

# Preventive Home Visits: A Feasibility and Effects Study of a Novel Intervention for Older Adults

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## Abstract

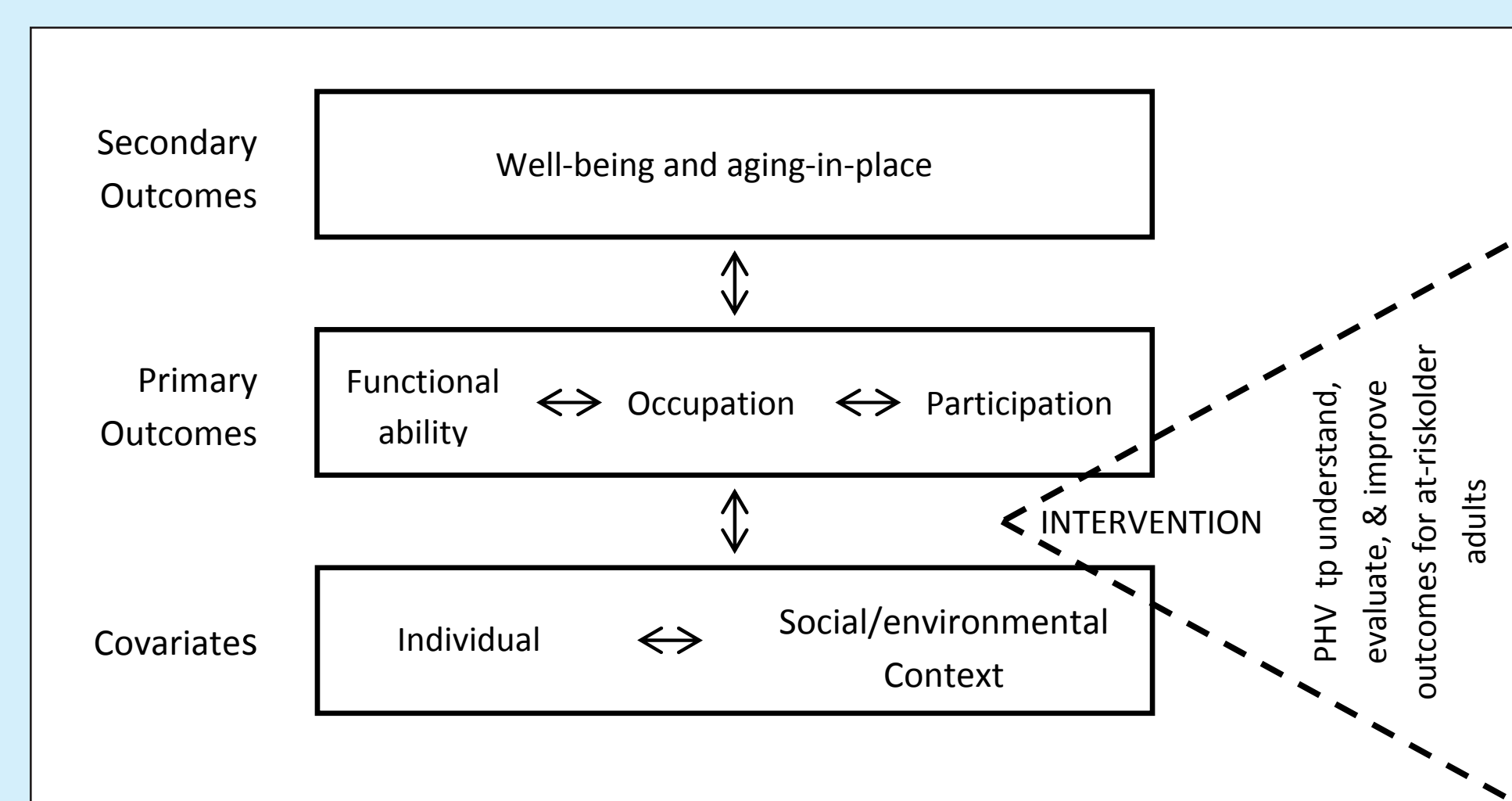
This poster describes an in-process project, funded by NIA grant 1R21AG029502, to test the feasibility and effects of Preventive Home Visits (PHVs) for older adults. The project is implementing an experimental design with approximately 120 older (75+ years) community-dwelling adults who are at-risk for functional decline and relocation. The intervention is based on infrequent but regular visits to an older adult's home by an occupational therapist and is designed to assess the older person's situation and provide information and advice to optimize function and well-being. In the poster we provide the rationale and conceptual model for the intervention and explain the PHV intervention. Subsequently, we explain the evaluation design and methods, and we describe the progress to date and lessons learned. In the last section, we discuss the long-term goals for a larger trial based on the current study as well as the potential benefits of a larger trial and eventual dissemination of the intervention.

