

Informal Discussion Transcript  
Session 5B - Longevity and Cognitive Impairment

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**AL KLEIN:** I have two questions for Heather. One of the things that I do is look at causes of death and I know there have been increases in the number of Alzheimer's deaths as well as dementia. What I'm wondering is how to quantify the true increase in the disease versus the number of cases that have been misdiagnosed (I saw an estimate of 1 to 2 million misdiagnoses) as well as the increased number of cases from the change in definition of Alzheimer's from a few years ago. How do you go about quantifying each of those components? That's my first question.

**HEATHER SNYDER:** When we quantify the number of deaths due to Alzheimer's, we look at a number of tools. I'm not sure if you're familiar with the Alzheimer's Association "Facts and Figures," it's an annual document around the prevalence statistics for Alzheimer's disease and related dementia. In last year's report, we published that while we know that there has been significant deaths due to Alzheimer's disease, there is challenge in quantifying because of the potential diagnosis or lack of diagnosis or the label given at death. Alzheimer's disease may be one of the causes or it may be a contributing factor in terms of the morbidity associated with an individual's death.

We do know that one in three seniors, so one in three individuals over the age of 65, will die with Alzheimer's

disease. The growing prevalence is captured in several different ways, based on the information that we have. One of the big challenges is the data that's available. In terms of the misdiagnosis, one or 2 million individuals seems low to me. There is also the issue of differential diagnosis between dementias. For instance, there is another type of dementia called frontal temporal dementia or FTD and it's characterized and diagnosed due to differences in the individual's symptoms usually; however, there are people that have FTD who present like they have Alzheimer's disease, and the symptomatic treatments that are used for Alzheimer's disease may not be beneficial or [may] potentially be harmful to somebody with FTD, and that's actually one of the populations that's put forth in the appropriate used criteria for the use of amyloid imaging as a potential tool for in those instances where there's the atypical presentation for differential diagnosis. But at this point in time, we do not have sufficient data to quantify the number of individuals who fit this criteria.

Also one of the big challenges is physician awareness around diagnosis for Alzheimer's disease. We hear so often from families that they'll go to their family physician because mom is having memory issues and the physician will prescribe them one of the symptomatic treatments for Alzheimer's but not necessarily do a full work up, and may

provide a diagnosis for Alzheimer's to the family.

One of the priorities of the association is to work with physicians and physician groups around raising awareness for Alzheimer's and to impact the process for the family that's going through a diagnosis. We hear stories from families all the time around not being able to find out what's wrong with mom or dad or their husband or their spouse or even themselves. We have an advisory group of individuals living in the early stages of the disease that talk about the challenges, in some instances, with getting a diagnosis. Helping these families in their journey, this is a priority of our organization.

So not an exact answer to your question, because some of it's the data doesn't exist.

**AL KLEIN:** Thank you. My second question actually is consistent with Jay Olshansky's final comment and that is I've read a couple of things about beta amyloid plaques being in people that die, they have all those tangles and other things, and yet they don't have Alzheimer's. So I'm hopeful that we're not going off in the wrong direction with a lot of these studies on causes and potential cures for Alzheimer's. It was good to see that there are a lot of different approaches on these studies. I wanted your thoughts on the fact that there are a lot of people dying with those tangles that don't have Alzheimer's disease at

all. And are we spending too much time in the wrong direction?

**HEATHER SNYDER:** And there are a lot of people that die with high cholesterol that don't have a heart attack or a stroke, so it's that same type of idea. It may be that these biological changes are associated with the disease but not the cause. We do not definitively know and it's still a very active question in the field. You often will hear and see very provocative talks around amyloid about being the answer or about not being the answer, so I think that is still very much a hot topic in the field around what is that cause or what is that target. But to your point, that question is being investigated and the A4 trial, the anti-amyloid asymptomatic trial, will help answer some of that question. If you're looking and you're actually categorizing your population of interest in a clinical trial, by looking and using beta amyloid as a potential marker and using that as a potential tool of saying this is a population at an increased risk, what does that mean in terms of intervening in a treatment? In clinical trials, when studies have done sub-analysis on their volunteers, some have showed that about 20-30 percent of people in that sub study did not have beta amyloid accumulation and a compound targeting beta amyloid was being tested. I think that's all very much open questions,

so I think to your point yes, there's a lot of research and a lot of diverse directions going on.

**MIKE DRAGO:** Yeah, Mike Drago from Genworth Financial and I have a question for Heather. I recently read about a study that linked Alzheimer's with statin drugs, and I just wanted to know if you ever heard about that or can comment on that.

