Interventions to Prevent or Delay Nursing Home Placement for Adults with Impairments

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Disclosure Information

I have no financial relationships to disclose.

I will not discuss off label use and/or investigational use in my presentation.
Learning Objectives

• Describe effectiveness of community-based & outpatient interventions in preventing or delaying nursing home placement

• Recognize gaps in evidence

• Discuss implications for VHA programs & services

Outline

I. Background

II. Methods

III. Intervention Effectiveness

IV. Gaps in Evidence

V. Implications for Policy
US Funding for Long-term Care Services

- Medicaid, 51%
- Other Public, 21%
- Out-of-Pocket, 19%
- Private Insurance, 8%

Total = $310 billion

Growth in Cost of Long-term Care Services

- Nursing Home
- Rebalancing Initiatives
- $71 (47%)

U.S. DHS Assistant Secretary for Planning and Evaluation Office of Disability. Aging and Long-Term Care Policy, 2018.
VA Choose Home Initiative

- FY 2020—$9.8 billion VHA costs for long-term care
  - 71% for nursing home care?

- 2017—VA Secretary launched Choose Home Initiative:
  - Enhance VHA policies & practices to support Veterans with impairments (and their informal caregivers)
  - Remain in community settings, if preferred


Evidence Synthesis Program

Systematic Review: Risk Factors and Interventions to Prevent or Delay Long-term Nursing Home Placement for Adults with Impairments

May 2019

Duan-Porter et al. https://www.hsrd.research.va.gov/publications/esp/reports.cfm
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Conceptual Framework
Key Questions

For adults with physical and/or cognitive impairments:

1) What is the effectiveness of home and community-based interventions for preventing or delaying nursing home placement?

2) Which characteristics of participants moderate the effectiveness of interventions?

Search Strategy

• Keywords and subject headings for:
  ➢ Populations—older adults, TBI/PTSD
  ➢ Interventions of interest
  ➢ Nursing home placement (“institutionalization,” etc.)

• MEDLINE, Soc Abstracts, PsycINFO, CINAHL, Embase, Cochrane, JBI, AHRQ EPC, VA ESP

• Expert suggestions & referrals
Screening & Selection

• Inclusion Criteria:
  ➢ Adults with physical and/or cognitive impairments
  ➢ Eligible intervention
  ➢ Examined long-term nursing home placement
  ➢ Systematic review

• Exclusion Criteria:
  ➢ Acute care settings
  ➢ Caregiver outcomes without patient outcomes
  ➢ Hospice or end-of-life care
  ➢ Condition-specific treatments (dementia medications, etc.)
Data Abstraction

• All eligible reviews:
  ➢ Population(s)
  ➢ Intervention(s)
  ➢ # & characteristics of included primary studies
  ➢ Definition/assessment of nursing home placement (reviews & primary studies)

• Prioritized reviews (most recent, highest quality):
  ➢ Summary intervention effects
  ➢ # unique studies examining nursing home placement
  ➢ Secondary outcomes (hospitalization, mortality, etc.)

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Characteristics of All Eligible Reviews

<table>
<thead>
<tr>
<th>Category</th>
<th># Reviews</th>
<th>High Quality</th>
<th>Recent</th>
<th>Reviews including:</th>
<th># Prioritized Reviews</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>RCTs</td>
<td>Cohort Studies</td>
</tr>
<tr>
<td>Case Management</td>
<td>8</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Caregiver Support</td>
<td>10</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Respite Care &amp; Adult Day Clinic</td>
<td>9</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Preventive Home Visits</td>
<td>6</td>
<td>1</td>
<td>—</td>
<td>—</td>
<td>6</td>
</tr>
<tr>
<td>Others</td>
<td>14</td>
<td>5</td>
<td>8</td>
<td>1</td>
<td>12</td>
</tr>
<tr>
<td>Totals</td>
<td>47</td>
<td>15</td>
<td>19</td>
<td>7</td>
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</table>
Characteristics of Prioritized Reviews

