Viz.ai

WELCOME TO

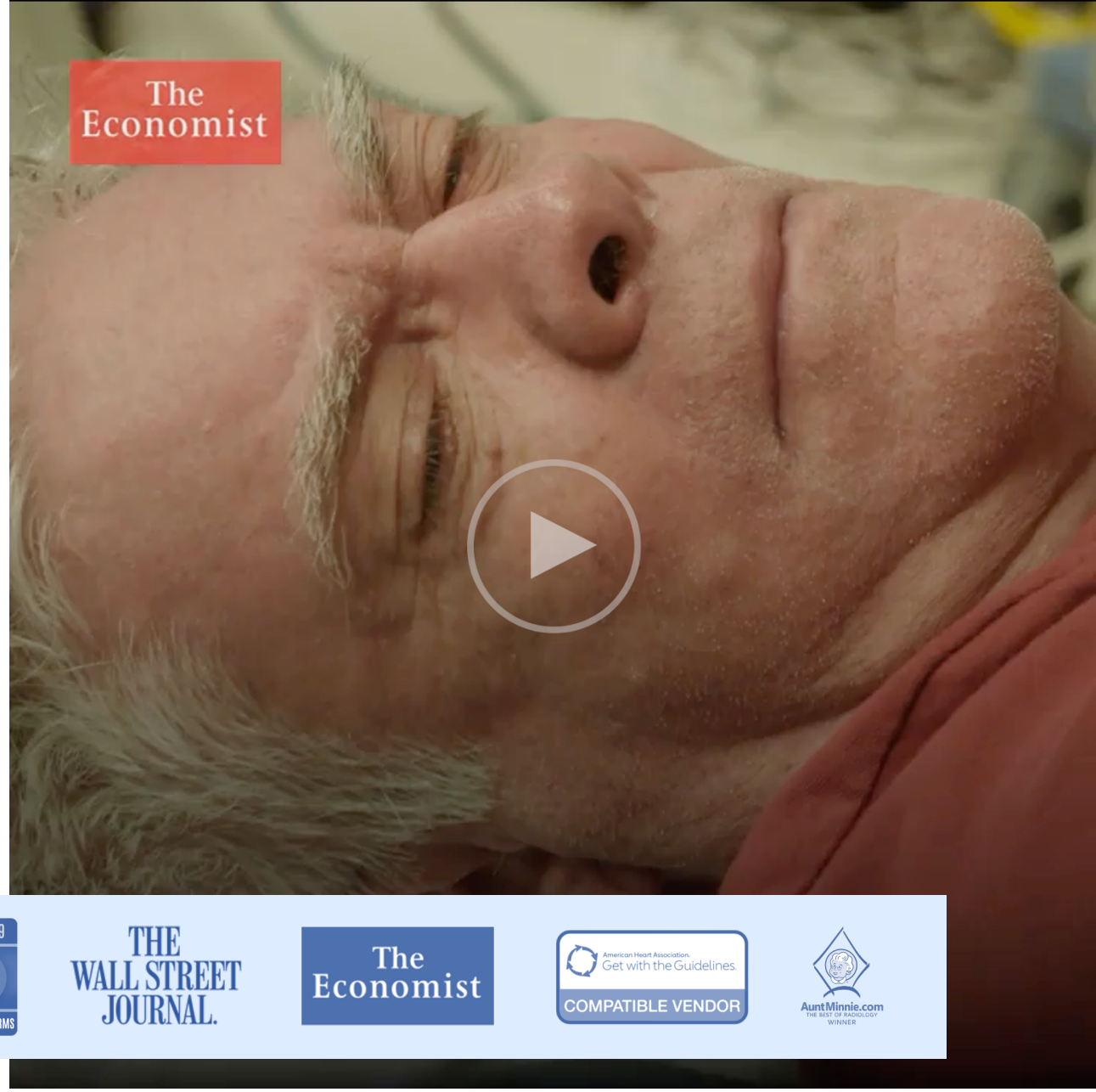
Intelligent Care Coordination for Stroke

DR. DERICK EN'WEZOH
VICE PRESIDENT OF GROWTH
DERICK@VIZ.AI

OUR MISSION

Inspired by Patients. Built by Doctors.

