

FSR 10th Anniversary Meeting Agenda



1.

Keynote Address:

Dr. Joseph Ladapo Florida State Surgeon General

Session I: 10 Years of the FSR

Featuring Florida Deputy Secretary for Health and the American Heart Association

2.

Session II: Stroke Updates

Featuring FSR and FSR Stakeholder Research

WELCOME

3.

FSR Hospital Awards

Featuring Florida Hospital Association & FSR Awardees

4.

Session III: Enhancing the FSR's Infrastructure through the Paul Coverdell Award

Featuring DOH Bureau of Chronic Prevention Disease and Bureau of Medical Oversight

5.

Session IV: FSR QI Tools - A Platform for Statewide Systems of Stroke Care

Featuring Northeast Florida Regional Stroke Coalition and Florida Community Health Worker Coalition

6.

Adjourn



Florida Stroke Registry 10th Anniversary
Meeting

Keynote Address

Dr. Joseph A. Ladapo
Florida State Surgeon General





Florida Stroke Registry 10th Anniversary
Meeting

Session I: Session I: 10 Years of the FSR

The Development of the FSR and its Impact

Florida Deputy Secretary for Health

Kenneth A Scheppke, MD

Ten Year FSR Review

Ralph L. Sacco, MD MS

FSR Scholarly Activity

Negar Asdaghi, MD

AHA and FSR: A Longstanding Relationship

Julia Mora, MSHSA, BSN, NREMT

August 05, 2022



10 Years of the Florida Stroke Registry

**Ralph L. Sacco, MS MD FAAN
FAHA**

Executive Director, Florida Stroke Registry

Oleberg Family Chair in Neurological Disorders Miller Professor of Neurology, Public Health & Epidemiology, Human Genetics, & Neurosurgery

Executive Director, Evelyn McKnight Brain Institute
Senior Associate Dean for Clinical & Translational Science

Supported by:
Florida Department of Health
CDC Paul Coverdell National Acute Stroke Program

Presentation Overview

The Registry's
Improvements
and
Developments
are Built Upon
a Founding

Goal:

To Improve
the Quality of
Stroke Care
for all
Floridians

Ten Year Review: 2012 - 2022

Registry Birth and Evolution

Data Tracking, Benchmarking, and Quality
Improvement

Stakeholder Engagement and Education

Stroke Policy Impact

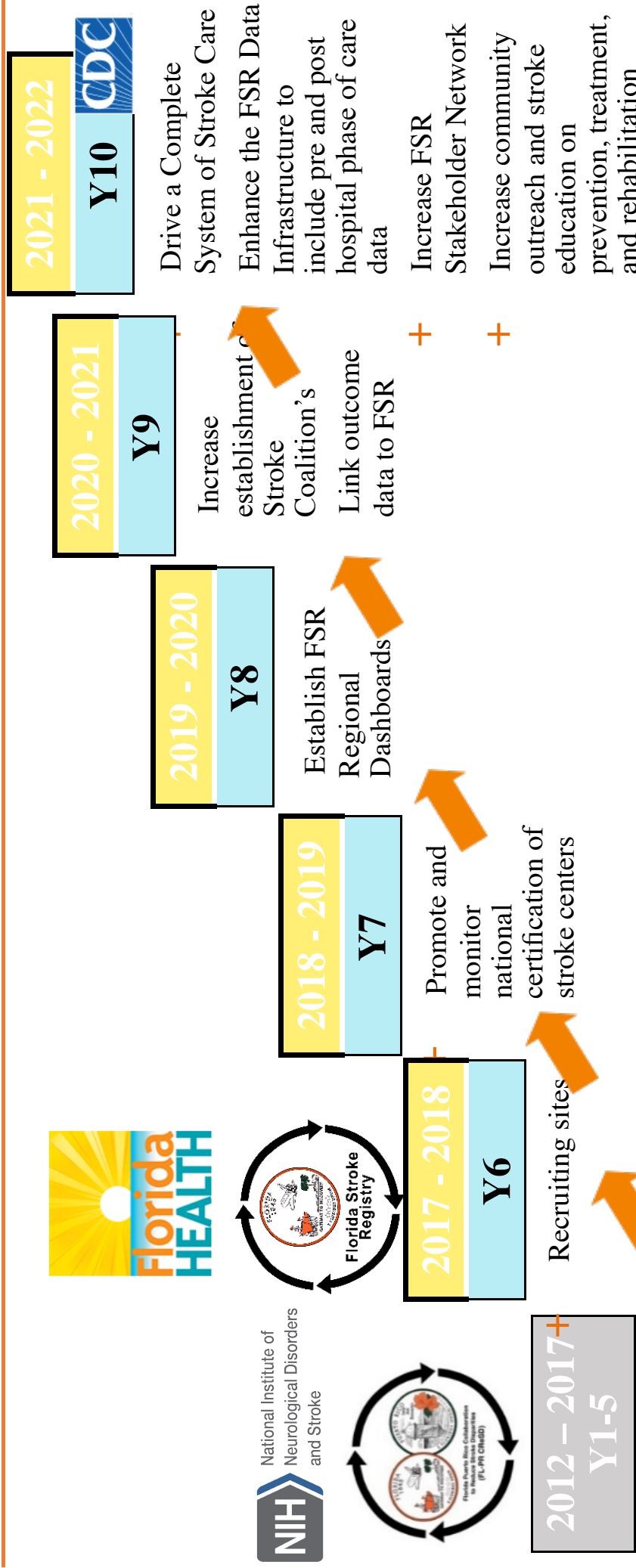


Ten Year Review: 2012 - 2022

- **Registry Birth and Evolution**
- **Data Tracking, Benchmarking, and Quality Improvement**
- **Stakeholder Engagement**
- **Education**
- **Stroke Policy Impact**

