

Alzheimer's disease and related dementias in New Mexico

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Objectives

- Overview of dementia (including Alzheimer's disease)
- Impact of dementia in New Mexico
- Assessment and diagnosis of dementia
- Treatment of dementia
- Advancements and new research in dementia
- Resources for dementia

Disclosures - Hernandez

- Salary from Alzheimer's Association

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Disclosures - Richardson

- Salary from the University of New Mexico
- Current funding from the National Institutes of Health, Department of Defense, and SingWell Canada
- Previous funding from the New Mexico Governor's Commission on Disability
- Leadership positions for the UNM Center for Brain Recovery and Repair and the NM Alzheimer's Disease Research Center

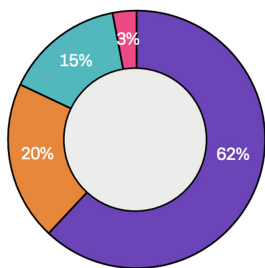
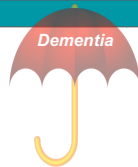


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What is dementia?

- According to the National Institutes of Health (NIH), *"dementia is the loss of cognitive functioning - thinking, remembering, and reasoning - to such an extent that it interferes with a person's daily life and activities"*
- There are different types of dementia - you can think of the word "dementia" as an umbrella term.



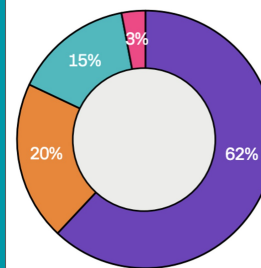
Alzheimer's disease: Caused by the buildup of two abnormal protein structures in the brain called amyloid plaques and neurofibrillary tangles, which disrupt communication between brain cells.

Vascular dementia: Caused by interrupted oxygen flow to the brain, causing brain cells to die.

Lewy body dementia: Caused by Lewy bodies - abnormal structures found in the brain's cortex, which is responsible for thinking, perceiving and understanding language.

Frontotemporal dementia: Caused by degeneration of brain cells located in the frontal and temporal lobes of the brain, which control personality, judgment, emotion and language.

*image from Constant Therapy



AD - Alzheimer's disease
VaD - Vascular dementia
LBD - Lewy body dementia
FTD - Frontotemporal dementia

Not shown:

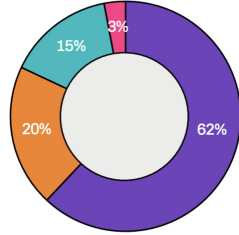
PDD - Parkinson's disease dementia

HS - Hippocampal sclerosis

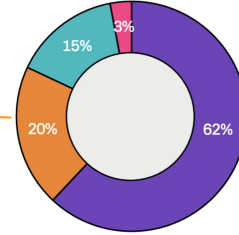
Mixed - Mixed causes/pathology

.....and more

*additional information from Alzheimer's Association

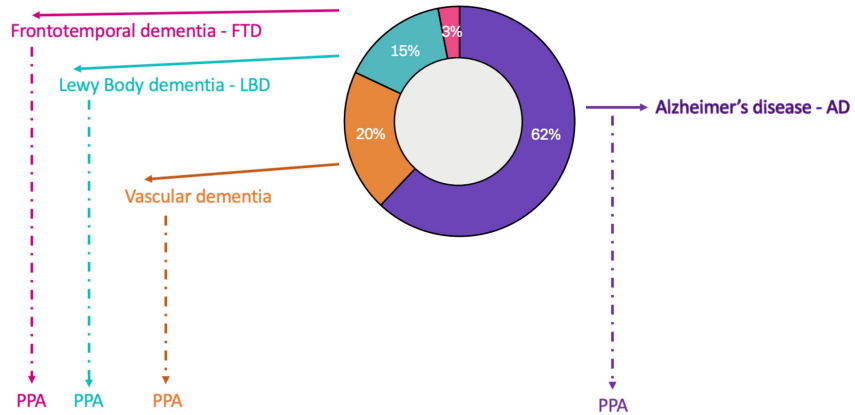


- These dementias are caused by damage to brain cells which interferes with the ability of those cells to communicate with each other.
- Symptoms start out slowly and gradually get worse*.

