Real World AI: Insider Experiences and Perspectives

Thursday October 10, 2024 -- Wrightsville Beach, NC

Christy Spivey, RN, BSN, MBA, NE-BC, FACHE, Novant Health

Heather Thornton, VP Digital Applications, Sutter Health

Jim Beinlich, MBA, Principal Consultant, Himformatics

Eddie Parrish, CIO, EmergeOrtho

Annual Conference 2024
Building the Future of Health Together

HIMSS NORTH CAROLINA CHAPTER

Panel Objectives

1 **Provide insights** into how three different organizations are thinking about and putting AI into practice.

2 **Share examples** of how AI has been successfully implemented, highlighting key strategies, **challenges**, and tangible benefits.

3 **Offer practical real-world guidance** on how AI efforts formed, from strategy to use cases to selecting the right tools and building a team to enable/support.

Christy Spivey, RN, BSN, MBA, NE-BC, FACHE

Senior Director of Nursing
Community Hospitals
Coastal Market &
Hospital at Home

Heather Thornton

Vice President,
Digital Applications

Jim Beinlich, MBA

Principal Consultant,
Healthcare Information
Technology

Eddie Parrish
CIO

Novant Health (Christy Spivey, RN, FACHE)

o Four-state not-for-profit integrated network of clinics, outpatient centers, and hospitals across the Southeast

o 850 locations including 19 medical centers and hundreds of outpatient facilities and physician clinics

o More than 2,000 physicians

o 40,000 employees

o 8.3 billion USD (Operating, 2023)
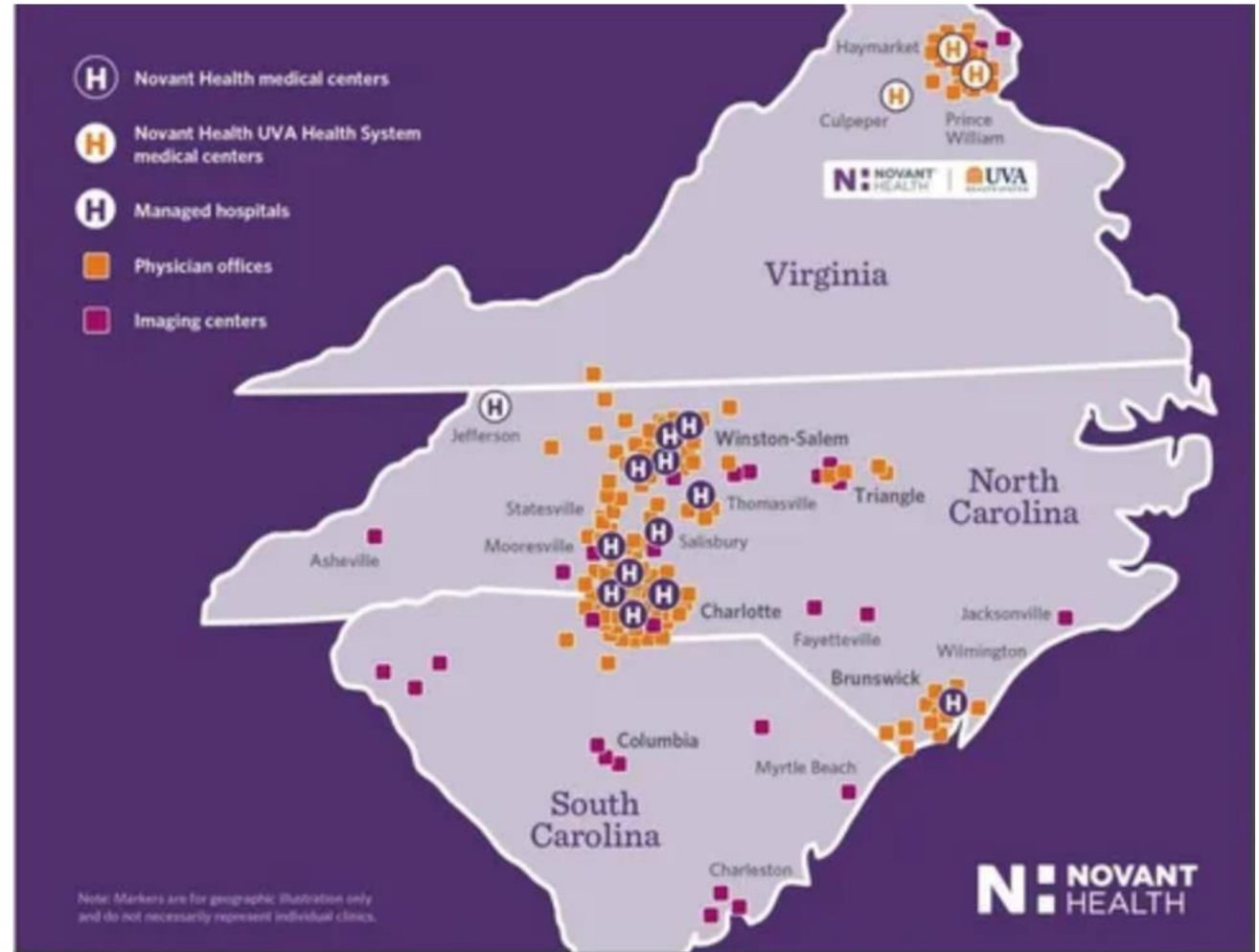
Sutter Health (Heather Thornton, VP)

