

Stroke Program

John H. Stroger Hospital of Cook County

2022

Lakshmi Warrior, MD, MPH, FAAN

January 20, 2022



COOK COUNTY
HEALTH

What is a stroke?

Ischemic Stroke



Blood vessel is blocked
preventing blood flow to the
brain

Hemorrhagic Stroke

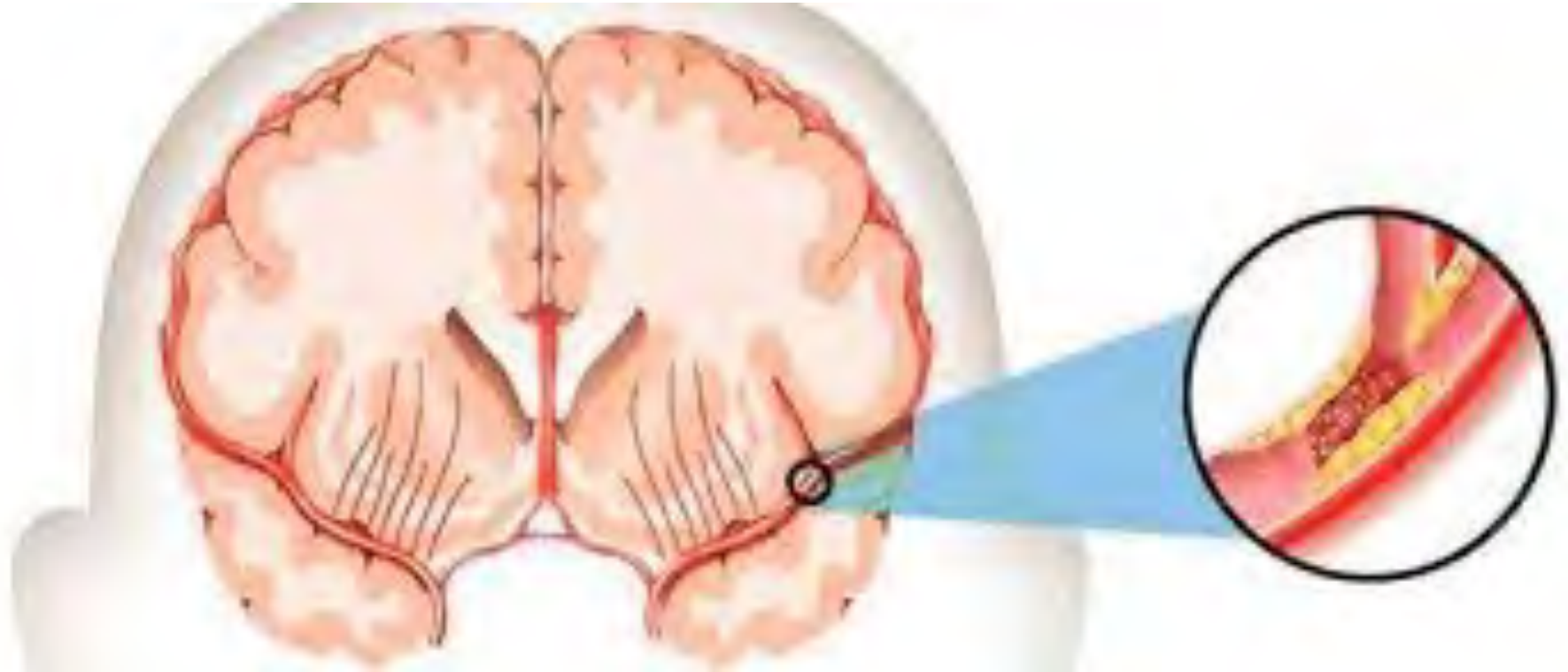


Bleeding inside or around
the brain



Ischemic stroke therapeutics

- Alteplase (tPA)
- Thrombectomy



Time is brain!!!

Treatment windows

- Alteplase
 - Up to 3 hours
 - Extended window: up to 4.5 h
- Thrombectomy
 - Up to 6 hours
 - Extended window up to 24h



Stroger Stroke Program

Formalized in 2010 with the appointment of a medical director and formation of the stroke committee

Mission

To facilitate provision of high-quality care to patients with stroke through an organized system of care informed by clinical guidelines with careful monitoring of performance.

Vision

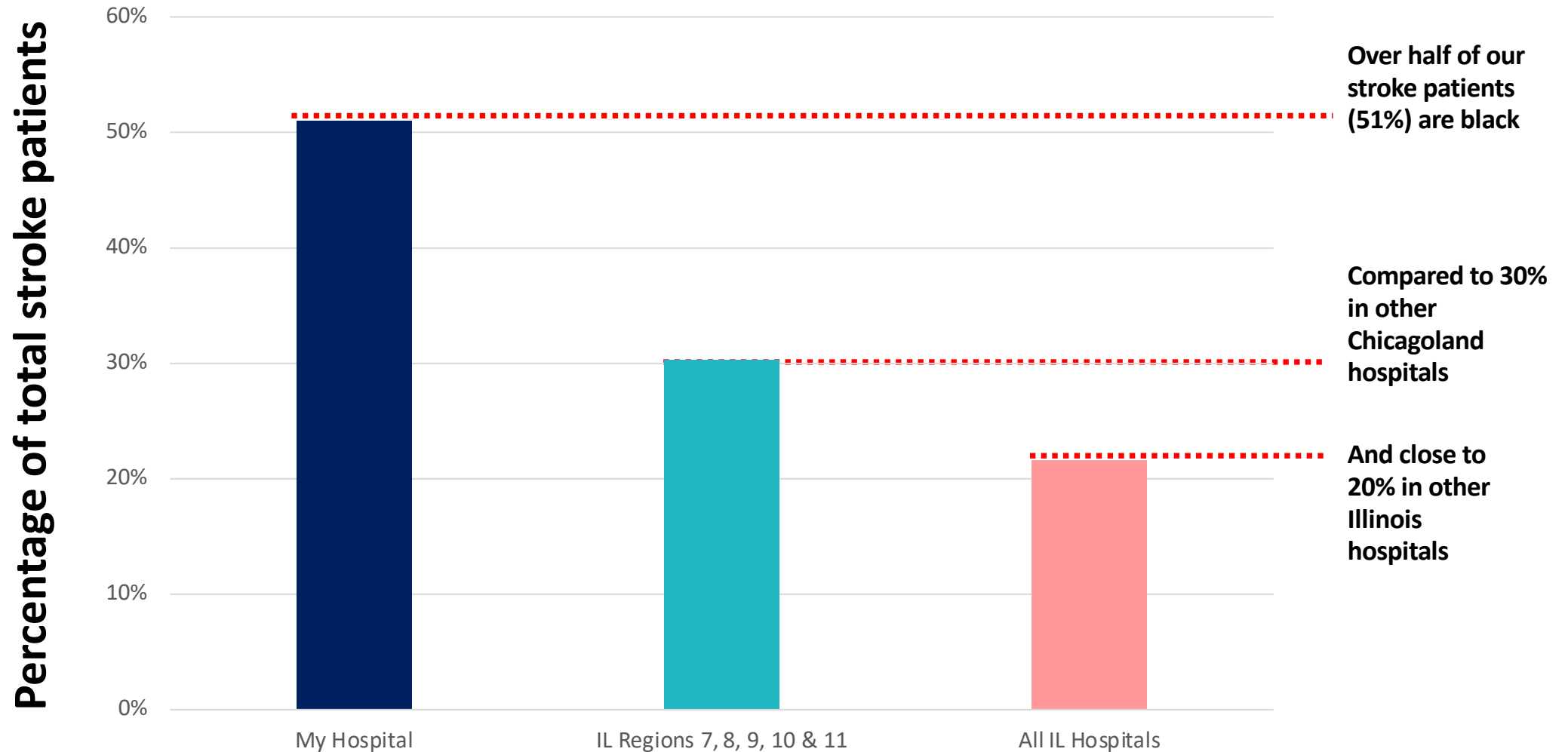
To lead the nation in providing comprehensive, equitable, high-quality stroke prevention and care

