

Case Study 1



Flawless Live Surgery Transmission for the Gurugram ENT Update Workshop

CLIENT

Dr Bhushan Patil Organising Secretary
Gurugram ENT Association
Event: Gurugram ENT Update Workshop
Location: Palm Club Gurugram
Date: 27 April 2025

OBJECTIVE

To deliver a real-time, high-definition, uninterrupted live transmission of surgical procedures from Max Fortis Gurugram to the main conference venue, allowing over 300 delegates to:

- Observe advanced surgical techniques
- Interact with operating surgeons in real time
- Facilitate knowledge transfer and Q&A

CHALLENGES

1. Technical Complexity

- Synchronizing live feed from Max hospital ORs to the main venue
- Ensuring high-definition video and audio with minimal latency or buffering
- Securing bandwidth and backup systems

2. Coordination Across Institutions

- Aligning schedules between hospital teams, surgeons, AV vendors, and the conference team
- Navigating hospital protocols and data privacy concerns

3. Medical Confidentiality & Legal Compliance

- Ensuring informed patient consent
- Maintaining full compliance with HIPAA / GDPR and local medical broadcasting laws

4. Audience Engagement

- Enabling interactive Q&A with surgeons during procedures
- Ensuring seamless experience for both in-person and virtual attendees (hybrid model)



SOLUTION

SEM Team tasked with the above undertook the following:-

1. Technical Setup

- HD Cameras with robotic zoom capability installed in both operating rooms
- Fiber optic and satellite backup links ensured stable and redundant transmission paths
- Real-time switching hub at the conference venue to manage multi-feed streaming
- Use of low-latency streaming technology (WebRTC over fiber) for sub-2 second delay
- AV Control Team on-site and at both hospitals for technical supervision

2. Pre-Event Testing

- Three full-scale mock trial runs conducted one month, one week, and one day before the event
- Simulated worst-case scenarios (e.g., power outages, audio loss) with backup protocols tested

3. Coordination & Training

- Joint task force created including representatives from both hospitals, IT teams, and the conference committee
- Surgeons trained on camera angles, microphone usage, and interaction protocols
- Dedicated staff for real-time chat moderation and relaying delegate questions

4. Legal & Ethical Oversight

- Written informed consent obtained from all patients involved
- No identifying visuals shown; real-time blur filter and audio gate used to protect patient identity
- Legal review and medical ethics board approval obtained in advance



OUTCOMES

- ✓ 100% successful transmission from both hospitals
- ✓ Zero downtime or signal loss during the live sessions
- ✓ Over 500 on-site and 1,200 virtual delegates engaged during live surgeries
- ✓ Live interaction with surgeons enhanced learning experience
- ✓ Received 97% satisfaction rating from post-conference survey responses

CLIENT TESTIMONIAL

"This was the most flawless and professionally executed live surgery we've ever been part of. The SEM Events and Meetings team and partners ensured zero disruptions and made complex medical knowledge accessible to all our attendees in real time."

- [Dr. Bhushan Patil Organising Secretary ENT Association of Gurugram]

Key Takeaways

- Meticulous technical planning and multi-level coordination are crucial for successful surgical streaming
- Redundancy is essential — both in internet connectivity and equipment
- Legal compliance and ethical considerations must be front-loaded and not treated as an afterthought
- Audience engagement tools (Q&A, moderator support, hybrid access) amplify value