### Supplemental Table 1. Selected Evidence for the Effects of Occupation- and Activity-Based Interventions on IADL Performance Among Community-Dwelling Older Adults (N = 13)

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</table>
| Clark et al. (2001) | Determine the effectiveness of the lifestyle intervention in improving mental and physical well-being in ethnically diverse community-living older people | Level I RCT  
 N = 460 older adults living in the community, age ≥60 yr  
 Occupational therapy intervention group n = 232  
 Control group n = 228  
 Mean age: 74.9 yr | Intervention  
 Intervention group: 6-mo treatment period, 2 hr/wk of group occupational therapy and up to 10 hr within the 6-mo treatment period of individual occupational therapy  
 Control group: No intervention | No significant differences between the occupational therapy group and the control group were found in physical function and role limitations related to IADLs on the SF-36. | The study used self-report measures.  
 IADL performance was not comprehensively measured.  
 Results may not generalize to other living situations. |
| Clark et al. (1997) | Evaluate the effectiveness of preventive occupational therapy services tailored for multiethnic, independent-living older adults | Level I RCT  
 N = 361 older adults living in the community, age ≥60 yr  
 Occupational therapy intervention group n = 122  
 Social control group n = 120  
 Control group n = 119  
 Mean age: 74.4 yr | Intervention  
 Intervention group: 9-mo treatment period, 2 hr/wk of group occupational therapy and 9 hr within the 6-mo treatment period of individual occupational therapy  
 Social control group: 9-mo treatment period, 2.25 hr/wk, focused on activities intended to promote social interaction  
 Control group: No intervention | Significant differences between the occupational therapy group and the two other groups were found on the SF-36, including physical function and role limitations in the performance of some IADLs.  
 No difference was found on the FSO physical function subscales of IADL. | The study used self-report measures.  
 IADL outcomes were not comprehensively measured.  
 Results may not generalize to other living situations. |
| De Vreede, Samson, van Meeteren, Duursma, & Verhaar (2005) | Determine whether a functional task exercise program and a resistance exercise program have different effects on ability to perform daily tasks | Level I RCT single-blind  
 N = 98 adults living in the community, age ≥70 yr  
 Functional task intervention group n = 33  
 Resistance intervention group n = 34  
 Control group n = 31  
 Mean age: 74 yr | Intervention  
 Functional task exercise group: Task-specific exercises were performed 3×wk in 40-min sessions for 12 wk  
 Resistance exercise program: Exercises were performed 3×wk in 1-hr sessions for 12 wk to strengthen the muscle groups important for daily task performance  
 Control group: No intervention | The functional task exercise group had significantly higher ADAP total scores and individual scores in three of its domains than the other two groups. Nine months after baseline, the changes in ADAP total score and all of its domains of the control group were significantly different from those of the functional task group but not the resistance group. | Men were not included in the study.  
 Limitations include the learning effect; the ADAP tasks were used as a training tool and an assessment tool in the functional training group. |
### Supplemental Table 1. Selected Evidence for the Effects of Occupation- and Activity-Based Interventions on IADL Performance Among Community-Dwelling Older Adults (N = 13) (cont.)

