India's first 5G driven, artificial intelligence guided colonoscopy trial

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Solutions built on 5G and AI are key to assist doctors to bring quality care to the maximum population

Communications solutions provider Bharti Airtel and Apollo Hospitals have carried out India's first 5G driven, artificial intelligence (AI) guided colonoscopy trials.

The trial was conducted using AI on Airtel's 5G technology with ultra-low latency and high processing capabilities that resulted in detection of the colon cancer much faster and with greater accuracy. HealthNet Global, AWS and Avesha are the other three companies that collaborated in these trials.

As per current protocol, colon cancer is detected through colonoscopy procedure which is manual and requires great attention and time from medical practitioners for accurate detection. This procedure is performed using a device comprising a light, flexible tube with light, camera and tools at one end, which are used to extract samples to identify an infected polyp. Not only is the procedure long, its discomforting for patients and for the doctors and nurses who have to perform this procedure which takes around 30 to 40 minutes per case.

As a result of AI guided colonoscopy procedure, the image processing happened in real time without any lag even when the physician moved the scope through the colon for it to be overlaid on top of the right element of the colon. The advent of this technology enables an "extra pair of eyes" for physicians and improves the detection rate of polyps, thus saving lives and vastly improving patient care.

The data was processed by Avesha edge inferencing applications on AWS platforms in real time which ensured analysis closer to the end points.

AI assisted Colonoscopy Polyp Detection trial will help doctors to improve quality of patient care, improve accuracy of detection rates by capturing information correctly and reducing errors.