Stroke Frequency and Subtype

	Infarct	TIA	ICH	SAH	TOTAL	tPA
2012	311	68	36	7	422	8
2013	332	73	27	9	441	3
2014	341	88	15	11	455	9
2015	283	71	25	6	385	10
2016	284	53	27	4	368	4
2017	320	45	26	9	400	9
2018	282	55	27	6	370	5
2019	248	51	34	9	342	12
2020	256	19	31	6	312	7
2021	241	28	35	11	314	16
Average	290	55	28	8	381	8

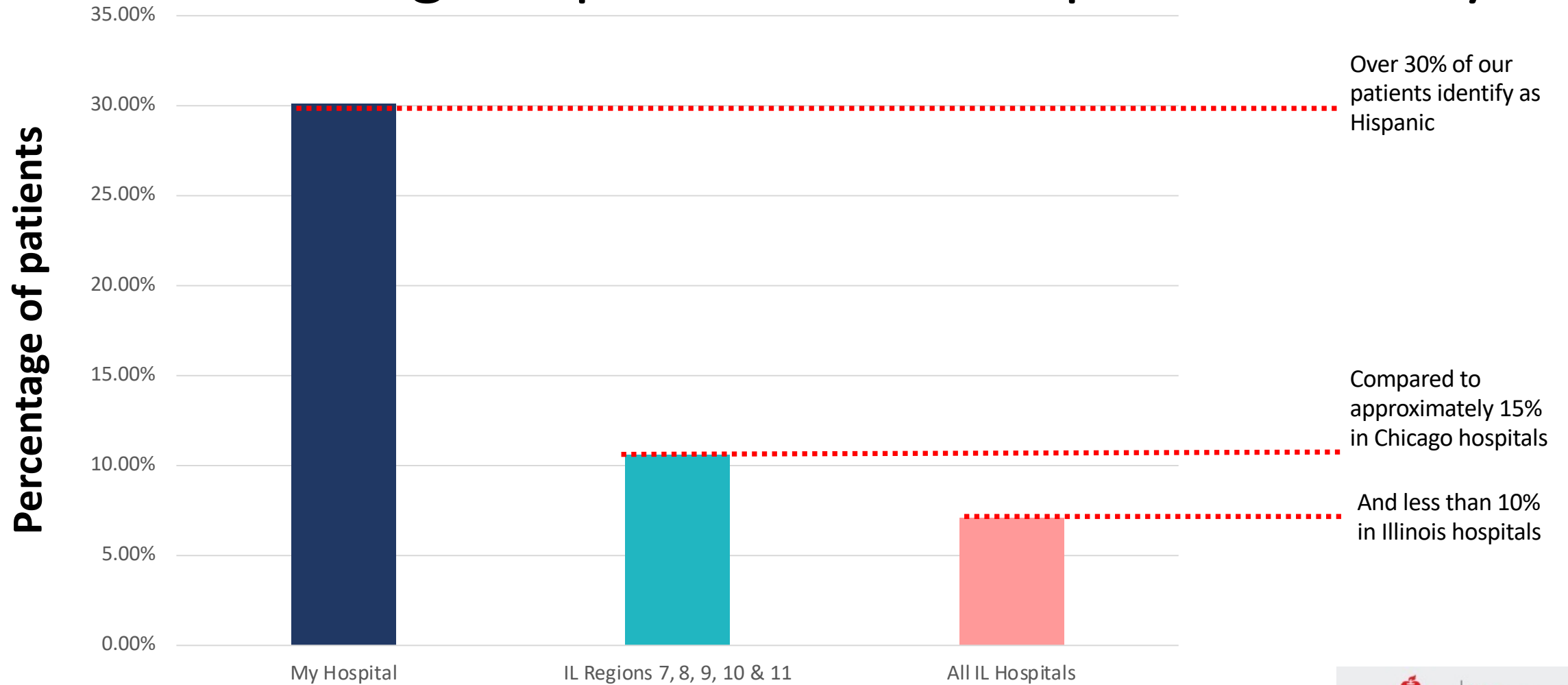
Get with the Guidelines[®]

