

## PROGRAM DESCRIPTION

The Wellness Initiative for Senior Education (WISE) is a curriculum-based health promotion program that aims to help older adults increase their knowledge and awareness of issues related to health and the aging process. Based on the health belief model of behavioral change, WISE provides older adults with the information and resources they need to maintain a healthy lifestyle and become empowered in regard to both their health and the health care they receive. Program objectives include helping participants to (1) understand how lifestyle choices and behaviors impact health; (2) learn to use tools and feel empowered to manage health care, particularly regarding the use of medications; (3) understand the aging process and how it affects the metabolism of alcohol and medications; (4) develop an appreciation for cultural and generational diversity, including their own increasing age; and (5) recognize the early signs and symptoms of depression.

The six-lesson WISE curriculum is delivered by trained substance abuse prevention specialists at small-group sessions held weekly over a 6-week period. Each lesson lasts 2–3 hours and normally includes breakfast or lunch. The lessons are presented through a mix of lecture, discussion, small-group activities, and individual exercises. Participants also are given tools and resources for use at home, helping to increase the likelihood that they will put into practice and share what they have learned.

## DESCRIPTIVE INFORMATION

<b>Areas of Interest</b>	Health and wellness
<b>Outcomes</b>	<p><b>Review Date: April 2011</b></p> <ul style="list-style-type: none"> <li>▶ Knowledge and attitudes about alcohol and medications, aging, and depression</li> <li>▶ Health and health care behaviors</li> <li>▶ Medication management</li> </ul>
<b>Ages</b>	<ul style="list-style-type: none"> <li>▶ 50–60 (Older adult)</li> <li>▶ 61–74 (Older adult)</li> <li>▶ 75–84 (Older adult)</li> <li>▶ 85+ (Older adult)</li> </ul>
<b>Genders</b>	<ul style="list-style-type: none"> <li>▶ Female</li> <li>▶ Male</li> </ul>
<b>Races/Ethnicities</b>	<ul style="list-style-type: none"> <li>▶ American Indian or Alaska Native</li> <li>▶ Asian</li> <li>▶ Black or African American</li> <li>▶ White</li> <li>▶ Race/ethnicity unspecified</li> </ul>
<b>Settings</b>	Other community settings

<b>Geographic Locations</b>	<ul style="list-style-type: none"> <li>▶ Urban</li> <li>▶ Suburban</li> <li>▶ Rural and/or frontier</li> </ul>
<b>Adverse Effects</b>	No adverse effects, concerns, or unintended consequences were identified by the developer.
<b>Implementation History</b>	The New Jersey Prevention Network (NJPN) launched WISE in 1996, and the program has been locally implemented in over 1,300 senior centers, houses of worship, community centers, and senior living complexes throughout New Jersey, reaching more than 40,000 older adults. In 2009 and in 2013, expansion outside of New Jersey was initiated through trainings conducted by NJPN to prevention agencies in Alaska and Kentucky.
<b>Adaptations</b>	No population- or culture-specific adaptations were identified by the developer.

## QUALITY OF RESEARCH

**Review Date: April 2011**

### 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

Rutgers School of Social Work, Institute for Families. (2011, March). *WISE program evaluation pretest/posttest/follow-up* (Report originally prepared for the New Jersey Prevention Network in November 2007) (Rev. ed.). Unpublished manuscript.

#### Study 2

Rutgers School of Social Work, Institute for Families. (2011, February). *The WISE program evaluation findings* (Report originally prepared for the New Jersey Prevention Network in August 2008) (Rev. ed.). Unpublished manuscript.

#### Study 3

Rutgers School of Social Work, Institute for Families. (2011, February). *Project WISE evaluation report* (Report originally prepared for the New Jersey Prevention Network in December 2009) (Rev. ed.). Unpublished manuscript.

### Supplementary Materials

Ma, L., Green, K. E., & Cox, E. O. (2008, March). *Stability of the Philadelphia Geriatric Center Morale Scale: A multidimensional item response theory analysis*. Paper presented at the annual meeting of the American Educational Research Association, New York, NY.