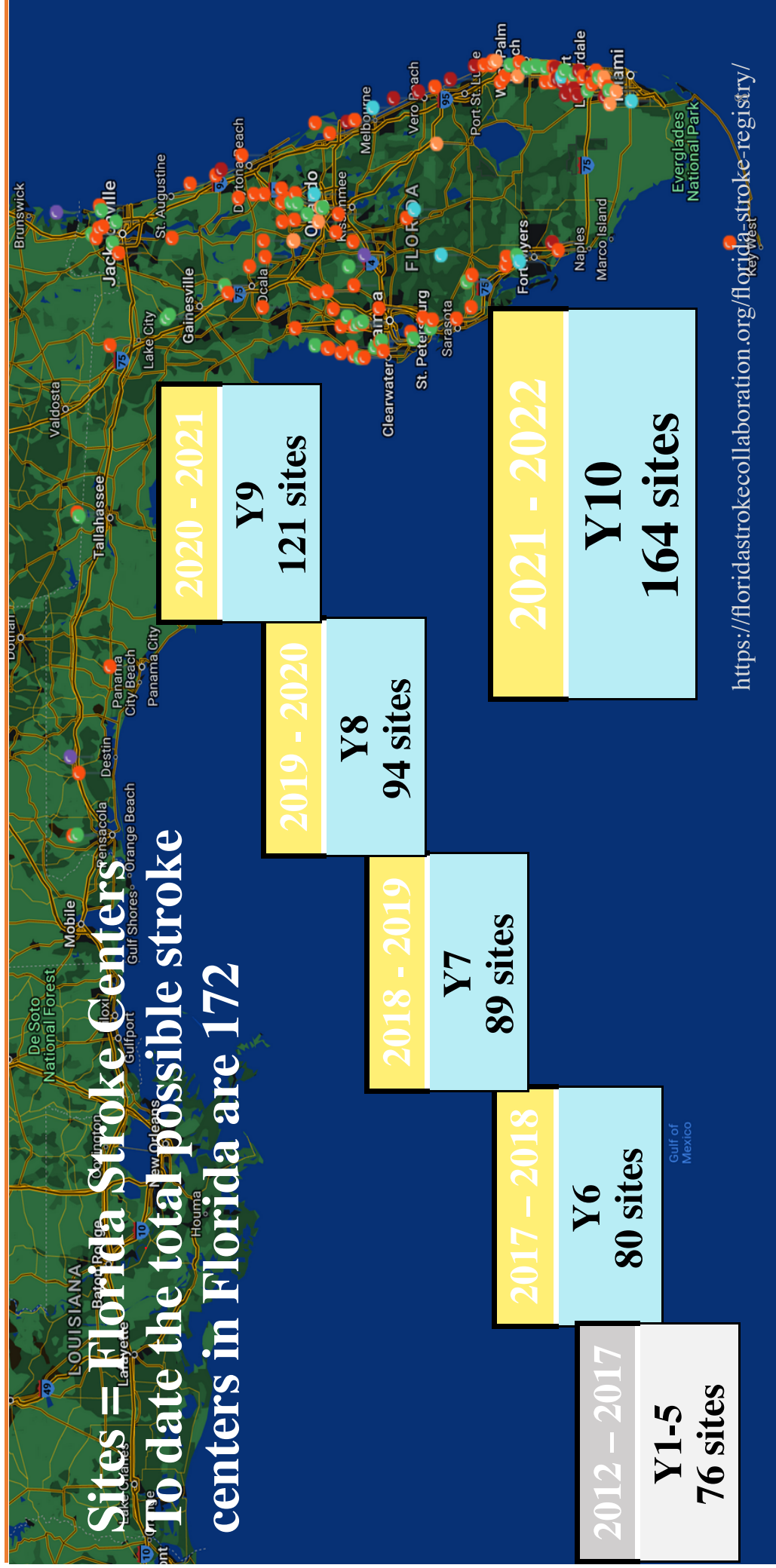


Registry Birth and Evolution: Funding and Aims

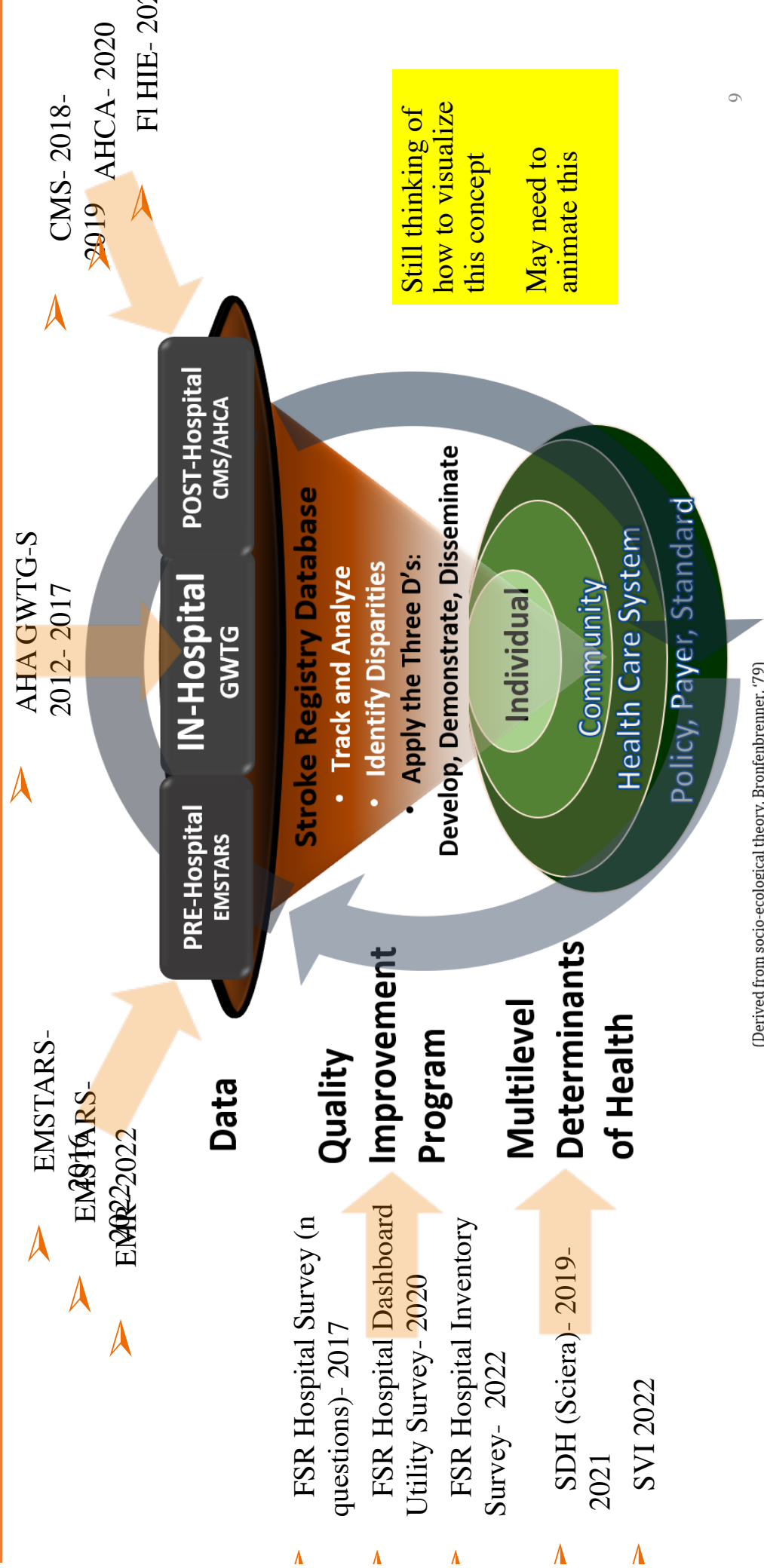


- Improve the Quality of Stroke Care
- Identify and Address Disparities in Stroke Care
- Provide Stroke Education to Health Professionals

Registry Birth and Evolution: ESR Stroke Centers



Registry Birth and Evolution: FSR Data Infrastructure



(Derived from socio-ecological theory, Bronfenbrenner, '79)

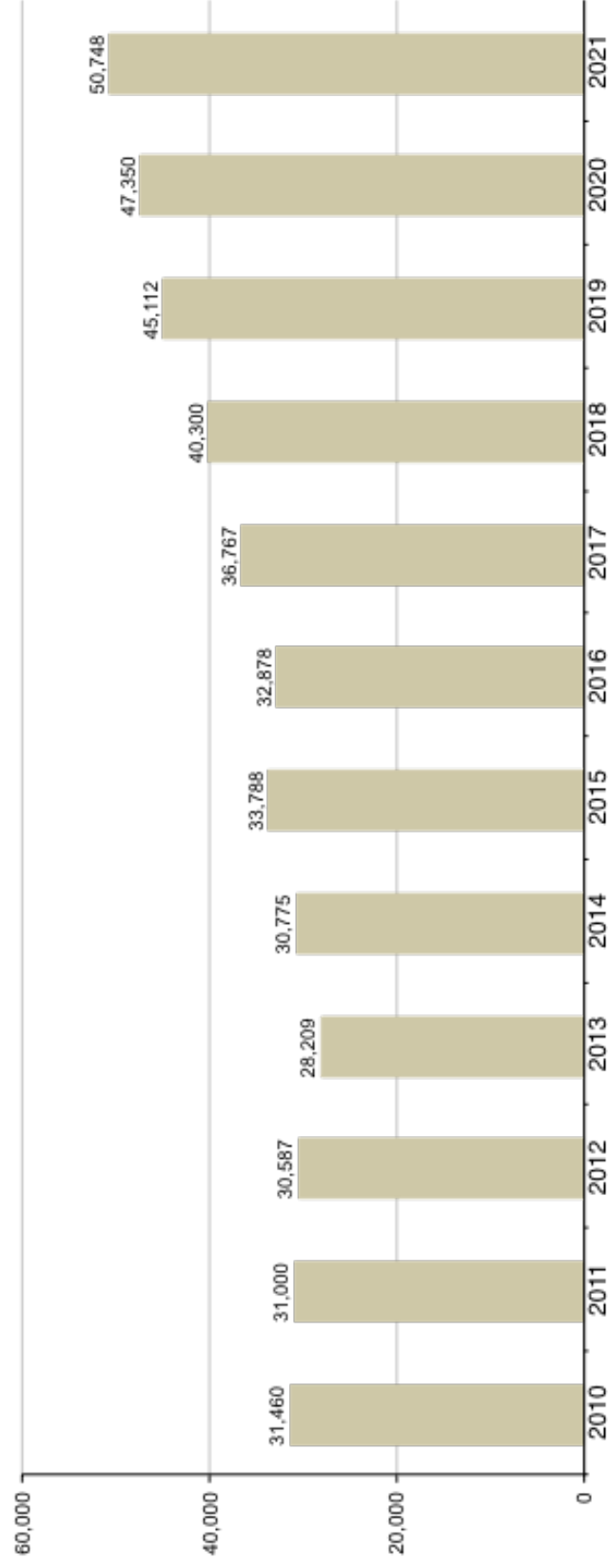
Ten Year Review: 2012 - 2022

