# GEAR

## Geriatric Emergency care Applied Research

Research for geriatric and dementia emergency care

NIH National Institute on Aging (R33 AG069822, R33 AG058926)

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Geriatric Emergency care Applied Research

MISSION…to generate evidence to improve emergency care of older adults and those with dementia and other cognitive impairments

https://gearnetwork.org/

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# "The Other Great Dementia Breakthroug

**David B. Reuben, MD**

Inaugural GEAR Grand Rounds

February 27, 2024

[This session is being **recorded**]

# GEAR Grand Rounds

- Recording of session & slides will be available on GEAR website.
- Please type questions into the chat.
- Questions and comments will be addressed at end of talk.
- Please complete post-Grand Rounds survey.

# The Other Great Dementia Breakthrough

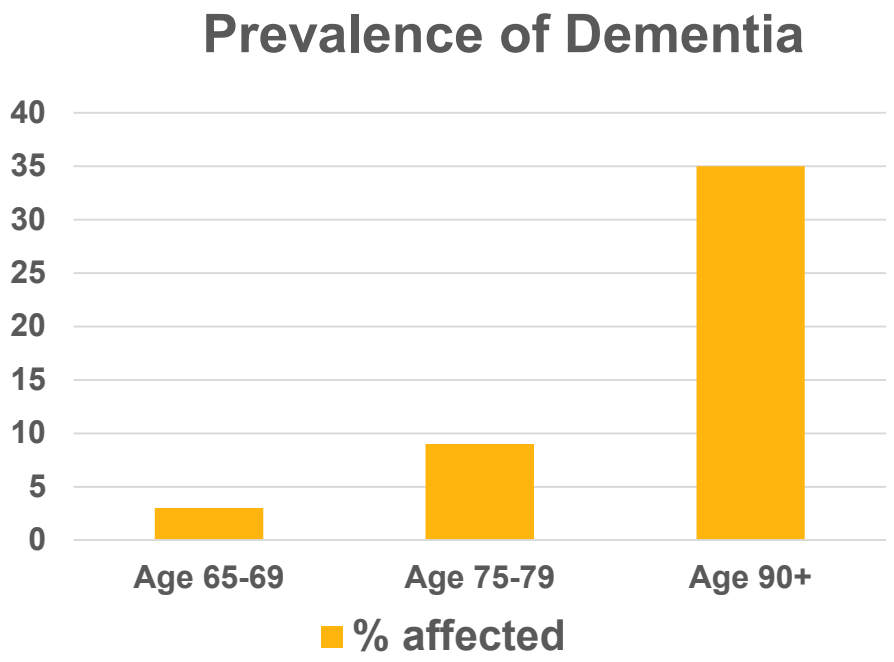
David B. Reuben, MD

February 27, 2024

UCLA Health

ADC Alzheimer's and Dementia Care PROGRAM

