# Program to Encourage Active, Rewarding Lives for Seniors (PEARLS)

## Program Description

The Program to Encourage Active, Rewarding Lives for Seniors (PEARLS) is an intervention for people 60 years and older who have minor depression or dysthymia and are receiving home-based social services from community services agencies. The program is designed to reduce symptoms of depression and improve health-related quality of life. PEARLS provides eight 50-minute sessions with a trained social service worker in the client's home over 19 weeks. Counselors use three depression management techniques: (1) problem-solving treatment, in which clients are taught to recognize depressive symptoms, define problems that may contribute to depression, and devise steps to solve these problems; (2) social and physical activity planning; and (3) planning to participate in pleasant events. Counselors encourage participants to use existing community services and attend local events.

## Descriptive Information

| | |
|---|---|
| **Areas of Interest** | ▸ Health and wellness<br>▸ Mental health promotion |
| **Outcomes** | **Review Date: March 2007**<br>▸ Symptoms of depression<br>▸ Health-related quality of life |
| **Ages** | ▸ 50–60 (Older adult)<br>▸ 61–74 (Older adult)<br>▸ 75–84 (Older adult)<br>▸ 85+ (Older adult) |
| **Genders** | ▸ Female<br>▸ Male |
| **Races/Ethnicities** | ▸ American Indian or Alaska Native<br>▸ Asian<br>▸ Black or African American<br>▸ Hispanic or Latino<br>▸ White |
| **Settings** | Home |
| **Geographic Locations** | ▸ Urban<br>▸ Suburban |
| **Adverse Effects** | No adverse effects, concerns, or unintended consequences were identified by the developer. |
| **Implementation History** | PEARLS was first implemented in the Seattle, Washington, area through two local agencies: (1) Aging and Disability Services, Area Agency on Aging for Seattle and King County, and (2) Senior Services of Seattle/King County. Each agency implemented the |

| | |
|---|---|
| | intervention as part of the first evaluation study of PEARLS, conducted by the developer in 2000. Since 2008, more than 40 PEARLS programs have been active throughout the United States, in Arizona, California, Colorado, Georgia, Illinois, Iowa, Massachusetts, Missouri, New York, North Carolina, Ohio, Vermont, Washington, and Wyoming. Agencies implementing PEARLS include area agencies on aging, community mental health centers, senior centers, and other community-based organizations. Approximately 1,900 clients have participated in PEARLS, and over 300 providers have been trained to date. Technical assistance is provided by the University of Washington Health Promotion Research Center. PEARLS providers often conduct evaluations of their program for internal use or funding organizations. To date, none of these evaluations have been published in peer-reviewed literature. |
| **Adaptations** | No population- or culture-specific adaptations were identified by the developer. |

# Quality of Research

## Review Date: March 2007

### Documents Reviewed

The documents below were reviewed for Quality of Research. The research point of contact can provide information regarding the studies reviewed and the availability of additional materials, including those from more recent studies that may have been conducted.

#### Study 1

Ciechanowski, P., Wagner, E., Schmaling, K., Schwartz, S., Williams, B., Diehr, P., … LoGerfo, J. (2004). Community-integrated home-based depression treatment in older adults: A randomized controlled trial. *Journal of the American Medical Association, 291*(13), 1569–1577. PubMed abstract available at http://www.ncbi.nlm.nih.gov/pubmed/15069044

Schwartz, S. J., Wagner, E. H., Ciechanowski, P. S., Schmaling, K., Collier, C., Kulzer, J., et al. (2002, February). *Case-finding strategies in a community-based depression treatment program for older adults: PEARLS.* Roundtable presentation at the 16th National Conference on Chronic Disease Prevention and Control, Atlanta, GA.

#### Supplementary Materials

Glass, R. M., Allan, A. T., Uhlenhuth, E. H., Kimball, C. P., & Borinstein, D. I. (1978). Psychiatric screening in a medical clinic. An evaluation of a self-report inventory. *Archives of General Psychiatry, 35*(10), 1189–1195. PubMed abstract available at http://www.ncbi.nlm.nih.gov/pubmed/697537

Health Promotion Research Center. (n.d.). *Progress report: June 2002–September 2003*. Report submitted to the Centers for Disease Control and Prevention Research Center Program.

