

Overview

- Caregiving in the U.S.
- Caregiving and Health
- Interventions for Caregivers
- Caregiver Policy
- 7 Recommedations: Future Research

Caregiving in the U.S.

- 17.7 million provide support to older adults
- 8.5 million provide support to severely impaired (dementia and or self-care needs)
- Mean hours of care per month:
 - 85 for household activities only
 - 118 for persons with 1-2 self-care needs
 - 253 for persons with >2 self-care needs
- Value of "free" care \$250-450 billion

Caregiving as a Research Platform

- Important social problem affecting individuals and society
- Incorporates numerous transitions of interest to psychologists (e.g., increasing/decreasing levels of demand/chronic stress, bereavement, institutionalization)
- Enables multiple levels of analysis from macro (e.g., social policy) to micro (e.g., psychobiological processes)
- Many relevant theoretical approaches (e.g., stresscoping, interpersonal relationships, helping behavior, altruism, emotion regulation)
- Multiple methods (e.g. descriptive studies, randomized trials, experiments)

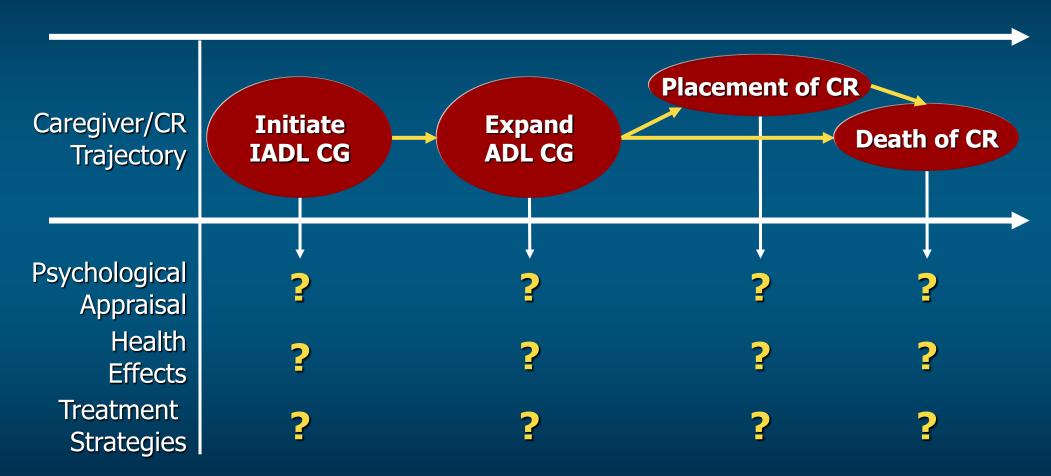
Caregiving as Chronic Stress Exposure

- Stressor is persistent, uncontrollable, unpredictable—requires high levels of vigilance
- Generates physical and psychological strain
- Generates secondary stress in multiple life domains

Causal Linkages Between Caregiving and Health

Unraveling health effects by studying the effects of moving into and out of the caregiving role

Caregiver (CG)/Care Recipient (CR) Trajectory and Health



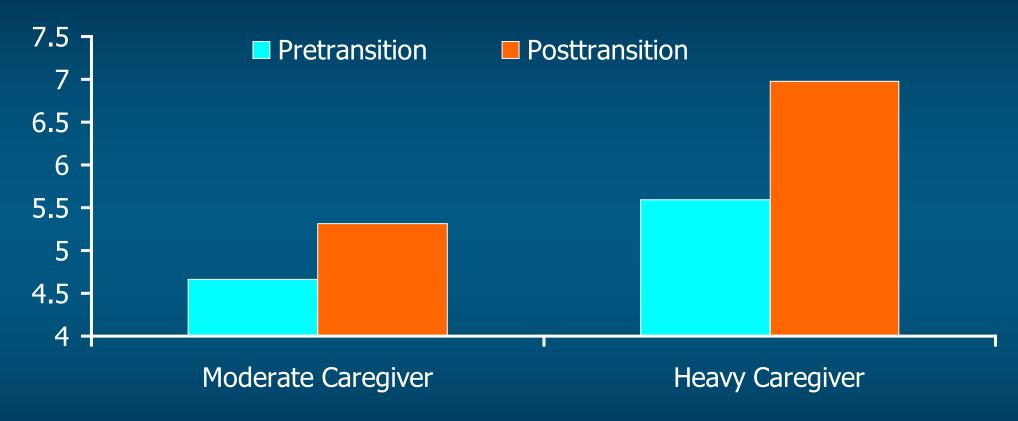
IADL=Instrumental Activities of Daily Living (cooking, cleaning, finances, etc.); ADL=Activities of Daily Living (bathing, dressing, eating, etc).

Caregiver Transitions

Longitudinal Health Effects: Transitions Into the Caregiving Role

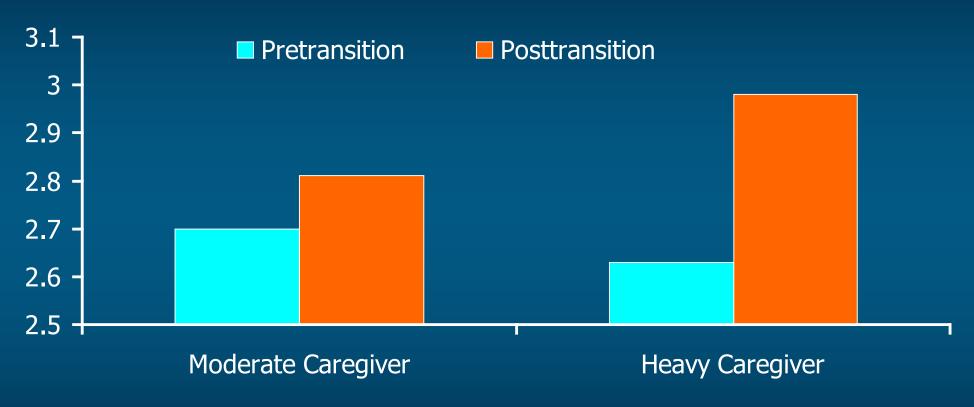
How do increasing levels of caregiving stress affect health status of caregivers?

