Highlighting Disparities in Ongoing Studies

Tatjana Rundek, MD PhD
**FL-PR CReSD**  
**Publication Committee Members**

<table>
<thead>
<tr>
<th>Institution</th>
<th>member</th>
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<tbody>
<tr>
<td>Baptist Health</td>
<td>Amy Starosciak, PhD</td>
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<tr>
<td>FIU</td>
<td>Juan Carlos Zevallos, MD</td>
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<tr>
<td>HIIMA Hospital</td>
<td>Ulises Nobo, MD</td>
</tr>
<tr>
<td>Sacred Heart</td>
<td>Terry Neill, MD</td>
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<tr>
<td>Tampa General Hospital</td>
<td>David Z Rose, MD</td>
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<td>Scott Burgin, MD</td>
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<tr>
<td>Tenant South Florida</td>
<td>Nils Kronast-Meuller, MD</td>
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<tr>
<td>UF Jacksonville</td>
<td>Wayne Hodges</td>
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<td>UF Shands</td>
<td>Nicolle Davis</td>
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<td>Anna Khanna, MD</td>
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<td></td>
<td>Christina A Wilson, MD PhD</td>
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<td>Teddy Youn, MD</td>
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<tr>
<td>University of Puerto Rico</td>
<td>Enid Garcia, MD</td>
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<th>Institution</th>
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<tbody>
<tr>
<td>University of Miami</td>
<td>Tatjana Rundek, MD PhD- CHAIR</td>
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<tr>
<td></td>
<td>Chuanhui Dong, PhD</td>
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<td></td>
<td>Hannah Gardner, ScD</td>
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<td>Carolina Gutierrez, PhD</td>
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<td>Ralph L Sacco, MD</td>
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<td>Kefeng Wang, MS</td>
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FL-PR CReSD Publication Committee Function and Policy

Publication Committee Function

• Committee approval to publish unpublished data
• Provide AHA review of all publications
• Manuscript proposal submission and review
• Solicit participation of stakeholders in writing process
• Prioritize analysis in alignment with project aims
• All analysis done by Core C
• Maintain list of ongoing manuscripts and analysis proposals
• NINDS, NIH, and AHA will be acknowledged in all publications

The FL-PR CReSD Publication Committee is formed in order to review manuscripts (abstract & presentation) requests for scientific merit and feasibility, prioritize analysis, solicit authorship and review and decide on requests for data sharing from internal and external investigators (other than those participating in the FL-PR CReSD).

The final decision on those data and projects requests, manuscript and authorship will be made by the FL-PR CReSD Executive Committee.

The purposes of the FL-PR CReSD publication policy are:
1. To facilitate the production of timely, high quality manuscripts, abstracts and presentations;
2. To minimize inconsistencies and avoid redundancies in the presentation of study results;
3. To protect against premature publication or presentation of study results;
4. To provide the opportunity for all investigators to participate in, and receive publication credit for, the presentation of study results;
5. To provide authorship guidelines;
6. To assist the FL-PR CReSD Core C (Data Management and Statistics) in the analysis and reporting of data, prioritizing the analyses, and to protect them from excessive demands.

The following policies will serve as the framework for all issues regarding publications:

1. No unpublished FL-PR CReSD data from any source can be published in any format (poster, presentation, abstract, manuscript, etc.) without approval of the FL-PR CReSD Executive Committee.
2. The FL-PR CReSD publication policy will conform with the AHA/WHTU publication policy regarding single-center/community/stand-alone research network group data from WHTU that states: "While use of such data is highly encouraged and there is no need for pre-review or approval of proposals/data analyses, the policy does require that data or abstracts or manuscripts submitted that make abstracts and manuscripts be sent to AHA for final review. This is only to ensure that there was not any inadvertent misrepresentation of WHTU or that unpublished national aggregate data was not integrated without prior approval." This is in no way intended to impede or limit local/regional research uses of WHTU data. Abstracts or manuscripts are to be submitted to the AHA 30 days prior to submission deadline. Review turnaround times are approximately 2 business days and 14 business days for abstracts and manuscripts respectively.
3. Investigators will submit a data access form for approval to the FL-PR CReSD Executive Committee, in which the proposal for data analysis is briefly outlined. Approval of the data access form request will allow the investigator to assume primary authorship,
4. Accepted data access requests proposals will be directed among the stakeholders to solicit participation on a larger proposal writing group.
5. Analysis for all publications will be performed by the Core C (Data Management and Statistics), unless other data analysis strategies have been approved by the Executive Committee.
7. The NINDS FL-PR CReSD will be acknowledged in all publications, abstracts, and presentations. The publications shall include an acknowledgment as follows: "This project has been funded with federal
FL-PR CReSD Publication Committee
Proposal/Manuscript List

The list documents the status of all proposed analyses (abstracts and manuscripts)

Various stages include:
- “Proposal” - approved/declined/pending revisions
- “In-Analysis” - completed in-house
- “Manuscript in Draft” - writing group and journal defined
- “Manuscript Submitted” - list rejections; status of reviews
- “Manuscript Accepted” - status of compliance with NIH publication policy
# FL-PR CReSD Publication Committee- Current Project Abstracts

## 1. Manuscripts in Draft Form

<table>
<thead>
<tr>
<th>Title</th>
<th>Investigators</th>
<th>Statist</th>
<th>Journal</th>
<th>Timeline</th>
<th>Comments</th>
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<tbody>
<tr>
<td>Race-Ethnic Disparities in CMS-1yr mortality</td>
<td>HG, TR, RS, CG, Yale</td>
<td></td>
<td>Circulation Quality and Outcomes</td>
<td>Final draft</td>
<td>09.28.17-07.24.17 – JL has final to wordsmith; by Oct 9 submit to the ECom to open the paper to others and to help move the paper along</td>
</tr>
<tr>
<td>Primary vs Comprehensive Centers and EMS pre-notification in relation to outcomes</td>
<td>ELM, JR; WH; NM</td>
<td></td>
<td></td>
<td>draft</td>
<td>09.27.17- EML will send KW methods section next week; writing group pending</td>
</tr>
<tr>
<td>Primary vs Comprehensive Centers and EMS pre-notification in relation to outcomes</td>
<td>D. R, Scott Burgin, DZR, Ryan Martin, TR, KW, JZ</td>
<td>KW, CD</td>
<td>Circulation</td>
<td>draft</td>
<td>09.28.17- this paper will accompany the bigger overall paper (to be dev). TR working in parallel. Reframe and refocus paper; clarifying</td>
</tr>
<tr>
<td>Race Ethnic Disparities in Door to CT</td>
<td>E. Perez, TR</td>
<td>KW, CD</td>
<td></td>
<td>draft</td>
<td>09.28.17- 06.30.17 pending; writing group pending</td>
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## Acute Care: Mild Stroke and EVT Use

**Negar Asdaghi, MD**

## Long Term Outcomes: CMS/FL-PR Registry Disparities

**Hannah Gardener, ScD**

## Acute Stroke Treatment Metrics in CSC and PSC

**Erika Marulanda-Londono, MD**
Sex Disparities in Stroke Hospital Characteristic Florida—Puerto Rico Collaborative Stroke Disparities Study

Maria A. Clift, Vargas, MD, Hannah Gardner, MD, Elie J. Yu, Jose G. Romano, MD, Mary Robichaux, MD, Sunkidah Dookas, MD, Rajalda Pednekar, MD, MPH, Ralph L. Sacco, MM

Background—Racial-ethnic disparities in stroke care in acute stroke care have been well documented, national, hospital-based registries to monitor acute stroke care in Florida and Puerto Rico (PR) have not been established. The PR-PR Collaboration in Stroke Disparities (PR-PR Collaboration) was developed to evaluate race-ethnicity and regional disparities in stroke care in Florida and PR. The PR-PR Collaboration, using an electronic medical record-based system, will comprehensively characterize hospital discharge data from acute stroke patients with a focus on disparities associated with race-ethnicity and geography.

