

# Stroke Data & Case Presentation



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# Disclosures

- No Disclosures

# My Background

- Registered Nurse
- Quality Improvement Coordinator
- Stroke Program Coordinator
- Patient Education Coordinator
- QSI Director

# My WHY



# Case Study

- “You work in a hospital that has decided to achieve a goal of becoming a stroke certified center. You have been appointed the role of stroke coordinator and tasked with meeting the requirements necessary for stroke certification.”
- What do you do?

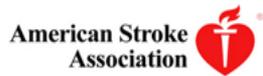
# 1. Gather your resources

- Standards/Requirements
  - Manual, application, etc.
  - Perform a gap analysis
- Develop a network
  - Both within and outside of your organization
  - Share best practice/tools/protocols/policies
- Educate yourself
  - Courses/reading materials/websites

# Clinical Practice Guidelines

- **Guidelines are the basis for protocols for treating the Acute Stroke Patient**
- **• Drive the quality care of stroke patients**
- **• GWTG-Stroke helps facilities ensure continuous improvement of stroke treatment by aligning clinical care with evidence-based guidelines**

# Clinical Practice Guidelines



Recommendations for the Management of Cerebral and Cerebellar Infarction With Swelling- Stroke Journal of the American Heart Association; Stroke 2014

*Dysphagia Screening: State of the Art: Invitational Conference Proceeding From the State of the Art Nursing Symposium, International Stroke Conference 2012*

*Revised and Updated Recommendations for the Establishment of Primary Stroke Centers-Stroke Journal of the American Heart Association; Stroke 2011;42:2651-2665*

*Expansion of the Time Window for Treatment of Acute Ischemic Stroke with Intravenous Tissue Plasminogen Activator- Stroke Journal of the American Heart Association; Stroke 2009;40;2945-2948*

Guidelines for Early Management of Patients with Acute Ischemic Stroke: Stroke Journal of the American Heart Association' Stroke 2013

*Guidelines for the Management of Aneurysmal Subarachnoid Hemorrhage-Stroke Journal of the American Heart Association' Stroke 2012;43:1711-1737*

Guidelines for the Management of Spontaneous Intracerebral Hemorrhage-Stroke Journal of the American Heart Association; Stroke 2010;41:2108-2129



*Guide to the Care of the Hospitalized Patient with Ischemic Stroke-2nd Edition AANN Clinical Practice Guideline Series*

*Care of the Patient with Aneurysmal Subarachnoid Hemorrhage- AANN Clinical Practice Guideline Series*



Recommendations for the Establishment of Primary Stroke Centers

# Target Population

- What types of patients are you serving?
- Age?
- Cultural
- Language
- Know your population in order to build your program around meeting the needs of the patients you serve