## Outcomes

### Outcome 1: Knowledge and Attitudes About Alcohol and Medications, Aging, and Depression

<b>Description of Measures</b>	<p>In one study, knowledge about the ability of the body to metabolize alcohol and medications was assessed using a self-report survey with 15 items created from the WISE curriculum. Participants were asked to choose the response that best described the extent to which they agreed or disagreed with each item, using a 4-point Likert-type scale ranging from “strongly agree” to “strongly disagree.” Examples of items include “The effects of alcohol on the body and mind are the same regardless of age” and “I would feel comfortable talking to others if I were concerned about my ability to use over-the-counter medication safely.”</p> <p>In another study, knowledge and attitudes about alcohol and medications, aging, and depression were assessed using two measures:</p> <ul style="list-style-type: none"><li>▶ A self-report survey with 12 items created from the WISE curriculum. The items focused on knowledge of the early signs and symptoms of depression (e.g., “People who are depressed may have trouble making a decision or thinking clearly”) and the interaction between medications and alcohol (e.g., “Mixing alcohol with over-the-counter medications is generally safe”).</li><li>▶ The 5-item Attitude Toward Own Aging Subscale of the Philadelphia Geriatric Center Morale Scale. The items assessed the psychological well-being of older people (e.g., “As I get older, I feel less useful”).</li></ul> <p>For both measures, participants were asked to choose the response that best described the extent to which they agreed or disagreed with each item, using a 7-point Likert-type scale ranging from “strongly agree” to “strongly disagree.”</p>
<b>Key Findings</b>	<p>In one study, participants from four counties in New Jersey were randomly assigned to the 6-week WISE program or the no-treatment control group. Participants completed the survey at pretest, posttest, and 30-day follow-up. Compared with participants in the control group, those who completed WISE had increases over time in knowledge about the ability of the body to metabolize alcohol (<math>p = .001</math>) and medications (<math>p = .006</math>). These group differences were associated with medium effect sizes (<math>\eta^2 = .11</math> and <math>.07</math>, respectively).</p> <p>In another study conducted the following year, participants from six counties in New Jersey were recruited from senior centers and senior housing complexes. Sites were randomly assigned to the 6-week WISE program or the no-treatment control group; participants in the control group were given the opportunity to receive WISE at the completion of the study. Participants completed the measures at pretest, posttest, and 30-day follow-up. Compared with participants assigned to the control group, those who completed WISE had improvements over time in psychological well-being, knowledge and attitudes about aging, knowledge of the interaction between medications and alcohol, and knowledge of the early signs and symptoms of depression (<math>p = .007</math>).</p>
<b>Studies Measuring Outcome</b>	Studies 1 and 2

<b>Study Designs</b>	Experimental
<b>Quality of Research Rating (0.0–4.0 scale)</b>	3.4

### Outcome 2: Health and Health Care Behaviors

<b>Description of Measures</b>	Health and health care behaviors were assessed using a self-report survey with 9 items that were adapted from the Communication Scale of the Interpersonal Processes of Care Survey. Using a 5-point Likert-type scale ranging from “never” to “always,” participants chose the response that best described how frequently they engaged in the health and health care behavior reflected in each item. Examples of items include “I tell my doctor my opinion about my care and treatment” and “I ask my doctor enough questions to get the information I need to make my own decisions about which treatment to choose.” The assessment, which was administered after the last session of the 6-week program, asked respondents to report on the frequency of their behaviors both before and after participating in WISE.
<b>Key Findings</b>	After receiving WISE, participants had an increase in the frequency in which they engaged in positive health and health care behaviors ( $p < .0005$ ). This finding was associated with a large effect size (eta-squared = .14).
<b>Studies Measuring Outcome</b>	Study 3
<b>Study Designs</b>	Preexperimental
<b>Quality of Research Rating (0.0–4.0 scale)</b>	3.0

### Outcome 3: Medication Management

<b>Description of Measures</b>	Medication management was assessed using a self-report survey with 9 items that were adapted from the Communication About Medications Scales. Using a 5-point Likert-type scale ranging from “never” to “always,” participants chose the response that best described how frequently they engaged in medication management as reflected in each item. Examples of items include “I take over-the-counter medicine as directed” and “I read the instructions about prescription medicines before using them.” The assessment, which was administered after the last session of the 6-week program, asked respondents to report on the frequency of their behaviors both before and after participating in WISE.
<b>Key Findings</b>	After receiving WISE, participants had an increase in the frequency in which they engaged in positive medication management ( $p < .0005$ ). This finding was associated with a large effect size (eta-squared = .14).
<b>Studies Measuring Outcome</b>	Study 3
<b>Study Designs</b>	Preexperimental

Quality of Research Rating  
(0.0–4.0 scale)