Depressive Symptoms Pre- and Post-transition, by Transition Group



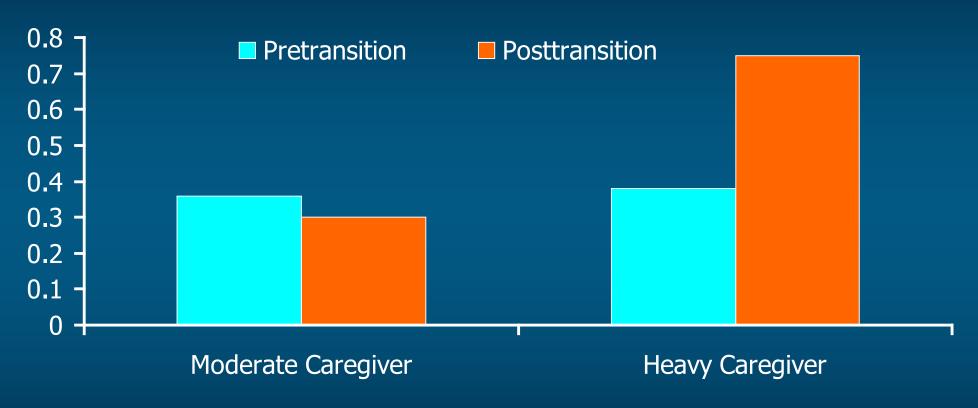
Repeated measures ANCOVA statistics. Main test for transition group, F=4.06, P<.05. Main effects test for time, F=4.66, P<.05. Interaction of transition category and time not significant. Control variables: age, education, gender, self-reported health, race and income. Possible range of depressive symptoms 0-30. Higher scores indicate more symptoms of depression.

Self-Reported Poor Health Pre- and Post-transition, by Transition Group



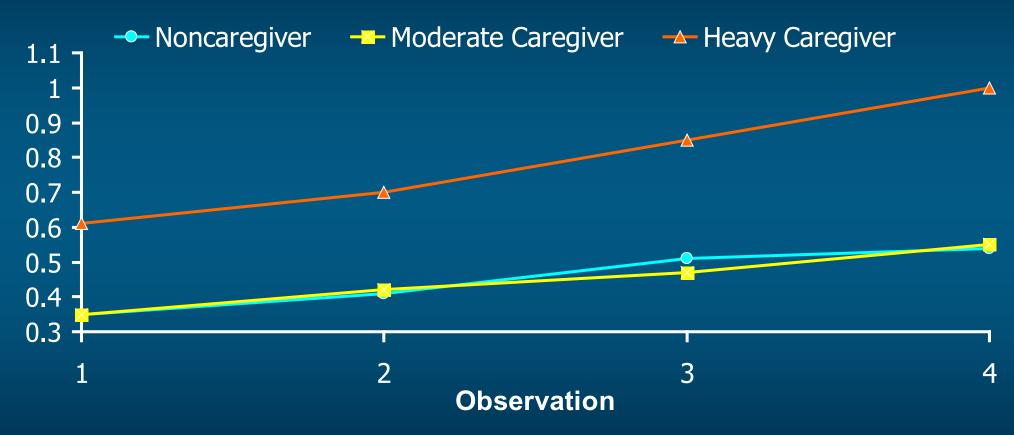
Repeated measures ANCOVA statistics. Main effects test for transition group not significant. Main effects test for time not significant. Interaction of transition category and time marginally significant, F=3.59, P<.07. Control variables were age, education, gender, race and income. Possible range of self-reported health 0-5, with higher scores indicating poorer health.

Health Risk Behaviors Pre- and Post-transition, by Transition Group



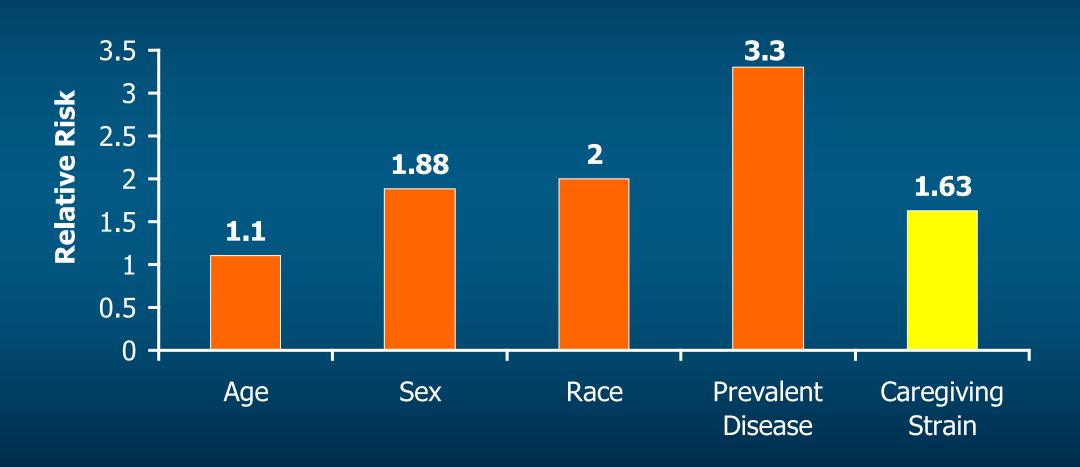
Repeated measures ANCOVA statistics. Main effects test for transition group, F=5.46, P<.05. Main effects test for time not significant. Interaction of transition category and time, F=11.23, P<.01. Control variables were age, education, gender, race, self-reported health, and income. Possible range of health risk behaviors was 0 to 6 with higher scores indicating more health risk behaviors.

