

**Questions for the Record for Dr. Leighton Chan**  
**March 20<sup>th</sup> Hearing on Disability Determinations**  
**Social Security Subcommittee of the House Ways and Means Committee**

1. In your testimony, he stated “the way in which disability is conceptualized and measured has changed dramatically in the past 50 years.” Please explain what this means and how it impacts who should and shouldn’t receive benefits.

As I mentioned in my testimony, the way in which disability is conceptualized and measured has changed dramatically in the past 50 years, starting with the work of a distinguished medical sociologist, Saad Nagi in 1965. Over time, many others have built on Nagi’s original framework including Verbrugge and Jette (1994), the Institute of Medicine (Brandt Jr. and Pope 1997; Pope and Tarlov 1991; Pope 1992), Abberley (1987), Oliver (1996, 1990, 1993) and the World Health Organization (WHO) (1980, 2001). Although aspects of these models differ, they all agree that disability cannot be viewed as an individual attribute. Instead, disability should be thought of as the difference between individual capabilities and their environmental demands. The Institute of Medicine (IOM) has noted that disability is not a stable attribute across situations, since physical and mental functioning is influenced by environments. Disability is a complex process, which is multidimensional, dynamic, and interactive in nature.

The question of who should and should not receive disability benefits falls outside of my area of expertise. The National Institutes of Health (NIH) was asked to work on this project, in part, because of our expertise in measuring *function*. The Social Security Administration (SSA) is charged with determining how those functional assessments relate to the definition of disability in the Social Security Act and the payment of benefits. Thus, the SSA would be in the best position to provide a response to this question.

2. Based on your experience, how would you define disability today?

We have chosen to use the WHO's taxonomy called the International Classification of Functioning, Disability and Health (ICF) as the conceptual framework for our collaboration with the SSA. The ICF is one of the most widely used models of disability. It has been endorsed by all 191 WHO Member States and is the international standard used to describe and measure health and disability. In the United States, the ICF is being integrated into important institutional frameworks. In 2007, the Institute of Medicine recommended that government agencies adopt ICF as a conceptual framework and language.

ICF uses a bio-psychosocial model of disability, in which disability is a multi-dimensional phenomena experienced at the level of the body, the person, and society. The ICF describes disability using impairment information to capture changes in an individual’s body structure and body function while acknowledging the influence of environmental factors, such as workplace demands and accommodations.

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3. If a claimant's condition does not meet or equal the listings, the next step is an assessment of the claimant's remaining ability to function. How does an examiner or medical consultant assess someone's function? How subjective is that assessment?

Our understanding is that the residual functional capacity (RFC) forms are filled out by adjudicators in the Disability Determination Service (DDS) offices. However, in our current research, we have not examined SSA's operations related to the residual functional capacity assessment. The SSA may be in a better position to respond to this question.

4. Should the electronic claims analysis tool ultimately be implemented by the Social Security Administration? Will these tools alone be sufficient to determine the ability to work? Will medical listings still be needed to determine eligibility?

The Electronic Claims Analysis Tool (eCAT) is a web-based application designed to assist the adjudicator throughout the sequential evaluation process. eCAT aids in documenting, analyzing, and adjudicating the disability claim in accordance with SSA regulations. This system is not part of our work with SSA, and we are not in a position to judge whether it should be implemented.

NIH's collaboration with the SSA is based on item response theory and computer assisted technology (IRT-CAT). Unfortunately, the names are similar but the systems are distinct. The goal of the NIH project is to create a real time functional assessment process that is rapid, reliable, objective and could be considered for integration into the SSA's disability evaluation processes. We are coupling Computer Adaptive Testing (CAT) methodology with Item Response Theory (IRT) to measure outcomes precisely across the full continuum of human functioning. IRT-CAT represents a simple form of artificial intelligence software requiring a computer for administration.

While we are very happy with the progress we are making to create new IRT-CAT tools, the ultimate decision on how they might be implemented or whether these tools could be used instead of the Medical Listing process will be up to the SSA.