

BCM Cerebro: Neuropsychology Outpatient Clinic Specializing in the Care of Spanish-Speakers

Adriana M. Strutt, PhD, ABPP-CN; Irene E. Jose, BS; Stephen R. McCauley, PhD; Michele K. York, PhD, ABPP-CN; Jennifer M. Stinson, PhD, ABPP-CN

Section of Neuropsychology, Department of Neurology, Baylor College of Medicine, Houston, Texas



BACKGROUND

Hispanics constitute **45% of the Houstonian population** and are the fastest growing segment of the population.

The Alzheimer's Association revealed that 97% of those affected by Alzheimer's disease (AD) are ≥65 years of age—that precise demographic composes **15% of the Hispanic population in Houston**.¹

❖ The Hispanic population is known for its higher prevalence of risk factors—medical comorbidities, lifestyle practices, and socioeconomic limitations—that render this population at a higher vulnerability to neurodegenerative conditions.¹

❖ The American Diabetes Association declared the prevalence of total diabetes (both diagnosed and undiagnosed—and a risk factor for AD development) to reach **more than 50%** for Hispanic **women by the time they reach age 70**, and **44%** for Hispanic **men aged 70-74**.²

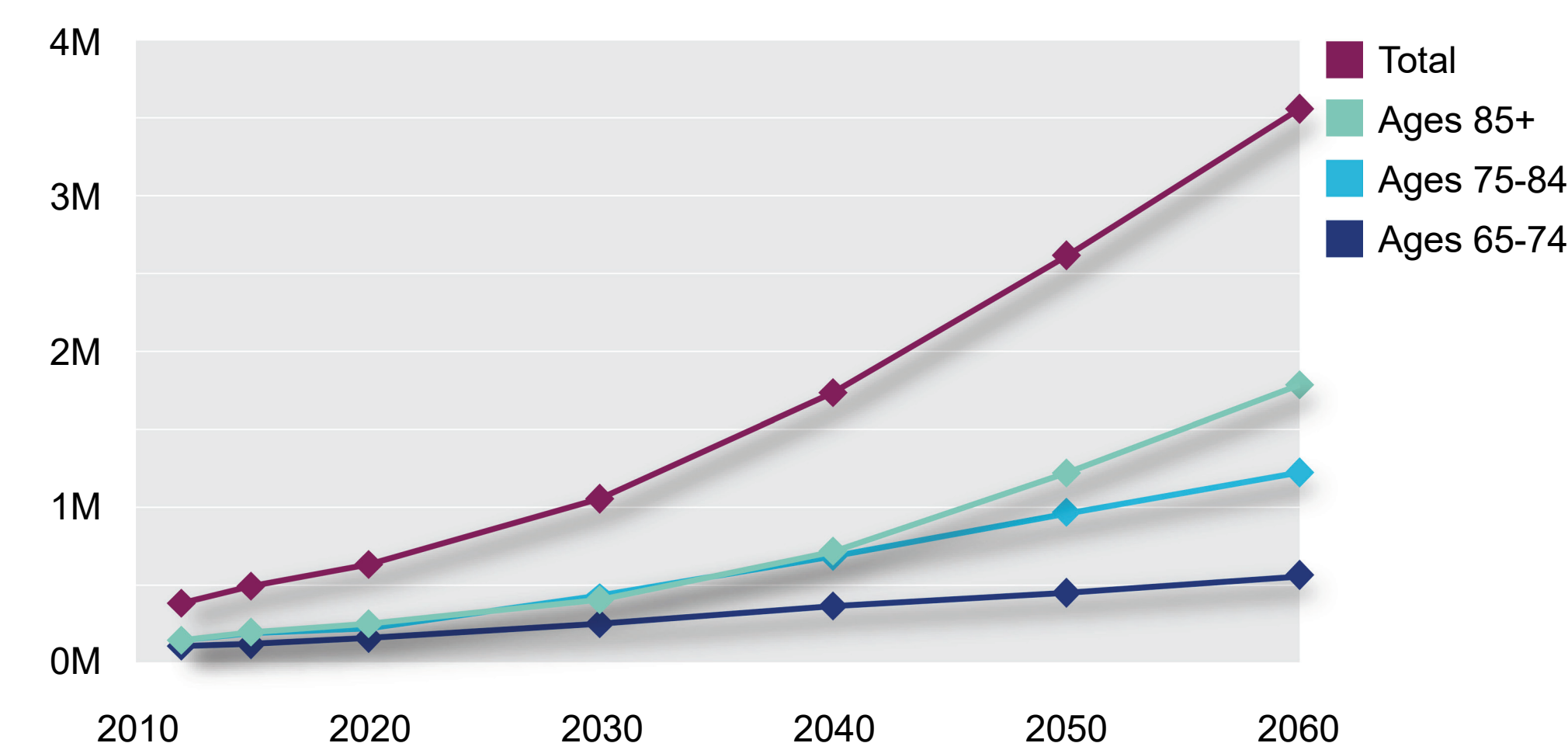
❖ An estimated **3.5 million Hispanics** are projected to suffer from AD by 2060 (see Fig. 1).³