Prevalent Disease Count at 4 Observations, by Transition Group

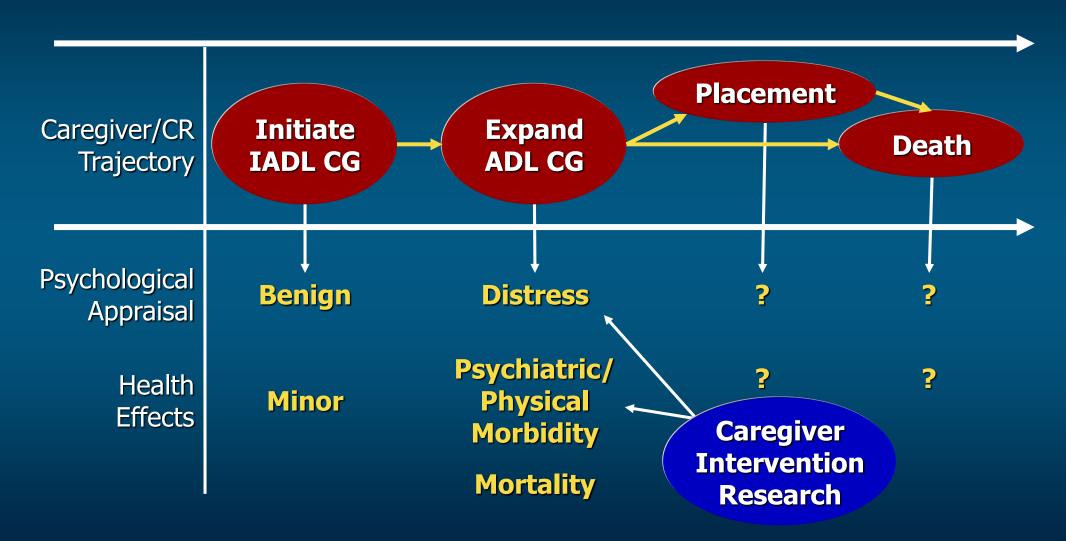


Repeated measures ANCOVA statistics. Main effects test for transition group, F=5.37, P<.01. Main effects test for time not significant. Interaction of transition category and time, F=2.19, P<.05. Control variables were age, education, gender, and baseline prevalent disease count.

Adjusted Relative Risk of Mortality: Significant Predictors (Complete Model)



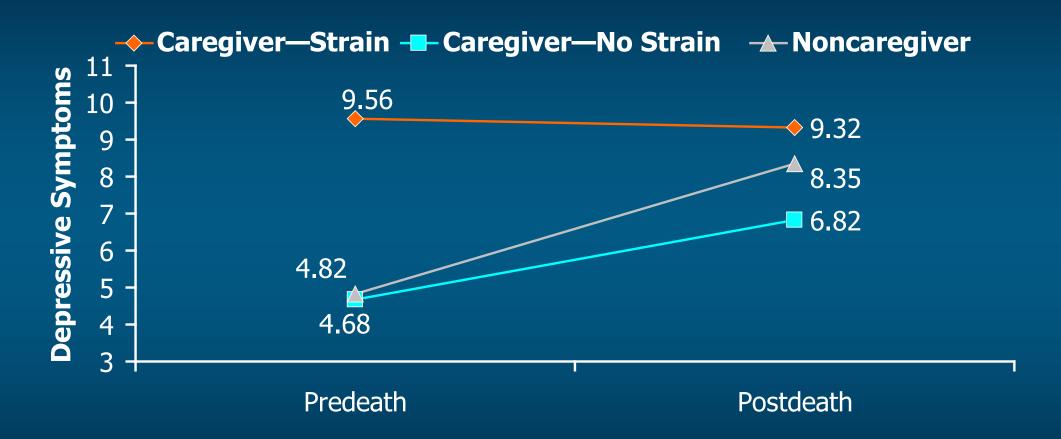
Chronic Stress Trajectory of Caregiver



Caregiver Exit Transitions

 Death of care recipient the bereavement transition

Pre- and Post-death CES-D Depression Symptoms as a Function of Pre-death Caregiving Status (CHES)

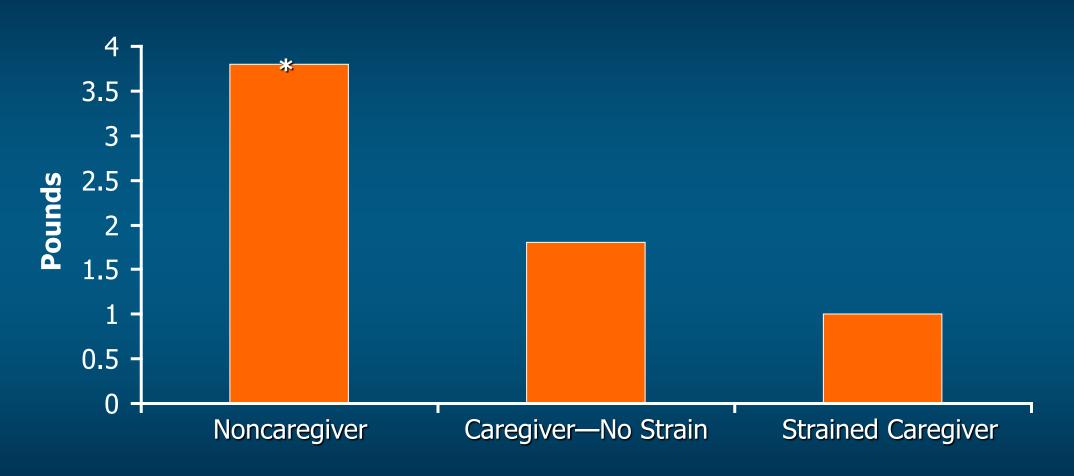


CESD=Center for Epidemiologic Studies-Depression.

