Leveraging Emerging Technologies to Strengthen the Dementia Care Workforce

ADvancing States Annual HCBS Conference
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Meet the Presenters

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Our Vision: A world without Alzheimer's and all other dementia®

Our Mission: The Alzheimer's Association leads the way to end Alzheimer's and all other dementia — by accelerating global research, driving risk reduction and early detection, and maximizing quality care and support.
Dementia

Umbrella term for loss of memory and other thinking abilities severe enough to interfere with daily life.

- Alzheimer’s: 60-80%
- Lewy Body Dementia: 5-10%
- Vascular Dementia: 5-10%
- Frontotemporal Dementia: 5-10%
- Others: Parkinson’s, Huntington’s

Mixed dementia:
Dementia from more than one cause
2021 ALZHEIMER’S DISEASE FACTS AND FIGURES

MORE 6 MILLION Americans are living with Alzheimer’s

DISCRIMINATION is a barrier to Alzheimer’s and dementia care. These populations reported discrimination when seeking health care:

- 50% of Black Americans
- 42% of Native Americans
- 34% of Asian Americans
- 33% of Hispanic Americans

OVER 11 MILLION Americans provide unpaid care for people with Alzheimer’s or other dementias

IN 2021, Alzheimer’s and other dementias will cost the nation $355 BILLION

These caregivers provided an estimated 15.3 billion hours valued at nearly $257 BILLION

By 2050, these costs could rise to more than $1.1 TRILLION

1 IN 3 seniors dies with Alzheimer’s or another dementia

It kills more than BREAST CANCER + PROSTATE CANCER

COMBINED

INCREASED 145% Alzheimer’s and dementia deaths have increased 16% during the COVID-19 pandemic

Between 2000 and 2019, deaths from heart disease have DECREASED 7.3%
The Impact of COVID-19 on PWD

48% of nursing home residents and 42% of assisted living residents have dementia.

People with dementia are twice as likely to get COVID and four times more likely to die from it.

172,000+ residents and workers have died from COVID at LTC facilities making up 34% of all COVID deaths in the U.S.

Risk was greater for African Americans with dementia, who were close to three times as likely to be infected with COVID.
Pre-existing Challenges Magnified by COVID-19

• Direct care workforce shortage
• Inadequate training standards
• Low reimbursement rates
• Insufficient infection control protocols
• Importance of emergency preparedness

The pandemic has amplified the need to identify solutions that aid our partners in care to deliver critical services.
Bringing High Quality, Dementia-Informed, Person-Centered Care into Long-Term and Community-Based Care Settings
Defining Quality Care: Dementia Care Practice Recommendations
Quality Care: History

- Guidelines for Dignity
- Key Elements of Dementia Care
- Dementia Care Practice Recommendations
• Evidence-based practices
• 56 recommendations by 27 expert authors
• Applicable to various care settings and throughout the disease continuum
• Published as a supplement to Feb 2018 issue of The Gerontologist
• Foundation for quality person-centered care
Dementia Care Practice Recommendations

Person-Centered Focus

Detection and Diagnosis
Assessment and Care Planning
Medical Management
Information, Education and Support
Dementia-Related Behaviors
Activities of Daily Living
Workforce
Supportive and Therapeutic Environment
Transition and Coordination of Services

alz.org/qualitycare
PERSON CENTERED FOCUS

- Know the person
- Person’s reality
- Meaningful engagement
- Authentic, caring relationship
- Supportive community
- Evaluation of care practices
Emergency Preparedness: Caring for PWD in Long-Term and Community-based Care Settings

• Tips for supporting persons with dementia
  – Preventing Illness – handwashing, social distancing
  – Providing person-centered care even in emergency situations – access to personal information form, knowing the person
  – Helping keep families and friends connected – reducing social isolation, technology applications, “What You Need to Know” fact sheet
  – Assisting with eating and drinking – ability to recognize hunger/thirst
  – Monitoring walking/unsafe wandering – ability to exercise/go outdoors
  – Dementia Related Behaviors - Observing and Responding – form of non-verbal communication to relay a feeling, unmet need or intention
    • Triggered by the interaction between the individual and his/her social and physical environment

• Based on Dementia Care Practice Recommendations
• Supported by 36 organizations and affiliated associations
• www.alz.org/professionals-covid
Project ECHO – “All Teach, All Learn”

MOVING KNOWLEDGE, NOT PEOPLE

Learning Loop

Knowledge Exchange

Learning Loop

Subject Matter Experts
- Share knowledge
- Acquire new knowledge
- Facilitate a network

