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Modeling Retirement Needs

Track: Retirement Systems Practice Area/Investment/Foundation

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Summary: There are many software packages available to help plan for retirement. Each of these includes some model of post-retirement needs. Simple models may be a level percentage of pre-retirement income or an amount increasing with inflation. More complex models may include the death of a spouse, long-term care or other health needs. What are effective and efficient approaches to financial planning for retirement? How can changing needs after retirement be modeled?

MR. PAUL MCDONALD: We at Lincoln have a tool that models the post-retirement period. In any model, regardless of its intent, you have to be able to adjust quickly to the things that change in the marketplace. In order to do that, you can't have one big monolithic model that requires a lot of support either from the business side or the systems side of the house. At Lincoln, we decided we'd come up with a model that had components to it, pieces that we could swap in and out as things changed. As a juggler, you try not to focus on having everything going at the same time. With our retirement model, we try not to think about the whole thing all at once. Our planning tool, we call it planning advisor, is part of a larger tool. The larger tool is known as an agent workbench. The workbench is a platform that handles both our customer relationship management and detailed financial plans. We have a component in there that we call the financial condition model. The consumers of our

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product are captive agents. We have brokers that utilize our product, as well as support staff within those offices that help them do their presentations. The actual output from the model goes to end clients. Because this goes to end clients, you have to take into consideration compliance and making sure you've got all the I's dotted and all the T's crossed. We have had to go through that process, and we run everything that we do through our compliance department.

One of the questions that you might have for modeling is whether or not you take into consideration Monte Carlo modeling. We don't do Monte Carlo because our compliance department has told us that we need to be careful when we present anything to our end customers in which they might assume that we're predicting some future event for them. So in general, we try to keep the model more simple.

FROM THE FLOOR: Isn't there the opposite risk that you don't identify scenarios that might cause failure in your planning?

MR. MCDONALD: That's correct as well. There is that opposite risk. They haven't been brought up to speed on what the main idea of Monte Carlo is, which is that—I may say that there's an 8 percent return here, but I'm not going to get 8 percent every year. They haven't internalized the fact that this whole idea of Monte Carlo is to depict that very thing, that you might get some years higher and some years lower. We need to educate our people on that whole aspect, our internal people, home office or wherever, that things like Monte Carlo shouldn't make you more nervous. If anything, you should be more comforted by the idea that you're presenting that concept. There are other things that you have to worry about when you're using a modeling tool.

The other part of using a modeling tool for retirement is that we need to be aware of the fact that the ultimate consumer, the client, may not be as well versed as we are. Things are more intuitive to us, and we still have to make it simple for them. So one of the things that we have is a streamlined analytical tool. In this case, streamlined means that it's not necessarily going to take everything in the world into consideration. We had a conference call earlier, and we started to talk about some aspects of retirement. Marilyn asked me, does your tool take into consideration long-term care, for example? The tool doesn't have an identified slot for long-term care, however, it is a variable tool in that you can create your own. You can create a long-term-care objective that you'd like to fulfill in the future. It has some flexibility. It's a tool that handles much more than just retirement. It will handle college educational needs; it will handle survivorship needs. What if one spouse dies and leaves the other? What are the needs that come up because of that? It will take into consideration things that are important for cash-flow modeling.

We also show the impact of Social Security and income tax. One of the things that we found is that, when we consider retirement planning, a lot of times we don't take into consideration the impact of either Social Security or income tax at that

older age. Some of the tools that we're using, the techniques that we're using to fund retirement, have some impact either on the front side or on the back side in terms of when you get to retirement. So the tool will handle that as well.

FROM THE FLOOR: What about trusts?

MR. MCDONALD: What types of trusts do you think they might have some implications for?

FROM THE FLOOR: Charitable trusts.

MR. MCDONALD: Yes. This is a planning advisor tool that we have. It's part of a larger model. That larger model has things such as modeling a charitable remainder annuity trust, taking a look at how unified credit impacts as far as estate planning, and all those other things. So it is a part of the tool, but we don't necessarily look at it just for retirement planning. It's in the overall financial condition of the individual.

In our tool, we want to make sure that we capture some of the things that are going on, for example, earned income, both pre- and post-retirement. There are certain things that can happen to the income prior to retirement. Generally, the more simplified models that we found take an income stream and say it's going to grow by this percentage or X number of years and that's what it will be. But we found that our advisors ask for more customized income-type streams, both before and after. We allow them to customize it year by year. We allow them to separate the information for the spouse and the client.

FROM THE FLOOR: What about stock options, is that part of this income analysis that you can customize?

MR. MCDONALD: As a matter of fact, it is. We have a stock-option aspect to the tool in which you're able to say that there are various grants that you might have at times, as time passes. And as time passes, you may want to vest some of those and then make some determination on the best time to exercise those stock options. You'll see that reflected as we go forward. But that's a very good point, that stock options, even though you say that you can model them, you have to also be able to model the functionality that goes with them. For example, there is a cost associated with exercising that grant, as well as a tax implication. All of these things are a part of what we should consider when we're looking at retirement needs.