Means adjusted for age, education, gender, race, time between pre-death interview and death, and time between post-death interview and death.

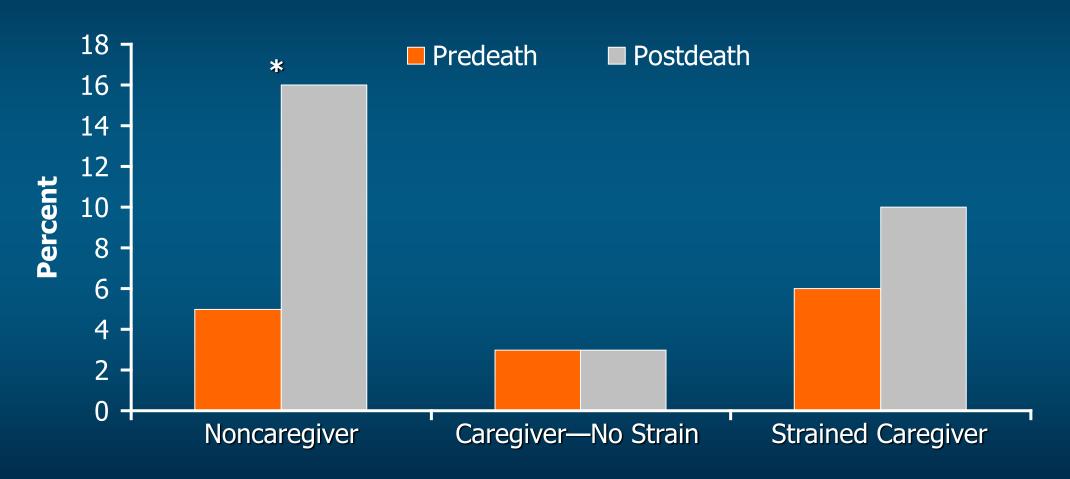
Schulz et al., 2001, JAMA, 285:3123-3129.

Mean Pre- to Post-bereavement Weight Loss in Pounds by Caregiving Status (Adjusted)



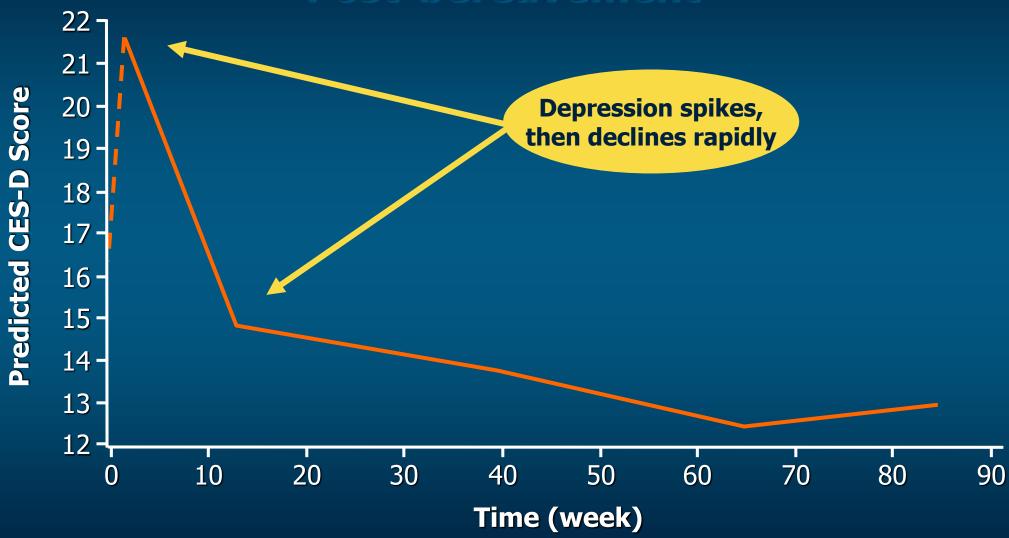
^{*}*P*<.05. Schulz et al., 2001, JAMA, 285:3123-3129.

Percent Taking Antidepressant Medication Before and After Death of Spouse by Caregiver Status

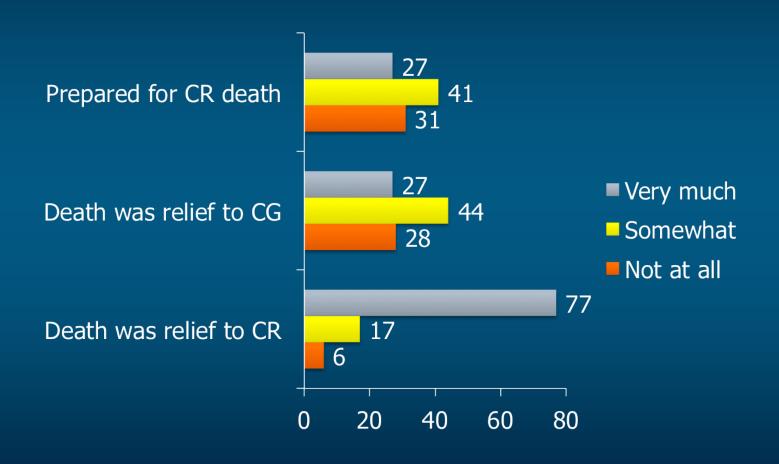


^{*}*P*<.05. Schulz et al., 2001, JAMA, 285:3123-3129.