- Registry Birth and Evolution
- **Data Tracking, Benchmarking, and Quality Improvement**
- Communications and Stakeholder Engagement
- Education
- Stroke Policy Impact



Registry Birth and Evolution: Stroke Cases Collected

(ALL) Stroke Cases in the FSR
2010-2021

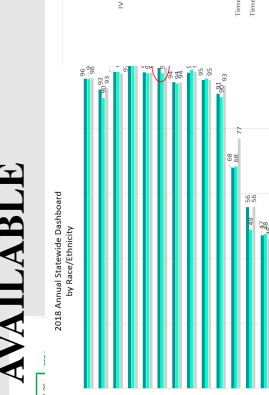
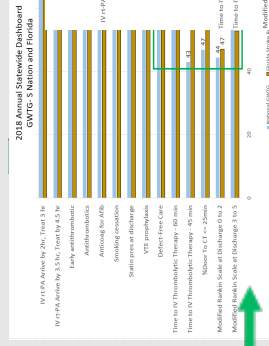
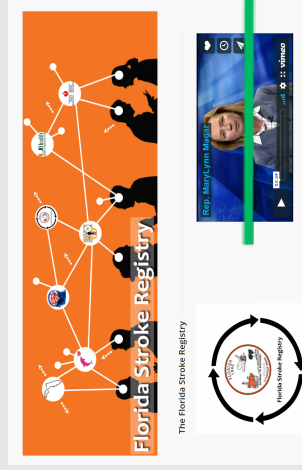


Pre-FSR

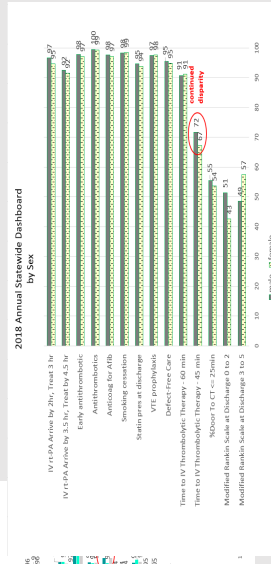
Data Tracking, Benchmarking, and Quality Improvement