# Know Your Population

Q **QUINTILES**
Patients
Download

**Current Study:** Stroke PMT **Current User:** Laurie London **Site:** AHA National Demo Site **Site ID:** 59274

### Configurable Measure Reports

Generate Report

**TIME PERIOD**

Interval: Monthly  Aggregate

From: 2015 Jan

To: 2015 Mar

**REPORT 1**

**GWTC Standard Measures:**

**GWTC Additional Patient Population Measures:**

**Historic Measures:**

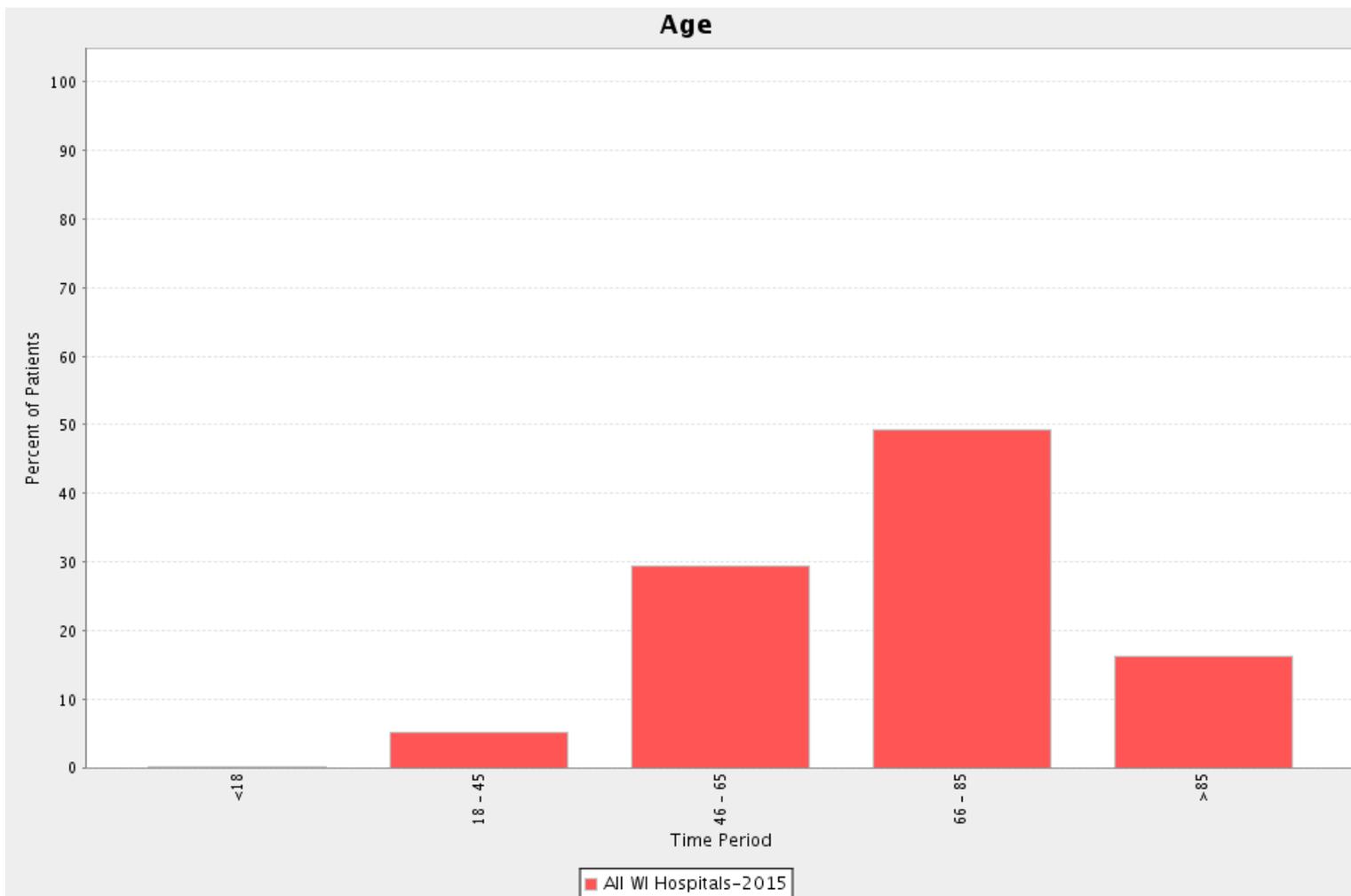
**Format:**

**Compare to:**  
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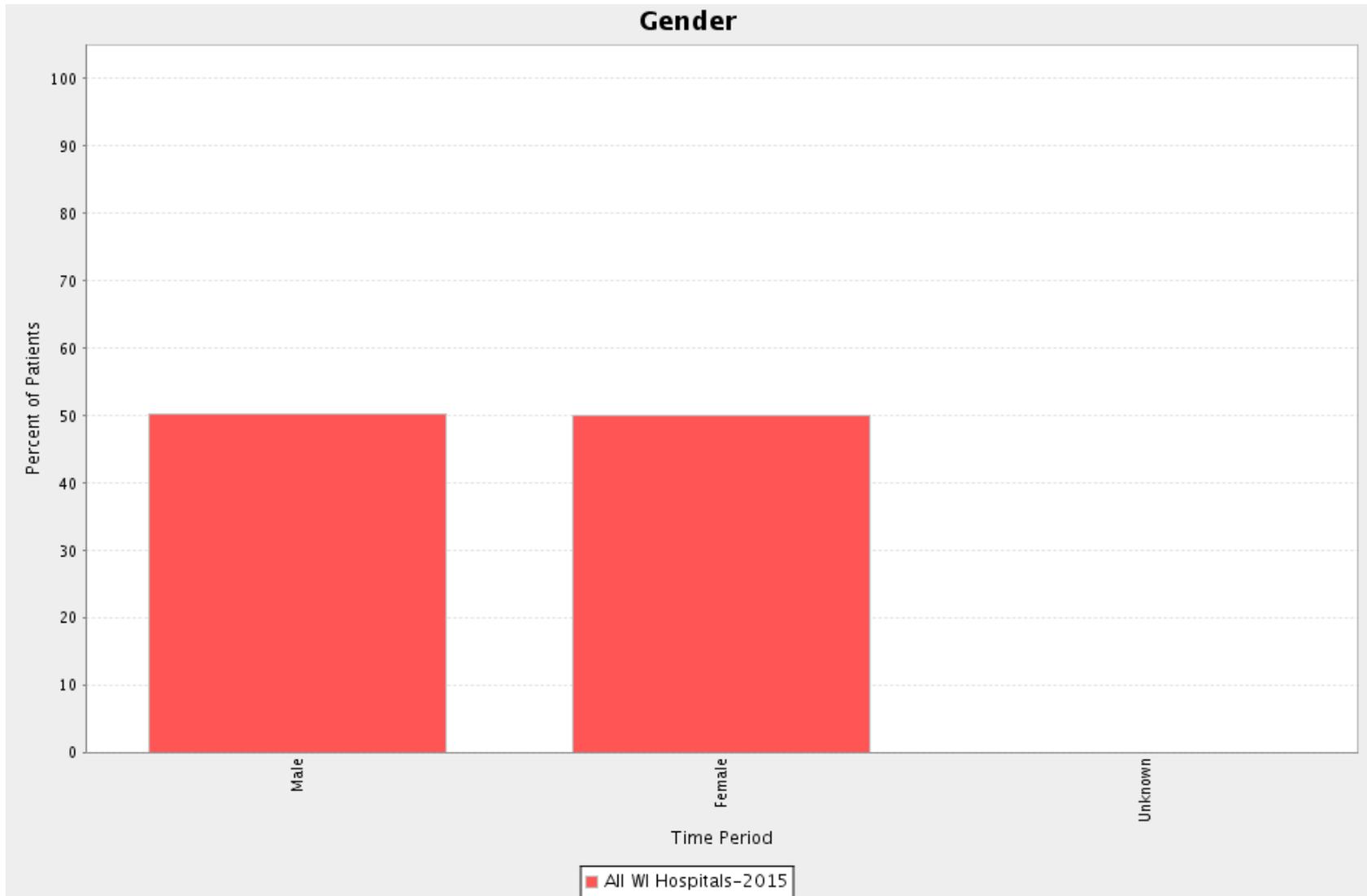
- Reasons for delay, IV rt-PA initiation beyond 60 minutes
- Reasons for no IV rt-PA (Contra/Warning)
- Reasons for no IV rt-PA (Hospital-Related)
- Time to Intravenous Thrombolytic Therapy - 45 min
- Time to Intravenous Thrombolytic Therapy Times
- Thrombolytic Complications
- Thrombolytic Therapies
- Weight Recommendation
- Descriptive**
- Age
- Diagnosis
- Dysphagia Screening Results
- Gender
- Initial Exam Findings
- LOS
- Medical History
- Race
- Risk-Adjusted Mortality Ratio (Ischemic and Hemorrhagic model)
- Risk-Adjusted Mortality Ratio (Ischemic-Only model)
- Symptom Duration if diagnosis of TIA

