A recent issue of the *Journal of Insurance Medicine* addressed broad insurance issues of the elderly. Particular attention was given to the medical underwriting of the elderly applicant.\(^1\)

Due to a shortened predicted life expectancy, elderly individuals with selected chronic impairments can be placed in lower risk classification groups since the probability of death from the impairment is less.

Alzheimer's Dementia (AD) is a disease of the elderly, although it tragically can affect individuals at younger ages. The age adjusted annual death rate, based on United States population data, shows a tenfold increase from 0.004/1000 in 1979 to 0.042/1000 in 1987. The cause for this dramatic change may be twofold. First, the true incidence or prevalence may have increased. Secondly, due to increased physician awareness, the impairment may be diagnosed more frequently. We occasionally see applicants with either an established or suspected diagnosis. Also, we see applicants whose physicians note nonspecific but worrisome complaints such as forgetfulness or memory loss.

Based on a preliminary investigation, we should cautiously consider underwriting individuals with diagnosed or suspected AD as insurable risks.\(^3\)

A group of 126 consecutively enrolled outpatients with AD was followed for a minimum of six years. The study entry criteria were:

- age greater than 60
- suspected global cognitive impairment based upon symptoms such as forgetfulness, confusion, inability to care for self, and slow thought process
- symptoms of cognitive impairment of at least three months duration

The diagnosis of AD was established by a consensus group which included internists, psychiatrists, psychologists, neurologists, and research nurses. The diagnostic guidelines were based on criteria in use between 1980 and 1982 and suggested by Eisdorfer and Cohen and the DSM III criteria.

The group, whose mean age at onset of symptoms was 74 years (72.6 to 75.2) had a median survival, from symptom onset, of nine years (1.8 to 16+), and a median survival, from enrollment in the study, of five years (0.2 to 7.2+). Two previous studies found the median survival from onset of symptoms to be seven and eight years. There was no relation between age at study entry and survival.

The mortality risk can be further stratified by the following high-risk (shortened survival) factors:\(^3,4\):

- degree of dementia assessed by overall cognitive function
- any of six behavioral problems
- suspiciousness or paranoia
- agitation
- incontinence
- hallucinations
- inattention to personal hygiene
- wandering and/or falling

The subsequent discussion is based on male and female tables of life expectation using the 1975-80 basic select and ultimate mortality table. One could argue using United States population tables since the cohort studied was a population-based study. However, the group was specifically selected for the study and appeared to be relatively free of other life threatening impairments. Were a general population mortality table used, the mortality ratios would be considerably lower since expected mortality rates would be higher.

Table 1 shows the life expectancy for males and females, ages 65 and 75, from 1975-80, basic select and ultimate mortality table at issue age 65.

### Table 1  
**Expected Survival in Years**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 (age)</td>
<td>75</td>
<td>65 (age)</td>
</tr>
<tr>
<td>18 (years)</td>
<td>10</td>
<td>21 (years)</td>
</tr>
</tbody>
</table>

Table 2 illustrates approximate mortality ratios for males and females, ages 65 and 75, derived from the previous life expectancies and based on an observed median life expectancy for AD of nine years from onset of symptoms.

### Table 2  
**Approximate Mortality Ratios from Onset of Symptoms**

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Females</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 (age)</td>
<td>75</td>
<td>65 (age)</td>
</tr>
<tr>
<td>750%</td>
<td>125%</td>
<td>900%</td>
</tr>
</tbody>
</table>
For the study group whose mean age at onset of symptoms was 74 years, the males would be minimally, if at all, substandard individual life risks; the females would be moderately substandard but still insurable. Both males and females, disease onset age 65, would be highly substandard and individually uninsurable. These mortality ratios could be further adjusted either favorably or unfavorably according to the clinical risk factors.\(^3\)\(^4\)

Were one underwriting a survivorship or second-to-die policy with the spouse free of medical impairments, a very favorable combined rating could be made for the couple when the impaired individual has the disease onset at age 75. Even an individual whose disease onset is age 65 could be insurable with a survivorship policy.

It then follows, if we accept some of those with an established diagnosis of AD, we can certainly safely insure those with vague symptoms or nonspecific symptoms noted on an attending physician’s statement.

**REFERENCES**