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EWA Conference | 11.12.2024

Telehealth geriatrics workforce training for the primary care providers in provider shortage areas, State of Nevada

Welcome

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Welcome

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Acknowledgement & disclosure

- Ji Yoo & Yonsu Kim received funding supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (DHHS) award #U1QHP53032; Nevada State DHHS Aging Disability Services Division (ADRD) award #2101NVHDC6-00.
- The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by ADSD, HRSA, DHHS, the U.S. or Nevada State Governments.
- Sun Me Wallace contributed to project administration for this presentation.

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Conflict of interest

Ji Yoo, MD
Has no real or apparent conflicts of interest to report.

Yonsu Kim, PhD
Has no real or apparent conflicts of interest to report.

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Agenda

Ji Yoo, MD

- Learning objectives
- Provider shortage, State of Nevada
- Telehealth training for provider/caregiver
- Takeaway messages

Yonsu Kim, PhD

- Impact of telehealth training – clinical/economic appraisal
- Policy implications

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Learning objectives

1. Illustrate geriatrics workforce unmet needs in State of Nevada

2. Employ telehealth as primary care delivery and provider training

3. Appraise clinical/economic outcomes of telehealth primary care for the dementia caregivers

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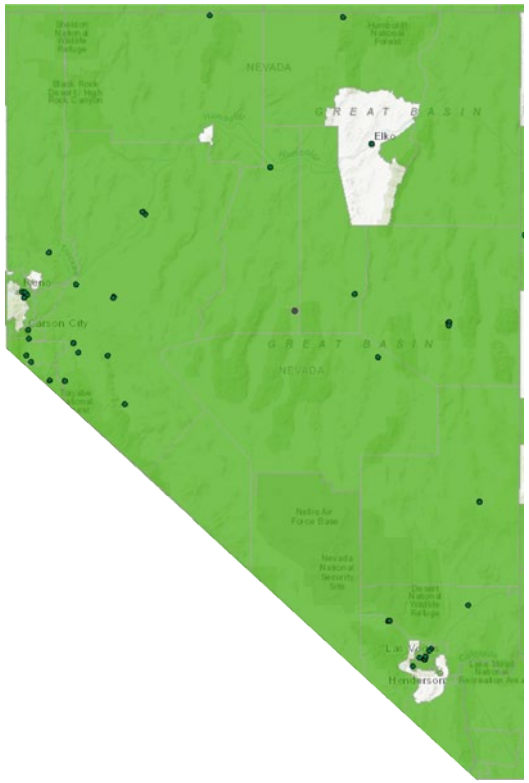
Provider shortage state, Nevada



Green: primary care provider shortage.
95% population concentrated in 5% areas – Clark/Washoe counties & Carson City.

[FY2023 HPSA report. https://www.Data.HRSA.gov.
Jung et al. J Rural Health. 2024.
https://www.doi.org/10.1111/jrh.12872.]

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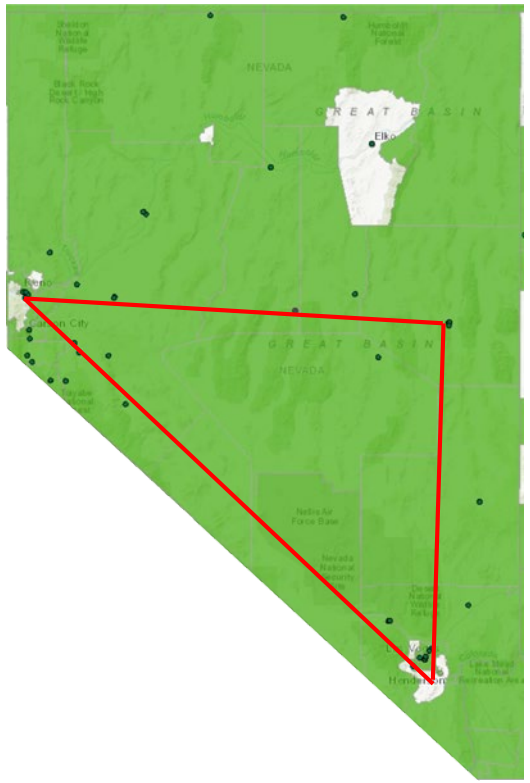
Response to COVID-19 pandemic