Methods—Participants were from 7 Florida (FL) and 2 PR-PR Collaboration Baseline Study (94 FL, 19 PR) participants completed a 50-item survey assessing institutional characteristics across community, acute stroke care resource availability, emergency medical service integration, stroke center certification, data collection and use, quality improvement programs, FL-PR (Florida-Puerto Rico) agreement on PT/ST and inpatient and inpatient stroke care.

Results—FL-PR Baseline Study will identify potential disparities in stroke care across Florida and PR in articles. This study is the first to our knowledge to identify disparities in stroke care in Puerto Rico and Florida. The PR-PR Collaboration Baseline Study will provide data to guide future studies of stroke care disparities in Florida and PR.

Key Words: stroke care, Florida, Puerto Rico, disparities, stroke care, PR-PR Collaboration

Disparities and Trends in Door-to-Needle Time: The FL-PR CRESD Study (Florida-Puerto Rico Collaboration to Reduce Stroke Disparities)

Sofia A. Olavidez, MPH, Kefeng Wang, MS, Cendai Dong, MD, Maria A. Clift, Vargas, MD, Hannah Gardner, MD, Elie J. Yu, Jose G. Romano, MD; Emmanuel Perez, PhD; Brittany Am-Tyson, BS; Marisela A. Vasquez, MD; Henrique J. Garcia, MD; MPH; Jean Carlos Zavala, MD; Darnel Fonseca, FNP; MB; Mary Robichaux, MPH, MBA; Salina P. Waddy, MD; Ralph L. Sacco, MM; Tejalida Pednekar, MD, MPH; for the FL-PR Collaboration to Reduce Stroke Disparities Investigators

Background—In the United States, about half of acute ischemic stroke patients treated with mechanical thrombectomy arrive treatment within 60 minutes of hospital arrival. We aimed to determine the proportion of patients receiving 90% within 60 minutes (door-to-needle time (DTNT) ≤ 60) and 95 minutes (DTNT ≤ 95) of hospital arrival by race-ethnicity and sex and to identify trends in DTNT≤60 and DTNT≤95.

Methods—Among 60,844 acute ischemic stroke admissions to the National Institute of Neurological Disorders and Stroke-Registered FL-PR CRESD study (Florida-Puerto Rico Collaboration to Reduce Stroke Disparities) from 2010 to 2018, we included 61,811 interventions (IPs) treated cases (94%). Generalized estimating equations were used to determine predictors of DTNT≤60 and DTNT≤95.

Results—DTNT≤60 was achieved in 42% and DTNT≤95 in 18% of cases. After adjustment, women less likely received DTNT≤60 (odds ratio, 0.81; 95% confidence interval, 0.72–0.82) and DTNT≤95 (odds ratio, 0.71; 95% confidence interval, 0.67–0.75). DTNT≤95 achieved in women, with age (odds ratio, 0.66; 95% confidence interval, 0.63–0.70) and younger in West Central Florida (25%).

Conclusions—In the FL-PR CRESD designation of DTNT≤60 and DTNT≤95 remains low. Compared with Whites, Black less likely receive DTNT≤95 and DTNT≤95 remains low. Compared with younger in women, with age (odds ratio, 0.66; 95% confidence interval, 0.63–0.70) and younger in West Central Florida (25%).