We also want to take a look at not just the income needs, but also living expenses, both pre- and post-retirement. This is where you're able to characterize the tool or bend it so that it fits your needs. For example, when we say living expense, maybe a living expense is something that you should consider for older parents, as they may need to have some support since they are unable to take care of some regular daily living skills. We have to make sure that we customize that. We found in the past that our producers weren't able to innately quantify that. They didn't always

think about those types of living expenses in relation to retirement. The only thing they would think about is, what's your home, and they'd find that the clients, when they got to retirement would say, you did a poor job in planning. So we've instituted or created an area within the tool where you can quantify those living expenses.

I mentioned income tax earlier. With income tax, we allow you to say "this is my marginal tax bracket." We also allow you to vary that year by year, because it's rare that, number one, the legislation will remain the same. That's probably the biggest one. And it's also rare that the clients will remain in the same tax bracket over their lives. We allow them to vary the tax year by year.

I also mentioned Social Security a little bit earlier. We separate this by client and spouse. We base the information that we use or that we present on Mercer's *Guide to Social Security and Medicare*. So we don't ask our producers to actually calculate or come up with what their Social Security would be when they reach retirement. We do that for them and we incorporate that into our model.

Obviously, portions of the benefits might be taxable and we allow them to specify what that's going to be, but we automatically update the limits and the amounts annually for them so they don't have to keep track of them. If they choose to retire earlier than, 65, let's say, there's some proration that we'll do for earlier ages, for example, 62, and I don't remember the percentage off the top of my head, but it might be something like 83 percent of the year 65 benefits that might be available to them. We'll take care of that within the tool as well.

We also have—a net composite rate of return. We try to present to them not just the rate of return they'll get on the investment, but also the impact of having those investments in various places and the tax implications. So we allow them to specify a net composite rate of return, but we ask and we provide in the plan a definition of that so they can explain it to their clients as well.

The other things are just generic, such as being able to say that at retirement or at some ending age, "I want to make sure that not only are my retirement needs taken care of, but I also have a certain amount that I'd like to either transfer to my heirs or to give to charity at that point." So we allow them to get an ending balance that they want to keep in there as well. We do survivor planning, as I mentioned. We create funding illustrations for specific needs, and I mentioned one that's common today, at least for me. I have a 15-year-old daughter, and she's already thinking about where she's going to go to school. One of the things that we provide is a specific funding illustration that allows you to do educational planning. But it's not limited to just educational planning; it's flexible, so you can use it for anything.

As I mentioned before, you can decide that you have specific objectives that you'd like to reach. My specific objective is that I'm in love with Porsches, probably a 930, 911-type Porsche, but I have two kids. My daughter is just about 15 and she's

asking about driving, so I have decided that I'm going to push that objective off a little longer until she's away and I can have the car to myself. Right now, my objective is that I will have a Porsche in 15 years. That will give her enough time to be gone. I can drive it and not have to worry about sharing it with her. We allow you to do that.

FROM THE FLOOR: Do you take insurance into account?

MR. MCDONALD: Insurance, yes. One of the niceties about the workbench tool is that we include all of the components. They talk back and forth to one another. We have in our tool an illustration insurance proposal system, and you can use that insurance to either fund objectives in the future if a spouse dies or even just for our simplified planners, those that are new to the planning process. They may not know too much about the insurance underpinnings and they may say. "All I know is I have $10,000 that this client will give me every year. He or she will give me this for five, six, seven, however many years. What can I give him or her in terms of retirement on the back side? Historically, it's been very popular to use variable products with those kinds of things. As we were talking last night at dinner, we were kind of seeing that popularity go down. So they're really becoming more conservative in that regard, but we do incorporate insurance in the plan as well. It's a tight link with it. We also incorporate in the tool our insurance download. Anything that a client has on the books with us, each producer, each office that's out there, the client able to get up-to-date information on a particular product and that product is pulled into the retirement planning so that you can have your assets, as well as the expenses.

I want to talk a little about some of the other things that are there. One is standard assets. You enter your income, the growth rates, and various asset allocation classifications. We do have non-qualified annuities. We also have some qualified-type resources. For the Roth IRAs, we do assume that the five-year holding period is in effect, so that they're able to see the benefits of that.

We offer both a LAN version and a stand-alone version. We do find that our producers are a bit squeamish when it comes to sharing their clients' information. So, even though in our minds the best thing for each office to do is to have a LAN version of the tool, we find that the producers, not understanding the technology, tend to shy away from that. There are two versions, and we deliver the tool both ways. We're finding that many people, or more and more of our distribution channels, are asking us to deliver our tools via the Web versus actually sending out a CD. The reason for this is that there's a whole process that has to happen in order to send the CD to everybody in the nation, all our producers, and those updates, those modifications, happen generally once a quarter.