Government (Platform):

- State of Nevada ADSD

Academia (Training curriculum):

- UNR Sanford Center of Aging

& Kirk Kerkorian School of Medicine at UNLV

Community Organization (Training delivery):

- Provider: Comagine Health, Renown Health, Cleveland Clinic Lou Ruvo Center for Brain Health, UNLV Health, Mission Pines Nursing Rehab Center, William Bee Ririe Rural Health
- Caregiver: Nevada Senior Services

Nevada Geriatrics Telehealth Collaborative.1/19/2021. https://adsd.nv.gov/uploadedFiles/adsdnvgov/content/Boards/TaskForceAlz/2021/Nevada_Geriatrics_Telehealth_Collaborative.pdf.

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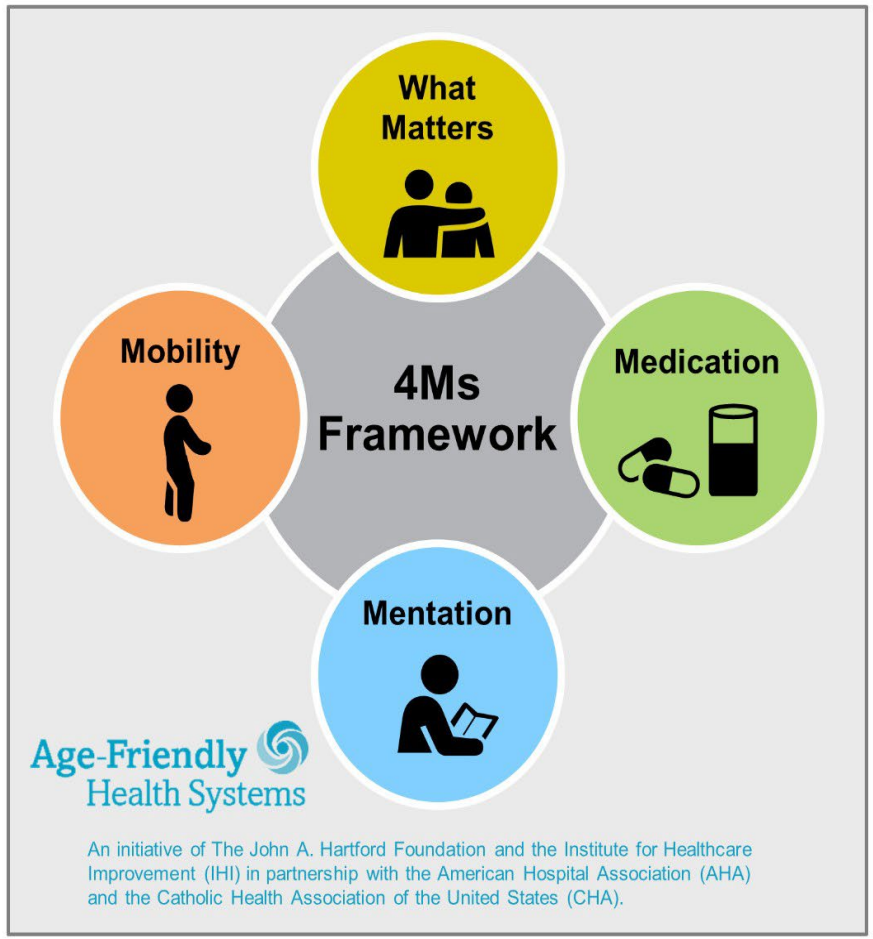
Framework #1

- To establish age and dementia-friendly Nevada (communities), either *structure* or *process* has to be chosen and prioritized.
- Structure prioritization: for example, opening medical school, recruiting neurosurgeons
- ***Process*** prioritization: for example, enhancing capacity of current healthcare providers

Donabedian et al. *Med Care.* 1982. https://doi.org/10.1097/00005650-198210000-00001.