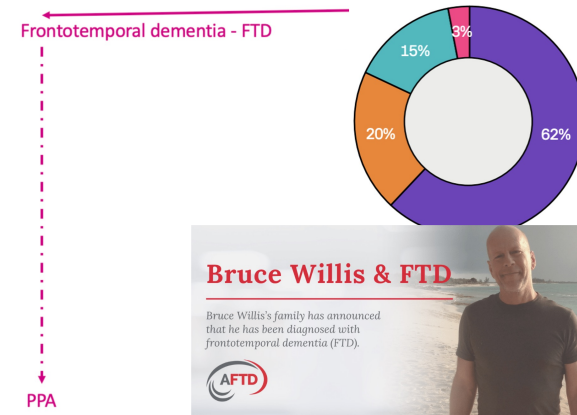


VaD ←

A person with VaD may be able to maintain abilities if the underlying vascular condition is treated, or they may worsen over time.



Primary Progressive Aphasia



Bruce Willis & FTD

Bruce Willis's family has announced that he has been diagnosed with frontotemporal dementia (FTD).

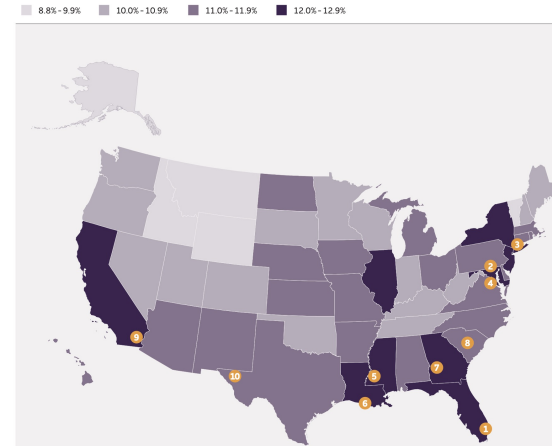


Primary Progressive Aphasia

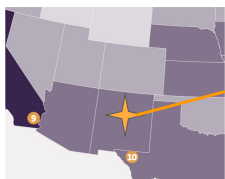
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Prevalence of Alzheimer's Disease in the 50 U.S. States, and the 10 Counties with the Highest Prevalence, 2020*



*image from Alzheimer's Association



People living with dementia:

PREVALENCE

Number of People Aged 65 and Older with Alzheimer's (2020)

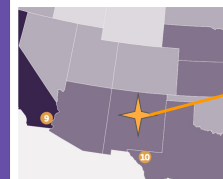
46,000

% of Adults Over 65 with Alzheimer's

11.8%

- Note re: minoritized ethnoracial groups:
 - Dementia more frequent in these groups, and...
 - Dementia is underdiagnosed in these groups (so probably even more frequent than we think!)
 - There are more barriers to research, treatment, and support for these groups
- Note re: women:
 - Alzheimer's disease is more common in women (and this is the most common type of dementia)

These numbers only reflect Alzheimer's disease data. They are higher when counting all dementia.



Caregivers:

CAREGIVING

of Caregivers

67,000

Total Hours of Unpaid Care

118,000,000

Total Value of Unpaid Care

\$2,142,000,000

Caregivers with Chronic Health Conditions

64.8%

Caregivers with Depression

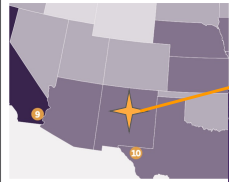
31.3%

Caregivers in Poor Physical Health

12.6%

- Note re: women:
 - Caregivers - paid and unpaid/informal - are more likely to be women

These numbers only reflect Alzheimer's disease data. They are higher when counting all dementia.