Although they usually happen four times a year, we know that things don't always change according to that time frame. For example, the IRS came out at the end of January or beginning of February with a new notice regarding some split-dollar-type

plans and how you can measure economic benefit and tax according to that, and it happened to come out after we had done our first release and everyone was clamoring for that change to be included in our model. The only way that we could address that was to go out and ship something over the Web and say okay, here's the update for you. If you don't do that, you'll find that the folks won't use the tool. They won't use it because they'll feel it's aged, and it's not appropriate any more.

FROM THE FLOOR: I was wondering if they're reproduction-capable. Once you do it one year, can you download the data and do an update with your clients the following year?

MR. MCDONALD: That's a very good point. One of the things that we want to encourage with our producers is continual contact. If I've done a plan with you, created a plan for you today, it doesn't mean that the situations or the circumstances that we discussed today will be in effect tomorrow. Lincoln has a fee-based planning segment to it that's part of the way we encourage them to utilize that, so they recognize that they can go back and share an up-to-date plan. This is what we planned. Our objectives still might be the same, but the legalities or the specific circumstances might have changed. They are able to do re-projection. As a matter of fact, our compliance folks would prefer if we did shorter projections and went back frequently, as opposed to giving them a 30-year projection. Anyone who knows what's going to be here in 30 years is really good.

FROM THE FLOOR: You said that you don't do lots of Monte Carlos. What do you do to handle variability? The second question is: how do you deal with the issues around outliving assets, both for the primary person and spouse?

MR. MCDONALD: We were having the discussion last night at dinner about the old saying, we're in this business because you either live too long, die too soon or get sick along the way. One of the things that we encourage our people to do is to make sure that we take those three things into consideration. What happens if a spouse dies too soon? That's where the insurance piece comes in. I don't think that that's generally the discussion that we're going to have. The discussion we'll have is whether or not they live too long. That's the one that we don't generally talk about as much, only because most people view living too long as an accomplishment, but they don't realize that there are living expenses that go along with that, which require appropriate planning. We try to encourage our producers to utilize, number one, our re-projections, so that every year they're looking at them, they're asking: What do we do? What do we need to do? We had discussed how you determine when someone thinks they're going to die, because it's hard. You would find that not too many people think about when they're going to die. So what do we do? We use life expectancy within our tool.

I understand there is some discussion about whether or not life expectancy is the right measure, because last night we talked about having 27 years added to the life expectancy. When was the last time that happened?

FROM THE FLOOR: From 1900–1990, life expectancy in the U.S. advanced by 27 years. The amount of time it took for the prior advance in 27 years of life expectancy was 4700 years.

MR. MCDONALD: With regard to variability, instead of doing Monte Carlo, we will tell them that they need to come up with a growth rate or a pattern that is acceptable or comfortable with their client and themselves. Even though their client may think hey, we've been riding this wave, we're going to get 9 percent, 10 percent on that variable product, you know that that's not the case, so you have to try to guide them and keep them within some reasonable levels.

FROM THE FLOOR: So are you implying that you can change the growth rate from year to year?

MR. MCDONALD: That's exactly what I'm implying, that we have the flexibility of changing that growth rate from year to year. It's not kept the same. You can change it.

FROM THE FLOOR: One last thing. You didn't mention asset allocation—I assume that's part of the tool as well?

MR. MCDONALD: In terms of specific retirement planning, we don't deal too much with asset allocation. We do some and I'll show you that on our investment side, but it's pretty simplistic. The reason that we don't do it is because some of our producers are not as experienced as they need to be, and we don't want them getting into the area of giving advice about investments, taxes or legal advice.

MR. SUNIT R. PATEL: The title of my presentation is, "Financial Planning and Retiree Health Care Costs." Really, the agenda is twofold. One, I just want to make a case for why I think retiree health care should be given special consideration in the financial planning process. Secondly, I want to give you some background about the retiree market today, in order to give a sense of the options that are available, how costly they are, and that would develop a basis for our framework if you did want to model what your expected costs would be for retiree health care.

I just wanted to give everyone a sense of what kind of dollars we're talking about. The example that we're going to go through is going to show that, given certain assumptions that we'll go into in some more detail, a couple retiring today at age 65 is going to need a savings of $161,000 to pay for their expected retiree medical costs. This assumes that the individual lives in the U.S. and has coverage under Medicare. The $161,000 is basically to fill in gaps in Medicare coverage and the cost sharing. It does not include long-term care, for example.

Most of the financial planning models that I've seen don't explicitly model health care costs. A lot of the models I've seen, and that I'm sure you've come across, talk about replacing pre-retirement income. Perhaps you want to replace a percentage

of it, say 80 percent, or perhaps even 100 percent. That approach might make sense for many categories of expenditures, such as food or travel. For health care, you have to understand that health care is not sensitive to one's income or asset levels. It's a fixed cost and it's not biased dependent on income levels.

For many individuals, health care is going to be a significant percentage of their total expenditures after retirement, and, as we'll see later, it's going to vary significantly by individual. But for the majority of the people in this country, it will represent a significant portion of their expenditures.

