

# TUH Living Lab - AI

HSE Digital Academy Forum

05/10/2020



HSE Digital  
Transformation

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Transformation



Tallaght  
University  
Hospital

An Academic Partner of Trinity College Dublin

Ospidéal  
Ollscoile  
Thamhlachta

Ms. Lucy Nugent Chief Executive

Dr. Dan Ryan Consultant Geriatrician/Stroke  
Physician

# Artificial Intelligence – Stroke Thrombectomy

## Case from August

I was on-call for stroke for Tallaght and Naas hospitals for the weekend

I was in the Emergency Dept Sunday seeing another patient and then was on my way home

A new stroke arrived in ED within the time window for treatment at 12.03pm

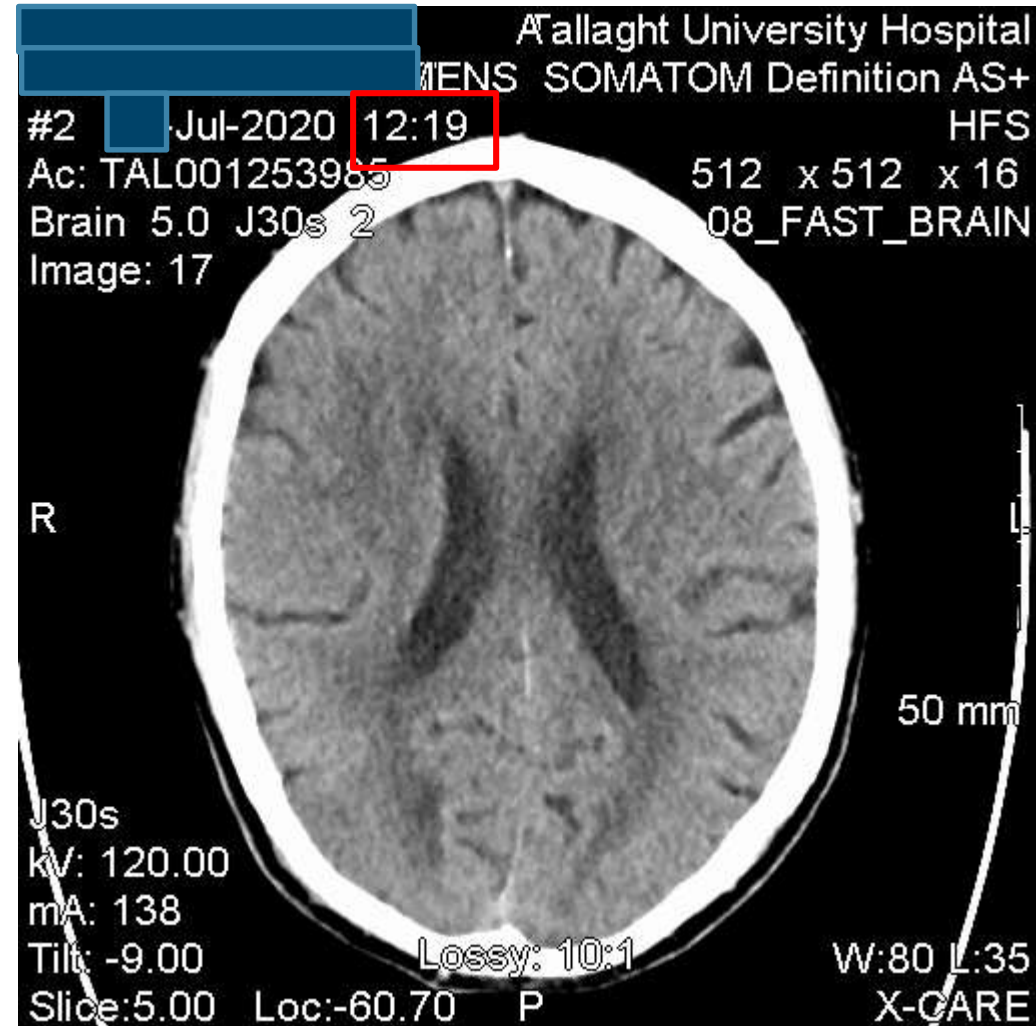
# Artificial Intelligence – Stroke Thrombectomy

12:23 I received a text message alert while in Templeogue-on way home  
Clicked into the app on my phone

12:27 I phoned the medical registrar- he was still in the scanner with the patient

I could drive in as I knew I had time

Aphasic patient (couldn't speak) so left Middle cerebral artery  
Radiology reported CT brain as normal- I agreed  
Brainomix said no CT brain bit off on the right??



