee was prompted to provide a unique, valid email address upon registration, the online platform only required registrants to provide a unique combination of first name, last name, and email address. For example, both a John Doe and a Mike Smith could have registered under a single email address because the *combination* of first name, last name, and email address was unique. Consequently, a significant portion of the registrants did not provide valid, unique email addresses. Often, registrants provided a generic institutional email address (such as activities@longtermcarefacility.com) when registering multiple attendees. As a result, approximately 20 percent of follow-up email invitations bounced, were sent to institution email addresses that were not consistently monitored by the same individual, or were not received by the appropriate individuals, significantly reducing the follow-up response rate.

- 2. Incentivize participation on the follow-up survey. To increase the likelihood of success in future evaluations, we recommend that future follow-up survey efforts utilize a variety of means to incentivize participation. While the current evaluation utilized frequent reminders for participants to complete the follow-up survey, future evaluations should consider requiring follow-up responses before issuing continuing education credits.
- 3. Increase the number and frequency of reminders before trainings, particularly with the online training. Our findings revealed that compared to in-person training participants, online training participants had a much lower attendance rate. Only 44 of approximately 103 registrants even began the training, and even fewer completed the training. In addition, only half of the online training participants began the training and finished it on the same day. It may be that participants register for the online training and then forget to begin the course. One potential way to address this issue would be to set up automatic reminders through the online training platform, alerting registrants about their training status after periods of inactivity.
- 4. **Provide the same training materials to all training participants.** Although conclusions should not be drawn about differences between training modalities based on the descriptive data presented in this report, it is possible that the in-person participants had a slight advantage over their online training counterparts on follow-up questions because they could refer to the training materials after the training concluded. AMDA should consider making all training materials and resources—particularly the *Younger Adult in Long-Term Care Tool Kit*—available to online and in-person training participants, if possible.

### **C.** Limitations

Like all studies, this evaluation had some limitations that may impact the interpretation of the study's findings. Below, we discuss these limitations and provide recommendations for addressing them in future studies.

Limited comparability of in-person and online modalities. The small number of online training participants who completed the online training relative to the number of participants who attended the in-person training significantly limits the ability to draw conclusions about any differences or similarities between modalities. Although this report provides side-by-side results for both modalities for descriptive purposes, inferences should not be drawn about the relative impacts on desired outcomes between them. In other words, it is difficult to determine whether the in-person or the online trainings had more of an impact on participant knowledge, attitudes,

or any other desired training outcome. In addition to the low number of online participants, there were slight differences in the training modalities themselves that preclude direct comparison of modalities. For example, in-person training participants were given additional training materials, such as AMDA's *The Younger Adult in Long-Term Care Tool Kit*, that could have had a subtle impact on in-person participants' follow-up scores. In addition, online participants cannot ask questions or interact with the speaker. To mediate the effect of these differences between training modes, AMDA might consider offering the online training in a webinar format to more closely emulate the in-person training.

Low number of online completions and follow-up respondents. The low number of online participant completions and follow-up response rate limited the statistical tests the study team was able to perform. Due to the low number of online completions and follow-up responses obtained during this study, the study team was limited to describing the results using descriptive analysis techniques. In this case, while we present results for the number of individuals in each mode for comparison, the low response rate eliminated the study team's ability to detect whether differences between effectiveness of the two training modes (in-person and online) were statistically significant.

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## **Appendix A. Pretest Instrument**

#### Young Adults in Long-Term Care Settings Questionnaire

1. Cognitive deficits due to developmental delays, traumatic brain injuries, and neurologic illnesses (such as multiple sclerosis) occur more often in younger adult residents than in older residents.

a. True b. False

2. Younger adult residents and older adult residents in long-term care settings have similar medical problems, treatment regimens, and emotional needs.

a. True b. False

3. Since a practitioner's or psychologist's one-time capacity evaluation of a resident remains valid for all subsequent decision-making concerns, use of the U-CARE model at that time is optional.

a. True b. False

4. Identifying residents' defense mechanisms and coping strategies help the inter-professional team address challenges posed by caring for younger adult residents.

a. True b. False

5. Staff should avoid apologizing for mistakes because it will undermine the trust they have built in their relationships younger adult residents.

a. True b. False

6. Boundaries are behavioral limits designed to protect residents from exploitation or harm.

a. True b. False

7. A resident's right to make personal decisions (such as what to wear and how to spend free time) comes before the needs of the facility and staff.