Lyness, J. M. (2004). Treatment of depressive conditions in later life: Real-world light for dark (or dim) tunnels. *Journal of the American Medical Association, 291*(13), 1626–1628. PubMed abstract available at http://www.ncbi.nlm.nih.gov/pubmed/15069051

Schwartz, S. J. (2000, November). *The PEARLS study: Program to Encourage Active, Rewarding Lives for Seniors.* Report presented at the 15th National Conference on Chronic Disease Prevention and Control, Washington, DC.

Williams, J. W., Jr., Stellato, C. P., Cornell, J., & Barrett, J. E. (2004). The 13- and 20-item Hopkins Symptom Checklist Depression Scale: Psychometric properties in primary care patients with minor depression or dysthymia. *International Journal of Psychiatry in Medicine, 34*(1), 37–50. PubMed abstract available at http://www.ncbi.nlm.nih.gov/pubmed/15242140

## Outcomes

| Outcome 1: Symptoms of Depression | |
|---|---|
| **Description of Measures** | Symptoms of depression were measured using the Hopkins Symptoms Checklist 20 (HSCL-20), a self-report instrument used for the diagnosis of major depression in adult primary care patients. |
| **Key Findings** | At 12 months, compared with the usual care group, patients receiving the PEARLS intervention were more likely to have at least a 50% reduction in symptoms of depression (43% vs. 15%; $p < .001$) and to achieve complete remission from depression (36% vs. 12%; $p = .002$). |
| **Studies Measuring Outcome** | Study 1 |
| **Study Designs** | Experimental |
| **Quality of Research Rating (0.0–4.0 scale)** | 3.6 |

| Outcome 2: Health-Related Quality of Life | |
|---|---|
| **Description of Measures** | Health-related quality of life in functional, physical, social, and emotional well-being domains was assessed using the self-report Functional Assessment of Cancer Therapy Scale–General (FACT-G). The FACT-G is a generic core questionnaire with 27 items targeted to management of chronic illness. It has been used and validated with individuals diagnosed with cancer and other chronic conditions and with the general population. |
| **Key Findings** | At 12 months, compared with the usual care group, patients receiving the PEARLS intervention were more likely to report greater health-related quality of life improvements in functional well-being ($p = .001$) and emotional well-being ($p = .048$). |
| **Studies Measuring Outcome** | Study 1 |
| **Study Designs** | Experimental |
| **Quality of Research Rating (0.0–4.0 scale)** | 3.4 |

## Study Populations

The following populations were identified in the studies reviewed for Quality of Research.

| Study | Age | Gender | Race/Ethnicity |
|---|---|---|---|
| **Study 1** | ▸ 50–60 (Older adult)<br>▸ 61–74 (Older adult)<br>▸ 75–84 (Older adult)<br>▸ 85+ (Older adult) | ▸ 79% Female<br>▸ 21% Male | ▸ 58% White<br>▸ 36% Black or African American<br>▸ 4% Asian<br>▸ 1% American Indian or Alaska Native<br>▸ 1% Hispanic or Latino |

## Quality of Research Ratings by Criteria (0.0–4.0 scale)

| Criterion | Ratings | |
|---|---|---|
| | Outcome 1 | Outcome 2 |
| **Reliability of Measures** | 4.0 | 3.0 |
| **Validity of Measures** | 4.0 | 4.0 |
| **Intervention Fidelity** | 3.0 | 3.0 |
| **Missing Data and Attrition** | 4.0 | 4.0 |
| **Potential Confounding Variables** | 3.0 | 3.0 |
| **Appropriateness of Analysis** | 3.5 | 3.5 |
| **Overall Rating** | **3.6** | **3.4** |

### Study Strengths

The investigators employed commonly used measures with sound psychometric properties. No differential attrition was evident across groups. Attrition and missing data were minimal and were handled appropriately with good statistical analyses. The intervention was implemented with the use of a manual, therapists underwent training consistent with the standard in the field, and weekly meetings were held to review cases. The investigators adequately attempt to account for variables found to differ significantly among groups. The use of a randomized controlled trial design minimized potential confounding variables.

