

Embrace Technology to Innovate: A Comparison of Select Platforms for the Aging Nutrition Network

Background

Technology is the practical application of knowledge. This resource focuses on computer and information technology for senior nutrition programs. The Nutrition and Aging Resource Center hosted numerous discussions with Innovations in Nutrition (INNU) Program and Services grantees, State Units on Aging (SUA), Area Agencies on Aging (AAA) and local service providers (LSP) to learn how senior nutrition programs leverage technology. Respondents said they use technology platforms to:

- Reach participants and providers
- Modernize service delivery
- Increase efficiency and scale operations
- Improve data collection and management
- Manage projects
- Evaluate/demonstrate impact and outcomes

Comparison of Select Platforms

- The following technology platforms are examples from the aging network. The tables do not include a complete list but rather, a starting point for senior nutrition programs thinking about ways to modernize programs and services.
- The Nutrition and Aging Resource Center does not endorse or recommend any specific software. Programs seeking additional information about the platforms, applications and devices described in this resource are encouraged to contact the business or organization directly.

Technology Education for Older Adults

Technology/ Platform	What is it?	How was it utilized?	Features and benefits according to the aging network
Older Adults Technology Services (OATS)	AARP affiliate service to improve digital equity	Technology education for older adults	<ul style="list-style-type: none"> • Provided helpful, step-by-step instruction for participants with OATS trainer • Offers its own virtual and in-person programming
Teens Teach Technology	Non-profit technology education service	Technology education for older adults	<ul style="list-style-type: none"> • Described as engaging and enjoyable programming for participants; chapters across the US partner with aging programs

Call, Text, and Video Conferencing Systems

Technology/ Platform	What is it?	How was it utilized?	Features and benefits according to the aging network
Friendlybuzz	Call system	Facilitate, record, and transcribe calls	<ul style="list-style-type: none"> Used in phone-based social connection training programs adapted for use by organizations such as AAAs and other components of the aging services network. Friendlybuzz enables volunteers to call into the system but does not disclose the contact information of the older adult being helped. See Interventions to Prevent Older Adult Suicide: Final Report.
Zoom	Video conferencing	Virtual socialization and education activities (participants); also used in research to conduct focus groups and provider learning collaborative	<ul style="list-style-type: none"> Used in partnership with OATS for educating participants on the USDA Start Simple with MyPlate app Used for conducting research focus groups and for facilitating a learning collaborative to build business acumen and project development skills among grantees
Twilio	Consumer data and communication applications	Texting appointment reminders and follow up materials	<ul style="list-style-type: none"> Improves participation in one-on-one sessions to improve health outcomes for older adults by connecting participants with food and socialization resources
Google Voice	Voice over Internet Protocol (VoIP) phone service	Participant communication	<ul style="list-style-type: none"> Used for more effective outreach to participants via phone or text Can help reach participants who may avoid unfamiliar phone numbers due to phone scam concerns Supports volume texting.
Robotalker	Robo texting and automated call system	Potential tool shared with aging network by stakeholders	<ul style="list-style-type: none"> Offers potential for text-to-speech application that could be used for appointment or event reminders and other communication needs

Cultural Diversity

Technology/ Platform	What is it?	How was it utilized?	Features and benefits according to the aging network
Google Translate	Language translation app	Participant communication	<ul style="list-style-type: none"> Used to communicate, especially via text, with participants who speak languages other than English
LanguageLine Solutions	Translation and interpretation services	Potential tool shared with aging network by stakeholders	<ul style="list-style-type: none"> Offers virtual and in-person services
Language Link	Translation and interpretation services	Potential tool shared with aging network by stakeholders	<ul style="list-style-type: none"> Offers potential for improving engagement with diverse older adults
Well Connected Español - Front Porch	Spanish language telephone and online programming for older adults	Potential tool shared with aging network by stakeholders	<ul style="list-style-type: none"> Provides socialization and education programming for Spanish-speaking older adults across the nation, including classes and support groups
Cultured Health	Dietitian-client matching app	Potential tool shared with aging network by stakeholders	<ul style="list-style-type: none"> Matches participants with dietitians based on shared culture



Nutrition Education and Healthy Aging Programming

Technology/ Platform	What is it?	How was it utilized?	Features and benefits according to the aging network
Start Simple with MyPlate	Nutrition education application	Nutrition education for older adults	<ul style="list-style-type: none"> Based on USDA MyPlate for healthy eating
Text2LiveHealthy	Evidence-based SNAP-Ed nutrition education intervention	Nutrition education	<ul style="list-style-type: none"> Accommodates different learning styles, cultural needs and preferences related to nutrition education Includes behavior change evaluation component, allowing dietitians to spend more time on nutrition counseling
Uniper Care	HIPAA-compliant digital health service	Reducing isolation among participants with “plug and play” access to evidence-based health programming	<ul style="list-style-type: none"> Provides access to socialization and other healthy aging programming and services via TV or mobile device

