Dr. Leah R. Hanson - Testimony in Support of HF 278

Mr. Chairman and members of the committee, my name is Leah Hanson. I am a neuroscientist and director of research at HealthPartners Center for Memory & Aging.

There is an immense need for research in the area of Alzheimer’s disease and related dementias. The statistics clearly show that the prevalence of Alzheimer’s disease will escalate rapidly in the next 30 years and that it is the most expensive condition in the nation. Research in this area is so important because it has the potential to change that projected future. Research efforts are underway to develop effective treatments, ways to prevent the disease, to test new ways to positively impact lives of patients with memory impairments and their families, and reduce the cost of care. But, there is a large gap in funding for research in this area. There are many potential treatments out there that have not been able to be tested due to lack of funds.

While you may have heard of research happening in Minnesota at the University of MN or Mayo, you might not be as aware of other Alzheimer’s research taking place at other institutions, such as HealthPartners. At HealthPartners Center for Memory & Aging, we are not only dedicated to early diagnosis and support for patients and families who have a diagnosis of dementia, but also to provide access for our patients and those in the community to clinical trials for cutting-edge treatments and our program of development for effective treatments and methods for prevention of Alzheimer’s disease and other dementias. We currently have 14 approved studies related to Alzheimer’s disease and related dementias.

One of the new treatments recognized nationally as most promising for Alzheimer’s disease, intranasal insulin, was developed right here at the Center for Memory & Aging. Insulin dysregulation in the brain is increasingly being recognized as a feature of Alzheimer’s disease, prompting some scientists to describe Alzheimer’s as “diabetes of the brain” or a type-3 diabetes. Three studies have shown that intranasal insulin can improve memory in Alzheimer’s patients and mild cognitive impairment. Intranasal insulin is currently in a large Phase 3 clinical trial funded by the NIA. The significance of using intranasal delivery is important; it allows drugs to be targeted to the brain, bypassing the blood-brain barrier, to travel to the brain along the nerves involved in the sense of smell.

I joined HealthPartners in 2000 as a research fellow. In the decade before I arrived and many years after, we struggled to gain acceptance and funding to move this innovative treatment forward. If it weren’t for a partnership with Regions Hospital Foundation and our ability to raise charitable dollars to support this work, this innovative idea would have never progressed to clinical trials. It is difficult to obtain funding for research that is innovative, which is often high risk, yet high reward. With the limited amount of funding available, funders typically make awards to projects that have the highest chance of success. One effect of this is that it reduces the diversity of strategies and approaches that are tested. One thing that is clear with the projected trajectory of Alzheimer’s disease is that we need to test as many strategies as we can as quickly as possible.

Other research at HealthPartners Center for Memory & Aging includes:

* Industry sponsored clinical drug trials - we have clinical trial opportunities for mild cognitive impairment, mild-to-moderate Alzheimer’s disease, and moderate-to-severe disease.
* Memory PREP (Patient Resource & Education Program) – a study designed to test a program to increase disease specific education and social support in patients with newly diagnosed memory loss and their caregivers.
* Stress Reduction – evaluating the benefits of mindfulness-based stress reduction (MBSR) in people with memory loss and their care partners.
* MN Memory Project - an observational study of memory changes with aging in three groups of people: aging adults >55 yr, caregivers, and diagnosed memory loss with the goal of finding new ways to identify, treat and prevent memory loss.
* 6th Vital Sign - piloting the use of a standardized tool for cognitive screening, called the mini-cog, in healthy aging adults and studying healthcare utilization and chronic disease management in those who pass and fail the screen.
* Essential Oils - assessing the ability of lavender aromatherapy to improve sleep and reduce psychiatric symptoms of residents in memory care facilities.
* New Treatments - development and testing of intranasal insulin and iron binding agents as a treatment for Alzheimer’s disease and other neurodegenerative diseases.

The need for Alzheimer’s research has also been personally driven home for me. Both my grandmother and my husband’s grandfather suffered from dementia. I know that this same personal drive is shared by many of my team members at the center who also have family members with dementia.

Funding for research can make a difference. The more ideas we can test, the faster we can move toward a treatment, prevention, and ultimately a cure.