Percentage of black or African American patients

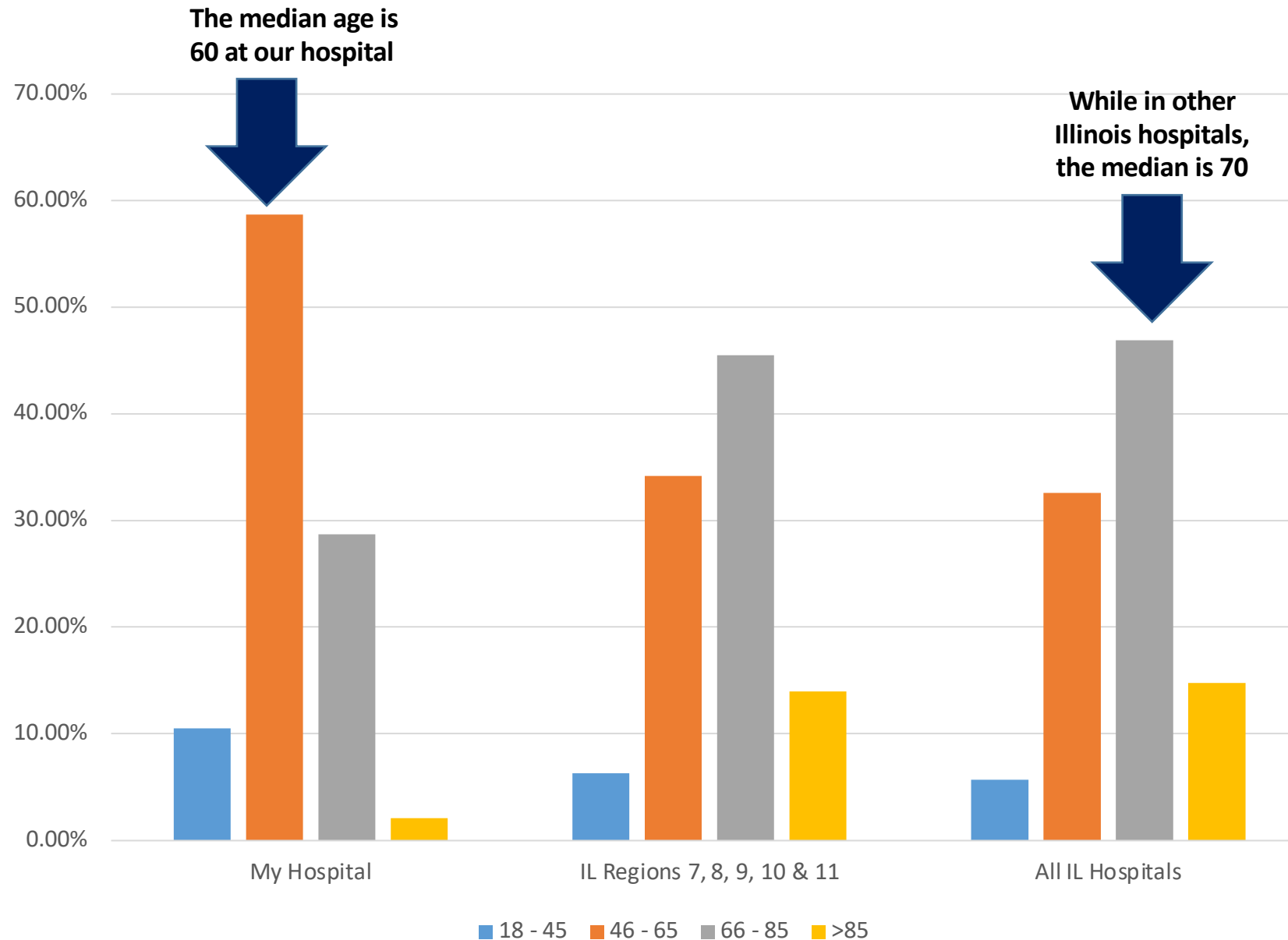


Get with the Guidelines[®]