Measure group with all 10 Consensus Measures with case inclusion by Clinical Diagnosis (including Stroke and TIA)

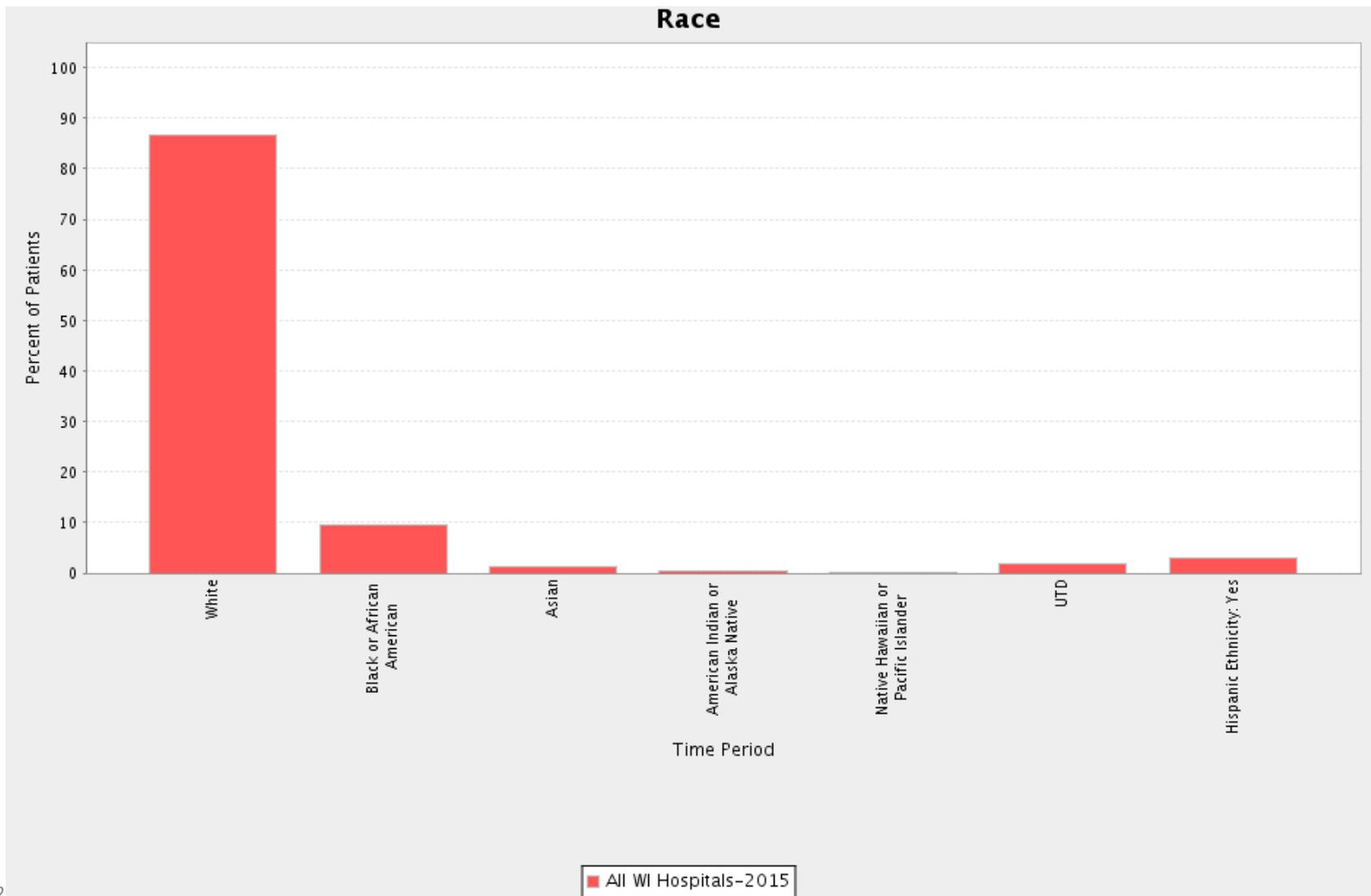