Unfortunately, many of the retirees, or people who are even close to retirement, are unaware of how expensive medical care is. There has been a lot of news in the press recently about prescription drug costs, and that's shedding some light on the subject, but I don't think that people quite have a sense of how significant the gap in Medicare coverage is. Most of us are accustomed to fairly comprehensive coverage.

The last point I want to make, and this is a very significant one, is that employer-sponsored retiree health care is going to be the key determinant of whether or not medical costs are going to be a significant issue for an individual in the financial planning process. To that end, let's examine coverage today in terms of what employers are doing for both the early retirees and the post-65 retirees. For the early retirees, about 64 percent have no employer-sponsored coverage, so these are people who are going to be out on their own, who are going to be responsible for accessing their own plans and paying the full cost. Another 14 percent have access only, meaning the employers are providing the employees with access to health care plans, but they're not necessarily paying for these plans. It's a step in the right direction; it's better than not having coverage, but again, for most of these people, they're going to have to bear the full burden of the costs associated with health care coverage. There are 22 percent with employer-sponsored dollars, and for those people there's going to be great variation where some are going to get a very comprehensive package similar to their active plans, where there are not many out-of-pocket costs, but there are going to be others for whom the contribution is going to be quite significant.

For example, a company that I know, depending on some service requirements, gives its employees $10,000 as a pool of money, sort of like a bank account for retiree health care expenses. But, as I already mentioned, the expected retiree health care costs are more around $160,000, so the $10,000 really isn't significant coverage. For the post-65 retirees, the numbers are fairly similar to those for the pre-65 retirees.

The percentage of employees that are being covered by medical plans for post-retirement is declining. We expect that trend to continue into the future. Recently, there have been two fairly sizable corporations, or at least in their days they were, that filed for Chapter 11 bankruptcy and cited retiree health care costs as one of the

reasons why. The companies are Polaroid Corporation and Bethlehem Steel, and, again, this is just in the last couple of weeks. The cost burdens to the employers include the demographics, where many folks are entering retirement age, and the FAS 106 liabilities associated retiree medical coverage. There have been some legal cases recently, including the County of Erie, which I won't get into, but some of you may have heard of. There are a number of different rationales for why employers are cutting down on offering retiree benefits.

There's also a very large subset of employers who are offering retiree medical, but are cutting back on what they're offering. The interest gap indicates that employees, as they're getting older, are going to think more about retiree coverage and health care, and so they're going to become more and more interested, while at the same time the financial burdens are going to lead the employers to cut back on the benefits. Again, I'm just trying to give you some background on the retiree health care market. This will serve as the basis of creating a framework when you want to model health care costs for retirees.

Next, I'm going to talk about the retiree health care coverage options available. These are options that would be available to someone retiring. If you take someone retiring under age 65 today in the United States, he or she is obviously going to want comprehensive coverage. Their number-one choice is going to be to go through employer coverage, if their employer makes that available, and it will usually be the most attractive in terms of cost. Assuming that there's no employer coverage, the next option is COBRA, which is a continuation of their active plan. Unfortunately, that's a short-term solution, which typically runs 18 months, and after which the individual insurance market would have to be accessed. The alternative, or the last option, is to have no insurance, and obviously that's the most unattractive option.

For over age 65, the goal is to fill in what Medicare doesn't cover. The options are, again in order of what would be most preferable, employer coverage, followed by Medicare supplement policies, which are typically available to everyone, followed by Medicare HMO, and then the last option is just to go with the Medicare coverage and pay out-of-pocket expenses with your own money.

I want to go over some of the costs associated with these, again keeping in mind that, in order to do any modeling around retiree health care, it's important to get an idea of the options that are available to individuals and the costs associated with each. I'll start with the under age 65 scenario. Employer-sponsored plans are the first option, which again range from comprehensive coverage to coverages where only access is guaranteed, and the plans can vary in terms of what the contribution is—it's going to be dependent on the employer. The access-only plans are going to be typically two-times COBRA rate, which is in the neighborhood of $300 to $400 per member per month (PMPM). Again, these are just ballpark figures. It would depend on a number of issues, obviously including plan design. The COBRA rate is relatively attractive. It's about 102 percent of the active rate and so it affords a

very good solution, but as I mentioned before, it is a short-term solution. The final option is the individual insurance market, where costs are approximately $400 to $600 PMPM. I've seen those numbers much higher than that even, and the individual insurance market is, as many of you know, not that attractive, and it does vary from state to state.

I'd next like to address the post-65 options that are available. Most of you know that there's Medicare Part A and Part B. Part A has no premium for the vast majority of people. Part B does have a premium. It's $50 this year, expected to go up to $54 next year. There are different options to fill in coverage for Medicare. The employer is typically the most attractive, with costs ranging from $0 to $300. I've estimated Medicare subpolicies as $100 to $400, although there are some very inexpensive policies, which don't offer much coverage, that are less than $100. Then there is the Medicare HMO, which from a pricing perspective is fairly attractive from $0 to $100. The problem with the Medicare HMO is that many HMOs are pulling out of markets, as the payments the governments are making have been insufficient.