Framework #2

4Ms Framework of an Age-Friendly Health System



What Matters

Know and align care with each older adult's specific health outcome goals and care preferences including, but not limited to, end-of-life care, and across settings of care.

Medication

If medication is necessary, use Age-Friendly medication that does not interfere with What Matters to the older adult, Mobility, or Mentation across settings of care.

Mentation

Prevent, identify, treat, and manage dementia, depression, and delirium across settings of care.

Mobility

Ensure that older adults move safely every day in order to maintain function and do What Matters.

Scalable

Locally adaptable

Fitted to both equity of vulnerable population and efficiency of clinical outcomes

Institute of Healthcare Improvement. Age Friendly Health System. https://www.ihi.org/Engage/Initiatives/Age-Friendly-Health-Systems/Pages/Resources.aspx.

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Telehealth provider training

Three workforce training projects:

- 1 x CARES ACT (federal) and x 2 State of Nevada ADSD
- Telehealth curriculum development for primary provider
- Evidence-based 4M Age-Friendly Health System framework
- Problem-based learning: Enhance clinical decision-making of (1) counseling, (2) coordination, and (3) referrals

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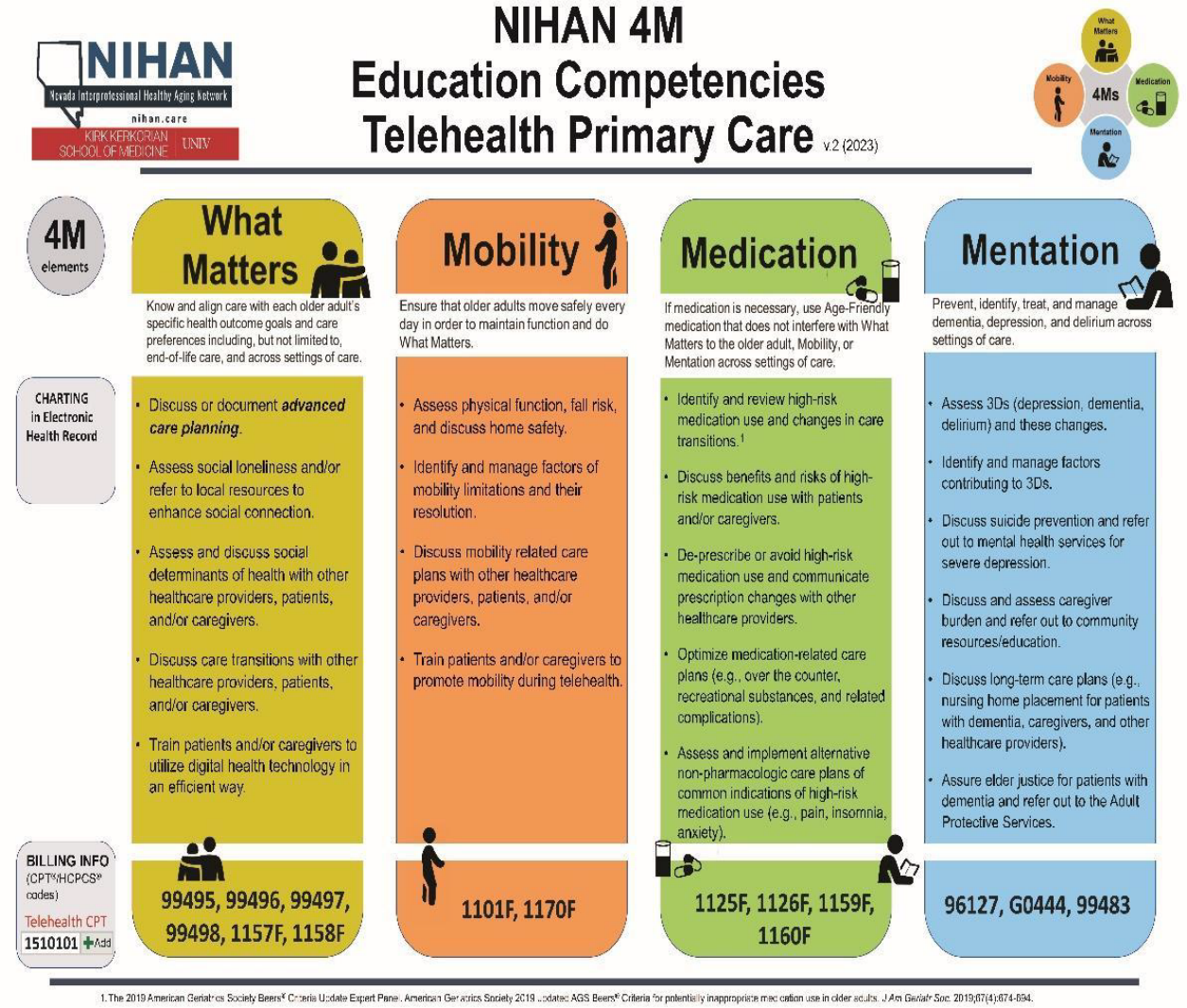
Telehealth provider training