ECHO Participants
- Acquire new knowledge
- Gain confidence
- Join a network

People Reached
- Advance equity
- Increase access to resources
- Earlier identification of those in need
Project ECHO: Long-Term & Community-Based Care

- Launched in 2018
- National & Regional Series
- Dementia Care Practice Recommendations
- Emergency Preparedness Guidelines: Caring for persons living with dementia in a long-term or community based care setting
- Provided training to over 100 communities to date across all LTC ECHO programs

Total reach in 2020 by the special topic Emergency Preparedness ECHO series
Alzheimer’s and Dementia Care ECHO: 
Emergency Preparedness Series 
Project VITAL - Florida

15 communities completed the program

78% of participants said Project ECHO improved the quality of care they provided to community members with dementia
AHRQ ECHO National Nursing Home COVID-19 Action Network

• $250M CARES Act – AHRQ contract to Project Echo
• Alzheimer’s Association approved as a Training Center
  – Phase I – 16 weeks/Continuation Phase – 19 weeks
  – Focus – Infection Control, Quality Improvement, Dementia Care & Support
• Engaged 348 nursing homes (42,496 licensed beds) weekly in 267 sessions between 11/5/20 – 8/31/21
AHRQ Echo National Nursing Home COVID-19 Action Network - PHASE II

- Weekly 5 - 7 minute videos focused on latest clinical updates
- Hosted by the Alzheimer’s Association
  - Information from Facts & Figures presented each week
- Coordinated through IHI (Institute for Healthcare Improvement)
  - IHI moved videos to YouTube format based on feedback for general public access
- Available to all Training Centers/Nursing Homes across the country
Supporting Dementia Caregivers and Addressing Social Isolation
Florida Numbers

Demographics
- 5.9 million Floridians are over 60 years old.
- By 2030, this will increase to 7.6 million – a 30% increase.

Aging Network Structure
- Department of Elder Affairs - State Unit on Aging,
- 11 Area Agencies on Aging (AAAs),
- Many providers in communities throughout Florida
Focusing on dementia in Florida

**FLORIDA ALZHEIMER’S STATISTICS**

**PREVALENCE**

<table>
<thead>
<tr>
<th>Year</th>
<th>TOTAL</th>
<th>ESTIMATED % CHANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>580,000</td>
<td>24.1%</td>
</tr>
<tr>
<td>2025</td>
<td>720,000</td>
<td></td>
</tr>
</tbody>
</table>

**CAREGIVING (2020)**

- 527,000 Number of Caregivers
- 685,000,000 Total Hours of Unpaid Care
- $10,636,000,000 Total Value of Unpaid Care

- 47.8% % of caregivers with chronic health conditions
- 16.3% % of caregivers with depression

**HOSPICE (2017)**

- 19,897 # of people in hospice with a primary diagnosis of dementia

**HOSPITALS (2018)**

- 1,552 # of emergency department visits per 1,000 people with dementia

**MEDICAID**

- $2.689 BILLION Medicaid costs of caring for people with Alzheimer’s (2020)

- 15% % in hospice with a primary diagnosis of dementia
- 23.0% dementia patient hospital readmission rate
- 28.4% projected change in costs from 2020 to 2025
The COVID-19 Pandemic

Addressed the basic needs of older adults
  • Meeting needs for steep increases in home-delivered meals, and staffing grocery and prescription delivery services

Addressed social and emotional needs
  • Brainstorming creative ways to address and help mitigate the negative health impacts of loneliness and reduce social isolation

Receipt of significant federal funding to meet immediate needs
  • Families First $18 million
  • CARES Act $64 million
  • Coronavirus Preparedness and Response Supplemental Appr $4.5 million
  • Consolidated Appropriations Act $16.5 million
Focusing on dementia in Florida

Alzheimer’s Disease and Related Dementias (ADRD): Florida State Health Improvement Plan – Priority Area 9

• **Goal AD1:** Strengthen the capacity to address Alzheimer’s Disease & Related Dementias (ADRD) in Florida
  
  Strategy AD1.1: Promote early detection/early diagnosis, brain health and ADRD support services in Florida.

• **Goal AD2:** Assure a competent ADRD workforce through education and training
  
  Strategy AD2.1: Enhance current education/training for all staff working in Assisted Living Facilities, Skilled Nursing Facilities, Adult Day Care Programs, Specialized Adult Day Care Programs, Hospice facilities, and Home Health Agencies.

