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### Longevity and Underwriting: The Centenarian Markers™

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Longevity in an applicant's family history is given only minor significance in underwriting for life and long term care insurance. It is a very small piece of the morbidity or mortality risk-assessment pie. The fact that the applicant's grandma lived to age 103 is impressive but doesn't turn a standard into a preferred or make an uninsurable suddenly insurable. Is there another use of longevity in underwriting beyond documenting an applicant's family history? The answer is yes. On closer inspection longevity offers a unique look at the markers for extended life expectancy and successful aging. These insights highlight specific physical and mental health traits that lead to a "long-lived life." This article looks at what I call **centenarian markers™** and discusses their usefulness in the underwriting of older applicants.

#### The Gold Standard of Longevity

The gold standard of longevity is the individual who lives to age 100 and beyond, the centenarian. Becoming a centenarian is no accident<sup>i</sup>. In fact, a common theme emerges from the physical and mental lifestyle of these long-lived individuals, whose profiles provide us with both insights and guidelines for living long and productive lives. These profiles also provide clues about who is already on the track to "enhanced" longevity.

Enhanced longevity is not about simply living more years at any cost. Living longer is of limited value without a satisfactory quality of life. Living well includes the surprising benefit of a phenomenon called "compressed morbidity."<sup>ii</sup> Contrary to popular belief, centenarians do not experience prolonged periods of disability and chronic illness. They live long and rather healthy lives with a "compressed" period of disability near the end. How do they do that?

Many factors tip the morbidity and mortality scales in their favor. All of these factors have an important bearing not only on living longer, but also on the risk assessment process itself. With the increased importance of "life style" as a predictor of morbidity and mortality in older applicants for life and long term care insurance (i.e., for applicants 75 and up), knowledge of **centenarian markers™** becomes essential information for producer and consumer alike.

#### The first marker is the successful use of health care.

It is not enough to say that modern medicine and public health measures afford a greater likelihood of living longer. They do but they are no guarantee. The operative word is "use" of health care in a timely and systematic manner. On the most basic level use would include vision and hearing enhancements to make sure older adults

remain safe and connected to their environment. It would also include vaccines and screening tests. But the question to ask is, has the applicant taken advantage of them? Is the applicant having age-appropriate screening tests? Are the applicant's vaccinations up to date? What about medications, the most expensive and elusive health care variable. We know medications save lives and prevent or retard the advancement of disease. The key question is not their effectiveness, but the applicant's compliance in taking prescribed drugs, especially for the so-called silent diseases such as hypertension that can lead to stroke or heart attack.

**Underwriting Strategy #1** Make a case for the applicant's use of the health care system. Is the applicant getting the appropriate screening tests for his or her age group? Are the applicant's immunizations up to date? Is the applicant compliant with taking medications as directed and showing up for follow-up visits?

### The second marker is genetics.

Centenarians are blessed with "long-lived" family trees. The advantages of this type of genetic inheritance appear to be both slowed aging and decreased susceptibility to disease. Who wouldn't want that?

**Underwriting Strategy #2** Make a case for the applicant's family history of longevity that looks on both sides of the family tree. Who lived to what age?

### The third marker is the immune system.

This is where centenarians with longevity genes really shine. As the body ages, it starts to build antibodies against itself called *autoantibodies*. These autoantibodies are looking more and more like the primary source of heart disease and cancer. How so? It appears that the end product of these antibodies' interaction with the body's various tissues is inflammation, i.e., the autoantibodies literally attack the body itself and set the individual up for heart attacks and tumors, among other diseases. Individuals with longevity genes appear to have a slower buildup of autoantibodies, and may explain, in part, why they seem to age more slowly than noncentenarians.

But about the centenarians who were not blessed with longevity genes? Recent research suggests that these immune changes may not be due to aging but to nutritional deficiencies. <sup>iii</sup> The weakening of the immune system may not be normal part of aging. In fact, it appears that if the immune system can be enhanced, the inflammation factor is reduced. <sup>iv</sup> If the inflammation factor is reduced, aging slows down. How? The following vitamins and minerals have been identified as playing a critical role in maintaining the immune system: <sup>v</sup>

- Zinc
- Selenium
- Iron
- Copper
- Folic Acid
- Vitamin A
- Vitamin B
- Vitamin D

How these nutrients are taken (i.e. diet or supplement) and at what dosages are

issues still being researched. But this much seems clear. Good nutrition can make up ground lost to less than optimal genetics.