Key Words: stroke, stroke care, geographic disparities, FL-PR CRESD, stroke care, PR-PR Collaboration

Racial-ethnic disparities in acute stroke care have been well documented, national, hospital-based registries to monitor acute stroke care in Florida and Puerto Rico (PR) have not been established. The PR-PR Collaboration in Stroke Disparities (PR-PR Collaboration) was developed to evaluate race-ethnicity and regional disparities in stroke care in Florida and PR. The PR-PR Collaboration, using an electronic medical record-based system, will comprehensively characterize hospital discharge data from acute stroke patients with a focus on disparities associated with race-ethnicity and geography. Participants were from 7 Florida (FL) and 2 PR-PR Collaboration Baseline Study (94 FL, 19 PR) participants completed a 50-item survey assessing institutional characteristics across community, acute stroke care resource availability, emergency medical service integration, stroke center certification, data collection and use, quality improvement programs, FL-PR (Florida-Puerto Rico) agreement on PT/ST and inpatient and inpatient stroke care. This study is the first to our knowledge to identify disparities in stroke care in Puerto Rico and Florida. The PR-PR Collaboration Baseline Study will provide data to guide future studies of stroke care disparities in Florida and PR. In the United States, about half of acute ischemic stroke patients treated with mechanical thrombectomy arrive treatment within 60 minutes (door-to-needle time (DTNT) ≤ 60) and 95 minutes (DTNT ≤ 95) of hospital arrival. We aimed to determine the proportion of patients receiving 90% within 60 minutes (door-to-needle time (DTNT) ≤ 60) and 95 minutes (DTNT ≤ 95) of hospital arrival by race-ethnicity and sex and to identify trends in DTNT≤60 and DTNT≤95. Among 60,844 acute ischemic stroke admissions to the National Institute of Neurological Disorders and Stroke-Registered FL-PR CRESD study (Florida-Puerto Rico Collaboration to Reduce Stroke Disparities) from 2010 to 2018, we included 61,811 interventions (IPs) treated cases (94%). Generalized estimating equations were used to determine predictors of DTNT≤60 and DTNT≤95. DTNT≤60 was achieved in 42% and DTNT≤95 in 18% of cases. After adjustment, women less likely received DTNT≤60 (odds ratio, 0.81; 95% confidence interval, 0.72–0.82) and DTNT≤95 (odds ratio, 0.71; 95% confidence interval, 0.67–0.75). DTNT≤95 achieved in women, with age (odds ratio, 0.66; 95% confidence interval, 0.63–0.70) and younger in West Central Florida (25%). Compared with Whites, Black less likely receive DTNT≤95 and DTNT≤95 remains low. Compared with younger in women, with age (odds ratio, 0.66; 95% confidence interval, 0.63–0.70) and younger in West Central Florida (25%).
<table>
<thead>
<tr>
<th>Professional Meeting (2018)</th>
<th>Abstract title</th>
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<tbody>
<tr>
<td>International Stroke Conference (Jan 24-26; Los Angeles, CA)</td>
<td>Safety and Outcome of Mechanical Endovascular Revascularization in Patients with Minor Ischemic Stroke: The Florida Puerto Rico Collaboration to Reduce Stroke Disparities Study (CReSD)- Asdaghi et al.</td>
</tr>
<tr>
<td></td>
<td>The Impact of EMS Directly Transporting Patients with Suspected Acute Ischemic to Comprehensive Stroke Centers in South Florida. – Mueller-Kronast et al.</td>
</tr>
<tr>
<td>American Academy of Neurology (April 21-27; Los Angeles, CA)</td>
<td>CT Time in Acute Ischemic Stroke in the FL-PR CReSD- Perez et al.</td>
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New Projects Developed From FL-PR CReSD
Disparities in Stroke Outcomes and Care Delivery in Patients with Atrial Fibrillation

Study Rationale:
• Utilize the FL-PR Stroke Registry to determine novel data on disparities in stroke care and outcomes for patients with AF in ‘real life’ hospital setting.

• Evaluate the clinical practice for AF detection and treatment in multi-ethnic stroke populations (FL and PR) in stroke hospital systems of care.