## Background

- The search for preventive methods to mitigate decline of at-risk older adults and their unwanted move from home is important
- Non-medical preventive home visits have been utilized in Europe for 2 decades
- A successful approach in the USA could enhance quality of life and save health care costs
- Evidence about PHV efficacy is mixed but generally supportive, but knowledge needs exist:
  1. Evidence is unclear because of variation in the type of intervention and the outcome measures used
  2. Evidence lacking about the context in which interventions take place, the role of adherence, and other covariates
  3. More evidence needed about psychosocial outcomes (e.g., life satisfaction, participation)
  4. Interventions have rarely combined a comprehensive (biopsychosocial) OT intervention protocol (assessments and recommendations) with a home visit to older adults.
  5. Evidence for home interventions with older adults in the USA—a context with different values and expectations regarding care—is not substantial

## Intervention and Evaluation

### Conceptual Framework



### PHV Process Model



### Research Design

Experimental group	O <sub>1</sub>	X <sub>1</sub>	O <sub>2</sub>	X <sub>2</sub>	O <sub>3</sub>	X <sub>3</sub>	O <sub>4</sub>	X <sub>4</sub>	O <sub>5</sub>
Nominal intervention group	O <sub>1</sub>		X <sub>1</sub>		O <sub>2</sub>		X <sub>2</sub>		O <sub>3</sub>
Months	0	1	3	5	7	9	11	13	15

O = observation; X = intervention

Nominal intervention = mail information about services for older adults in the community

### Data collection

- Face-to-face interviews (observations 1, 3, & 5 of experimental group)
- During intervention with experimental group using protocol instrument
- Over the telephone (observations 2 & 4 of experimental group)

Table 1. Operationalization of PHV Framework Concepts in Data Collection.

Framework Construct	Role in Framework & Analysis	Instrument	How/when Collected
Individual	Covariate	PHV Protocol Instrument	Pre-intervention
Social/environmental context	Covariate	PHV Protocol Instrument	Pre-intervention
Occupation	Primary outcome	PHV Protocol Instrument	During visits
Functional ability	Primary outcome	Late Life Function and Disability Instrument (LLFDI) Function component	Pre- and post
Participation	Primary outcome	LLFDI Disability component	Pre- and post
Life satisfaction	Secondary outcome	Satisfaction with Life Scale	Pre- and post
General health	Secondary outcome	SF-12 v.2	Pre- and post
Hospitalization	Tertiary outcome	Care Utilization Inventory	Pre- and post
Institutionalization	Tertiary outcome	Care Utilization Inventory	Pre- and post

- Other Instruments Used
  - Vulnerable Elders Survey (eligibility screen)
  - 6-item Cognitive Impairment Test
  - CES-D 10
  - Fidelity check instrument
- Also collected observational data on intervention, participants, situations

### Analysis

- Feasibility: recruitment yield, efficiency, & representativeness
- Efficacy: GLMs and repeated measures ANOVA

## Progress through September 24, 2008

- Sample of 120 sought (60 in each group)
- 2/3 of the way to that goal (current N = 79)

Table 2. Sample Characteristics.

Characteristics	N	%
Age	81 (mean)	75-97 (range)
Female	60	77
Non-Hispanic White	70	90
College Degree	36	46
Living with someone	48	61
Single-family Dwelling	44	56
Urban/suburban	63	81

## Future plans

- The study is a step toward a larger, more comprehensive (full-scale) evaluation
- This study will provide the basis for feasibility and improvement of the intervention
- In a full-scale trial, we would want to expand the scope of the proposed study in several ways
  - use a larger sample and more complex multivariate models
  - use SF-36 and objective measures of hospitalization
  - assess whether urban/rural, socioeconomic, or ethnic differences are important considerations in such an intervention