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Whealthcare: Preventing Financial Fraud And Promoting Cognitive Health And Wealth

When Renee Packel brought her husband Arthur for a new patient assessment at the Penn Memory Center, she told the saddest story. His symptoms were memory problems, but the bigger problem was money. In addition to skipping the payments on three consecutive months of condominium fees, he'd either been defrauded or committed a series of poor financial transactions. He'd lost most of their life savings.

Their life was transformed. Their retirement plans for travel and leisure were cancelled. She sold their house, they moved to an apartment, and she took up the first job of her life. And he was diagnosed with mild-stage dementia caused by Alzheimer's disease. In the years to follow, the only visit he'd make to his beloved Paris would be after he died, when Renee scattered his ashes over a grave in Père Lachaise Cemetery.

When Claire Jones came to the Penn Memory Center in the company of her daughter Tanya, she spoke of how, after years of hard work as a bookkeeper and careful savings, she lived alone in an apartment enjoying her church, playing cards with friends and having occasional visits with her daughter.* She was enjoying a good life, but then she won the lottery.

Within a few months, the "lottery



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officials" had fleeced her of several hundred thousand dollars. When she was down to her last \$100,000 of savings, she announced to her daughter, "I think I've been had."

She was right. The scam involved having

her transfer cash to other banks to cover the costs of taxes on the winnings, and opening new accounts in order to "seed" the transfer of the funds from abroad. The scammers kept asking and she kept giving, and then her money disappeared.

She came to the memory center because she and her daughter worried she was suffering from Alzheimer's disease. "How could I, a bookkeeper, have made such decisions?" she asked. The memory center evaluation found nothing wrong. Unlike Arthur Packel, she was cognitively "normal." She was experiencing cognitive aging, and the scammers took advantage of that.

By the time these patients came to a memory center, it was too late. These stories did not have to happen. They could have been prevented.

Why older adults are uniquely at risk of losing their wealth

Alzheimer's disease kills brain cells. Cognitive aging causes them not to work as well. In particular, decades

of psychology studies document how, with age, humans and other mammals show declines in a particular set of cognitive abilities collectively called fluid intelligence to distinguish it from our crystallized intelligence. Our crystallized intelligence describes the knowledge we accumulate over time. With age it remains fairly stable or even increases.

Age-adjusting measures of fluid intelligence hides these changes. They become buried in the lower end of the bell curve that describes "normal for age." Mrs. Jones was, for her age, a little below average, but still normal.

She was also experiencing another common change with cognitive aging, a change in how she used her emotions to sort through new information and interact with the world. With age, humans become more focused on the present and on experiencing emotionally pleasant events in that present. Changes in how older adults process social and emotional events cause them to be less worried and anxious than younger adults and more likely to seek out and remember pleasant than unpleasant events.

"The lottery officials," she recalled, "were such nice people."

One of them, a woman, would call to ask and update her on the process of the funds transfer. Through these conversations, she befriended Ms. Jones and learned how, for

example, she planned to use her winnings to help her son pay his debts and then start up a cleaning business. The scammer played off those good feelings.

Together, changes in fluid intelligence and social and emotional processing are why older adults such as Mrs. Jones are a setup for scams, particularly older adults like her who live alone. Over time, these changes can cause bad decisions, especially when the decision is complicated and emotionally charged, such as thinking through the sensibility of paying taxes and transfer fees before receiving a lottery payout.

Whether from neurodegenerative diseases like Alzheimer's ("neurodegenerative" meaning brain cells are dying) or the changes in fluid intelligence and social and emotional processing seen with aging, older adults are uniquely at risk of losing their wealth, and when they do, lots of people suffer.

Mrs. Packel went to work. Mrs. Jones' children were pitching in to pay for her food, rent and medications. The institutions that once managed their money no longer had it to invest. Customers were not satisfied.

The Concept of Whealthcare

At present, physicians cannot prescribe effective treatments for Alzheimer's disease because they don't exist, and although they can recommend healthy lifestyles that promote cognitive health, pills don't exist that enhance fluid intelligence. Pills aren't the solution, though. Short of a miracle pill that fixes our aging brains at about 50 years, pills won't prevent problems like financial fraud or abuse,

or errors from losses in financial capacity. And yet, the sufferings of Mr. Packel and Mrs. Jones, as well as millions of other Americans like them, could have been prevented.

They suffered because their problems were discovered too late. They could've been prevented in the same way we can prevent hip fractures and heart attacks.

For those problems, not only older adults but communities and society can take action, such as changing habits and the environment and setting up methods to monitor. We could do the same to monitor and preserve the health of our brains and our wealth.

In May, the World Economic Forum Global Agenda Council on Ageing and Penn's Healthy Brain Research Center co-hosted "Aging and Cognition: Maintaining Economic Security in Later Life." For two days, experts in financial services, elder abuse, senior advocacy, regulators, banking and technology talked about how the banking and financial services industries of the future will promote their clients' health and wealth. The conceptual model was "whealthcare."