There is a dearth of neuropsychologists in the U.S. who can provide services to Spanish-speakers (monolingual and bilingual) in addition to lengthy wait times for those who do seek neuropsychological services within this demographic.

The health disparity in neuropsychology results in lack of equitable care to this at-risk population. Moreover, the known impact of language and culture on neuropsychological outcomes shapes diagnostic impressions.

BCM Cerebro is a specialty care outpatient clinic engendered to address the health disparity in Neuropsychology via the incorporation of **culturally and linguistically sensitive neurocognitive assessment practices**.⁴

Figure 1: Projection of Latinos with AD through 2060, by Age (in millions)³



OBJECTIVE

To detail the development of an outpatient neuropsychology clinic for Spanish-speakers that addresses the necessity of implementing:

1. Linguistically and culturally informed clinical practices
2. Appropriate, objective psychometric assessment tools and normative data that considers the impact of socio-demographic variables, and
3. Educational programs to address diversity for learners of varying levels.

While this clinic provides services for other non-English speaking ethnic minorities, the Spanish portion of this program will be the focus of this presentation.

ADDRESSING THE NEED

The BCM Neuropsychology Section first responded to the need for equitable care in 2008 by the founding faculty. The College formalized this clinical service in 2017 (*BCM Cerebro*) and a two-year fellowship was created. Consistent availability of this service (through the fellowship and training of pre-doctoral students) has resulted in an increase in clinical referrals and patients served.

BCM Cerebro is **one of four** recognized Adult Spanish/Cross-Cultural specialty neuropsychology clinical services in the nation and offers **the only fellowship training program** accredited by the Association of Postdoctoral Programs in Clinical Neuropsychology.

Fellowship program offers extensive training in the assessment, diagnosis, and feedback delivery of services to Spanish-speakers, highlighting *BCM Cerebro's* contribution to “mending the broken pipeline for ethnic minority neuropsychologists” via training in linguistically and culturally sensitive approaches to clinical care and intervention.⁴

CLINICAL PRACTICE: Neuropsychological assessments administered by *BCM Cerebro* employ culturally and linguistically tailored measures and when available, normative data that generalizes to the assessed patients.

- ❖ All limitations—regarding normative data and the influence of sociodemographics—are acknowledged in the interpretation of results and diagnostic impression.
- ❖ Active utilization of “cultural humility” is stressed in the provision of care to Hispanic/Latinx patients—ensuring the sustained honing of linguistically and culturally sensitive services in the providers’ clinical approach at *BCM Cerebro*.⁵
- ❖ Constant evolution of culturally appropriate service is maintained via self-evaluation regarding approaches to cultural complexities and differences—for instance, understanding and addressing the collectivist nature of Hispanic cultures.^{5,6}

EDUCATION/TRAINING: In 2017, *BCM Cerebro* launched a monthly international on-line didactics program, *TaQUITOS de Sesos* (Brain Tacos) which currently has over 225 registrants including neuropsychologists, psychologists, physicians, and learners of varying levels.

- ❖ Development of *TaQUITOS de Sesos* began following a national needs assessment which revealed a desire for additional education in topics of diversity.
- ❖ Each *TaQUITOS de Sesos* session examines a topic in Neuropsychology/Psychology and its relationship to—and application in—various fields spanning law and sociology to public health and technology with the goal of bolstering education in the provision of services to patients from diverse backgrounds. Each session is led by an expert in the field of discussion.