o Sutter Health is a not-for-profit integrated health delivery system headquartered in Sacramento, CA

o Provides care to more than 3 million Californians

o Over 4,100 licensed general acute care beds

o 12,000+ physicians, 16,000+ nurses, and 2,000 advanced practice clinicians

o Over 55,000 employees

o 24 acute care hospitals and more than 200 clinics

For illustrative purposes only.
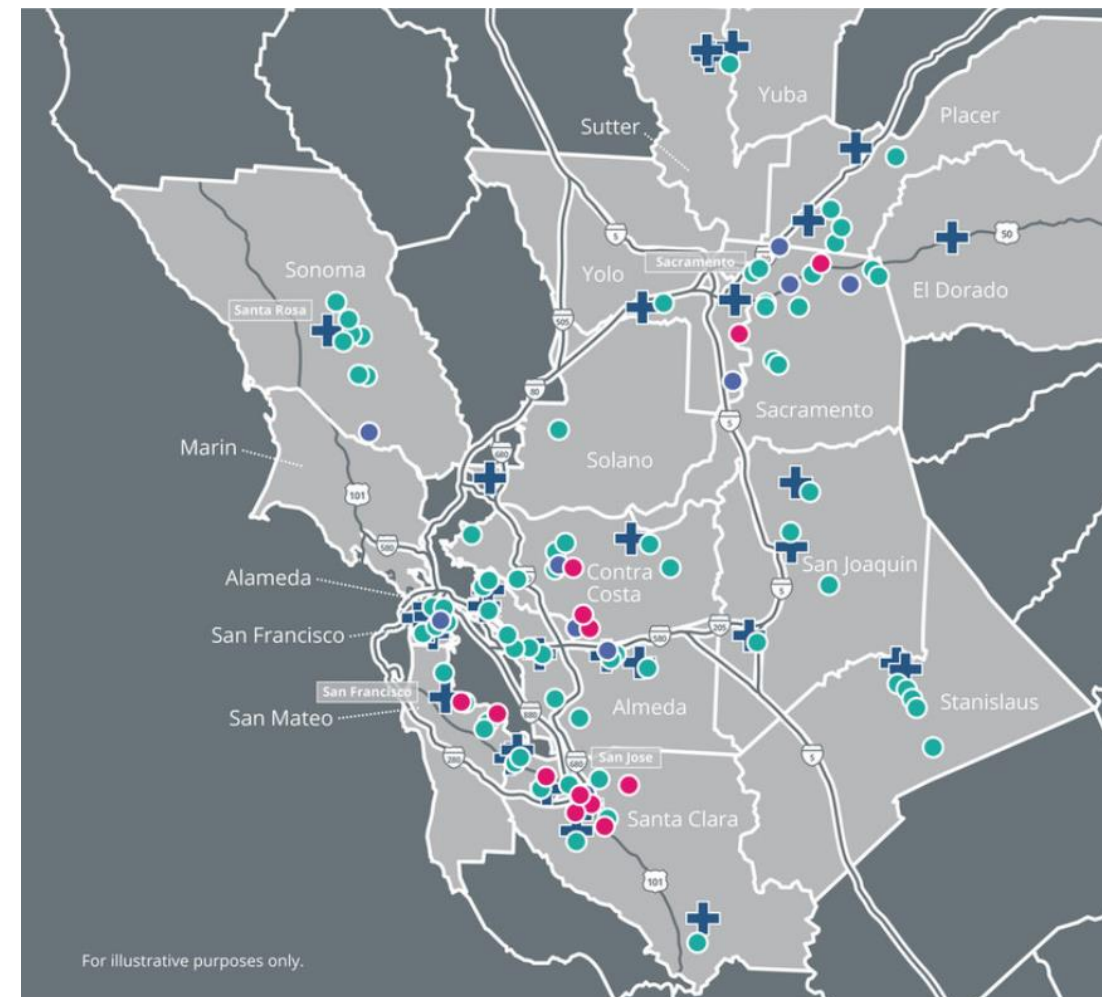
✚ Hospitals   ● Urgent Care Centers   ● Sutter Walk-in Clinics   ● Retail Walk-in Clinics