# The Worst Fear of Aging, and with Good Reason




**6.5 million** (4.1 million are women) Americans have Alzheimer's Disease

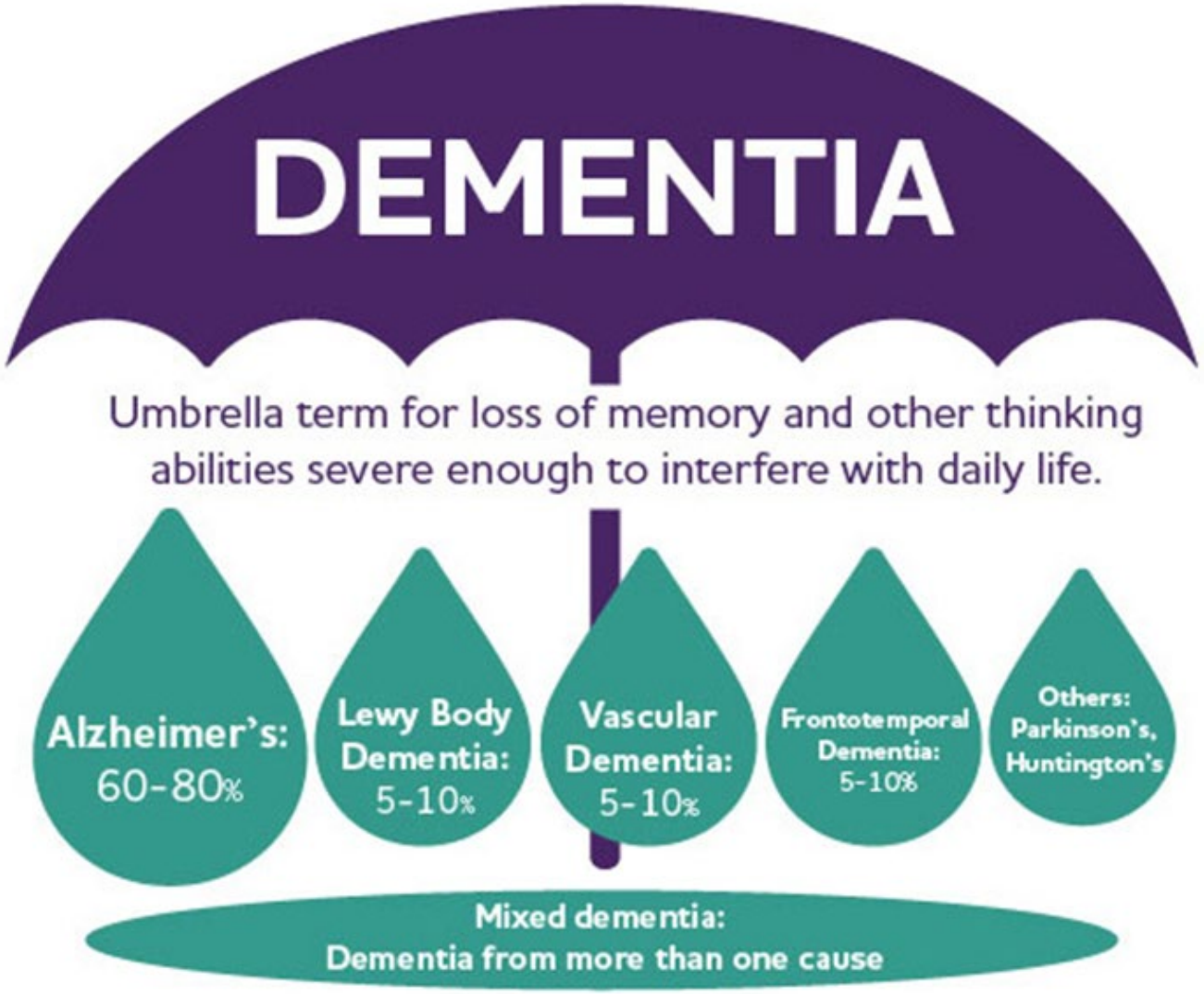
By 2025, it will be **7.2 million**

Higher prevalence in African Americans (OR 1.8) and < high school education (OR 1.6)

# Dementia-2011 NIA Definition

- A chronic acquired decline not explained by delirium or psychiatric disorder in two or more of the following domains:
  - Memory
  - Reasoning and complex tasks
  - Visuospatial
  - Language
  - Personality
- Sufficient to affect daily life

# Diseases Causing Dementia



# Alzheimer's Disease: 2011

- 3 stages
  - Preclinical: normal cognition; defined by changes in biomarkers
  - MCI: impaired cognition, intact function; positive biomarkers; may help determine progression to dementia
  - Dementia: impaired cognition; impaired function; biomarkers may be helpful in excluding AD as cause

# Stages of Dementia


**Difficulty with:**
- Social withdrawal
- Mood changes
- ↓ insight & judgement
- Short term memory
- Finances
- Driving
- Medications