<table>
<thead>
<tr>
<th># Reviews</th>
<th>Recent</th>
<th>Quality of SR:</th>
<th>Reviews including:</th>
<th># Unique Studies Evaluating NHP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>Medium</td>
<td>Only RCTs</td>
</tr>
<tr>
<td>Caregiver Support</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Respite Care &amp; Day Clinics</td>
<td>3</td>
<td>1</td>
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<td>2</td>
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<tr>
<td>Preventive Home Visits</td>
<td>2</td>
<td>—</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Others</td>
<td>9</td>
<td>6</td>
<td>5</td>
<td>5</td>
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Results from 13 Prioritized Reviews (RCTs only)

<table>
<thead>
<tr>
<th></th>
<th>Effect on Nursing Home</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caregiver Support (2)</td>
<td></td>
<td>1 review reported qualitative summary of inconsistent effects, highlighted 2 studies that showed delay in placement</td>
</tr>
<tr>
<td>Respite Care &amp; Day Clinics (2)</td>
<td></td>
<td>1 review on adult day clinics reported no overall effect, RR 0.84 (95% CI 0.58, 1.21)</td>
</tr>
<tr>
<td>Case Management (2)</td>
<td></td>
<td>1 review reported no overall effect, RR 0.94 (95% CI 0.85, 1.03); 1 review reported inconsistent effects across different follow-up durations</td>
</tr>
<tr>
<td>Preventive Home Visits (1)</td>
<td></td>
<td>1 review reported no overall effect, RR 0.91 (95% CI 0.76, 1.09), suggested more intensive interventions (&gt;9 visits) may decrease placement</td>
</tr>
</tbody>
</table>
Results from 13 Prioritized Reviews (RCTs only)

<table>
<thead>
<tr>
<th>Effect on Nursing Home</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Others (5)</td>
<td></td>
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<tr>
<td>?</td>
<td>2 reviews on physical activity interventions for frail or pre-frail older adults found no RCT</td>
</tr>
<tr>
<td></td>
<td>1 review on a variety of interventions for falls prevention, reported qualitative summaries on multifactorial programs and exercise-focused interventions, inconsistent effects</td>
</tr>
<tr>
<td>?</td>
<td>1 review on light therapy for adults with dementia found no RCT</td>
</tr>
<tr>
<td>?</td>
<td>1 high-quality review on assistive technologies for adults with dementia found no RCT</td>
</tr>
</tbody>
</table>

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Evidence Gaps

• No reviews (or primary studies) on PTSD/TBI

• Interventions with no studies examining nursing home placement

• Many studies involved caregivers

• Complex interventions varied in components, setting

Future Research

• Randomized evaluations of complex interventions to compare models which differ in only 1-2 key components/characteristics

• Randomized evaluations with longer follow-up (likely > 2 years) & larger sample size

• Consider describing in detail selection of components & implementation of interventions
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Current VA Process & Services

### Considerations for Policy

- Organize & streamline programs according to key goals
- Compare existing programs with effective high-intensity interventions (lower intensity programs may not be effective)
- Combine improved assessment for physical & cognitive impairments with programs to provide dedicated, longitudinal care coordination over years
- Evaluate programs for cost-effectiveness from improved patient & family-centered outcomes (rather than avoidance of nursing home placement)
Limitations

• Effectiveness of interventions for other outcomes?
• Review descriptions of interventions, quality ratings, and overall strength of evidence
• Most studies used participant reports of nursing home placement
• No reviews restricted studies to US
• Some studies were conducted >20 years ago

Conclusions

• Interventions with no (or inconsistent) effects:
  ➢ Caregiver support
  ➢ Respite care & adult day clinics
  ➢ Case management
  ➢ Preventive home visits

• Several interventions with no evidence

• Longer-term studies of interventions that can be adapted & involve intensive participant contacts?
Acknowledgments

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The views expressed in this report are those of the authors and do not necessarily represent the views of the Department of Veterans Affairs.

Questions?

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