### Study Weaknesses

The articles did not mention any development or use of a fidelity instrument. The FACT-G (used to measure health-related quality of life in the study) appears to be used in research with cancer patients. However, consistent support for the use of this measure for a wider population (i.e., adults over the age of 60) is lacking. The study sample was small and drawn from a single geographic area.

## Readiness for Dissemination

### Review Date: March 2007

### Materials Reviewed

The materials below were reviewed for Readiness for Dissemination. The implementation point of contact can provide information regarding implementation of the program and the availability of additional, updated, or new materials.


Ciechanowski, P. (n.d.). *The PEARLS study: Community-integrated home-based depression treatment for the elderly* [PowerPoint slides].

Ciechanowski, P., & Schwartz, S. (2004, February). *PEARLS: Program to Encourage Active, Rewarding Lives for Seniors.* Presented at the 18th National Conference on Chronic Disease Prevention and Control, Washington, DC.

Kaiser, C. (n.d.). *PEARLS: A practitioner's perspective* [PowerPoint slides].

Ludman, E. (2004, July). *PEARLS dissemination training: Problem solving treatment* [PowerPoint slides].

Schwartz, S. (n.d.). *PEARLS: Background* [PowerPoint slides].

Schwartz, S. (n.d.). *PEARLS: Quality monitoring and program evaluation* [PowerPoint slides].

University of Washington Health Promotion Research Center. (2005, September). *PEARLS counselor training manual.* Seattle, WA: Author.

### Readiness for Dissemination Ratings by Criteria (0.0–4.0 scale)

| Criterion | Rating |
|---|---|
| **Implementation Materials** | 2.0 |
| **Training and Support** | 1.5 |
| **Quality Assurance** | 1.8 |
| **Overall Rating** | **1.8** |

### Dissemination Strengths

The program materials offer detailed information on problem-solving treatment and some information on organizational implementation. In-person training is available on an as-needed basis, and limited guidance and suggestions for program adaptation are available for problem-solving treatment. Quality assurance forms are provided to assist supervisors in monitoring implementation fidelity.

### Dissemination Weaknesses

A step-by-step program implementation manual is not yet available. Supervisory guidance is not provided. The manual appears complicated enough to require in-depth training and support, yet implementers are not required by the developer to undergo formal, in-person training. No procedures are specified for collecting and analyzing program data to support quality assurance.

## Costs

The cost information below was provided by the developer. Although this cost information may have been updated by the developer since the time of review, it may not reflect the current costs or availability of items (including newly developed or discontinued items). The implementation point of contact can provide current information and discuss implementation requirements.

### Implementation Materials

| Item Description | Cost | Required by Developer |
|---|---|---|
| **PEARLS Toolkit (includes background on PEARLS; detailed instructions, guidance, and tips for implementing PEARLS within an organization and carrying out the components of the PEARLS sessions with clients; and forms for creating the organizational and data management infrastructure necessary for the implementation of PEARLS)** | Free | Yes |
| **2-day, off-site training in Seattle, WA** | $395 per participant (includes tuition, course materials, continental breakfast, and snacks) | No |
| **On-site training** | Varies depending on the number of participants (minimum of 15–20 persons), plus travel expenses | No |
| **Online training modules** | Contact the developer | No |
| **Monthly technical assistance conference call** | Free | No |
| **Phone- or email-based technical assistance** | Free | No |
| **Tailored technical assistance** | Varies depending on site needs and number of participants | No |
| **PEARLS Fidelity Instrument (brief, 20-item multiple-choice survey)** | Free | No |