**Difficulty with:**
- Worsening memory
- Repeating questions
- Instrumental ADLs
- Some ADLs
- Getting lost
- Gait and balance
- Disorientation
- Delusions/Agitation

**Difficulty with:**
- Remote memory
- Recognizing family
- ↓ verbal output
- Apathy/depression
- ADLs
- Sundowning
- Mobility
- Swallowing

# Management

- This is a lifelong disease
- Play the ball where it lies
  - If disease is early, include person living with dementia
  - If late, rely on family and caregiver
- Aim for the highest level of independence that works for everyone

- Treat the disease

# Pharmacologic Treatment of Alzheimer's Dementia

- Cholinesterase inhibitors (inhibit acetylcholinesterase at the synaptic cleft)
  - FDA approved for all stages of dementia (mild-mod-severe)
  - Available in generic forms (Donepezil, Galantamine, Rivastigmine)
- Memantine (NMDA receptor antagonist)
  - Approved for moderate to severe AD dementia
- Amyloid immunomodulators (aducanamab FDA approved but not available after 11/2024; lecanamab FDA approved)
  - Aimed at MCI or early Alzheimer's disease

# Management

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- Treat the disease
- Manage hot-button issues (e.g., driving, living at home)
- Manage other diseases
- Manage symptoms

# Alzheimer's Disease Behavioral Symptoms

- NPI-Q symptoms at any point during their disease
  - Apathy 70%
  - Anxiety 68%
  - Irritability 66%
  - Agitation/aggression 64%
  - Dysphoria/depression 62%
  - Sleep/nighttime behaviors 62%
  - Delusions 36%
  - Hallucinations 26%

*JAMA Psychiatry. Published online February 16, 2022. doi:10.1001/jamapsychiatry.2021.4363*

# Management of Behavioral and Psychological Complications

- Use DICE approach (Describe, Investigate, Create, and Evaluate) to help identify a potential underlying cause
- Without drugs: behavioral approaches
  - Good evidence for formal caregiver training (effect size=0.34)
  - Music therapy has some scant evidence
  - Others (e.g., cognitive stimulation, reminiscence, validation, exercise, animal-assisted therapy) have limited evidence to support
  - http://dementia.uclahealth.org/caregiver-education-videos

# Medications for Behavioral and Psychological Complications

- First, do a medication “clean-up” focused on de-prescribing psychoactive medications; maintain cognitive medications
- Target medications to symptoms:
  - Agitation: antidepressants (take time to work)
    - SSRIs-meta-analysis, improved agitation
    - Citalopram 30 mg for agitation
      - Reduced agitation
      - Worsened MMSE scores
      - Increased QTc

# Medications for Behavioral and Psychological Complications

- Agitation: Atypical antipsychotics
  - Not very effective (effect size 0.13) but some patients benefit
  - Brexpiprazole - FDA approved (2023) but same AEs
  - Have potential for side effects including falls and cognitive decline
  - Mortality 4.5% vs 2.6% due to CV or ID
- Agitation: Mood stabilizing medications
  - Valproate, Carbamazepine, Lithium
  - Little evidence for any
- Agitation: Other
  - Dextromethorphan-Quinidine *(Nuedexta)*
    - Modest improvement in 1 RCT

# Management

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- Treat the disease
- Manage hot-button issues (e.g., driving, living at home)
- Manage other diseases
- Manage symptoms
- Advance Care Planning

# Advance Care Planning

- Begin early
- If stage is mild, involve the patient
- Reassess at major illnesses and after life events
- Explain but do not force options
- Be patient

# Management

- This is a lifelong disease
- Play the ball where it lies
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- Treat the disease
- Manage hot-button issues (e.g., driving, living at home)
- Manage other diseases
- Manage symptoms
- Advance Care Planning
- Caregiver support