Viz.ai's mission is to fundamentally improve how healthcare is delivered in the world, through intelligent software that promises to reduce time to treatment, improve access to care and increase the speed of diffusion of medical innovation.



Forbes 2019 AI 50 MOST PROMISING AI FIRMS

THE WALL STREET JOURNAL.

The Economist

American Heart Association. Get with the Guidelines. COMPATIBLE VENDOR

AuntMinnie.com THE BEST OF RADIOLOGY WINNER

Viz.ai. The Economist. 2018..

MILESTONES

A New Era of A.I. in Stroke Care

2018

Viz.ai Released First-Ever, A.I. Powered Neurovascular Platform

Unveiled first-ever A.I.-powered computer-aided triage and notification system for suspected ischemic strokes.

FDA

2019 Medtronic Further, Together

Partnered with Medtronic to Accelerate Adoption

Medtronic and Viz.ai partner to accelerate the adoption of Viz.ai's technology in hospitals across the United States.

2020

Released Telehealth Platform

Announced telehealth platform enabling asynchronous and synchronous communication between providers, patients, consulting specialists.

2020 CMS CENTERS FOR MEDICARE & MEDICAID SERVICES

Granted Unprecedented Reimbursement by CMS

CMS granted Viz.ai the first New Technology Add-on Payment (NTAP) for A.I. software of up to $1,040 per use.

2021

Expanding Beyond Neuro and the US

Modernizing care to new diseases and markets.

Time is Brain

American Heart Association. 2021 Heart Disease and Stroke Statistics.

CURRENT STATE OF STROKE

- Every 40 seconds someone in the United States has a stroke, representing nearly 800k strokes annually[1]
- Stroke is a leading cause of death (#5), disability (#1) and costs ($72B) [2]
- Despite having effective medical and surgical interventions, less than 10% of ischemic stroke patients receive IV TPA or mechanical thrombectomy [3]
- Those patients who do receive treatment, often receive it 3-5 hours after stroke onset [4]
- For each minute delay in treatment, patients lose nearly 2M neurons [5]

[1] *AHA. 2021 Heart Disease and Stroke Statistics.;* [2] *Sukumaran M, et al. Endovascular Today. Feb 2019.* [3] *Burton TM. Wall Street Journal. 6 Feb 2018;* [4] *Froehler , M et al. STRATIS Registry. Circulation. 2017.;* [5] *Saver J. Stroke. 2006;37:263-266.*

Why do stroke patients fail to get timely treatment?

THE PROBLEM

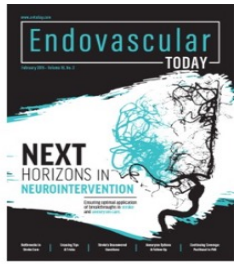
Stroke Workflow is Complex & Challenging

February 2019

Stroke Patient Workflow Optimization

Common bottlenecks in stroke treatment and strategies to resolve them.