3.0

## Study Populations

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

Study	Age	Gender	Race/Ethnicity
Study 1	<ul style="list-style-type: none"> <li>▶ 50–60 (Older adult)</li> <li>▶ 61–74 (Older adult)</li> <li>▶ 75–84 (Older adult)</li> <li>▶ 85+ (Older adult)</li> </ul>	<ul style="list-style-type: none"> <li>▶ 80.3% Female</li> <li>▶ 15% Male</li> </ul>	<ul style="list-style-type: none"> <li>▶ 83.3% White</li> <li>▶ 5.1% Black or African American</li> <li>▶ 2.1% Race/ethnicity unspecified</li> <li>▶ 1.7% Asian</li> <li>▶ 0.9% American Indian or Alaska Native</li> </ul>
Study 2	<ul style="list-style-type: none"> <li>▶ 50–60 (Older adult)</li> <li>▶ 61–74 (Older adult)</li> <li>▶ 75–84 (Older adult)</li> <li>▶ 85+ (Older adult)</li> </ul>	<ul style="list-style-type: none"> <li>▶ 73.1% Female</li> <li>▶ 26.5% Male</li> </ul>	<ul style="list-style-type: none"> <li>▶ 84.6% White</li> <li>▶ 10.7% Black or African American</li> <li>▶ 2.1% Race/ethnicity unspecified</li> <li>▶ 0.4% American Indian or Alaska Native</li> <li>▶ 1.3% Asian</li> </ul>
Study 3	<ul style="list-style-type: none"> <li>▶ 50–60 (Older adult)</li> <li>▶ 61–74 (Older adult)</li> <li>▶ 75–84 (Older adult)</li> <li>▶ 85+ (Older adult)</li> </ul>	Data not reported/available	Data not reported/available

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

Criterion	Ratings		
	Outcome 1	Outcome 2	Outcome 3
Reliability of Measures	3.8	2.8	2.8
Validity of Measures	3.8	2.8	2.8
Intervention Fidelity	2.5	2.5	2.5
Missing Data and Attrition	3.8	3.5	3.5

Criterion	Ratings		
	Outcome 1	Outcome 2	Outcome 3
Potential Confounding Variables	2.5	2.8	2.8
Appropriateness of Analysis	3.9	3.5	3.5
Overall Rating	3.4	3.0	3.0

### Study Strengths

Some assessment tools used to determine WISE’s effectiveness in various outcomes are well documented in the research literature and supported in these studies as being appropriate for the target population. Other assessment tools were developed by the evaluator but had good evidence of reliability, as supported by Cronbach’s alpha coefficients. Intervention fidelity was well documented and addressed through multiple methods (e.g., instructor training, content analysis of participants’ program evaluations, instructor observations forms). Attrition was not an issue with the use of a retrospective design in one study, where a single assessment was used to collect past perceptions and current behavior. Missing data in all three studies were managed appropriately through statistical methods. In two studies, participants were randomly assigned to an intervention or control group. One study reduced the potential for confounding variables by recruiting participants from two different sites. Although one study did not include a control group, its use of a retrospective pre- and posttest design was effective for the target population; the method avoided response-shift bias, which occurs when participants overestimate their knowledge, skills, and behaviors at baseline. In all three studies, statistical procedures were appropriate, and sample size and power were adequate.

### Study Weaknesses

Cronbach’s alpha coefficients were the only evidence presented for the reliability of assessment tools. Although survey questions were based on established measures for which validity had been determined, validity for the measures’ use with the specific target population was not well delineated. Objective observations of program implementation were not conducted, and a tested fidelity instrument shown to have reliability and validity was not used. In two studies, contamination between the intervention group and the control group was a potential confounding variable. In another study, a control group was not included, which raises concerns regarding potential confounding variables. The reports for the three studies do not mention how many different trainers there were and what efforts were made to reduce trainer effects.

# READINESS FOR DISSEMINATION

Review Date: April 2011

## 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.

New Jersey Prevention Network. (2008). *Wellness Initiative for Senior Education curriculum and training manual*. Lakewood, NJ: Author.

Program Web site, <http://www.njpn.org/programs/wise/>

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

Criterion	Rating
Implementation Materials	2.8
Training and Support	2.5
Quality Assurance	2.5
Overall Rating	2.6

### Dissemination Strengths

The manual provides step-by-step guidance for implementation, including facilitator tips and evaluation tools. Materials are well organized and easy to use. The required facilitator training includes discussion of participant recruitment. The importance of both process and outcome evaluations is emphasized throughout program materials, and training includes discussion of the collection of quality assurance data. Implementation checklists, participant evaluation forms, process data collection tools, and participant surveys are provided to support quality assurance.

