



Healthcare/Pharma

Daily Use

- Research and development
- Access to experts
- Tele-Medicine
- Quality assurance
- Clinical trial assessment and rating

Solution

- (220) Polycom video conferencing systems
- Polycom Global Management System™ software
- Polycom Video Border Proxy™ (VBP™) network security solution
- Polycom Lost Packet Recovery™ (LPR™) technology

Results and Benefits

- Enables trial sponsors to reduce clinical trial failure rates
- Reliance on Polycom video enables MedAvante to cut costs, improve accuracy, shorten trial length, and eliminate bias
- 1.1 million minutes of video and nearly 15,400 video assessments in first four years
- Ability to easily expand overseas while cutting network costs by at least two-thirds

With Polycom Video Solutions, MedAvante Makes a Success of Clinical Drug Trials

It can take more than a decade—and more than \$1.6 billion—to develop, test and introduce a new treatment for depression, schizophrenia, Parkinson's disease and other disorders of the central nervous system (CNS). To cut costs and bring new drugs to market sooner, pharmaceutical companies have long sought to reduce the failure rates of the clinical trials required to determine whether a new treatment is effective and safe.

Achieving a conclusive end to a clinical trial—even if the drug itself fails—is the ultimate goal of trial sponsors. Drug studies can last two years or more, so concluding them sooner can save drug companies millions. A successful trial requires accurate, consistent, and unbiased assessments throughout the life of the study.

That's why many of the world's largest pharmaceutical companies rely on MedAvante, Inc., a pioneering psychological rating service that centralizes the process of assessing CNS trials.

The company's business model is built around a video communications infrastructure from Polycom. Through video-based interviews conducted throughout the duration of the trial, MedAvante's clinicians help trial sponsors:

- Objectively determine who belongs in a clinical trial
- Establish a baseline assessment of severity of the CNS condition the new drug is designed to treat
- Measure changes caused by the medication under study, which helps pinpoint the potential positive effects of the treatment

Building a Business around Polycom

Since 2005, MedAvante has relied on an ever-growing Polycom infrastructure that allows clinicians to interview trial participants in an interactive, face-to-face environment. To date, the company conducted nearly 40,000 individual batteries, representing a total of 1.1 million minutes of videoconferencing time.

"Without video, our business model wouldn't work," says Ben Barrell, video services manager at MedAvante. "Our service was completely built upon the idea that video conferencing has to work perfectly so a remote assessment can be as effective as an in-person interview.

"We chose Polycom because we knew that, for our business to succeed, this has to work every single time, again and again and again."

Ben Barrell, Video Services Manager, MedAvante, Inc.

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You need the intimate connection, that rapport, so subjects readily disclose to clinicians things they otherwise wouldn't."

MedAvante chose Polycom because of its renowned quality and reliability—which, in a CNS trial, can have special significance. "For subjects suffering from severe mental disorders, a jittery video connection might be confused with a hallucination," says Barrell. "We chose Polycom because we knew that, for our service to succeed, this has to work every single time, again and again and again."

Barrell says Polycom is also a respected brand among pharmaceutical companies. "A lot of major pharma companies already use Polycom, so when we first presented our video-based model to them, the choice of Polycom gave us instant credibility. Our clients understood why we selected Polycom."

MedAvante's video communications infrastructure includes 220 Polycom VSX series video conferencing endpoints, 180 of which are installed at trial facilities throughout North America. The Polycom Global Management System™ software enables MedAvante's modest IT staff to manage an average of 60 video-based interviews a day across a MPLS-based private network over dedicated T-1 lines. And Polycom video transmissions are FIPS-2 compliant, which enables trial sponsors to comply with privacy mandates.

And for staff and participants at trial facilities, installing and using the systems couldn't be simpler. "We take the Polycom unit, put it on a small LCD screen and connect it as a pre-configured all-in-one unit. The users pull it out of the box, plug it in, connect to the network, and they're ready for a test call. This is a testament to the ease of use and installation of Polycom systems."

Eliminating Bias and Improving Accuracy

With its unique centralized rating model, MedAvante also can shield trial sponsors from the kind of clinician biases and inconsistencies that can corrupt clinical findings and lengthen trials by months or years. CNS trials are particularly challenging because of the subjective nature of CNS disorders. To rate how study subjects are responding to a drug, clinicians must conduct face-to-face interviews over the life of the trial.

"The traditional approach has clinicians interviewing trial subjects at the study site, but that model has certain challenges," explains Barrell. One problem is that with pressure to enroll subjects and payment based on the number of patients enrolled in a trial, subjects who don't fully meet the trial criteria

are sometimes enrolled in trials. "It's difficult to accurately assess how subjects are responding to a trial medication if a number of those subjects really shouldn't be in the study at all."

In contrast, MedAvante's service improves accuracy by employing a centralized pool of carefully trained clinicians who remotely interview trial participants using an encrypted Polycom video connection. MedAvante regularly retrains and calibrates its pool of clinicians to ensure ratings remain consistent throughout the life of the trial. The company also ensures its clinicians can't be influenced by factors that could influence results.

"We're paid for our service, not by the number of patients enrolled in a trial, so that removes one potential bias," says Barrell. "And our clinicians are blinded. They don't know what drug is under study, or who is getting the drug versus a placebo, or even the location of the site they're calling. We've eliminated all these prospective areas of bias that have plagued clinical trials for years."

Expanding, While Still Cutting Costs

Now MedAvante is taking its remote centralized ratings service to new markets. In early 2010, the company plans to expand to clinical trial facilities in Russia.

To help keep operating costs down, Amir Elfar, MedAvante's VP of IT, is overseeing deployment of the Polycom® Video Border Proxy™ (VBP™) networking security solution to make it easier to accommodate new endpoints. Elfar plans to combine VBP with the breakthrough Polycom Lost Packet Recovery™ (LPR™) technology, which helps protect IP video calls from the damaging impact of packet loss common to public broadband networks.

"With VBP and Polycom LRP, we can seriously consider using the public Internet for the first time," says Elfar. "Now we can offer the same great experience while cutting our network costs by two-thirds at least."

And that gives MedAvante yet another way to measure success.

Learn more.

To find out how Polycom solutions can help your organization, visit us at www.polycom.com or speak with a Polycom Account Representative.

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