# Caregiver Support

- Caregivers are the most important resource
- Over 50% of caregivers develop depression
- Caregiver training/support programs work
  - REACH II (12 individual and 5 telephone support groups over 6 months)
  - NYU CI (2 individual counseling sessions, 4 family counseling sessions
- Poor integration with health care systems
- Cost ($2.50-$5/day for 6 months)
- Pre-GUIDE: no viable reimbursement strategy

# The Dementia Quality Problem

- Poor quality of care: 38-44% of ACOVE Quality Indicators met
  - Cognitive evaluation if positive screen (25%)
  - Checking medications (9%)
  - Caregiver (61.5% are women) support (29%)
  - Monitoring for Behavioral/Psychological sx (45%)
- Poor linkages to community-based resources

# And in the ED

- Detection
- Complications of dementia that land patients in the ED including: Falls, Delirium, Aggression, Elder mistreatment
- Communication with patients and families
- Processes of care in the ED: how to prevent a bad situation from getting worse
- Discharge planning including to a safe environment and adequate follow-up

Get in GEAR!

# The Consequences

- $345 billion in health care for persons with dementia (2023)
- 3 x hospital stays; higher provider, nursing home, home health, and drug costs
- >11 million caregivers provided 17 billion hours of care worth $340 billion (2022)
- Cost per person per year with and without dementia (2022):

| Cost | Dementia | Without dementia |
|---|---|---|
| Medicare | $21,873 | $7,882 |
| Medicaid | $6,739 | $303 |
| Out of pocket | $10,241 | $2,518 |
| Total | $43,444 | $14,593 |

# Efforts to Improve Dementia Quality

| Study/Year | Conditions | Intervention | % Dementia QIs passed | |
|---|---|---|---|---|
| | | | Int | UC |
| ACOVE/1999-2008 | 22 | None | | 38-41% |
| ACOVE-2/2009 | Falls, Dem, UI | QI aimed at MDs: prompts education, structured visit notes | 44% | 41% |
| JAHF-NP/2010 | Falls, Dem, Dep, HF, UI | NP co-management of 5 conditions | 51% | 30% |
| Unihealth-NP/2013 | Falls, Dem, Dep, UI | NP co-management of 4 conditions | 59% | 38% |
| ADC/2016 | Dementia | NP co-management of dementia | 92% | |

# Comprehensive Dementia Care

- Focuses on patient and caregiver and includes:
  - Continuous monitoring and assessment
  - Ongoing care plans
  - Psychosocial interventions
    - Aimed at person living with dementia
    - Aimed at caregivers
  - Self-management
  - Medication management
  - Treatment of related conditions
  - Coordination of care

*Boustani M, et al. An Alternative Payment Model To Support Widespread Use Of Collaborative Dementia Care Models. Health Aff (Millwood). 2019 Jan;38(1):54-59. PMID: 30615525.*

# Evidenced-based dementia care navigation programs

- Benjamin Rose Institute (BRI) Care Consultation
- Care Ecosystem
- Eskenazi Healthy Aging Brain Center
- Integrated Memory Care
- Maximizing Independence (MIND) at Home
- UCLA Alzheimer's and Dementia Care Program

# How Comprehensive Care Models Differ

- Staffing
- Base of operations
- Scope of services
- Intensity
- Cost
- Efficacy/Effectiveness (pragmatism)
- Potential ROI
- Level of evidence