So what's the bottom line, looking at who has coverage today? What are the options? The bottom line is that, for the vast majority of people, if they retire before age65, they are going to have to go into COBRA for 18 months followed by accessing the individual policy market or the individual insurance market. For those that retire after age 65, most folks are going to have Medicare, and they're either going to have to get a Medicare supplement policy or they're going to have to pay out of their own pocket for whatever Medicare doesn't cover.

I'd like to quickly go over what Medicare does and doesn't cover. Medicare coverage for inpatient is fairly comprehensive. There is a deductible of $792 or some co-insurance, depending on how long the length of stay is. Part A also covers skilled nursing facility, home health, and hospice. For Part B, there's a $100 deductible and a 20 percent co-insurance. There are some things that Medicare does not cover. The big one that I think most people are aware of is prescription drugs, but there are also other items that Medicare doesn't cover.

I want to put everything together, and, finally, we're going to do a little financial modeling—very simple calculations that you can do on an Excel spreadsheet. The assumption is we have a retiree who is age 65 today, and in the modeling we're going to assume a 5 percent discount rate. We're going to assume a medical inflation rate of 8 percent, so there's a 3 percent spread between what we're assuming the general discount rate is and what medical inflation is. We have life expectancy of 15 years for a male, 20 years for a female, and, again we're going to exclude long-term care, which could add a significant burden to the calculations that we do.

In Table 1 we quantify what the cost is to a retiree, and we categorize everything on a PMPM basis, which is the standard that HMOs use to look at costs.

Table 1

Summary of Expected Post 65 Costs

	Per Member Per Month Cost	PV at 65 with Life Expectancy Equal to 20 Years	PV at 65 with Life Expectancy Equal to 15 Years
Part B Premium	$49	$15,600	$10,800
Part A Inpatient Deductible & Coinsurance	$20	$6,400	$4,400
Part A Skilled Nursing Facility in Excess of 20 Days	$6	$1,900	$1,300
Part B Deductible	$7	$2,200	$1,500
Part B Coinsurance	$60	$19,100	$13,300
Prescription Drugs	$125	$39,700	$27,600
Other Benefits Not Covered by Medicare	$33	$10,500	$7,300
Total	$300	$95,400	$66,200

You'll see that I've broken it down into the different components that are available. With Part A, as you recall, there's a deductible and co-insurance. It's going to cost the average retiree $20 PMPM. The Part B premium, as we also discussed, is $50 PMPM. There' s a deductible in co-insurance on Part B and this is quantified. You'll see prescription drugs are the big one, about $125. That's assuming an unlimited benefit, which would be appropriate for the calculation that we're doing, and then there are other benefits, including benefits that are not covered by Medicare, such as dental, eyeglasses, etc. The total comes out to $300 PMPM, which doesn't look too intimidating. A couple at age 65 is going to need $161,000 to fund their retiree medical expenses. This is as of today, so we have the benefit of knowledge in terms of what medical expenses grew at. Having said that, a couple at age 35, 30 years ago in the 1970 ballpark, would have needed to start saving about $1,400 annually in order to have that $161,000 accumulated. Someone at age 45 would have needed about $3,500. So as you can see, these are fairly significant amounts.

If you assume that someone retires early, it's really making the situation much worse from a cost perspective. Not only is there going to be less time to save that money, but the expenses are also going to be even higher, because you're going to have to pay for individual insurance from the time that you retire early to age 65. So here is an approximation that assumed you add $10,000 per year, and again, this is for a couple that retires early. So if you retire at age 60, you can add $50,000 to that $161,000. To retire at age 55, just to give you a sense of how dramatic the increase is, the couple would have needed to save $5,700 annually at age 35. If they started at age 45, that only leaves them ten years to accumulate

money, and they would have needed to start saving $18,000 annually just to fund their medical expenses.

Hopefully you've seen that health care costs are quite significant. Unfortunately, there's not much education. A lot of people know about college expenses, and I think a lot of people are planning for that appropriately. Health care expenses still need to be addressed, and I think there's going to be more and more attention paid to that as the baby boom generation approaches retirement. One caveat is that it's going to vary significantly from individual to individual. However, I would bet that if I took a poll here, most people don't have comprehensive post-retirement medical coverage. I think what we're talking about will apply to the vast majority of people. Changes in government coverage obviously would have an impact, either positively or negatively. Unfortunately, I don't think that we can afford to make the benefits more comprehensive, and, if anything, the situation might get worse. I just want to stress that education is really important and it's part of the financial planning process to the extent that we can educate people. It's a benefit both for them and for the companies that cater to those needs.

MR. MATHEW GREENWALD: I've been asked to discuss retirement planning and money management and retirement from the consumer perspective. I base my remarks on hundreds of focus groups that I've conducted on this subject, the latest one being from the Society of Actuaries, a study that's going to be released probably in January, and most of the retirement constant surveys that I've done with the Employee Benefit Research Institute over the past eleven years. Instead of presenting just the findings, I'm going to talk a little more generally.