PROGRAMMATIC ACHIEVEMENTS

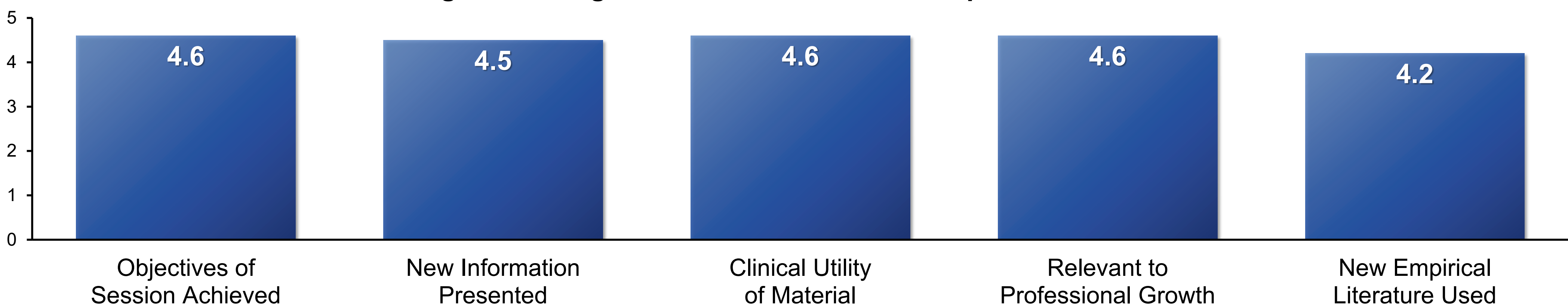
CLINICAL ACHIEVEMENTS:

- ❖ The consistent availability of services to Spanish monolingual and bilingual patients following fellowship implementation resulted in a **180% increase in the number of patients served** within the first year of *BCM Cerebro's* training program.
- ❖ *BCM Cerebro* has broadened its scope to examining patients who present with a myriad of neurological and psychiatric conditions. This service evaluates patients from BCM's Alzheimer's Disease and Memory Disorders Clinic, Parkinson's Disease and Movement Disorders Clinic, Maxine Mesinger Multiple Sclerosis Clinic, and Epilepsy Clinic.
- ❖ Pre and post-surgical assessments and intraoperative evaluations are also conducted.
- ❖ Clinical experiences highlight the need for tailored, culturally and linguistically appropriate medical services in order to adequately serve and medically support the underrepresented Hispanic (monolingual and bilingual) population in Houston and surrounding areas.

EDUCATIONAL/TRAINING ACHIEVEMENTS:

- ❖ A case-study regarding a Houstonian who suffered from Acute Mountain Syndrome while in Bolivia was presented at the International Neuropsychological Society in February of 2019.
- ❖ The Houston Neuropsychological Society supported *TaQUITOS de Sesos* by sponsoring continuing education credit for registered participants who attended the May 2019 session titled *Mental Health in Rural Communities: Challenges, Opportunities, and the Urban/Rural Divide* presented by Dr. Hannah L. Combs, BCM Neuropsychology Fellow.
- ❖ Dr. Elsa Baena, *BCM Cerebro* Fellow, presented *Assessment of Effort and Malingering in Hispanics*. This presentation was requested for submission to an upcoming national conference.
- ❖ Program evaluations have been utilized since program inception to measure the impact and clinical utility of each *TaQUITOS de Sesos* session using a 5-point Likert scale (see Fig. 2). Positive comments have been shared by registrants in addition to their ratings.

Figure 2: Program Evaluation Results - TaQUITOS de Sesos



FUTURE DIRECTIONS

CLINICAL SERVICE: Maintain number of outpatient clinics with new fellowship rotation (academic year 2019-2021).

- ❖ Translation and cultural modification of patient self-report measures and caregiver questionnaires.
- ❖ Finalization of Spanish clinical documents including clinical consent and release of information forms.
- ❖ Development of a Spanish report template for training purposes and also to serve international patients.
- ❖ Development of a quality improvement program to document the patient's experience of care.

EDUCATION: Houston Neuropsychological Society will sponsor continuing education credits for a three-month *TaQUITOS de Sesos* series (July-September 2019) focused on Women's Issues in Academic Medicine.

- ❖ Works in progress: refinement of in-house fellowship training curriculum and *TaQUITOS de Sesos* programming for the 2019-2021 academic year.

RESEARCH: Works in progress include international presentation on the development of an outpatient clinic for Portuguese-speaking Brazilians, collaboration in a nationally-based epilepsy clinical-research program, and submission of works for publication.

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