# Know Your Population



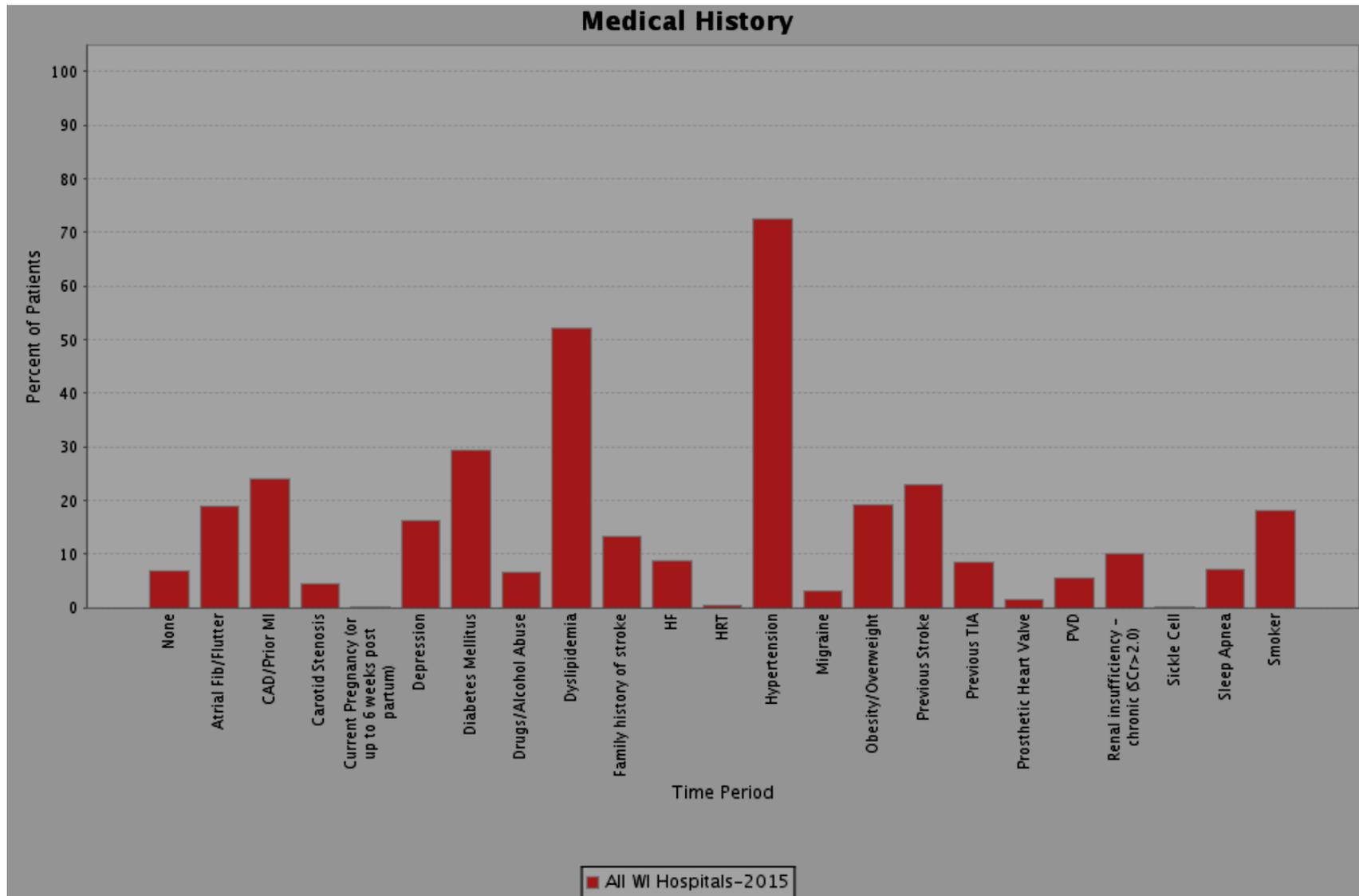
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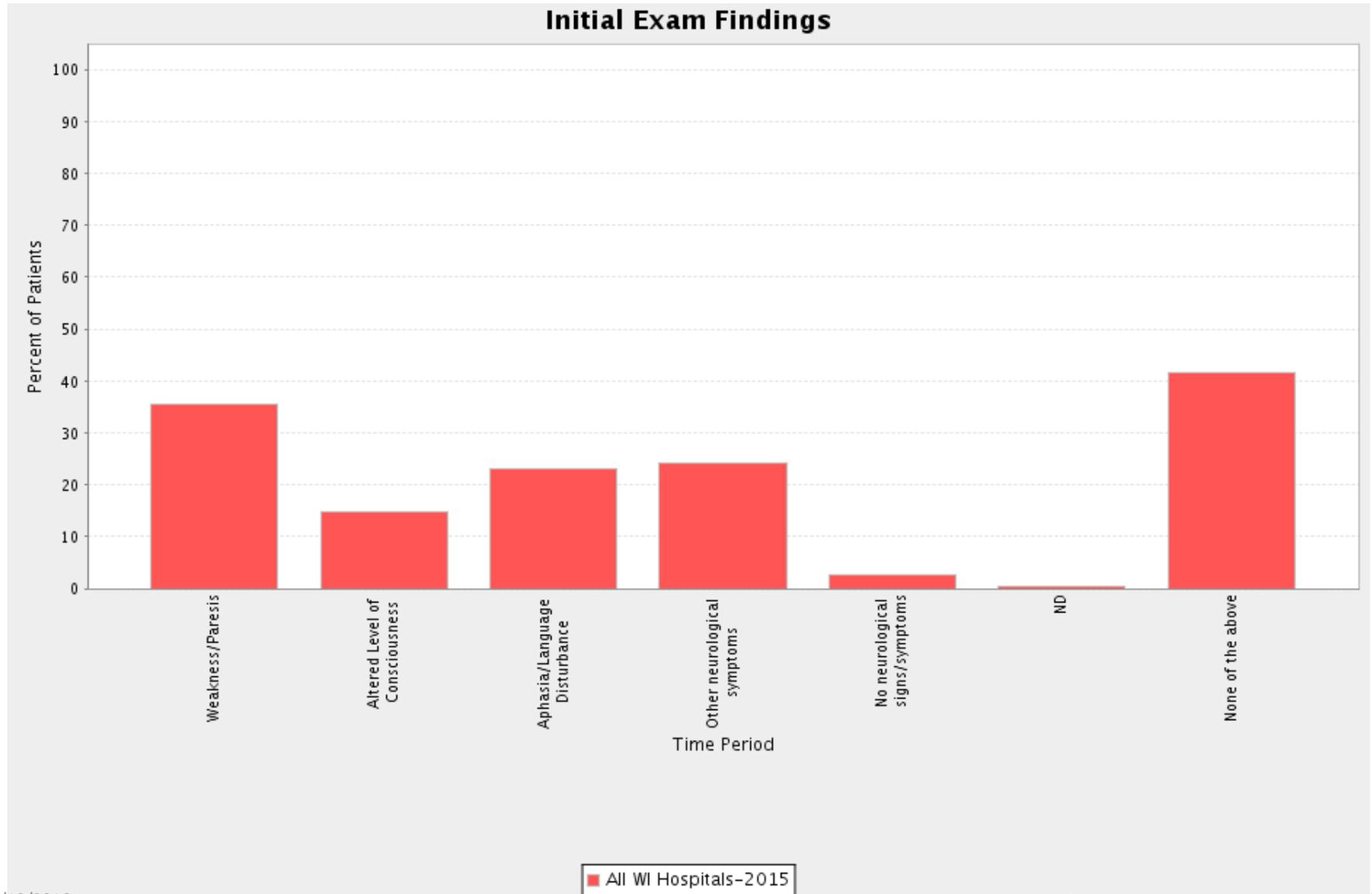
# Know Your Population