## Other Citations


Chaytor, N., Ciechanowski, P., Miller, J. W., Fraser, R., Russo, J., Unutzer, J., & Gilliam, F. (2011). Long-term outcomes from the PEARLS randomized trial for the treatment of depression in patients with epilepsy. *Epilepsy and Behavior, 20*(3), 545–549. PubMed abstract available at http://www.ncbi.nlm.nih.gov/pubmed/21333607

Ciechanowski, P., Chaytor, N., Miller, J., Fraser, R., Russo, J., Unutzer, J., & Gilliam, F. (2010). PEARLS depression treatment for individuals with epilepsy: A randomized controlled trial. *Epilepsy and Behavior, 19*(3), 225–231. PubMed abstract available at http://www.ncbi.nlm.nih.gov/pubmed/20609631

Community Preventive Services Task Force. (2012). Recommendation from the Community Preventive Services Task Force for use of collaborative care for the management of depressive disorders. *American Journal of Preventive Medicine, 42*(5), 521–524. PubMed Abstract available at http://www.ncbi.nlm.nih.gov/pubmed/22516494

Frederick, J. T., Steinman, L. E., Prohaska, T., Satariano, W. A., Bruce, M., Bryant, L., … Late Life Depression Special Interest Project Panelists. (2007). Community-based treatment of late life depression: An expert panel–informed literature review. *American Journal of Preventive Medicine, 33*(3), 222–249. PubMed abstract available at http://www.ncbi.nlm.nih.gov/pubmed/17826584

Jacob, V., Chattopadhyay, S. K., Sipe, T. A., Thota, A. B., Byard, G. J., Chapman, D. P., & Community Preventive Services Task Force. (2012). Economics of collaborative care for management of depressive disorders. A Community Guide systematic review. *American Journal of Preventive Medicine, 42*(5), 539–549. PubMed abstract available at http://www.ncbi.nlm.nih.gov/pubmed/22516496

Thota, A. B., Sipe, T. A., Byard, G. J., Zometa, C. S., Hahn, R. A., McKnight-Eily, L. R., … Community Preventive Services Task Force. (2012). Collaborative care to improve the management of depressive disorders: A Community Guide systematic review and meta-analysis. *American Journal of Preventive Medicine, 42*(5), 525–538. PubMed abstract available at http://www.ncbi.nlm.nih.gov/pubmed/22516495

## Translational Work

PEARLS was developed as an in-home intervention for older adults with minor depression or dysthymia, and the program was evaluated in a randomized controlled trial in 2000–2003 through a partnership between the University of Washington Health Promotion Research Center and two local agencies: (1) Aging and Disability Services (ADS), Area Agency on Aging for Seattle and King County, and (2) Senior Services of Seattle/King County (SSSKC). The program was designed to be delivered during home visits with clients from ADS, and implementation by ADS and SSSKC continues to date. After the first evaluation, PEARLS was evaluated in a randomized controlled trial with 80 adults with epilepsy and co-occurring depression. Partnerships with several community-based organizations have contributed to the expansion of PEARLS to reach other populations, such as clients who speak limited English and adults with major depression. In 2007, the PEARLS Toolkit (http://www.pearlsprogram.org/Training/PEARLS-Toolkit.aspx) was developed with the support of the Washington State Aging and Disability Services Administration to assist in the dissemination and implementation of PEARLS in community agencies. PEARLS providers and training participants from sites across 14 States participate in monthly technical assistance calls conducted by the PEARLS research team. These calls offer an opportunity to solve problems and provide strategies for overcoming organizational barriers to implementation within and outside the system. PEARLS has been included in the Substance Abuse and Mental Health Services Administration's National Registry of Evidence-based Programs and Practices (http://www.nrepp.samhsa.gov/ViewIntervention.aspx?id=29) and in the Agency for Healthcare Research and Quality's Innovations Exchange (http://www.innovations.ahrq.gov/content.aspx?id=2613). PEARLS received the Title III-D Highest Tier Evidence-Based Health Promotion/Disease Prevention Programs rating by the Administration on Aging and was awarded the 2011 Archstone Award for Excellence in Program Innovation.