• **Goal AD3:** Enhance support for those living with ADRD and their caregivers in Florida
  
  Strategy AD3.1: Develop and administer campaigns or policies that support those living with ADRD and their caregivers in Florida.
The COVID-19 Pandemic

Reinforced crisis response services for clients

- Telephone reassurance,
- Teletherapy,
- Animatronic therapeutic pets,
- Tablets for Long-Term Care residents (i.e., PROJECT: VITAL in partnership with the Alzheimer’s Association)
- Mental health flyers
- Billboards
The pandemic thoroughly disrupted the Social Determinants of Health—the conditions in which people are born, grow, live, work and age—but in so doing:

• Has increased awareness and understanding of social services as critical to population health

• Has provided numerous opportunities for rebuilding and reorganization at all levels and the ability for communities to see the benefits of new and expanded technology with the advent of new programs and improved services

• Receipt of significant federal funding to invest in Florida’s Aging Network
  – $106.7 million American Rescue Plan Act
Focus on the future

• What we didn’t know a year ago was the vital significance of mental health and well-being, as well as the access to person-centered mental and physical health care.

• States provided with significant funding to advocate, support, and promote successful strategies in addressing social isolation and loneliness.

• Emphasis on technology.

• Project VITAL expansion.

• Direct care worker training.
Project VITAL
Bringing New Technology to an Age Old Challenge

alzheimer's association®
Background

Social engagement is an important aspect of well-being and cognitive health, especially in older adults. Lack of social engagement and the resulting social isolation can have negative impacts on health and well-being.

Loneliness and social isolation are an even greater concern for those in senior living environments.

With COVID-19, the impact of social isolation in senior living communities increased with the social distancing guidelines, cancelation of group and communal activities, and closure to visitors.

COVID-19 restrictions have disrupted the ability for residents to connect with their usual support systems and increased distressing behaviors and mood disturbance for individuals with dementia.
Background

To mitigate these risks and to support those in senior living communities, especially those living with ADRD, the potential utility of technology has increasingly been explored.

A number of technologies have shown a positive impact on reducing social isolation, increasing quality of life, increasing positive emotions, and promoting greater level of activity and social engagement.

The purpose of this project is to assess the effectiveness of technology, specifically tablets, in reducing feelings of social isolation and increasing mood among residents during the COVID-19 pandemic.
Project VITAL: Virtual Inclusive Technology for ALL

Leverages customized technology and resources to positively impact social isolation, stress, and well-being

Originally launched in April 2020 with additional phases adopted throughout the year and continuing into 2021

Public-private partnership between Florida’s Department of Elder Affairs (DoEA), Alzheimer’s Association, and other stakeholders
Key Components Of Project VITAL

Connection  Engagement  Education  Support
150 care communities received 2 tablets each to connect and engage residents and their families (iN2L)

Project ECHO was provided to facilitate educational and support opportunities for staff through a case-based, video learning platform.

Alzheimer’s Association virtual and online education and support provided for family caregivers in targeted underserved communities
VITAL 2.0

Additional 150 care communities and 300 additional tablets

Evidence-based online professional dementia care staff training and certification

VITAL Virtual Forums to engage stakeholders for sustainability
### Project VITAL 1.0 and 2.0: 300 Care Communities

<table>
<thead>
<tr>
<th>Community Type</th>
<th>Community Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assisted living (55%)</td>
<td>14% had 1-9 beds</td>
</tr>
<tr>
<td>Skilled nursing (37%)</td>
<td>15% had 10-49 beds</td>
</tr>
<tr>
<td>Memory care (6%)</td>
<td>31% had 50-99 beds</td>
</tr>
<tr>
<td>Adult family-care homes (2%)</td>
<td>29% had 100-149 beds</td>
</tr>
<tr>
<td></td>
<td>11% had more than 150 beds</td>
</tr>
</tbody>
</table>
Project VITAL 1.0 and 2.0 Six Month

107 completed surveys in total
- 63 respondents from VITAL 1.0 communities
- 44 respondents from VITAL 2.0 communities

2 respondents indicated that their communities did not use the tablets

Final sample size: 105 respondents
- VITAL 1.0: 62 respondents
- VITAL 2.0: 43 respondents
Survey Participants

Age
• 49 years average

Gender
• 12 Male
• 91 Female
• 2 NA

Race/Ethnicity
• 68 White
• 10 Black/African American
• 3 Asian
• 10 Hispanic/Latino (any race)
• 7 Other
• 7 NA