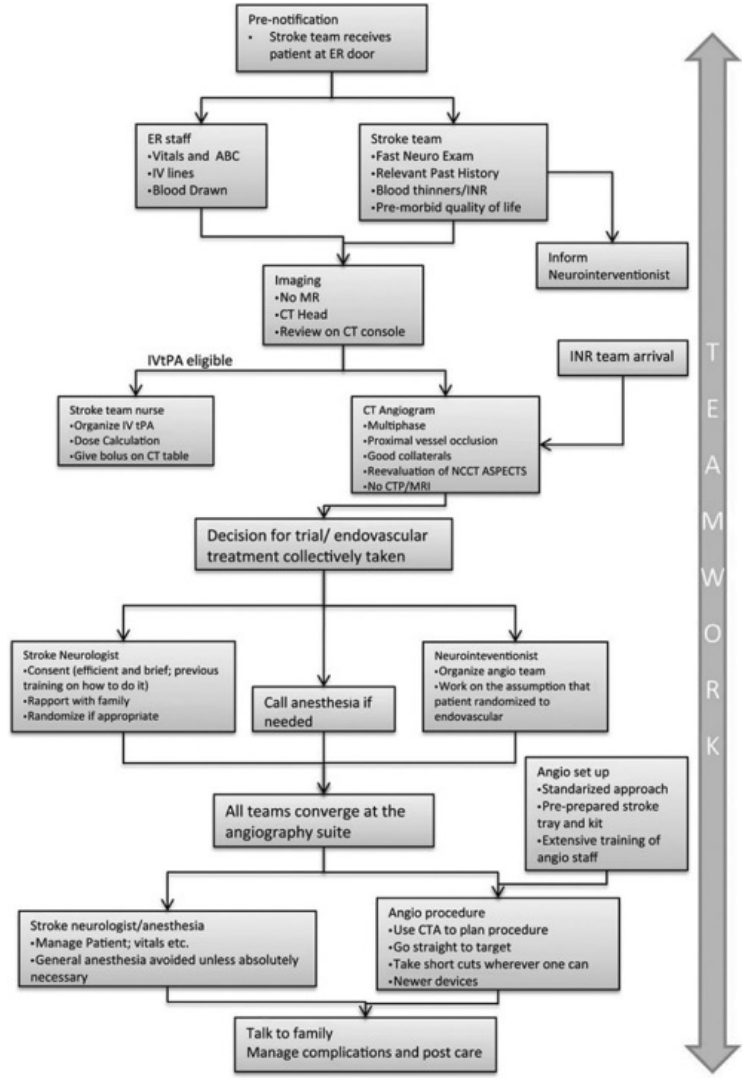
By Madhav Sukumaran, MD, PhD; Donald R. Cantrell, MD, PhD; Sameer A. Ansari, MD, PhD; Michael Hurley, MD; Ali Shaibani, MD; Matthew B. Potts, MD; and Babak S. Jahromi, MD, PhD



SHARE | E-MAIL | PRINT | BOOKMARK | REPRINTS | PDF

CONCLUSION

Effective stroke treatment must be systematically planned to optimize workflow, reduce bottlenecks and delays, and maximize expeditious treatment. Implementing an effective treatment protocol requires coordination of various providers from multiple specialties into interdisciplinary teams, with an emphasis on communication and teamwork. The



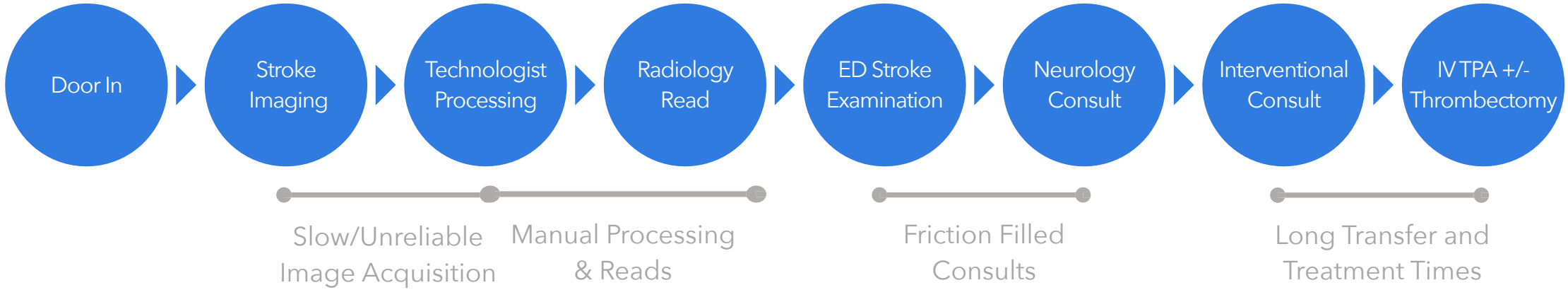
Sukumaran M, et al. Endovascular Today. Feb 2019.; Holodinsky, J et al. Stroke. 2014;45:e252–e256

THE PROBLEM

Friction in Coordinating Stroke Care

Late Involvement of Neuro Specialists

(Neurologist >1.5 hrs, Interventionalist >2 hrs)



[1] *Wang H, et al. J Stroke Cerebrovasc Dis. 2017;26(8):1655-1662.*
[2] *Burton TM. A Breakthrough Stroke Treatment Can Save Lives. WSJ. 6 Feb 2018.*
[3] *Froehler MT, et al. STRATIS Registry. Circulation. 2017;136(24):2311-2321.*

How can we identify strokes earlier and enable faster treatment?

