

Using artificial intelligence in radiology clinical practice

Video	Audio
	Using artificial intelligence in health care seems like a futuristic concept, but it's something that's being used now to complement the knowledge of doctors. Radiology was one of the first areas that saw a lot of AI applications.
Bradley Erickson, M.D., Ph.D. Neuroradiology Mayo Clinic	"Radiology has had the lead, partly because AI is driven by data, and radiology has a lot of digital data already ready to be used by AI."
	Dr. Bradley Erickson, director of Mayo Clinic's Al Lab, says in the case of radiology, machine learning is used to complete some of the more time-consuming work.
	"It's actually doing a lot of the more mundane work like tracing tumors, tracing structures. Measuring the amount of fat and muscle in body CTs is another example."
	"And so, if a computer can do that first pass, that can help us a lot."
	Beyond that, the diagnostic capabilities of AI are what attracts a lot of the appeal.
	"To help detect intracranial aneurysms, intracranial stroke, pulmonary embolism. We also use it for identifying some potential molecular markers."
	While imaging-related AI has seen a lot of advancements, Dr. Bhavik Patel, director of AI at Mayo Clinic Arizona, says the next step is looking at AI applications for preventive health and shifting the mindset from pipeline to platform thinking.
Bhavik Patel, M.D. Radiology Mayo Clinic	"We have an AI model now that can incidentally say, 'Hey, you've got a lot of coronary artery calcium, and you're at high risk for a heart attack or a stroke in five or 10 years.' And you might not have otherwise known that. And now that we've detected that, and we can see in your electronic medical record that you're not seeing a primary care physician, you're not on a cholesterol lowering medications, let's get you plugged in somebody within the Mayo Clinic. And let's start following you more closely. So we're not waiting

for that patient to come back to us with that preventable event."
There are a broad area of applications (for AI), starting in radiology, but really spreading into the rest of the clinic, including cardiology and even pathology.
For the Mayo Clinic News Network, I'm DeeDee Stiepan.