FSR Dashboard Initiative: Improving the Quality of Stroke Care and Reducing Disparities

1. Annual Statewide Dashboards

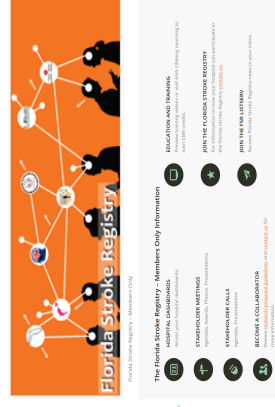


FSR OPEN ACCESS – PUBLICALLY AVAILABLE



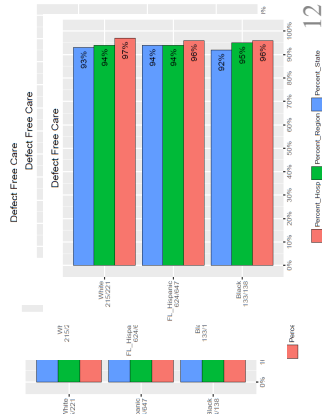
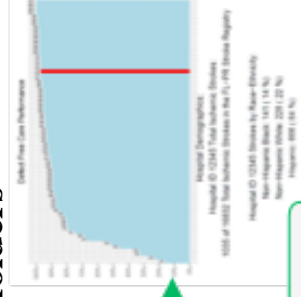
2017 - 2021

2. Annual Hospital-Specific Disparities Dashboards



2013 - 2021

FSR MEMBERS ONLY – Hospital Account Holders



12

Defect Free Care

DISPARITIES REDUCED-
no statistical difference across race-ethnic groups



Racial-Ethnic Disparities in Acute Stroke Care in the Florida-Puerto Rico Collaboration to Reduce Stroke Disparities Study

Ralph L. Sacco, MD, MS; Hannah Gardener, ScD; Kefeng Wang, MS; Chuanhui Dong, PhD; Maria A. Ciliberti-Vargas, MPH; Carolina M. Gutierrez, PhD; Negar Asdaghi, MD; W. Scott Burgin, MD; Olveen Carrasquillo, MD, MPH; Enid J. Garcia-Rivera, MD; Ulises Nobo, MD; Sofia Oluwole, BA; David Z. Rose, MD; Michael F. Waters, MD, PhD; Juan Carlos Zevallos, MD; Mary Robichaux, MPH, MBA; Salina P. Waddy, MD; Jose G. Romano, MD; Tatjana Rundek, MD, PhD; for the FL-PR CReSD Investigators and Collaborators*

**Previously Reported
Race/Ethnic Disparities**

Door To Needle in 60

DISPARITIES REDUCED-

no statistical difference across race-ethnic groups

Stroke

Volume 48, Issue 8, August 2017; Pages 2192-2197

<https://doi.org/10.1161/STROKEAHA.116.016183>



Previously Reported Race/Ethnic and Sex Disparities

ORIGINAL CONTRIBUTION

Disparities and Trends in Door-to-Needle Time

The FL-PR CRESD Study (Florida-Puerto Rico Collaboration to Reduce Stroke Disparities)

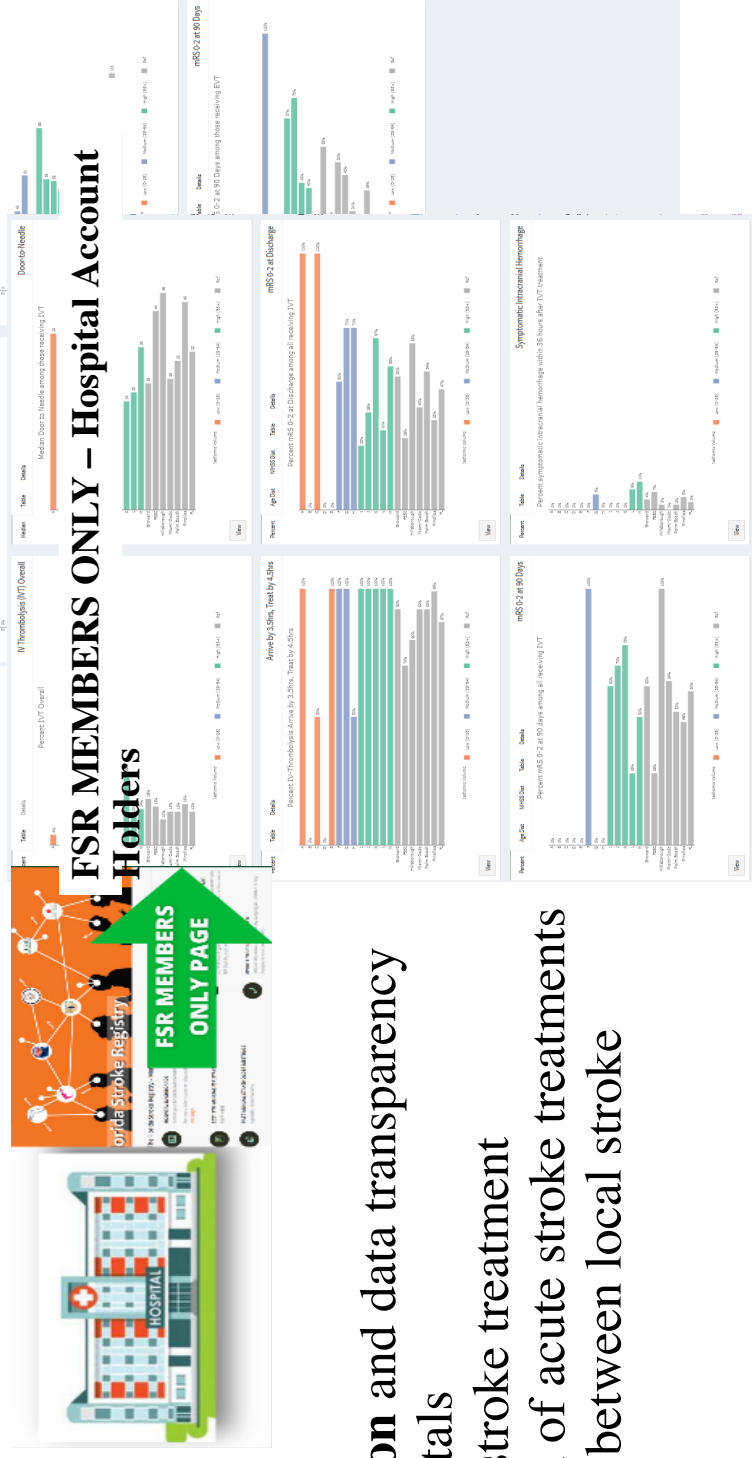
Sofia A. Oluwole, MPH, Kefeng Wang, MS, Chuanhui Dong, PhD, Maria A. Ciliberti-Vargas, MPH, Carolina M. Gutierrez, PhD, Li Yi, MS, Jose G. Romano, MD, Enmanuel Perez, PhD, Brittany Ann Tyson, BS, Maranatha Ayodele, MD, Negar Asdaghi, MD, Hannah Gardener, ScD, David Z. Rose, MD, Enid J. Garcia, MD, MPH, Juan Carlos Zevallos, MD, Dianne Foster, RN, MBA, Mary Robichaux, MPH, MBA, Salina P. Waddy, MD, Ralph L. Sacco, MD, MS, Tatjana Rundek, MD, PhD, and for the FL-PR Collaboration to Reduce Stroke Disparities Investigators