Percentage of patients with Hispanic Ethnicity

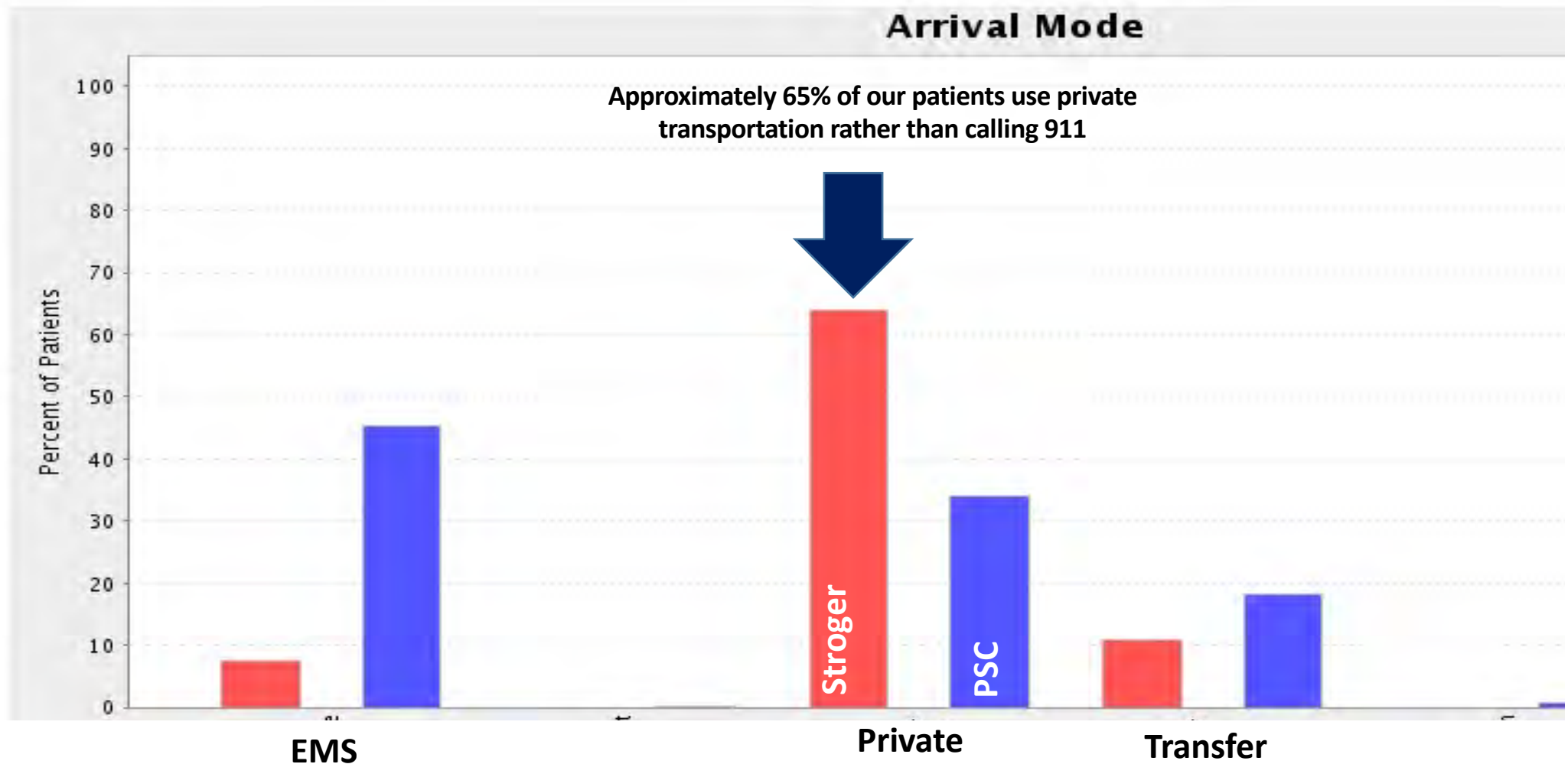


Our stroke patients are younger, black and Hispanic



Arrival Mode

Stroger Hospital vs. All TJC/AHA PSC Hospitals



MISSION

To deliver integrated health services with dignity and respect regardless of a patient's ability to pay; foster partnerships with other health providers and communities to enhance the health of the public; and advocate for policies which promote and protect the physical, mental and social well-being of the people of Cook County.

VISION

In support of its public health mission, CCHHS will be recognized locally, regionally and nationally – and by patients and employees – as progressively evolving model for an accessible, integrated, patient-centered and fiscally-responsible health care system focused on assuring high-quality care and improving the health of the residents of Cook County.

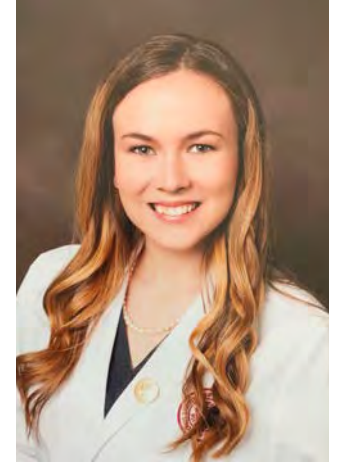
Stroger Stroke Program

Stroke Program Leadership

- Lakshmi Warrior MD, Neurology, Medical Director
- Kathryn Dudzik RN, Program Coordinator
- Associate Medical Directors:
 - Jordan Moskoff MD, Emergency Medicine
 - Isaac Paintsil MD, Hospital Medicine
 - Peter Egofske, MD, Radiology

24/7 Core Stroke Team

- On-site ED attending
- In-house MICU fellow
- On-call Neurologist



Stroke Committee

Members

- Elias Alhanoun MD
- David Brady, RN, MSN, MBA
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- Gerard Dysico MD
- Peter Egofske MD
- Leslie Frain, MSN, RN, CPPS, CPHQ
- Ayodeji Gbotosho MD
- Marla Lax
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- Carol Marshall, LCSW
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- Jordan Moskoff, MD
- Sherri Nahin, LCSW
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- Heather Prescaro, RN, MSN
- Bincy Poothurail RN
- Patricia Raksin MD
- Alex Ree MD
- Joanne Routsolias PharmD
- Sharon Scott-Reed, RN, BSN
- Neha Sheng MD
- Blaine Stringer MSN, RN CEN NE-BC
- Christina Thilagam RN
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- Cassandra Waddlington, RN
- Lakshmi Warrior MD MPH
- Joseph Weber, MD
- Myrlene Charles, RN, MSN

Department of Medicine

Members

- Elias Alhanoun MD
- David Brady, RN, MSN, MBA
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- Gerard Dysico MD
- Peter Egofske MD
- Leslie Frain MSN, RN, CPPS, CPHQ
- Ayodeji Gbotosho MD
- Marla Lax
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- Carol Marshall, LCSW
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- Jordan Moskoff, MD
- Sherri Nahin, LCSW
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- Heather Prescaro, RN, MSN
- Bincy Poothurail RN
- Patricia Raksin MD
- Alex Ree MD
- Joanne Routsolias PharmD
- Sharon Scott-Reed, RN, BSN
- Neha Sheng MD
- Blaine Stringer MSN, RN CEN NE-BC
- Christina Thilagam RN
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- Cassandra Waddlington, RN
- Lakshmi Warrior MD MPH
- Joseph Weber, MD
- Myrlene Charles, RN, MSN

Department of Emergency Medicine

Members

- Elias Alhanoun MD
- David Brady, RN, MSN, MBA
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- Gerard Dysico MD
- Peter Egofske MD
- Leslie Frain
- Ayodeji Gbotosho MD
- Marla Lax
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- Carol Marshall, LCSW
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- **Jordan Moskoff, MD**
- Sherri Nahin, LCSW
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- **Heather Prescaro, RN, MSN**
- Bincy Poothurail RN
- Patricia Raksin MD
- Alex Ree MD
- Joanne Routsolias PharmD
- **Sharon Scott-Reed, RN, BSN**
- Neha Sheng MD
- Blaine Stringer MSN, RN CEN NE-BC
- **Christina Thilagam RN**
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- Cassandra Waddlington, RN
- Lakshmi Warrior MD MPH
- **Joseph Weber, MD**
- Myrlene Charles, RN, MSN

Department of Radiology

Members

- Elias Alhanoun MD
- David Brady, RN, MSN, MBA
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- Gerard Dysico MD
- **Peter Egofske MD**
- Leslie Frain
- Ayodeji Gbotosho MD
- Marla Lax
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- Carol Marshall, LCSW
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- Jordan Moskoff, MD
- Sherri Nahin, LCSW
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- Heather Prescaro, RN, MSN
- Bincy Poothurail RN
- Patricia Raksin MD
- **Alex Ree MD**
- Joanne Routsolias PharmD
- Sharon Scott-Reed, RN, BSN
- Neha Sheng MD
- Blaine Stringer MSN, RN CEN NE-BC
- Christina Thilagam RN
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- Cassandra Waddlington, RN
- Lakshmi Warrior MD MPH
- Joseph Weber, MD
- Myrlene Charles, RN, MSN