Two aims of provider training

(1) Quality of care improvement –linking to CMS MIPS measurement

(2) Revenue generation

i.e., advance care planning

CPT 99497 (16-30 min) Nevada non-facility, $81.37

CMS Physician Fee Schedule. https://www.cms.gov/medicare/physician-fee-schedule/search.

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Telehealth provider training – *key points*

- Trainer telehealth experiences
- Explore case studies to overcome ethical and litigating concerns
- Integrate primary care role to mental health/counseling

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Case Study – provider training (a)

72 yo F

Citalopram 20 mg QD, Alprazolam 0.5 mg prn for anxiety x 3 times daily, Losartan 100 mg QD

Anxiety, occasional episodes of *suicidal ideation*

Her daughter recently committed suicide in front of patient

Lives with spouse, main caregiver, retired engineer

Declined referral to 2nd opinion mental health, frustrated with mental health experiences

Ok to schedule telehealth primary care every month

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Case Study – provider training (b)

1st telehealth: home BP 180/110

Provider actions by 4M approach:

Mentation – discuss flashback; switch slowly from Citalopram to Venlafaxine; taper off Alprazolam when anti-anxiety effect kicks in

What Matters – retain in telehealth primary care

Medication – switch smoothly from Losartan to Nifedipine; monitor home BP using wearable electronic device

Case Study – provider training (c)

2nd telehealth: home BP 152/84

Provider actions by 4M approach:

Mentation – flashback episodes less often; remain Venlafaxine at moderate dose and no report of side effect; Alprazolam less often use

What Matters – retain in telehealth primary care

Medication – no report of side effect with Nifedipine. BP is stable

Case Study – provider training (d)

3rd telehealth: home BP 137/76

Provider actions by 4M approach:

Mentation – No flashback episode since last visit; remain Venlafaxine at full dose and no report of side effect; off Alprazolam for 2 weeks

What Matters – retain in telehealth primary care

Medication – Nifedipine 90 mg QD. Refill meds x 90 days.

Next return visit in 3 months.

Telehealth caregiver training

- Decision-makers of seeking healthcare utilizations
- Most 911 calls can be avoidable by timely communication and counseling caregivers
- Prioritize caregiving tasks
- Share caregiver burdens by providing respite/resources

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Case Study – caregiver training (a)

- 82 yo M with moderate dementia.
- 76 yo F spouse living together, main caregiver.
- This couple needs (1) transportation, (2) financial advice (out of pocket burdens), and (3) prioritization/care planning.
- No wifi service subscription is available at their home.