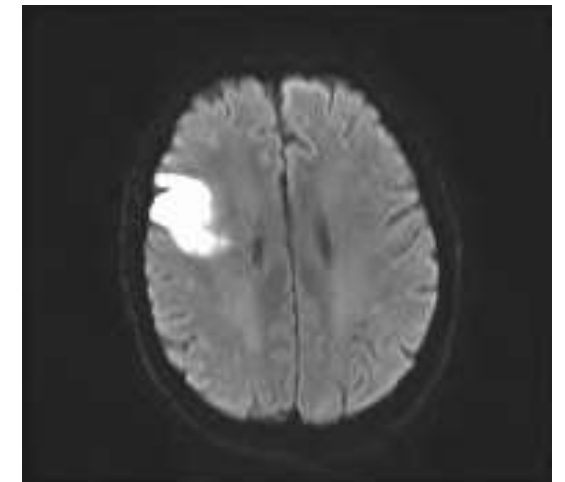
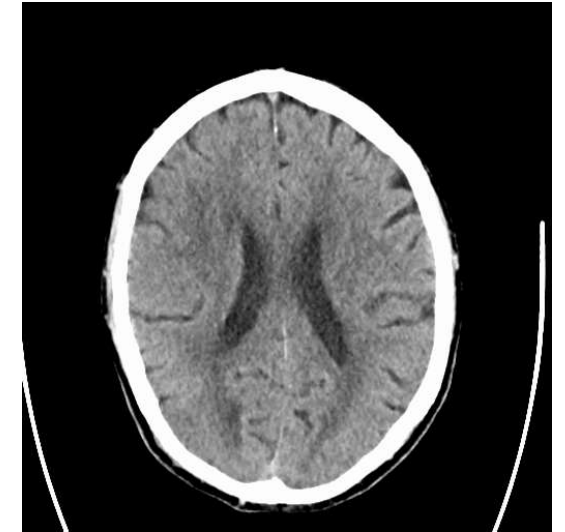
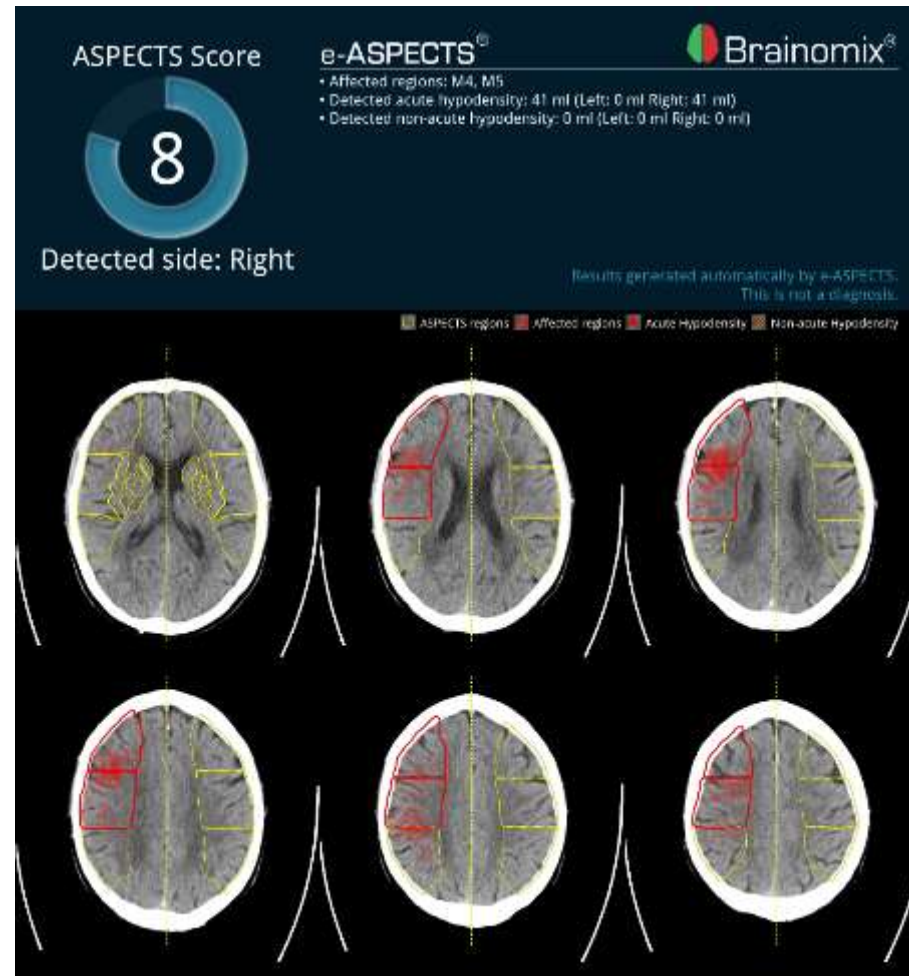