**Underwriting Strategy #3** Make a case for the applicant's nutritional status. Are they following a healthy diet? If yes, describe it in detail. Do they take supplements? If so, which ones and how much?

**The fourth marker is physical activity and exercise.**

The hallmark of centenarians is that they have always lived active lives. Physical activity and exercise are essential for longevity. As long as it is constant and of good quality, physical activity and exercise can add years to a person's life. As important, it is a major factor in achieving compressed morbidity. <sup>vi</sup>

**Underwriting Strategy #4** Make a case for the applicant's physical activity and exercise status. Does the person exercise on a regular basis? If yes, what kind? Is it cardiovascular, resistance training, or both? Be specific about each. How often does he/she exercise and how long at each session? Is the exercise at a health club or home? If they exercise at home, do they have their own equipment? If yes, what kind? In what other activities is the person engaged on a daily and weekly basis?

**The fifth marker is normal weight.**

The centenarians as a group maintain a normal weight, which reduces their chances of getting diabetes and heart disease. Obesity may prove to be the Achilles heel for baby boomers as they age and want to remain healthy. This is highlighted in an interesting study of the offspring of the Framingham cohort (the cohort is the original volunteers who agreed to be part of this landmark medical study). The offspring (i.e. baby boomers) were found to be healthier than their parents (the cohorts) in all areas except weight. <sup>vii</sup> The offspring's weight tends to be greater.

**Underwriting Strategy #5** Make a case for the applicant's successful weight management. Be sure to use the standard height and weight tables to make your point. Also note if the applicant has successfully lost extra pounds and maintained a healthy weight over a period of time.

**The sixth marker is not smoking.**

Centenarians are almost universally non-smokers. It is common knowledge that non-smokers do better in every aspect of health and longevity. What isn't as well known is that quitting smoking not only increases life expectancy but also the number of years lived without disability. Quitting smoking has the additional benefit of compressed morbidity. <sup>viii</sup>

**Underwriting Strategy #6** Make a case for the applicant's non-smoking status. Is the applicant a life long non-smoker? If not, how many years ago did he/she quit?

**The seventh marker is social connectedness.**

Centenarians are happier and live longer because they are connected to family, friends, and social groups. Isolation has the opposite effect and can lead to depression and decreased morbidity and mortality. <sup>i</sup>x Being connected also provides a sense of purpose that is called "productive engagement." With older adults, productive engagement has a significant impact on improving longevity. <sup>x</sup>

**Underwriting Strategy #7** Make a case for the applicant’s social connectedness. Does the person play bridge, volunteer, dance, or serve at church? How often do social commitments take the person out of the home? Does the person still drive? If not, who takes the person around to these events?

**The eighth marker is attitude.**

Centenarians are good at managing life. No one is immune to life’s unpredictable events, but viewing life as an unfolding drama with optimism, humor, and calmness emerges as key traits of the centenarian personality. Centenarians experience the same stress we all do. They simply use their optimistic attitude to successfully manage it. Their mental fitness parallels their physical fitness, and they are consistent in their dedication to both.

**Underwriting Strategy #8** Make a case for the applicant’s attitude. Give examples of the optimism, humor, and wisdom. Give specific examples of how this person’s healthy attitude has benefited both the person and those to whom he/she is connected.

**The ninth marker is spiritual connectedness.**

The centenarians do not pretend they know it all or made it all happen on their own. They possess a sense of spiritual gratitude and connectedness to their faith. They are as a whole religious people. Their faith is reflected in their attitude and their sense of personal responsibility. They accept responsibility for themselves and the world they inhabit. They draw strength, courage, and peace of mind in their spiritual partnership.

**Underwriting Strategy #9** Make a case for the applicant’s spiritual connection. Does the client attend religious services on a regular basis? If yes, how often and where? Is he/she active in his/her faith? If yes, provide specific examples.

In the midst of a national health care crisis and aging population, the **centenarian markers™** provide a clear and easy-to-read blueprint on how to live and age successfully. They provide a collective game plan that can be used at any age to upgrade both the chances of living longer and living well. The centenarians’ pioneering lives are resetting the bar on successful aging. We need to be ready and willing to employ their collective wisdom on a personal and professional basis for our clients and, as importantly, for ourselves.

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