Department of Family Medicine

Members

- Elias Alhanoun MD
- David Brady, RN, MSN, MBA
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- Gerard Dysico MD
- Peter Egofske MD
- Leslie Frain
- **Ayodeji Gbotosho MD**
- Marla Lax
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- Carol Marshall, LCSW
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- Jordan Moskoff, MD
- Sherri Nahin, LCSW
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- Heather Prescaro, RN, MSN
- Bincy Poothurail RN
- Patricia Raksin MD
- Alex Ree MD
- Joanne Routsolias PharmD
- Sharon Scott-Reed, RN, BSN
- Neha Sheng MD
- Blaine Stringer MSN, RN CEN NE-BC
- Christina Thilagam RN
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- Cassandra Waddlington, RN
- Lakshmi Warrior MD MPH
- Joseph Weber, MD
- Myrlene Charles, RN, MSN

Department of Surgery

Members

- Elias Alhanoun MD
- David Brady, RN, MSN, MBA
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- **Gerard Dysico MD**
- Peter Egofske MD
- Leslie Frain
- Ayodeji Gbotosho MD
- Marla Lax
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- Carol Marshall, LCSW
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- Jordan Moskoff, MD
- Sherri Nahin, LCSW
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- Heather Prescaro, RN, MSN
- Bincy Poothurail RN
- **Patricia Raksin MD**
- Alex Ree MD
- Joanne Routsolias PharmD
- Sharon Scott-Reed, RN, BSN
- **Neha Sheng MD**
- Blaine Stringer MSN, RN CEN NE-BC
- Christina Thilagam RN
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- Cassandra Waddlington, RN
- Lakshmi Warrior MD MPH
- Joseph Weber, MD
- Myrlene Charles, RN, MSN

Department of PT/OT/ST

Members

- Elias Alhanoun MD
- David Brady, RN, MSN, MBA
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- Gerard Dysico MD
- Peter Egofske MD
- Leslie Frain
- Ayodeji Gbotosho MD
- Marla Lax
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- Carol Marshall, LCSW
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- Jordan Moskoff, MD
- Sherri Nahin, LCSW
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- Heather Prescaro, RN, MSN
- Bincy Poothurail RN
- Patricia Raksin MD
- Alex Ree MD
- Joanne Routsolias PharmD
- Sharon Scott-Reed, RN, BSN
- Neha Sheng MD
- Blaine Stringer MSN, RN CEN NE-BC
- Christina Thilagam RN
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- Cassandra Waddlington, RN
- Lakshmi Warrior MD MPH
- Joseph Weber, MD
- Myrlene Charles, RN, MSN

Department of Nursing

Members

- Elias Alhanoun MD
- David Brady, RN, MSN, MBA
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- Gerard Dysico MD
- Peter Egofske MD
- Leslie Frain
- Ayodeji Gbotosho MD
- Marla Lax
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- Carol Marshall, LCSW
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- Jordan Moskoff, MD
- Sherri Nahin, LCSW
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- Heather Prescaro, RN, MSN
- Bincy Poothurail RN
- Patricia Raksin MD
- Alex Ree MD
- Joanne Routsolias PharmD
- Sharon Scott-Reed, RN, BSN
- Neha Sheng MD
- Blaine Stringer MSN, RN CEN NE-BC
- Christina Thilagam RN
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- Cassandra Waddlington, RN
- Lakshmi Warrior MD MPH
- Joseph Weber, MD
- Myrlene Charles, RN, MSN

Department of Pharmacy

Members

- Elias Alhanoun MD
- David Brady, RN, MSN, MBA
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- Gerard Dysico MD
- Peter Egofske MD
- Leslie Frain, MSN, RN, CPPS, CPHQ
- Ayodeji Gbotosho MD
- Marla Lax
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- Carol Marshall, LCSW
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- Jordan Moskoff, MD
- Sherri Nahin, LCSW
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- Heather Prescaro, RN, MSN
- Bincy Poothurail RN
- Patricia Raksin MD
- Alex Ree MD
- **Joanne Routsolias PharmD**
- Sharon Scott-Reed, RN, BSN
- Neha Sheng MD
- Blaine Stringer MSN, RN CEN NE-BC
- Christina Thilagam RN
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- Cassandra Waddlington, RN
- Lakshmi Warrior MD MPH
- Joseph Weber, MD
- Myrlene Charles, RN, MSN

Department of Social Services

Members

- Elias Alhanoun MD
- David Brady, RN, MSN, MBA
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- Gerard Dysico MD
- Peter Egofske MD
- Leslie Frain, MSN, RN, CPPS, CPHQ
- Ayodeji Gbotosho MD
- Marla Lax
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- **Carol Marshall, LCSW**
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- Jordan Moskoff, MD
- **Sherri Nahin, LCSW**
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- Heather Prescaro, RN, MSN
- Bincy Poothurail RN
- Patricia Raksin MD
- Alex Ree MD
- Joanne Routsolias PharmD
- Sharon Scott-Reed, RN, BSN
- Neha Sheng MD
- Blaine Stringer MSN, RN CEN NE-BC
- Christina Thilagam RN
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- **Cassandra Waddlington, RN**
- Lakshmi Warrior MD MPH
- Joseph Weber, MD
- Myrlene Charles, RN, MSN

Department of Health Information Services

Members

- Elias Alhanoun MD
- David Brady, RN, MSN, MBA
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- Gerard Dysico MD
- Peter Egofske MD
- Leslie Frain, MSN, RN, CPPS, CPHQ
- Ayodeji Gbotosho MD
- **Marla Lax RN, RN-BC**
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- Carol Marshall, LCSW
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- Jordan Moskoff, MD
- Sherri Nahin, LCSW
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- Heather Prescaro, RN, MSN
- Bincy Poothurail RN
- Patricia Raksin MD
- Alex Ree MD
- Joanne Routsolias PharmD
- Sharon Scott-Reed, RN, BSN
- Neha Sheng MD
- Blaine Stringer MSN, RN CEN NE-BC
- Christina Thilagam RN
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- Cassandra Waddlington, RN
- Lakshmi Warrior MD MPH
- Joseph Weber, MD
- Myrlene Charles, RN, MSN