Connectivity Resources

Technology/ Platform	What is it?	How was it utilized?	Features and benefits according to the aging network
Starlink	Satellite access internet service	Shared with aging network	<ul style="list-style-type: none"> Offers potential for improving access especially in rural areas
Amazon Alexa One service among similar platforms (e.g. Google Assistant , Apple Siri)	Artificial Intelligence (AI)	Virtual assistant technology	<ul style="list-style-type: none"> Voice recognition or virtual assistant technology that aging programs can leverage; the voice service allows a user to “just talk” to a device to access information, requiring no special training
Quick Response (QR) codes	Matrix barcode for accessing information quickly, such as on a website	Connecting participants with information and services	<ul style="list-style-type: none"> Versatile tool for aging nutrition programs as more participants use smartphones

Data Collection and Evaluation

Technology/ Platform	What is it?	How was it utilized?	Features and benefits according to the aging network
Adobe Forms	Data collection and electronic signatures	Participant assessments	<ul style="list-style-type: none"> Used in the field on a tablet and in the office for telephone-based assessments; more secure than paper-based systems
Qualtrics	Online surveys and reports	Data collection and evaluation	<ul style="list-style-type: none"> Used for conducting research (e.g., on decline in congregate nutrition participation)
REDCap	Survey and database management tool	Data collection and evaluation	<ul style="list-style-type: none"> Frequently used in academia for research; Institutional Review Board -approved survey tool; includes electronic participant consent Streamlines and improves accuracy of data collection, especially when gathering large amounts of data; able to calculate assessment scores as programmed (e.g., body mass index) Described as adaptable and secure and a good partner in training users Able to collect data offline (when no internet connection is available) Able to capture qualitative data (in addition to quantitative data) Interfaces with numerous data analysis tools; Strata and IBM Statistical Package for the Social Sciences (SPSS) were specifically mentioned Supports text messaging via Twilio, used by grantees for distributing surveys May not offer all the same features as other survey tools (e.g., SurveyMonkey)
ServTracker	Data and service tracking for aging services	Data collection and service delivery	<ul style="list-style-type: none"> Used to streamline tracking and billing processes, user-friendly for staff, offers timely reports, improves data collection and accuracy Mobile meal application offers recording of real-time meal delivery details

Technology/ Platform	What is it?	How was it utilized?	Features and benefits according to the aging network
SeniorDine	Nutrition data and service tracking software used in restaurant partnerships	Data collection and service delivery	<ul style="list-style-type: none"> • Consumers can use credit card or keychain card to access a predetermined quantity of meals decided by provider/AAA • Helped establish restaurant partnerships for congregate nutrition by streamlining meals and participant data tracking
Salesforce	Customer Relationship Management (CRM) software	Data collection and evaluation	<ul style="list-style-type: none"> • Allows maximum ownership, usability and flexibility of data collection and reporting

Recruiting and Marketing

Technology/ Platform	What is it?	How was it utilized?	Features and benefits according to the aging network
Jotform	Online form builder	Volunteer recruitment	<ul style="list-style-type: none"> • Helps “level the playing field” for programs by making technology available to improve volunteer recruitment and reach a new demographic through interfacing with Google • Has also required programs to improve their internal volunteer management processes
Constant Contact	Email and digital marketing	Newsletters	<ul style="list-style-type: none"> • Allows text messaging to clients, scheduling of emails, social media, engagement data
Canva	Free online graphic design tool (Pro version available for a fee)	Create graphics, print products, presentations, videos, social media posts, newsletters and more	<ul style="list-style-type: none"> • See this June 2023 presentation from the Nutrition and Aging Resource Center: Are you using Canva like a Pro?

How the Aging Network is Tackling Challenges

- Senior nutrition programs are working with partners to address privacy and security concerns in data-sharing.
- Connectivity and equity concerns are an ongoing challenge. Senior nutrition programs pointed out that connectivity concerns affect individuals and providers, such as rural community centers.
- Senior nutrition programs know older adults have various needs. Programs are investing resources to make technology more accessible through various literacy levels, vision difficulties, and hearing difficulties. Senior nutrition programs noted that having staff time available to train participants to use technology is essential. Programs highlighted the importance of approaching these challenges with empathy. Programs also described how increasing community engagement, involving those who have the rapport and expertise to more effectively assist older adults, supports these efforts.
- Programs also described the need for ongoing assistance to support providers to adopt new technology and invest the necessary time and resources in training and implementation.
- Some senior nutrition providers are equipping participants and other partners with devices. Some examples of devices being used include:
 - Virtual assistant devices enabled with Alexa such as Amazon Echo Show 8
 - Tablets (e.g., iPad, Android, Samsung Galaxy, ZTE)
 - Healthcare-specific tablet devices (e.g., Claris Companion, HRS PatientConnect, Continuud, GrandPad, Ibis). Some aging nutrition programs have described these healthcare-specific devices, such as the Claris Companion, as being more tech-friendly among the participants the devices serve when compared to standard tablets.
- Senior nutrition programs are working to improve confidence among participants and providers to adopt new technology. Programs mentioned participant concerns about scams and resulting reluctance to scan a QR code, click a link or respond to a text.