a. True b. False

- 8. Age and developmental stage have little effect on residents' ability to adapt to challenging situations.
   a. True
   b. False
- 9. Caregivers should not acknowledge inappropriate behaviors from residents with dementia or neurocognitive decline because those behaviors are not fully under the residents' control.

a. True b. False

- 10. In order to successfully manage difficult or problematic behavior, facilities should set limits on what can reasonably be accomplished or accommodated.
   a. True
   b. False
- 11. Negotiation (i.e., finding a solution that all parties can live with) is a key skill necessary in creating a therapeutic milieu (or positive therapeutic community).
  a. True
  b. False
- 12. In long-term care settings, care providers must meet all residents' needs and wants. a. True b. False

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A (I am not a care provider)
I feel capable of addressing the needs of young adult residents.	0	0	0	0	0
Each young adult resident is an individual with unique challenges and needs.	0	0	0	0	0
I feel capable of providing a high quality of care for young adult residents.	0	0	0	0	0
I dislike it when young adult residents whine or complain.	0	0	0	0	0
I feel capable of cultivating personal relationships with young adult residents.	0	0	0	0	0
When interacting with or caring for young adult residents, I am attentive and patient.	0	0	0	0	0
I am knowledgeable about the needs of young adult residents.	0	0	0	0	0
Caring for young adult residents is something I would rather avoid.	0	0	0	0	0
Young adult residents are more difficult to deal with than older adult residents.	0	0	0	0	0
I am uncomfortable dealing with young adult residents.	0	0	0	0	0
Young adult residents are too demanding.	0	0	0	0	0
The factors that constitute a high quality of life are the same for all residents.	0	0	0	0	0
Young adult residents in long-term care settings have different social, psychological, and physical needs than older residents.	0	0	0	0	0

Please indicate the degree to which you agree or disagree with the following statements:

## **Appendix B. Posttest Instrument**

#### Young Adults in Long-Term Care Settings Questionnaire

1. Cognitive deficits due to developmental delays, traumatic brain injuries, and neurologic illnesses (such as multiple sclerosis) occur more often in younger adult residents than in older residents.

a. True b. False

2. Younger adult residents and older adult residents in long-term care settings have similar medical problems, treatment regimens, and emotional needs.

a. True b. False

 Since a practitioner's or psychologist's one-time capacity evaluation of a resident remains valid for all subsequent decision-making concerns, use of the U-CARE model at that time is optional.

a. True b. False

4. Identifying residents' defense mechanisms and coping strategies help the inter-professional team address challenges posed by caring for younger adult residents.

a. True b. False

5. Staff should avoid apologizing for mistakes because it will undermine the trust they have built in their relationships younger adult residents.

a. True b. False

- Boundaries are behavioral limits designed to protect residents from exploitation or harm.a. Trueb. False
- 7. A resident's right to make personal decisions (such as what to wear and how to spend free time) comes before the needs of the facility and staff.

a. True b. False

- 8. Age and developmental stage have little effect on residents' ability to adapt to challenging situations.
   a. True
   b. False
- 9. Caregivers should not acknowledge inappropriate behaviors from residents with dementia or neurocognitive decline because those behaviors are not fully under the residents' control.

a. True b. False

- 10. In order to successfully manage difficult or problematic behavior, facilities should set limits on what can reasonably be accomplished or accommodated.
  a. True
  b. False
- 11. Negotiation (i.e., finding a solution that all parties can live with) is a key skill necessary in creating a therapeutic milieu (or positive therapeutic community).
  a. True
  b. False
- 12. In long-term care settings, care providers must meet all residents' needs and wants.a. Trueb. False

Please indicate the degree to which you agree or disagree with the following statements:

	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A (I am not a care provider)
I feel capable of addressing the needs of young adult residents.	0	0	0	0	0
Each young adult resident is an individual with unique challenges and needs.	0	0	0	0	0
I feel capable of providing a high quality of care for young adult residents.	0	0	0	0	0
I dislike it when young adult residents whine or complain.	0	0	0	0	0
I feel capable of cultivating personal relationships with young adult residents.	0	0	0	0	0
When interacting with or caring for young adult residents, I am attentive and patient.	0	0	0	0	0
I am knowledgeable about the needs of young adult residents.	0	0	0	0	0
Caring for young adult residents is something I would rather avoid.	0	0	0	0	0
Young adult residents are more difficult to deal with than older adult residents.	0	0	0	0	0
l am uncomfortable dealing with young adult residents.	0	0	0	0	0
Young adult residents are too demanding.	0	0	0	0	0
The factors that constitute a high quality of life are the same for all residents.	0	0	0	0	0

