Design of the Brain Attack Surveillance in Corpus Christi—Cognitive (BASIC-Cognitive) study

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Background

- Few estimates of vascular cognitive impairment in multi-ethnic populations exist.

- The association of stroke and cognitive impairment in a stable community is understudied.

Study Purpose

- This study seeks to determine the association of cognitive impairment and stroke in a community of Mexican Americans and non Hispanic whites in South Texas, USA.

Methods

- A random sampling of housing units in Nueces County, Texas, USA, will be generated.

- Field Personnel will knock on selected houses and subjects 65 and over that consent will be screened with the Montreal Cognitive Assessment (MoCA).

- Those with a score of 25 or less will be invited to participate in a large battery of cognitive tests known as the HCAP.

- Caregivers will be enrolled as well to determine positives and negatives of caregiving.

- Caregiver needs, community resources and gaps between needs and resources will be studied.

- Subjects will be followed for two years and measures will be repeated.

- Subjects will be linked to the Brain Attack Surveillance in Corpus Christi (BASIC) project which has ascertained all stroke cases in the community since January 1, 2000.

- Detailed information regarding stroke history and cognitive performance will be determined.

Figure: BASIC-Cognitive Sample Plan
MCI-mild cognitive impairment; MA-Mexican American; NHW-non Hispanic white; MoCA-Montreal Cognitive Assessment; HCAP-Harmonized Cognitive Assessment Protocol
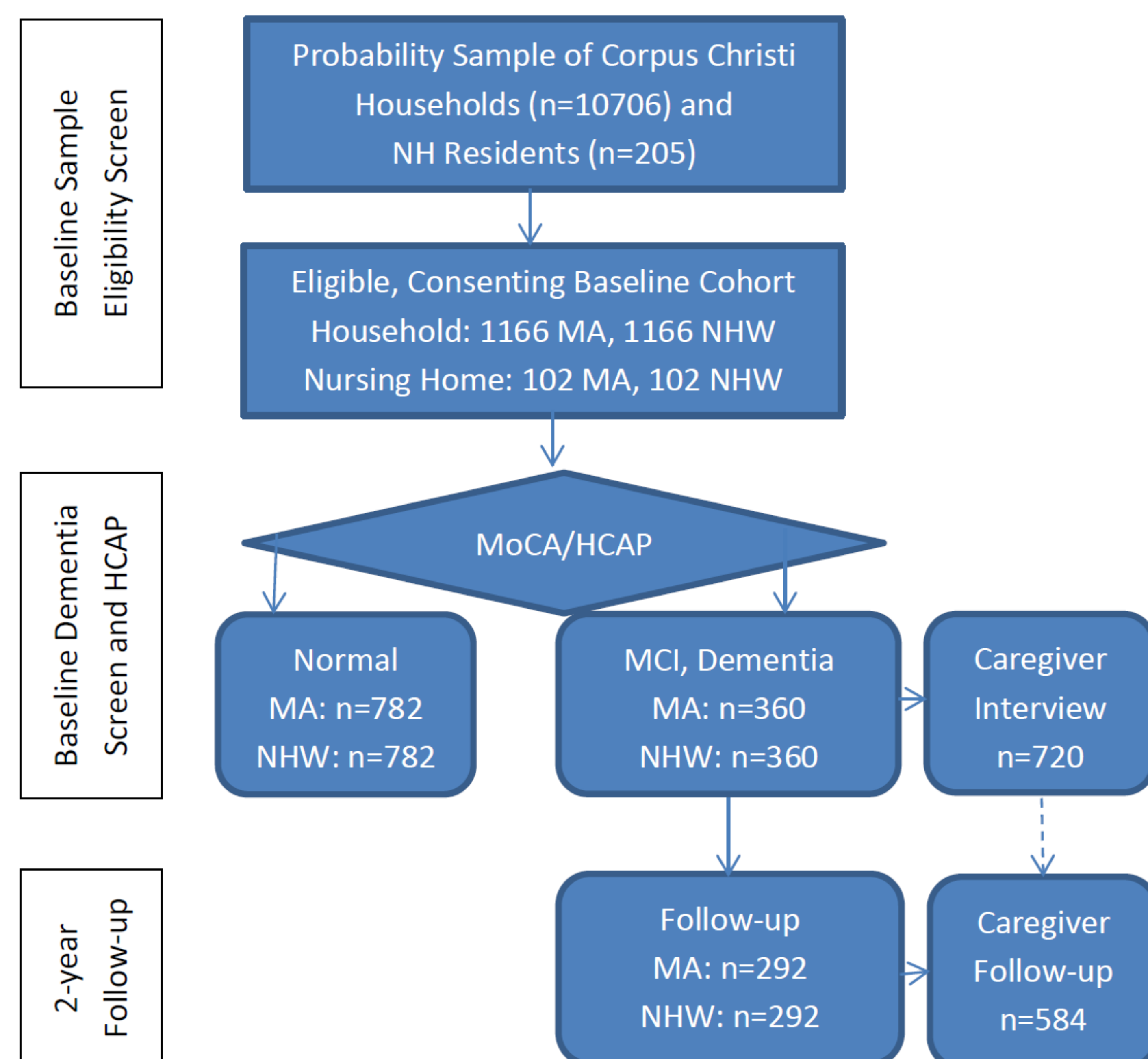

Table: BASIC-Cognitive assessments

	BASELINE			2-year FOLLOW-UP		
	INSTRUMENT	PARTICIPANTS	OUTCOMES	INSTRUMENT	PARTICIPANTS	OUTCOMES
Prevalence & trajectory of cognitive impairment and dementia Specific Aim 1	1. HCAP 2. Demographics	1: Patients and informants	1: Cognitive status: prevalence of MCI & dementia	1. HCAP	1: Patients and informants	1: Cognitive status and dementia progression
Caregiver assessment Specific Aim 2	1: Zarit Caregiver Burden Scale 2: SF-36 3: ARSMA II 4: Attitudinal Familism	All: Caregivers	1: Caregiver Burden 2: Caregiver Health 3: Acculturation 4: Attitudinal Familism	1: Zarit Caregiver Burden Scale 2: SF-36	All: Caregivers	1: Changes in burden 2: Changes in health
Community needs assessment Specific Aim 3	1: CANE 2: Asset Map	1: Patients & caregivers 2: Research team & Alzheimer's Association	1: Patient needs 2: Existing community resources	1: CANE 3. Concept Mapping	1: Patients & caregivers 3: Caregivers & clinicians	1: Changes in patient needs 3: Patient/caregiver needs

Summary

- This will be the first comprehensive, large investigation of vascular cognitive impairment in Mexican Americans and non Hispanic whites in the USA.

- Using the HCAP, an international neurocognitive battery, cognitive performance following stroke can be compared across populations to identify targets to reduce cognitive impairment following stroke.

BASIC COGNITIVE