Piecewise Linear Function of CES-D Scores Post-bereavement



Caregiver Report of Relief after Death of Patient with AD (%)

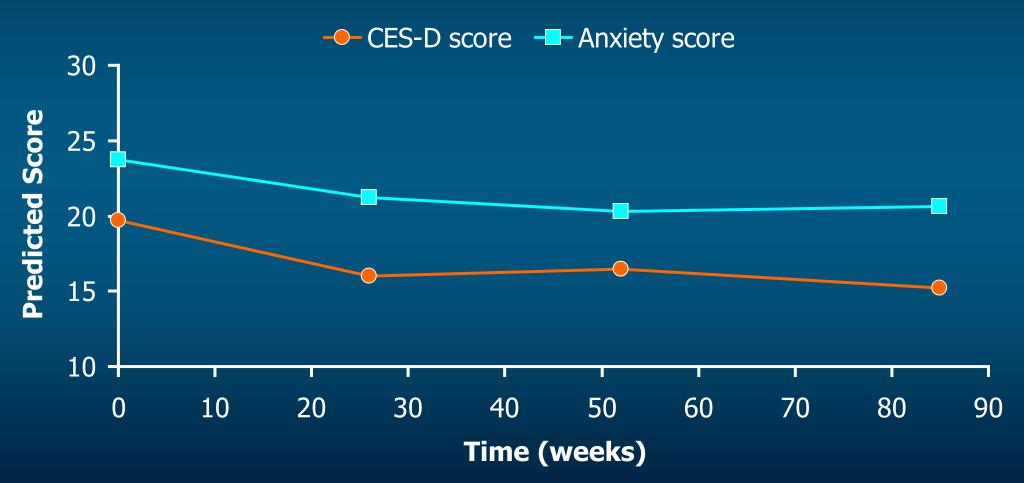


Caregiver Transitions: The Placement Transition

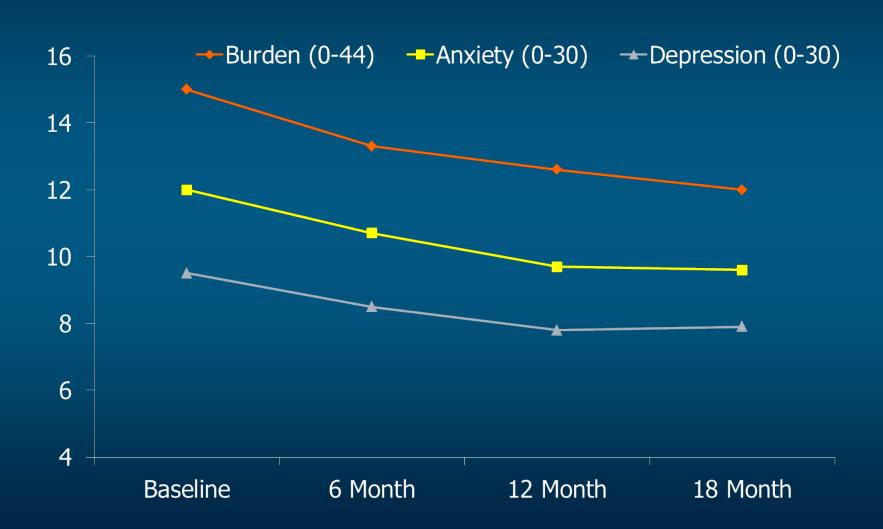
What happens to the caregiver when the care recipient is placed in a long-term care facility?



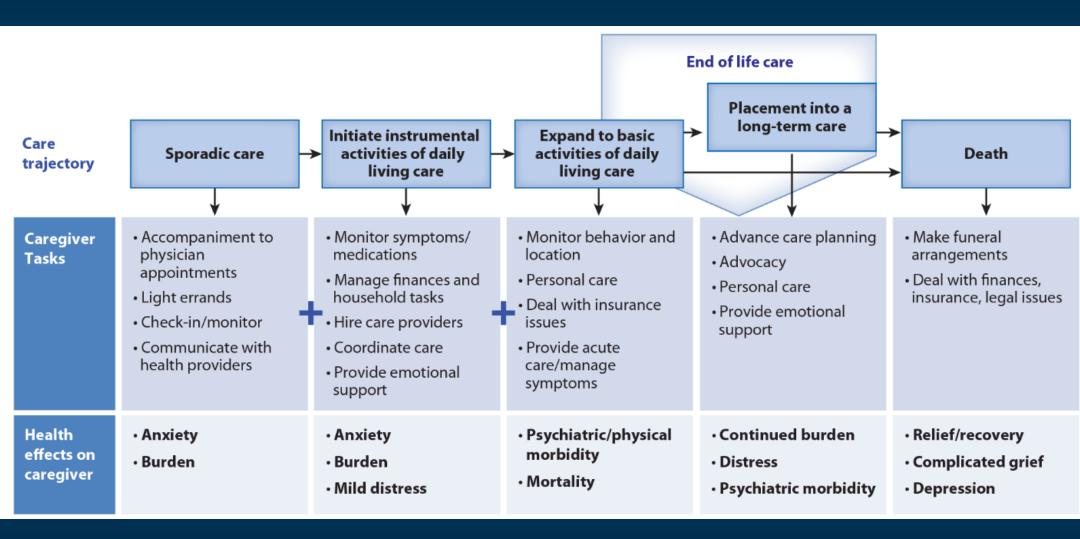
Post-placement CES-D Scores (Depression) and Anxiety Scores as a Function of Time Since Institutionalization (n=179)



Burden, Anxiety and Depression Caregivers with CR in Nursing Home (n=212)



Care Trajectory, Tasks, and Health Effects



...so we understand some of the effects of caregiving

What can we do about it?