Healthcare workforce:

WORKFORCE

# of Geriatricians in 2021	27	# of Home Health and Personal Care Aides in 2020	32,360
Increase Needed to Meet 2050 Demand	244.4%	Increase Needed to Meet 2030 Demand	25.9%

What are we doing to prepare for this?

- **Alzheimer's Association** working on a bill to increase # of paid caregivers
- **NM ADRC** working on a bill to increase # of community health workers/social workers

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Diagnosing Dementia - Early Signs (1)

- Early signs of dementia are exaggerated forms of minor day-to-day lapses
 - **Memory** example:
 - Occasionally forgetting an appointment, missing a deadline, remembering neighbor's name

VS

Forgetting that you even made an appointment or that you were working on something with a deadline, not recognizing a neighbor

Diagnosing Dementia - Early Signs (2)

- Early signs of dementia are exaggerated forms of minor day-to-day lapses
 - **Orientation** example:
 - Occasionally forgetting what day of the week it is or getting lost in unfamiliar places

VS

Routinely not knowing what day it is or what time of day it is; getting lost in familiar places

Table 2

Signs of Alzheimer's Dementia Compared With Typical Age-Related Changes*

Signs of Alzheimer's Dementia	Typical Age-Related Changes
Memory loss that disrupts daily life: One of the most common signs of Alzheimer's dementia, especially in the early stage, is forgetting recently learned information. Others include asking the same questions over and over, and increasingly needing to rely on memory aids (for example, reminder notes or electronic devices) or family members for things that used to be handled on one's own.	Sometimes forgetting names or appointments, but remembering them later.
Challenges in planning or solving problems: Some people experience changes in their ability to develop and follow a plan or work with numbers. They may have trouble following a familiar recipe or keeping track of monthly bills. They may have difficulty concentrating and take much longer to do things than they did before.	Making occasional errors when managing finances or household bills.
Difficulty completing familiar tasks: People with Alzheimer's often find it hard to complete daily tasks. Sometimes, people have trouble driving to a familiar location, organizing a grocery list or remembering the rules of a favorite game.	Occasionally needing help to use microwave settings or record a television show.
Confusion with time or place: People living with Alzheimer's can lose track of dates, seasons and the passage of time. They may have trouble understanding something if it is not happening immediately. Sometimes they forget where they are or how they got there.	Getting confused about the day of the week but figuring it out later.
Trouble understanding visual images and spatial relationships: For some people, having vision	Vision changes related to

*snapshot of helpful resource from Alzheimer's Association

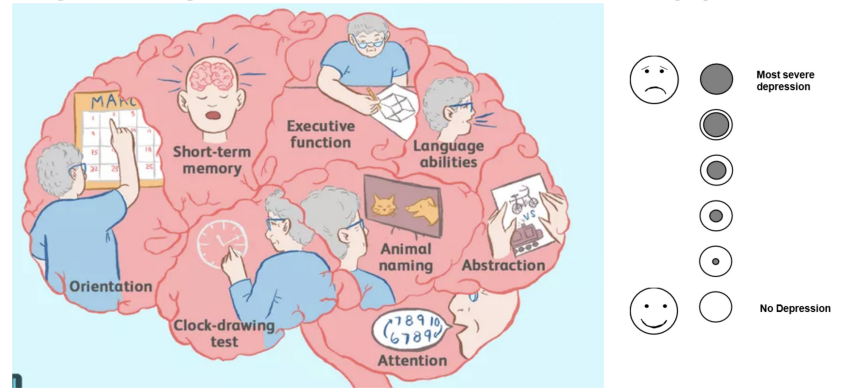
Diagnosing Dementia - Assessment (1)

- **Clinical interview** (with person and their family members and/or friends)
 - Concrete examples are most helpful, especially of how perceived cognitive or behavioral problems are impacting everyday life
 - Information regarding timeline also helpful
- **Review of medical records**