Years in the care community
• 7 years average

Role
• 19 Administrators
• 64 Activity directors
• 11 Other

Degree
• 2: no degree; 2: GED
• 22: high school
• 15: 2-year college
• 44: 4-year college
• 11: Master degree
COVID-19 Precautionary Measures

- Most communities (89%) introduced tablets in 2020
- 61 out of these 95 communities introduced tablets between April and June
- 99% of communities were under COVID-19 precautionary measures
## Perceptions and Tablet Use

<table>
<thead>
<tr>
<th>Question (1: strongly disagree - 5: strongly agree)</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residents have been struggling with loneliness since the implementation of the COVID-19 precautionary measures</td>
<td>4.38</td>
<td>0.84</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Residents' mood declined since the implementation of the COVID-19 precautionary measures</td>
<td>4.20</td>
<td>0.95</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>The iN2L tablets were useful in reducing residents' loneliness</td>
<td>4.28</td>
<td>0.92</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>The iN2L tablets were useful in improving residents' mood</td>
<td>4.31</td>
<td>0.90</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>The iN2L tablets made it easier for residents to stay in touch with family and friends</td>
<td>4.30</td>
<td>0.99</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Residents enjoyed using the iN2L tablets</td>
<td>4.30</td>
<td>0.95</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>The iN2L tablets made it easier for residents to adjust to COVID-19 precautionary measures</td>
<td>3.87</td>
<td>1.06</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Residents understood how to use the iN2L tablets</td>
<td>2.92</td>
<td>0.94</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>I had enough time to help residents with the iN2L tablets</td>
<td>3.64</td>
<td>1.14</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>
## Other Findings

### Leadership
- 87 communities: leadership did not change in the last 6 months, changes in 18 communities
- Executive leadership supported the iN2L tablets (1: strongly disagree to 5: strongly agree)
  - Mean = 4.50, SD = 0.95, ratings range from 1 to 5

### Training
- I had sufficient training on the use of the iN2L tablets (1: strongly disagree to 5: strongly agree)
  - Mean = 4.14, SD = 1.13, ratings range from 1-5
- I had sufficient technical support on the use of the iN2L tablets (1: strongly disagree to 5: strongly agree)
  - Mean = 4.18, SD = 1.12, ratings range from 1-5
### Other Findings

#### Acceptance
- I enjoy using the iN2L tablets with the residents (1: strongly disagree to 5: strongly agree)
  - Mean = 4.46, SD = 0.93, ratings range from 1 to 5
- I welcome the use of the iN2L tablets (1: strongly disagree to 5: strongly agree)
  - Mean = 4.58, SD = 0.87, ratings range from 1 to 5

#### Ease of Use
- The iN2L tablets were easy to include in our daily routines (1: strongly disagree to 5: strongly agree)
  - Mean = 4.00, SD = 1.14, ratings range from 1 to 5
- The iN2L tablets were easy to use (1: strongly disagree to 5: strongly agree)
  - Mean = 4.23, SD = 1.05, ratings range from 1 to 5
What We Heard

We want to keep it. The residents have truly enjoyed all of the features. The families enjoyed the video chatting.

We have very much enjoyed them, each month we celebrate a different country and we use the iN2L for music from the country we are celebrating. We also use them for bed bound residents to play relaxation music.

I have used the iN2L in my memory care unit. The sing-alongs the old programs Lone Ranger etc. are fabulous. It makes a HUGE difference in my residents suffering with sun downers.

The tablets have been a great tool for distractions from COVID.
What We Heard

Most residents are **not capable of using on their own**. Basically, I have to do everything for them. I am the only one in my department. Which, leaves limited time to spend with residents while they attempt to use the notebook.

Would like to schedule for some **more training**.

I believe the concept is amazing. The **technical issues** and how slow the tablets can become is frustrating to the residents and staff. There is room for improvement on how to make tablet settings and videocalls more user friendly.

**Two devices are not enough** to really get a lot of people using them on a regular basis. Only our more computer savvy residents were wanting to use them. Others need more one on one to use them.
<table>
<thead>
<tr>
<th>What’s Next: VITAL 3.0 and 4.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 caregivers at home received a tablet to connect and engage (iN2L)</td>
</tr>
<tr>
<td>Alzheimer’s Association virtual and online education and support provided for family caregivers</td>
</tr>
<tr>
<td>Concern and Awareness Campaign focusing on social isolation and mental health</td>
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</tbody>
</table>
Other State-Wide Iterations

- New Mexico
- Montana
- Virginia
- Texas
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alz.org/professionals
alzimpact.org/state