American Heart Association. 2021 Heart Disease and Stroke Statistics.

THE SOLUTION

Possible solutions arising in the field of stroke

Mobile Stroke Units

Stroke Helmets

Train More Neuro-Interventionalists

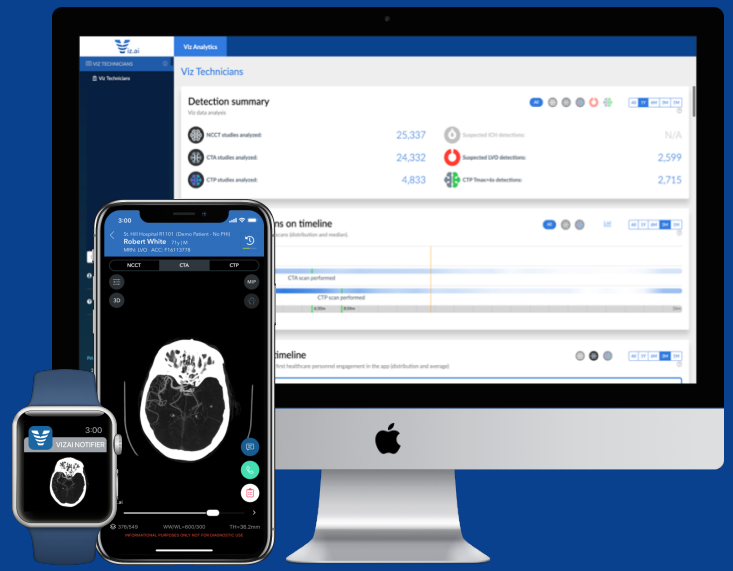
Robotic Telemedicine

Viz.ai

A.I.-Powered Systems of Action

VIZ.AI

A.I. Powered Systems of Action



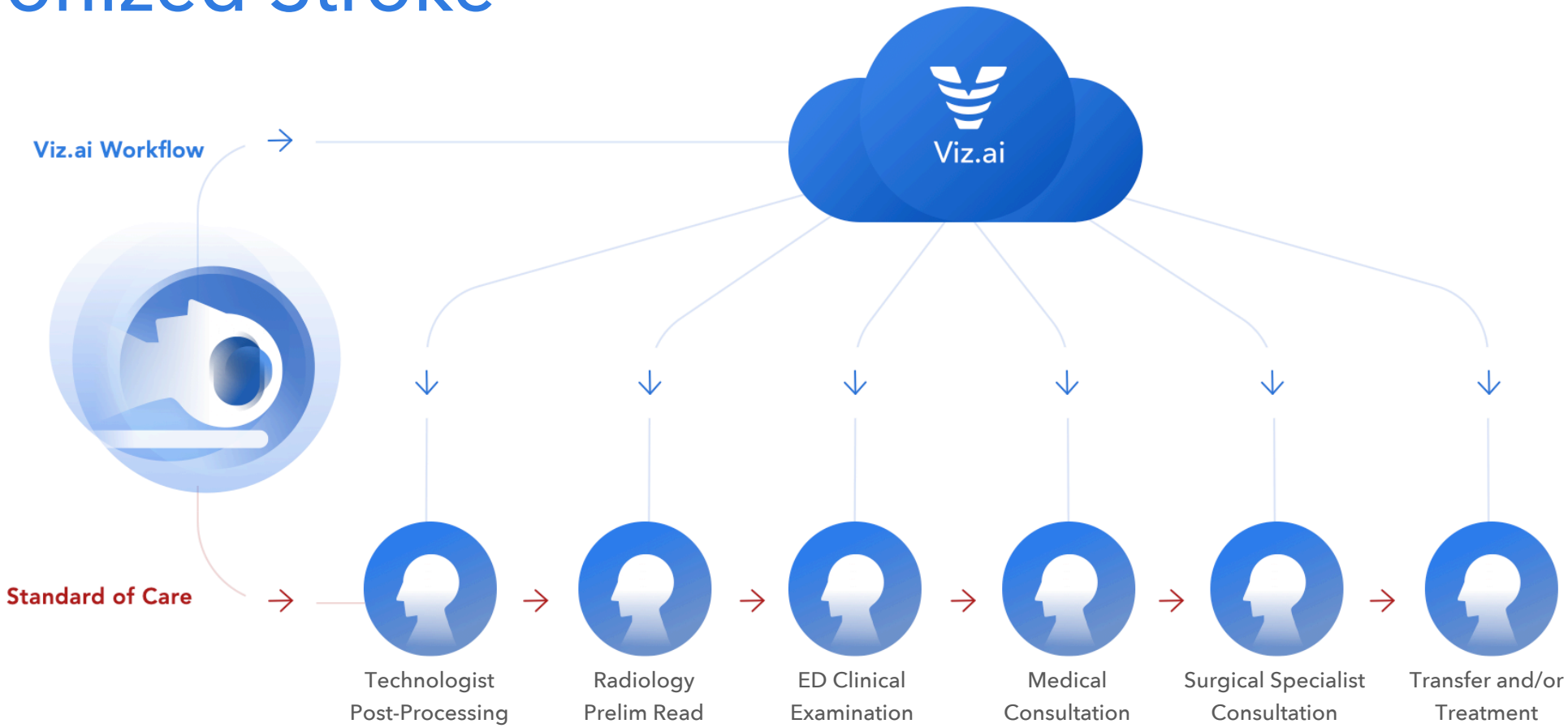
1. **AI-Powered Disease Detection**
2. **Real-Time, Automated Alerts and Triage**
3. **High-Fidelity, Mobile DICOM Image Viewer**
4. **Secure Patient Messaging & Group Communication**
   Asynchronous & Synchronous
5. **Point of Care Physician Consults & Patient Scheduling**
6. **Proven Substantial Clinical Benefit**

OUR SOLUTION

Intelligent Care Coordination

OUR TECHNOLOGY

Synchronized Stroke Care



Intelligent Care Coordination Platform