Diagnosing Dementia - Assessment (2)

- **Neuropsychological assessment**
 - **Standardized cognitive tests** with age and education norms for comparison
 - Includes **assessment of affect/mood** to rule out a primary role of a psychological issue

Diagnosing Dementia - Assessment (3)



Diagnosing Dementia - Assessment (4)



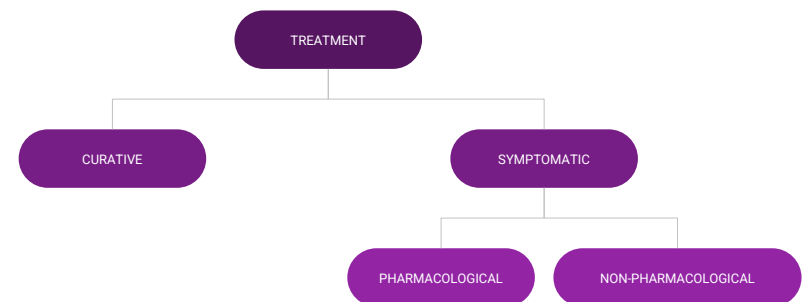
Diagnosing Dementia - Interpretation



- Test results are compared to norms (adjusted for age/educ)
- Based upon deficits in cognition and other history and exam results, a diagnosis of dementia is considered
 - **NORMAL**: as expected for age/educ
 - **DEPRESSED/ANXIOUS**
 - **SUBJECTIVE COGNITIVE IMPAIRMENT**: reporting symptoms but exam seems normal
 - **MILD COGNITIVE IMPAIRMENT**: cognition is not as good as expected but not severe
 - **DEMENTIA**: more noticeable symptoms to severe symptoms
 - More work will then be done to determine which **TYPE** of dementia