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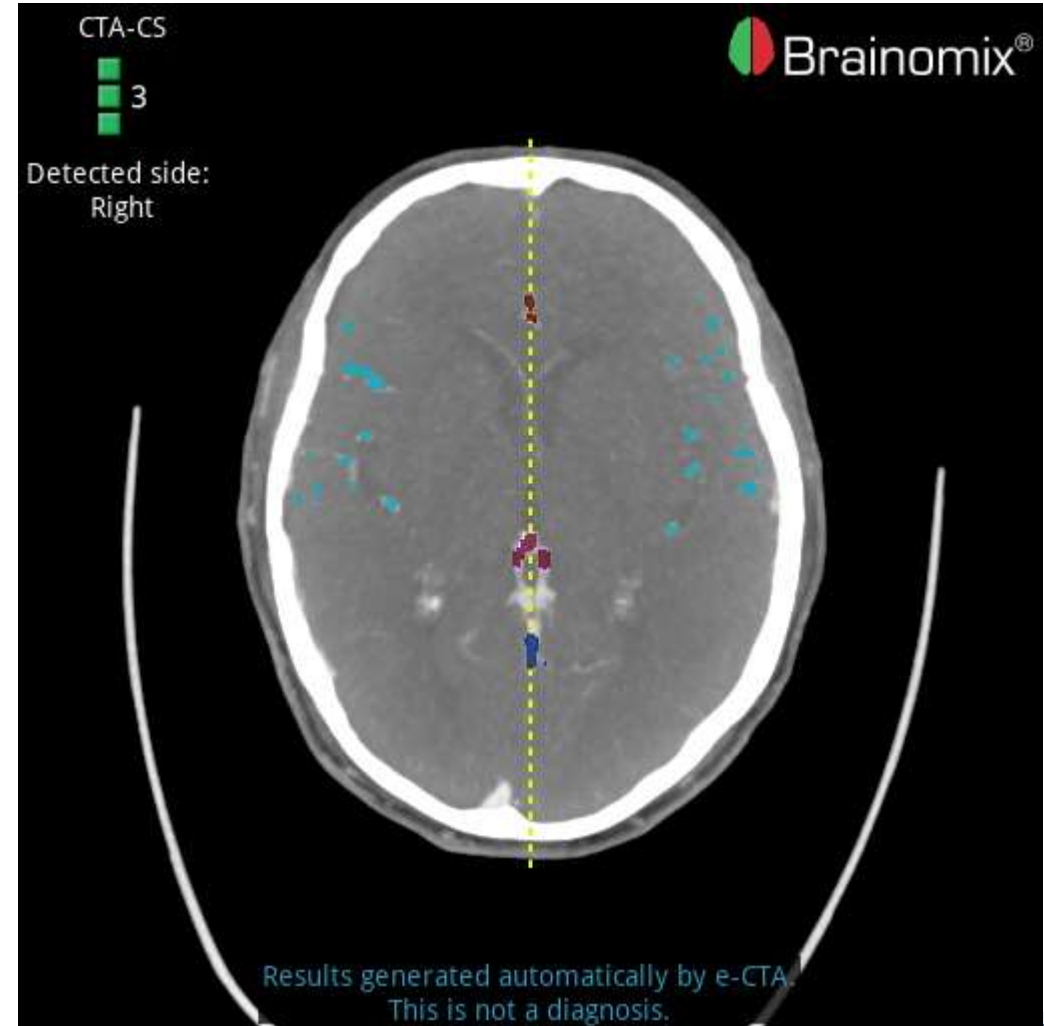