Viz LVO

A.I. powered and automated detection of suspected LVOs.

Viz CTP

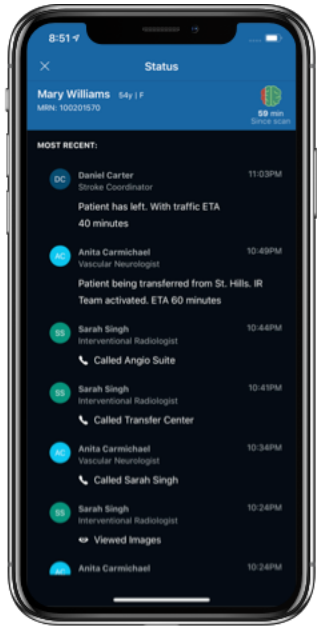
Automated CT perfusion mapping and analysis.

Viz ICH

A.I. powered and automated detection of suspected ICH.

Viz VIEW

Mobile DICOM viewer for NCCT, CTA, and CTP images.



Viz HUB

Secure communication and workflow visualization.

FUNCTIONALITY

A.I.-Powered Functionality

Dynamic 3D Viewing
Viz LVO allows dynamic rotation along ANY dimensional axis.

Automated MIPS
Viz LVO creates MIPS can be manipulated in real-time.

A.I. Motion Artifact Correction
Viz CTP uses deep learning to automatically correct for motion.

Patient-Focused & Group Chat
Viz HUB is the "WhatsApp" of healthcare.

Quick Case Sharing & Calling
Viz HUB allows users to share cases and call colleagues quickly.