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Young adult residents in long-term care settings have different social, psychological, and physical needs than older residents.	)	0	0	0	0
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## **Training Evaluation Form**

for participants in The Younger Adult in Long-Term Care training

Trainer: \_\_\_\_\_

**Instructions:** Please indicate your level of agreement with the statements listed below in #1-10.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. The objectives of the training were clearly defined.	0	0	0	0	O
2. The topics covered were relevant to me.	0	0	0	0	0
3. The content was organized and easy to follow.	0	0	0	0	0
4. The materials distributed were helpful.	0	0	0	0	0
5. This training experience will be useful in my work.	0	0	0	0	O
6. The trainer was knowledgeable about the training topics.	0	О	0	0	O
7. The trainer was well prepared.	0	О	0	О	O
8. The training objectives were met.	0	О	0	О	O
9. The time allotted for the training was sufficient.	O	О	0	O	O
10. The meeting room and facilities were adequate and comfortable.	0	0	0	0	O

(More questions on back)

B-4

11. What did you like most about this training?

12. What aspects of the training could be improved?

13. How do you hope to change your practice as a result of this training?

14. Please share other comments or expand on previous responses here:

Thank you for your feedback!

## **Appendix C. Follow-Up Instrument**

**Follow-Up Filter Questions** 

1. Which version of the AMDA Young Adults in Long-Term Care training did you attend? OIn-person training

OOnline training

2. Did you participate in the AMDA Young Adults in Long-Term Care online forum? OYes

ONo

3. Were you able to share what you learned in the AMDA Young Adults in Long-Term Care training with anyone at your facility or organization?

OYes ONo

- 4. Is your primary place of employment a long-term care facility (e.g., skilled nursing facility, nursing home, etc.)?
  - OYes ONo
- 5. Since attending the AMDA Young Adults in Long-Term Care training, have you interacted directly with any residents in a long-term care facility?
  - OYes ONo

Note: If Q4 = "No" and Q5 = "No," skip to Scalability section.

#### Knowledge Utilization

"After attending the AMDA Young Adults in Long-Term Care training"	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A
I learned things that I have been able to apply when working with young adult residents.	0	0	0	0	0
My organization or facility has utilized some of the principles from the training.	0	0	0	0	0
My organization or facility has changed policies or programs that relate to young adults in long term care.	0	0	0	0	0
I am better able to distinguish between the wants and needs of young adult residents.	0	0	0	0	0
I am better able to meet the needs of younger adult residents.	0	0	0	0	0
I am better able to identify the possible reasons behind young adult resident	0	0	0	0	0

behaviors.

#### Quality of Life/Quality of Care

Using the knowledge you gained from the YALTC training, think of the young adult residents in your facility BEFORE you attended the AMDA Young Adults in Long-Term Care training. How would you rate the following?

	Very Good	Good	Fair	Poor	N/A
Young adult residents' quality of life at my facility or organization	0	0	0	0	0
Young adult residents' quality of care at my facility or organization	0	0	0	0	0

Using the knowledge you gained from the YALTC training, think of the young adult residents in your facility AFTER you attended the AMDA Young Adults in Long-Term Care training. How would you rate the following?

	Very Good	Good	Fair	Poor	N/A
Young adult residents' quality of life at my facility or organization	0	0	0	0	0
Young adult residents' quality of care at my facility or organization	0	0	0	0	0

"After attending the AMDA Young Adults in Long- Term Care training"	Strongly Disagree	Disagree	Agree	Strongly Agree	N/A
I have observed a positive change in attitudes toward young adult residents at my facility or organization.	0	0	0	0	0
I have observed a positive change in staff interactions with young adult residents at my facility or organization.	0	0	0	0	0
I believe that the quality of care for young adult residents has improved at my facility or	0	0	0	0	0

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organization.					
My facility or organization now provides a higher quality of care for young adult residents.	0	0	0	0	0
I believe that the quality of care my organization or facility provides for young adult residents could be improved.	0	0	0	0	0
My organization or facility has increased the quality of life for younger adult residents.	0	0	0	0	0

#### **Scalability**

"During the AMDA YALTC training, I was able to"	Strongly Disagree	Disagree	Agree	Strongly Agree
Ask questions	0	0	0	0
Review materials at a later time	0	0	0	0
Learn at my own pace	0	0	0	0
Engage with the material	0	0	0	0
Understand the material	0	0	0	0

