# B. Collection of Information Employing Statistical Methods

### 1. Respondent Universe and Sampling Methods

We plan to evaluate the intervention by comparing outcomes for those in the intervention group to three comparison groups. An active comparison group (ACG) that consists of private long-term care insurance policyholders who agree to participate in the study and receive the telephone screen but not the intervention. The active comparison group will include 1,200 individuals—the same number as in the intervention group. This equal assignment ratio minimizes the standard errors of our estimates of intervention impacts for any given sample size.

An administrative comparison group (ADCG) that consists of private long-term care insurance policyholders who agree to participate in the study and who receive no intervention. An external or silent comparison group (SCG) that consists of Medicare beneficiaries that is matched to study subjects based on characteristics such as age, gender, eligibility status and area of residence that are available in Medicare enrollment records. Note that it will not be possible to restrict the SCG to those with long-term care insurance policyholders. However, we propose to draw a sample that explicitly excludes study sample members and is large enough (three or four times the size of the total study sample) to adequately represent a broad cross section of "similar" Medicare beneficiaries. If geographic strata are selected for the study sample, we will use these strata to sample the SCG.

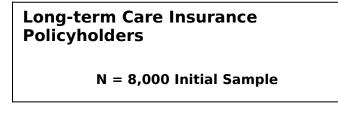
The same quarterly telephone calls will be conducted with both the intervention group and the ACG. The ADCG will allow us to explore whether there is evidence of a "placebo effect" (e.g., due to an increased awareness of fall risk factors that is triggered by the survey questions). For both the ACG and the ADCG, we will collect long-term care and Medicare claims data for three years beginning at the time of randomization from the long-term care

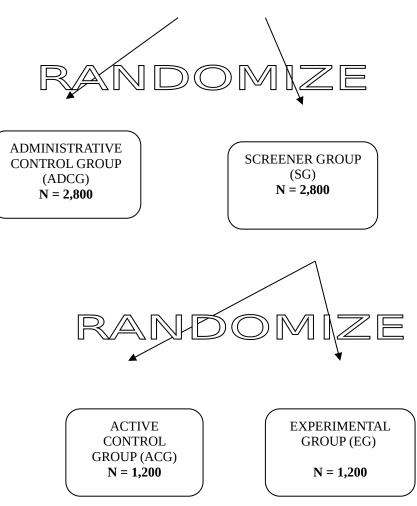
insurance companies that are participating in the study.

Figure 2: Schematic of Sampling Plan



N= 5,000





Note: Policyholders will have coverage for a minimum of five (5) years to assure that the effects of underwriting are eliminated.

# 2. Procedures for the Collection of Information

The data sources for the evaluation will include data from the baseline telephonic and inperson interviews, the quarterly telephone calls that we conduct with the intervention and active comparison groups, final in-person interviews, LTC claims, and Medicare claims data.

- *Survey data:* We will have baseline and follow-up data from the telephone interviews that we plan to conduct with members of the intervention and ACG. The intervention group will also receive in-person evaluations.
- *Claims data from long-term care insurers:* We will acquire long-term care insurer claims data for those in the intervention group, the ACG, and the ADCG. These data will allow us to track service utilization and costs for long-term care services.
- *Medicare claims data* We anticipate that Medicare claims data will be available for all study groups. We plan to able to link Medicare claims data to claims data from long-term care insurers (i.e., linking based on Medicare Patient ID) so that we can analyze outcomes based on utilization and health care expenditures.

# 3. Methods to Maximize Response Rates and Deal with Nonresponse

To meet our sampling objectives we will employ a number of techniques. First, all written communications with participants will be on their insurance company letterhead. This will ensure recognition, assist with study validation and legitimacy and take advantage of insurer affinity. Second, we are providing participants with free assessment and home safety evaluations, which are designed to promote healthy aging and independence. One of the goals of the program is to allow older adults to remain independent in their homes, which previous research has shown is of great importance to this population. Third, we will be providing participants with a Health Promotion and Fall Prevention toolkit containing useful items such as a wipe off medication minder, pedometer and exercise video at no charge. Fourth, customer service representatives at the participating insurance companies are made aware that their company is participating in the study so that if phone calls are received form potential participants they can validate study participation. Finally, all potential study participants are provided with a toll-free phone number that they can call if they have any questions about the study.

Company representatives also believe that because the industry is working together with the Federal government (i.e. the Department of Health and Human Services) potential respondents will be motivated to participate in the study. Finally, given the population characteristics of long-term care insurance policyholders, we expect almost everyone to have a telephone. We are cognizant of the fact that individuals have twelve opportunities to refuse to participate – at the time of the initial letter, the telephonic risk assessment, the in-person assessment, the jump-start phone cell, each of the seven quarterly telephone calls and the final assessment. Nevertheless, we believe that our 80% response rate estimate over the two year study period is reasonable.

#### 4. Tests of Procedures or Methods to be Undertaken

As noted previously, we have conducted a pretest of the survey instruments and have made changes based on the results. We have obtained feedback on the action plan and physician review form from physicians. Due to the nature of the evaluation strategy (quarterly follow-up phone calls over a two year period), we are only able to obtain limited feedback on the quarterly telephone follow-up instrument. Aspects of the planned fieldwork procedures have been

implemented in a somewhat compressed timeline. As mentioned, many of the questions that are

being asked have been field tested as part of insurance assessments and have been used

extensively in national surveys.

# 5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

The contractors principally responsible for study design, data collection and analysis are:

Marc Cohen, PhD. Center for Health and Long Term Care President Research **Co-Principal Investigator** 51 Sawyer Road, Suite 340 Waltham, MA 02453 Tel: (781) 893-7600 x250 Email: Mcohen@lifeplansinc.com Alan White, PhD. Abt Associates Vice President 55 Wheeler Street Cambridge, MA 02138 Tel: (617) 349-2489 Email: Alan White@abtassoc.com Jessica Miller, MS Center for Health and Long Term Care Research Director 51 Sawyer Road, Suite 340 Waltham, MA 02453

> Tel: (781) 893-7600 x270 Email: <u>Jmiller@lifeplansinc.com</u>

> > Center for Health and Long Term Care Research 51 Sawyer Road, Suite 340 Waltham, MA 02453 Tel: (781) 893-7600 x291 Email: Xshi@lifeplansinc.com

> > Center for Health and Long Term Care Research 51 Sawyer Road, Suite 340

Xiaomei Shi, MS Data Analyst

Amelia Levy Project Manager Waltham, MA 02453 Tel: 781-810-2403 Email: <u>ALevy@lifeplansinc.com</u>

Additional consultation on the clinical aspect of falls and fall prevention, as well as on the sample selection, analytical and statistical methods of the design was provided and will continue to be provided by our technical advisory group. Each member is an expert in a specific area related to the study and has expressed interest in continuing there role throughout the process and willingness to offer additional expert input.