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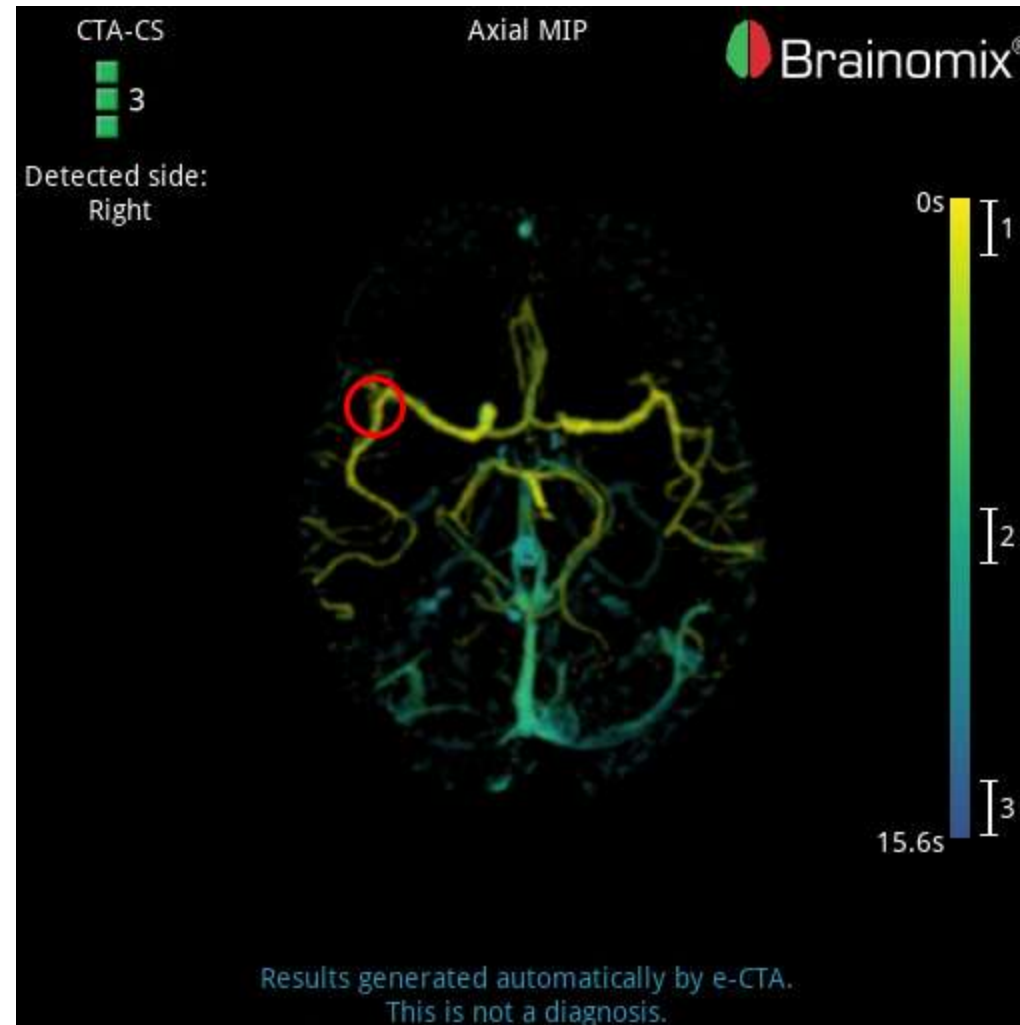