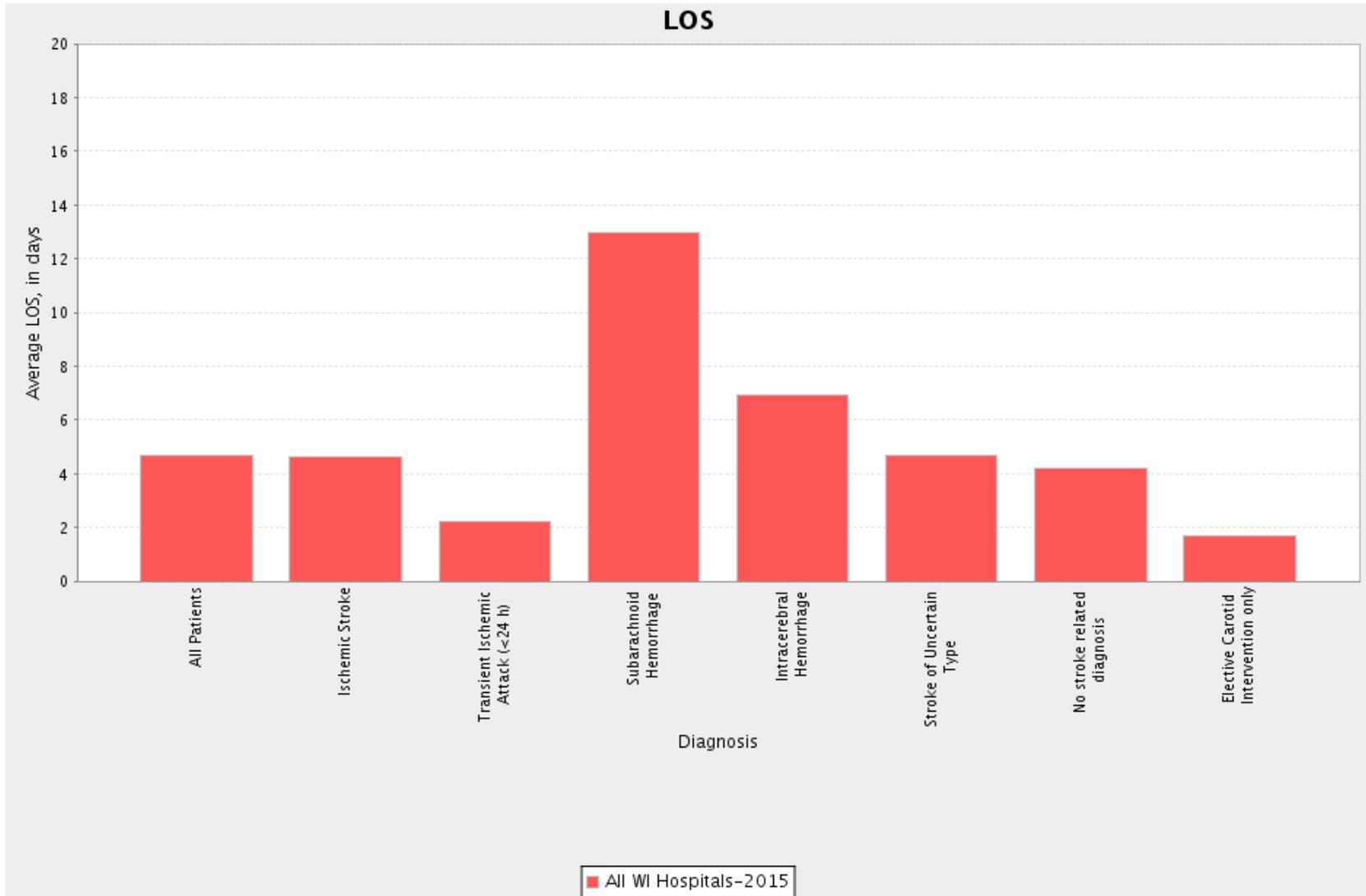
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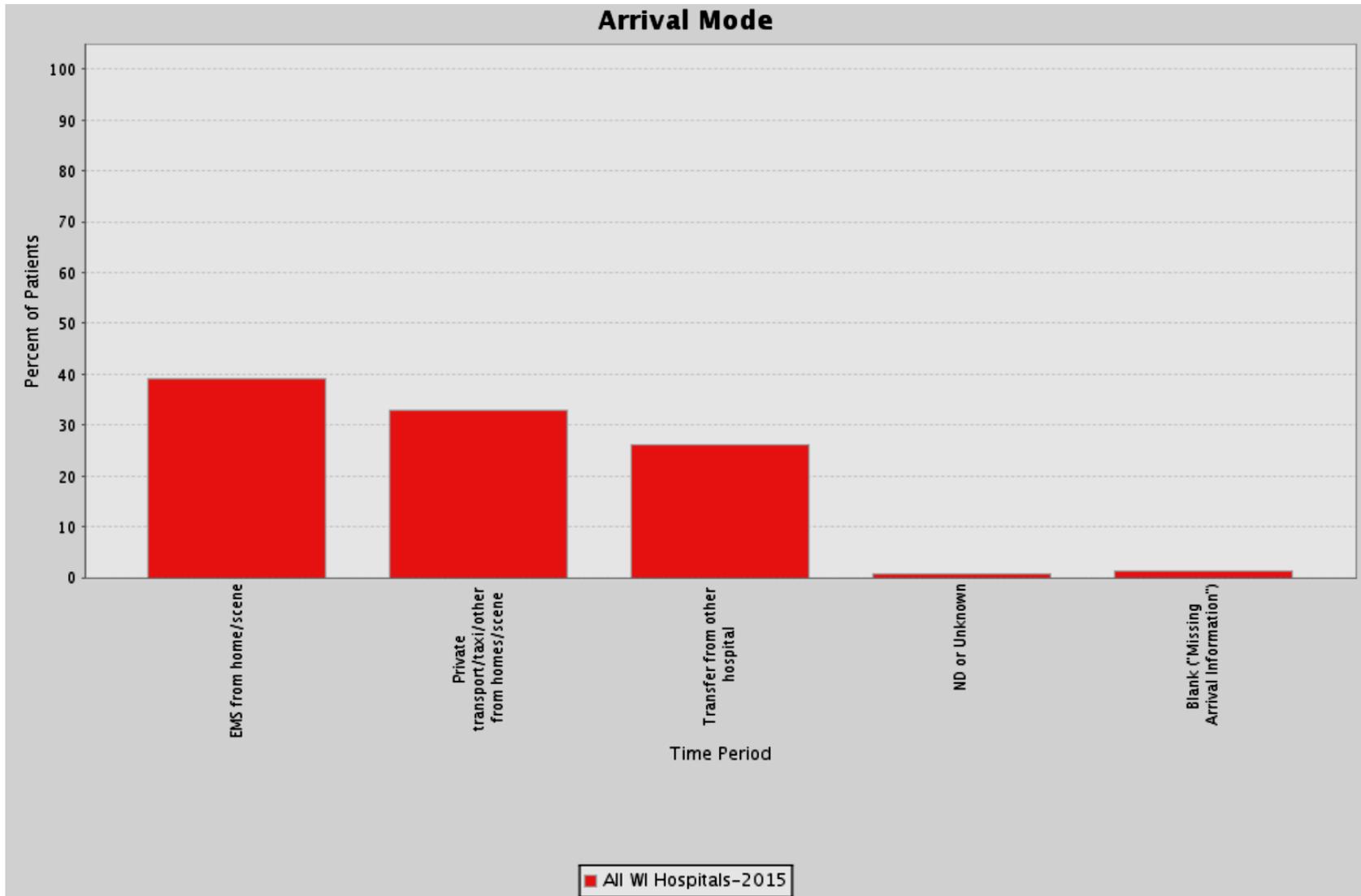
# Know Your Population