EmergeOrtho (Eddie Parrish, CIO)

o Continuity of care focused linked by single EHR (AthenaOne)

o Over 1 million annual visits

o 2,211 employees

o 170 physicians including 126 orthopedic surgeons

o 62 locations in NC

o 18 IT employees

o Participant in Physician Empowered Leadership of Transformational Organizations (PELTO)
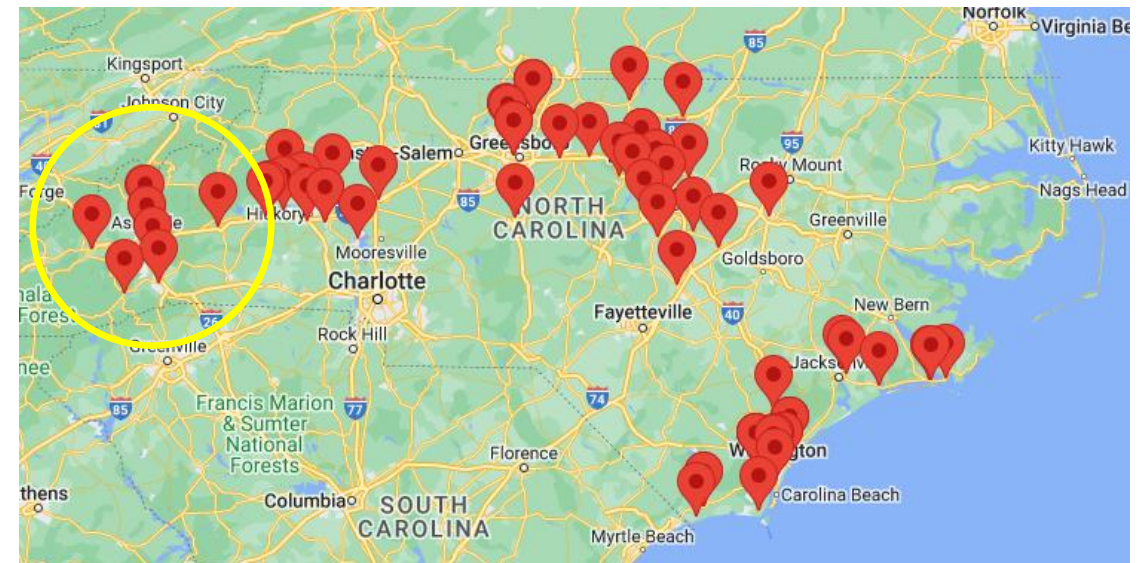
1 - How has AI changed your governance and decision-making processes for your organization -- speak to how that impacts funding.

2 - We hear a lot about trust and transparency with AI. Not just with patients, but there has also been some stir about nursing and concern about impact on jobs.

Talk a little about what you are seeing within your organization to address these areas?

3 - For general security awareness, not everyone is aware of the differences between a protected or private AI environment vs public.

Talk at a high level about the differences and what people need to be aware of?

4 - ROI has been a hot topic recently, how is your organization looking at return on investment or better yet – value add of AI and outcomes?