Data Tracking, Benchmarking, and Quality Improvement

FSR Dashboard Initiative:

3. Quality Improvement Tool Impacting Systems of Stroke Care

Reporting 11 Reperfusion Measures Quarterly & Annually to Counties/Regions



- Enhance communication and data transparency between EMS and hospitals
- Improve time to acute stroke treatment
- Increase the utilization of acute stroke treatments
- Increase collaboration between local stroke systems of care

ALL increasing the probability of favorable stroke outcomes

2017 – 2021

Ongoing Disparities in Endovascular Treatment of AIS

FL-B are **less** likely to receive EVT compared to FL-W

FL-H are **most** likely to receive EVT compared to FL-W

2020 aggregate FSR

Endovascular Treatment of AIS
Adjusted Odds Ratio (95%)

FL-B vs FL-W

0.86 (0.73, 1.02)

FL-H vs FL-W

1.17 (0.97, 1.41)

ADJUSTED FOR: race, sex, age, insurance, smoking status, hypertension, diabetes mellitus, dyslipidemia, atrial fibrillation/flutter, coronary artery disease, peripheral vascular disease, prior stroke history, independent ambulation, arrival mode, arrival NIHSS, teaching hospital, number of bed, years in GWTC

Trends 2010- 2020

P E R C E N T

2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 16

Data Tracking, Benchmarking, and Quality Improvements



Improvements Over Time

Acute Stroke Treatment Among FSR participating hospitals in Florida	2010 AIS=18,604	2021 AIS=38,216
Defect Free Care (overall quality of care)	10%	87%
Use of thrombolytics (clot busting medication) in stroke	7%	14%
Use of clot busting medication amongst stroke patients arriving in 3.5 hrs. and treated within 4.5 hrs. of stroke onset	69%	93%
Treatment within 60 min. of hospital arrival	20%	92%
Treatment within 45 min. of hospital arrival	7%	78%
Door to CT in less than 25 min.	26%	57%
Catheter based stroke treatment (clot removal or thrombectomy)	2%	16%

Data Tracking, Benchmarking, and Quality Improvement

**Data tracking
stroke center
certification
status
2012 vs 2022**



Data Tracking and Measuring: Stroke Disparities

NEW Disparities Found

- ... calling 911, toc; readmission;- will see how I can make an image of this or show data



Ten Year Review: 2012 - 2022

- Registry Birth and Evolution
- Data Tracking, Benchmarking, and Quality Improvement
- Stakeholder Engagement and Education
- Stroke Policy Impact



Stakeholder Engagement- committees

2022

Number of and types of stakeholders

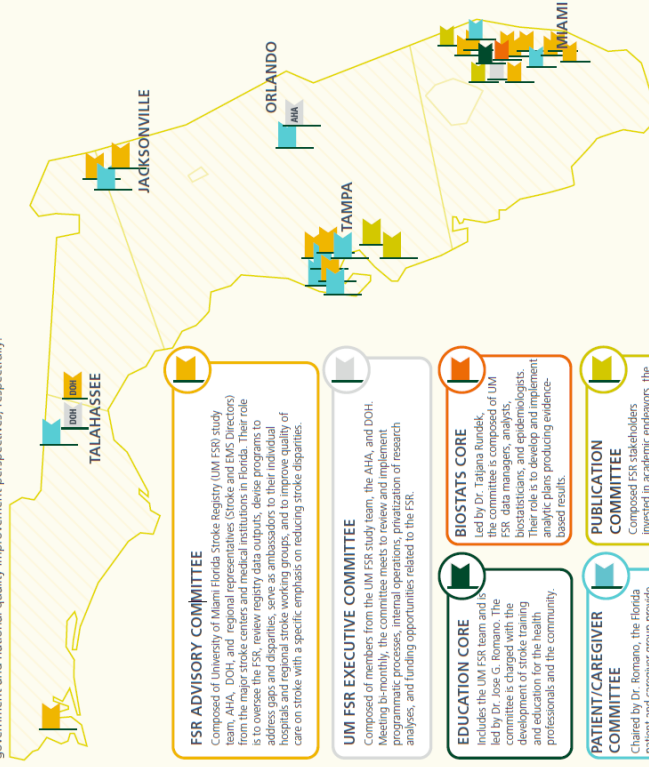
...can make an infographic of this

Annual Hospital Awards

...can make an infographic of this

FSR COMMITTEES

As a statewide stroke registry, the FSR is committed to address quality of care stroke needs throughout Florida. The FSR provides a platform to the multiple Florida regions through the inclusion and participation of statewide stroke care leaders in FSR committees. Regional presence and input, particularly through the Advisory Committee, guides the FSR to develop initiatives customized to community needs, and to broadly disseminate FSR information. FSR committees also include the participation of the Department of Health (DOH) and the American Heart Association/American Stroke Association (AHA), providing a state government and national quality improvement perspectives, respectively.