Whealthcare isn't simply alliterative word play. It reveals itself when several empirical observations are woven together beginning with the changes that either aging or diseases, or both, that cause changes in older adults' financial capacity, a term that describes our abilities to manage our money and other assets to meet our needs and in a manner that is consistent with our values and interests.

Paying bills, balancing accounts, deciding about an investment, calculating interest... The list of

tasks is long, and all of us start from a different baseline that worked for us as we passed through adulthood, more or less. Starting in our fifth decade, as cognition changes, one of the first signals that there might be problems is a change in our capacity to perform these sometimes difficult, tedious and value-laden tasks.

Another observation that compels the model of whealthcare is the value older adults place on maintaining their cognition. Panelists from AARP, Blackrock and Bank of America Merrill Lynch showed consistent survey results.

Old adults' top priorities are preserving their health and wealth.

When we add in the ways older adults live, the facts all fit together. Older adults are typically in a transition from accumulating to decumulating wealth, wealth that may be spread over multiple accounts and connected to checkbooks and credit cards, mortgages, co-signatures on student loans, etc. It's a jungle out there. Some places are well charted and safely regulated, but others are a buyer-beware hazard to be avoided.

Together, these biological, psychological and social facts show the need for a public health approach to practice whealthcare in order to promote financial security with aging.

Practicing Whealthcare

Better treatments for Alzheimer's disease and interventions that keep aging brains sharp might help to prevent the losses that Mr. Packel and Mrs. Jones suffered, but short of a cure for these conditions, assuring financial security with aging

isn't a biomedical problem that will surrender to a tidy medical fix. Multiple neurodegenerative diseases and aging create older adults' brains, brains that are in turn interwoven into a world of interconnected and disconnected accounts, technologies, relationships (family, friend and foe, with family sometimes the foe) and institutions.

The social-ecological model of public health is an ideal guide for how to practice healthcare. This four-level model is used by the U.S. Centers for Disease Control and Prevention to tackle vexing problems like HIV infection, violence and heart disease. These problems engage complex interactions between the individual, their relationships, their community and society.

Consider the case of heart disease. Doctors prescribe statin drugs to prevent a heart attack or stroke. At home, patients check their blood pressure and weight and take steps to reduce their risks, quite literally, by exercising. Society and communities take steps as well. They enact policies and regulations that promote a heart-healthy community. These include public smoking bans, workplace incentives to walk about, streets with sidewalks, calorie-labeling food and sugar-sweetened drink bans. All of these efforts—at the levels of the individual, relationships, community and society—add up. The risk of having a heart attack—and if you do suffer one, of dying from it—are reduced.

We could do the same for the risks of suffering cognitive decline and fraud and abuse, the strokes and heart attacks of the aging or diseased brain. Steps could be taken to surveil for cognitive problems and to prevent

people from suffering the harms of losses in their financial capacity.

Healthcare begins with the recognition that banks and financial service industries are on the front lines of screening for cognitive impairments and therefore promoting financial security. Surveillance of financial transactions is a means to identify changes in cognition that might be the earliest signals of a disease or aging. Prediction algorithms developed through machine learning could help to identify older adults at the highest risk. A recent report from the President's Council of Advisors on Science and Technology, "Independence, Technology and Connection in Older Age," explains how technologies that allow passive monitoring of accounts and online view-only accounts can monitor cognitive function and protect older adults' economic security.

Technology is key, and an entire session of the conference was devoted to it, but it's only as useful as the regulations that govern it and the skills of the people who use it. The financial services work force needs skills in how to effectively communicate with older adults.

Professions like medicine and nursing have made substantial progress from the days of the data dump of an informed consent form, to developing methods to communicate with patients so the physician conveys facts and answers questions, and the patient reaches a decision that incorporates her values and goals. This model of shared decision-making is especially important when the decision involves competing and highly personal life goals. Along the way, the physician may pick up clues that the patient has trouble understanding

information and may even lack the capacity to make the decision. In such case, the physician can reach out to trusted others like Mrs. Packel or Tanya to help make the decision.

Technology and communication are only as effective as the environment they exist in. Kevin Volpp, the director of Penn's Center for Health Incentives and Behavioral Economics, showed symposium attendees how tweaks to the options patients have and the rewards they receive can promote healthy behaviors like smoking cessation.

AARP has prepared several reports summarizing the steps taken by several financial institutions here and in the UK. A key message is that practicing healthcare creates value. It's good for business.

Why? If routine business meant bankers and financial services providers had the skills to practice shared decision-making, technologies to monitor for problems and resources to reach out to trusted others or to refer clients to doctors at a memory center or to adult protective services, and if the community and society were aligned to promote healthcare, Mr. Packel and Mrs. Jones might have come to the memory center before they and their families—as well as the institutions that once had responsibility for their money—were mired in problems that ruined their health.

**The names and other identifying information of this case are changed to protect the patient's identity.*

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