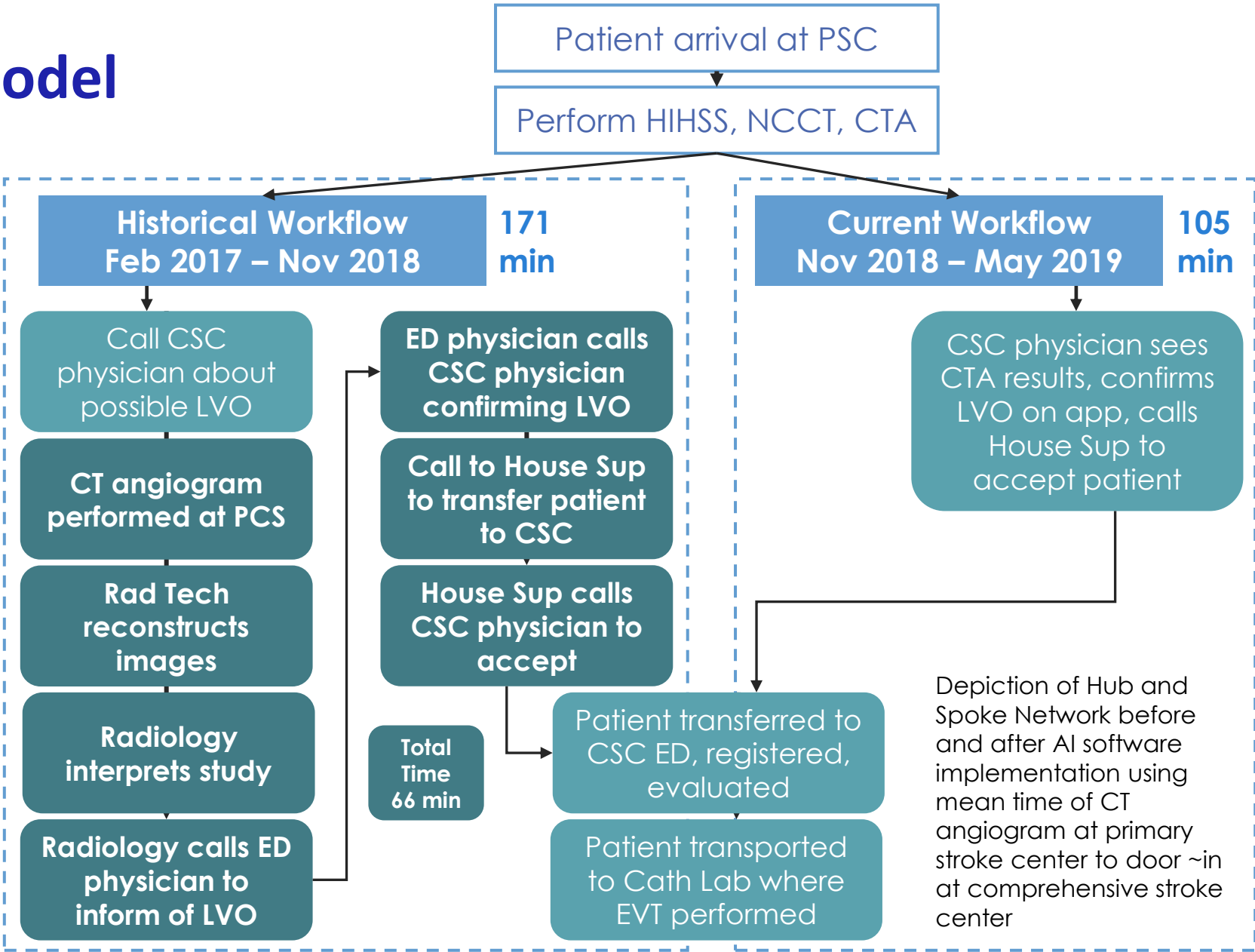# 5 – Share some real-world examples of the value-add of AI in healthcare.

Slide Reference

VizAI Spoke and Hub Model

Value Proposition

- ✓ **Service:** Access care where patients live
- ✓ **Quality:** LVO door to intervention time
- ✓ **Team:** Data pushed, convenient
- ✓ **Growth:** Regionalized system of care supports appropriate patients staying local; Primary stroke center patient transfer expedited to definitive care
- ✓ **Finance:** Number of patients retained in community hospital pays for software

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Patient arrival at PSC

Perform HIHSS, NCCT, CTA

Historical Workflow Feb 2017 – Nov 2018 — 171 min

- Call CSC physician about possible LVO
- CT angiogram performed at PCS
- Rad Tech reconstructs images
- Radiology interprets study
- Radiology calls ED physician to inform of LVO

- ED physician calls CSC physician confirming LVO
- Call to House Sup to transfer patient to CSC
- House Sup calls CSC physician to accept

Total Time 66 min

- Patient transferred to CSC ED, registered, evaluated
- Patient transported to Cath Lab where EVT performed

Current Workflow Nov 2018 – May 2019 — 105 min

- CSC physician sees CTA results, confirms LVO on app, calls House Sup to accept patient

Depiction of Hub and Spoke Network before and after AI software implementation using mean time of CT angiogram at primary stroke center to door ~in at comprehensive stroke center

Source: Early experience utilizing artificial intelligence shows significant reduction in transfer times and length of stay in a hub and spoke model (viz.ai). Hassan et al. 2020

6 - Share a little bit about barriers or potential pitfalls for achieving potential value of AI use cases.