### Dissemination Weaknesses

No information is provided on facilitator qualifications. Little guidance is provided to facilitators on addressing the heterogeneity of the older adult population, given that older adult cohorts have varied needs and expectations. It is unclear how new implementers identify and register for training opportunities. The content and extent of ongoing support are not described in the materials. Little guidance is provided on the use of quality assurance data to improve program delivery.

## 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
Facilitator’s guide, implementation binder, and other materials	\$100 per set	Yes
2-day, on-site facilitator training	\$5,500 for up to 20 participants, plus travel expenses for two instructors	Yes (one training option is required)
2-day, off-site facilitator training	\$425 per person (minimum of 10 participants)	Yes (one training option is required)

## TRANSLATIONAL WORK

NJPN partnered with the Institute for Families at the School of Social Work, Rutgers University, to conduct three evaluations of WISE.

The first evaluation was conducted with NJPN-affiliated agencies serving the New Jersey counties of Passaic, Ocean, Somerset, and Hudson in fall 2006 and spring 2007. The program evaluation used an experimental design with 137 older adults aged 60 or over receiving WISE and 97 older adults aged 60 or over being assigned to the control group. The development of the WISE Program Questionnaire, a self-administered survey to measure participant outcomes, was a collaborative effort between NJPN and the evaluation team. The WISE Program Questionnaire is made up of items developed from the WISE curriculum as well as items from existing validated instruments measuring psychosocial outcomes with older adult populations. Participants were assessed at three points: pretest, posttest, and 30 days after the posttest. Efforts to maintain intervention fidelity included providing required instructor trainings and gathering qualitative data from both instructors and participants on intervention adherence. Findings from this evaluation included significant outcomes favoring WISE participants over control group participants in increases of knowledge about alcohol use and medication management.

Rutgers University conducted a second evaluation in fall 2007 with NJPN-affiliated senior centers and senior housing complexes in the New Jersey counties of Bergen, Burlington, Gloucester, Cumberland, Salem, and Passaic. Study participants received WISE in fall 2007, and control group participants were scheduled to receive the program the following year. Outcome measures were collected through a modified version of the WISE



Program Questionnaire. The modified questionnaire assessed changes in knowledge about aging, alcohol and medication use, and symptoms of depression; changes in health behaviors; and changes in social integration. At posttest and at a 30-day follow-up, WISE participants had an increase in knowledge compared with control group participants; however, there were no statistically significant differences between WISE participants and control group participants in changes in health behaviors or social integration.

The third evaluation—a retrospective pre-posttest evaluation—was conducted in December 2009 with 270 seniors from NJPN-affiliated agencies from 12 counties in New Jersey. Findings indicated significant increases from pre- to posttest in health care empowerment and medication management. In addition, more than 84% of WISE participants reported changes in their behavior that promoted a healthier lifestyle.

Translational work was also initiated by a prevention agency in the Anchorage area of Alaska in 2009, but program implementation data are unavailable because the agency lost funding support soon after program training. In 2013, NJPN provided WISE training to prevention specialists in Kentucky, and data will be available when program implementation begins.

Site With Translational Work	Articles Describing Site’s Translational Work, by Category					
	Planning/ Partners	Adoption	Reach/ Recruitment	Implementation	Effectiveness	Maintenance
Passaic, Ocean, Somerset, and Hudson Counties, NJ	Article 1	—	Article 1	Article 1	Article 1	—
Senior centers and senior housing complexes in Bergen, Burlington, Gloucester, Cumberland, Salem, and Passaic Counties, NJ	Article 2	—	Article 2	Article 2	Article 2	—
Twelve counties throughout NJ	Article 3	—	Article 3	—	Article 3	—

Article Number	Article Reference
1	Rutgers School of Social Work, Institute for Families. (2011, March). <i>WISE program evaluation pretest/posttest/follow-up</i> (Report originally prepared for the New Jersey Prevention Network in November 2007) (Rev. ed.). Unpublished manuscript.
2	Rutgers School of Social Work, Institute for Families. (2011, February). <i>The WISE program evaluation findings</i> (Report originally prepared for the New Jersey Prevention Network in August 2008) (Rev. ed.). Unpublished manuscript.
3	Rutgers School of Social Work, Institute for Families. (2011, February). <i>Project WISE evaluation report</i> (Report originally prepared for the New Jersey Prevention Network in December 2009) (Rev. ed.). Unpublished manuscript.

## CONTACTS

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

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### Additional program information can be obtained through the following Web site:

<http://www.njpn.org/programs/wise/>

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