Words of Wisdom from the Aging Network

Equity and Leveling the Playing Field

- SUAs explained the role of technology in “leveling the playing field” for providers by making certain technology available from the state level, allowing AAAs and providers to focus on service delivery. This was described as a strategy to improve equity and quality service delivery among diverse communities. SUAs mentioned the need to keep the long-range view in mind as change takes time.
- SUAs are leveling the playing field with statewide data collection, nutrition education, nutrition analysis and volunteer recruitment systems.

Partnerships

- Senior nutrition programs encouraged partnerships with local community centers and colleges to provide intergenerational technology education and programming.
- Strong partnerships with information technology experts helped reveal cases in which aging nutrition programs “don’t know what we don’t know” about the capabilities of technology programs and what is possible. Don’t assume it can’t be done – ask!

Expanding and Improving Service Delivery

- Senior nutrition programs described using technology to expand and improve the quality of services in settings where barriers existed before. One example is conducting malnutrition screening in congregate nutrition settings and implementing interventions among community-residing older adults earlier, before malnutrition is diagnosed in a hospital setting.
- Some INNU projects are developing their own websites and applications to connect older adults to nutrition education, food, and other community resources.
 - The [REACH](#) (Resources, Education, Activities, Community, Health) app is a component of [SeniorDine](#) (see table above) that helps programs deliver nutrition education and marketing materials to participants. Programs can access and evaluate participant utilization data similar to restaurant meal utilization reports from SeniorDine.
 - Texas State University's [NUEVA](#) app is a food delivery application (in the developmental phase as of January 2024) designed to increase the capacity of senior nutrition programs.
 - Lanakila Pacific has developed [Kupuna U](#), a unifying hub of all of the programs' remote programming and digital literacy activities. Participants can bring their own devices or use rented tablets. Kupuna U hosts a wide variety of classes, including health and wellness classes, as well as activities from partner organizations.

Conclusion

Technology is changing our world and how senior nutrition services are delivered. Given the rapid evolution of platforms, applications, and inherent flexibilities in delivering Older Americans Act (OAA) nutrition services; aging nutrition programs are encouraged to collaborate with Information Technology experts, SUAs, AAAs, LSPs, contracted partners and other stakeholders in evaluating their own technology needs and solutions.

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Additional Resources:

- [Innovations in Nutrition Projects](#) Web page with links to several projects with a technology focus
- [INNU Grantee Lightning Talks](#) YouTube videos of INNU grantees introducing their projects
- [Tele or Virtual Nutrition Education for Older Adults](#) Guide with examples of technology platforms and vendors as well as numerous technology and nutrition education resources for older adults
- [Purchasing Foodservice Software Guide](#) Considerations around nutrient analysis software and comparison of software
- [Innovations and Lessons Learned from COVID-19](#) Brief that discusses the role of technology including virtual programming and gathering data
- [Business Management](#) Links to resources from the Nutrition and Aging Resource Center
- [Monthly INNU Grantee Gathering 4/28/22 Technology Topic](#) YouTube recording of discussions referenced in this resource
- [Quarterly INNU Grantee and SUA Combined Gathering 10/26/23 Technology Panel](#) YouTube recording of discussions referenced in this resource

Additional Partner Resources:

- [Tools for Reaching a Remote Audience](#) National Council on Aging article discussing pros and cons of popular tools used in delivering services remotely
- [Referrals and Interventions for Older Adults with Food Insecurity](#) Administration for Community Living YouTube recording that mentions several technology-based referral systems
- [Social Health Access Referral Platforms \(SHARPs\) Function Checklist](#) Aging and Disability Institute guide explaining issues to consider in implementing technology-based referral systems
- [Tapping Into Technology to Stay Connected and Engaged](#) engAGED: The National Resource Center for Engaging Older Adults guide to platforms, devices, assistive technology, and connectivity
- [Implementing and Expanding Virtual Programming for Older Adults](#) engAGED: The National Resource Center for Engaging Older Adults technology implementation and best practices guide
- [Implementing Hybrid Programs: Considerations and best practices for aging network organizations](#) engAGED: The National Resource Center for Engaging Older Adults hybrid programming guide
- [The Older Individuals who are Blind - Technical Assistance Center](#) Website with articles and resources describing access and assistive technology for those who are blind
- [Creating a More Welcoming World for Deaf, Hard of Hearing, and Deaf-Blind Individuals | ACL Administration for Community Living](#) National Institute on Disability, Independent Living, and Rehabilitation Research (NIDILRR) works to increase choices, opportunities, and accommodations for people with disabilities through advancements in technology and engineering