#### **Barriers**

After the training, did you encounter any of the following that may have acted as barriers to change at your facility? Please select all that apply:

- □ Resistance by management
- □ Resistance by co-workers or colleagues
- General facility or office culture

Budget

- Policies currently in place
- □ Other (please specify):\_
- □ No, I encountered no barriers to change.\*

\*(Denotes exclusive answer)

#### Young Adults in Long-Term Care Settings Questionnaire

1. Cognitive deficits due to developmental delays, traumatic brain injuries, and neurologic illnesses (such as multiple sclerosis) occur more often in younger adult residents than in older residents.

a. True b. False

2. Younger adult residents and older adult residents in long-term care settings have similar medical problems, treatment regimens, and emotional needs.

a. True b. False

3. Since a practitioner's or psychologist's one-time capacity evaluation of a resident remains valid for all subsequent decision-making concerns, use of the U-CARE model at that time is optional.

a. True b. False

4. Identifying residents' defense mechanisms and coping strategies help the inter-professional team address challenges posed by caring for younger adult residents.

a. True b. False

5. Staff should avoid apologizing for mistakes because it will undermine the trust they have built in their relationships younger adult residents.

a. True b. False

- Boundaries are behavioral limits designed to protect residents from exploitation or harm.a. Trueb. False
- 7. A resident's right to make personal decisions (such as what to wear and how to spend free time) comes before the needs of the facility and staff.

a. True b. False

- 8. Age and developmental stage have little effect on residents' ability to adapt to challenging situations.a. Trueb. False
- 9. Caregivers should not acknowledge inappropriate behaviors from residents with dementia or neurocognitive decline because those behaviors are not fully under the residents' control.
  - a. True b. False
- 10. In order to successfully manage difficult or problematic behavior, facilities should set limits on what can reasonably be accomplished or accommodated.

a. True b. False

- Negotiation (i.e., finding a solution that all parties can live with) is a key skill necessary in creating a therapeutic milieu (or positive therapeutic community).
   a. True
   b. False
- 12. In long-term care settings, care providers must meet all residents' needs and wants.a. Trueb. False

Please indicate the degree to which you agree or disagree with the following statements:

Strongly Disagree	Disagree	Agree	Strongly Agree	N/A-I am not a care provider

C-4

I feel capable of addressing the needs of young adult residents.	0	0	0	0	0
Each young adult resident is an individual with unique challenges and needs.	0	0	0	0	0
I feel capable of providing a high quality of care for young adult residents.	0	0	0	0	0
I dislike it when young adult residents whine or complain.	0	0	0	0	0
I feel capable of cultivating personal relationships with young adult residents.	0	0	0	0	0
When interacting with or caring for young adult residents, I am attentive and patient.	0	0	0	0	0
I am knowledgeable about the needs of young adult residents.	0	0	0	0	0
Caring for young adult residents is something I would rather avoid.	0	0	0	0	0
Young adult residents are more difficult to deal with than older adult residents.	0	0	0	0	0
I am uncomfortable dealing with young adult residents.	0	0	0	0	0
Young adult residents are too demanding.	0	0	0	0	0
The factors that constitute a high quality of life are the same for all residents.	0	0	0	0	0
Young adult residents in long-term care settings have different social, psychological, and physical needs than older residents.	0	0	0	0	0

#### Do you or your organization have any plans to train on this topic in the future?

OYes ONo

[If yes] Please describe:

Please provide any additional comments you may have about the AMDA Young Adults in Long-Term Care training in the space below:

## **Appendix D. iCohere Data Cleaning Procedures**

The procedures used to clean the data obtained from the iCohere online training platform are described below.

- 1. The file downloaded from iCohere contained 93 observations for individuals applying to take the YALTC course for CEU credits.
  - a. Of those, eight observations were test entries and were deleted. Each deleted test account had an enrollment start date of April 7, 2017, or earlier.
  - b. The resulting data file contained 85 registrants.
- 2. The file downloaded from iCohere contained 19 observations of individuals registering to take the YALTC training for a participation certificate.
  - a. Of those observations, one was a test entry and was deleted.
  - b. Of the remaining observations, two cases were simultaneously registered to take the course for CEU credits. These cases had not completed either training. These observations were retained, although their records were manually set to missing for the non-credit group to remove the duplicate records.
  - c. The resulting file contained 18 registrants.

Overall, 103 individuals registered for the online training. Of those registrants, 22 completed the training; 81 did not complete the training.

D-1