# Comparison of Six Dementia Care Models

| **Structure and Process** | BRI – CC | Care Ecosystem | MIND | HABC | UCLA ADC | IMCC |
|---|---|---|---|---|---|---|
| Key personnel | Non-licensed, SW, RN, MFT | Non-licensed care navigator, CNS, SW, Pharmacist | Non-licensed staff, RN, MD | Non-licensed staff, MD, SW, RN, Psychologist | NP, PA, SW, non-licensed staff, MD | NP, SW, RN |
| Key personnel base | CBO or Health system | Health System or Community | Community or Managed Care Organization | Health system | Health system | Health system |
| Face-to-face visits | No | No | Yes | Yes | Yes | Yes |
| Access 24/7/365 | Optional | No | No | Yes | Yes | Yes |
| Communication w/ PCP | Mail, fax, phone | Fax, phone | Phone, mail, fax | EHR, phone, mail | EHR, phone | N/A |
| Order writing | No | No | No | Yes | Yes | Yes |
| Medication management | No | Yes | No | Yes | Yes | Yes |
| **Benefits** | | | | | | |
| High quality of care | N/A | N/A | N/A | Yes | Yes | Yes |
| Patient benefit | Yes | Yes | Yes | Yes | Yes | Yes |
| Caregiver benefit | Yes | Yes | Yes | Yes | Yes | Yes |
| Costs of the program | +++ | ++ | +++ | +++ | ++++ | ++++ |
| Costs savings, gross | ++ | ++++ | +++ (Medicaid) | ++ | ++++ | ++++ |

# The Alzheimer's and Dementia Care (ADC) Program

UCLA Health

ADC Alzheimer's and Dementia Care PROGRAM

# The UCLA Alzheimer's and Dementia Care Program

- Began in 2011 with philanthropic funds
  - Planned 250 patients
- Round 1 CMMI Award July 2012—Dec 2015
  - To expand the program to 1,000 patients
- As of February 15, 2024, 4154 patients have been enrolled; 993 active, with 84 scheduled out, and 106 on the waitlist; 10.2 new referrals/week

# The Alzheimer's and Dementia Care Program Model

Approaches the PLWD and caregiver as a dyad; both need support

Provides comprehensive care based in the health system that reaches into the community

Recognizes that this care is a long journey.

Uses a co-management model with APPs as Dementia Care Specialists (DCS) who do not assume primary care of the PLWD

# The Alzheimer's and Dementia Care Program Model

- Multidisciplinary care team
- Works with primary care and specialty physicians to care for patients by
  - Conducting in-person needs assessments
  - Developing and implementing individualized dementia care plans
  - Monitoring response and revising as needed
  - Providing access 24 hours/day, 365 days a year
- Partners with community-based organizations (CBOs) to provide direct services (e.g., adult day care) and caregiver training

# The UCLA ADC Program Team-December 7, 2023

# Dementia Care Specialist (DCS) and Assistants (DCA)

- DCS: Advance Practice Provider (NP, PA, CNS with prescribing authority)
  - Healthcare system-based, outpatient clinic setting
  - Dementia Care Co-Management along with the individual's medical team
  - Each DCS follows ~ 250 patients
- DCA: Non-licensed or Licensed (RN, SW, PharmD)
  - Reach out to lower acuity PWD-caregiver dyads and offer resources
  - Identify dyads in crisis
  - Allow DCSs to work at the top of their license

# Services Provided by Partner Community-Based Organizations

- Services for patients:
  - Adult day care services
  - Programs for brain health (for early stage memory loss)
- Services for families/caregivers:
  - Education (workshops, classes, informational sessions, handouts)
  - Counseling and peer-to-peer support
  - Case management
  - Legal and financial counseling
  - Support groups
- Voucher system funded by philanthropy
  - Selected, short-term services, authorized by Dementia Care Specialist (i.e., counseling, case management, respite care)

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Serving Seniors & Their Families

WISE & Healthy Aging

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# ADC 1-Year Outcomes for PLWD and Caregivers

| Outcome | PLWD | Caregiver |
|---|---|---|
| Cognition (MMSE) | Worse | |
| Functional status (FAQ) | Worse | |
| Behavioral symptoms (NPIQ) | Improved | |
| Distress because of behavioral symptoms | | Improved |
| Caregiver strain | | Improved |
| Caregiver depression (PHQ-9) | | Improved |