Before talking about the consumer perspective, I'd like to place it in the context of the real risks people face in retirement. I have two background comments on that. First of all, it's interesting that people use risk-sharing products during the time they're working to replace the risk of losing income. Life insurance is fairly widely held, as is disability insurance. Risk-sharing mechanisms are used less in the retirement period, although people have less of an opportunity to recover from those financial setbacks when they're retired than they do when they're working, when they can perhaps work longer, put more hours in, take a second job, things like that.

The risks that people really face in retirement include the uncertain timing of death. If you take a couple at age 65, it is possible that they can be killed within the first year of their retirement. Or they can each live at least 40 years to age 105. So they have to cover financially from 0 to a combined 80 years. They don't know what the timeframe is. In terms of health care, it's possible that this couple age 65 and retiring will have no health care costs, especially if they die rather early. Or they could have at least $500,000 a piece in costs (in some cases more with some diseases), so their range is approximately from $0 to $1 million. In terms of long-term-care costs, their cost for long-term care could be $0. I think for most people, that's the case. They could each develop Alzheimer's and have costs of over $1

million. Inflation could be 0 percent, but if they live for 40 years and there's even moderate inflation, it could be a combined 300 percent. Their investment return, if they retire from 1900 to 1998, could be rather attractive. If they retire from 1928 and live to 1938, it could be rather unattractive. There's a public policy risk as well that people face. Social Security, Medicare, and Medicaid, through the coverage of long-term-care costs, could continue to deliver the same coverage that they do now, and I'm thinking particularly of the baby boomers. It could be that each of the programs is in some distress, and maybe especially long-term-care coverage under Medicaid could be reduced. So there's a public policy risk, in some cases hundreds of thousands of dollars for some people, if the programs deliver less over a period of 40 years. As background, I think those are the real risks that people face when they plan their retirement.

Now, what do people consider, and I'm thinking broadly and generally, although I think it includes almost everybody? Number one, when people decide when to retire, they consider whether they will still have health insurance or whether they will lose it, what is their health, how much money they have now. Future considerations, such as how long they will live, bear almost no relationship to their decision. What inflation will be bears no relationship. We did a survey for the American Council of Life Insurance and asked people at what point they wish to retire and asked them when they expected to die. The people who expected to live a very long time didn't intend to work any later than the people who expected to retire earlier, and one of the things that leads people to expectations of when they're going to die is usually the life span of their same -ex grandparents. That's the shorthand method that most people use if you ask that question. My grandmother lived to 78, so I suppose I'll live to about that, maybe a year longer.

The decision of when to retire tends to be based on where things are now in terms of money they have, in terms of the health they have, and not on other considerations. I just want to recall a remark that my father made to me recently after retiring at age 65. He said he never really thought through the impact that inflation would have on his financial well-being. Inflation in this time period has been rather modest. But in his case, and in most other people's cases, that was not a consideration at all. What can I afford to do now?

The third area I'd like to cover is: how do people model their own financial needs in retirement—what do they specifically take into account when they develop a financial plan for retirement? I think in almost all cases it is (A) asset allocation, (B) their budget now, (C) some thoughts about whether they want to leave money behind, and (D) more now than five years ago, much more than ten years ago, some concern about long-term care.

So let's go back to A, asset allocation. Financial preparation for retirement is most seen as an asset allocation issue. I want to accumulate money, I want it to grow as much as possible, and, therefore, I have to invest it, I have to put it in certain places. When people come to retire, in general they have control over more money

if they have a DC plan. My understanding is that 70 percent of rollover money goes to stockbrokers, and I think that's the reason, it's an investment issue. I think that the bull market of the '90s has really furthered that viewpoint, and, in fact, I've done some research with financial planners and asked them how they cope with the uncertain timing of death, the point that Anna raised, and the typical answer to that is, and this is more than two years ago, but not much more, the market will provide. You invest properly and the market will deliver returns. It doesn't matter when you die, because it will always be there.

Basically, number one, how do I invest my money and part of that too, is how much risk do I wish to take? The people who want to have a certain amount of their money invested conservatively have really been beaten up by low fixed rates and so that is part of the issue. Number two is the question of what do I need to live on and that is in some ways the big moving part. I want to live this way. If I have less money, I'll cut back, and I'll cut back, and I'll cut back. Now, there may be a generational issue here, because the people who are basically retired now are people who lived during the depression and people who are much more used to cutting back and living fairly frugal lives. The next generation may have more difficulty with frugality. That's the item, the thing that they have under their control.