Study Importance:
• Results will be of critical importance for secondary stroke prevention by identifying gaps in stroke care for patients with AF and by recognizing the needs for developing targeted interventions to reduce and improve systems of care for all stroke patients with AF.
FLiPER- AF

**AIMS**

**Aim 1.** To determine the effect of AF on ischemic stroke/TIA outcomes (in-hospital mortality, recurrence, discharge home, length of hospital stay) overall, and by sex and race-ethnicity.

**Aim 2.** To determine the use of anticoagulation therapy/OACs and contraindications to anticoagulation use for AF at ischemic stroke/TIA admission and at discharge, overall and by sex and race-ethnicity.

**Aim 3.** To evaluate the type and duration of ECG monitoring performed post stroke/TIA
Study Hypotheses

• Stroke patients with AF have poorer outcomes than stroke patients without AF in FL-PR CReSD, particularly among women and minority stroke patients;

• The use of anticoagulation/OAC is low, especially among women and minorities;

• The prolonged cardiac monitoring for AF in patients with stroke is underutilized, especially among women and minorities.

Secondary hypotheses:
• Temporal trends in stroke outcomes, the use of anticoagulation/OACs, and prolonged cardiac monitoring are improving in comparison to 2010.
FLiPER-AF

BMS/Pfizer ARISTA-USA:
American Thrombosis Investigator Initiated Research Program

5-Q Survey

1. Do you perform prolonged cardiac monitoring (ECG telemetry, Holter, loop recorder) for stroke patients in house, at discharge or post discharge?

2. What stroke type/subtype do you perform it for?

3. How long do you perform prolonged cardiac monitoring?

4. What type of prolonged cardiac monitoring?

5. Do you OAC for conditions other than AF?
Transitions of Care Stroke Disparity Study (TCSD-S)

NATIONAL INSTITUTE ON MINORITY HEALTH AND HEALTH DISPARITIES

9/26/2017 - 6/30/2022
**Objective:** To identify race-ethnic and sex disparities in hospital-to-home transition of stroke care and stroke outcomes, and to develop effective hospital-initiated system level initiatives to reduce disparities, improve stroke outcomes and reduce readmissions.
Transitions of Care Stroke Disparity Study (TCSD-S)

Aims

Aim 1.
Determine race-ethnic and sex disparities in hospital-to-home transition of stroke care (TOSC) and stroke outcomes.

Aim 2.
Identify the key stroke-related and social health-related determinants in hospital-to-home TOSC and stroke outcomes.

Secondary Aim.
Reduce race-ethnic and sex disparities in hospital-to-home TOSC and stroke outcomes by developing and implementing a multi-modal educational initiative.
Transitions of Care Stroke Disparity Study (TCSD-S)

Study Products:

- A novel Transitions of Stroke Care Performance Index (TOSC PI) functioning as a global measure of successful transition of care.
- TOSC Hospital Dashboards – Individualized hospital reports containing facility-specific metrics of TOSC, outcomes and relevant predictors, and benchmarked against all project participating comprehensive stroke centers by race/ethnicity and sex.
- Online Educational Module – directed at health care providers to raise awareness on transition of stroke care disparities, incorporating culturally appropriate best practices to train health care providers to disseminate best TOSC practices, provide motivational lifestyle advice, and facilitate medication, preventive medical/rehab adherence.
- Patient Care Giver Advisory Committee - provide a stroke survivor’s point of view in the curriculum that will help “bring home” the message of TOSC disparities to health care providers.
- Hospital discharge advisory group - provide input on best clinical practices proposed for the identified TOSC factors, and will review the proposed initiatives.
Highlighting Disparities in Ongoing Studies

10:25 – 10:40
**Acute Care: Mild Stroke and EVT Use**
Negar Asdaghi, MD

10:40 – 10:55
**Long Term Outcomes: CMS/FL-PR Registry Disparities**
Hannah Gardener, ScD

10:55 – 11:10
**Acute stroke treatment metrics in CSC and PSC**
Erika Marulanda-Londono, MD

11:10 – 11:20
**Break**