The implementation of PEARLS by ADS is documented in a qualitative study conducted in 2008. Focus group interviews with PEARLS providers and their clients were analyzed to identify facilitators and barriers to implementation. PEARLS clients reported that in addition to treating depression, PEARLS provided other benefits, such as increasing physical and pleasurable activities, social support, quality of life, and ability to live independently. Program administrators reported that the implementation of PEARLS was innovative for ADS because area agencies on aging had not typically provided mental health services. ADS gained evidence-based program experience, a partnership with the University of Washington Health Promotion Research Center, and new funding opportunities. PEARLS counselors were viewed as a support for case managers as well as an integral part of a comprehensive program to help meet clients' mental health needs. Some barriers to implementations were identified, such as client ineligibility because of program exclusion criteria, beliefs about the depression screening instruments, and the added workload to case managers.

The partnership between the University of Washington Health Promotion Research Center and three community-based organizations implementing PEARLS in Seattle–King County has been documented by PEARLS researchers through a series of semistructured interviews conducted with PEARLS counselors, PEARLS referrers, and PEARLS participants from January to March 2011. Informants provided insight on three major areas: populations that are hard to reach with PEARLS, barriers to reaching these populations, and suggestions for improving recruitment and retention. Veterans, men and women who are ethnic minorities, immigrants, people who speak limited English, adults over age 75, adults with low incomes, and people residing in rural communities were identified as being hard to reach. Some of the challenges in reaching these populations revolved around stigma; client mistrust and negative perceptions about research; isolation created by the client's geographic location; and socioeconomic barriers (e.g., transportation, poverty, low levels of education). Suggested strategies for reaching these populations included recruiting clients through word of mouth by PEARLS program completers, recruiting clients through a variety of media outlets, and using positive language to describe the program. Strategies for improving retention included ensuring that PEARLS counselors are caring and helpful to the clients they serve, establishing rapport to keep clients engaged, and being flexible with each client's needs. Another suggested strategy to improve client retention was to taper PEARLS sessions gradually, specifically early in the program. Informants also noted that booster sessions and follow-up phone calls should be provided to the clients.

| Site With Translational Work | Articles Describing Site's Translational Work, by Category | | | | | |
|---|---|---|---|---|---|---|
| | Planning/ Partners | Adoption | Reach/ Recruitment | Implementation | Effectiveness | Maintenance |
| **Aging and Disability Services** | Article 1 | Article 1 | — | Article 1 | Article 1 | Article 1 |
| **3 community-based organizations in Seattle–King County** | Article 2 | — | Article 2 | — | — | — |

| Article Number | Article Reference |
|---|---|
| 1 | Steinman, L., Cristofalo, M., & Snowden, M. (2012). Implementation of an evidence-based depression care management program (PEARLS): Perspectives from staff and former clients. *Preventing Chronic Disease, 9,* E91. PubMed abstract available at http://www.ncbi.nlm.nih.gov/pubmed/22537909 |
| 2 | Steinman, L., Hammerback, K., & Snowden, M. (2011). *It could be a pearl to you: Exploring Program to Encourage Active and Rewarding Lives for Seniors (PEARLS) with hard-to-reach populations.* Unpublished manuscript. |

## Contacts

**To learn more about implementation or research, contact:**

Lesley Steinman, M.S.W., M.P.H.
University of Washington Health Promotion Research Center
(206) 543-9837
mailto:mlesles@uw.edu

**Additional program information can be obtained through the following Web sites:**

http://www.pearlsprogram.org
http://depts.washington.edu/hprc/depression

---

This intervention summary was developed through funding from the Administration for Community Living (ACL), Administration on Aging (AoA). The summary contains information from the Quality of Research and Readiness for Dissemination reviews that were completed in March 2007 for the intervention summary developed by the National Registry of Evidence-based Programs and Practices (NREPP), which is funded by the Substance Abuse and Mental Health Services Administration (SAMHSA).