



Making complex decisions when confronted with conflicting opinions

Dr. Ramesh, a dermatologist from Tirupathi, traveled to Chennai with his father-in-law, Mr. Subramaniam, who had been diagnosed with prostate cancer. It had been diagnosed at an early stage and there was a good chance that the right treatment could lead to a complete cure. Mr. Subramaniam was a fit 61-year-old who went for walks in the morning and was in great physical shape. He looked forward to beating the disease. Owing to the contacts of Dr. Ramesh, they were able to get appointments with two oncologists at a top private hospital in Chennai. They felt enthused that this trip would be successful and that they would get clarity on the path forward. After they met with the two specialists, the family seemed more confused than ever. The surgical oncologist recommended immediate surgery and the radiation oncologist opined that radiation followed by chemotherapy would be the recommended course of action. Even though both of these specialists were practicing in the same hospital, the patient needed to take separate appointments and the treatment advice was contradictory with neither consulting the other.

Cancer decisions are complex as they require multidisciplinary opinions. Treatment plans need to be decided by a group of doctors who discuss and weigh the pros and cons of the various treatment paths. In a tertiary care center like Tata Memorial Center or Stanford Medical Center, a case like this would involve a decision being made by a tumour board. A tumour board typically consists of a diagnostic radiologist, pathologist, surgeon, medical oncologist and a radiation oncologist getting together in the same room to discuss the case. A decision is first taken on the diagnosis and staging of the disease where the pathologist and diagnostic radiologist weigh in. Once this is completed, the surgeon, medical oncologist and radiation oncologist decide on the treatment path. The intent is to recommend a path that will provide a complete cure or extend years of cancer free survival or improve quality of life. This can be possible through surgery if the disease is localized and operable. Sometimes the surgeon will suggest that the tumor be shrunk through chemotherapy or radiation and then the patient get operated. Having all relevant specialists weigh in and review the case is the ideal scenario but this is unfortunately not the modus operandi in most hospitals.

Given the contradictory paths presented to them, Dr. Ramesh decided to approach Tata Memorial Center. They became aware of the online opinion service available and registered on www.navya.care. He uploaded all of his father-in-law's reports following which a Navya clinical

analyst reached out to him to not only understand the medical history but also all questions they needed answered. “We believed that we had gone to one of the best hospitals in South India and had met with two reputed oncologists. Even though I am a doctor myself, we were in a quandary as we were given contradictory opinions. Given this situation, we wanted to know from Tata Memorial Center how we should proceed in this case. Navya expedited our request and within 24 hours, we got a report that included the consensus of opinions from three experts including a surgical oncologist, a medical oncologist, and a radiation oncologist. The report was detailed and mentioned all of the treatment options and the reasons for recommended path. An experimental therapy was also considered which gave us the peace of mind that no stone was left unturned.” The treatment recommended was to follow chemotherapy at this time and then consider definitive or curative therapy which could either be surgery or targeted radiation. The path was clear and the patient underwent a cycle of chemotherapy and the family heaved a collective sigh of relief.

Gaining access to even one oncologist can be challenging. Consulting more than one is often not possible, and even when it is, it takes up significant time. Given the criticality of timely treatment, the process of consulting several oncologists can be physically and emotionally draining and can lead to contradictory opinions which lead to confusion. To ensure that the treatment plan is comprehensive and is arrived at after considering all options, Navya processes cases by incorporating opinions of several experts from renowned cancer centers such as Tata Memorial Centre or expert centers such part of National Cancer Grid. Using Navya’s ExpertApp, case details and possible treatment options are sent to multiple experts who discuss the case online and build a multidisciplinary consensus opinion.

Says Dr. Abhishek Mahajan, a diagnostic radiologist at Tata Memorial Centre: “I am able to look at DICOM (*Digital Imaging and Communications in Medicine*) images to confirm the diagnosis and staging of the cancer. In some cases, there can be a question of the origin of the cancer. In one case, the treating oncologist needed to know whether it was a case of liver cancer or if it was a cancer that had spread to the liver.” The therapies recommended for each of these cases could be very different.

“Treatment decision making in oncology is essentially a joint discussion between all care givers, aiming towards the best course forward for the patient. At times, only surgery and radiation may suffice without chemotherapy, or chemotherapy and radiation can make surgery easier, and at times single modalities of treatment like chemotherapy or radiation may be all that the patient requires. What matters most is the optimal timing and selection of right modality of treatment. Navya, through the online ExpertApp, brings together a nuanced consensus from opinions of all the experts, in a language and manner understandable to all stakeholders, thus the best possible care for the patient” says Dr. Tushar Vora, medical oncologist at Tata Memorial Center.

Urging family members of cancer patients, Gitika Srivastava, Founder of Navya, shares her personal viewpoint: "Most people who have had any experience with cancer are aware of TMC and that it is one of the largest tertiary care centers in the world. However, not everyone from far flung areas can come to Mumbai or is aware of the significance of a proper choice in treatment to a change in outcomes. Given the cases we have seen, we would urge everyone to get an expert opinion online at www.navya.care. You can be assured that the opinion rests on the experience of world renowned cancer experts and follows evidence based protocols best suited to your loved one's specific case."

National Cancer Grid (NCG), tmc.gov.in/ncg Tata Memorial Centre (TMC) tmc.gov.in

The NCG is a consortium of 104 cancer centers, with a mandate to standardize cancer care, nationally. NCG is the largest global network of cancer centers collaborating to use technology and training to bring cancer expertise to every oncologist and cancer patient in India. TMC is Asia's largest leading tertiary care expert cancer center, seeing over 67,000 cancer patients every year. Its strength necessitates a responsibility to make its expertise available to patients across India and developing countries, especially those who reside in locations where there are no expert cancer care centers.

Navya www.navya.info

Navya is a clinical informatics and patient services organization with a unique understanding of cancer patients and oncologists and a core commitment to cancer care. With a proven track record of successfully implementing innovative solutions that are low cost and effective, Navya is the first to develop technology systems specific to Indian cancer data for use by cancer patients and oncologists in India. **Contact:** Gitika Srivastava | gitika@post.harvard.edu

Twitter: <https://twitter.com/NavyaNetwork>

Facebook: <https://www.facebook.com/NavyaNetwork/>

LinkedIn: <https://www.linkedin.com/company/15236089>