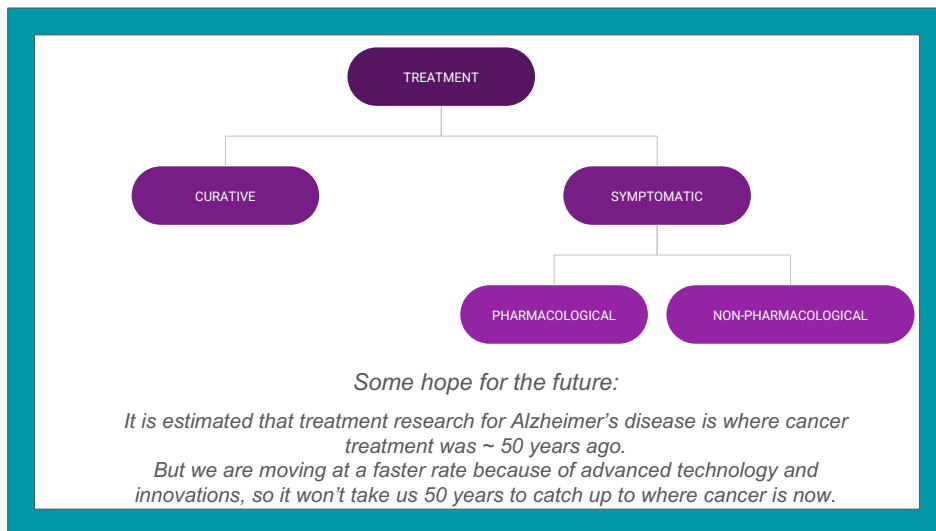
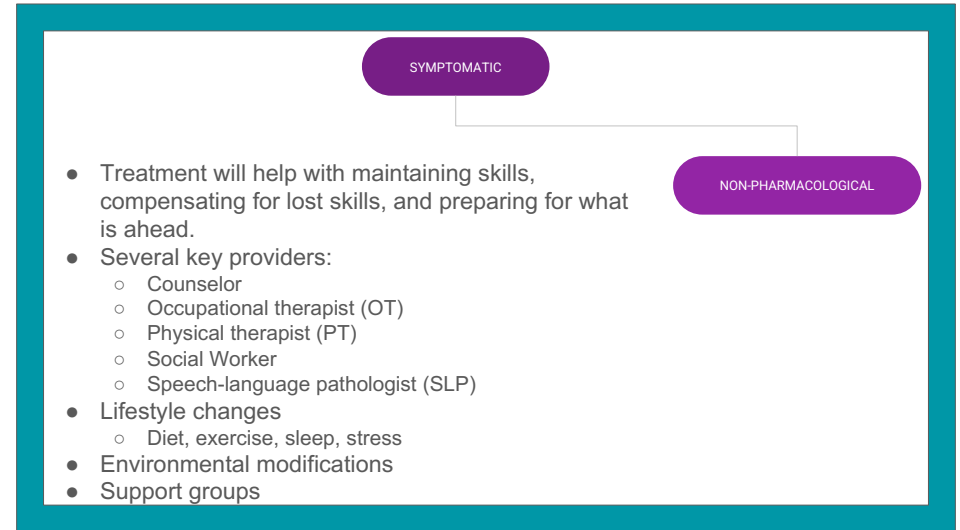
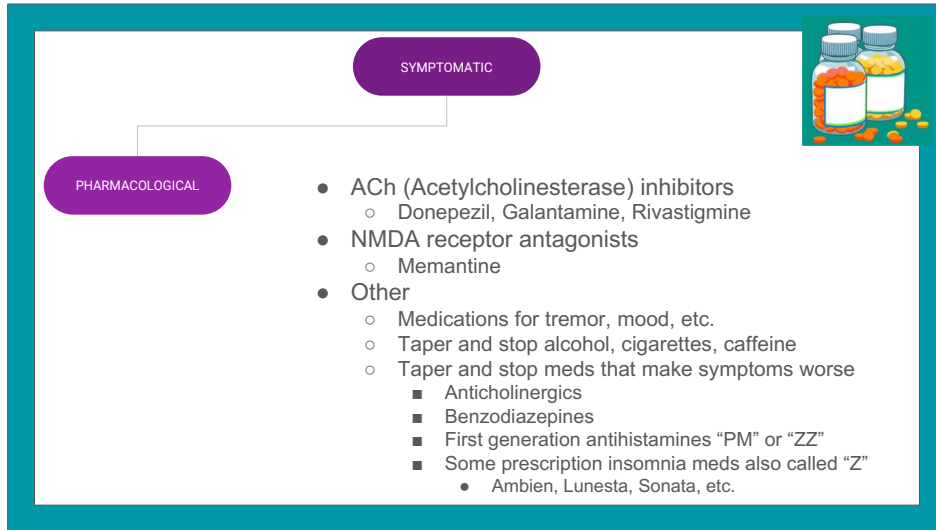
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CURATIVE: treating the cause of the illness
- Example: treating an infection