Department of Quality

Members

- Elias Alhanoun MD
- **David Brady, RN, MSN, MBA**
- Margaret Carroll DNP, RN, MBA
- Kathryn Dudzik, RN
- Gerard Dysico MD
- Peter Egofske MD
- **Leslie Frain, MSN, RN, CPPS, CPHQ**
- Ayodeji Gbotosho MD
- Marla Lax RN, RN-BC
- Linda Liu, RN
- Ma Nieves Marcelo RN, MSN, CEN
- Carol Marshall, LCSW
- Morly Monsy, RN
- Margott Montesinos, DNP, MSHI, RN-BC, CCRN-K
- Jordan Moskoff, MD
- Sherri Nahin, LCSW
- Radhamani Nair RN, MSN
- Nessa Nkemnji, MS CCC-SLP
- Isaac Paintsil MD MPH
- Heather Prescaro, RN, MSN
- Bincy Poothurail RN
- Patricia Raksin MD
- Alex Ree MD
- Joanne Routsolias PharmD
- Sharon Scott-Reed, RN, BSN
- Neha Sheng MD
- Blaine Stringer MSN, RN CEN NE-BC
- Christina Thilagam RN
- Simon Tingem RN, BSN, BA, MBA
- Darleen Vlahovic, MBA, BSN, RN
- Cassandra Waddlington, RN
- Lakshmi Warrior MD MPH
- Joseph Weber, MD
- Myrlene Charles, RN, MSN

Stroke Program Activities

- **Continuous monitoring of performance measures**
 - Distribution of stroke data to stroke committee and clinicians
- **Detailed analysis of all alteplase and thrombectomy cases**
 - Reporting to involved parties
- **Analysis of all stroke data to detect opportunities for improvement**
- **Education in stroke**
 - Conference, grand round presentations, student and resident lectures; division and administrative meetings
- **Support clinical services in the provision of patient care**
 - Through the Neurology consultation service

Stroke Measures

- CSTK-1 NIHSS performed within 12 hours or prior to intervention
- STK- OP-1 Door to transfer to another hospital
- STK-1 VTE prophylaxis by day 2 of hospitalization
- STK-2 Discharged on antithrombotic therapy
- STK-3 Anticoagulation therapy for A-fib/flutter at discharge
- STK-4 Thrombolytic therapy in eligible patients who present within 2 hours
- STK-5 Antithrombotic therapy by end of hospital day 2
- STK-6 Discharged on Statin
- STK-8 Stroke education
- STK-10 Assessed for Rehabilitation
- Door to CT
- Door to Needle

Stroke Program Online



COOK COUNTY
HEALTH

[Sign-In](#)

[Home](#) [COVID-19](#) [Departments](#) [Locations](#) [Human Resources](#) [Policies](#) [Resources](#) [Safety & Security](#) [Help](#)

Departments / Neurology

Stroke Center

Stroke Center Guidelines

Guidelines, Pathways, and Protocols

Emergency Department

- Protocol for Administration of IV Thrombolysis (t-PA, alteplase)
- Direct to CT protocol
- Acute stroke protocol flowsheet
- Acute Ischemic Stroke - Initial Management - Non rt-PA candidate
- Acute Spontaneous Intracerebral Hemorrhage - ED Management
- Acute Subarachnoid Hemorrhage - ED

Hospital Inpatient

- Interprofessional Stroke Management and Care Guideline
- Protocol for the Management of Inpatients with symptoms suggestive of Acute Stroke
- Acute Stroke Protocol Flowsheet
- PROTOCOL FOR THE MANAGEMENT OF IN-PATIENTS WITH SYMPTOMS SUGGESTIVE OF ACUTE STROKE
- In-patient Acute Stroke protocol
- Clinical Pathway for the Care of Patients with Acute Ischemic Infarct
- Clinical Pathway for the Care of Patients with Acute Hemorrhagic Stroke

Radiology Protocols

- Endovascular Protocol

◀ May 2021 ▶

Sun	Mon	Tue	Wed	Thu	Fri	Sat
25	26	27	28	29	30	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

Monthly Stroke Committee Meeting

Stroke Program Committee
Meeting

Where: Webex

When: First Tuesday of each
month, 1:00 PM

[Details](#)

Clinical Practice Guidelines

- Patient care is delivered consistent with clinical practice guidelines
- Guidelines are selected and approved by the Stroke Committee
- Guidelines:
 - Guidelines for the early management of patients with acute ischemic stroke: 2019 Update to the 2018 Guidelines for the Early Management of Acute Ischemic Stroke; A Guideline for Healthcare professionals from the American Heart Association/American Stroke Association
 - Guidelines for the management of spontaneous intracerebral hemorrhage: a guideline for healthcare professionals from the American Heart Association/American Stroke Association 2015
 - Guidelines for the management of aneurysmal subarachnoid hemorrhage: a guideline for healthcare professionals from the American Heart Association/American Stroke Association 2012
 - 2021 Guideline for the prevention of stroke in patients with stroke and transient ischemic attack: a guideline for healthcare professionals from the American Heart Association/American Stroke Association

Orderset for IV tPA (alteplase) for Acute Ischemic Stroke





Alteplase (Stroke), TPA (Initiated Pending) , Ordered as: ED Alteplase

Medications

*****WARNING*****

Alteplase is a **weight based medication**. Double check patient weight to ensure you are giving the correct dose.

If Med Dosing Wt in the banner bar is incorrect, enter an order for "Change Dosing Weight" first.

<input checked="" type="checkbox"/>	 	alteplase (alteplase bolus (stroke))	0.09 mg/kg, Soln, IV Push, Once, STAT IV Push over 1 minute
<input checked="" type="checkbox"/>	 	alteplase (alteplase infusion (stroke))	0.81 mg/kg, Inj, IVPB, Once, STAT Infuse over 60 Minutes

Stroke Program Initiatives

- Direct to CT protocol
- Creation of stroke pager
- Certification of NIHSS certification by attendings of Neurology and Emergency Medicine, and by attendings and fellows of Pulmonary/Critical Care
- NIHSS certification and documentation by ED and ICU nursing
- Competency in Mini NIHSS and dysphagia screening by nursing staff
- Stroke Champion program
- Ordering by physicians and utilization by nurses of the Mini NIHSS
- Stroke education hours for attendings of Neurology and Emergency Medicine
- Knowledge of stroke management by attendings of Neurology, Emergency Medicine, and Pulmonary/Critical Care
- Rapid evaluation and treatment of patients presenting with TIA
- Record weighs on all patients presenting to the ED with stroke under 4.5 hours
- Documented evaluation of need for social services on patients admitted with stroke
- Dysphagia screening and referrals for Speech/Language/Swallow evaluation
- Documentation of SCD application following orders
- Use of stroke order caresets
- Tracking of mortality
- Disposition (Stroke Clinic)
- Community stroke education