# ADC Utilization and Costs

| Type of Care | Impact |
|---|---|
| Hospitalizations | ▼ 12% |
| ED visits | ▼ 20%* |
| ICU stays | ▼ 21% |
| Hospital days | ▼ 26%* |
| Nursing home placement | ▼ 40%* |
| Hospice in last 6 months | ▲ 60%* |

Total Medicare costs of care:
▼ $2,404/year *

* p<.05
Based on NORC external evaluation of CMMI Award using fee-for-service claims data and UCLA ACO data September 2015- September 2017

# Guiding an Improved Dementia Experience (GUIDE) Model

- On July 31, 2023, the Centers for Medicare & Medicaid Services (CMS) announced a new voluntary nationwide model – the Guiding an Improved Dementia Experience (GUIDE) Model that aims to:
  - improve the quality of life for people living with dementia,
  - reduce burden and strain on unpaid caregivers of people living with dementia, and
  - prevent or delay long-term nursing home care.

# GUIDE Model: Design

1. **Defining a standardized approach to dementia care delivery**
2. **Providing an alternative payment methodology** – CMS will provide a monthly per-beneficiary payment to support a team-based collaborative care approach
3. **Addressing unpaid caregiver needs** –by caregiver training and support services, including 24/7 access to a support line, as well as connections to community-based providers.
4. **Respite services** – Payment for respite services, which are temporary services provided to a beneficiary in their home, at an adult day center, or at a facility that can provide 24-hour care
5. **Screening for Health-Related Social Needs** – and help navigate them to CBOs to address

# GUIDE Model: Payment

- Per-beneficiary-per-month payment
- Amount per beneficiary by tier (5 categories) based on:
  - Whether beneficiaries have a caregiver
  - Severity of dementia (mild, moderate. or severe)
- Payment adjustments based on Health Equity and Performance
- Respite care payment for moderate or severe patients up to an annual cap of $2500
- Infrastructure payment for safety net providers: 1-time lump sum ($75,000) for program development

# GUIDE Model: Beneficiary (Patient) Eligibility

- Diagnosis of dementia
- Medicare is their primary payer
- Enrolled in Medicare Part A and B (not in MA, including SNPs and PACE)
- Not enrolled in hospice
- Not residing in long-term nursing home

# GUIDE Model: Care Delivery Approach

- Standardized set of services in 9 domains
- Interdisciplinary care team
- Training requirement for care navigators
- Person-Centered Care Plan
- Care Coordination
- Caregiver services

# GUIDE Model: Getting In

- Medicare Part-B enrolled providers and suppliers
- Interdisciplinary care team including
  - Care navigator who has received training
  - Clinician with dementia proficiency (e.g., specialty designation in neurology, psychiatry, geriatrics, geriatric psychiatry, behavioral neurology, or geriatric neurology)
- Two tracks
  - Established Program if already providing comprehensive dementia care in at least 6 of 9 care delivery domains for at least 12 months prior to submission date (start July 1, 2024)
  - New Program: 1-year pre-implementation period (beginning July 1, 2024)

# GUIDE Model Timeline

- 8-year model
  - Letters of Interest (optional, non-binding) due September 15, 2023
  - Request for Applications issued November 7, 2023
  - Applications due January 30, 2024
  - Launch July 1, 2024
    - Established Program: start care and payment July 1, 2024
    - New Program: 1-year pre-implementation period beginning July 1, 2024; start care and payment July 1, 2025

# Lessons Learned

- Start with a problem that everyone can agree on. In ED, TNTC
- Practice redesign can make life better for all providers and improve quality of care
- Physicians must be able to delegate and function as part of a team
- Expect false starts and learn from them
- Respect and support your competitors. There is work enough for everybody and, with each success, all boats rise
- Strategic work with good outcomes can lead to major policy changes
- If it works, give away all the credit

# QUESTIONS?

# Contact us & join GEAR!

Please complete the post-grand rounds survey.

Thank you!