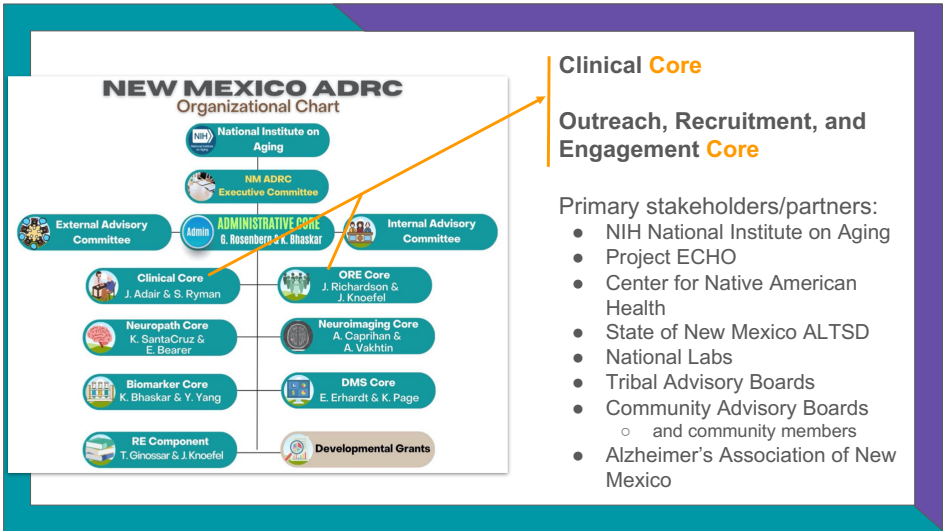
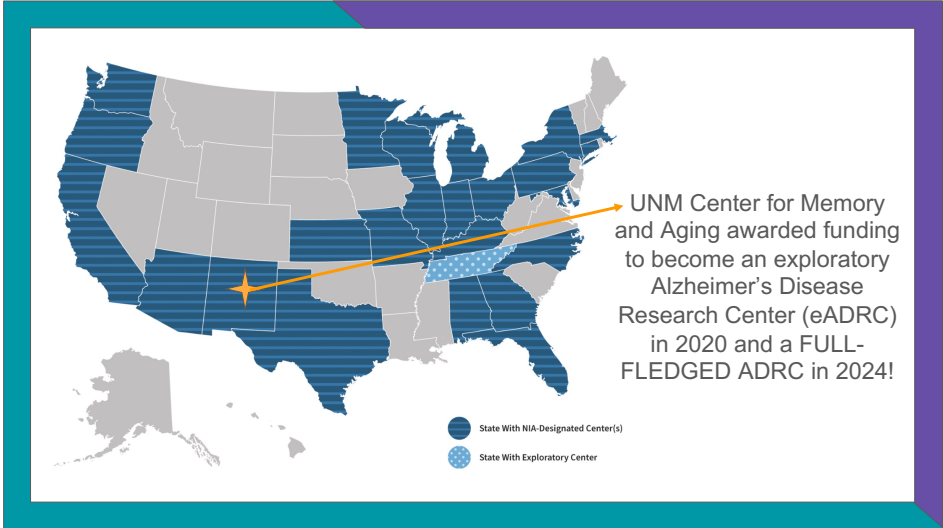
SYMPTOMATIC: treating the symptoms of the illness
- Example: treating fever from infection