Program Initiatives

- Direct to CT protocol
- Stroke Clinic
- Community Stroke Education

Direct to CT protocol



Triage

- 1) ED primary desk RN evaluates patient using BEFAST triage sheet
- 2) If LKW \leq 6 hrs and BEFAST +, then direct to CT protocol initiated
- 3) Primary desk RN overhead pages "Acute Stroke" overhead and walk patient and BEFAST triage sheet to CT scanner
- 4) Clerk to call Radiology tech at 4-3906 while patient is en-route to CT scanner



CT

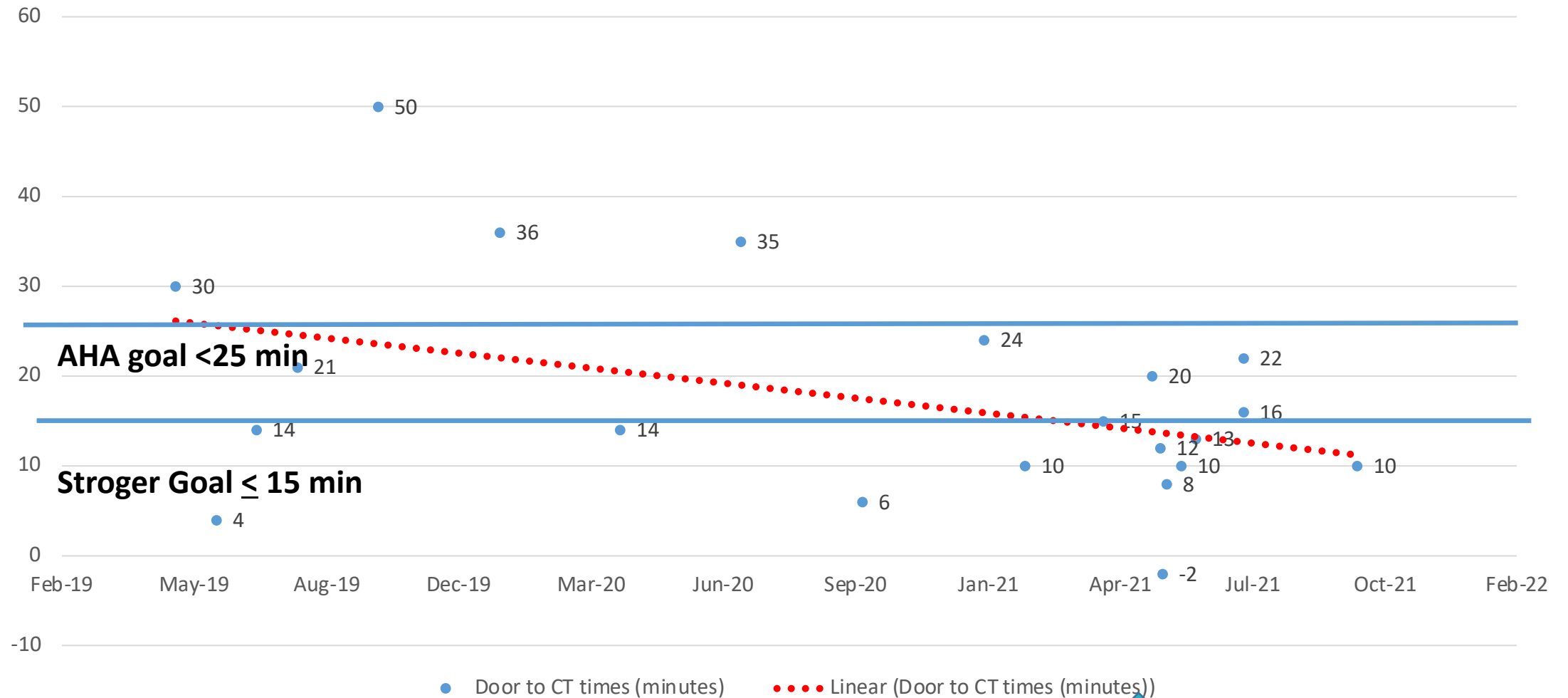
- 1) ED primary desk RN hands off to ED charge RN or designee
- 2) CT tech to use temporary MRN on BEFAST sheet to complete noncontrast HCT
- 3) Noncontrast HCT performed using temporary MRN (EDSTROKE1)
- 4) BEFAST sheet uploaded into PACS and placed in BEFAST folder
- 4) ED Charge RN/designee brings patient to ED Red



ED Red Resuscitation

- 1) ED charge RN/designee signs out to ED Red RN
- 2) Registration completed
- 3) ED attending/resident evaluates patient with NIHSS and LKW
- 4) Blood drawn and Stroke orders placed (Stroke pager and Stroke HCT order)
- 5) ED radiology resident gives verbal read of HCT to ED team
- 6) Neurology gives recommendations for alteplase and next steps

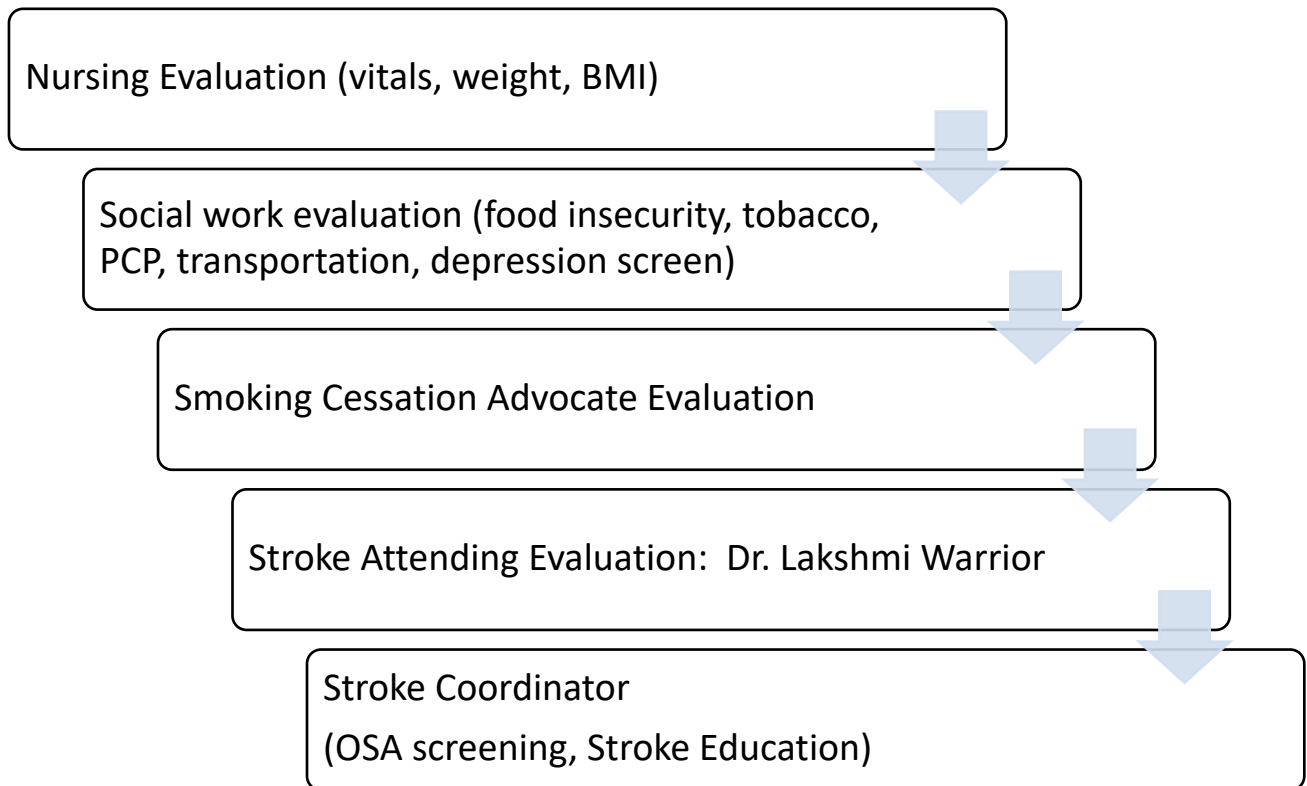
Door to CT times (minutes)