Thank You!

Christy Spivey, RN, Senior Director of Nursing Community Hospitals Coastal Market & Hospital at Home

Heather Thornton, Vice President, Digital Applications

Jim Beinlich, MBA, Healthcare Information Technology Principal Consultant

Eddie Parrish, CIO

Artificial intelligence applies advanced analysis and logic-based techniques, including machine learning, to interpret events, support and automate decisions, and take actions. – Gartner Glossary

ML & Deep Learning	NLP	Predictive Analytics	Gen AI & LLM
Algorithms used in supervised and unsupervised learning that operate guided by lessons from existing information	A machine learning technology that gives computers the ability to interpret, manipulate, and comprehend unstructured text	The use of historical and current data to predict future events	A specialized type of AI that has been trained on vast amounts of data to understand existing content and generate new content (images, text) based on prompts provided to a Gen AI application
Robot-assisted surgery	**Voice recognition**	**Sepsis onset detection**	**Clinical summary generation**

Getting started with AI

INVENTORY what you already have
- Applications
- Platforms
- Medical devices

Implement **GOVERNANCE**
- Leverage existing data or analytics governance
- Develop policies and standard operating model

Start with the right **USE CASES**
- Leverage existing systems
- High-value, actionable
- Must be able to operationalize workflows

Begin building **SKILLS** and **LITERACY**
- Assess where you are
- Leverage existing employee and training platforms
- Develop a plan

VizAI Spoke and Hub Model

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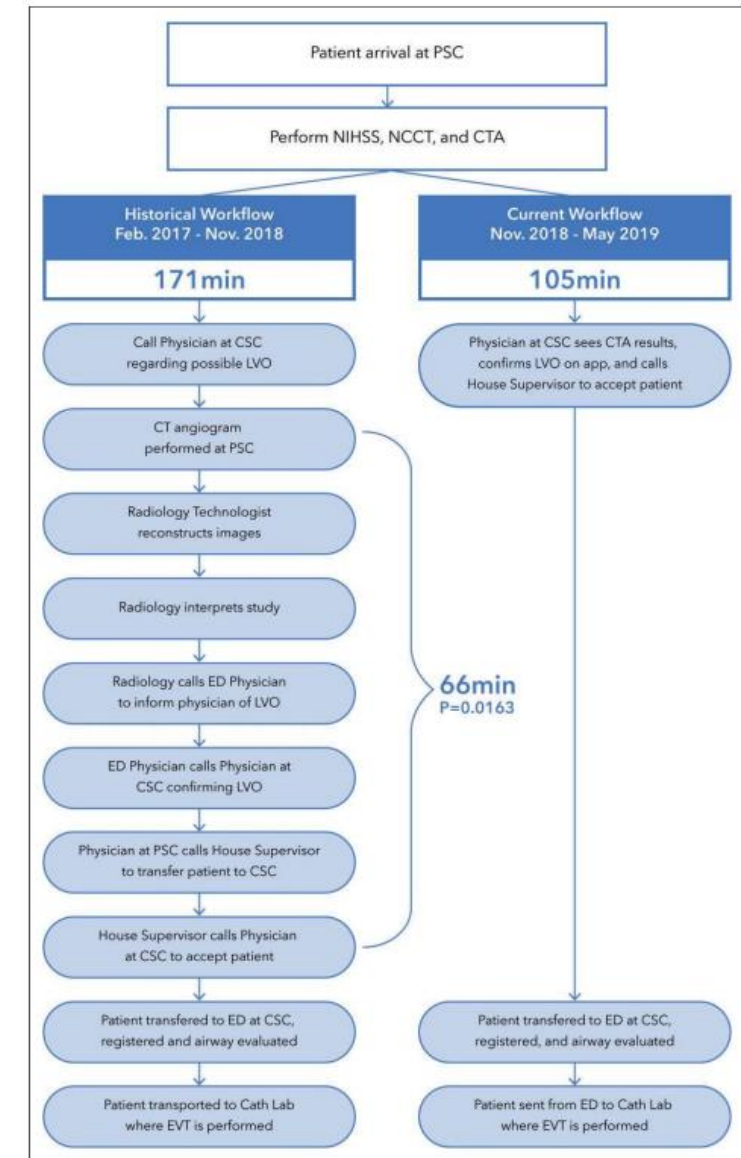
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Figure 1. Depiction of the Hub and Spoke Network Before and After the Implementation of AI Software using mean time of CT Angiogram at primary stroke center to door-in at comprehensive stroke center.