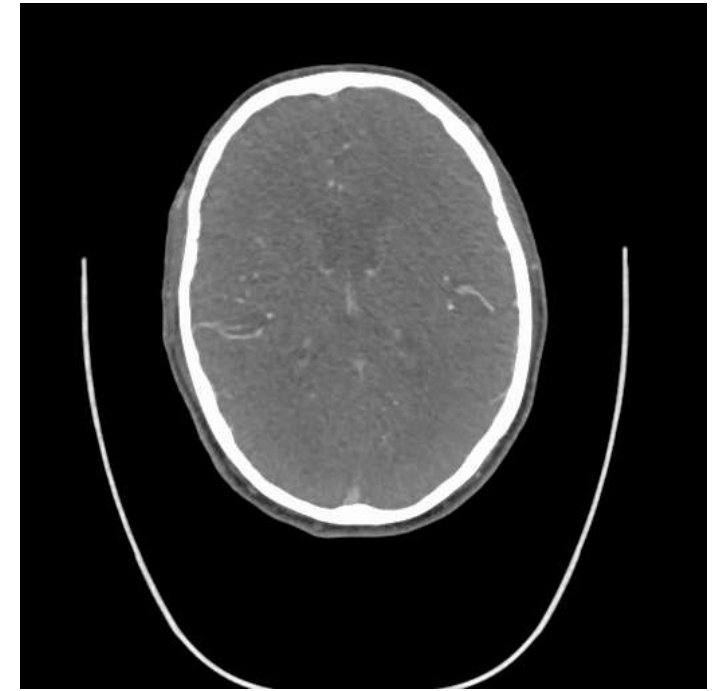
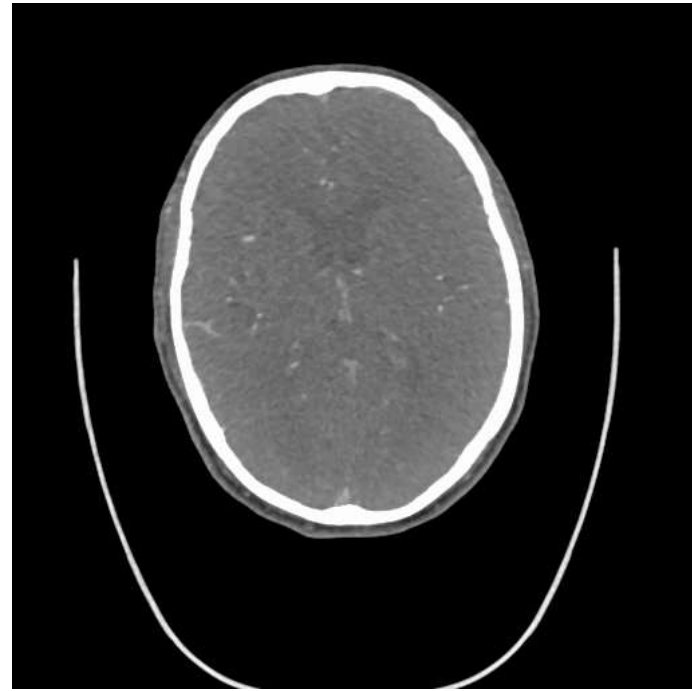
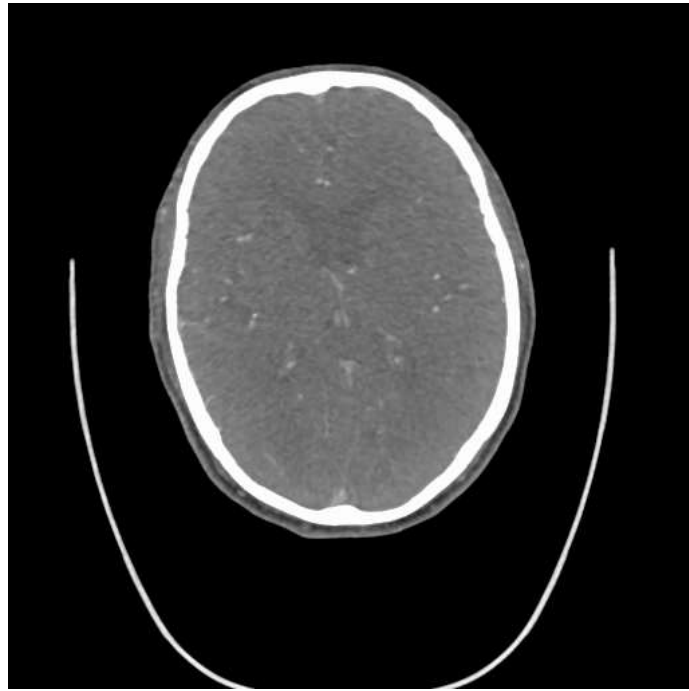
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## What Brainomix did

- It notified me of a FAST +ve in ED immediately that the scan was complete
  - Sped the entire process up
- It picked up damage on the CT brain that I struggled to see
- It picked up a possible occlusion of the brain vessel- amenable to thrombectomy- that I wouldn't otherwise have seen

## What for?

- Tells me early there's a stroke in ED
- It improves the speed of our image interpretation
- It improves the quality of our image interpretation
  - Second set of eyes looking at the scan





# Thank You!



Tallaght  
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