Direct to CT Start

Outpatient Stroke Clinic

- Once a week, Wednesday
- Multi-disciplinary clinic
- Goal of providing comprehensive stroke prevention
- Connects patients to resources across the system
- Every patient with confirmed stroke, TIA, ICH, or SAH is given an appointment
- Seen within 2-6 weeks of discharge
- Over 1800 patients encounters since 2016



Food Insecurity

- Defined as a “limited or uncertain availability of nutritionally adequate and safe foods”
- **38%** of our patients are identified as food insecure



“Food as Medicine” Initiative

- Patients who screen positive for food insecurity are given vouchers for the FRESH Truck
- In partnership with the Greater Chicago Food Depository, FRESH trucks provide fresh produce to CCH health centers bimonthly
- During the pandemic, the Fresh Truck distributed food to a over **38,000 individuals**, representing **126,575 household members** and totaling more than **835,500 pounds**



Tobacco Use

	National	Illinois	Cook County	Stroke outpatient clinic
% of smokers	20%	18%	18%	32%

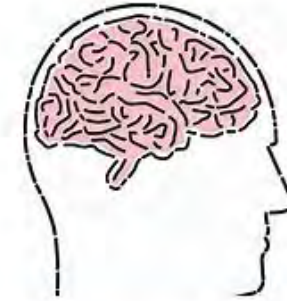
“Healthy Lungs” Initiative

- Trained health educators discuss the benefits, barriers and motivation to stop smoking with patients
- For those willing to quit, health educators develop a personalized quit plan
 - Incorporated action-oriented strategies
 - Substitutes for smoking urges
 - Coping with temptations
 - Commitment to create a smoke-free home
- Offer four follow-up telephone calls over three months

Community Stroke Education

- Stroke education events across the city
 - Black Women's Expo
 - Southland Ministerial Health Network
 - 4 Men Event at Provident Hospital
 - Little Village 4 Men Event Health Fair
- Stroke education at quarterly advisory councils across our community
- Partnering with community clinics to provide stroke education to our hypertensive patients

People with **high blood pressure** have a significantly **higher risk of stroke.**



**HIGH BLOOD
PRESSURE
AND STROKE**

*A guide to controlling a key
risk factor.*



Stroke impacts survivors and caregivers in many ways.
It often presents physical, emotional, and spiritual challenges and changes.

Learn how to better understand and manage these changes by attending in our support group. Share experiences and gain support from other survivors and caregivers.

Please join us if you are a stroke survivor, a family/friend/caregiver of a stroke survivor or if you would like more information about

Ischemic or Hemorrhagic Stroke

**The SECOND Tuesday of every month
2:00pm**

WE ARE VIRTUAL!

For your safety, our stroke support group will be held via WebEx until further notice. Please contact Kathryn (see below) to get our WebEx invite!

Kathryn.Dudzik@cookcountyhhs.org
312-864-7291



CERTIFICATE OF DISTINCTION

has been awarded to

John H. Stroger, Jr. Hospital of Cook County
Chicago, IL

for Advanced Certification as a
Primary Stroke Center
by



The Joint Commission

*based on a review of compliance with national standards,
clinical guidelines and outcomes of care.*

June 8, 2021

Certification is customarily valid for up to 24 months.


Jane Englebright, PhD, RN, CENE, FAAN
Chair, Board of Commissioners

ID #7271
Print/Reprint Date: 06/14/2021


Mark R. Chassin, MD, FACP, MPP, MPII
President

The Joint Commission is an independent, not-for-profit national body that oversees the safety and quality of health care and other services provided in certified organizations. Information about certified organizations may be provided directly to The Joint Commission at 1-800-994-6610. Information regarding certification and the certification performance of individual organizations can be obtained through The Joint Commission's web site at www.jointcommission.org.



**COOK COUNTY
HEALTH**



AMA
AMERICAN
MEDICAL
ASSOCIATION



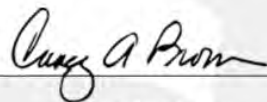
The American Heart Association and
American Stroke Association proudly recognizes

Cook County Health
Chicago, IL

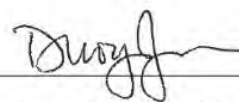
Get With The Guidelines® - Stroke BRONZE

Achievement Award Hospital

The American Heart Association and American Stroke Association recognizes this hospital for its continued success in using the **Get With The Guidelines®-Stroke** program. Thank you for applying the most up-to-date evidence-based treatment guidelines to improve patient care and outcomes in the community you serve.*



Nancy Brown
Chief Executive Officer
American Heart Association



Donald M. Lloyd-Jones, MD, ScM, FAHA
President
American Heart Association



Future Directions

- Building Stroger's Neuro ICU to a Level I Neurosciences ICU
- Stroger as a Thrombectomy Capable Stroke Center
- Provident as a Stroke ready or Primary Stroke Center