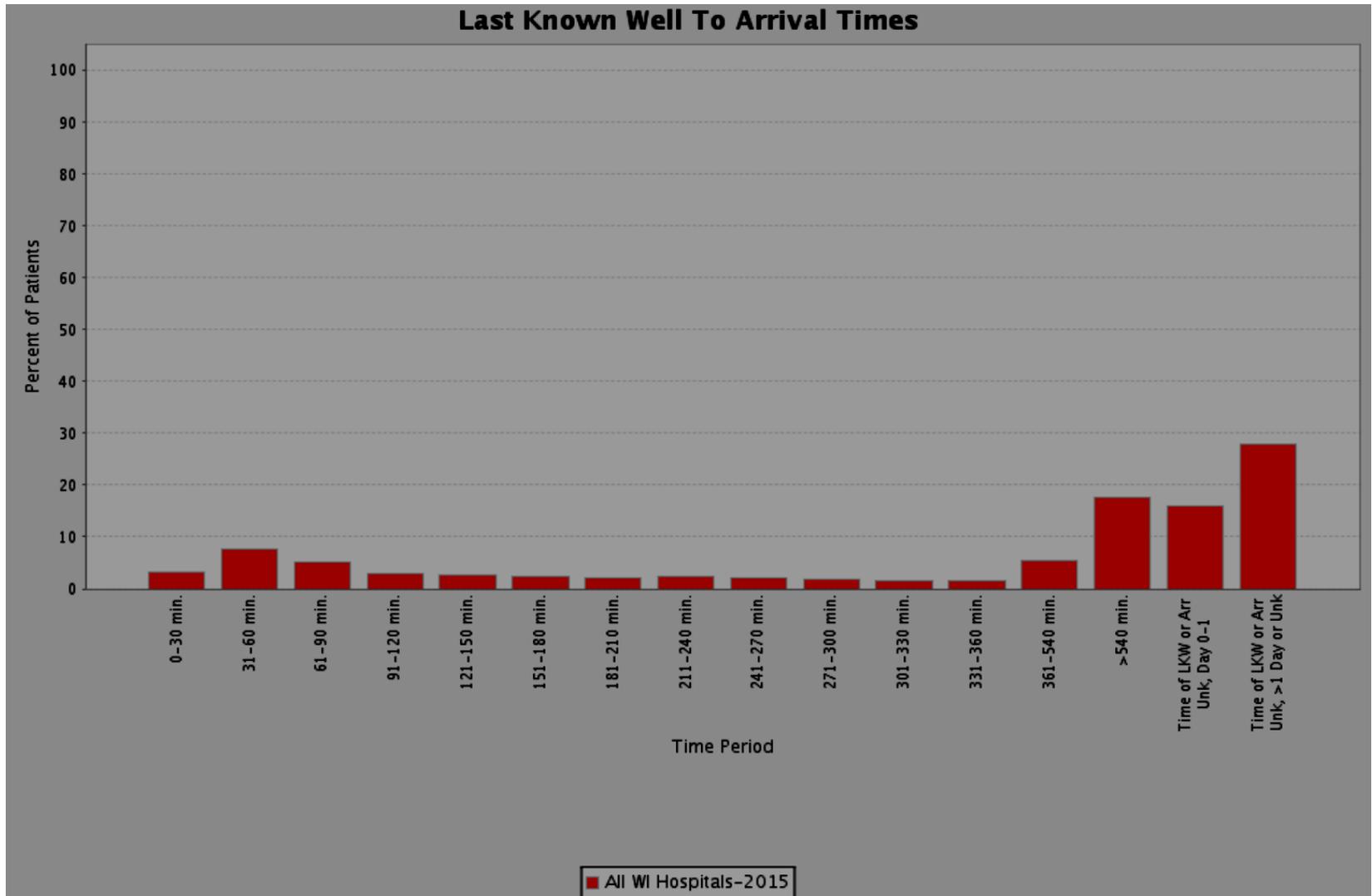
# Know Your Population-LOS



# Know Your Population-Arrival Mode



# Know Your Population



# Performance Improvement

- Measures
- Data
- Communicating the results

# Know the Measures

## TJC/CMS Core Measures

[www.qualitynet.org](http://www.qualitynet.org)

STK-4 (chart abstracted)

Electronic Clinical Quality Measures (STK-2, STK-3, STK-5, STK-10)

## GWTG Measures

[www.heart.org/quality](http://www.heart.org/quality)

GWTG-S Coding Instructions

Measure Descriptions & Rationale

## Standards/Performance Measures for Certification

[www.jointcommision.org](http://www.jointcommision.org)

Acute Stroke Ready

Primary Stroke Center

Comprehensive Stroke Center

Last Updated: version 5.00

## STROKE (STK) NATIONAL HOSPITAL INPATIENT QUALITY MEASURES

**STK Measure Set Table**

Set Measure ID #	Measure Short Name
<b>STK-1</b>	Venous Thromboembolism (VTE) Prophylaxis (removed starting with 1/1/2016 discharges)
<b>STK-2</b>	Discharged on Antithrombotic Therapy (removed starting with 1/1/2016 discharges)
<b>STK-3</b>	Anticoagulation Therapy for Atrial Fibrillation/Flutter (removed starting with 1/1/2016 discharges)
<b>STK-4</b>	Thrombolytic Therapy
<b>STK-5</b>	Antithrombotic Therapy By End of Hospital Day 2 (removed starting with 1/1/2016 discharges)
<b>STK-6</b>	Discharged on Statin Medication (removed starting with 1/1/2016 discharges)
<b>STK-8</b>	Stroke Education (removed starting with 1/1/2016 discharges)
<b>STK-10</b>	Assessed for Rehabilitation (removed starting with 1/1/2016 discharges)