FSR ADVISORY COMMITTEE

Composed of University of Miami Florida Stroke Registry (UM FSR) study team, AHA, DOH, and regional Representatives Stroke and EMS Directors from the major stroke centers and medical institutions in Florida. Their role is to review registry data outputs, to develop programmatic strategies and focus on the quality of care on stroke with a specific emphasis on reducing stroke disparities.

UM FSR EXECUTIVE COMMITTEE

Composed of members from the UM FSR study team, the AHA, and DOH. Meeting bi-monthly, the committee meets to review and implement programmatic processes, internal operations, prioritization of research analyses, and funding opportunities related to the FSR.

EDUCATION CORE

Includes the UM FSR team and is charged with the development of stroke training and education for the health professionals and the community.

PATIENT/CAREGIVER COMMITTEE

Chaired by Dr. Romano, the Florida patient and caregiver group provide educational initiatives, community outreach, and stroke support group trainees.

BIOSTATS CORE

Led by Dr. Tatiana Burdick, the committee is composed of UM FSR data managers, analysts, biostatisticians, and epidemiologists. Their role is to develop and implement analytic plans producing evidence-based results.

PUBLICATION COMMITTEE

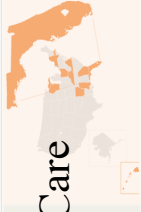
Composed FSR stakeholders invested in academic endeavors, the committee chaired by Dr. Negar Adighi, determines feasibility and research proposals.



Stroke coalitions

2

Implement a Team-Based Approach to Enhance Quality Care for Those at Highest Risk for Stroke

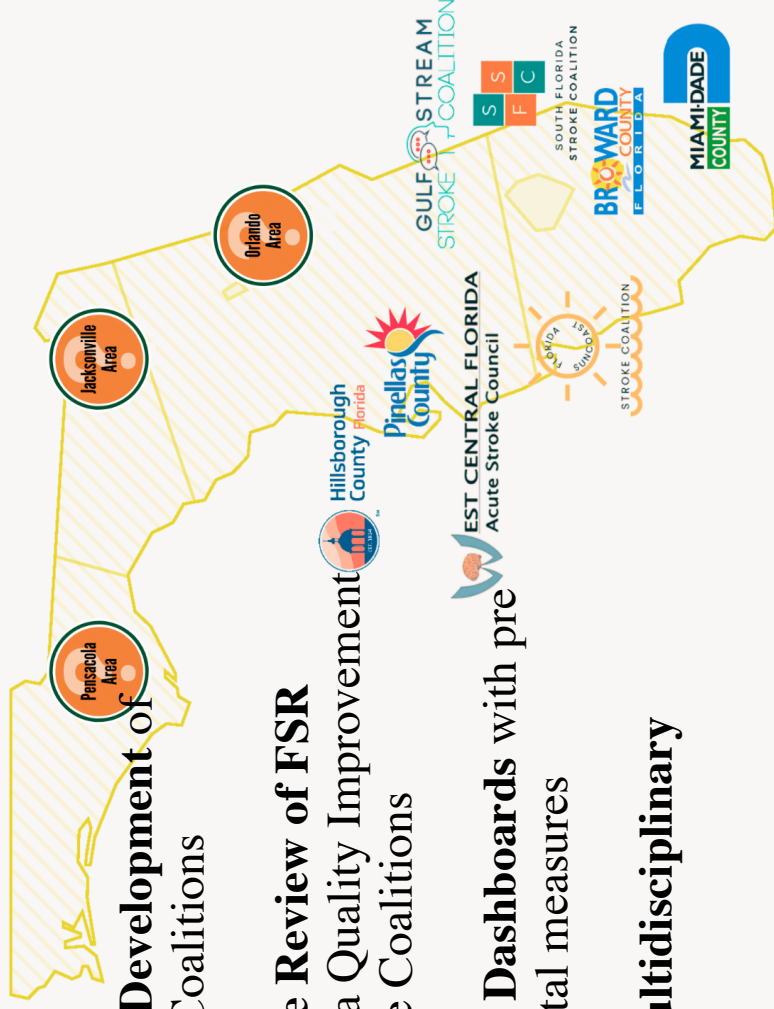


Facilitate the Development of Local Stroke Coalitions

Encourage the Review of FSR Dashboards (a Quality Improvement Tool) in Stroke Coalitions

Enhance FSR Dashboards with pre and post hospital measures

Promote a Multidisciplinary Membership



FSR Outreach and Education

What Does the FSR Do?

Disseminating the Latest Stroke Related Information

- “FSR at the Front Lines” = Brief, recorded discussions on the latest FSR related research
- “Friday Food for Thought” = Sharing Evidence-Based Best Practices through the FSR Listserv
- “FSR Stakeholder Testimonials” = Community Directed Videos on FSR Research



**Florida Stroke Registry
at the Front Lines**

Telehealth/TeleStroke
A chat between:

Charles Sand
MD, FACEP, FACP, FAHA
WCF Stroke Coalition

Jerry Chalko
District 12
Congressman Gus Bilirakis Florida

Kim Lantry
Chief Medical Officer, Liguard Ambulance Service, LLC
Disaster and preparedness of the University of Miami Miller School of Medicine



FRIDAY FOOD FOR THOUGHT

Community Stroke Prevention for Stroke Prevention and Community Health Workers: A Review of the Literature

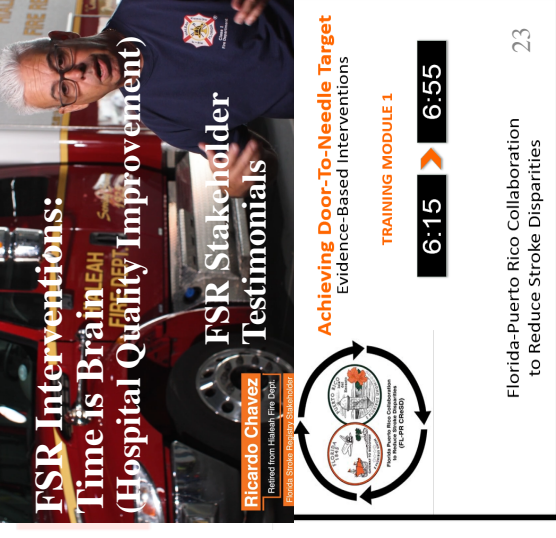
THE GOAL: To provide a review of the literature on stroke prevention for community health workers and to provide a review of the literature on stroke prevention for community health workers.

