

SVIMS: An Exceptional Approach to Providing Universal Healthcare

Health equity is one of today's greatest challenges. There are differing views on how best to equally distribute health services. One solution to this challenge can be found in the least likely of places. In Tirupati, India, Sri Venkateswara Institute of medical sciences (SVIMS) is revolutionizing healthcare by delivering free and low-cost healthcare for the country's poor without compromising on quality.

SVIMS is a tertiary health center located in Tirupati near the holy Hindu pilgrimage site Venkateswara Temple, Tirumala. In addition to its missions related to medical research and medical education offering nursing, physiotherapy and medical training programs, SVIMS was established to provide super-specialty care at a nominal cost to the poor regardless of caste, color, creed, sex, race, or religion. Most of the patients at SVIMS are day labourers or farmers from drought-stricken districts of Andhra Pradesh with an annual income well below the poverty line. SVIMS provides a health safety net for these people, offering comprehensive health services, as well as transportation and food for every meal, completely free of cost. This allows the patient to be fully treated while avoiding medically induced poverty.

Brief Intro NTR Vaidya Seva and Sri Venkateswara Pranadana Schemes:

SVIMS fulfills its mission of charity and service under two financial schemes: the NTR Vaidya Seva Scheme of Government complemented by the Sri Venkateswara Pranadana Scheme of the TTD. The NTR Scheme is funded by the government and supported by tax payers. The Pranadana Scheme funds are allocated by the Hindu temple Tirumala—one of the richest temple in the world. The remaining balance after the two schemes are applied is paid by the hospital if the patient is unable to pay, or paid as out-of-pocket expenses for patients who can afford the bill. Because over 80% of patients who attend SVIMS are poor, the two schemes and the hospital must bear the full cost of care for most of its patients.

Patients earning below the poverty line qualify for free medical services through the NTR Government Scheme, which allots a capped amount of money for the treatment of 1265 different ailments. For the procedures costing significantly more, for example cancer or neurosurgical treatments which require expensive instruments and staged procedures, the Pranadana scheme covers the cost of care.

Patient interview: The two schemes at work

We met several patients that exemplify the benefits of these schemes. One patient, a 63-year-old farmer from the town Kodigudlapadu (kodi = hen, gudla = eggs, padu = village; the hen-egg-laying village) came to SVIMS with severe, crippling back pain. His pain was so bad that he was no longer able to walk let alone farm. Even while he was healthy, his annual income was 9,000 rupees per year, money he used to support his wife, son, and grandchildren. To be cured of his debilitating pain, he would need a high-end procedure, a neurosurgical laminectomy, costing 2 lakhs or 200,000 rupees. This one intervention would be lifesaving; thus this patient qualified for the Pranadana scheme and received his treatment completely free. We met him post-op, and he explained that the impact of this operation will allow him to return to farming to help support his wife and son who are both day labourers.

Another patient, a 25-year-old man who ties flowers together into necklaces to decorate the gods, required cardiothoracic surgery following a complication of tuberculosis (decortication of a fibrothorax). Qualifying for government funding, he NTR scheme allotted 60,000 rupees to cover the cost of the procedure. Following his recovery, he will return to selling flower necklaces to the daily mass of tens of thousands of Hindu pilgrims on their way to honor their God Vishnu.

SVIMS, with monetary support from the Pranadana Scheme, recently completed spinal deformity surgeries for 40 children suffering from scoliosis and kyphosis. These debilitating physical disfigurements are associated with lung disease, learning disabilities, and social stigmas often times preventing these kids from attending school. Deformity surgeries are only available in a few centers across India as they require sophisticated equipment, highly skilled doctors, and expensive implants, each surgery costing up to 5 lakhs. Having received these surgeries for free, these 40 patients, ages 11-15, are now back in school and walking tall with a new lease on life.

During our stay at SVIMS, we also experienced the rural camp model of healthcare delivery. Through NTR funding, a team of SVIMS healthcare workers (cardiologist, urologist, gynecologist, nurses, technicians, pharmacist, and other healthcare workers) travel to remote villages to set up health clinics, perform health screenings, hand out free medications, link these villages with the SVIMS hospital system with free transportation, and provide free food. These patients do not have access to medical care without this service, and SVIMS has completed over 700 rural camps. We participated by taking blood pressures and serving the rice and sambar. Personally, this was our most rewarding experience at SVIMS and a highlight during our trip to India.

Challenges and Future Directions for SVIMS

All of these examples show how universal healthcare is achieved and medically induced poverty avoided through publically funded Government and Religious financial support. However great this system is, it also faces many challenges. There are several groups of patients that are either not eligible or not fully covered by NTR but also not eligible for Pranadana. These patients are still given free healthcare services, but the hospital is required to absorb these costs, leading to a system that is running on a deficit. Yet this deficit still does not restrain the hospital from implementing some of its quality improvement strategies.

To address these challenges, the director of SVIMS Dr. Ravikumar is seeking new funding avenues and implementing an innovative Quality and Patient Safety program. He is expanding medical research funding and seeking to offer more accommodations for the patients who can pay out-of-pocket for medical treatment. The Quality and Patient Safety program is a plan to transform SVIMS in a "High Reliability Organization" and an "Accountable Health System". A model that uses self-monitoring data on quality and patient safety as drivers of health system performance – a model that should not only be replicated within India but also in the US and other developed and developing countries. This program first implements basic health protocols, ones that are already in existence in developed countries but that need emphasis in India. For example, Code Blue was launched at SVIMS to establish the process of summoning appropriate teams and resources necessary to resuscitate and rescue patients with deteriorating conditions, so called preventable deaths

due to “failure to rescue”. Another branch of this program is the monitoring of patient safety, including “Never Events” which refer to shocking, egregious, and unambiguous events that should never occur in healthcare. SVIMS will not only monitor these fundamental patient safety problems, but will also publish their results on their website, making their results transparent and accountable to the public. For example, SVIMS now implements safety measures to avoid stage 3-4 Decubitus Ulcers (bed sores), and since the monitoring program began in September 2015, they have had zero patients develop stage 3-4 decubitus ulcers. SVIMS is also incorporating new protocols on how to monitor, report, and prevent health-care associated infections – a serious problem in the US and even more prevalent and underreported issue in developing countries. Their “Antimicrobial Stewardship” aims to optimize antibiotic use in order to reduce antibiotic resistance, improve patient outcomes and safety, and ensure cost effective therapy by providing healthcare workers an ‘Antimicrobial Pocket Guide’ revised every 6 months to inform personnel of local pathogen surveillance, antimicrobial use, infection control measures and outcome.

By making their data on quality and patient safety public, they create negative incentives to improve their performance, and by expanding sources of revenue, SVIMS may also be able to offer positive financial incentives to individuals and departments based on improved performance outcomes. Without a comparative national healthcare reporting program in place, SVIMS is allowing themselves to be the “Canary in the Coalmine”, shining a spotlight on major problems in Indian healthcare. In doing so, they also create an opportunity to be a leader in medical improvements, likely leapfrogging other institutions in quality of care as they achieve global repute.

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