There's the main strategy that people are taking now, I think, as they plan on how much to save and how much to spend. They want their principal to remain at the same level. They want to live—this is the polarity of people according to the actuary study that will be released in January, 38 percent. That's more than the other choices of rationing up or rationing down. I will keep my principal, same amount and live on whatever I get from Social Security, pension, etc. Now, there's a flaw in that. That means that you lose principal by the rate of inflation, and with retirements getting longer and longer, that becomes more difficult. By taking that approach, you're basically saying look, can I afford to retire now? So that's likely to be an extremely effective lever in terms of how people calculate how much they need.

In the Society of Actuaries' study, we asked people about the importance of various items in their decision to retire. Social Security hasn't had that much of an impact. I'm using the word retire, although many people retire and then go back to work, so the concept of retirement is changing. That's also a way of dealing with financial difficulties. It's more effective from ages 65, let's say, to 70, but less effective as people get older. I think in some ways it probably is a factor in some people's decisions to keep working and maybe to go back. But there has been an increase in the age of retirement that's been kind of modest. I should also say that, according to the retirement survey, about two in five workers really retire before they plan to, usually but not always because of health and disability, and they don't have the option. That's one way of saying that is probably a minor, but still noticeable, effect. Of course, we have the things going in the same way with the increasing age and eligibility for Social Security, which probably should have some effect, but a minor

one.

One other issue on being able to afford to retire is that we've asked people in many surveys whether they have ever tried to figure out how much they need to have a safe retirement, and we have seen some increase in that recently. But basically what will happen is workers have done that, and if they haven't tried to figure out how much they need to accumulate by the point of retirement, a third of the people that have tried to come up with a calculation have not been able to do it. When we ask people what replacement ratio they think is appropriate for them, only about a quarter to a third say 70 percent or more. There are also some other underestimates of what it takes to live retired. Basically, part of the work involved when people retire is the budget. How much do I need to live now?

The third thing is that there is a desire for many people to leave an estate—many people being a minority because most people don't have the wherewithal to do so. That is another moving part and I've done some research after September 11, with two groups of people, consumers and stockbrokers, saying the same thing. They're willing to give that up. That is something that people who are newly less wealthy than they were before feel that that's not a very important goal and that's one of the things that's being sacrificed. The fourth thing that I'm noticing more is more people are aware of long-term-care costs and are at least considering long-term-care insurance, a relatively new development.

So if you look at people's basic approaches to planning for retirement—short-term perspective—they don't consider many risks, they're worried about outliving resources, but not willing to settle up that risk really, probably growing interest in annuitization, but still rather modest. Basically, we're looking at asset allocation.

Here are my final thoughts. What has changed recently? I think there are a few things that are important that may change these basic approaches. Number one, we have the movement and continued movement to DC plans. Basically, people have been fairly sheltered from managing money and retirement because in the past a significant portion have basically funded themselves on two life annuities, Social Security, which is basically a life annuity and a DB plan. They couldn't mess up. Now, increasingly, they can if they're given a lump sum to manage as long as they live and they don't have the tools to do so. Number two, the end of the bull market, with people I think in some ways being thrown in a quandary. Having something that even a few years ago seemed like it could deliver a significant amount of money. It wasn't able to, and some people in retirement have been significantly hurt by developments of the last few months and maybe year and a half as well. Expectations that the economy will not recover anytime soon, and, fourth, changes in the estate tax law, which I think probably pertains only to the upper end. That leaves the final question: what's going to happen now? What's going to happen now especially if there's a longevity shock, and, according to the predictions of some people, there will be significant advances against cancer and heart disease, which are the two main killers of all the people? I think we have in

some ways, hopefully, a movement toward more sophisticated planning and more effective and appropriate ways of dealing with financial risk and ultimately moving money management and retirement from simply an investment issue to a risk-management issue with use of risk-sharing products like annuitization, long-term-care insurance, and other products to be invented. Maybe that's wishful thinking, but I think especially since September 11, the stage has been set for more consumer receptivity to those approaches.

MS. MILLER OLIVER: I did want to mention that the Society of Actuaries is conducting a large study evaluating retirement planning models.

MS. ANNA M. RAPPAPORT: The study that the Society of Actuaries is doing is about retirement planning models will not be an evaluation of named models, I want to be really clear about that. We are looking at a variety of models to try to understand how post-retirement risk is handled. It is the expectation that the results may be used to do things like consumer education, and we thought we needed to know what's out there first. We're partnering with LIMRA and entering into a connection with financial planners. We're very excited about this, and some people have also thought that we might drive some changes in the marketplace. I have to say in response to my question in planning for life expectancy, I personally, along with a lot of other people am very nervous about that, it's like planning for failure for half the people. I wanted to ask a couple of questions of Mr. Patel on retiree health. I think putting on the table the amount of money you need to save is a great contribution. At the same time, I'm very nervous about this because when you get to pre-Medicare experience, the insurance markets don't work very well. In many health situations, say 10 percent of the people, many of whom are chronically ill, account for a very large part of the expenses. If they can't really buy insurance, they don't have enough money, and I think we have some real issues—what I would view as market failure today, and if the markets don't do a better job, I think we have some real questions about the future of where our health insurance system is going. I'm very nervous about that, and the same thing would apply to an extent to post-65 drug coverage, because for the people that are very sick and need a lot of drugs, it's very expensive. The Medicare supplements don't provide very much drug coverage, so if you save the money, the marketplace right now doesn't give you a good way to transfer the risk, if you really needed to, in the sick part of the population. The situation is a lot worse than it would appear to me from his numbers. I'm curious about his numbers in terms of the average amount of costs, particularly the pre-65, and also about the eight percent medical trend factor and what that implies about medical costs, and what his underlying inflation figures are.