Cooperative agreement among NIH (NIA and NINR)

6 intervention sites:

- Birmingham, AL
- Boston, MA
- Memphis, TN
- Miami, FL
- Palo Alto, CA
- Philadelphia, PA

Coordinating Center

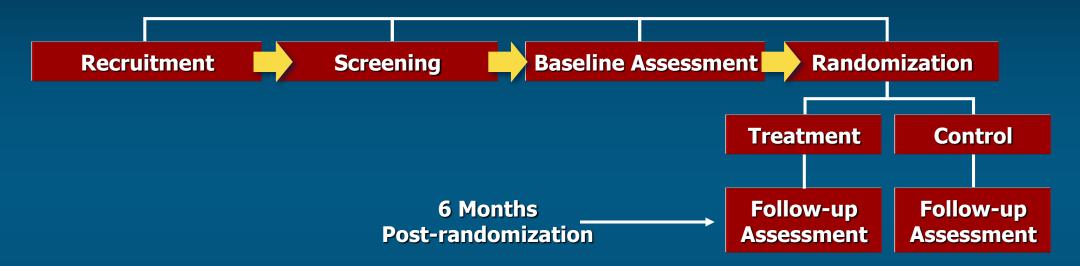
Pittsburgh, PA



REACH II Design

- Randomized Clinical Trial—1 active treatment and 1 control condition implemented at all sites
- 5 sites (Birmingham, Memphis, Miami, Palo Alto, and Philadelphia)
- Recruit equal numbers of African Americans, Whites, and Hispanic Americans (N=600 total)

Study Design and Assessment Intervals



Intervention Strategy

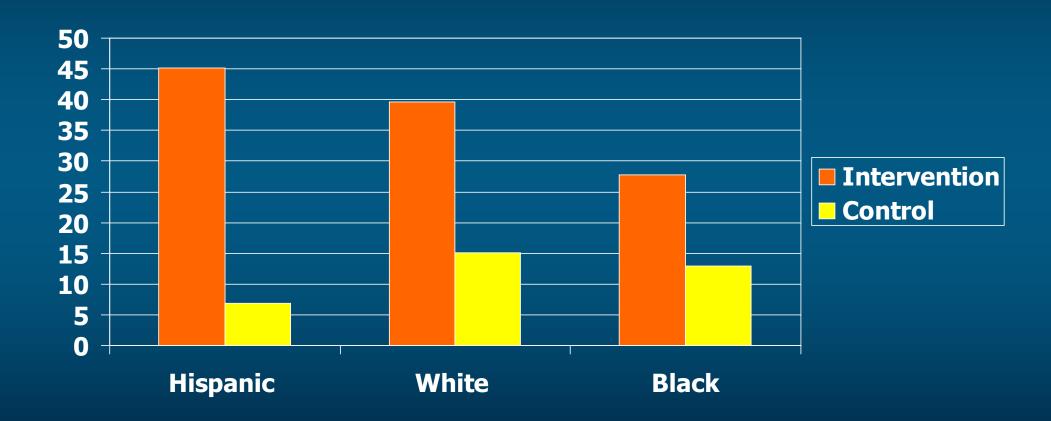
Risk **Appraisal Intervention Dosing Outcomes Assessment**

Risk Appraisal and Intervention

Intervention designed to address six areas:

- Burden
- Problem behaviors
- Social support, social integration
- Self-care/physical health
- Emotional well-being
- Safety (Pt driving, access to weapons)*

Clinically Significant Net Improvement* Across All 5 Domains (depression, support, self-care, burden, pt. problem behaviors) by Treatment Group and Race/Ethnicity



^{*}Net Improvement = Improved-Worsened Reach Investigators, 2006, Annals of Internal Medicine, 145:727-738.

Editorial on REACH II Results (Annals of Internal Medicine)

"If these interventions were drugs, it is hard to believe that they would not be on the fast track to approval."