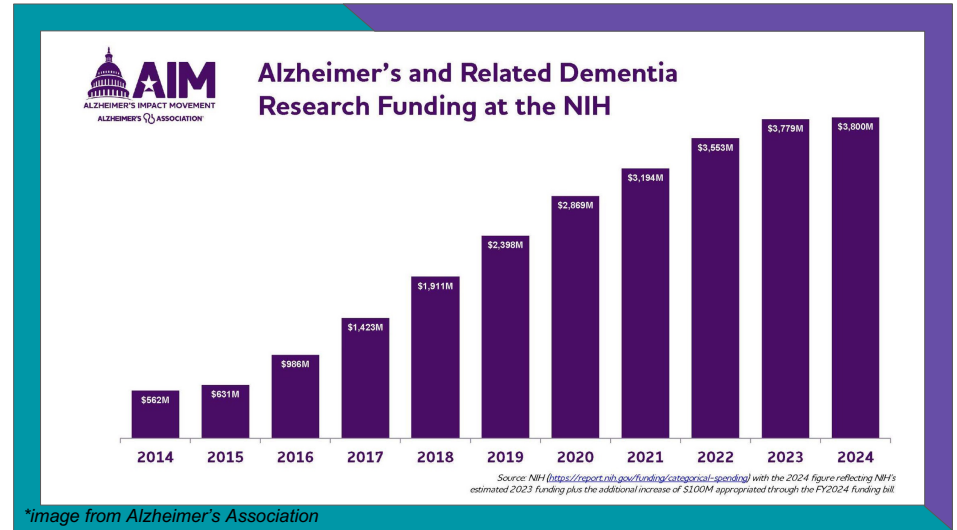


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PHARMACOLOGICAL	NONPHARMACOLOGICAL
Anti-amyloid therapy <ul style="list-style-type: none"> - Only for Alzheimer's disease or mixed-Alzheimer's disease - Aducanumab, Lecanemab, Donanemab - Not available in NM yet <ul style="list-style-type: none"> - No public funding yet, so not approved yet - Prohibitively expensive - Requires infrastructure NM does not yet have 	Behavioral therapies (cognitive, speech-language, etc.) <ul style="list-style-type: none"> - Prophylaxis (to protect/preserve more intact skills) - Improvement of declining skills Brain stimulation therapies Music therapy Exercise





RESEARCH IN YOUR COMMUNITY

We have played a role in nearly every significant development in Alzheimer's science to date

New Mexico

ISTAART

6 Members

Grant Funding

Total awards: 5
Year: 1993-2022
Active awards: 1

Total amount: \$ 538 K
Active amount: \$ 150 K

Grant Reviewers

Reviewers: 13
Critiques: 114

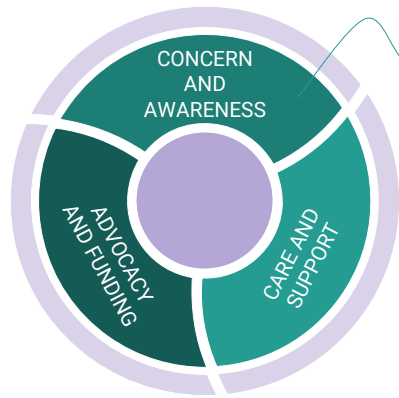
Funded Institutions

University of New Mexico

alzheimer's association

**image from Alzheimer's Association*

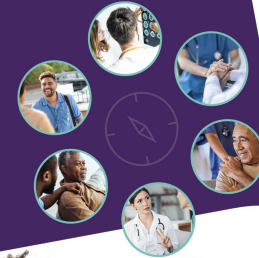
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Aka
"Outreach and
Education"

2024 ALZHEIMER'S DISEASE FACTS AND FIGURES

SPECIAL REPORT
MAPPING A BETTER
FUTURE FOR DEMENTIA
CARE NAVIGATION



ALZHEIMER'S ASSOCIATION

ALZHEIMER'S ASSOCIATION



NEW MEXICO ADRC

How are we working together to provide/develop resources?

- Coordinating regarding support programs and groups for people living with dementia
- Coordinating regarding training, support (including groups) for family caregivers
- Coordinating regarding training of healthcare providers and lay community
- Working together on legislative efforts
- Sharing outreach and education resources
- Coordinating regarding development of new outreach and education resources

ALZHEIMER'S ASSOCIATION



NEW MEXICO ADRC

Digital resource repositories

- <https://www.alz.org/help-support/resources>
- https://drive.google.com/drive/folders/18rTHh15e7ReZ1GS0SJB_-IUgnBi4lLzt
- <https://youtube.com/playlist?list=PLY586K9YzXUxp9WGFtdjIzTk6mSK6ctbS&si=IrRp14mnjWyLMxC4>

Alzheimer's Association of New Mexico	https://www.alz.org/newmexico		505-266-4473 1-800-272-3900
New Mexico Aging and Long-Term Services	https://aging.nm.gov/	nm.adrc@altsd.nm.gov	505-476-4799
New Mexico Alzheimer's Disease Research Center	https://hsc.unm.edu/research/centers-programs/nmadrc/	NMADRC@salud.unm.edu NMADRC@gmail.com	505-277-3315
UNMH Senior Health Center	https://unmhealth.org/services/senior-health.html	unm-mac@salud.unm.edu	505-272-4866

THANK YOU

