

# Rural Analysis of Data From a Medicare Demonstration

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# Purpose of Medicare Demonstration<sup>1</sup>

To test and evaluate a model of:

1. Disease self-management/health promotion,  
and
2. Consumer-directed care

<sup>1</sup>A Randomized Controlled Trial of Primary and Consumer-Directed Care for  
People with Chronic Illnesses (CMS 95-C-90467/2-01)

# Objectives

- Reduce rate of functional decline;
- Improve health status and quality of life;
- Minimize inpatient hospital, Medicare, and total health care utilization and expenditures

# Study Inclusion Criteria

## N=1605

- Community residing (NY, WV, OH); and
- Medicare Parts A and B eligible; and
- Moderately or severely impaired (2+ ADL deficits or 3+ IADL deficits); and
- Prior service use
  - Hospital or nursing home use in the past year
  - Medicare home health use in past year
  - 2 or more ED visits in past 6 months

# Research Design – RCT

## (24-Month Intervention)

- **Treatment Group A**
  - Primary Care Health Promotion Nurse
- **Treatment Group B**
  - Consumer Directed Voucher for home care (\$250/month)
- **Treatment Group C**
  - Nurse + Voucher
- **Control Group**
  - Usual community care

# Subject Recruitment Data Collection

- Recruited through primary care practices
- Data collected by trained interviewers at baseline, 12 months, 22 months
- Block random assignment
- Main Instruments
  - Assessment form (function, health, cognition, demographics, service use, caregiver data)
  - SF-36
  - Health Care Journal

# Primary Care Health Promotion Nurse Intervention

- Special conference visits with primary care providers (PCPs)
- Health behavior change (coaching)
- Disease self-management
  - Knowledge
  - Skills
- Nurse home visits



# Rural Sample

- Definition:
  - Residing outside a Metropolitan Statistical Area (MSA)
- Sample: 451 (out of 1605 total sample)

# Baseline Characteristics

(\* $P < .01$ ; \*\* $P < .05$ )

- Rural (n=451)
  - Mean age = 77.7 (10.9)
  - **64.3% female\***
  - **1.1% minority\***
  - **76.1% HS or less\***
  - 34.3% income less than \$10,000
  - **62.3% home ownership\***
  - **33.3% lives alone\*\***
  - **77.6% informal caregiver\***
- Urban (n=1,154)
  - Mean age = 77.2 (11.5)
  - 70.9% female
  - 4.9% minority
  - 68.7% HS or less
  - 32.7% income less than \$10,000
  - 55.9% home ownership
  - 39.2% lives alone
  - 71.6% informal caregiver

# Health and Functional Status

(\* $P < .01$ )

- Rural (n=451)
  - ADL Score (0-12) = 5.3\*
  - 34.8% Fair/poor life sat.\*
  - 32.4% Congestive heart failure\*
- Urban (n=1,151)
  - ADL Score (0-12) = 5.8
  - 45.7 Fair/poor life sat.
  - 25.8% Congestive heart failure

# Earlier Findings

- Rural participants in Nurse Group reported less decline in ADLs compared to controls ( $p=0.02$ ). This finding held with rural (but not urban) sub-groups:
  - Heart conditions ( $p=0.04$ )
  - Hypertension ( $p=0.07$ )
- Cost neutrality (both urban and rural)

# Conclusions

- The Primary Care Health Promotion Nurse intervention significantly lessened functional decline over a 22-month period;
- The positive effect of the intervention was stronger for rural than for urban participants;
- The intervention holds promise for high-risk disease groups, such as heart conditions and hypertension; and
- The intervention can be delivered without significantly increasing healthcare costs, and has the potential to actually lower total expenditures.