MR. PATEL: In terms of the prescription drug coverage over 65, I have to agree with your comments. I think even the most generous Medicare supplement plans have a maximum of $2,500 for prescription drug coverage, which is not very significant. That definitely is an issue and these numbers obviously make things look much better than they would be for those who really do need prescription drug coverage. For the under-65 group, and someone here might know better than I,

we're having our legal department review our reading of HIPAA, but we believe that under HIPAA you can go from a group policy to an individual policy and that's guaranteed after you would drop COBRA. Is that not the case?

FROM THE FLOOR: We've decided that when you're done with COBRA, you're beyond HIPAA.

MR. PATEL: Does that mean you can go straight from employer coverage to an individual policy?

MS. RAPPAPORT: I think the other problem is that under HIPAA the coverage that you can go to has a pretty high premium, and it's not the coverage with the lowest premium rate.

MR. PATEL: That's absolutely correct. The access might be there, but the costs are going to be quite significant and that's going to vary from state to state, depending on plan designs and a number of other issues.

MS. RAPPAPORT: I was curious about your pre-65 costs and your eight percent medical trend rate.

MR. PATEL: The pre-65 costs are just examples. I know we've looked at a couple of the markets in which Fidelity itself has a large concentration of employees. For example, for Massachusetts on their Web site, it's a guaranteed-issue state. We looked at what most of the plans are charging and the Web site is fairly good. It shows what the costs for different individuals would be, including expenses for a retired couple aged 63. Again, the costs are going to vary depending on state, whether you go for HMO coverage, or a PPO. Do you find those to be too high, too low?

MS. RAPPAPORT: I think your pre-65 costs are too low.

MR. PATEL: I would agree that there are states where it's going to be much higher and others where I think the costs would fall within that range.

FROM THE FLOOR: Going forward, basically I'm not sure I would agree that the costs of retiree medical will not vary by income. I think that there's the potential out there that it will vary significantly in the future with all the biotech and prescription drug advances, and the capping of Medicare and Medicare supplements. In terms of cost management, one of the single biggest providers of health care in the country is Kaiser Permanente in California. Early last week they announced that there are going to be significant hospitalization deductibles—if memory serves me it's $200-$400. Now there are going to be a lot of people squealing like stuck pigs, so we'll see if they still do it. There are some potential inconsistencies in the company value of pension benefits and retiree medical benefits in terms of the medical trend rate for inflation vis-à-vis the non-medical

inflation rate. You can see some inconsistencies in that the assumptions for retiree medical hold true for a lot of retiree medical evaluations we've seen. There is just so much more medical inflation in 15 to 20 years from now that would only be true if you underline the function in terms of society—if you were spending between 25 and 30 percent of our GNP on medical costs, my observation is that if we ever to see it getting closer to that, there will be some type of structural change in the way that medical care is provided in this country.

MR. PATEL: When you do the modeling, you assume the maximum trend, because, I think it's around 5 percent or so. If you assume anything higher, you're assuming that too large a percentage of the GDP is going to be consumed by health care. Tying all of this together, when we talk about the fact that it is going to be income-dependent on the future, I would agree actually with the assessment that the system is moving toward, in which those who can afford it are going to be able to get the comprehensive coverage that I think most of us have today. So when you're assuming eight percent trends, it's assuming, I guess, that if you can afford everything that's out there, all the new developments, and if you want the same type of coverage you have today, you'll need to spend X amount of dollars. For that calculation, it is assumed to be eight percent. That's not to say, though, that everyone is going to be able to afford the full set of services that is afforded to everyone today.

MS. MILLER OLIVER: Does anybody have any great ideas on how to incorporate risk in the model?

MS. RAPPAPORT: I think there are two areas in the models. I think the work that Mr. Patel did, for example, on retiree health is very good in that regard, but the other question is a question of how you transfer risk, and can you transfer risk? There is a question of what do you do when you can't transfer risk and teach people that they need to transfer certain risks. As Matt said, you'd better think about transferring the risk, and if you don't transfer the risk, it's bad news. The problem is you need to think about how, in doing modeling to teach people about the scenarios and variabilities that are important, but that's only half of it. The other half of it is, if you're going to have a private insurance system, you're going to need a vehicle to transfer the risk into, and I think we have work to do on both sides of that. I am very worried about the medical care system. I feel like what is happening right now on the retiree health front is very bad with the growing numbers of uninsured and that group is moving into more trouble and risk. I think it's a two-sided thing.