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<td>Gitlin et al. (2006)</td>
<td>Test the efficacy of a multi-component intervention to reduce functional difficulties and home hazards and enhance self-efficacy and adaptive coping in older adults with chronic conditions</td>
<td>Level I RCT&lt;br&gt;N = 319 older adults with functional difficulties, age ≥70 yr&lt;br&gt;Intervention group n = 160&lt;br&gt;Control group n = 159&lt;br&gt;Mean age: 79 yr</td>
<td>Intervention&lt;br&gt;Intervention group: Five occupational therapy contacts (four 90-min visits and one 20-min telephone contact) and one physical therapy visit (90 min) within a 6-mo period. Intervention included education and problem solving, home modifications, energy conservation, balance, muscle strengthening, and fall-recovery techniques.</td>
<td>Intervention group had less difficulty with IADLs, greater confidence in managing daily functional activities, greater use of control-oriented strategies, and greater improvement in functional activities than control group. The magnitude of 12-mo effects was similar to effects at 6 mo for IADL functional difficulty.</td>
<td>Study outcomes were self-reported. Attention bias in the intervention group could have an impact on the results.</td>
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<tr>
<td>Manini et al. (2007)</td>
<td>Determine the efficacy of 10 wk of resistance, functional, or functional plus resistance training in older adults who modify tasks of everyday life and are at risk of subsequent disability</td>
<td>Level I RCT&lt;br&gt;N = 32 older adults living independently, age ≥70 yr with different functional abilities&lt;br&gt;Resistance intervention n = 11&lt;br&gt;Functional and resistance intervention n = 11</td>
<td>Intervention&lt;br&gt;Control period: First 10-wk period of no intervention&lt;br&gt;Resistance training (RT) intervention: 10-wk intervention period, 2×/wk, 30–45 min each session of graded resistance exercises</td>
<td>FT group improved in both components of functional ability (task modification and time performance) but not in MS. The RT group increased MS but only reduced task modification ability. The FRT group had fewer changes in MS and functional ability than the other two groups but had</td>
<td>Small sample size Possibility of seasonal effect because interventions and control periods were not conducted concurrently.</td>
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<td>Mann, Ottenbaker, Fraas, Tomita, &amp; Granger (1999)</td>
<td>Evaluate the effectiveness of a system of assistive technology devices and environmental intervention services to promote independence and reduce health care costs</td>
<td>Level I</td>
<td>Intervention group $n = 52$</td>
<td>After the 18-mo intervention period, both groups had reduced FIM total and motor scores. Compared with the intervention group, a greater percentage of participants in the control group declined in the areas of IADL, mobility, and occupation.</td>
<td>Small sample size could limit generalizability of results. Lack of control of variables in the control group. IADL measurement was not comprehensive.</td>
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<td>Matteliano, Mann, &amp; Tomita (2002)</td>
<td>Explore the relationship of receipt of community-based occupational therapy services to changes in IADLs</td>
<td>Level II</td>
<td>Intervention Group 1: Patients received occupational therapy services through a home care agency. Group 2: Patients did not receive occupational therapy services.</td>
<td>Participants receiving occupational therapy improved in ADL function. Participants receiving occupational therapy demonstrated improvement in food preparation, but this was not significantly different from the control group.</td>
<td>Use of a nonstandardized instrument for measuring IADLs threatens the validity of the results. Only the food preparation outcome was reported for IADLs.</td>
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<td>Pahor et al. (2006)</td>
<td>Assess the effect of a comprehensive PA intervention on the Short Physical Performance Battery (SPPB) and other physical performance measures</td>
<td>Level I RCT N = 424 older adults living in the community, ages 70–89 yr PA intervention group n = 213 Control group n = 211 Mean age: 76.8 yr</td>
<td>Intervention&lt;br&gt;PA intervention: A combination of balance, aerobic, strength, and flexibility exercises with a combination of center- and home-based sessions and group behavioral counseling sessions&lt;br&gt;Control group: Received successful aging health intervention sessions weekly for the first 26 wk and monthly the next 6 mo; session topics included nutrition, medication, foot care, and basic PA education</td>
<td>Outcome Measures&lt;br&gt;• SPPB: Standardized time measure of lower-extremity physical performance, which includes standing, balance, walking speed, and ability to rise from a chair&lt;br&gt;• 400-m timed walk&lt;br&gt;• Community Health Activities Model Program for Seniors Questionnaire (CHAMPS PA) At 8 wk, the SPPB scores for the PA group were significantly higher than scores for the control group. The 400-m walk speed declined in the control group and remained stable for the PA group. 12.2% of participants in the PA group and 15.6% of participants in the control group experienced major mobility disability. No control group without intervention Measured community mobility (IADL) indirectly by 400-m walk speed</td>
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<td>Rejeski et al. (2008)</td>
<td>Investigate the effect of PA on self-efficacy and satisfaction with physical functioning in older adults who have mobility deficits</td>
<td>Level I RCT N = 424 older adults living in the community, age ≥70 yr with lower-extremity mobility impairment</td>
<td>Intervention&lt;br&gt;PA: 12 mo of aerobic, strength, balance, and flexibility exercises, primary walking 5×/wk&lt;br&gt;Control group: Received health education for successful aging (SA) once a month for 12 mo</td>
<td>Both groups increased the weekly time spent doing physical activities of moderate intensity or greater from baseline to 12 mo; however, the PA group reported a significantly greater increase in time spent in physical activities (p &lt; There was variability in PA goals for each participant in response to a wide range of physical disabilities.</td>
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## Supplemental Table 1. Selected Evidence for the Effects of Occupation- and Activity-Based Interventions on IADL Performance Among Community-Dwelling Older Adults (*N* = 13) (cont.)

