

Submission Topic: Standardization of protocol for various cancers in resource-constrained settings

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):

The aim of this solution is standard cancer care to every patient regardless of his financial status and place of his residence. Nowadays lot of advances are happening in cancer care. Everyday there is a new drug, new intervention and new algorithm formed. But people in tier 2 cities and remote areas don't get the standard of care due to poor healthcare distribution in India. This solution aims to provide uniform cancer care to every cancer patient.

Describe your solution / proposal: Provide a detailed account of your solution/ proposal to this challenge. You could type your solution/ proposal here. (Disclaimer: Solution/proposal should not exceed more than 300 words.):

Steps and Considerations for Standardizing Protocols in Resource-Constrained Settings

1. To first find out the need and current available resources. Assess the cancer incidence, prevalence, type of cancer and identify target population. Make a note of all available resources, existing healthcare facilities and access to medications. To look for the availability of proper supportive care and multidisciplinary team for building up good cancer care.

2. To summarize the standard treatment protocols as per the existing guidelines like NCCN, ESMO and DCGI. The standard treatment protocols for cancer care are easily accessible to health care workers through online platforms. But the challenge is to deliver these treatments to the public staying in resource-constrained setting.

3. If a patient from resource constraint setting doesn't get the standard treatment due to cost or non-availability of medicine or devices is a kind of gross negligence from healthcare system. It's important to promote doctors and all health care workers to work in at least tier 2 cities with good pay. And make availability of drugs, proper tissue diagnosis, radiation oncology equipment, OT, etc in the hospital.

4. Implementation Framework To make easy transportation of patients, tissue blocks, radionuclide dye etc to make it unified setup.

5. Monitoring, Evaluation, and Quality Assurance To regularly audit the treatment provided and maintain the standard of care.

6. In India, public is aware of health concerns like heart attack or stroke but not about cancer. Proper awareness among patients and doctors of other branches to understand the cancer treatment for early diagnosis and proper referrals. Alliances Needed to Develop or Adapt Standardized Guidelines

A. National Stakeholders Ministries of Health: Policy endorsement, funding, and regulation. National Cancer Control Programs (NCCP): Integration into national health strategies. Academic and Research Institutions: Protocol development and evaluation. Medical and Nursing Councils: Endorsement of training and certification standards.

B. International Organizations World Health Organization (WHO): Technical guidance, toolkits, and Essential Medicines List. International Atomic Energy Agency (IAEA): Support for radiotherapy infrastructure and training. Union for International Cancer Control (UICC): Knowledge sharing and advocacy support. International Agency for Research on Cancer (IARC): Epidemiological data and research collaboration. NCCN, ASCO, ESMO: Access to evidence-based guidelines adaptable to local needs.

C. Professional Societies and NGOs National oncology societies: Standard setting and peer networks. NGOs and philanthropic groups: Funding, logistics, and advocacy support (e.g., PATH, Clinton Health Access Initiative).

D. Private Sector and Pharma Partnerships for affordable medications and technologies through access programs or tiered pricing. Solutions to Encourage and Support Cost-Effective and Innovative Research

A. Local and Regional Research Grants: Establish small-scale funding opportunities for local researchers to explore context-specific interventions.

B. Public-Private Partnerships Collaborate with biotech firms and universities to pilot low-cost diagnostics, drugs, and treatment devices.

C. Academic Twinning and Mentorship Programs Pair institutions in resource-constrained settings with those in high-income countries for joint research initiatives.

D. Simplified Clinical Trial Regulations Streamline ethics approval and regulatory processes to enable local participation in global clinical trials.

E. Data Collection and Registries Develop centralized, anonymized databases to support research on cancer trends, treatment outcomes, and cost-effectiveness.

F. Innovation Hubs Set up innovation centers within cancer hospitals or universities to test new models of care delivery (e.g., tele-oncology, task shifting, mobile diagnostics).

G. Publication and Dissemination Support- Support local researchers in publishing findings and sharing innovations in regional and global forums.