IMPORTANT POINTS:

- The review of the literature on stroke prevention for community health workers and to provide a review of the literature on stroke prevention for community health workers.
- The review of the literature on stroke prevention for community health workers and to provide a review of the literature on stroke prevention for community health workers.

QUESTIONS FOR FSR STAKEHOLDERS:

- How can we best disseminate this information to our community health workers?
- How can we best disseminate this information to our community health workers?



**FSR Interventions:
Time is Brain EAH
FIRST RESPONDERS
(Hospital Quality Improvement)**

FSR Stakeholder Testimonials

Ricardo Chavez
Retired from Hialeah Fire Dept.
BESS Stroke Response Coordinator

Achieving Door-To-Needle Target
Evidence-Based Interventions

TRAINING MODULE 1

6:15 ➔ **6:55**

Florida-Puerto Rico Collaboration
to Reduce Stroke Disparities

Education

2012

List of initiatives

- ...V J Club; Food for thought Fri; FSR at the Front Lines; Community centric videos

Number of FSR trainees

- ...PhD ,MD PhD, Fellows

Annual Meetings ?

- ...can make an infographic of this

Publication

- ...can make an infographic of this

2022



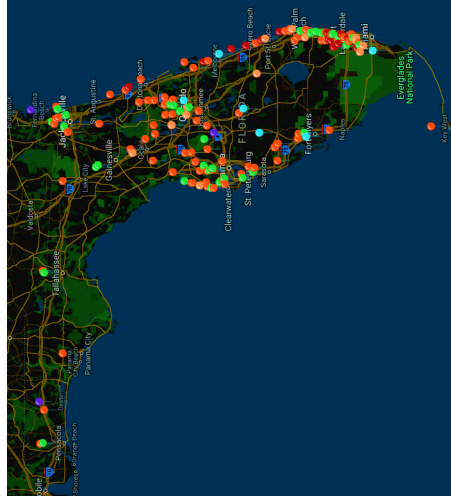
Paul Coverdell National Acute Stroke Program

3

Link Community Resources and Clinical Services that Support Those at Highest Risk for Stroke



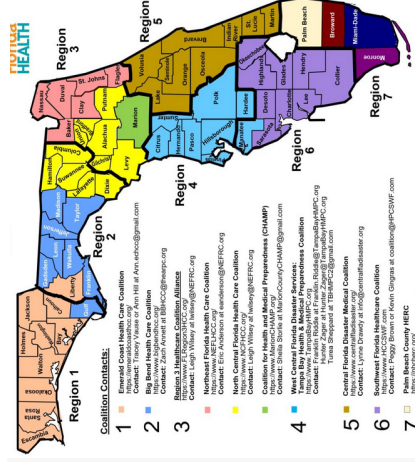
FSR Stroke Centers



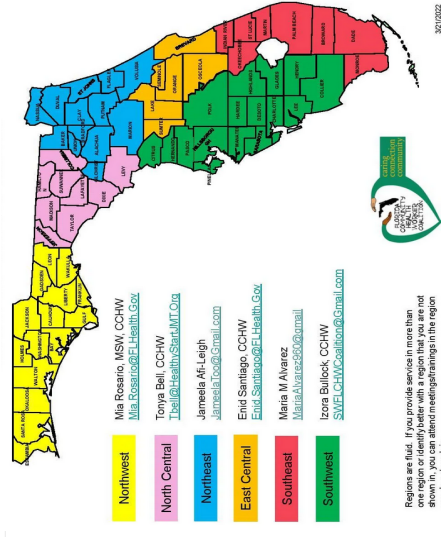
Local Stroke Coalitions



Healthcare Coalitions



Community Health Care Regions



Engage various coalitions to participate in a stroke systems of care initiative

Align coalition goals to improve collaboration

Exchange local community resources

Focus team-based approaches in high-risk areas for stroke

Increase opportunities to link patients to community resources and clinical services through the stroke coalition initiative

Introductions

Bureau of Chronic Disease Prevention

Tara Hylton, MPH – Bureau Chief (2102)
 Paul Coverdell Acute Stroke Program
 WISEWOMEN(1816)
 Heart Disease and Stroke Prevention (1815, 1817)



Bureau of Emergency Medical Oversight

Steve McCoy – Bureau Chief
 Angus Jameson, MD – State EMS Medical Director
 Health Information and Policy Analysis Section
 Health, Access, Resiliency and Telehealth (HART) Section
 Community Paramedicine Section
 Florida Cardiac Arrest Registry to Enhance Survival (CARES)

Bureau of Preparedness and Response

Florida Healthcare Coalitions
 Pam Tempson – Community Preparedness Manager



University of Miami Florida Stroke Registry

Ralph L Sacco, MD MS – Executive Director
 Carolina M Gutierrez, PhD – Program Director
 Jose G Romano, MD – Education and Training Core Director
 Hannah Gardener, ScD – Research Core Director



Florida Agency for Health Care Administration
 Christopher R. Cogle, MD – CMO Florida Medicaid



Audacious Inquiry
 Aaron Parsons –Senior Manager



Florida Community Health Worker Coalition
 Lisa Osborne Scheuler, PhD – Director



Florida Hospital Association
 Kim Streit – Senior Vice President
 Cheryl Love – Chief Clinical and Patient Safety Officer



American Heart Association
 Tiffany M Henderson – FI Government Relations Director

Ten Year Review: 2012 - 2022

- Registry Birth and Evolution
- Data Tracking, Benchmarking, and Quality Improvement
- Stakeholder Engagement and Education
- Stroke Policy Impact



Policy

2004...