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<td>Richardson, Law, Wishart, &amp; Guyatt (2000)</td>
<td>Determine whether improvement in ADL and IADL skills is greater when receiving rehabilitation therapy in a simulated environment intervention than a traditional treatment setting (TTS)</td>
<td>Level I RCT</td>
<td>Intervention: <em>EASY Street intervention:</em> Three 1-hr treatment sessions/wk for the first 2 mo and 2·/wk for the 3rd and 4th mo, with 13 modules that mimic indoor and outdoor home and community environments that challenge frail elderly persons (e.g., bank, grocery store)</td>
<td>No differences between groups were found at baseline. No statistically significant change was found by group, time of assessment, or Group  \times  Time interaction for overall SAILS or any SAILS domain.</td>
<td>No control group Small sample size and loss of participants may have affected results. The outcome measure may have been insufficiently responsive to detect small but important changes.</td>
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<td>Wellman, Kamp, Kirk-Sanchez, &amp; Johnson (2007)</td>
<td>Assess the effectiveness of the Eat Better &amp; Move More (EBMM) Program in a variety of community sites</td>
<td>Level III Pretest–posttest</td>
<td>Intervention: EBMM: 12 weekly sessions of talks and activities for group nutrition and PA sessions</td>
<td>Participants showed a significant increase in steps taken per day, stairs climbed, average blocks walked, and number of days walked per week.</td>
<td>No control group Wide variation in completion rate Does not report on outcomes for household activities Program completers had significantly fewer health conditions than noncompleters.</td>
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| Willis et al. (2006) | Determine the effects of cognitive training on daily function and durability of training of cognitive abilities | Level I  
RCT single-blind trial, 5-yr follow-up and 4 groups  
*N* = 2,832  
Memory group *n* = 71  
Reasoning group *n* = 705  
Speed training group *n* = 712  
Control group *n* = 704 | Intervention  
Four groups: (1) Reasoning training group, (2) memory training group, (3) speed training group, (4) control group  
Independent variables: Type of training, time, booster | Participants who received cognitive training reported less difficulty with IADLS at end of training and 5-yr follow-up compared with control group. The effect size reached statistical significance only for the reasoning group. | The study used self-report measures. Participants were not blind to receipt of the intervention. No placebo was used for control group. |

Zidén, Frandin, & Kreuter (2008) | Investigate whether home rehabilitation can improve physical function and daily activity level compared with conventional care in the early phase after hip fracture | Level I  
RCT  
*N* = 102 older adults living in the community post hip fracture, ≥65 yr  
Multiprofessional home rehabilitation (HR) group *n* = 48  
Conventional care group (CG) *n* = 54  
Mean age: 81.9 yr | Intervention  
HR: Focused on supported discharge, independence in daily activities, and enhancing PA and confidence at discharge. Patients were accompanied home by a physical therapist and occupational therapist and received brief intervention periods for a maximum of 3 wk after discharge. Physical therapy included supported self-efficacy in locomotion and PA and outdoor ambulation. Occupational therapy included safety and independence in ADL.  
CG: Conventional care  
Outcome Measures  
• Instrumental Activity Measure (IAM): walking 300m, cooking | A majority (88%) of the HR patients took outdoor walks compared with less than half (46%) of the CG patients (*p* < .001).  
IAM: Significant difference at 1-mo follow-up in outdoor activities (*p* = .0014) and domestic activities (*p* = .0292)  
FAI: Significant differences in domestic and outdoor activities (*p* = .0119 and .0007, respectively)  
HR patients demonstrated a higher degree of recovery. | 6 HR patients did not participate in the intervention; some members (*n* = 20; 37%) of the CG participated in other care and rehabilitation. Not all patients received exactly the same intervention (e.g., different number of home visits). |
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<td>a simple meal, using public transportation, simple shopping, major shopping, cleaning and washing, domestic activities, and outdoor activities</td>
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**Note.** ADLs = activities of daily living; IADLs = independent activities of daily living; PA = physical activity; RCT = randomized controlled trial; SF–36 = 36-Item Short-Form Health Survey.

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