**HEATHER SNYDER:** There's a whole wealth of literature around the linkage of statins and Alzheimer's. It's actually been around since the '90s around looking at statins in Alzheimer's disease. When they've actually gone forward and done some clinical trials looking at using statin drugs as an intervention to see if there's a benefit, they have not panned out. I think there are some theories out there about, well, we're not early enough, so more work is still being done in this area.

**FROM THE FLOOR:** It's getting worse.

**HEATHER SNYDER:** There's that part of the literature and there's been some that have recently come out that have shown that actually individuals that are taking statin drugs are making their risk of dementia worse. There are the two spectrums and I think that at this point in time we don't have enough evidence and enough information. There are some limitations on how these studies have been done and the numbers of populations that are in those studies

and the other factors that they've been controlled for.

**JAY SIEGEL:** Well, my comments are mainly directed to what Jay Olshansky said, one I understand that NIA [National Institute of Aging] is sponsoring a protocol at its Baltimore facility specifically recruiting people who have no serious physical ailment or mental ailments and I don't know where that's going, I know that friends of mine have been approached about that, talking to one another about it and one of them has joined. The other thing I want to say is it's nice to ask people, in these age brackets, how they feel with respect to their health. Let me tell you, it's a hell of a ride. I visit nursing homes and independent living facilities frequently for personal reasons, not my person, and I've eaten many dinners with them. I'll take one man who was 98 when he died, a year ago, a friend of mine. Perfectly, he was at the independent living, but he only went there because he lost his wife and he didn't want to cook dinners anymore and we would sit at the dinner table often and I would discuss things that I was working on, which were alien to his field but his mind was perfectly clear. But let me assure you, I have never talked to any of these people, many of them over 85 or 90, who didn't have multiple morbidities and maybe they're not the serious ones but what you have is numerous false alarms, numerous sometimes serious things that can be corrected,

but it's one hell of a ride. As for Bob Butler, now to quote a phrase, I knew Bob Butler too and Jay Olshansky you know that he had, although he didn't tell you what he suffered from, I mean his history, all you knew and I knew was that suddenly he died. What was it, leukemia? Or was it nonHodgkin's?

**JAY OLSHANSKY:** Acute leukemia.

**JAY SIEGEL:** OK, yeah he died suddenly but he was the kind of guy that didn't talk about his person.

**JOSEPH LU:** This question is for Gordon. In your presentation, you mentioned that resilience could be used as a factor to be used for an underwritten annuity. Your proposal appears to rely on self-reported questions. I believe that when people tell their doctors they are well, they are well. But for their annuity providers, when they tell their annuity providers they are well, are you so sure that they are well – or not? The point that I can make is that the answers to a number of these questions could lead to false financial incentives. For example, if I were to tell you that I'm grumpy, I've stopped talking to my brother and I avoid my mom's phone call, you may conclude that I am anti-social. Therefore give me a low score, resulting in a discount. If I were to tell other people that the discounts works well for me, then the insurance company could run into trouble if you get 1,000 applicants

per day giving you those types of answers. It's not easy to test the accuracy of those answers.

**GORDON WOO:** Thanks, Joseph. For the purposes of this paper, it's really a process of putting these issues on the table, namely that there's a whole area of information about people's lives which are completely being omitted from any kind of pricing of these issues, so the main purpose of this presentation was to put these issues on the table. Now, how organizations, like yourselves as L&G, deal with these issues, that's up to you. While it's not possible to interview people there must be some people with high valued annuities for whom it might be of value to talk to someone for five minutes, even on the phone just to ask some ordinary questions – like tell me about your hobbies. Already you have a situation where there are very lengthy and costly medical examinations given for prospective annuitants. People are not just robots. You can ask people some questions about their ordinary lives and the answers to these questions tell you something about their resilience to frailty. Resilience is complementary to frailty and resilience is a key determinant of how long people are going to be living; you can't just pretend that people who have equal numbers of health deficits are going to be living to the same age.

Again the purpose of this presentation is really to

put some information out into the domain, which you can then make use of, but if you don't make use of this information, then somebody else will, so I think that is really a case of going back and thinking about how this could be.

Another possibility quite apart from interviewing people is asking someone to write you a letter, telling you about themselves, where you could just say: please tell me something about yourself. What is clear is this is a very important issue. In particular, what is going right with people, what is good about their lives is something which you need to know about apart from things that are wrong with people.

**JOSEPH LU:** Thank you. I think it's just a question of whether I have the incentive to tell you that I play chess, solve Rubik's cubes, etc.

**GORDON WOO:** Right, obviously how the information is interpreted is obviously is up to the insurer but anyway this is a new source of information which sooner or later will find its way into practical use.

**JOSEPH LU:** Thank you.