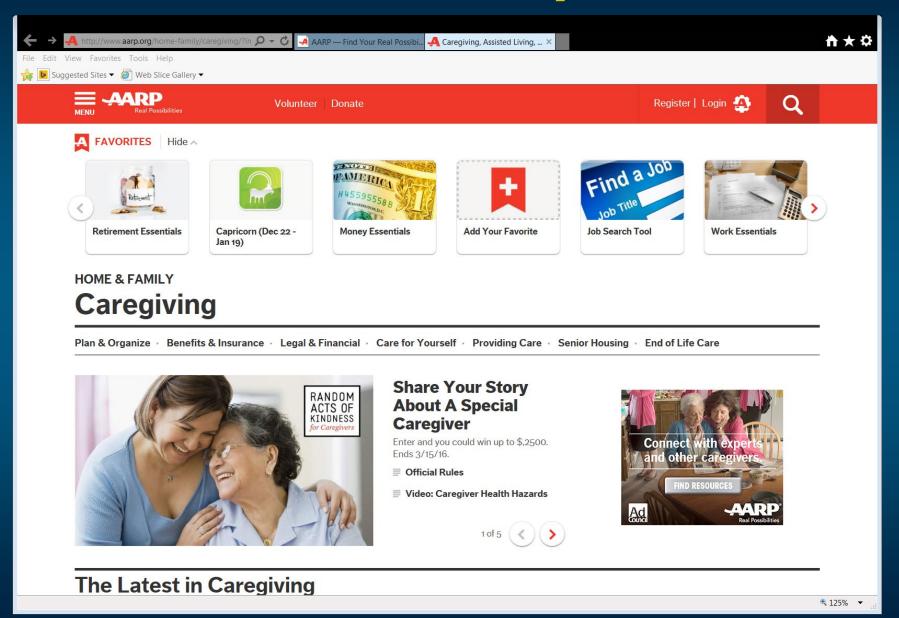
Extending REACH

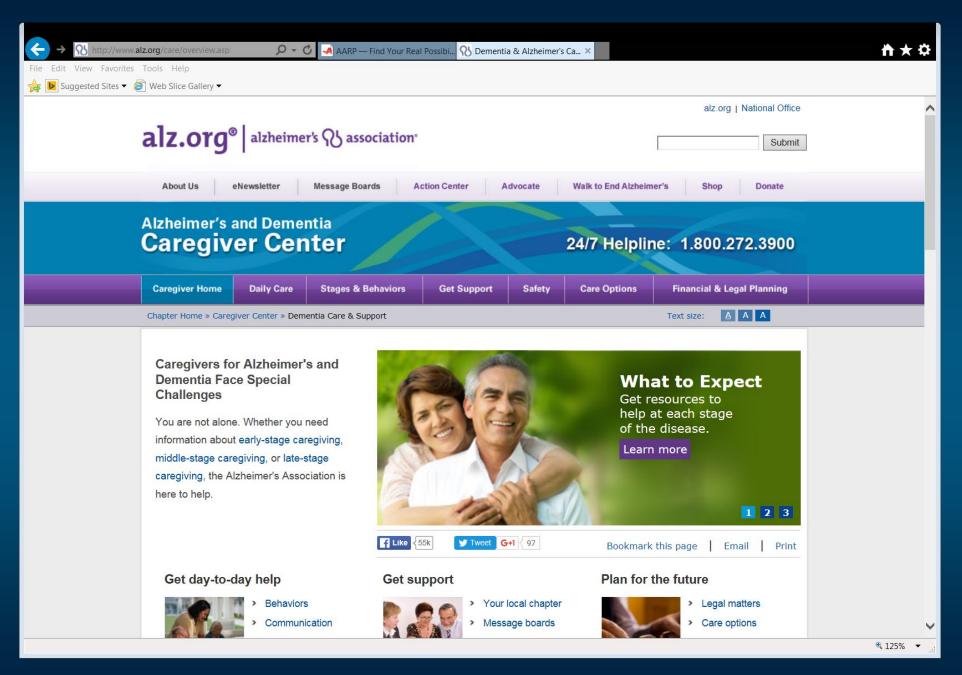
- REACH VA—adaptation for veterans living at home
- Adopted in numerous states as part of Area Agencies on Aging (Aging Services programs)
- Replicated/applied in Hong Kong, Korea, Germany, adapted for mainland China
- Adopted by Indian Health Service

Translating Research into Policy

- Advocacy—late 90s
- Legitimization—mid 2000s
- Legislation—2012 on

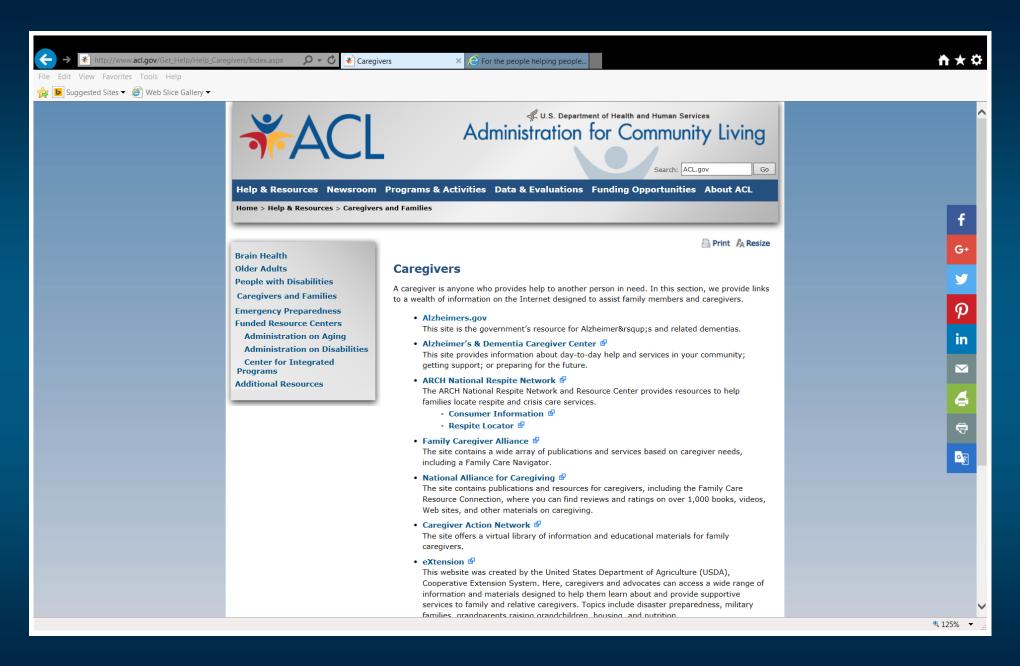
Advocacy

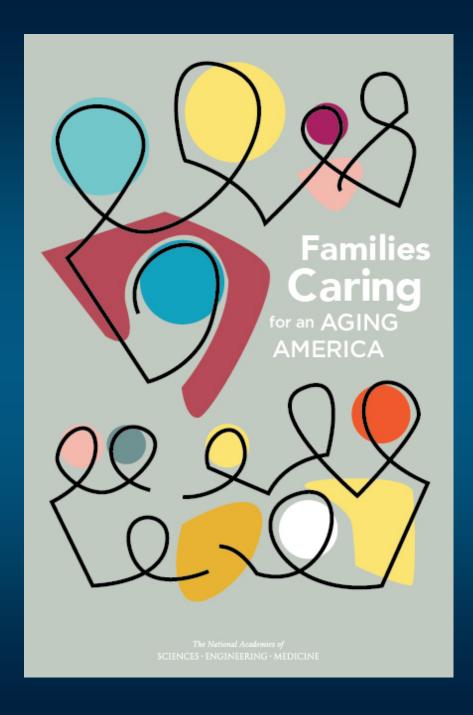




Legitimization







Download the report for free at: www.nationalacademies.org/caregiving

Legislative Initiatives

- RAISE (Recognize, Assist, Include, Support, and Engage) Family Caregivers Act
- Credit for Caring Act—tax credit up to \$3000 for financially helping relative
- Caregiver Advise, Record, Enable (CARE)
 Act —discharge planning, Adopted in 30 states