Case Study – caregiver training (b)

- Telehealth trainer supported caregiver

(a) Use nearby public library resources at no cost.

(b) Use public library learning program how to access wifi and app.

(c) Purchase a tablet from a grandchild

(d) Register telehealth for spouse (living with dementia) primary care office.

Impact of telehealth training – disparity identification

- Baseline care quality by 4M framework
- Chart review n = 254 7/2021 – 6/2022
- UNLV Health, Medicare Advantage enrollees
- Racial and ethnic disparities were identified. Compared to Whites,

Hispanics *less likely* to discuss What Matters OR = .18 ($p < .001$)

Blacks/AA *less likely* to discuss Mobility OR = .35 ($p < .001$)

- Disparities in clinical outcomes relate to provider practice patterns.
- Translation of telehealth training in Spanish.

Yoo et al. *Geront Geriatr Med.* 2023. https://doi.org/10.1177/2333721423118905 3.

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Impact of telehealth training on provider practice

- Advance care planning (ACP) is established within 2 years of ADRD diagnosis. (Schultz et al. 2020. https://doi.org/10.1176/appi.ajp.2019.19121290.)
- ACP establishment via telehealth is feasible.
- UNLV Health, chart review ADRD *n* = 473
- Main outcome: CPT 99497 ACP (16-30 min)
- ACP *before* telehealth training (2020) = 0.8%
- ACP *after* telehealth training (2021) = 12.3%

$P < .01$

- Hospitalization cost with ACP ↓ 25% ($p = .01$)

Yoo et al. Int J Environ Res Public Health. 2023. https://doi.org/10.3390/ijerph20126157.

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Impact of telehealth training on provider practice

- Revenue generation in addition to E/M timed billing
- In 2024 and Nevada, CPT 99497 (16-30 min) adds $81.37.
- CMS pay for performance MIPS measurement #047
- ACP *before* telehealth training (2020) = 0.8%
- ACP *after* telehealth training (2021) = 12.3%
- Hospitalization cost with ACP ↓ 25% (p = .01)

Yoo et al. *Int J Environ Res Public Health.* 2023. https://doi.org/10.3390/ijerph20126157.

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Impact of telehealth training on provider practice

	Beers' Criteria high risk medication use	2019 Before training	2023 After training
UNLV Health (primary care)	Any	56.4%	26.0%
	Opioid ≥ 6 week	26.0%	10.2%
Mission Pines (long-term care)	Any	74.3%	63.5%

Denominator = all patients 65 and older

Numerator = at least one

Most common agents:

short-acting Benzodiazepine

(UNLV Health – 44% among user);

2nd generation anti-psychotics (Mission Pines – 58% among user)

AGS Panel. 2019 AGS Beers' Criteria Update. *J Am Geriatr Soc.* 2019. https://doi.org/10.1111/jgs.15767.

