This is a fifth newsletter in a series of ONCORG Community Conversations. They're focused on relationships between doctors and patients, and the complexity of cancer.

March 2026 – Early Edition: Welcome to AI in Medicine. 'Technology to help your doctors!'

Rodney Thomas is a senior officer working for ONCORG, INC, headquartered in Mt. Laurel, NJ. ONCORG was developed as a comprehensive cancer support service for those seeking a first or second opinion for their cancer.

Mr. Thomas is a military veteran who served 8 years in the USAF. He also spent 11 years in the automotive industry, 10 years in healthcare and 8 years with Apple Inc. supporting customer needs.

So he has a unique insight into what it takes to enhance the customer experience and obtain strong customer feedback, which is essential to a company's reputation. He also understands how to maximize performance from a team by encouraging collaboration.

In our last newsletter we talked about how a *multidisciplinary* group works cohesively to battle the enemy cancer. They have better more precise technology to detect previously undetectable cancer cells. We talked about surgeons, radiation oncologists, pathologists, radiologists, pain management and obviously nurses. They meet regularly and their objective is 'YOU.'

In this newsletter, I'll be introducing you to how AI is used in medicine to read images and how it's used to analyze information. In our next newsletter I'll introduce you to Watson and other analytics tools.

My Previous Life

I worked for Apple for eight years and left them in February 2024. During that time I took a couple of classes on-line at MIT focused on AI and Machine learning. We had quite a few case studies. Our first case study was focused on how AI was used to read an MRI. We learned about CNN's, also called Convolutional Neural Networks. AI analyzes lots of image data to identify patterns, such as cancer/benign tumors, early signs of Alzheimer, Parkinson diseases or brain hemorrhages. AI can also be used to detect, break down or categorize tissue patterns in the brain, spine or joints. It's also used to grade cancer in multi-parametric (combines different MRI techniques into a single scan) prostate imaging. This helps reduce unnecessary procedures. This is a big deal.

At Apple we learned how CNN is used for facial recognition from your IOS devices.

How does CNN work?

CNN is a type of deep learning algorithm that process 'grid-like' data such as images, photographs. Everything starts with 'trainable' data, and CNN passes the new date through layers of trained data, and looks for patterns, edges, shapes, and textures, and eventually determines a final classification. That's a simplistic view of how AI is used to read an MRI. It's about understanding patterns compared to other digital patterns.

On a separate note I wondered how AI would affect Nighthawking. Hospitals use ***Nighthawking***, which is an outsourced human resource living in another time zone. Let's say, an MRI was taken at an US East Coast hospital near the end of the work day. Instead of the hospital paying for an extra shift resource to read an MRI, the hospital would send the MRI image (HIPAA compliant of course) to a resource in another time zone such as Australia. The MRI would be ready the next day at the beginning of the East Coast hospital shift. Today, because of AI the need to Nighthawk is evolving and more images are read in less time. Very cool stuff! Think about how your healthcare provider can respond to your medical needs sooner than later. Think about how your oncologist can spend more time with you instead of dealing with the technical side of your images. Think about how previously missed cancer cells can now be detected because of AI.

At Apple, we learned how CNN is used for facial recognition. Apple authenticates your face and photos apps pictures. Apple did that at the local IOS device level without exchanging data in the cloud. This is a security and efficiency issue.

Apple uses 30,000 infrared dots to create a 3D map. From that map, Apple determines the distance between the subject's eyes, the shape of the nose or the jaw line. The CNN recognizes when the subject wore a hat, sunglasses or grew a beard, or just normally aged. It continuously encrypted the image without leaving the device.

Similar images are grouped across many photos (such as photo library) and helps with organization. Have you ever wondered how you could search your photo library for a person, animal or inanimate object? That's CNN for you. There are similarities between MRI pictures and facial recognition. BTW, Apple never figured out how to differentiate identical twins. LOL!

In our next ONCORG newsletter we'll describe how large amounts of data is sifted to help your provider determine the next best course of action. We'll introduce you to WATSON.

Rodney Thomas
ONCORG – Chief Communication Officer

For more information, visit: https://www.oncorg.com/newsletter