Future Directions

- Assess prevalence and impact of caregiving
- Not all caregivers need help
- Shift from efficacy to implementation/ pragmatic trials
- 4 Change health care and support systems to incorporate caregiver
- 6 Monetize the effects of caregiving
- 6 Embrace technology
- Educate and prepare all adults for caregiving

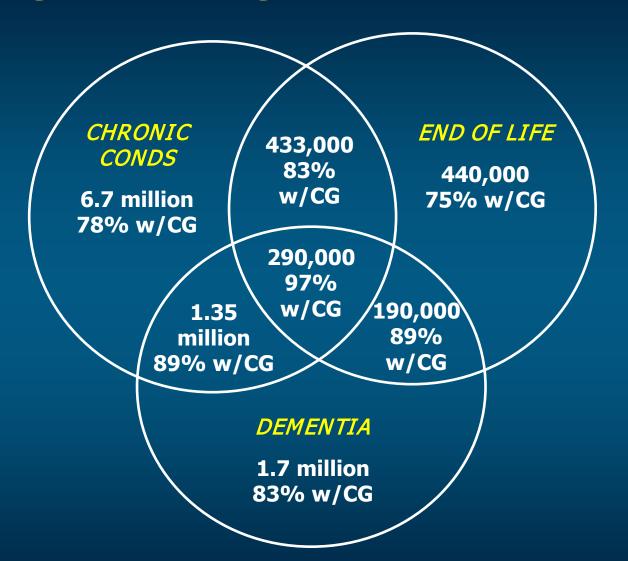
1. Assess the Prevalence and Impact of Caregiving

- Adopt consensus definition in population surveys of prevalence
- Assess population level effects on time use, finances, employment, social isolation, lifestyle changes, and health
- Assess caregiving over the life-course

2. Not All Caregivers Need Help— Identify High Risk Caregivers/Patients

- Many caregivers do fine, particularly in early stages of caregiving career
- Allocation of limited resources to highest need at risk caregivers
- Well established risk profiles available

High Need/High Cost Patients and Their Caregivers



CHRONIC CONDS = at least 3 chronic conditions and 1ADL/IADL limitation; dementia excluded as chronic condition

END OF LIFE = died within 1 year of baseline assessment

DEMENTIA = diagnosis of probable dementia

NONE OF THE ABOVE

24.1 million, 67% w/CG

High Need/High Cost Patient Caregiver Impacts*

- More hours of care (1/3 report >100 hours per month)
- Provide help with more types of tasks
- Increased caregiver psychological and physical morbidity
- Increased financial strain (e.g., out-of-pocket expenditures, labor force participation)
- More unmet needs

3. Shift from Efficacy to Implementation Research

- Vast published intervention literature
- More than 50 systematic reviews/ meta-analysis since 2000
- 5 systematic reviews of systematic reviews

Successful Interventions

Address pragmatics of providing care

- Knowledge about illness, symptoms and progression, available support service
- Skills to address needs of care recipient, assisting with functional disabilities, managing behaviors, accessing professional services

Coping with emotional toll of caregiving—

- Living with, watching loved one suffer and decline, with little or no ability to mitigate conditions
- Meditative strategies and cognitive behavior therapies

Pragmatics Challenges

Emotional Toll



Efficacy Research—A Litany of Woes

- Small to moderate effect sizes for some outcomes
- Risk of bias in published RCTs is moderate to high
 - Sequence generation and allocation concealment not described
 - Outcome assessors not blinded (interventionist is assessor)
 - Methods for dealing with missing data not reported
 - Selective (opportunistic) outcome reporting
 - Small sample size, poor quality control in treatment implementation and data collection, limited follow-up
- ◆ Increasingly fragmented treatment approaches Care AHRQ (2020): Interventions for People Living With Dementia and Their Caregivers

4. Formally integrate caregivers into Health Care and Support Systems

- Consensus core outcomes
 - Meaningful improvement of adverse symptoms
 - Maintain/improve quality of life
 - Societal significance—service utilization, cost
- Develop context and disease assessment tools tailored to disease and treatment trajectory
- Train and certify health care providers

5. Monetize the Economic Costs/Benefits of Caregiving

- Caregivers replace or delay formal care
- Recent review* of 45 studies 3 studies stand out
 - Van Houtven & Norton, 2008: decreased Medicare costs
 - Torbica et al., 2015: increased healthcare costs after stroke
 - Coe et al., 2016: small (not statistically significant) reduced health care utilization

The Ideal Monetizing Study

- Longitudinal study of representative subset of population with and without caregiver
- Capture people before they become ill
- Track work related impacts on caregiver
- Assess healthcare utilization for both care recipient and caregiver—both during and after care
- Track out-of-pocket expenditures for caregiver and care recipient

6. Embrace Technology to Support Caregivers

- Computers, smart phones, and web-based clinical care tools
- Symptom monitoring
- Advice and coaching
- Accessing services
- Barriers: digital divides, usability issues, reliability, trust

7. Educate and Prepare all Adults for Caregiving

- Implement population based preventive strategies?
- Population level training on
 - Likelihood of becoming caregiver/care recipient
 - Planning for support needs
 - Roles and responsibilities of caregiving
 - Rudimentary caregiving skills