# GWTG Measures-Achievement

- **IV rt-PA arrive by 2 hour, treat by 3 hour:** Percent of acute ischemic stroke patients who arrive at the hospital within 120 minutes (2 hours) of time last known well and for whom IV t-PA was initiated at this hospital within 180 minutes (3 hours) of time last known well.
- **Early antithrombotics:** Percent of patients with ischemic stroke or TIA who receive antithrombotic therapy by the end of hospital day two.
- **VTE prophylaxis:** Percent of patients with ischemic stroke, hemorrhagic stroke, or stroke not otherwise specified who receive VTE prophylaxis the day of or the day after hospital admission.
- **Antithrombotics:** Percent of patients with an ischemic stroke or TIA prescribed antithrombotic therapy at discharge.

# GWTG Measures-Achievement

- **Anticoag for AFib/Aflutter:** Percent of patients with an ischemic stroke or TIA with atrial fibrillation/flutter discharged on anticoagulation therapy
- **Smoking cessation:** Percent of patients with ischemic or hemorrhagic stroke, or TIA with a history of smoking cigarettes, who are, or whose caregivers are, given smoking cessation advice or counseling during hospital stay.
- **LDL 100 or ND - Statin:** Percent of ischemic stroke or TIA patients with LDL  $\geq$  100, or LDL not measured, or on cholesterol-reducer prior to admission who are discharged on statin medication

# GWTG Measures-Quality

- **Dysphagia Screening**
- **Stroke Education**
- **Rehabilitation Considered**
- **Time to Intravenous Thrombolytic Therapy**
- **LDL Documented**
- **Intensive Statin Therapy**
- **IV rt-PA 3.5 Hour, Treat by 4.5 Hour**
- **NIHSS reported**

# GWTG-Target Stroke Phase 2.0

- **Target: Stroke Honor Roll:** Time to thrombolytic therapy within 60 minutes in 50 percent or more of acute ischemic stroke patients treated with IV tPA (current criteria and same volume thresholds).
- **Target: Stroke Honor Roll-Elite:** Time to thrombolytic therapy within 60 minutes in 75 percent or more of acute ischemic stroke patients treated with IV tPA (current criteria and same volume thresholds).
- **Target: Stroke Honor Roll-Elite Plus:** Time to thrombolytic therapy within 60 minutes in 75 percent or more of acute ischemic stroke patients treated with IV tPA AND door-to-needle time within 45 minutes in 50 percent of acute ischemic stroke patients treated with IV tPA (current criteria and same volume thresholds).

# TJC ASRH Performance Measures

- Certified ASRH programs will be required to comply with Stage I requirements for performance measurement until standardized measures are developed
- Stage I will include submission of 4 performance measures
- Choices include:
  - Door to IV thrombolytic time
  - Head CT/Lab Times
  - Code Stroke Response Times
  - Complication rate s/p IV thrombolytic
  - Time to telemedicine initiation

# TJC PSC Performance Measures

**STK Measure Set Table**

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# TJC CSC Performance Measures

## Comprehensive Stroke (CSTK)

### Set Measures

Set Measure ID	Measure Short Name
CSTK-01	National Institutes of Health Stroke Scale (NIHSS Score Performed for Ischemic Stroke Patients)
CSTK-02	Modified Rankin Score (mRS at 90 Days)
CSTK-03	Severity Measurement Performed for SAH and ICH Patients (Overall Rate)
CSTK-04	Procoagulant Reversal Agent Initiation for Intracerebral Hemorrhage (ICH )
CSTK-05	Hemorrhagic Transformation (Overall Rate)
CSTK-06	Nimodipine Treatment Administered
CSTK-07	Median Time to Revascularization **SUSPENDED Effective January 1, 2016**
CSTK-08	Thrombolysis in Cerebral Infarction (TICI Post-Treatment Reperfusion Grade)

# Data to track regardless of certification level

- Neuro alert call & response time
- IV alteplase administration time
- Brain imaging time
- Lab results time
- Utilize time tracker

# Process Improvement

- Committee meets to evaluate protocols and performance
- Maintains a stroke log
- Utilizes a stroke registry or similar data collection tool
- Identifies performance measures
- Communicate the results to front line staff

# Education

- Community
  - Internal & external resources
  - FAST
  - Risk factor modification
  - Patient education
  
- Staff
  - Nursing competencies
  - Physician orientation
  - Education re: CPG's, order sets, pathways, protocols, care plans

# Pulling It All Together

- Continuously evaluate processes
- Celebrate successes
- Keep your focus on improving patient outcomes & experience
- Team approach
- Seek support/resources
- Share best practice

# Benefits

- Sense of accomplishment
- Building a team culture
- Recognition/Certification
- Public/Community Perception
- Improved Patient Outcomes-reduced death & disability

# Questions

## *Contact Info:*

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