National Institute of Health 2012-2017

- Improve the Quality of Stroke Care
- Identify and Address Disparities in Stroke Care
- Provide Stroke Education to Health Professionals

2017, 2019, 2022

Look for older slides
Use timeline slides

2022

Florida Department of Health 2017 - current

- Improve the Quality of Stroke Care
- Identify and Address Disparities in Stroke Care
- Provide Stroke Education to Health Professionals
- +
- +

Florida Department of Health – CDC Paul Coverdell 2021 - current

- Drive a Complete System of Stroke Care
- Enhance the FSR Data Infrastructure to include pre and post hospital phase of care data
- Increase FSR Stakeholder Network to include health professionals from across the continuum of stroke care
- Increase community outreach and stroke



Presentation Overview

STRATEGY: Data Tracking and Measuring

Data Linkage

- State Outcome Data
- Social Determinants of Health

FSR Dashboards

- More Geographical Areas Represented
- More Stroke Measures Visualized

STRATEGY: Communication & Engagement

FSR Committees

- New Stroke Coalitions Subcommittee
- Re-activated Patient Caregiver Committee
- Active Publication Committee

Digital Channels

- Website, Listserv, twitter

Feedback and Reviews

- Dashboard Utility Survey
- Website Feedback Functions

STRATEGY: Education

Conferences

- Annual In-Person 3-day Meeting (CE eligible)
- Quarterly Stroke Coordinator Calls (informative)

Informational Initiatives

- FSR at the Front Lines
- Virtual Journal Club
- Friday Food For Thought



STOP



Florida Stroke Registry (FSR) Overview

2012 - 2017	2017 - 2018	2018 - 2019	2019 - 2020	2020 - 2021
NIH- NINDS 	Florida State Appropriations  			
Years 1-5 76 FI hospitals	Year 6 80 FI hospitals	Year 7 89 FI hospitals	Year 8 94 FI hospitals	Year 9 121 FI hospitals

**We are here,
now!**

2021- 2022





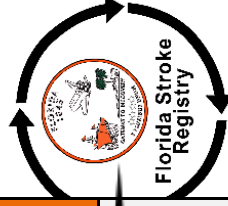
Year 10
160 hospitals

Registry Birth and Evolution: Funding

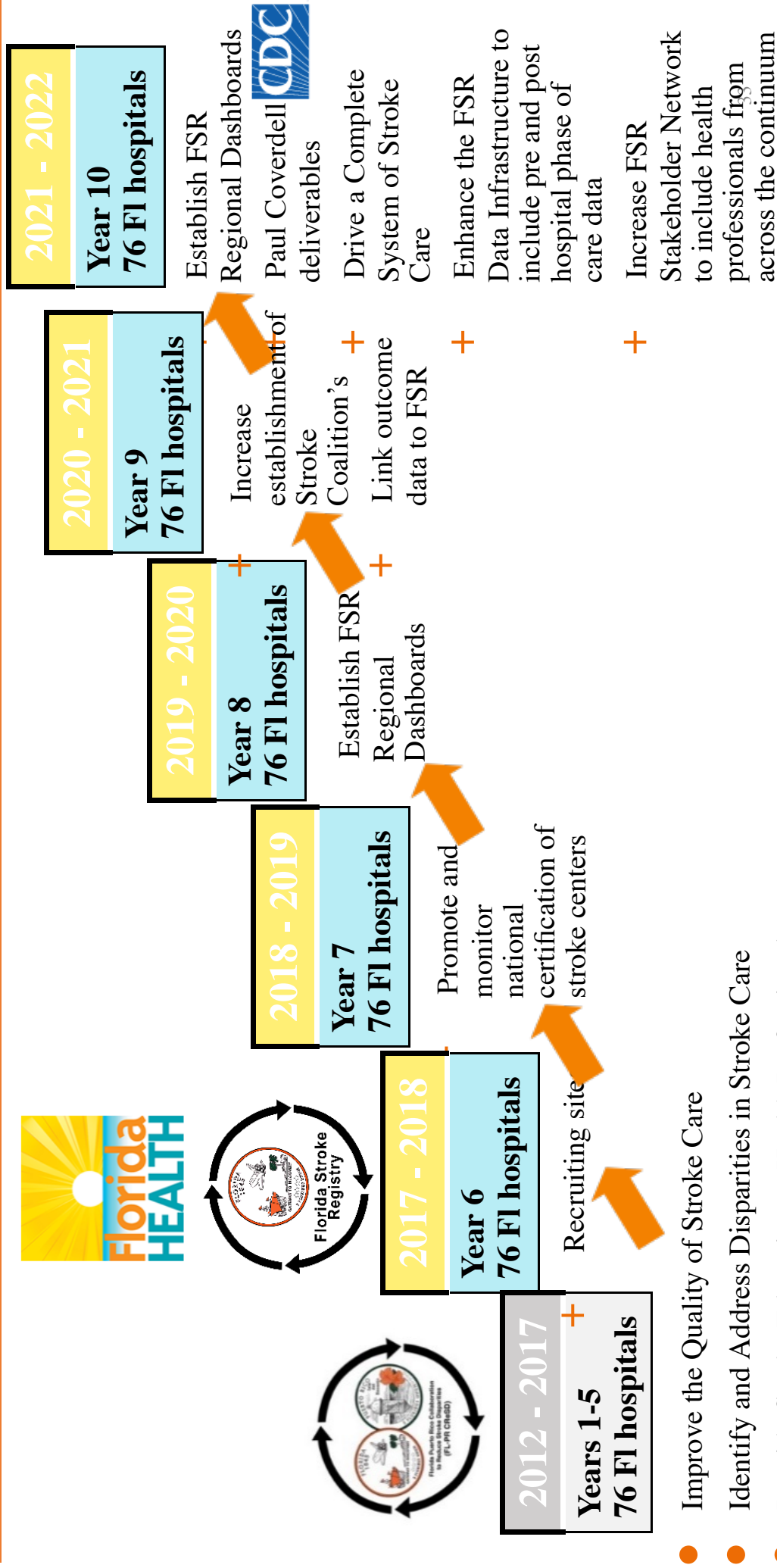
2012 - 2017
NIH - NINDS
Years 1-5
76 FL hospitals

- **Identify Populations at High Risk for Stroke – BCDP** (EMR, HIE, SDH, linked data)
- **Establish FSR as a data repository** (EMR, HIE, SDH, linked data)
- **Improve data quality** (completeness of stroke center data)
- **Increase pre-hospital data – EMS data submission**

2017 – 2018	2018 - 2019	2019 - 2020	2020 - 2021	2021 - 2022
Year 6 80 FL hospitals	Year 7 89 FL hospitals	Year 8 94 FL hospitals	Year 9 121 FL hospitals	Year 10 164 FL hospitals



Registry Birth and Evolution: Funding and Aims



- Improve the Quality of Stroke Care
- Identify and Address Disparities in Stroke Care