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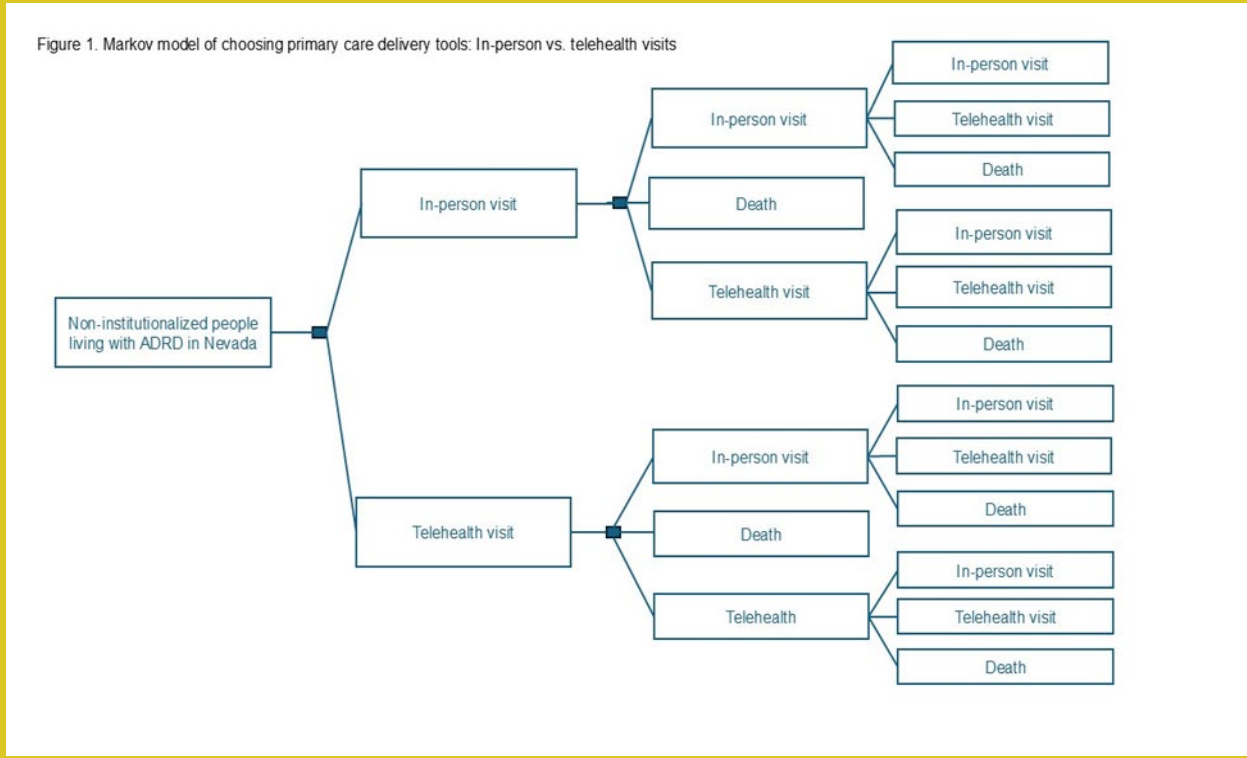
Impact of telehealth training – economic appraisal



ADRD, Alzheimer Disease Related Disorders
Kim et al. *Int J Env Res Public Health.* 2024. https://doi.org/10.3390/ijerph21101381.

Telehealth vs. in-person primary care visit of ADRD

Markov model scenarios:

Model A: Urban non-Hispanic Whites

Model B: Urban racial minorities

Model C: Rural residents

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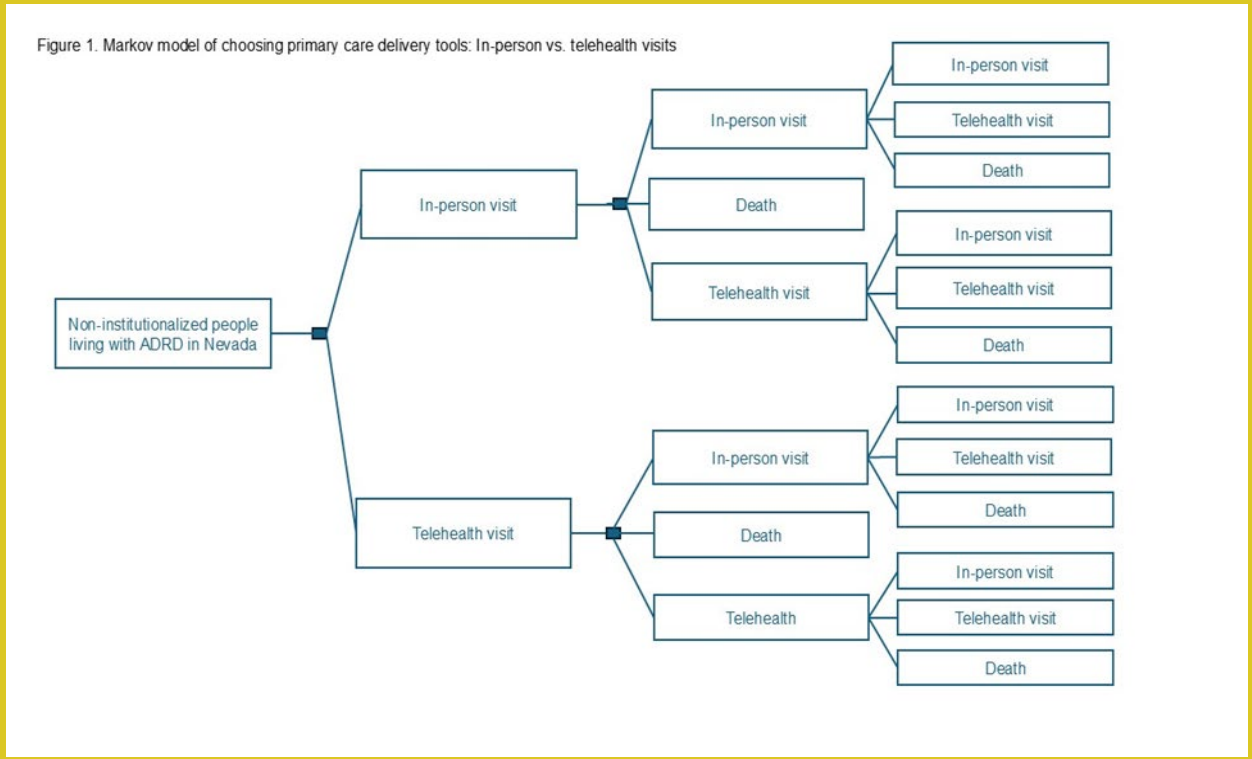
Impact of telehealth training – economic appraisal



- Nevada community-dwelling ADRD
- Cost as of year 2022
- Healthcare system perspective (under Medicare Advantage program)
- 10-year cycle simulation, 3% yearly discount

ADRD, Alzheimer Disease Related Disorders

Kim et al. *Int J Env Res Public Health.* 2024. https://doi.org/10.3390/ijerph21101381.

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Impact of telehealth training – economic appraisal

Model A: Urban non-Hispanic Whites → Telehealth saves cost **$9.44** per caregiver burden scale (1 – 100)

†Model B: Urban racial minorities → In-person visit saves cost **$29.26** per caregiver burden scale (1 – 100)

Model C: Rural residents → Telehealth saves cost **$320.93** per caregiver burden scale (1 – 100)

Transition probability from telehealth to in-person visit is higher among racial minorities compared to that of non-Hispanic Whites (26.77% vs. 18.29%).
It leads to different cost results in model B. Health literacy may contribute to this.

Kim et al. *Int J Env Res Public Health.* 2024. https://doi.org/10.3390/ijerph21101381.

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Policy implications

(a) Telehealth training for provider and caregiver is necessary for enhancing access to care as well as advancing efficiency of delivering primary care.

(b) CMS reimbursement of telehealth becomes stricter. CMS will leave key providers' flexibilities to furnish remote "direct supervision" from 1/1/2025.

Federal Register. 7/31/2024. https://www.federalregister.gov/documents/2024/07/31/2024-14828/medicare-and-medicaid-programs-cy-2025-payment-policies-under-the-physician-fee-schedule-and-other.

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Takeaway messages

- Telehealth provider training curriculum needs emphasis of efforts of mitigating racial and ethnic disparities.
- Telehealth training advances care efficiency by generating quality of care incentives (i.e., advance care planning).
- Telehealth provider and caregiver training is necessary for sustainable telehealth primary care benefits in provider shortage areas.

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Thank you & Q/A

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