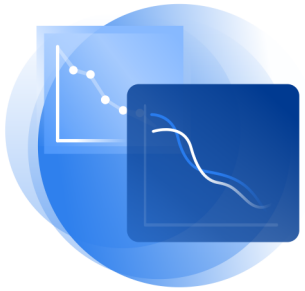
Actionable Clinical Intelligence
Viz HUB collects and presents actional clinical information.

Real-World Clinical Impact

Saving Time

1hr+ Time Savings

After installing Viz, 100% of cases had Door to Skin Puncture time of less than 90 min ($p < 0.001$).[1] Viz resulted in statistically significant time savings of 66 minutes from PSC Imaging to CSC Arrival.[2]



Shorter LOS

3.5 Less Days in Neuro ICU

Viz resulted in a statistically significant reduction in neuro ICU length of stay by 3.5 days and overall length of stay by 2.5 days.[2]

Better Outcomes

Improved 90-Day mRS

Viz resulted in statistically significant improvements in 5-day NIHSS (51% improvement), Discharge mRS (37% improvement), and 90-Day mRS (40% improvement).[3]

[1] Whaley M, et al. ASNR Webinar. 2020. [2] Hassan A, et al. ISC Abstract. 2020. [3] Fifi J, et al. medRxiv. 2020.

THE TRANSFORMATIVE SHIFT

Traditional Care

Meaningful Use Era

- Manual Disease Detection
- Slow Serial Processes
- Costly Information Silos
- Blind Spots in Care Continuum
- Disparate Point Solutions
- Outdated Desktop Tools

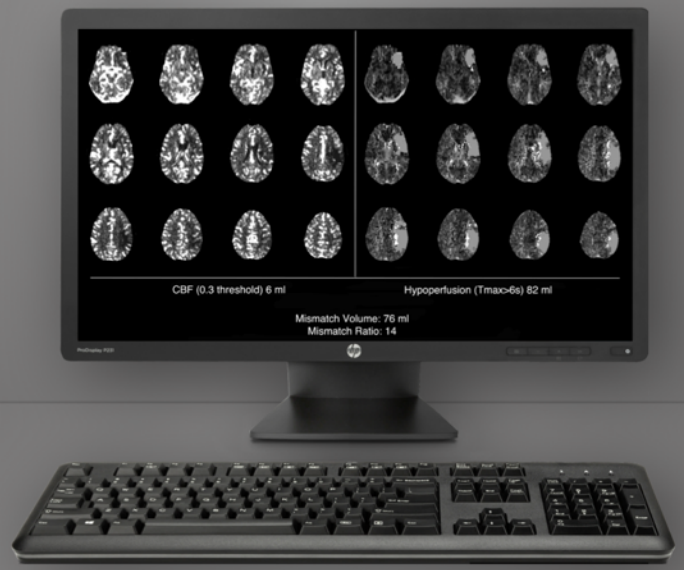
Viz.ai

Intelligent Care

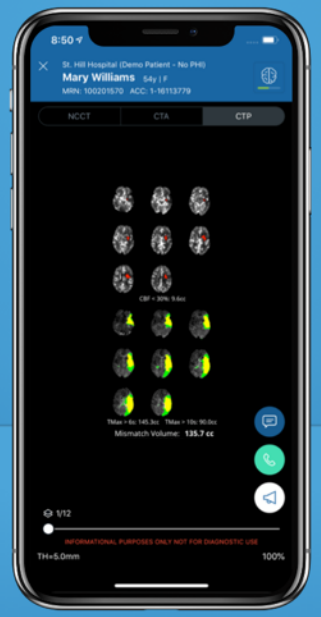
Value-Based Care Era

- Automated Disease Detection
- Efficient Parallel Processes
- Integrated Data & Information
- Visibility Across Care Continuum
- Unified Care Delivery Platform
- Advanced Mobile Experience

OLD



NEW



There's the old way

(Semi-Automated Analysis of CT Perfusion Images)

And there's the Viz.ai way

(A.I. Powered and Automated Detection of Suspected LVOs, Analysis of CT Perfusion Images, and Triage of Patients)

Viz.ai

Time is Brain

DR. DERICK EN'WEZOH
VICE PRESIDENT OF GROWTH
DERICK@VIZ.AI